

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
http://ageconsearch.umn.edu
aesearch@umn.edu

Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.

Trends and Characteristics of Hunter and Angler Spending, North Dakota, 1981 through 2001

Dean A. Bangsund F. Larry Leistritz

Department of Agribusiness and Applied Economics Agricultural Experiment Station North Dakota State University Fargo, ND 58105-5636

ACKNOWLEDGMENTS

The authors wish to extend thanks to all the hunters and anglers who in the past 20 years took the time to participate in various surveys. Without their input, research on sportsman expenditures would not be possible.

Special thanks are extended to Arlen Harmoning, Wildlife Planner, ND Game and Fish Department, for his numerous contributions throughout the course of this project. Arlen Harmoning's effort to standardize the expenditure data sets was crucial to conducting this study.

Financial support for this study was provided by the ND Game and Fish Department, Federal Aid in Wildlife Restoration Act (CFDA 15.611), Sport Fish Restoration Act (CFDA 15.605), and the ND Agricultural Experiment Station. We express our appreciation to these organizations for their support.

Thanks are extended to Norma Ackerson for document preparation and assistance with creating tables and figures, to Sreelatha Anugonda for her assistance in producing report tables, and to our colleagues who reviewed this manuscript.

The authors assume responsibility for any errors of omission, logic, or otherwise. Any opinions, findings, or conclusions expressed in this publication are those of the authors and do not necessarily reflect the views of the ND Game and Fish Department, the ND Agricultural Experiment Station, or the NDSU Department of Agribusiness and Applied Economics.

A single copy of this publication is available free of charge. You may address your inquiry to: Carol Jensen, Department of Agribusiness and Applied Economics, North Dakota State University, P.O. Box 5636, Fargo, ND 58105-5636, phone 701-231-7441, fax 701-231-7400, e-mail cjensen@ndsuext.nodak.edu or this publication can be found on the World Wide Web at the following site: http://agecon.lib.umn.edu/.

NDSU is an equal opportunity institution.

TABLE OF CONTENTS

<u>Pa</u>	<u>ige</u>
List of Tables	iii
List of Figures xxxv	viii
Abstract	lvi
Introduction	1
Objectives	4
Data Durable Goods/Fixed Expenses Nondurable Goods/Variable Expenses	4 5 6
Correcting for Inflation	9 10 11 11 12
Seasonal Spending Daily Spending Major Components of Variable and Fixed Expense Proportion of Total Spending for Durable and Nondurable Goods Change in the Composition of Variable and Fixed Expenses Percentage of Survey Respondents Reporting Various Expenses Average Spending by Characteristic and Demographic Factors Miles Traveled Days Participated Rural and Urban Residence Location of Residence Age Income Percent of Spending in Rural Areas With/without Access and/or Guide Fees Value Placed on a Day of Hunting/Fishing Spending by Year	12 13 14 15 17 19 22 23 24 24 24 25 26 26 26 26
Resident Hunting	272930

TABLE OF CONTENTS (cont.)

			<u>Page</u>
		tion of Characteristic/Participation Data (cont.)	30 30
		esident Fishing	31
		ays Participated and Miles Traveled	31
		Data Collection System for Future Use	31
Summa	ary		35
Conclu	sions		39
Referei	nces		41
Attachi	ments		
	Section A:	Seasonal and Daily Variable, Fixed, and Total Expenditures, by Year and Survey Group	44
	Section B:	Seasonal Variable and Fixed Expenses, and Spending by Major	• •
		Components of Variable and Fixed Expenditures, by Year and	0.2
	Section C:	Survey Group	82
		Survey Group	121
	Section D:	Total Spending, combined with the Proportion of Total Spending	
		for Variable and Fixed Expenses, by Year and Survey Group	135
	Section E:	Proportion of Variable and Fixed Spending by Major Expense	
		Category, by Year and Survey Group	146
	Section F:	Percentage of Resident and Nonresident Hunter and Angler Survey	
		Respondents reporting Expenses by Expenditure Category,	
		by Year and Survey Group	175
	Section G:	Spending Differences within Survey Groups over Time	
		and Spending Differences according to Characteristic and	22.5
	G II	Demographic Variables, by Survey Group	226
	Section H:	Results of Cross-tabulation of Respondent Characteristics	100
	C .: I	for Resident and Nonresident Hunters and Anglers in 2001	423
	Section I:	Changes in Days Participated and Miles Traveled	400
	Castin I.	by Year and Survey Group	480
	Section J: Section K	Regression Analysis of Spending and Participant Characteristics	490 495
	Section K	Representative Questionnaires	493

List of Tables

<u>Table</u>	<u>Page</u>
1	Hunting and Fishing Survey Groups, by Survey Year, North Dakota
2	Expenditure Categories for Survey Groups, North Dakota, 2001
3	Participant Characteristics and Demographic Information Collected, by Survey Year, North Dakota
4	Percentage of Survey Respondents Reporting Expenditures, by Type of Good and Service, North Dakota, 1981 through 2001
5	Description of Characteristic and Demographic Information, North Dakota, 2001 28
6	Resident Archery Antelope Hunter Expenditures, Real (2002) Dollars
7	Resident Firearm Antelope Hunter Expenditures, Real (2002) Dollars
8	Resident Gratis Antelope Hunter Expenditures, Real (2002) Dollars
9	Resident Special Big Game Hunter Expenditures, Real (2002) Dollars
10	Resident Archery Deer Hunter Expenditures, Real (2002) Dollars
11	Resident Firearm Deer Hunter Expenditures, Real (2002) Dollars
12	Resident Gratis Deer Hunter Expenditures, Real (2002) Dollars
13	Resident Muzzleloader Deer Hunter Expenditures, Real (2002) Dollars
14	Resident Furbearer Expenditures, Real (2002) Dollars53
15	Resident Open Water Fishing Expenditures, Real (2002) Dollars
16	Resident Ice Fishing Expenditures, Real (2002) Dollars
17	Resident Season-long Fishing Expenditures, Real (2002) Dollars
18	Resident Darkhouse Spearing Expenditures, Real (2002) Dollars
19	Resident Fall Turkey Hunter Expenditures, Real (2002) Dollars
20	Resident Gratis Fall Turkey Hunter Expenditures, Real (2002) Dollars
21	Resident Spring Turkey Hunter Expenditures, Real (2002) Dollars

<u>Table</u>	<u>Page</u>
22	Resident Gratis Spring Turkey Hunter Expenditures, Real (2002) Dollars 61
23	Resident Upland Game Hunter Expenditures, Real (2002) Dollars 62
24	Resident Waterfowl Hunter Expenditures, Real (2002) Dollars
25	Nonresident Archery Antelope Hunter Expenditures, Real (2002) Dollars 64
26	Nonresident Archery Deer Hunter Expenditures, Real (2002) Dollars
27	Nonresident Firearm Deer Hunter Expenditures, Real (2002) Dollars
28	Nonresident Small Game Hunter Expenditures, Real (2002) Dollars
29	Nonresident Season-long Fishing Expenditures, Real (2002) Dollars
30	Nonresident Antelope Archery, Average Variable Spending by Miles Traveled
31	Nonresident Antelope Archery, Average Fixed Spending by Miles Traveled
32	Nonresident Antelope Archery, Average Variable Spending by Days Participated
33	Nonresident Antelope Archery, Average Fixed Spending by Days Participated
34	Nonresident Antelope Archery, Average Variable Spending with and without Access Fees and/or Guide Fees
35	Nonresident Antelope Archery, Average Fixed Spending, with and without Access Fees and/or Guide Fees
36	Nonresident Antelope Archery, Average Variable Spending, Rural and Urban Residence
37	Nonresident Antelope Archery, Average Fixed Spending, Rural and Urban Residence
38	Nonresident Antelope Archery, Average Variable Spending, by Location of Residence

<u>Table</u>		<u>Page</u>
39	Nonresident Antelope Archery, Average Fixed Spending, by Location of Residence	232
40	Nonresident Antelope Archery, Average Variable Spending, by Amount of Rural Spending	233
41	Nonresident Antelope Archery, Average Fixed Spending, by Amount of Rural Spending	233
42	Nonresident Antelope Archery, Average Variable Spending, by Age of Participant	234
43	Nonresident Antelope Archery, Average Fixed Spending, by Age of Participant	234
44	Nonresident Antelope Archery, Average Variable Spending, by Income of Participant	235
45	Nonresident Antelope Archery, Average Fixed Spending, by Income of Participant	235
46	Nonresident Antelope Archery, Average Variable Spending, by Value Placed on a Day of Hunting	236
47	Nonresident Antelope Archery, Average Fixed Spending, by Value Placed on a Day of Hunting	236
48	Resident Antelope Archery, Average Variable Spending, by Miles Traveled	237
49	Resident Antelope Archery, Average Fixed Spending, by Miles Traveled	237
50	Resident Antelope Archery, Average Variable Spending, by Days Participated	238
51	Resident Antelope Archery, Average Fixed Spending, by Days Participated	238
52	Resident Antelope Archery, Average Variable Spending, with and without Access Fees and/or Guide Fees	239
53	Resident Antelope Archery, Average Fixed Spending, with and without Access Fees and/or Guide Fees	239
54	Resident Antelope Archery, Average Variable Spending, Rural and Urban Residence	240

<u>Table</u>		<u>Page</u>
55	Resident Antelope Archery, Average Fixed Spending, Rural and Urban Residence	240
56	Resident Antelope Archery, Average Variable Spending, by Location of Residence	241
57	Resident Antelope Archery, Average Fixed Spending, by Location of Residence	241
58	Resident Antelope Archery, Average Variable Spending, by Amount of Rural Spending	242
59	Resident Antelope Archery, Average Fixed Spending, by Amount of Rural Spending	242
60	Resident Antelope Archery, Average Variable Spending, by Age of Participant	243
61	Resident Antelope Archery, Average Fixed Spending, by Age of Participant	243
62	Resident Antelope Archery, Average Variable Spending, by Income of Participant	244
63	Resident Antelope Archery, Average Fixed Spending, by Income of Participant	244
64	Resident Antelope Archery, Average Variable Spending, by Value Placed on a Day of Hunting	245
65	Resident Antelope Archery, Average Fixed Spending, by Value Placed on a Day of Hunting	245
66	Resident Antelope Firearm, Average Variable Spending, by Miles Traveled	246
67	Resident Antelope Firearm, Average Fixed Spending, by Miles Traveled	246
68	Resident Antelope Firearm, Average Variable Spending, by Days Participated	247
69	Resident Antelope Firearm, Average Fixed Spending, by Days Participated	247

<u>Table</u>		<u>Page</u>
70	Resident Antelope Firearm, Average Variable Spending, with and without Access Fees and/or Guide Fees	248
71	Resident Antelope Firearm, Average Fixed Spending, with and without Access Fees and/or Guide Fees	248
72	Resident Antelope Firearm, Average Variable Spending, Rural and Urban Residence	249
73	Resident Antelope Firearm, Average Fixed Spending, Rural and Urban Residence	249
74	Resident Antelope Firearm, Average Variable Spending, by Location of Residence	250
75	Resident Antelope Firearm, Average Fixed Spending, by Location of Residence	250
76	Resident Antelope Firearm, Average Variable Spending, by Amount of Rural Spending	251
77	Resident Antelope Firearm, Average Fixed Spending, by Amount of Rural Spending	251
78	Resident Antelope Firearm, Average Variable Spending, by Age of Participant	252
79	Resident Antelope Firearm, Average Fixed Spending, by Age of Participant	252
80	Resident Antelope Firearm, Average Variable Spending, by Income of Participant	253
81	Resident Antelope Firearm, Average Fixed Spending, by Income of Participant	253
82	Resident Antelope Firearm, Average Variable Spending, by Value Placed on a Day of Hunting	254
83	Resident Antelope Firearm, Average Fixed Spending, by Value Placed on a Day of Hunting	254
84	Resident Antelope Firearm Gratis, Average Variable Spending, by Miles Traveled	

<u>Table</u>		<u>Page</u>
85	Resident Antelope Firearm Gratis, Average Fixed Spending, by Miles Traveled	255
86	Resident Antelope Firearm Gratis, Average Variable Spending, by Days Participated	256
87	Resident Antelope Firearm Gratis, Average Fixed Spending, by Days Participated	256
88	Resident Antelope Firearm Gratis, Average Variable Spending, with and without Access Fees and/or Guide Fees	257
89	Resident Antelope Firearm Gratis, Average Fixed Spending, with and without Access Fees and/or Guide Fees	257
90	Resident Antelope Firearm Gratis, Average Variable Spending, Rural and Urban Residence	258
91	Resident Antelope Firearm Gratis, Average Fixed Spending, Rural and Urban Residence	258
92	Resident Antelope Firearm Gratis, Average Variable Spending, by Location of Residence	259
93	Resident Antelope Firearm Gratis, Average Fixed Spending, by Location of Residence	259
94	Resident Antelope Firearm Gratis, Average Variable Spending, by Amount of Rural Spending	260
95	Resident Antelope Firearm Gratis, Average Fixed Spending, by Amount of Rural Spending	260
96	Resident Antelope Firearm Gratis, Average Variable Spending, by Age of Participant	261
97	Resident Antelope Firearm Gratis, Average Fixed Variable Spending, by Age of Participant	261
98	Resident Antelope Firearm Gratis, Average Variable Spending, by Income of Participant	262
99	Resident Antelope Firearm Gratis, Average Fixed Spending, by Income of Participant	262

<u>Table</u>		<u>Page</u>
100	Resident Antelope Firearm Gratis, Average Variable Spending, by Value Placed on a Day of Hunting	263
101	Resident Antelope Firearm Gratis, Fixed Variable Spending, by Value Placed on a Day of Hunting	263
102	Resident Big Game, Average Variable Spending, by Miles Traveled	264
103	Resident Big Game, Average Fixed Spending, by Miles Traveled	264
104	Resident Big Game, Average Variable Spending, by Days Participated	265
105	Resident Big Game, Average Fixed Spending, by Days Participated	265
106	Resident Big Game, Average Variable Spending, with and without Access Fees and/or Guide Fees	266
107	Resident Big Game, Average Fixed Spending, with and without Access Fees and/or Guide Fees	266
108	Resident Big Game, Average Variable Spending, Rural and Urban Residence	267
109	Resident Big Game, Average Fixed Spending, Rural and Urban Residence	267
110	Resident Big Game, Average Variable Spending, by Location of Residence	268
111	Resident Big Game, Average Fixed Spending, by Location of Residence	268
112	Resident Big Game, Average Variable Spending, by Amount of Rural Spending	269
113	Resident Big Game, Average Fixed Spending, by Amount of Rural Spending	269
114	Resident Big Game, Average Variable Spending, by Age of Participant	270
115	Resident Big Game, Average Fixed Spending, by Age of Participant	270
116	Resident Big Game, Average Variable Spending, by Income of Participant	271

<u>Table</u>		<u>Page</u>
117	Resident Big Game, Average Fixed Spending, by Income of Participant	271
118	Resident Big Game, Average Variable Spending, by Value Placed on a Day of Hunting	272
119	Resident Big Game, Average Fixed Spending, by Value Place on a Day of Hunting	272
120	Nonresident Deer Archery, Average Variable Spending, by Miles Traveled	273
121	Nonresident Deer Archery, Average Fixed Spending, by Miles Traveled	273
122	Nonresident Deer Archery, Average Variable Spending, by Days Participated	274
123	Nonresident Deer Archery, Average Fixed Spending, by Days Participated	274
124	Nonresident Deer Archery, Average Variable Spending, with and without Access Fees and/or Guide Fees	275
125	Nonresident Deer Archery, Average Fixed Spending, with and without Access Fees and/or Guide Fees	275
126	Nonresident Deer Archery, Average Variable Spending, Rural and Urban Residence	276
127	Nonresident Deer Archery, Average Fixed Spending, Rural and Urban Residence	276
128	Nonresident Deer Archery, Average Variable Spending, by Location of Residence	277
129	Nonresident Deer Archery, Average Fixed Spending, by Location of Residence	277
130	Nonresident Deer Archery, Average Variable Spending, by Amount of Rural Spending	
131	Nonresident Deer Archery, Average Fixed Spending, by Amount of Rural Spending	

<u>Table</u>		<u>Page</u>
132	Nonresident Deer Archery, Average Variable Spending, by Age of Participant	279
133	Nonresident Deer Archery, Average Fixed Spending, by Age of Participant	279
134	Nonresident Deer Archery, Average Variable Spending, by Income of Participant	280
135	Nonresident Deer Archery, Average Fixed Spending, by Income of Participant	280
136	Nonresident Deer Archery, Average Variable Spending, by Value Placed on a Day of Hunting	281
137	Nonresident Deer Archery, Average Fixed Spending, by Value Placed on a Day of Hunting	281
138	Resident Deer Archery, Average Variable Spending, by Miles Traveled	282
139	Resident Deer Archery, Average Fixed Spending, by Miles Traveled	282
140	Resident Deer Archery, Average Variable Spending, by Days Participated	283
141	Resident Deer Archery, Average Fixed Spending, by Days Participated	283
142	Resident Deer Archery, Average Variable Spending, with and without Access Fees and/or Guide Fees	284
143	Resident Deer Archery, Average Fixed Spending, with and without Access Fees and/or Guide Fees	284
144	Resident Deer Archery, Average Variable Spending, Rural and Urban Residence	285
145	Resident Deer Archery, Average Fixed Spending, Rural and Urban Residence	285
146	Resident Deer Archery, Average Variable Spending, by Location of Residence	286

<u>Table</u>		<u>Page</u>
147	Resident Deer Archery, Average Fixed Spending, by Location or Residence	286
148	Resident Deer Archery, Average Variable Spending, by Amount of Rural Spending	287
149	Resident Deer Archery, Average Fixed Spending, by Amount of Rural Spending	287
150	Resident Deer Archery, Average Variable Spending, by Age of Participant	288
151	Resident Deer Archery, Average Fixed Spending, by Age of Participant	288
152	Resident Deer Archery, Average Variable Spending, by Income of Participant	289
153	Resident Deer Archery, Average Fixed Spending, by Income of Participant	289
154	Resident Deer Archery, Average Variable Spending, by Value Placed on a Day of Hunting	290
155	Resident Deer Archery, Average Fixed Spending, by Value Placed on a Day of Hunting	290
156	Nonresident Deer Firearm, Average Variable Spending, by Miles Traveled	291
157	Nonresident Deer Firearm, Average Fixed Spending, by Miles Traveled	291
158	Nonresident Deer Firearm, Average Variable Spending, by Days Participated	292
159	Nonresident Deer Firearm, Average Fixed Spending, by Days Participated	292
160	Nonresident Deer Firearm, Average Variable Spending, with and without Access Fees and/or Guide Fees	
161	Nonresident Deer Firearm, Average Fixed Spending, with and without Access Fees and/or Guide Fees	

<u>Table</u>		<u>Page</u>
162	Nonresident Deer Firearm, Average Variable Spending, Rural and Urban Residence	294
163	Nonresident Deer Firearm, Average Fixed Spending, Rural and Urban Residence	294
164	Nonresident Deer Firearm, Average Variable Spending, by Location of Residence	295
165	Nonresident Deer Firearm, Average Fixed Spending, by Location of Residence	295
166	Nonresident Deer Firearm, Average Variable Spending, by Amount of Rural Spending	296
167	Nonresident Deer Firearm, Average Fixed Spending, by Amount of Rural Spending	296
168	Nonresident Deer Firearm, Average Variable Spending, by Age of Participant	297
169	Nonresident Deer Firearm, Average Fixed Spending, by Age of Participant	297
170	Nonresident Deer Firearm, Average Variable Spending, by Income of Participant	298
171	Nonresident Deer Firearm, Average Fixed Spending, by Income of Participant	298
172	Nonresident Deer Firearm, Average Variable Spending, by Value Placed on a Day of Hunting	299
173	Nonresident Deer Firearm, Average Fixed Spending, by Value Place on a Day of Hunting	299
174	Resident Deer Firearm, Average Variable Spending, by Miles Traveled	300
175	Resident Deer Firearm, Average Fixed Spending, by Miles Traveled	300
176	Resident Deer Firearm, Average Variable Spending, by Days Participated	301

<u>Table</u>		<u>Page</u>
177	Resident Deer Firearm, Average Fixed Spending, by Days Participated	301
178	Resident Deer Firearm, Average Variable Spending, with and without Access Fees and/or Guide Fees	302
179	Resident Deer Firearm, Average Fixed Spending, with and without Access Fees and/or Guide Fees	302
180	Resident Deer Firearm, Average Variable Spending, Rural and Urban Residence	303
181	Resident Deer Firearm, Average Fixed Spending, Rural and Urban Residence	303
182	Resident Deer Firearm, Average Variable Spending, by Location of Residence	304
183	Resident Deer Firearm, Average Fixed Spending, by Location of Residence	304
184	Resident Deer Firearm, Average Variable Spending, by Amount of Rural Spending	305
185	Resident Deer Firearm, Average Fixed Spending, by Amount of Rural Spending	305
186	Resident Deer Firearm, Average Variable Spending, by Age of Participant	306
187	Resident Deer Firearm, Average Fixed Spending, by Age of Participant	306
188	Resident Deer Firearm, Average Variable Spending, by Income of Participant	307
189	Resident Deer Firearm, Average Fixed Spending, by Income of Participant	307
190	Resident Deer Firearm, Average Variable Spending, by Value Placed on a Day of Hunting	308
191	Resident Deer Firearm, Average Fixed Spending, by Value Placed on a Day of Hunting	308

<u>Table</u>		<u>Page</u>
192	Resident Deer Firearm Gratis, Average Variable Spending, by Miles Traveled	309
193	Resident Deer Firearm Gratis, Average Fixed Spending, by Miles Traveled	309
194	Resident Deer Firearm Gratis, Average Variable Spending, by Days Participated	310
195	Resident Deer Firearm Gratis, Average Fixed Spending, by Days Participated	310
196	Resident Deer Firearm Gratis, Average Variable Spending, with and without Access Fees and/or Guide Fees	311
197	Resident Deer Firearm Gratis, Average Fixed Spending, with and without Access Fees and/or Guide Fees	311
198	Resident Deer Firearm Gratis, Average Variable Spending, Rural and Urban Residence	312
199	Resident Deer Firearm Gratis, Average Fixed Spending, Rural and Urban Residence	312
200	Resident Deer Firearm Gratis, Average Variable Spending, by Location of Residence	313
201	Resident Deer Firearm Gratis, Average Fixed Spending, by Location of Residence	313
202	Resident Deer Firearm Gratis, Average Variable Spending, by Amount of Rural Spending	314
203	Resident Deer Firearm Gratis, Average Fixed Spending, by Amount of Rural Spending	314
204	Resident Deer Firearm Gratis, Average Variable Spending, by Age of Participant	315
205	Resident Deer Firearm Gratis, Average Fixed Spending, by Age of Participant	315
206	Resident Deer Firearm Gratis, Average Variable Spending, by Income of Participant	

Table		Page
207	Resident Deer Firearm Gratis, Average Fixed Spending, by Income of Participant	316
208	Resident Deer Firearm Gratis, Average Variable Spending, by Value Placed on a Day of Hunting	317
209	Resident Deer Firearm Gratis, Average Fixed Spending, by Value Placed on a Day of Hunting	317
210	Resident Deer Muzzleloader, Average Variable Spending, by Miles Traveled	318
211	Resident Deer Muzzleloader, Average Fixed Spending, by Miles Traveled	318
212	Resident Deer Muzzleloader, Average Variable Spending, by Days Participated	319
213	Resident Deer Muzzleloader, Average Fixed Spending, by Days Participated	319
214	Resident Deer Muzzleloader, Average Variable Spending, with and without Access Fees and/or Guide Fees	320
215	Resident Deer Muzzleloader, Average Fixed Spending, with and without Access Fees and/or Guide Fees	320
216	Resident Deer Muzzleloader, Average Variable Spending, Rural and Urban Residence	321
217	Resident Deer Muzzleloader, Average Fixed Spending, Rural and Urban Residence	321
218	Resident Deer Muzzleloader, Average Variable Spending, by Location of Residence	322
219	Resident Deer Muzzleloader, Average Fixed Spending, by Location of Residence	322
220	Resident Deer Muzzleloader, Average Variable Spending, by Amount of Rural Spending	323
221	Resident Deer Muzzleloader, Average Fixed Spending, by Amount of Rural Spending	323

<u>Table</u>	<u>Page</u>
222	Resident Deer Muzzleloader, Average Variable Spending, by Age of Participant
223	Resident Deer Muzzleloader, Average Fixed Spending, by Age of Participant
224	Resident Deer Muzzleloader, Average Variable Spending, by Income of Participant
225	Resident Deer Muzzleloader, Average Fixed Spending, by Income of Participant
226	Resident Deer Muzzleloader, Average Variable Spending, by Value Placed on a Day of Hunting
227	Resident Deer Muzzleloader, Average Fixed Spending, by Value Placed on a Day of Hunting
228	Resident Furbearer, Average Variable Spending, by Miles Traveled
229	Resident Furbearer, Average Fixed Spending, by Miles Traveled
230	Resident Furbearer, Average Variable Spending, by Days Participated 328
231	Resident Furbearer, Average Fixed Spending, by Days Participated
232	Resident Furbearer, Average Variable Spending, with and without Access Fees and/or Guide Fees
233	Resident Furbearer, Average Fixed Spending, with and without Access Fees and/or Guide Fees
234	Resident Furbearer, Average Variable Spending, Rural and Urban Residence
235	Resident Furbearer, Average Fixed Spending, Rural and Urban Residence
236	Resident Furbearer, Average Variable Spending, by Location of Residence
237	Resident Furbearer, Average Fixed Spending, by Location of Residence
238	Resident Furbearer, Average Variable Spending, by Amount of Rural Spending

<u>Table</u>		<u>Page</u>
239	Resident Furbearer, Average Fixed Spending, by Amount of Rural Spending	332
240	Resident Furbearer, Average Variable Spending, by Age of Participant	333
241	Resident Furbearer, Average Fixed Spending, by Age of Participant	333
242	Resident Furbearer, Average Variable Spending, by Income of Participant	334
243	Resident Furbearer, Average Fixed Spending, by Income of Participant	334
244	Resident Furbearer, Average Variable Spending, by Value Placed on a Day of Hunting	335
245	Resident Furbearer, Average Fixed Spending, by Value Placed on a Day of Hunting	335
246	Resident Fall Turkey, Average Variable Spending, by Miles Traveled	336
247	Resident Fall Turkey, Average Fixed Spending, by Miles Traveled	336
248	Resident Fall Turkey, Average Variable Spending, by Days Participated	337
249	Resident Fall Turkey, Average Fixed Spending, by Days Participated	337
250	Resident Fall Turkey, Average Variable Spending, with and without Access Fees and/or Guide Fees	338
251	Resident Fall Turkey, Average Fixed Spending, with and without Access Fees and/or Guide Fees	338
252	Resident Fall Turkey, Average Variable Spending, Rural and Urban Residence	339
253	Resident Fall Turkey, Average Fixed Spending, Rural and Urban Residence	339
254	Resident Fall Turkey, Average Variable Spending, by	340

<u>Table</u>		<u>Page</u>
255	Resident Fall Turkey, Average Fixed Spending, by Location of Residence	. 340
256	Resident Fall Turkey, Average Variable Spending, by Amount of Rural Spending	. 341
257	Resident Fall Turkey, Average Fixed Spending, by Amount of Rural Spending	. 341
258	Resident Fall Turkey, Average Variable Spending, by Age of Participant	. 342
259	Resident Fall Turkey, Average Fixed Spending, by Age of Participant	. 342
260	Resident Fall Turkey, Average Variable Spending, by Income of Participant	. 343
261	Resident Fall Turkey, Average Fixed Spending, by Income of Participant	. 343
262	Resident Fall Turkey, Average Variable Spending, by Value Placed on a Day of Hunting	. 344
263	Resident Fall Turkey, Average Fixed Spending, by Value Placed on a Day of Hunting	. 344
264	Resident Fall Turkey Gratis, Average Variable Spending, by Miles Traveled	. 345
265	Resident Fall Turkey Gratis, Average Fixed Spending, by Miles Traveled	. 345
266	Resident Fall Turkey Gratis, Average Variable Spending, by Days Participated	. 346
267	Resident Fall Turkey Gratis, Average Fixed Spending, by Days Participated	. 346
268	Resident Fall Turkey Gratis, Average Variable Spending, with and without Access Fees and/or Guide Fees	. 347
269	Resident Fall Turkey Gratis, Average Fixed Spending, with and without Access Fees and/or Guide Fees	. 347

<u>Table</u>		<u>Page</u>
270	Resident Fall Turkey Gratis, Average Variable Spending, Rural and Urban Residence	348
271	Resident Fall Turkey Gratis, Average Fixed Spending, Rural and Urban Residence	348
272	Resident Fall Turkey Gratis, Average Variable Spending, by Location of Residence	349
273	Resident Fall Turkey Gratis, Average Fixed Spending, by Location of Residence	349
274	Resident Fall Turkey Gratis, Average Variable Spending, by Amount of Rural Spending	350
275	Resident Fall Turkey Gratis, Average Fixed Spending, by Amount of Rural Spending	350
276	Resident Fall Turkey Gratis, Average Variable Spending, by Age of Participant	351
277	Resident Fall Turkey Gratis, Average Fixed Spending, by Age of Participant	351
278	Resident Fall Turkey Gratis, Average Variable Spending, by Income of Participant	352
279	Resident Fall Turkey Gratis, Average Fixed Spending, by Income of Participant	352
280	Resident Fall Turkey Gratis, Average Variable Spending, by Value Placed on a Day of Hunting	353
281	Resident Fall Turkey Gratis, Average Fixed Spending, by Value Placed on a Day of Hunting	353
282	Resident Spring Turkey, Average Variable Spending, by Miles Traveled	354
283	Resident Spring Turkey, Average Fixed Spending, by Miles Traveled	354
284	Resident Spring Turkey, Average Variable Spending, by Days Participated	355

<u>Table</u>		<u>Page</u>
285	Resident Spring Turkey, Average Fixed Spending, by Days Participated	355
286	Resident Spring Turkey, Average Variable Spending, with and without Access Fees and/or Guide Fees	356
287	Resident Spring Turkey, Average Fixed Spending, with and without Access Fees and/or Guide Fees	356
288	Resident Spring Turkey, Average Variable Spending, Rural and Urban Residence	357
289	Resident Spring Turkey, Average Fixed Spending, Rural and Urban Residence	357
290	Resident Spring Turkey, Average Variable Spending, by Location of Residence	358
291	Resident Spring Turkey, Average Fixed Spending, by358 Location of Residence	358
292	Resident Spring Turkey, Average Variable Spending, by Amount of Rural Spending	359
293	Resident Spring Turkey, Average Fixed Spending, by Amount of Rural Spending	369
294	Resident Spring Turkey, Average Variable Spending, by Age of Participant	360
295	Resident Spring Turkey, Average Fixed Spending, by Age of Participant	360
296	Resident Spring Turkey, Average Variable Spending, by Income of Participant	361
297	Resident Spring Turkey, Average Fixed Spending, by Income of Participant	361
298	Resident Spring Turkey, Average Variable Spending, by Value Placed on a Day of Hunting	362
299	Resident Spring Turkey, Average Fixed Spending, by Value Placed on a Day of Hunting	362

<u>Table</u>		Page
300	Resident Upland Game, Average Variable Spending, by Miles Traveled	. 363
301	Resident Upland Game, Average Fixed Spending, by Miles Traveled	. 363
302	Resident Upland Game, Average Variable Spending, by Days Participated	. 364
303	Resident Upland Game, Average Fixed Spending, by Days Participated	. 364
304	Resident Upland Game, Average Variable Spending, with and without Access Fees and/or Guide Fees	. 365
305	Resident Upland Game, Average Fixed Spending, with and without Access Fees and/or Guide Fees	. 365
306	Resident Upland Game, Average Variable Spending, Rural and Urban Residence	. 366
307	Resident Upland Game, Average Fixed Spending, Rural and Urban Residence	. 366
308	Resident Upland Game, Average Variable Spending, by Location of Residence	. 367
309	Resident Upland Game, Average Fixed Spending, by Location of Residence	. 367
310	Resident Upland Game, Average Variable Spending, by Amount of Rural Spending	. 368
311	Resident Upland Game, Average Fixed Spending, by Amount of Rural Spending	. 368
312	Resident Upland Game, Average Variable Spending, by Age of Participant	. 369
313	Resident Upland Game, Average Fixed Spending, by Age of Participant	. 369
314	Resident Upland Game, Average Variable Spending, by Income of Participant	. 370

<u>Table</u>		<u>Page</u>
315	Resident Upland Game, Average Fixed Spending, by Income of Participant	370
316	Resident Upland Game, Average Variable Spending, by Value Placed on a Day of Hunting	371
317	Resident Upland Game, Average Fixed Spending, by Value Placed on a Day of Hunting	371
318	Resident Waterfowl, Average Variable Spending, by Miles Traveled	372
319	Resident Waterfowl, Average Fixed Spending, by Miles Traveled	372
320	Resident Waterfowl, Average Variable Spending, by Days Participated	373
321	Resident Waterfowl, Average Fixed Spending, by Days Participated	373
322	Resident Waterfowl, Average Variable Spending, with and without Access Fees and/or Guide Fees	374
323	Resident Waterfowl, Average Fixed Spending, with and without Access Fees and/or Guide Fees	374
324	Resident Waterfowl, Average Variable Spending, Rural and Urban Residence	375
325	Resident Waterfowl, Average Fixed Spending, Rural and Urban Residence	375
326	Resident Waterfowl, Average Variable Spending, by Location of Residence	376
327	Resident Waterfowl, Average Fixed Spending, by Location of Residence	376
328	Resident Waterfowl, Average Variable Spending, by Amount of Rural Spending	377
329	Resident Waterfowl, Average Fixed Spending, by Amount of Rural Spending	377
330	Resident Waterfowl, Average Variable Spending, by Age of Participant	378
331	Resident Waterfowl, Average Fixed Spending, by Age of Participant	378

<u>Table</u>		<u>Page</u>
332	Resident Waterfowl, Average Variable Spending, by Income of Participant	379
333	Resident Waterfowl, Average Fixed Spending, by Income of Participant	379
334	Resident Waterfowl, Average Variable Spending, by Value Placed on a Day of Hunting	380
335	Resident Waterfowl, Average Fixed Spending, by Value Placed on a Day of Hunting	380
336	Nonresident Small Game, Average Variable Spending, by Miles Traveled	381
337	Nonresident Small Game, Average Fixed Spending, by Miles Traveled	381
338	Nonresident Small Game, Average Variable Spending, by Days Participated	382
339	Nonresident Small Game, Average Fixed Spending, by Days Participated	382
340	Nonresident Small Game, Average Variable Spending, with and without Access Fees and/or Guide Fees	383
341	Nonresident Small Game, Average Fixed Spending, with and without Access Fees and/or Guide Fees	383
342	Nonresident Small Game, Average Variable Spending, Rural and Urban Residence	384
343	Nonresident Small Game, Average Fixed Spending, Rural and Urban Residence	384
344	Nonresident Small Game, Average Variable Spending, by Location of Residence	385
345	Nonresident Small Game, Average Fixed Spending, by Location of Residence	385
346	Nonresident Small Game, Average Variable Spending, by Amount of Rural Spending	386

<u>Table</u>		<u>Page</u>
347	Nonresident Small Game, Average Fixed Spending, by Amount of Rural Spending	386
348	Nonresident Small Game, Average Variable Spending, by Age of Participant	387
349	Nonresident Small Game, Average Fixed Spending, by Age of Participant	387
350	Nonresident Small Game, Average Variable Spending, by Income of Participant	388
351	Nonresident Small Game, Average Fixed Spending, by Income of Participant	388
352	Nonresident Small Game, Average Variable Spending, by Value Placed on a Day of Hunting	389
353	Nonresident Small Game, Average Fixed Spending, by Value Placed on a Day of Hunting	389
354	Resident Summer Fishing, Average Variable Spending, by Miles Traveled	390
355	Resident Summer Fishing, Average Fixed Spending, by Miles Traveled	390
356	Resident Summer Fishing, Average Variable Spending, by Days Participated	391
357	Resident Summer Fishing, Average Fixed Spending, by Days Participated	391
358	Resident Summer Fishing, Average Variable Spending, with and without Access Fees and/or Guide Fees	392
359	Resident Summer Fishing, Average Fixed Spending, with and without Access Fees and/or Guide Fees	392
360	Resident Summer Fishing, Average Variable Spending, Rural and Urban Residence	393
361	Resident Summer Fishing, Average Fixed Spending, Rural and Urban Residence	393

<u>Table</u>		<u>Page</u>
362	Resident Summer Fishing, Average Variable Spending, by Location of Residence	394
363	Resident Summer Fishing, Average Fixed Spending, by Location of Residence	394
364	Resident Summer Fishing, Average Variable Spending, by Amount of Rural Spending	395
365	Resident Summer Fishing, Average Fixed Spending, by Amount of Rural Spending	395
366	Resident Summer Fishing, Average Variable Spending, by Age of Participant	396
367	Resident Summer Fishing, Average Fixed Spending, by Age of Participant	396
368	Resident Summer Fishing, Average Variable Spending, by Income of Participant	397
369	Resident Summer Fishing, Average Fixed Spending, by Income of Participant	397
370	Resident Summer Fishing, Average Variable Spending, by Value Placed on a Day of Fishing	398
371	Resident Summer Fishing, Average Fixed Spending, by Value Placed on a Day of Fishing	398
372	Resident Winter Fishing, Average Variable Spending, by Miles Traveled	399
373	Resident Winter Fishing, Average Fixed Spending, by Miles Traveled	399
374	Resident Winter Fishing, Average Variable Spending, by Days Participated	400
375	Resident Winter Fishing, Average Fixed Spending, by Days Participated	
376	Resident Winter Fishing, Average Variable Spending, with and without Access Fees and/or Guide Fees	401

<u>Table</u>	<u>Pa</u>	ıge
377	Resident Winter Fishing, Average Fixed Spending, with and without Access Fees and/or Guide Fees	01
378	Resident Winter Fishing, Average Variable Spending, Rural and Urban Residence	02
379	Resident Winter Fishing, Average Fixed Spending, Rural and Urban Residence	02
380	Resident Winter Fishing, Average Variable Spending, by Location of Residence	03
381	Resident Winter Fishing, Average Fixed Spending, by Location of Residence	.03
382	Resident Winter Fishing, Average Variable Spending, by Amount of Rural Spending	04
383	Resident Winter Fishing, Average Fixed Spending, by Amount of Rural Spending	04
384	Resident Winter Fishing, Average Variable Spending, by Age of Participant	05
385	Resident Winter Fishing, Average Fixed Spending, by Age of Participant	05
386	Resident Winter Fishing, Average Variable Spending, by Income of Participant	-06
387	Resident Winter Fishing, Average Fixed Spending, by Income of Participant	-06
388	Resident Winter Fishing, Average Variable Spending, by Value Placed on a Day of Fishing	07
389	Resident Winter Fishing, Average Fixed Spending, by Value Placed on a Day of Fishing	07
390	Nonresident Seasonal Fishing, Average Variable Spending, by Miles Traveled	-08
391	Nonresident Seasonal Fishing, Average Fixed Spending, by Miles Traveled	-08

<u>Table</u>		<u>Page</u>
392	Nonresident Seasonal Fishing, Average Variable Spending, by Days Participated	409
393	Nonresident Seasonal Fishing, Average Fixed Spending, by Days Participated	409
394	Nonresident Seasonal Fishing, Average Variable Spending, with and without Access Fees and/or Guide Fees	410
395	Nonresident Seasonal Fishing, Average Fixed Spending, with and without Access Fees and/or Guide Fees	410
396	Nonresident Seasonal Fishing, Average Variable Spending, Rural and Urban Residence	411
397	Nonresident Seasonal Fishing, Average Fixed Spending, Rural and Urban Residence	411
398	Nonresident Seasonal Fishing, Average Variable Spending, by Location of Residence	412
399	Nonresident Seasonal Fishing, Average Fixed Spending, by Location of Residence	412
400	Nonresident Seasonal Fishing, Average Variable Spending, by Amount of Rural Spending	413
401	Nonresident Seasonal Fishing, Average Fixed Spending, by Amount of Rural Spending	413
402	Nonresident Seasonal Fishing, Average Variable Spending, by Age of Participant	414
403	Nonresident Seasonal Fishing, Average Fixed Spending, by Age of Participant	414
404	Nonresident Seasonal Fishing, Average Variable Spending, by Income of Participant	415
405	Nonresident Seasonal Fishing, Average Fixed Spending, by Income of Participant	415
406	Nonresident Seasonal Fishing, Average Variable Spending, by Value Placed on a Day of Fishing	416

<u>Table</u>		<u>Page</u>
407	Nonresident Seasonal Fishing, Average Fixed Spending, by Value Placed on a Day of Fishing	416
408	Resident Antelope Hunting, Average Variable Spending, by Year	417
409	Resident Antelope Hunting, Average Fixed Spending, by Year	417
410	Resident Deer Hunting, Average Variable Spending, by Year	418
411	Resident Deer Hunting, Average Fixed Spending, by Year	418
412	Resident Big Game, Furbearer, Upland Game, and Waterfowl, Average Variable Spending, by Year	419
413	Resident Big Game, Furbearer, Upland Game, and Waterfowl, Average Fixed Spending, by Year	419
414	Resident Turkey Hunting, Average Variable Spending, by Year	420
415	Resident Turkey Hunting, Average Fixed Spending, by Year	420
416	Resident Fishing, Average Variable Spending, by Year	421
417	Resident Fishing, Average Fixed Spending, by Year	421
418	Nonresident Hunting and Fishing, Average Variable Spending, by Year	422
419	Nonresident Hunting and Fishing, Average Fixed Spending, by Year	422
420	Distribution of Days Participated by Miles Traveled, Resident Hunters, 2001	424
421	Distribution of Days Participated by Access and/or Guide Fees, Resident Hunters, 2001	424
422	Distribution of Days Participated by Type of Residence, Resident Hunters, 2001	425
423	Distribution of Days Participated by Rural/Urban Residence, Resident Hunters, 2001	425
424	Distribution of Days Participated by Percentage of Rural Spending, Resident Hunters, 2001	426

<u>Table</u>	<u>l</u>	Page
425	Distribution of Days Participated by Income, Resident Hunters, 2001	426
426	Distribution of Days Participated by Age, Resident Hunters, 2001	427
427	Distribution of Miles Traveled by Access and/or Guide Fees, Resident Hunters, 2001	427
428	Distribution of Miles Traveled by Type of Residence, Resident Hunters, 2001	428
429	Distribution of Miles Traveled by Rural/Urban Residence, Resident Hunters, 2001	428
430	Distribution of Miles Traveled by Percentage of Rural Spending, Resident Hunters, 2001	429
431	Distribution of Miles Traveled by Income, Resident Hunters, 2001	429
432	Distribution of Miles Traveled by Age, Resident Hunters, 2001	430
433	Distribution of Survey Respondents with/without Access and/or Guide Fees by Type of Residence, Resident Hunters, 2001	430
434	Distribution of Survey Respondents with/without Access and/or Guide Fees by Rural/Urban Residence, Resident Hunters, 2001	431
435	Distribution of Survey Respondents with/without Access and/or Guide Fees by Percentage of Rural Spending, Resident Hunters, 2001	431
436	Distribution of Survey Respondents with/without Access and/or Guide Fees by Income, Resident Hunters, 2001	432
437	Distribution of Survey Respondents with/without Access and/or Guide Fees by Age, Resident Hunters, 2001	432
438	Distribution of Type of Residence by Rural/Urban Residence, Resident Hunters, 2001	433
439	Distribution of Type of Residence by Percentage of Rural Spending, Resident Hunters, 2001	433
440	Distribution of Type of Residence by Income, Resident Hunters, 2001	434
441	Distribution of Type of Residence by Age, Resident Hunters, 2001	434

<u>Table</u>	<u>Page</u>
442	Distribution of Rural/Urban Residence by Percentage of Rural Spending, Resident Hunters, 2001
443	Distribution of Rural/Urban Residence by Income, Resident Hunters, 2001 435
444	Distribution of Rural/Urban Residence by Age, Resident Hunters, 2001
445	Distribution of Percentage of Rural Spending by Income, Resident Hunters, 2001
446	Distribution of Percentage of Rural Spending by Age, Resident Hunters, 2001
447	Distribution of Age by Income, Resident Hunters, 2001
448	Distribution of Days Participated by Miles Traveled, Resident Anglers, 2001
449	Distribution of Days Participated by Access and/or Guide Fees, Resident Anglers, 2001
450	Distribution of Days Participated by Type of Residence, Resident Anglers, 2001
451	Distribution of Days Participated by Rural/Urban Residence, Resident Anglers, 2001
452	Distribution of Days Participated by Percentage of Rural Spending, Resident Anglers, 2001
453	Distribution of Days Participated by Income, Resident Anglers, 2001
454	Distribution of Days Participated by Age, Resident Anglers, 2001
455	Distribution of Miles Traveled by Access and/or Guide Fees, Resident Anglers, 2001
456	Distribution of Miles Traveled by Type of Residence, Resident Anglers, 2001
457	Distribution of Miles Traveled by Rural/Urban Residence, Resident Anglers, 2001
458	Distribution of Miles Traveled by Percentage of Rural Spending, Resident Anglers, 2001

<u>Table</u>	<u>Page</u>
459	Distribution of Miles Traveled by Income, Resident Anglers, 2001
460	Distribution of Miles Traveled by Age, Resident Anglers, 2001
461	Distribution of Survey Respondents with/without Access and/or Guide Fees by Type of Residence, Resident Anglers, 2001
462	Distribution of Survey Respondents with/without Access and/or Guide Fees by Rural/Urban Residence, Resident Anglers, 2001
463	Distribution of Survey Respondents with/without Access and/or Guide Fees by Percentage of Rural Spending, Resident Anglers, 2001
464	Distribution of Survey Respondents with/without Access and/or Guide Fees by Income, Resident Anglers, 2001
465	Distribution of Survey Respondents with/without Access and/or Guide Fees by Age, Resident Anglers, 2001
466	Distribution of Type of Residence by Rural/Urban Residence, Resident Anglers, 2001
467	Distribution of Type of Residence by Percentage of Rural Spending, Resident Anglers, 2001
468	Distribution of Type of Residence by Income, Resident Anglers, 2001
469	Distribution of Type of Residence by Age, Resident Anglers, 2001
470	Distribution of Rural/Urban Residence by Percentage of Rural Spending, Resident Anglers, 2001
471	Distribution of Rural/Urban Residence by Income, Resident Anglers, 2001
472	Distribution of Rural/Urban Residence by Age, Resident Anglers, 2001
473	Distribution of Percentage of Rural Spending by Income, Resident Anglers, 2001
474	Distribution of Percentage of Rural Spending by Age, Resident Anglers, 2001
475	Distribution of Age by Income, Resident Anglers, 2001
476	Distribution of Days Participated by Miles Traveled, Nonresident Hunters, 2001

<u>Table</u>	<u>Pag</u>	<u>e</u>
477	Distribution of Days Participated by Access and/or Guide Fees, Nonresident Hunters, 2001	2
478	Distribution of Days Participated by Type of Residence, Nonresident Hunters, 2001	3
479	Distribution of Days Participated by Rural/Urban Residence, Nonresident Hunters, 2001	3
480	Distribution of Days Participated by Percentage of Rural Spending, Nonresident Hunters, 2001	4
481	Distribution of Days Participated by Income, Nonresident Hunters, 2001	4
482	Distribution of Days by Age, Nonresident Hunters, 2001	5
483	Distribution of Miles Traveled by Access and/or Guide Fees, Nonresident Hunters, 2001	5
484	Distribution of Miles Traveled by Type of Residence, Nonresident Hunters, 2001	6
485	Distribution of Miles Traveled by Rural/Urban Residence, Nonresident Hunters, 2001	6
486	Distribution of Miles Traveled by Percentage of Rural Spending, Nonresident Hunters, 2001	7
487	Distribution of Miles Traveled by Income, Nonresident Hunters, 2001	7
488	Distribution of Miles Traveled by Age, Nonresident Hunters, 2001	8
489	Distribution of Survey Respondents with/without Access and/or Guide Fees by Type of Residence, Nonresident Hunters, 2001	8
490	Distribution of Survey Respondents with/without Access and/or Guide Fees by Rural/Urban Residence, Nonresident Hunters, 2001	9
491	Distribution of Survey Respondents with/without Access and/or Guide Fees by Percentage of Rural Spending, Nonresident Hunters, 2001	9
492	Distribution of Survey Respondents with/without Access and/or Guide Fees by Income, Nonresident Hunters, 2001	0

<u>Table</u>	<u>Page</u>
493	Distribution of Survey Respondents with/without Access and/or Guide Fees by Age, Nonresident Hunters, 2001
494	Distribution of Type of Residence by Rural/Urban Residence, Nonresident Hunters, 2001
495	Distribution of Type of Residence by Percentage of Rural Spending, Nonresident Hunters, 2001
496	Distribution of Type of Residence by Income, Nonresident Hunters, 2001
497	Distribution of Type of Residence by Age, Nonresident Hunters, 2001
498	Distribution of Rural/Urban Residence by Percentage of Rural Spending, Nonresident Hunters, 2001
499	Distribution of Rural/Urban Residence by Income, Nonresident Hunters, 2001 463
500	Distribution of Rural/Urban Residence by Age, Nonresident Hunters, 2001
501	Distribution of Percentage of Rural Spending by Income, Nonresident Hunters, 2001
502	Distribution of Percentage of Rural Spending by Age, Nonresident Hunters, 2001
503	Distribution of Age by Income, Nonresident Hunters, 2001
504	Distribution of Days Participated by Miles Traveled, Nonresident Anglers, 2001
505	Distribution of Days Participated by Access and/or Guide Fees, Nonresident Anglers, 2001
506	Distribution of Days Participated by Type of Residence, Nonresident Anglers, 2001
507	Distribution of Days Participated by Rural/Urban Residence, Nonresident Anglers, 2001
508	Distribution of Days Participated by Percentage of Rural Spending, Nonresident Anglers, 2001
509	Distribution of Days Participated by Income, Nonresident Anglers, 2001 468

<u>Table</u>		<u>Page</u>
510	Distribution of Days Participated by Age, Nonresident Anglers, 2001	. 469
511	Distribution of Miles Traveled by Access and/or Guide Fees, Nonresident Anglers, 2001	. 469
512	Distribution of Miles Traveled by Type of Residence, Nonresident Anglers, 2001	. 470
513	Distribution of Miles Traveled by Rural/Urban Residence, Nonresident Anglers, 2001	. 470
514	Distribution of Miles Traveled by Percentage of Rural Spending, Nonresident Anglers, 2001	. 471
515	Distribution of Miles Traveled by Income, Nonresident Anglers, 2001	. 471
516	Distribution of Miles Traveled by Age, Nonresident Anglers, 2001	. 472
517	Distribution of Survey Respondents with/without Access and/or Guide Fees by Type of Residence, Nonresident Anglers, 2001	. 472
518	Distribution of Survey Respondents with/without Access and/or Guide Fees by Rural/Urban Residence, Nonresident Anglers, 2001	. 473
519	Distribution of Survey Respondents with/without Access and/or Guide Fees by Percentage of Rural Spending, Nonresident Anglers, 2001	. 473
520	Distribution of Survey Respondents with/without Access and/or Guide Fees by Income, Nonresident Anglers, 2001	. 474
521	Distribution of Survey Respondents with/without Access and/or Guide Fees by Age, Nonresident Anglers, 2001	. 474
522	Distribution of Type of Residence by Rural/Urban Residence, Nonresident Anglers, 2001	. 475
523	Distribution of Type of Residence by Percentage of Rural Spending, Nonresident Anglers, 2001	. 475
524	Distribution of Type of Residence by Income, Nonresident Anglers, 2001	. 476
525	Distribution of Type of Residence by Age, Nonresident Anglers, 2001	. 476
526	Distribution of Rural/Urban Residence by Percentage of Rural Spending, Nonresident Anglers, 2001	. 477
527	Distribution of Rural/Urban Residence by Income, Nonresident Anglers, 2001	. 477

<u>Table</u>	$\underline{\mathbf{P}}_{\mathbf{i}}$	age
528	Distribution of Rural/Urban Residence by Age, Nonresident Anglers, 2001	! 78
529	Distribution of Percentage of Rural Spending by Income, Nonresident Anglers, 2001	! 78
530	Distribution of Percentage of Rural Spending by Age, Nonresident Anglers, 2001	! 79
531	Distribution of Age by Income, Nonresident Anglers, 2001	179
532	Resident Antelope Hunting, Average Days Participated, by Year	181
533	Resident Deer Hunting, Average Days Participated, by Year	181
534	Resident Big Game, Furbearer, Upland Game, and Waterfowl, Average Days Participated, by Year	182
535	Resident Turkey Hunting, Average Days Participated, by Year	182
536	Resident Fishing, Average Days Participated, by Year	183
537	Nonresident Hunting and Fishing, Average Days Participated, by Year	183
538	Resident Antelope Hunting, Average Miles Traveled, by Year	184
539	Resident Deer Hunting, Average Miles Traveled, by year	184
540	Resident Big Game, Furbearer, Upland Game, and Waterfowl, Average Miles Traveled, by Year	185
541	Resident Turkey Hunting, Average Miles Traveled, by Year	185
542	Resident Fishing, Average Miles Traveled, by Year	186
543	Nonresident Hunting and Fishing, Average Miles Traveled, by Year	186
544	Resident Antelope Hunting, Average Miles Traveled per Day of Participation, by Year	1 87
545	Resident Deer Hunting, Average Miles Traveled per Day of Participation, by Year	187
546	Resident Big Game, Furbearer, Upland Game, and Waterfowl, Average Miles Traveled per Day of Participation, by Year	188

<u>Table</u>		<u>Page</u>
547	Resident Turkey Hunting, Average Miles Traveled per Day of Participation, by Year	488
548	Resident Fishing, Average Miles Traveled per Day of Participation, by Year	489
549	Nonresident Hunting and Fishing, Average Miles Traveled per Day of Participation, by Year	489
550	Explanatory Capacity of Participant Characteristics on Average Seasonal Variable and Fixed Expenditures for Hunting and Fishing Activities, North Dakota, 2001	492

List of Figures

	<u>Page</u>
eason Variable, Fixed, and Total Expenses, and Days Participated, esident Antelope Archery, Real (2002) Dollars	69
eason Variable, Fixed, and Total Expenses, and Days Participated, esident Antelope Firearm, Real (2002) Dollars	69
eason Variable, Fixed, and Total Expenses, and Days Participated, esident Antelope Firearm Gratis, Real (2002) Dollars	70
eason Variable, Fixed, and Total Expenses, and Days Participated, esident Big Game, Real (2002) Dollars	70
eason Variable, Fixed, and Total Expenses, and Days Participated, esident Deer Archery, Real (2002) Dollars	71
eason Variable, Fixed, and Total Expenses, and Days Participated, esident Deer Firearm, Real (2002) Dollars	71
eason Variable, Fixed, and Total Expenses, and Days Participated, esident Deer Firearm Gratis, Real (2002) Dollars	72
eason Variable, Fixed, and Total Expenses, and Days Participated, esident Furbearer, Real (2002) Dollars	72
eason Variable, Fixed, and Total Expenses, and Days Participated, esident Fall Turkey, Real (2002) Dollars	73
eason Variable, Fixed, and Total Expenses, and Days Participated, esident Fall Turkey Gratis, Real (2002) Dollars	73
eason Variable, Fixed, and Total Expenses, and Days Participated, esident Upland Game, Real (2002) Dollars	74
eason Variable, Fixed, and Total Expenses, and Days Participated, esident Waterfowl, Real (2002) Dollars	74
lajor Survey Groups, Resident Hunting, Season Variable Expenses, eal (2002) Dollars	75
Tajor Survey Groups, Resident Hunting, Season Fixed Expenses, eal (2002) Dollars	75
Tajor Survey Groups, Resident Hunting, Season Total Expenses, eal (2002) Dollars	76

Figure	<u>Page</u>
16	Season Variable, Fixed, and Total Expenses, and Days Participated, Resident Summer Fishing, Real (2002) Dollars
17	Season Variable, Fixed, and Total Expenses, and Days Participated, Resident Winter Fishing, Real (2002) Dollars
18	Season Variable, Fixed, and Total Expenses, and Days Participated, Nonresident Antelope Archery, Real (2002) Dollars
19	Season Variable, Fixed, and Total Expenses, and Days Participated, Nonresident Deer Archery, Real (2002) Dollars
20	Season Variable, Fixed, and Total Expenses, and Days Participated, Nonresident Deer Firearm, Real (2002) Dollars
21	Season Variable, Fixed, and Total Expenses, and Days Participated, Nonresident Small Game, Real (2002) Dollars
22	Major Survey Groups, Nonresident Hunting, Season Variable Expenses, Real (2002) Dollars
23	Major Survey Groups, Nonresident Hunting, Season Fixed Expenses, Real (2002) Dollars
24	Major Survey Groups, Nonresident Hunting, Season Total Expenses, Real (2002) Dollars
25	Season Variable, Fixed, and Total Expenses, and Days Participated, Nonresident Seasonal Fishing, Real (2002) Dollars
26	Major Components of Total Variable Expenses, Resident Antelope Archery, Real (2002) Dollars
27	Major Components of Total Variable Expenses, Resident Antelope Firearm, Real (2002) Dollars
28	Major Components of Total Variable Expenses, Resident Antelope Firearm Gratis, Real (2002) Dollars
29	Major Components of Total Variable Expenses, Resident Big Game, Real (2002) Dollars

<u>Figure</u>	<u>Page</u>
30	Major Components of Total Variable Expenses, Resident Deer Archery, Real (2002) Dollars
31	Major Components of Total Variable Expenses, Resident Deer Firearm, Real (2002) Dollars
32	Major Components of Total Variable Expenses, Resident Deer Firearm Gratis, Real (2002) Dollars
33	Major Components of Total Variable Expenses, Resident Furbearer, Real (2002) Dollars
34	Major Components of Total Variable Expenses, Resident Fall Turkey, Real (2002) Dollars
35	Major Components of Total Variable Expenses, Resident Fall Turkey Gratis, Real (2002) Dollars
36	Major Components of Total Variable Expenses, Resident Upland Game, Real (2002) Dollars
37	Major Components of Total Variable Expenses, Resident Waterfowl, Real (2002) Dollars
38	Major Components of Total Variable Expenses, Resident Summer Fishing, Real (2002) Dollars
39	Major Components of Total Variable Expenses, Resident Winter Fishing, Real (2002) Dollars
40	Major Components of Total Variable Expenses, Nonresident Antelope Archery, Real (2002) Dollars
41	Major Components of Total Variable Expenses, Nonresident Deer Archery, Real (2002) Dollars
42	Major Components of Total Variable Expenses, Nonresident Deer Firearm, Real (2002) Dollars
43	Major Components of Total Variable Expenses, Nonresident Small Game, Real (2002) Dollars

<u>Figure</u>		<u>Page</u>
44	Major Components of Total Variable Expenses, Nonresident Seasonal Fishing, Real (2002) Dollars	. 101
45	Major Components of Total Fixed Expenses, Resident Antelope Archery, Real (2002) Dollars	. 102
46	Major Components of Total Fixed Expenses, Resident Antelope Firearm, Real (2002) Dollars	. 103
47	Major Components of Total Fixed Expenses, Resident Antelope Firearm Gratis, Real (2002) Dollars	. 104
48	Major Components of Total Fixed Expenses, Resident Big Game, Real (2002) Dollars	. 105
49	Major Components of Total Fixed Expenses, Resident Deer Archery, Real (2002) Dollars	. 106
50	Major Components of Total Fixed Expenses, Resident Deer Firearm, Real (2002) Dollars	. 107
51	Major Components of Total Fixed Expenses, Resident Deer Firearm Gratis, Real (2002) Dollars	. 108
52	Major Components of Total Fixed Expenses, Resident Furbearer, Real (2002) Dollars	. 109
53	Major Components of Total Fixed Expenses, Resident Fall Turkey, Real (2002) Dollars	. 110
54	Major Components of Total Fixed Expenses, Resident Fall Turkey Gratis, Real (2002) Dollars	. 111
55	Major Components of Total Fixed Expenses, Resident Upland Game, Real (2002) Dollars	. 112
56	Major Components of Total Fixed Expenses, Resident Waterfowl, Real (2002) Dollars	. 113
57	Major Components of Total Fixed Expenses, Resident Summer Fishing, Real (2002) Dollars	

Figure	\underline{Pag}	e
58	Major Components of Total Fixed Expenses, Resident Winter Fishing, Real (2002) Dollars	5
59	Major Components of Total Fixed Expenses, Nonresident Antelope Archery, Real (2002) Dollars	6
60	Major Components of Total Fixed Expenses, Nonresident Deer Archery, Real (2002) Dollars	7
61	Major Components of Total Fixed Expenses, Nonresident Deer Firearm, Real (2002) Dollars	8
62	Major Components of Total Fixed Expenses, Nonresident Small Game, Real (2002) Dollars	9
63	Major Components of Total Fixed Expenses, Nonresident Seasonal Fishing, Real (2002) Dollars	0
64	Average Daily Expenses, Resident Antelope Archery, Real (2002) Dollars	2
65	Average Daily Expenses, Resident Antelope Firearm, Real (2002) Dollars	2
66	Average Daily Expenses, Resident Antelope Firearm Gratis, Real (2002) Dollars 12	3
67	Average Daily Expenses, Resident Big Game, Real (2002) Dollars	3
68	Average Daily Expenses, Resident Deer Archery, Real (2002) Dollars	4
69	Average Daily Expenses, Resident Deer Firearm, Real (2002) Dollars	4
70	Average Daily Expenses, Resident Deer Firearm Gratis, Real (2002) Dollars 12	5
71	Average Daily Expenses, Resident Furbearer, Real (2002) Dollars	5
72	Average Daily Expenses, Resident Fall Turkey, Real (2002) Dollars	6
73	Average Daily Expenses, Resident Fall Turkey Gratis, Real (2002) Dollars	6
74	Average Daily Expenses, Resident Upland Game, Real (2002) Dollars	7
75	Average Daily Expenses, Resident Waterfowl, Real (2002) Dollars	7

<u>Figure</u>	<u>Page</u>
76	Major Survey Groups, Resident Hunting, Daily Variable Expenses, Real (2002) Dollars
77	Major Survey Groups, Resident Hunting, Daily Fixed Expenses, Real (2002) Dollars
78	Major Survey Groups, Resident Hunting, Daily Total Expenses, Real (2002) Dollars
79	Average Daily Expenses, Resident Summer Fishing, Real (2002) Dollars
80	Average Daily Expenses, Resident Winter Fishing, Real (2002) Dollars
81	Average Daily Expenses, Nonresident Antelope Archery, Real (2002) Dollars 131
82	Average Daily Expenses, Nonresident Deer Archery, Real (2002) Dollars
83	Average Daily Expenses, Nonresident Deer Firearm, Real (2002) Dollars
84	Average Daily Expenses, Nonresident Small Game, Real (2002) Dollars
85	Average Daily Expenses, Nonresident Seasonal Fishing, Real (2002) Dollars 133
86	Major Survey Groups, Nonresident Hunting, Daily Variable Expenses, Real (2002) Dollars
87	Major Survey Groups, Nonresident Hunting, Daily Fixed Expenses, Real (2002) Dollars
88	Major Survey Groups, Nonresident Hunting, Daily Total Expenses, Real (2002) Dollars
89	Total Spending and Percentage of Total Spending for Variable and Fixed Expenses, Resident Antelope Archery, Real (2002) Dollars
90	Total Spending and Percentage of Total Spending for Variable and Fixed Expenses, Resident Antelope Firearm, Real (2002) Dollars
91	Total Spending and Percentage of Total Spending for Variable and Fixed Expenses, Resident Antelope Firearm Gratis, Real (2002) Dollars
92	Total Spending and Percentage of Total Spending for Variable and Fixed Expenses, Resident Big Game, Real (2002) Dollars

<u>Figure</u>		<u>Page</u>
93	Total Spending and Percentage of Total Spending for Variable and Fixed Expenses, Resident Deer Archery, Real (2002) Dollars	138
94	Total Spending and Percentage of Total Spending for Variable and Fixed Expenses, Resident Deer Firearm, Real (2002) Dollars	138
95	Total Spending and Percentage of Total Spending for Variable and Fixed Expenses, Resident Deer Firearm Gratis, Real (2002) Dollars	139
96	Total Spending and Percentage of Total Spending for Variable and Fixed Expenses, Resident Furbearer, Real (2002) Dollars	139
97	Total Spending and Percentage of Total Spending for Variable and Fixed Expenses, Resident Fall Turkey, Real (2002) Dollars	140
98	Total Spending and Percentage of Total Spending for Variable and Fixed Expenses, Resident Fall Turkey Gratis, Real (2002) Dollars	140
99	Total Spending and Percentage of Total Spending for Variable and Fixed Expenses, Resident Upland Game, Real (2002) Dollars	141
100	Total Spending and Percentage of Total Spending for Variable and Fixed Expenses, Resident Waterfowl, Real (2002) Dollars	141
101	Total Spending and Percentage of Total Spending for Variable and Fixed Expenses, Resident Summer Fishing, Real (2002) Dollars	142
102	Total Spending and Percentage of Total Spending for Variable and Fixed Expenses, Resident Winter Fishing, Real (2002) Dollars	142
103	Total Spending and Percentage of Total Spending for Variable and Fixed Expenses, Nonresident Antelope Archery, Real (2002) Dollars	143
104	Total Spending and Percentage of Total Spending for Variable and Fixed Expenses, Nonresident Deer Archery, Real (2002) Dollars	143
105	Total Spending and Percentage of Total Spending for Variable and Fixed Expenses, Nonresident Deer Firearm, Real (2002) Dollars	144
106	Total Spending and Percentage of Total Spending for Variable and Fixed Expenses, Nonresident Small Game, Real (2002) Dollars	144

Figure	<u>P</u>	age
107	Total Spending and Percentage of Total Spending for Variable and Fixed Expenses, Nonresident Seasonal Fishing, Real (2002) Dollars	145
108	Percentage of Variable Spending by Major Expense Categories, Resident Antelope Archery	148
109	Percentage of Fixed Spending by Major Expense Categories, Resident Antelope Archery	148
110	Percentage of Variable Spending by Major Expense Categories, Resident Antelope Firearm	149
111	Percentage of Fixed Spending by Major Expense Categories, Resident Antelope Firearm	149
112	Percentage of Variable Spending by Major Expense Categories, Resident Antelope Firearm Gratis	150
113	Percentage of Fixed Spending by Major Expense Categories, Resident Antelope Firearm Gratis	150
114	Percentage of Variable Spending by Major Expense Categories, Resident Big Game	151
115	Percentage of Fixed Spending by Major Expense Categories, Resident Big Game	151
116	Percentage of Variable Spending by Major Expense Categories, Resident Deer Archery	152
117	Percentage of Fixed Spending by Major Expense Categories, Resident Deer Archery	152
118	Percentage of Variable Spending by Major Expense Categories, Resident Deer Firearm	153
119	Percentage of Fixed Spending by Major Expense Categories, Resident Deer Firearm	153
120	Percentage of Variable Spending by Major Expense Categories, Resident Deer Firearm Gratis	154

<u>Figure</u>	\underline{I}	Page
121	Percentage of Fixed Spending by Major Expense Categories, Resident Deer Firearm Gratis	154
122	Percentage of Variable Spending by Major Expense Categories, Resident Furbearer	155
123	Percentage of Fixed Spending by Major Expense Categories, Resident Furbearer	155
124	Percentage of Variable Spending by Major Expense Categories, Resident Fall Turkey	156
125	Percentage of Fixed Spending by Major Expense Categories, Resident Fall Turkey	156
126	Percentage of Variable Spending by Major Expense Categories, Resident Fall Turkey Gratis	157
127	Percentage of Fixed Spending by Major Expense Categories, Resident Fall Turkey Gratis	157
128	Percentage of Variable Spending by Major Expense Categories, Resident Upland Game	158
129	Percentage of Fixed Spending by Major Expense Categories, Resident Upland Game	158
130	Percentage of Variable Spending by Major Expense Categories, Resident Waterfowl	159
131	Percentage of Fixed Spending by Major Expense Categories, Resident Waterfowl	159
132	Percentage of Variable Spending for Food Expenses, Resident Hunting Groups	160
133	Percentage of Variable Spending for Lodging Expenses, Resident Hunting Groups	160
134	Percentage of Variable Spending for Transportation Expenses, Resident Hunting Groups	161

<u>Figure</u>		<u>Page</u>
135	Percentage of Variable Spending for Other Variable Expenses, Resident Hunting Groups	161
136	Percentage of Fixed Spending for Weapons/Optics, Resident Hunting Groups	162
137	Percentage of Fixed Spending for Clothing, Resident Hunting Groups	162
138	Percentage of Fixed Spending for Other Fixed Expenses, Resident Hunting Groups	163
139	Percentage of Variable Spending by Major Expense Categories, Resident Summer Fishing	164
140	Percentage of Fixed Spending by Major Expense Categories, Resident Summer Fishing	164
141	Percentage of Variable Spending by Major Expense Categories, Resident Winter Fishing	165
142	Percentage of Fixed Spending by Major Expense Categories, Resident Winter Fishing	165
143	Percentage of Variable Spending by Major Expense Categories, Nonresident Antelope Archery	166
144	Percentage of Fixed Spending by Major Expense Categories, Nonresident Antelope Archery	166
145	Percentage of Variable Spending by Major Expense Categories, Nonresident Deer Archery	167
146	Percentage of Fixed Spending by Major Expense Categories, Nonresident Deer Archery	167
147	Percentage of Variable Spending by Major Expense Categories, Nonresident Deer Firearm	168
148	Percentage of Fixed Spending by Major Expense Categories, Nonresident Deer Firearm	168
149	Percentage of Variable Spending by Major Expense Categories, Nonresident Small Game	169

Figure	Page
150	Percentage of Fixed Spending by Major Expense Categories, Nonresident Small Game
151	Percentage of Variable Spending by Major Expense Categories, Nonresident Seasonal Fishing
152	Percentage of Fixed Spending by Major Expense Categories, Nonresident Seasonal Fishing
153	Percentage of Variable Spending for Food Expenses, Nonresident Hunting Groups
154	Percentage of Variable Spending for Lodging Expenses, Nonresident Hunting Groups
155	Percentage of Variable Spending for Transportation Expenses, Nonresident Hunting Groups
156	Percentage of Variable Spending for Other Variable Expenses, Nonresident Hunting Groups
157	Percentage of Fixed Spending for Weapons/Optics, Nonresident Hunting Groups
158	Percentage of Fixed Spending for Clothing, Nonresident Hunting Groups 173
159	Percentage of Fixed Spending for Other Fixed Expenses, Nonresident Hunting Groups
160	Percentage of Survey Respondents Reporting Access Fees, Resident Hunters 177
161	Percentage of Survey Respondents Reporting Ammunition Expenses, Resident Hunters
162	Percentage of Survey Respondents Reporting Film and Film Processing Expenses, Resident Hunters
163	Percentage of Survey Respondents Reporting Food Expenses, Resident Hunters
164	Percentage of Survey Respondents Reporting Guide Fees, Resident Hunters 179

<u>Figure</u>	<u>Page</u>
165	Percentage of Survey Respondents Reporting Lodging Expenses, Resident Hunters
166	Percentage of Survey Respondents Reporting Meat Processing Expenses, Resident Hunters
167	Percentage of Survey Respondents Reporting Other Variable Expenses, Resident Hunters
168	Percentage of Survey Respondents Reporting Repairs, Resident Hunters
169	Percentage of Survey Respondents Reporting Taxidermy Expenses, Resident Hunters
170	Percentage of Survey Respondents Reporting Transportation Expenses, Resident Hunters
171	Percentage of Survey Respondents Reporting Veterinary Expenses, Resident Hunters
172	Percentage of Survey Respondents Reporting Variable Expenses, Resident Hunters
173	Percentage of Survey Respondents Reporting Binocular/Optics Expenses, Resident Hunters
174	Percentage of Survey Respondents Reporting Boat Purchases, Resident Hunters
175	Percentage of Survey Respondents Reporting Purchases of Game Calls, Resident Hunters
176	Percentage of Survey Respondents Reporting Camping Equipment Purchases, Resident Hunters
177	Percentage of Survey Respondents Reporting Clothing Purchases, Resident Hunters
178	Percentage of Survey Respondents Reporting Purchases of Decoys, Resident Hunters
179	Percentage of Survey Respondents Reporting Dog Purchases, Resident Hunters

Figure	<u>Page</u>
180	Percentage of Survey Respondents Reporting Other Fixed Expenses, Resident Hunters
181	Percentage of Survey Respondents Reporting Purchases of Skinning Equipment, Resident Hunters
182	Percentage of Survey Respondents Reporting Purchases of Traps, Resident Hunters
183	Percentage of Survey Respondents Reporting Vehicle Purchases, Resident Hunters
184	Percentage of Survey Respondents Reporting Purchases of Weapons, Resident Hunters
185	Percentage of Survey Respondents Reporting Fixed Expenses, Resident Hunters
186	Percentage of Survey Respondents Reporting Access Fees, Resident Anglers
187	Percentage of Survey Respondents Reporting Bait Expenses, Resident Anglers
188	Percentage of Survey Respondents Reporting Fuel (equipment) Expenses, Resident Anglers
189	Percentage of Survey Respondents Reporting Film and Film Processing Expenses, Resident Anglers
190	Percentage of Survey Respondents Reporting Food Expenses, Resident Anglers
191	Percentage of Survey Respondents Reporting Lodging Expenses, Resident Anglers
192	Percentage of Survey Respondents Reporting Meat Processing Expenses, Resident Anglers
193	Percentage of Survey Respondents Reporting Other Variable Expenses, Resident Anglers

<u>Figure</u>	<u>Page</u>
194	Percentage of Survey Respondents Reporting Rental Expenses, Resident Anglers
195	Percentage of Survey Respondents Reporting Repairs, Resident Anglers 194
196	Percentage of Survey Respondents Reporting Taxidermy Expenses, Resident Anglers
197	Percentage of Survey Respondents Reporting Transportation Expenses, Resident Anglers
198	Percentage of Survey Respondents Reporting Variable Expenses, Resident Anglers
199	Percentage of Survey Respondents Reporting Ice Auger Purchases, Resident Anglers
200	Percentage of Survey Respondents Reporting Boat Purchases, Resident Anglers
201	Percentage of Survey Respondents Reporting Camping Equipment Purchases, Resident Anglers
202	Percentage of Survey Respondents Reporting Clothing Purchases, Resident Anglers
203	Percentage of Survey Respondents Reporting Purchases of Fishing Electronics, Resident Anglers
204	Percentage of Survey Respondents Reporting Ice Fish House Purchases, Resident Anglers
205	Percentage of Survey Respondents Reporting Other Fixed Expenses, Resident Anglers
206	Percentage of Survey Respondents Reporting Purchases of Rods/Reels, Resident Anglers
207	Percentage of Survey Respondents Reporting Tackle Expenses, Resident Anglers
208	Percentage of Survey Respondents Reporting Vehicle Purchases, Resident Anglers

<u>Figure</u>		<u>Page</u>
209	Percentage of Survey Respondents Reporting Fixed Expenses, Resident Anglers	201
210	Percentage of Survey Respondents Reporting Access Fees, Nonresident Hunters	202
211	Percentage of Survey Respondents Reporting Ammunition Expenses, Nonresident Hunters	202
212	Percentage of Survey Respondents Reporting Film and Film Processing Expenses, Nonresident Hunters	203
213	Percentage of Survey Respondents Reporting Food Expenses, Nonresident Hunters	203
214	Percentage of Survey Respondents Reporting Guide Fees, Nonresident Hunters	204
215	Percentage of Survey Respondents Reporting Lodging Expenses, Nonresident Hunters	204
216	Percentage of Survey Respondents Reporting Meat Processing Expenses, Nonresident Hunters	205
217	Percentage of Survey Respondents Reporting Other Variable Expenses, Nonresident Hunters	205
218	Percentage of Survey Respondents Reporting Repairs, Nonresident Hunters	206
219	Percentage of Survey Respondents Reporting Taxidermy Expenses, Nonresident Hunters	206
220	Percentage of Survey Respondents Reporting Transportation Expenses, Nonresident Hunters	207
221	Percentage of Survey Respondents Reporting Veterinary Expenses, Nonresident Hunters	207
222	Percentage of Survey Respondents Reporting Variable Expenses, Nonresident Hunters	208
223	Percentage of Survey Respondents Reporting Binocular/Optics Expenses, Nonresident Hunters	208

Figure		Page
224	Percentage of Survey Respondents Reporting Boat Purchases, Nonresident Hunters	. 209
225	Percentage of Survey Respondents Reporting Camping Equipment Purchases, Nonresident Hunters	. 209
226	Percentage of Survey Respondents Reporting Clothing Purchases, Nonresident Hunters	. 210
227	Percentage of Survey Respondents Reporting Purchases of Decoys, Nonresident Hunters	. 210
228	Percentage of Survey Respondents Reporting Dog Purchases, Nonresident Hunters	. 211
229	Percentage of Survey Respondents Reporting Other Fixed Expenses, Nonresident Hunters	. 211
230	Percentage of Survey Respondents Reporting Vehicle Purchases, Nonresident Hunters	. 212
231	Percentage of Survey Respondents Reporting Purchases of Weapons, Nonresident Hunters	. 212
232	Percentage of Survey Respondents Reporting Fixed Expenses, Nonresident Hunters	. 213
233	Percentage of Survey Respondents Reporting Access Fees, Nonresident Anglers	. 214
234	Percentage of Survey Respondents Reporting Bait Expenses, Nonresident Anglers	. 214
235	Percentage of Survey Respondents Reporting Fuel (equipment) Expenses, Nonresident Anglers	. 215
236	Percentage of Survey Respondents Reporting Film and Film Processing Expenses, Nonresident Anglers	. 215
237	Percentage of Survey Respondents Reporting Food Expenses, Nonresident Anglers	. 216

<u>Figure</u>		<u>Page</u>
238	Percentage of Survey Respondents Reporting Lodging Expenses, Nonresident Anglers	216
239	Percentage of Survey Respondents Reporting Meat Processing Expenses, Nonresident Anglers	217
240	Percentage of Survey Respondents Reporting Other Variable Expenses, Nonresident Anglers	217
241	Percentage of Survey Respondents Reporting Rental Expenses, Nonresident Anglers	218
242	Percentage of Survey Respondents Reporting Repairs, Nonresident Anglers	218
243	Percentage of Survey Respondents Reporting Taxidermy Expenses, Nonresident Anglers	219
244	Percentage of Survey Respondents Reporting Transportation Expenses, Nonresident Anglers	219
245	Percentage of Survey Respondents Reporting Variable Expenses, Nonresident Anglers	220
246	Percentage of Survey Respondents Reporting Ice Auger Purchases, Nonresident Anglers	220
247	Percentage of Survey Respondents Reporting Boat Purchases, Nonresident Anglers	221
248	Percentage of Survey Respondents Reporting Camping Equipment Purchases, Nonresident Anglers	221
249	Percentage of Survey Respondents Reporting Clothing Purchases, Nonresident Anglers	222
250	Percentage of Survey Respondents Reporting Purchases of Fishing Electronics, Nonresident Anglers	222
251	Percentage of Survey Respondents Reporting Ice House Purchases, Nonresident Anglers	223
252	Percentage of Survey Respondents Reporting Other Fixed Expenses, Nonresident Anglers	223

<u>Figure</u>		<u>Page</u>
253	Percentage of Survey Respondents Reporting Purchases of Rods/Reels, Nonresident Anglers	224
254	Percentage of Survey Respondents Reporting Tackle Expenses, Nonresident Anglers	224
255	Percentage of Survey Respondents Reporting Vehicle Purchases, Nonresident Anglers	225
256	Percentage of Survey Respondents Reporting Fixed Expenses, Nonresident Anglers	225

Abstract

Macro-economic forces, technological innovations in equipment, abundant wildlife populations, changing participation levels, and land access are all contributing to a changing environment for wildlife managers and outdoor recreationists. Since the late 1970s, numerous studies have periodically examined hunter and angler spending in North Dakota; however, comprehensive assessments of changes in spending over time have not been conducted. The purpose of this report was to evaluate changes in hunter and angler spending from 1981 through 2001 and evaluate spending patterns based on selected participant characteristics.

For resident hunters, increasing trends in miles traveled, spending on lodging, and spending on durable goods were observed, while overall spending on nondurable goods remained relatively unchanged. Average spending by nonresident hunters generally increased for nondurable goods, but no conclusive trends in durable good purchases were found. Average spending on durable and nondurable goods increased for resident anglers, while average spending was mostly constant over the period for nonresident anglers. The shifts in spending were generally widespread among a majority of survey activities, yet the magnitude of spending changes was subtle.

When spending levels were evaluated based on selected participant characteristics, statistically significant differences were found. The strongest relationships in spending levels were found with miles traveled, days participated, and whether the participant paid access and/or guide fees. Weaker relationships were found in differences in spending levels associated with location of residence (i.e., rural versus urban participants) and percentage of spending in rural areas. Only minor differences in spending levels were found with variations in age and income.

Policy makers may wish to consider a data collection system in the future that provides more predictive assessments of sportsman spending and includes additional geographical information on spending, rather than the current system which produces mostly descriptive assessments and provides virtually no geographical distribution of spending within the state.

Key Words: hunting, fishing, expenditures, North Dakota

Trends and Characteristics of Hunter and Angler Spending, North Dakota, 1981 through 2001

Dean A. Bangsund and F. Larry Leistritz*

Introduction

Analyzing hunter expenditures in North Dakota is not a new concept. Stuart (1949) reported the results of surveying upland game and waterfowl hunters in 1948. In-state efforts to analyze hunter expenditures again surfaced in the mid 1970s, first in an effort to estimate the value of wildlife habitat and wildlife populations (Souris-Red-Rainy River Basins Commission 1972, Sorenson 1975, Leitch and Nelson 1976) and then to estimate the economic activity created by sportsmen expenditures (Harmoning 1977, 1978; Leitch 1977a, 1977b, 1978).

As the interest in obtaining more comprehensive and detailed information on hunter and angler expenditures increased, and as the sophistication of data collection techniques improved, the ND Game and Fish Department, in conjunction with researchers from North Dakota State University, developed a periodic data collection system for hunter and angler expenditures in the early 1980s (Leitch and Kerestes 1982, Kerestes and Leitch 1983). The data collection system for hunter and angler expenditures developed in the early 1980s has largely been responsible for the methods and type of information collected over the last 20 years. Although subtle changes in questionnaire design, hunting/angling activities surveyed, and estimation techniques have occurred since the early 1980s, the framework for collecting, analyzing, and reporting hunter and angler expenditures has remained consistent.

Since the late 1970s, numerous studies have examined hunter and angler spending in North Dakota. The first study sponsored by the ND Game and Fish Department, since the survey conducted by Stuart (1949), to assess socio-economic information on hunters and anglers in North Dakota was conducted in 1976 and only gathered information on nonresident hunters and anglers (Leitch and Scott 1978). Since 1978, six additional studies have been conducted at approximately five-year intervals to assess socio-economic characteristics of both resident and nonresident hunters and anglers. Studies in 1981 and 1982 collected information on resident hunters and anglers (Kerestes and Leitch 1983, Leitch and Kerestes 1982). Another study was conducted in 1983 to collect information on nonresident hunters and anglers (Anderson and Leitch 1984). Baltezore et al. (1987) collected information on resident hunter and angler spending in 1986. Both resident and nonresident hunters and anglers were surveyed in 1990 (Baltezore and Leitch 1992). Lewis et al. (1998) again surveyed both resident and nonresident hunters and anglers in North Dakota in 1996. Results from the most recent survey, conducted in 2001, were reported by Bangsund and Leistritz (2003).

Despite the periodic reporting of hunter and angler expenditures since the late 1970s, hunter and angler spending has not been consistently evaluated for changes in spending patterns or factors affecting spending levels. In previous expenditure reports, the primary focus of the socio-economic survey was to project participation levels in various hunting and fishing

^{*}Research scientist and professor, respectively, Department of Agribusiness and Applied Economics, North Dakota State University, Fargo, ND.

activities, estimate statewide hunter and angler spending, and identify basic characteristics of participants. Only cursory comparisons of past survey results have been included in the examination of hunter and angler spending.

Much has changed in the hunting/fishing landscape since the ND Game and Fish Department implemented a periodic assessment of sportsman expenditures in the early 1980s. Macro-economic forces have affected per capita incomes, leisure time, and population shifts. Real per capita incomes for most North Dakota residents have increased over the last 20 years (Coon and Leistritz 2003, Hamm et al. 1992). Changes in leisure time and traditional family structures also affect outdoor recreation (Nickerson and Black 2000), although information on changes in leisure time for both resident and nonresident hunters and anglers is unknown. Some of the most salient changes have included population shifts within the state, primarily an exodus of people from rural areas to the state's larger, regional trade centers (Coon and Leistritz 2003). These changes have broad implications for hunter and angler participation (Brown et al. 2000).

Numerous factors have influenced the distribution and population of game species over the last 20 years within North Dakota. Changes in Federal farm programs have influenced land use, and subsequently wildlife populations. The Conservation Reserve Program and other related conservation measures have had substantial effects on wildlife populations (Bihrle 2003a, Leistritz et al. 2002, Bangsund et al. 2002). Production agriculture in the state has shifted from small grains to row crops (NDASS various years, Johnson and Bangsund 1989), and many producers have adopted minimum tillage, no-till, and other conservation practices. The state has experienced sustained and substantial weather cycles over the last 20 years; drought in the late 1980s and wet weather in the mid 1990s have both influenced wildlife populations (Wilson 2003). The wet weather cycle of the mid 1990s turned many wetlands into small lakes and, combined with fish stocking efforts, has increased the opportunity for summer and winter angling. As a result of both conservation efforts and favorable weather conditions, populations of many wildlife species is at or near all time highs (ND Game and Fish Department 2002, Bangsund et al. 2002).

Regulations, season lengths, bag limits, license fees, and other policies also have changed over the past two decades. Some of the more noticeable changes include elimination of lead-based shot for waterfowl hunting and, more recently, requirement of non-toxic shot for upland game hunting on most Federal lands. Reductions in daily limits for some fish species and adoption of size restrictions for other species have been implemented over the last two decades on some North Dakota fisheries. Bag limits for waterfowl and upland game have fluctuated over the last two decades in response to changing wildlife populations, as well as the use of special hunting seasons to control populations (e.g., early resident Canada goose season). Licensing structures have changed, both in the type of licenses available and the cost of those licenses (e.g., resident sportsman license).

Technological changes in hunting and fishing equipment have been widespread. The invention of waterproof, breathable membranes (e.g., Gore-Tex®) for waterproof clothing, the use of lightweight, abrasion-resistant materials (e.g., Cordura® nylon, Helcor® rubber), development of realistic camouflage patterns, adoption of synthetic fabrics and insulations (e.g., thinsulate®, neoprene, microloft®, fleece), and invention of scent absorption systems for hiding body odor (e.g., scent-lok®) have all influenced the selection, comfort, durability, and cost of

clothing for outdoor recreation. Other technological changes include the use of electronic gear for both hunting and fishing, such as range finders, fish and depth locators, underwater cameras, bird and predator calls, and hand-held global positioning systems (i.e., GPS units). In addition, technology has influenced the affordability and availability of binoculars, spotting scopes, and telescopic sights for firearms and bows. Other changes in hunting equipment include the development of motion and mechanized decoys and specialized ammunition and archery equipment.

Technological innovations have also affected fishing equipment over the past two decades. Livewells, baitwells, and other on-board conveniences in fishing boats have become standard features for many manufacturers. Lightweight components (e.g., graphite) have improved fishing rods, reels, and other fishing gear. A plethora of realistic artificial lures are now available to anglers. As mentioned earlier, electronic fish/depth finders are now commonplace among anglers. Technology now allows the integration of lake contour maps, GPS coordinates, and depth finders to provide anglers with more tools to locate structure and target specific fish species. Underwater cameras also have become available to both open water and ice fishing participants to visualize bait presentation and assess fish behavior. Changes in ice fishing equipment (e.g., portable ice fishing shelters) have increased the ease and convenience of ice fishing for many participants.

Information technology has also changed the landscape of hunting and fishing. The use of the World Wide Web to track game movements, post hunting/fishing reports, provide weather reports and advisories, advertise/solicit hunting and fishing services and activities, provide electronic licensing, and provide forums for discussion of topics relating to hunting and fishing all became available to most hunters and anglers in the mid to late 1990s.

General access to land has been changing in recent decades. To various degrees, landowners have implemented fee arrangements for access to land, some hunters have negotiated private land leases for hunting access, and access to land through outfitters and guides has become more common in many areas of the state. Posting of land by landowners has become more the norm than the exception (Bihrle 2003b). The aforementioned trends associated with land access have the potential to affect hunter spending and participation levels.

Macro-economic forces, technological innovations, change in wildlife populations, and land access are all contributing to a changing environment for wildlife managers. The first step in gaining a better understanding of how changes in the hunting and angling landscape are influencing hunter and angler spending is to determine how spending has changed over the last two decades. Granted, many of the forces that affect outdoor recreation and specifically hunting and fishing are beyond the influence or control of wildlife managers, yet implications for future policy still exist. Hunter/angler spending has become an additional consideration in wildlife management, and an understanding of how and why spending levels have changed over time can have implications for wildlife managers and policymakers. Perhaps more important, an understanding of how participation has changed over the last two decades could produce insights which may provide some indication of how future policies may affect hunting and fishing participants.

The purpose of this study was to examine 1) changes in hunter and angler spending from 1981 through 2001, 2) spending differences based on respondent characteristics, and 3) to suggest potential changes in the current survey and data collection system for future research. Since little research has examined changes in spending over time using the 1981 to 2001 North Dakota hunter/angler expenditure data set, an opportunity exists to add value to the previous data collection efforts by extending the usefulness of the data to include analyses that have been omitted from prior research.

Objectives

The overall purpose of this study was to analyze hunter and angler expenditures from 1981 through 2001, to identify changes in spending over time, and to examine the relationships between spending levels and participant characteristics. Specific objectives were

- 1) to identify trends in spending levels and patterns,
- 2) to evaluate the relationships between participant characteristics and spending levels, and
- 3) to suggest potential changes in the current data collection system for future use.

Data

Data for this study came from surveys of hunters and anglers conducted in North Dakota in 1981, 1982, 1983, 1986, 1990, 1996, and 2001 (Table 1). Licensed hunters and anglers were randomly sampled and were mailed questionnaires shortly after the closing dates for each respective season in each survey year¹. The survey groups were divided by license type (e.g., resident, nonresident, gratis), game type (e.g., antelope, big game, deer, furbearers, turkey, upland, waterfowl, and fish), and, when applicable, by weapon type (e.g., archery and firearm). However, not all hunting and fishing activities were surveyed in each survey year (Table 1).

While subtle differences in sample rates, response rates, and questionnaire design existed across the survey years and survey groups; overall, sampling techniques for all periods were largely based on procedures outlined by Kerestes and Leitch (1983). [Please refer to prior reports listed in the **References** section for a complete description of previous survey sample and response rates.] For all survey years, expenditure questionnaires were specific to each survey group (see Attachment Section K for representative questionnaires). The type of information requested and the questionnaire format remained relatively unchanged over the 1981 to 2001 period, thus allowing for meaningful comparisons over time. Some changes did occur over the 20-year period in an attempt to standardize demographic and participant characteristics, and expand the list of durable and nondurable good purchases (e.g., expenses for binoculars/optics were added 1986, guide fees added in 1996, purchases of underwater cameras added in 2001). In addition, some expenditure categories in earlier survey years were slightly different (e.g., transportation costs in 1983 were separate for private and public transportation, separate vehicle categories for ATVs, trucks, and campers/motor homes were used in 1982). As a result, data for

¹In some hunting activities in the early stages of the survey process, daily diaries were used instead of mailed questionnaires to collect information on spending and participation.

all survey years were standardized into the expenditure categories used in the 2001 survey (Table 2).

The amount and type of demographic and characteristic data collected over the survey periods was not consistent (Table 3). Generally, more information was collected from survey respondents in the latter survey years (i.e., 1996, 2001). Also, within survey years, the information collected was not consistent across all survey groups (Table 3). Basic demographic and characteristic information collected from hunters and anglers included age, income, days participated, location of residence, miles traveled, percentage of expenditures made in rural areas, and value per day of hunting/fishing.

The questionnaires in each survey period were structured to sort expenditures into durable goods or fixed expenses and nondurable goods/services or variable expenses. The classification of durable and nondurable goods, methodology for identifying and quantifying expenditures (e.g., purchase price versus estimated cost), and the rationale for the approach was outlined by Leitch and Kerestes (1982) and Kerestes and Leitch (1983).

Durable Goods/Fixed Expenses

Durable goods usually represent items that can be used over several seasons or can be used numerous times over extended periods before replacing. Examples of durable goods for hunting and fishing include optics, weapons, fishing rods, clothing, boats, knives, decoys, ice augers, and so on. Purchases of durable goods are often classified as fixed expenses, since the cost of the item is not dependent upon activity levels (the cost of a knife is the same if an individual hunts 2 days or 20 days) even though most durable goods will eventually wear out, become obsolete, break, or otherwise become nonuseful in the long term (e.g., over 20 years).

The treatment of fixed expenses in this study is consistent with past studies and is based on the premise that not all hunters and anglers incur all of their fixed expenses in any given year. For example, in any given year, only some anglers will purchase a new boat and only some firearm deer hunters will purchase a new rifle. Thus, when fixed expenses for each survey group are averaged and multiplied by all individuals participating in the survey category, an approximate overall level of annual purchases for durable goods can be estimated. Durable good purchases were credited to the activity for which those items/goods were initially purchased. However, in reality, the purchase of some durable goods for a specific activity does not preclude the possible use of those items for other types of recreational activities. For example, binoculars purchased for an antelope hunt could also be used for other hunting and/or non-hunting activities. Given the scope of this study, and the need to maintain consistency with previous studies, no attempt was made to determine the percentage use of durable goods (except vehicle purchases) for only the activity surveyed. Rather than estimating the annualized expense² of durable goods, the purchase price of all durable goods (except vehicles) was allocated to the activity for which the durable good was purchased. For a more thorough explanation of the

²Annualizing expenses is a technique to spread out fixed expenditures over the life of an item or good. In the case of hunting and fishing, the difficulty in annualizing fixed expenditures prevents treating durable good purchases on annual use or anticipated useful life basis.

methodology used to estimate fixed expenses, and methods used to estimate vehicle expenses, see Bangsund and Leistritz (2003).

Nondurable Goods/Variable Expenses

Nondurable goods generally represent goods/services consumed or used in direct proportion to activity levels. Examples of nondurable goods for hunting and fishing include bait, ammunition, gas, food, lodging, guide services, and so on. Nondurable goods are often classified as variable expenses, since expenditures for those items are dependent upon activity levels (gas purchases should be proportional to the number of miles traveled). Most nondurable goods are consumed or used completely within a short period. Unlike some durable good purchases which may not necessarily parallel activity levels (i.e., they could potentially be used for other recreational activities and are not likely consumed in one use), nondurable goods/services closely match hunting/fishing activity levels and are usually directly attributable to only one activity. For example, lodging expenses incurred while pheasant hunting are not transferable to darkhouse spearing activities.

Table 1. Hunting and Fishing Survey Groups, by Survey Year, North Dakota

	Survey Years						
Survey Groups	1981	1982		1986		1996	2001
Resident							
Antelope							
Archery		✓		✓	✓	✓	✓
Firearm		✓		✓	✓	✓	✓
Gratis		✓		✓	✓	✓	✓
Deer							
Archery	✓	✓		✓	✓	✓	✓
Firearm	✓	✓		✓	✓	✓	✓
Gratis		✓			✓	✓	✓
Muzzleloader					✓	✓	
Special Big Game ^a	✓	✓		✓	✓	✓	✓
Furbearer	✓	✓		✓	✓	✓	✓
Small Game							
Upland Game	✓	✓		✓	✓	✓	✓
Waterfowl	✓	✓		✓	✓	✓	✓
Turkey							
Fall Regular	✓	✓		✓	✓	✓	✓
Fall Gratis				✓	✓	✓	✓
Spring Regular					✓	✓	
Spring Gratis						✓	
Fishing							
Open Water		✓		✓	✓	✓	✓
Ice				✓	✓	✓	✓
Season-long	✓						✓
Darkhouse Spearing							✓
Nonresident							
Antelope Archery					✓	✓	✓
Deer							
Archery			✓		✓	✓	✓
Firearm			✓		✓	✓	✓
Small Game			✓		✓	✓	✓
Seasonal Fishing			✓		✓	✓	✓

a Includes elk, moose, and bighorn sheep.

Table 2. Expenditure Categories for Survey Groups, North Dakota, 2001

Category Description

Variable Expenditures

Access Fees Expenses paid to gain access to land or to launch boats

Ammunition Expenses for cartridges, shot shells, and reloading components

Bait Purchases of bait (live, frozen, or otherwise) used for fishing

Equipment Fuel Expenses for fuel for boats, ice house heaters, and/or other equipment

Film Purchases of film and film developing
Food Purchases of food and beverages

Guide Expenses for guide services (hunting and/or fishing)

Lodging Expenses paid for overnight stays while hunting or fishing

Meat Processing Expenses for meat processing, packing, and/or fish cleaning

Rentals Expenses for rental of boat, motor, fish house, and/or other equipment

Repairs Expenses for repair of hunting or fishing equipment

Taxidermy Fees or material costs for mounting fish, birds, or animals
Transportation Expenses for gas, oil, air fare, or other transportation costs
Veterinarian Fees for veterinarian care of animals used while hunting

Other Any other variable expenses not included in the above categories

Fixed Expenditures

Auger Purchases of ice augers, saws, and/or chisels used for ice fishing
Binoculars Purchases of binoculars, scopes, range finders, and/or other optics
Boat Purchases of boats, motors, and boat trailers for hunting/fishing

Calls Purchases of predator calls

Camera Purchases of underwater cameras for fishing

Camping Purchases of camping equipment used while hunting/fishing
Clothing Purchases of clothing used primarily for hunting/fishing

Decoy Purchases of decoys for hunting and spearing

Dogs Purchases of hunting dogs

Finders Purchases of electronic depth and/or fish finders

Ice House Purchases of ice fishing houses, shelters, and/or heaters

Rods Purchases of fishing rods and/or reels

Skinning Equipment Purchases of stretchers, knives, and/or other tools for use on hides

Spears Purchases of ice fishing spears
Tackle Purchases of fishing tackle

Traps Purchases of traps, snares, and/or trapping supplies (lures, scents)
Vehicles Purchases of vehicles, campers, ATVs primarily for hunting/fishing

Weapons Purchases of rifles, shotguns, bows, arrows, accessories

Other Any other durable goods not included in the above categories

Table 3. Participant Characteristics and Demographic Information Collected, by Survey Year, North Dakota

Characteristic and	Survey Years						
Demographic Data	1981	1982	1983	1986	1990	1996	2001
Age	✓	✓	✓	na	✓ ^c	✓ ^e	✓
Days Participated	✓	✓	✓ ^b	✓	✓	✓	✓
Income	✓ ^a	na	na	na	✓	✓ ^f	✓
Miles Traveled	✓	✓	✓	✓	✓	✓	✓
Location of Residence	na	na	na	na	\checkmark^{d}	✓e	✓
Rural Expenditures	na	na	na	na	✓	✓	✓
Value per Day ^g	\checkmark^{h}	\checkmark^{h}	✓	\checkmark^{h}	✓	✓	✓

na = not available.

Methods

A variety of approaches were used to determine if hunter and angler spending has changed over the past 20 years. In some cases, hunter and angler spending was plotted on graphs to visualize the pattern of expenditures over time. In other cases, statistical tests were used to determine if spending and behavioral tendencies (e.g., days participated) changed over time and if average spending by those with selected characteristics was different (e.g., average spending by days participated). In addition, behavioral/demographic characteristics of participants were compared to identify relationships that might explain spending patterns.

^a Income was not available for resident furbearer and seasonal fishing survey groups.

^b Days participated was not available for the nonresident small game survey group.

^c Age was only available for nonresident antelope archery, resident big game, resident deer archery, nonresident seasonal fishing, and nonresident small game survey groups.

^d Location of residence was not available for resident antelope gratis, resident deer gratis, and resident turkey fall gratis survey groups.

Age and location of residence were not available for spring turkey survey groups.

f Income was not available for resident and nonresident fishing survey groups.

^g Participants were asked to place a monetary value on a day of hunting/fishing.

h Value of a day of hunting/fishing was not available for resident fishing in 1981, only available for resident big game and furbearers in 1982, and not available for resident antelope firearm, resident antelope firearm gratis, and furbearers in 1986.

Estimation of Average Expenditures

The method for determining average season variable expenses used in this study was identical to the method used by Bangsund and Leistritz (2003). Average season (total) variable expenditures, in each survey group, were estimated by summing the average of the individual expenditure categories (e.g., gas, food, lodging). Alternatively, the average expenses for gas, food, lodging, etc., were summed to estimate average season variable expenses in each survey group.

Methods used to calculate average vehicle, average season fixed, and average season total expenditures were different than the methods used to estimate average variable expenses. To correct for problems in estimating vehicle expenses in previous studies, the survey groups were condensed into five categories for purposes of estimating vehicle expenses in each survey year. The five categories included gratis hunters, resident (non-gratis) hunters, resident anglers, nonresident hunters, and nonresident anglers. Since vehicles (e.g., pickups, sport utilities, ATVs) are durable goods that are likely to be used extensively outside of hunting and fishing activities, a weighting procedure using days of participation was developed to allocate a percentage of all vehicle purchases to each of the five groups. Average vehicle expenses in the five categories were allocated to the individual survey groups. Purchases of all other durable goods were averaged using the same methods employed on variable expenses. Average season fixed expenses represented the sum of allocated vehicle expense and average expenses for all other durable goods. For a more thorough explanation of the methodology used to estimate fixed expenses, see Bangsund and Leistritz (2003).

Previous studies treated total season expenses as the sum of only those observations that had both variable and fixed expenses. However, not all respondents 1) purchased both nondurable (variable) and durable (fixed) goods for the activity surveyed or 2) reported both types of purchases. As a result, the number of observations with both variable and fixed expenses was substantially less than the number of observations that had either variable or fixed expenses. In addition, the average for only those observations with variable and fixed expenses did not match the sum of each group's average variable and average fixed expenses. To correct this problem, average variable season and average fixed season expenses were estimated separately for each survey group in each survey year, and then combined to represent average total season expenditures. This method utilized all expenditure observations in the data sets to estimate total season expenditures. For a more thorough explanation of the methodology used to estimate season fixed and season total expenses, see Bangsund and Leistritz (2003).

Average daily variable and average daily fixed expenses were estimated by dividing individuals' total variable and total fixed expenses by the number of days participated, and then averaging individuals' average daily variable and average daily fixed expenses for each survey group. Average daily total expenditures were the sum of average daily variable and average daily fixed expenses.

Correcting for Inflation

To facilitate comparison of expenses across survey years, the Consumer Price Index (CPI) was used to adjust all expenditure data to reflect real (2002) dollar equivalents (U.S. Department of Labor 2003). In some cases, when data permitted³, income data and value per day of hunting/fishing were also adjusted using the CPI.

Analyzing Trends in Spending

Numerous approaches were used to examine general trends or tendencies in hunter and angler spending. Inflation-adjusted variable, fixed, and total season spending was graphed for all survey groups over the period. Inflation-adjusted daily variable, fixed, and total season spending was also examined using graphs. The amount of spending in various expenditure categories (e.g., transportation, weapons) was examined, both in absolute and percentage terms. The percentage of variable and fixed spending to total spending was also included. The percentage of survey respondents indicating a purchase of durable goods and incurring nondurable expenses was examined. The above analyses allowed for comparisons of spending over time, and provided a framework to visualize changes in the composition of variable and fixed expenditures.

The use of graphs to visually examine various aspects of hunter and angler spending cannot prove differences in spending over time or differences in spending based on characteristic variables. To provide more conclusive assessments of spending differences, statistical tests were performed on average spending over time and average spending by characteristic variables. Mean separation tests were performed (i.e., also called pair-wise tests) using Bonferroni t-tests with statistical significance level set at 95 percent within a general linear model framework (alpha = 0.05) (SAS Institute, Inc. 1990).

The following description of potential shortcomings of mean separation tests or multiple comparison tests should be considered when examining the results of this study and understand the limitations of the analysis before drawing any conclusions.

"When you interpret multiple comparisons, remember that failure to reject the hypothesis that two or more means are equal should not lead you to conclude that the population means are in fact equal. Failure to reject the null hypothesis implies only that the difference between population means, if any, is not large enough to be detected with the given sample size. A related point is that nonsignificance is nontransitive: given three sample means, the largest and smallest may be significantly different from each other, while neither is significantly different from the middle one. Nontransitive results of this type occur frequently in multiple comparisons."

³ In most years, income was based on a range, and income for individual survey respondents could not effectively be adjusted.

"Multiple comparisons can also lead to counter-intuitive results when the cell sizes are unequal. Consider four cells labeled A, B, C, and D, with sample means in the order A>B>C>D. If A and D each have two observations, and B and C each have 10,000 observations, then the difference between B and C may be significant, while the difference between A and D is not" (SAS Institute, Inc. 1990, page 941).

Relationship of Respondent Characteristics to Spending Levels

To better understand how spending differs by respondent characteristics, characteristic data were placed into groups or ranges, and average spending for observations within those groups or ranges was estimated. For example, average spending was estimated based upon five categories associated with location of residence. In addition, average characteristic data was compared over time to determine if changes were present. For example, statistical tests were conducted to determine if average miles traveled differed within survey groups over time.

Cross-tabulation procedures were used to produce the distribution of survey respondents by various characteristics. The number of survey respondents, by demographic and participatory characteristics, were estimated to better understand the interaction and/or relationship among those factors. For example, the number of respondents with various amounts of miles traveled were matched by location of residence.

Results

The intent of the following sections is to provide broad assessments of changes in overall spending levels, changes in relative spending levels, changes in the type of spending, and identify trends in respondent characteristic and demographic factors. The scope of this study prevented the examination and discussion of all potential changes in each survey group over the period. As a result, discussion of the results in the following sections is general and focuses on findings common in many of the survey groups, as opposed to detailed discussions of individual survey groups.

Numerous tables and figures have been appended at the end of the document. Graphical and tabular results have been put into the following sections:

- Section A: Season and daily variable, fixed, and total expenditures by year for each survey group are contained in Tables 6 through 29 and presented in figures 1 through 25.
- Section B: Season variable and fixed expenses, and spending by major components of variable and fixed expenditures, for all survey groups are presented in figures 26 through 63.
- Section C: Daily variable, fixed, and total spending for all survey groups are presented in figures 64 through 88.

- Section D: Total spending, combined with the proportion of total spending for variable and fixed expenses, by survey group is presented in figures 89 through 107.
- Section E: Proportion of variable and fixed spending for major expense categories by survey group is presented in figures 108 through 159.
- Section F: Percentage of resident and nonresident hunter and angler survey respondents reporting expenses by expenditure category is presented in figures 160 through 256.
- Section G: Spending differences within survey groups over time and spending differences according to characteristic and demographic variables for all survey groups are presented in Tables 30 through 419.
- Section H: Results of cross-tabulation of respondent characteristics for resident and nonresident hunters and anglers in 2001 are presented in Tables 420 through 531.
- Section I: Changes in days participated and miles traveled over time by survey group are contained in Tables 532 through 549.
- Section J: Results of regression analysis on explanatory capacity of participant characteristics to estimate seasonal variable and fixed expenses.

Seasonal Spending

As might be expected, nearly all survey groups exhibited some year-to-year fluctuation in average seasonal spending (see Sections A and B). The conclusions drawn from this analysis were not based on statistical tests. Tests of statistical difference in variable and fixed spending over time were conducted and are presented in other sections. Therefore, although some visual changes have occurred over time in the level of seasonal variable and fixed spending, statistical significance is not implied in the discussion of those trends.

When all survey groups were evaluated holistically, the following trends were identified:

- Average seasonal spending on nondurable goods (variable expenses) for resident hunting activities has remained mostly constant over the 20-year period.
- ➤ Average seasonal spending on durable goods (fixed expenses) for resident hunting activities has been increasing over the 20-year period.
- ➤ Average total seasonal spending for resident hunting activities has generally been increasing largely due to increases in durable good purchases.
- ➤ Average seasonal spending for both nondurable and durable goods has trended upward over the 20-year period for resident fishing activities.

- ➤ Average seasonal spending (within North Dakota) on nondurable goods (variable expenses) for nonresident hunting activities has been increasing over the 20-year period.
- Average seasonal spending (within North Dakota) on durable goods (fixed expenses) for nonresident hunting activities exhibited substantial fluctuation over the 20-year period. Spending decreased during the 1980s but has trended higher in the 1990s.
- ➤ Average total seasonal spending for nonresident hunting activities has generally been increasing primarily due to increases in nondurable good purchases.
- Average seasonal spending for both durable and nondurable goods has remained mostly constant for nonresident fishing activities over the period.

Daily Spending

Average daily variable and fixed expenses were estimated by dividing individuals' total variable and total fixed expenses by the number of days participated, and then averaging individuals' average daily variable and average daily fixed expenses for each survey group. Average daily total expenditures were the sum of average daily variable and average daily fixed expenses.

The level of expense incurred while hunting and fishing can be influenced by the amount of time spent pursuing those activities. Examining daily spending is helpful since both overall spending levels and time spent participating in hunting and fishing activities vary. Nearly all survey groups exhibited some year-to-year fluctuation in average daily spending (see Section C). Statistical difference in the amount of time participated is discussed in other sections. No statistical significance is implied with the following findings. When all survey groups were evaluated holistically, the following trends were identified:

- ➤ No clear overall trend existed in average daily spending for nondurable goods by resident hunters. An equal number of survey groups exhibited slightly decreasing, slightly increasing, and no change in average daily variable expenses.
- ➤ Average daily spending for durable goods increased for most resident hunting activities.
- Average daily spending for all goods increased slightly for most resident hunting activities, largely as a result of increases in average daily fixed expenses.
- ➤ Average daily spending for nondurable goods was relatively unchanged for resident summer fishing, but exhibited a decreasing trend for winter fishing.
- ➤ Average daily spending for durable goods increased for both resident summer and winter fishing.
- Average daily spending for all goods increased for resident fishing activities, due mostly to increases in average daily fixed expenses.

- Average daily spending for nondurable goods increased for two nonresident hunting groups, but remained relatively unchanged for the other groups.
- ➤ Trends for average daily spending on durable goods increased during the 1990s for most nonresident hunting activities, but the overall trend for the entire period was less clear due to substantial decreases in average daily spending for durable goods in 1980s and early 1990s.
- ➤ Average daily spending for all goods trended upward slightly for nonresident hunting activities.
- ➤ Average daily spending for nonresident anglers was mostly unchanged for durable and nondurable goods. No clear trend was present.

Major Components of Variable and Fixed Expense

The major spending categories for nondurable goods included transportation, food, and lodging, while weapons and optics, clothing, camping equipment, and other miscellaneous items were the major spending categories for durable goods. Major purchases of durable goods for fishing included boat, tackle and rods/reels, and camping equipment.

The conclusions drawn from this analysis were not tested statistically. A number of trends were subtle, and although an increasing/decreasing trend was indicated, statistical significance in those trends is not implied.

The amount of average spending per person for the above categories was examined over the period (see Sections A and B). The following trends were identified for nondurable goods (variable expenses):

- ➤ Average transportation expenses per person trended downward in 4 of the 12 major resident hunting activities, trended upward in 1 activity, and did not show any noticeable trend in the other 7 hunting categories.
- Expenses for food trended higher in 3 hunting categories, lower in 1 category, but largely remained unchanged in the remaining 8 groups.
- ➤ Lodging expenses, reported by resident hunters, trended higher in a majority of hunting activities.
- ➤ Trends in taxidermy expenses were mixed, with nearly equal numbers of resident hunting groups showing increasing and decreasing average expenditures for those services.
- ➤ When expenditures for nondurable goods other than transportation, lodging, and food were combined into 'other' expenses, spending in that category trended upward for most resident hunting activities over the period.

- ➤ The average amount of expense reported by resident anglers for transportation remained relatively unchanged over the period.
- ➤ Average spending for food increased over the period for resident summer anglers, but trended lower for resident winter anglers.
- ► Lodging expenses trended upward for resident anglers.
- Expenses over the period for 'other' nondurable goods remained relatively unchanged for resident anglers.
- Trends in transportation expenses reported by nonresident hunters were mixed, as two major hunting activities showed transportation expenses trending lower and two activities showed expenses trending higher.
- Expenses for food generally trended lower in two nonresident hunting categories and remained unchanged in the other two groups.
- ➤ Lodging expenses, reported by nonresident hunters, trended higher in 3 of the 4 hunting categories.
- ➤ When expenditures for nondurable goods other than transportation, lodging, and food were combined into 'other' expenses, spending in that category trended upward for most nonresident hunting activities.
- ➤ The only major category of nondurable goods that showed a noticeable trend for nonresident anglers was lodging, which trended upward over the period.

The following trends were identified for purchases made in North Dakota for durable goods (fixed expenses):

- ➤ Average spending on weapons and optics, clothing, and camping equipment trended higher for most resident hunting activities.
- ➤ Average spending on 'other' durable good purchases was mixed among resident hunting activities.
- Average spending for nearly all durable goods trended higher for resident anglers.
- Average spending for weapons and optics by nonresident hunters was mostly unchanged over the period.
- ➤ Average spending for clothing by nonresident hunters increased over the period.
- ➤ Average spending for camping equipment and other durable goods by nonresident hunters was relatively unchanged over the period.

➤ Average spending on durable good purchases for nonresident anglers decreased slightly over the period.

Proportion of Total Spending for Durable and Nondurable Goods

By definition, total spending is the sum of both purchases for durable and nondurable goods. In an attempt to better understand how spending over time has changed, the percentage of total spending for variable and fixed expenses was examined (Section D).

The conclusions drawn from this analysis were not tested statistically. A number of trends were subtle, and although an increasing/decreasing trend was indicated, statistical significance in those trends is not implied. The following trends were identified:

- Across nearly all categories of resident hunting activities, the percentage of total spending for nondurable goods decreased, while the percentage of total spending for durable goods increased.
- ➤ The percentage of total spending for durable goods increased for resident anglers, while spending for nondurable goods as a percentage of all spending decreased.
- The percentage of total spending for durable and nondurable goods was mixed for nonresident hunting activities. Two groups showed purchases of nondurable goods increased relative to total spending, one group showed a decreasing trend, while two groups showed no distinguishable change over the period.
- ➤ No change in the percentage of total spending for durable and nondurable goods was found with nonresident anglers.
- The split between variable and fixed expenses for resident hunting activities was around 50 percent each for many survey groups, although some groups clearly spent (as a percentage of total spending) more on durable goods than nondurable goods.
- The split between the durable and nondurable goods for nonresident hunting activities remained heavily weighted towards nondurable spending over the period.

Change in the Composition of Variable and Fixed Expenses

Changes in the composition of spending can go unnoticed when changes in total spending remain relatively unchanged. For example, even though average variable spending for a particular hunting activity may not have changed over time, relative spending for transportation may be increasing, while relative spending for other items may be decreasing.

The conclusions drawn from this analysis were not tested statistically. A number of trends were subtle, and although an increasing/decreasing trend was indicated, statistical significance in those trends is not implied.

The major spending categories for both variable and fixed expenses were evaluated over the period (Section E). The following trends were identified:

- The percentage of variable expenses spent on transportation generally decreased for nearly all resident hunting activities.
- ➤ The percentage of variable expenses spent on food trended upward slightly for resident hunting activities.
- ➤ The percentage of variable expenses spent on lodging increased slightly for resident hunting activities.
- ➤ The percentage of variable expenses spent on 'other' nondurable goods generally increased for most resident hunting activities.
- ➤ The percentage of fixed expenses spent on weapons and optics for resident hunting activities decreased over the period.
- ➤ The percentage of fixed expenses spent on clothing for resident hunting activities increased for nearly all survey groups.
- The percentage of fixed expenses for 'other' durable goods was mostly unchanged for resident hunting activities.
- ➤ Relative spending on lodging, food, and 'other' nondurable goods increased for resident summer anglers.
- ➤ Relative spending on transportation and food decreased slightly over the period for resident winter anglers, but the percentage of variable expenses for lodging and 'other' nondurable goods increased.
- ➤ The percentage of fixed expenses spent on boats generally increased for resident anglers; whereas, the percentage of fixed spending for 'other' durable goods, rods/reels/tackle, and clothing decreased.
- ➤ Transportation, as a percentage of all nondurable goods, was the largest single component of variable expenses for resident hunters and anglers. Transportation expenses accounted for between 20 percent to 60 percent of seasonal variable expenditures.
- ➤ Purchases of weapons and optics, as a percentage of all durable goods, were the largest component of fixed expenses for resident hunters. Weapons and optics' expenses accounted for 40 to 70 percent of seasonal fixed expenditures.
- ➤ Boat purchases, as a percentage of all durable goods, were the largest component of fixed expenses for resident anglers. Boat purchases accounted for 60 percent of seasonal fixed expenditures.

- The percentage of variable expenses for lodging and 'other' nondurable goods generally increased for nonresident hunters.
- ➤ The percentage of variable expenses for transportation and food generally decreased for nonresident hunters.
- ➤ The percentage of fixed expenses spent on weapons and optics for nonresident hunting activities decreased over the period.
- ➤ The percentage of fixed expenses spent on clothing for nonresident hunting activities increased for nearly all survey groups.
- The percentage of fixed expenses for 'other' durable goods was mostly unchanged for nonresident hunting activities.

Percentage of Survey Respondents Reporting Various Expenses

Another measure of evaluating spending patterns includes examining the percentage of survey respondents reporting various expenditures over time. Although the average per person spending for a particular good or service may not have changed for some survey groups, the number of survey respondents indicating a purchase of that good or service may have changed.

This particular analysis has one major shortcoming. The total number of individuals purchasing specific goods or services in any particular year within North Dakota cannot be estimated without also knowing the number of participants in each activity. The total number of hunters or anglers purchasing a particular good or service could be increasing, even though the percentage of survey respondents making that purchase is decreasing. Take for example the following hypothetical situation where the percentage of all resident hunters purchasing widgets decreased from 10 percent in 1981 to 8 percent in 2001 while the number of hunters went from 1,000 in 1981 to 1,500 in 2001. In this case, the actual number of people buying widgets went from 100 in 1981 to 120 in 2001, despite the fact that the percentage of all hunters making a purchase of widgets decreased.

The conclusions drawn from this analysis were not tested statistically. A number of trends were subtle, and although an increasing/decreasing trend was indicated, statistical significance in those trends is not implied.

The analysis does not identify trends within specific survey groups (e.g., changes in the percentage of survey respondents purchasing clothing for deer firearm hunting), nor does it compare the percentage of survey respondents that have a purchase in one survey group to the percentage of survey participants having the same expense in another group. For example, comparisons between the percentage of resident firearm deer hunters with transportation expenses were not made to the percentage of nonresident firearm deer hunters with the same expense. In addition, it is possible to have similar numbers of participants incurring a specific expense among survey groups, but have the average per person spending be quite different between the groups.

Although every attempt was made to assure that data was comparable among the survey years, some questions on durable goods in the 1981 survey produced data that was not directly comparable to other the survey periods for this analysis. As a result, the percentage of survey respondents for resident hunting activities that had purchases of camping, clothing, vehicles, and weapons in 1981 was not comparable to other survey years and was omitted from the analysis. Also, observations on the percentage of resident fishing participants having purchases of boats, camping, clothing, electronics, rods and reels, tackle, and vehicles in 1981 were omitted from the analysis.

Survey respondents were grouped into resident hunting, resident fishing, nonresident hunting, and nonresident fishing. The percentage of respondents in those groups reporting an expense for each spending category was evaluated over the period (Section F). Trends, or lack thereof, were identified for each spending category (Table 4):

Table 4. Percentage of Survey Respondents Reporting Expenditures, by Type of Good and Service, North Dakota, 1981 through 2001

	Resident Hunting	Nonresident Hunting	Resident Fishing	Nonresident Fishing		
Variable Expenditures		trend				
Access Fees	decreasing	increasing	decreasing	unchanged		
Ammunition	unchanged	increasing	na	na		
Bait	na	na	unchanged	unchanged		
Equipment Fuel	na	na	unchanged	increasing		
Film	increasing	increasing	unchanged	decreasing		
Food	increasing	unchanged	unchanged	increasing		
Guide Fees	see notes	see notes	see notes	see notes		
Lodging	increasing	increasing	increasing	increasing		
Meat Processing	decreasing	decreasing	increasing	increasing		
Rentals	na	na	decreasing	decreasing		
Repairs	increasing	unchanged	decreasing	unchanged		
Taxidermy	unchanged	unchanged	unchanged	unchanged		
Transportation	unchanged	increasing	unchanged	unchanged		
Veterinarian	unchanged	increasing	na	na		
Other	unchanged	increasing	decreasing	decreasing		
Any Variable Expense	unchanged	unchanged	unchanged	unchanged		
Fixed Expenditures						
Ice Auger	na	na	increasing	decreasing		
Binoculars/Optics	increasing	increasing	na	na		
Boat	decreasing	increasing	mixed	decreasing		
Calls (electronic)	increasing	na	na	na		
Camera (underwater)	na	na	see notes	see notes		
Camping Equipment	unchanged	unchanged	mixed	unchanged		
Clothing	unchanged	mixed	mixed	increasing		
Decoy	mixed	unchanged	na	na		
Dogs	decreasing	increasing	na	na		
Fish/Depth Finders	na	na	mixed	unchanged		
Ice House	na	na	increasing	unchanged		
Rods	na	na	mixed	decreasing		
Skinning Equipment	decreasing	na	na	na		
Spears	na	na	see notes	na		
Tackle	na	na	increasing	decreasing		
Traps	decreasing	na	na	na		
Vehicles	unchanged	increasing	decreasing	unchanged		
Weapons	decreasing	decreasing	na	na		
Other	unchanged	increasing	decreasing	decreasing		
Any Fixed Expense	unchanged	unchanged	unchanged	decreasing		

Notes: na=not applicable. Mixed--implies distinct decreasing trend followed by distinct increasing trend, or vice versa. Expenses for guide fees, spears, and underwater cameras had too few survey years to indicate a trend.

- ➤ Common to both resident and nonresident hunters and anglers was an increasing trend in the percentage of survey respondents with lodging expenses.
- The percentage of both resident and nonresident hunters reporting paying for meat processing services decreased, while the percentage of resident and nonresident anglers reporting the same expense was increasing.
- ➤ The percentage of survey respondents purchasing durable goods relating to trapping was decreasing.
- For many durable good categories, the percentage of nonresident anglers reporting purchases decreased over the period.
- For many durable good categories, the percentage of nonresident hunters reporting purchases was increasing.
- ➤ The percentage of resident and nonresident hunters purchasing weapons decreased over the period.
- ➤ Common to both resident and nonresident hunters and anglers was no change or a slight increase in the percentage of survey respondents with transportation expenses.
- The percentage of resident and nonresident hunters purchasing 'other' variable expenses was either unchanged or increased slightly, while the percentage of resident and nonresident anglers reporting the same expense decreased. A similar trend in all groups was observed for 'other' fixed expenses.
- ➤ The percentage of resident and nonresident hunters and anglers reporting any variable expense was unchanged over the period.
- The percentage of resident hunters and anglers, and nonresident hunters reporting any fixed expense was unchanged over the period, while the percentage of nonresident anglers reporting any fixed expense decreased.

Average Spending by Characteristic and Demographic Factors

To better understand how spending differs by respondent characteristics, average seasonal variable and fixed expenses were estimated based on various demographic and participation characteristics (Section G). Characteristic data were placed into groups or ranges, and average spending for observations within those groups or ranges was estimated. Characteristic data included days participated, miles traveled, urban and rural residence, location of residence, age, income, amount of rural spending, those with/without access and/or guide fees, and value placed on a day of hunting/fishing.

In addition to examining the spending levels by participant characteristics, differences in spending levels for all survey groups were evaluated by year. For example, spending differences were tested for statistical significance in each survey year for each survey group (Section G).

Mean separation tests were performed (i.e., also called pair-wise tests) using Bonferroni t-tests with statistical significance level set at 95 percent (alpha = 0.05) to determine if differences in average spending were statistically significant (SAS Institute, Inc. 1990). The following sections describe general tendencies in average spending based on selected characteristics.

Miles Traveled

Survey respondents were asked to report the number of miles traveled over the course of the season for the activity surveyed. Miles traveled were placed into six ranges (Table 5), and average spending was estimated for each range for 21 survey groups (see Table 1).

Average seasonal variable expenses generally increased as the number of miles traveled increased, and the spending differences were statistically significant in 20 out of 21 survey groups, although not necessarily statistically significant in all survey years in each survey group.

Average seasonal fixed expenses increased with increases in miles traveled to a much lesser extent than found with variable expenditures. Differences in average fixed expenditures were statistically significant in 11 out of 21 survey groups. However, those spending differences by miles traveled were statistically significant in substantially fewer survey years than found with average seasonal variable expenses.

Days Participated

Survey respondents were asked to report the number of days participated during the season for the activity surveyed. Days participated were placed into six groups (Table 5), and average spending was estimated for each of those six groups for 21 survey groups (see Table 1).

Average seasonal variable expenses generally increased as the number of days participated increased, and the spending differences were statistically significant in 19 out of 21 survey groups, although not necessarily statistically significant in all survey years. Although statistically significant in nearly all survey groups, average spending levels did not correspond as strongly to days participated as with miles traveled.

Average seasonal fixed expenses generally did not increase with increases in days participated, although differences in average fixed expenditures were statistically significant in 14 out of 21 survey groups. However, those spending differences based on days participated were statistically significant in only one survey year for most activities.

Rural and Urban Residence

Rural residence included survey respondents who indicated they lived on a farm or ranch, a rural, non-farm setting, or in a city with a population less than 2,500. Urban residence was classified as those living in cities with a population over 2,500 (Table 5).

Average seasonal variable spending was consistently higher for urban participants. The difference in spending was statistically significant in 14 out of 21 survey groups. In four out of the seven survey groups where differences in average spending were not statistically significant, urban participants had numerically higher spending levels.

Average seasonal fixed spending was generally numerically higher for urban participants in 13 out of 21 survey groups, although the spending difference between the two types of residence was statistically significant in only 6 survey groups.

Location of Residence

A more specific description of residence, rather than rural or urban, was also used to evaluate differences in average seasonal spending. Five categories, three rural classifications and two urban classifications, were used (Table 5).

Differences in average seasonal variable spending among the five specific categories of residence was less distinct than the differences in average spending between the broader rural and urban designations. Spending differences were statistically significant in 8 out of 21 survey groups, but statistical differences were largely found in only one survey year per group. Generally, the only identifiable relationship between the five classifications of residence was that those living in cities (i.e., rural and urban cities) tended to spend more than those living on farms or ranches or those living in rural, non-farm locations.

Few differences in average seasonal fixed spending existed among the five categories of residence. Spending differences were statistically significant in only 4 out of 21 survey groups, and in all cases the differences were significant in only one survey year per group.

Age

Age of survey respondents were limited to four, fairly broad ranges (Table 5). The broad ranges for age were predetermined on the questionnaires. As a result, spending estimates could not be generated for more specific or narrower age ranges.

The only identified relationship between average seasonal variable expenses and age was that the youngest and oldest age groups tended to spend less than the two other age groups; however, that relationship was not prevalent in all survey groups. Spending differences were statistically significant in only 5 out of 21 survey groups.

The youngest and oldest age groups also tended to have slightly less average seasonal fixed expense than the other two age groups; however, that relationship was not as prevalent as with variable expenses. Spending differences were statistically significant in only 5 out of 21 survey groups, and in all cases the differences were significant in only one survey year per group.

Income

Household incomes of survey respondents were placed into four categories even though more income ranges were available in some survey years (Table 5). Since only four income ranges were collected in some survey years, data in other survey years were realigned in the four broad ranges to allow for comparisons between different survey years.

Generally, average seasonal variable expenses tended to be higher with participants having greater incomes; although the differences in average spending were statistically significant in only 3 out of 21 survey groups, and in each case, differences in spending by income category were significant in only one survey year per group.

Numerically, average seasonal fixed expenses were higher in four survey groups for participants with greater incomes; however, differences in average spending were not statistically significant in any survey group. No relationship was found between income and average fixed expenses in 16 out of 21 survey groups.

Percent of Spending in Rural Areas

Survey respondents were asked to estimate the percentage of their expenses that were made in rural areas (i.e., in rural settings and cities less than 2,500 population). Five categories or ranges were used to evaluate average seasonal spending levels based on the percentage of expenses made in rural areas (Table 5).

The relationship between the amount of spending in rural areas and the overall level of seasonal spending for nondurable goods was mixed in most survey groups. Average seasonal spending levels for non-durable goods were generally lower for those that had no expenditures in rural areas and somewhat lower for those that indicated they spent 75 to 100 percent of their seasonal expenditures in rural areas. Alternatively, participants who spent between 25 to 75 percent of their seasonal expenditures in rural areas tended to have higher average seasonal variable expenses. The differences in average seasonal variable expenses were statistically significant in 18 out of 21 survey groups.

The relationship between the amount of spending in rural areas and average seasonal spending for durable goods also was mixed in most survey groups. Average seasonal spending for durable goods was somewhat lower for those with no expenditures in rural areas and somewhat lower for respondents that spent 75 to 100 percent of their seasonal expenditures in rural areas. The differences in average seasonal fixed expenses were statistically significant in 17 out of 21 survey groups, but differences in spending levels were significant in only one year in a majority of survey groups.

With/without Access and/or Guide Fees

Survey respondents were grouped into those that paid access and/or guide fees and those that did not pay access and/or guide fees (Table 5). Since gratis hunters, by definition, would not pay access fees, and would not likely pay for guiding services, those groups were excluded from the analysis.

Average seasonal variable spending was consistently higher for participants with access/guide fees. The difference in spending was statistically significant in 16 out of 18 survey groups. Spending differences were statistically significant in most survey years for all survey groups.

Average seasonal fixed spending was generally higher for participants with access/guide fees; however, the relationship was less pronounced than found with variable expenses. In two survey groups, spending for durable goods was higher for those without access/guide fees. Differences in spending were statistically significant in 11 out of 18 survey groups.

Value Placed on a Day of Hunting/Fishing

Survey respondents were asked to place a monetary value on a single day of hunting or fishing, depending upon activity surveyed. The majority of respondents placed a value of a day of hunting or fishing between \$1 and \$100. Average variable and fixed expenses were examined based on different levels of the value placed on a day of hunting/fishing (Table 5).

Average seasonal variable spending was consistently higher for participants that placed a greater value on a day of hunting/fishing. The difference in spending was statistically significant in 20 out of 21 survey groups. However, in two survey groups, average variable spending in a few years was slightly higher for those who placed a lower value on a day of hunting.

Average seasonal fixed spending also was higher for respondents that placed a greater value on a day of hunting or fishing; however, the relationship was less pronounced than found with variable expenses. Differences in spending were statistically significant in 13 out of 21 survey groups; however, in 9 of those 13 survey groups, differences in spending were statistically significant in only one year.

Spending by Year

Average seasonal variable and fixed expenses were compared by survey year for each activity group. Differences in seasonal spending levels for both durable and non-durable goods were statistically significant across survey years for 12 out of 21 survey groups. However, not all groups had statistically significant differences in spending for both variable and fixed expenses.

Generally, average seasonal spending increased over time. Seasonal spending levels tended to be statistically higher in later survey years (e.g., 1996, 2001) than in earlier survey years (1981, 1986). However, statistical significance between years was not prevalent in all survey groups and not consistent for either spending on durable or non-durable goods. In some

cases, spending differences were statistically different in only one year (e.g., resident antelope firearm), while in other instances spending levels were statistically different in each survey year (e.g., nonresident deer archery).

Cross-tabulation of Characteristic/Participation Data

Demographic data (e.g., location of residence, age) were cross-tabulated with participation data (e.g., miles traveled, days participated) in attempt to better understand hunter and angler characteristics (see Table 3 for listing of characteristic and participation data). Cross-tabulations were limited to the 2001 survey year and only survey respondents providing information for both variables in the cross-tabulation procedure could be used. Statistical tests were not conducted on the cross-tabulations, and no statistical significance is implied in the findings.

Since data was not available on the number of individuals participating in more than one hunting or fishing activity, the cross-tabulations represent the values from all survey groups (e.g., antelope firearm, upland game), but do not necessarily represent the average 'hunter' or 'angler' in the state. Many individuals participate in more than one hunting or angling activity, and thus would have different participation data than the survey observations used in this analysis. For example, an individual who hunted upland game, deer, and waterfowl, and fished both in the summer and winter is likely to have more days participated (total for the year) and more miles traveled (throughout the year) than would be indicated when asked to report only those values for any single activity. The data collection process over the study period has been consistent in asking only for information pertaining to the activity being surveyed--not all possible activities that individual could have participated in throughout the year.

Some characteristic and participation data was continuous (e.g., days) while other data were noncontinuous (e.g., type of residence). For continuous data, ranges were used to facilitate comparisons with noncontinuous variables (Table 5).

Table 5. Description of Characteristic and Demographic Information, North Dakota, 2001

Variable	Range	Variable	Range
Age	6 to 18 years	Rural Spending	0%
	19 to 45 years		1 to 24.9%
	46 to 65 years		25 to 49.9%
	over 65 years		50 to 74.9%
			75 to 100%
Days Participated	1 to 3		
	4 to 6	Income	over \$50,000
	7 to 9		\$25,000 to \$50,000
	10 to 15		\$10,000 to \$25,000
	16 to 25		under \$10,000
	Over 25		
		Type of Residence ^a	city over 50,000 pop
Access/Guide Fees	Yes		city 2,500 to 50,000 pop
	No		city under 2,500 pop
			farm or ranch
Value per day of	0\$		rural non-farm
hunting/fishing ^b	\$1 to \$50		
	\$51 to \$100	Miles Traveled	0
	\$101 to \$200		1 to 300
	\$201 to \$500		301 to 600
	\$501 to \$5,000		601 to 900
	\$5,001 to \$15,000		901 to 1,200
	over \$15,000		over 1,200

^a Type of residence was also used to create a rural/urban classification. Rural included cities under 2,500 population, farm or ranch, and rural non-farm. Urban included all cities 2,500 or more in population.

Survey respondents were grouped into resident hunters, resident anglers, nonresident hunters, and nonresident anglers (Section H). The analysis provided both the distribution of survey respondents by demographic characteristics, and identified relationships between demographic and participation characteristics. The following distributions and relationships were observed:

Survey respondents were asked to place a monetary value on a single day of hunting or fishing for the activity surveyed.

Resident Hunting

- The majority (54 percent) of survey respondents in 2001 participated 3 days or less per activity.
- ➤ About 71 percent of respondents traveled between 1 and 600 miles per hunting activity.
- ➤ About 98 percent of resident hunters did not pay access/guide fees. Half of those that paid access and/or guide fees participated 3 days or less per hunting activity.
- Fifty-five percent of survey respondents were from urban areas, and 56 percent of urban respondents participated 3 days or less per hunting activity.
- ➤Over half (53 percent) of all survey respondents spent 75 percent or more of their seasonal expenditures in rural areas, and of those respondents, the majority participated 3 days or less per activity.
- Seventy-five percent of survey respondents who spent 75 percent or more of their seasonal expenditures in rural areas traveled 600 miles or less per activity.
- ➤ About 50 percent of all respondents had incomes over \$50,000 in 2001, and 54 percent of those with incomes over \$50,000 participated 3 days or less per activity. Of those with incomes over \$50,000, 71 percent traveled 600 miles or less per activity.
- ➤ About 50 percent of respondents were 19 to 45 years of age and 35 percent of respondents were 46 to 65 years of age.
- ➤ About 27 percent of respondents that paid access/guide fees, compared to 8 percent of respondents without access/guide fees, traveled over 1200 miles per activity.
- ➤ About 61 percent of respondents that paid access/guide fees were from urban areas compared to 56 percent of respondents overall were from urban areas.
- ➤ About 61 percent of respondents with access/guide fees spent 75 to 100 percent of their seasonal expenditures in rural areas, compared to 53 percent of respondents without guide/access fees who spent 75 to 100 percent of their seasonal expenditures in rural areas.
- ➤ About 42 percent of respondents that paid access/guide fees were 46 to 65 years old, compared to 35 percent of respondents overall.
- ➤ About 72 percent of rural respondents, compared to 37 percent of urban respondents, spent 75 to 100 percent of their seasonal expenditures in rural areas.
- ➤Of the respondents with incomes over \$50,000, 64 percent were from urban areas and 36 percent were from rural areas.

Resident Fishing

- ➤ About 57 percent of respondents participated at least 10 days per fishing activity in 2001.
- ➤ About 60 percent of survey respondents traveled 600 miles or less per activity in 2001.
- Nearly 57 percent of anglers were from urban areas.
- ➤ Forty-five percent of anglers spent 75 percent or more of their seasonal expenditures in rural areas.
- ➤ Forty-seven percent of anglers had incomes over \$50,000 in 2001.
- ➤Of those anglers traveling over 1200 miles per activity, 70 percent were from urban areas.
- ➤ Rural respondents accounted for 64 percent of all anglers spending 75 percent or more of their seasonal expenditures in rural areas.
- ➤ Rural respondents accounted for 65 percent of all participants aged 6 to 18 years; however, only 44 percent of all resident anglers were from rural areas.

Nonresident Hunting

- Nearly 45 percent of all respondents (nonresident hunters) participated 4 to 6 days per activity.
- ➤ About 36 percent of respondents traveled over 1200 miles per activity.
- ➤ Seventeen percent of respondents paid access/guide fees.
- Nearly 68 percent of respondents were from urban areas.
- ➤ Urban and rural respondents were proportionally equal in the distribution of the number of days participated.
- ➤Over 72 percent of respondents spent 75 percent or more of their in-state expenditures in rural areas.
- ➤ About 73 percent of respondents had incomes over \$50,000.
- ➤ About 82 percent of respondents with incomes over \$50,000 were from cities over 50,000 in population.
- Nearly 92 percent of respondents were between 19 and 65 years of age.

Nonresident Fishing

- ➤ About 47 percent of all respondents (nonresident anglers) participated 3 days or less per activity.
- ➤ Forty-six percent of respondents traveled 600 miles or less per activity.
- ➤Over 65 percent of respondents were from urban areas.
- ➤ Nearly 60 percent of respondents spent 75 percent or more of their in-state expenditures in rural areas.
- ➤ Nearly 71 percent of respondents had incomes over \$50,000.
- ➤Over 96 percent of respondents were between 19 and 65 years of age.
- ➤ Urban respondents were more likely than rural respondents to have paid access/guide fees. Urban respondents represented 65 percent of all respondents, but represented 74 percent of respondents that paid access/guide fees.
- ➤Rural respondents were more likely to be older than urban respondents. Of the respondents over age 65, 47 percent were from rural areas; however, only 36 percent of all respondents were from rural areas.

Change in Days Participated and Miles Traveled

Average days participated and miles traveled were compared for all survey groups over time. In addition, miles per day of participation were calculated, and examined for changes over time in each survey group.

Differences in average values for days participated and miles traveled were tested using a multiple comparison procedure (Bonferroni t-test) with statistical significance level set at 95 percent. Issues associated with using multiple comparison tests are discussed in the **Methods** section (see page 11). Failure to find statistical difference or implying statistical difference when none exists can be related to unequal sample sizes. The number of observations for each survey group in each survey year was not equal, and as such, some of the statistical results should be viewed conservatively, and should include a careful examination of the number of observations before drawing definitive conclusions.

Average miles traveled, days participated, and miles traveled per day participated were estimated for all survey groups (Section I). The following observations were noted:

➤ Variation in average days participated among the survey years were observed in most survey groups. However, only a few patterns were observed. Days participated for resident big game and fall turkey hunters has been increasing, while days participated for furbearer activities has been decreasing.

- ➤ Although not statistically significant in all survey groups, average miles traveled has increased over time. Average miles traveled trended higher in 14 out of 22 survey groups. Miles traveled for furbearers was the only survey group that showed a decreasing trend.
- ➤ Although not statistically significant in all survey groups, average miles traveled per day participated was increasing over time. Average miles traveled per day participated exhibited an increasing trend in 12 out of 22 survey groups. No survey groups exhibited a clear decreasing trend.

Changes in Data Collection System for Future Use

The current data collection system, while undergoing subtle changes over the years, remains largely consistent with formats and procedures adopted in the late 1970s and early 1980s. To that end, the current system provides valuable periodic assessments of spending by hunters and anglers in the state. However, whether the current system can continue to address emerging issues pertaining to hunter and angler spending is worthy of discussion.

Some of the early efforts in tracking sportsmen expenses used expenditure data to place a value on wildlife habitat and associated wildlife populations. Those studies were generally limited in scope. As the scope of data collection efforts grew to include more activities and expanded geographically to encompass the entire state in the mid 1980s, emphasis shifted to estimating statewide economic effects of sportsman activities. Essentially, over the last two decades, surveys of hunting and fishing participants were conducted to solicit information on how much was spent on various goods/services, as well as collecting information on participation, travel, and demographic characteristics of participants. Information from the expenditure surveys was then combined with estimates of the number of hunters and anglers to arrive at spending projections for the state. The current system has been successful in providing statewide and average individual spending estimates, and if policymakers desire to continue that assessment in the future, then the data collection process used over the last 20 years will largely satisfy that goal.

However, the current data collection system fails to address two important issues. First, the existing data set lacks the predictive ability to explain how spending would be affected by game management policies or by changes in resource levels (e.g., wildlife populations, water levels). Second, the data set lacks geographic specificity.

Data on participant characteristics was unable to explain much of the variation in spending (see Section J). Generally, only about one-third of the variation in spending for nondurable goods and about 5 percent of the variation in spending on durable goods could be explained with existing data. Other factors or participant characteristics (e.g., tastes/preferences, behavioral tendencies, traditional activities/actions, lifestyle issues) not currently collected account for more variation in spending than the current set of demographic and participation factors compiled from the data collection system. While existing participant data can describe differences in spending based upon those characteristics (e.g., average spending based on age); they provide limited predictive assessments of spending. Thus, despite knowing several descriptive characteristics of participants (e.g., age, income, days participated, miles traveled, home residence), numerous other factors (e.g., tastes and preferences, alternative or substitute activities) are influencing individual spending

levels. A through assessment of those additional explanatory factors would be required before the data set could provide predictive assessments of spending.

The original purpose of the data collection system was to provide descriptive assessments of hunter and angler spending. These descriptive assessments, such as average seasonal spending or average daily spending, have been used by policymakers to debate the economic effects of changes in hunter or angler spending based solely on changes in the number of hunter/angler participants. If participant numbers are the only factor influenced by policies or changing resource levels, then the data set is adequate to address those issues. However, in all likelihood, the effects of some policies are not limited only to changes in the number of participants. Future policies and changes in resource levels could likely affect participants' tastes and preferences and behavioral tendencies, which have the potential to also affect overall spending in the state to the same magnitude as changes in participation levels.

As the state continues to manage increasing participation levels, geographical distribution and location-specific impacts of game management policies become more important. A data collection system that provides a better understanding of the relationship between location of residence and hunting destinations would assist both policymakers and wildlife managers. How would region-specific game management policies affect the choice of hunting destinations for rural and urban resident participants, or nonresident participants? How would hunting expenditures be affected in those regions if policies have a greater effect on urban resident hunters than rural hunters, or a greater effect on nonresidents than residents?

Since much attention in game management policy has recently included concerns of the economic effects of hunter/angler spending in small, rural areas of the state, the data collection system would provide more information to policymakers and wildlife managers if estimates of spending throughout the state were more geographically specific. The existing data collection system provides little geographic specificity pertaining to hunting and fishing expenditures. Currently, the only geographic breakdown in expenditures is a crude approximation of "rural" versus "urban" expenditures. The current estimates of rural versus urban expenditures are of limited value since the type of expenditures, amount of individual expenses, and geographic distribution of rural spending are unknown. The current data collection system simply asks survey participants to estimate what percentage of their expenditures are made in rural areas. For example, when participants state that 50 percent of their expenditures were made in rural areas; does that include 50 percent of their variable expenses and 50 percent of their fixed expenses, does it mean transportation, food, and lodging expenses incurred in rural areas represent about 50 percent of all seasonal expenditures, or does it mean that 50 percent of all expenditures were made in rural areas simply because a few big ticket durable goods were purchased in a small town? Since the current system uses only one qualifier to assess rural versus urban spending, the composition and type of expenditures made in rural areas cannot be determined, and the above questions cannot be addressed.

Another shortcoming of the current data collection system is the definition of what is considered a "rural" area in the state. By definition, expenditures in urban areas include all cities over 2,500 in population. However, not all communities over 2,500 in population arguably fit the definition of urban in North Dakota. Several North Dakota cities, over 2,500 in population, are

located in rural areas, and while they capture and benefit from hunter expenditures, they differ greatly from the state's large, regional trade centers (e.g., the difference between Fargo and Valley City or Grand Forks and Devils Lake). The current methodology underestimates the amount of hunter expenditures made in many 'rural' areas of the state by using a broad definition for 'urban' areas.

While the current data collection system does provide gross, albeit understated, estimates of rural expenditures, those estimates are of limited value. The current system is unable to determine the geographic distribution of hunter/angler expenditures within the state, and cannot identify which hunting/angling activities contribute the most to specific rural economies. A data collection system that could estimate expenditures made within specific regions/areas of the state (i.e., regardless of city size), stratify expenditures by residence (i.e., rural resident, urban resident, nonresident) and track expenditures by activity (e.g., upland game, ice fishing), would help address economic effects of geographic or regional-specific policies. In addition, a system with a more thorough geographic tracking of expenditures could provide a basic understanding of the linkages between hunter preferences, destinations, and residence. Shifting emphasis away from estimating expenditures using a rural versus urban designation, to one of tracking all spending within specific areas of the state (e.g., by county or key cities) would (1) assist local decision makers throughout the state in understanding the economic effects of hunting and fishing activities, and (2) state-level policymakers and wildlife managers would be better equipped to assess the socio-economic effects of various game management policies.

Data that would offer insights into the effects of region-specific policies on hunter/angler participation would also be useful. For example, would a policy allowing unrestricted hunting in one region attract hunters from other parts of the state, or would policies restricting hunter numbers in some regions result in fewer hunters statewide or simply shift more hunters to unaffected regions of the state? To address those issues, policymakers and wildlife managers would need a greater understanding of substitutive behavior and participant preferences. Questions pertaining to why individuals choose to hunt in some locations versus other locations, and what choices hunters would make if prevented from pursing game in their preferred location remain unanswered. If prevented from hunting in some locations, would hunters pursue game elsewhere (in-state or out-of-state), pursue other game, and/or reduce time spent hunting in favor of other pursuits? For example, if an angler prefers to fish on Lake Sakakawea but low water levels result in damage to the fishery, and subsequently affect fishing quality, will that angler choose to fish elsewhere in the state, pursue out-of-state options, continue to fish on the lake anyway, or decide to participate in other recreational activities? The choices may be different for someone living near the lake versus someone living a long distance from the lake. Each of the possibilities has different implications for both the state and rural economies.

To more fully address spending implications of various emerging management issues, the current data collection system would need to be expanded to include data on hunter and anger preferences/behavior as well more specifically describe the distribution of spending within the state. A system that could predict who is likely to be affected by changing policies, what those effects would be, and where those effects would take place would likely provide policy makers with a more effective decision making tool in the future than the current system, which is primarily limited to descriptive assessments of sportsmen expenditures.

Summary

Data for this study came from surveys of hunters and anglers in North Dakota in 1981, 1982, 1983, 1986, 1990, 1996, and 2001. Licensed hunters and anglers were randomly sampled and were mailed questionnaires shortly after the closing dates for each respective season in each survey year. The survey groups, when applicable, were divided by type of license, game, and weapon. Information on spending for nondurable goods/services (e.g., food, lodging) and durable goods (e.g., clothing, boats) were collected. The Consumer Price Index was used to adjust all expenditure data to reflect real (2002) dollar equivalents.

Numerous analyses were used to examine changes in the level and composition of hunter and angler expenditures over the period. Changes in hunter and angler participation were also examined, as well as differences in average spending based on participation and demographic characteristics of survey respondents.

The most identifiable trend in resident hunter expenditures was an increase in spending for durable goods, while average spending for nondurable goods/services in most resident hunting activities generally remained unchanged over the period. Average spending (within North Dakota) on durable goods by nonresident hunters trended lower during the 1980s, but generally trended higher in the 1990s. Nonresident hunter expenditures for nondurable goods/services trended higher over the period.

Overall, average seasonal spending trended higher for resident hunting activities due primarily to increases in spending on durable goods, while nonresident hunter expenditures trended higher due primarily to increases in spending on nondurable goods. Average seasonal spending for both nondurable and durable goods trended higher for resident fishing activities, while average seasonal spending for both durable and nondurable goods remained mostly constant for nonresident fishing activities over the period.

Equal numbers of resident hunting activities had slightly decreasing, slightly increasing, and no change in average daily expenses for nondurable goods. However, average daily spending for durable goods increased for most resident hunting activities. Average daily seasonal spending for all goods increased slightly for most resident hunting activities, largely due to increases in average daily fixed expenses.

Average daily spending for nondurable goods increased for half of the nonresident hunting groups, but remained relatively unchanged in the remaining activities. Trends in average daily spending for durable goods increased during the 1990s for most nonresident hunting activities, but overall trends for the period were less clear due to substantial decreases in average daily spending for durable goods during the 1980s. Average daily spending for all goods trended slightly upward for nonresident hunting activities due mostly to an increase in average daily spending on nondurable goods.

Average daily spending for nondurable goods was relatively unchanged for resident summer fishing, but decreased for winter fishing. Average daily spending for durable goods increased for both resident summer and winter fishing. Average daily spending for all goods

increased for resident fishing activities, due mostly to increases in average daily fixed expenses. Average daily spending for nonresident anglers was mostly unchanged for durable and nondurable goods.

Changes in the level of spending for specific types of nondurable and durable goods were examined. Generally, average spending for transportation and food for resident hunting and fishing activities were unchanged; however, average spending for lodging trended higher in both groups. Spending patterns for nondurable goods/services for nonresident hunters and anglers were similar. Spending on transportation and food were largely unchanged, but expenses for lodging trended upward over the period. Generally, spending for weapons, optics, clothing, and camping equipment trended higher for resident hunters. However, clothing was the only durable good category that exhibited a clear upward trend for nonresident hunters. Spending for most types of durable goods increased for resident anglers and either decreased slightly or remained constant for nonresident anglers.

Spending for durable and nondurable goods/services was examined as a percentage of total spending. Across nearly all categories of resident hunting and resident fishing activities, the percentage of total spending for nondurable goods decreased, while the percentage of total spending for durable goods increased.

The percentage of total spending for durable and nondurable goods was mixed for nonresident hunting activities. No change in the percentage of total spending for durable and nondurable goods was found with nonresident anglers.

The split in total spending between durable and nondurable goods for resident hunting activities was around 50 percent for many survey groups; however, the ratio of spending between durable and nondurable goods remained weighted towards nondurable spending for nonresident hunters and anglers.

The percentage of resident and nonresident hunters reporting purchases of specific types of nondurable goods generally increased over the period. For many durable good categories, the percentage of resident hunters and nonresident anglers reporting purchases decreased over the period, while the opposite trend was occurring with resident anglers and nonresident hunters.

No comprehensive pattern was found with the average number of days participated among all survey groups over time. However, average days participated for resident big game and turkey hunters trended higher over the period, while average days participated for furbearer hunters decreased. Average miles traveled increased in a majority of survey groups. Furbearer hunters was the only survey group that showed a decreasing trend in miles traveled. Average miles traveled per day participated also has been increasing in a majority of survey groups.

Average spending for durable and nondurable goods was estimated based on participant characteristics. Characteristic data included days participated, miles traveled, urban and rural residence, location of residence, age, income, amount of rural spending, value placed on a day of hunting/fishing, and those with/without access and/or guide fees.

Average seasonal variable expenses generally increased as the number of miles traveled increased, and the spending differences were statistically significant in 20 out of 21 survey groups. Average seasonal fixed expenses increased with increases in miles traveled to a much lesser extent than found with variable expenditures. Average seasonal variable expenses generally increased as the number of days participated increased, and the spending differences were statistically significant in 19 out of 21 survey groups. Average seasonal fixed expenses generally did not increase with increases in days participated, although differences in average fixed expenditures were statistically significant in 14 out of 21 survey groups.

Average seasonal variable spending was consistently higher for urban participants. Average seasonal fixed spending was generally numerically higher for urban participants in 13 out of 21 survey groups, although spending differences between the two participant types were statistically significant in only 6 survey groups. Differences in average seasonal variable spending among the five specific categories of residence was less distinct than the differences in average spending between the broader rural and urban designations. Generally, the only identifiable relationship was that those living in cities (i.e., rural and urban cities) tended to spend more than those living on farms or ranches or those in rural, non-farm locations.

The only identified relationship between average seasonal variable expenses and age was that the youngest and oldest age groups tended to spend less than the two other age groups; however, that relationship was not prevalent in all survey groups. The youngest and oldest age groups tended to have slightly less average seasonal fixed expenses than the other two age groups; however, that relationship was not as prevalent as with variable expenses. Spending differences based on age were statistically significant in only 5 out of 21 survey groups for both variable and fixed expenses.

Generally, average seasonal variable expenses tended to be higher with participants having higher incomes, although the differences in average spending were statistically significant in only 3 out of 21 survey groups. Numerically, average seasonal fixed expenses increased in four survey groups for participants with higher incomes; however, differences in average spending for durable goods were not statistically significant in any survey group.

The relationship between the amount of spending in rural areas and the overall level of seasonal spending for nondurable goods was mixed in most survey groups. Average seasonal spending levels for nondurable goods were generally lower for those that had no expenditures in rural areas and somewhat lower for those that indicated they spent 75 to 100 percent of their seasonal expenditures in rural areas. Alternatively, participants who spent between 25 to 75 percent of their seasonal expenditures in rural areas tended to have higher average seasonal variable expenses. The differences in average seasonal variable expenses were statistically significant in 18 out of 21 survey groups.

The relationship between the amount of spending in rural areas and the overall level of seasonal spending for durable goods also was mixed in most survey groups. Average seasonal spending levels for durable goods were somewhat lower for those that had no expenditures in rural areas and slightly lower for those spending 75 to 100 percent of their seasonal expenditures in rural areas. The differences in average seasonal fixed expenses were statistically significant in 17

out of 21 survey groups, but differences in spending levels were significant in only one year in a majority of survey groups.

Average seasonal variable spending was consistently higher for participants that placed a greater value on a day of hunting/fishing. The difference in spending was statistically significant in 20 out of 21 survey groups. Average seasonal fixed spending also paralleled the value placed on a day of hunting or fishing; however, the relationship was less pronounced than found with variable expenses. Differences in spending were statistically significant in 13 out of 21 survey groups; however, differences in spending were statistically significant in only one year in a majority of survey groups.

Average seasonal variable spending was consistently higher for participants with access/guide fees. The difference in spending was statistically significant in 16 out of 18 survey groups (gratis hunting groups excluded from analysis). Average seasonal fixed spending was generally higher for participants with access/guide fees; however, the relationship was less pronounced than found with variable expenses. Differences in spending were statistically significant in 11 out of 18 survey groups.

In many cases, differences in seasonal spending levels for durable and nondurable goods were only statistically significant in one survey year. Statistically significant differences in season spending levels were observed in more survey years for miles traveled, days participated, and with/without access and/or guide fees than found with other participant characteristics.

Conclusions

Hunter and angler spending is a dynamic process influenced by numerous factors, some of which have substantial effects on spending in any given year, while other factors have gradual, long-term influences on average spending. Unfortunately, the data base of hunter and angler expenditures used in this study quantifies a limited number of participation and demographic characteristics. Other quantitative and qualitative data to fully explain variations in spending were not available. As a result, conclusions on why hunter and angler spending has changed are difficult to make. However, the data base was effective in describing changes in hunter and angler spending overtime.

Although some distinct patterns and trends in spending were identified, most changes are occurring gradually, and those changes were evident in a majority of hunting activities. These assessments would suggest macro forces (i.e., population shifts, changes in preferences over time) were the primary factors driving changes in hunter and angler spending from 1981 to 2001. Since the majority of survey respondents only participated in hunting activities for three days or less, it is reasonable to hypothesize that year to year fluctuations in wildlife numbers and other resource factors could have a greater effect on the number of participants than the amount of time any individual participates in an activity.

Definitive conclusions on changes in the composition of hunter and angler spending were difficult. Increases or decreases in seasonal spending did not necessarily translate into proportional changes in spending for specific types of durable and nondurable goods. For example, resident anglers are generally spending more each year on rods/reels/tackle, but those purchases, as a percentage of all fixed expenses, have been decreasing over the period. Another example, the percentage of survey respondents with purchases of weapons decreased over the period; however, the average expenditure for weapons increased in most hunting categories. Further, in other specific expenditure categories, the percentage of respondents with specific purchases increased over the period, yet average spending for that type of good/service did not change.

Spending patterns reflected a greater percentage of urban resident participants. The percentage of individuals purchasing lodging expenses increased in most hunting categories over the period. Although transportation expenses were not necessarily increasing in all categories, a majority of hunting categories showed trends in increased miles traveled. Both trends would be consistent with an increasing portion of resident hunters living in urban areas of the state.

Although it is difficult to determine the variation in spending that can be attributed to changes in the data collection system over time, consistent average spending suggests that the data collection process has successfully surveyed a representative sample and has reliably estimated expenditures for most activities over time. If the process was not consistent, substantial variations in average seasonal spending would likely be observed from survey year to survey year without any correlation in participant characteristics.

Several analyses reinforced that age and income are not influential factors in seasonal spending levels. Participatory characteristics (e.g., days participated, miles traveled) were

statistically linked to spending on nondurable goods; however, those factors were not strongly linked to spending on durable goods. Generally, participant characteristics available in the data set were insufficient to explain more than one-third of the variation in individual spending levels for nondurable goods and explained a much smaller fraction of the variation in spending for durable goods.

The current data collection system implemented by the ND Game and Fish Department has successfully provided statewide and average individual spending estimates for hunters and anglers, and if policymakers desire to continue that assessment in the future, then the current process will largely satisfy that goal. However, as the state continues to manage increasing wildlife populations and participation levels, more importance will likely be placed on geographical distribution and location-specific impacts of game management policies. While many game management policies are still closely tied to biological considerations, there is an expectation that at least some socio-economic factors be considered in formulating policies. If future wildlife management decisions are to include consideration of socio-economic factors, as well as biological factors, the current data collection system would need to further identify and quantify hunter and angler participant preferences/behavior as well as track expenditures geographically throughout the state.

Past surveys of hunter and angler spending have provided valuable insights and survey results have been used extensively by in-state policymakers and wildlife managers over the past 20 years. The current process of periodically surveying hunters and anglers to obtain expenditure and characteristic data has contributed substantially to understanding how much is being spent in the state, the composition of hunter and angler spending, and the rural and statewide economic effects of hunting and fishing activities. The future value of the current data collection system will depend to some extent on the type of information needed by policymakers and wildlife managers as they deal with changing priorities and issues pertaining to the state's wildlife resources.

References

- Anderson, Randall S. and Jay A. Leitch. 1984. *Characteristics and Expenditures of Nonresident Sportsman in North Dakota in 1983*. Ag. Econ. Misc. Rpt. No. 77. Department of Agricultural Economics, Agricultural Experiment Station, North Dakota State University, Fargo.
- Baltezore, James F., Jay A. Leitch, Theresa Golz, and Arlen K. Harmoning. 1987. *Resident Hunter and Angler Expenditures and Characteristics in North Dakota in 1986.* Staff Paper AE87008, Department of Agricultural Economics, Agricultural Experiment Station, North Dakota State University, Fargo.
- Baltezore, James F. and Jay A. Leitch. 1992. *Characteristics, Expenditures, and Economic Impact of Resident and Nonresident Hunters and Anglers in North Dakota, 1990-91 Season.* Staff Paper AE92003, Department of Agricultural Economics, Agricultural Experiment Station, North Dakota State University, Fargo.
- Bangsund, Dean A. and F. Larry Leistritz. 2003. *Resident and Nonresident Hunter and Angler Expenditures, Characteristics, and Economic Effects, North Dakota, 2001-2002.*Agribusiness and Applied Economics Report No. 507. Department of Agribusiness and Applied Economics, North Dakota State University, Fargo.
- Bangsund, Dean A., F. Larry Leistritz, and Nancy M. Hodur. 2002. *Rural Economic Effects of the Conservation Reserve Program*. Agribusiness and Applied Economics Report No. 497. Department of Agribusiness and Applied Economics, North Dakota State University, Fargo.
- Bihrle, Craig. 2003a. "Analyzing the New Farm Bill: Will Washington Programs mean more North Dakota Wildlife?" *North Dakota Outdoors* 66(1):5-7.
- Bihrle, Craig. 2003b. "Perceptions and Realities: Game and Fish Surveys Provide Insight into Current Issues." *North Dakota Outdoors* 66(2):16-20.
- Brown, Tommy L., Daniel J. Decker, William F. Siemer, and Jody W. Enck. 2000. "Trends in Hunting Participation and Implications for Management of Game Species," in *Trends in Outdoor Recreation, Leisure and Tourism*, eds. W. C. Gartner and D. W. Lime. CABI Publishing, New York, NY.
- Coon, Randal C. and F. Larry Leistritz. 2003. *The State of North Dakota: Economic, Demographic, Public Service, and Fiscal Conditions*. Department of Agribusiness and Applied Economics, North Dakota State University, Fargo.
- Hamm, Rita R., F. Larry Leistritz, Janet K. Wanzek, and JoAnn M. Thompson. 1992. *The State of North Dakota: Economic, Demographic, Public Service, and Fiscal Conditions*. Department of Agribusiness and Applied Economics, North Dakota State University, Fargo.

- Harmoning, Arlen K. 1977. "A Price Tag for Wildlife?" North Dakota Outdoors 40(1):4-8.
- Harmoning, Arlen K. 1978. "Big Bucks \$ for Bighorns." North Dakota Outdoors 40(8):2-4.
- Johnson, Roger G. and Dean A. Bangsund. May-June 1989. "Row Crops: An Intensification of the North Dakota Agricultural Industry." *North Dakota Farm Research* 46(6):3-6.
- Kerestes, Daniel E. and Jay A. Leitch. 1983. *An Analysis of Sportsman Activity Data Collection Methods for North Dakota*. Ag. Econ. Rpt. No. 180. Department of Agricultural Economics, Agricultural Experiment Station, North Dakota State University, Fargo.
- Leistritz, F. Larry, Nancy M. Hodur, and Dean A. Bangsund. 2002. "Socio-economic Impacts of the Conservation Reserve Program in North Dakota." *Rural America* 17(3):57-65.
- Leitch, Jay A. 1977a. "Nonresident Hunters Benefactors or Bad Men?" *North Dakota Outdoors* 40(2): 19-21.
- Leitch, Jay A. 1977b. "Characteristics of Nonresident Hunters." *North Dakota Outdoors* 40(5): 16-19.
- Leitch, Jay A. 1978. "Expenditures of Nonresident Hunters." *North Dakota Outdoors* 40(9):22-24.
- Leitch, Jay A. and Daniel E. Kerestes. 1982. Development and Implementation of a Periodic Data Collection System for Game and Fish Management and Policy Analysis: First Year Report--Summary Data and Preliminary Findings. Staff Paper AE82017, Department of Agricultural Economics, Agricultural Experiment Station, North Dakota State University, Fargo.
- Leitch, Jay A. and Donald F. Scott. 1978. *Nonresident Hunters in North Dakota: Characteristics, Expenditures, Harvest*. Ag. Econ. Rpt. No. 126. Department of Agricultural Economics, Agricultural Experiment Station, North Dakota State University, Fargo.
- Leitch, Jay A. and William C. Nelson. 1976. *Economic Value of Wildlife in the Lower Sheyenne River Basin*. Agricultural Economics Report No. 114. Department of Agricultural Economics, Agricultural Experiment Station, North Dakota State University, Fargo.
- Lewis, Tina A., Jay A. Leitch, and Aaron J. Meyer. 1998. *Characteristics, Expenditures, and Economic Impact of Resident and Nonresident Hunters and Anglers in North Dakota, 1996-97, Season and Trends*. Agricultural Economics Report No. 389. Department of Agricultural Economics, Agricultural Experiment Station, North Dakota State University, Fargo.
- North Dakota Game and Fish Department. 2002. Personal interviews with ND Game and Fish Department biologists. North Dakota Game and Fish Department, Bismarck.

- North Dakota Agricultural Statistics Service. Various years. *North Dakota Agricultural Statistics*. North Dakota Agricultural Statistics Service, North Dakota State University, and U.S. Department of Agriculture, Fargo.
- Nickerson, Norma P. and Rita J. Black. 2000. "Changes in Family and Work: Impacts on Outdoor Recreation and Tourism in North America," in *Trends in Outdoor Recreation*, *Leisure and Tourism*, eds. W. C. Gartner and D.W. Lime. CABI Publishing, New York, NY.
- Stuart, Russell W. 1949. "How the North Dakota Hunter Spent His Dollar." *North Dakota Outdoors* 11(12):10,12.
- SAS Institute, Inc. 1990. SAS/STAT User's Guide. Vol. 1 and 2. SAS Institute, Inc., Cary, NC.
- Sorenson, Lee A. 1975. *Alternative Uses of Wetlands*. M.S. Thesis, Department of Agricultural Economics, North Dakota State University, Fargo.
- Souris-Red-Rainy River Basins Commission. 1972. *Souris-Red-Rainy River Basins Commission Study*. Volume 5. Souris-Red-Rainy River Basins Commission, Moorhead, MN.
- U.S. Department of Labor. 2003. Consumer Price Index. ftp://146.142.4.23/pub/special.requests/cpi/cpiai.txt Bureau of Labor Statistics, U.S. Department of Labor, Washington, D.C.
- Wilson, Ron. 2003. "Drought-Buster A Decade Later." North Dakota Outdoors 66(1):10-13.

SECTION A

Seasonal and Daily Variable, Fixed, and Total Expenditures, by Year and Survey Group

Tables 6 through 29 Figures 1 through 25

Table 6. Resident Archery Antelope Hunter Expenditures, Real (2002) Dollars

	Average Per Hunter					
Expenditure Category	1982	1986	1990	1996	2001	
Variable Expenses						
Access Fees	0.17	0.95	0.03	0.38	0.42	
Film	4.87	5.68	9.81	4.27	4.63	
Food and Beverage	51.32	69.63	85.63	72.38	71.89	
Guide Fees	na	na	na	0.47	0.00	
Lodging	5.72	12.72	12.77	15.56	30.39	
Meat Processing	3.08	3.71	6.62	6.19	6.55	
Taxidermy	22.04	16.96	20.59	10.96	14.22	
Transportation	124.70	167.28	176.42	143.38	125.43	
Other	7.98	7.21	10.08	5.09	16.14	
Total Season Variable	219.87	284.13	321.95	258.67	269.67	
Daily Season Variable	58.07	49.16	56.35	55.21	68.16	
Fixed Expenses						
Binoculars/Optics	na	49.96	51.80	62.75	103.46	
Camping Equipment	13.31	49.74	92.83	54.66	109.70	
Clothing	30.03	45.91	48.52	64.31	116.62	
Vehicle	10.63	28.35	22.15	20.68	31.77	
Weapons	162.60	145.92	139.72	154.18	248.90	
Other	17.21	22.44	8.24	34.86	29.12	
Total Season Fixed	233.78	342.30	363.25	391.45	639.57	
Daily Season Fixed	70.02	74.21	65.01	91.37	172.22	
Total Season Expenses	453.65	626.43	685.20	650.12	909.24	
Daily Season Total	128.09	123.37	121.36	146.58	240.38	
Days Participated	4.90	7.38	7.60	6.27	4.79	

Table 7. Resident Firearm Antelope Hunter Expenditures, Real (2002) Dollars

	Average Per Hunter					
Expenditure Category	1982	1986	1990	1996	2001	
Variable Expenses						
Access Fees	1.72	1.08	0.23	0.18	0.15	
Ammunition	20.32	17.45	15.51	14.38	14.80	
Film	4.94	4.22	6.80	3.33	3.95	
Food and Beverage	63.72	47.86	47.94	53.72	56.91	
Guide Fees	na	na	na	0.17	0.09	
Lodging	27.33	20.96	26.37	29.59	40.78	
Meat Processing	23.04	18.01	22.28	27.06	33.67	
Taxidermy	75.56	72.50	63.34	26.42	34.67	
Transportation	121.55	70.99	81.20	84.81	83.84	
Other	3.06	3.91	2.15	4.29	1.87	
Total Season Variable	341.21	256.98	265.84	243.94	270.72	
Daily Season Variable	219.89	187.34	160.46	142.68	160.37	
Fixed Expenses						
Binoculars/Optics	na	20.16	48.67	23.88	51.38	
Camping Equipment	3.37	3.50	5.62	8.05	10.02	
Clothing	12.68	16.30	18.46	20.99	32.55	
Vehicle	10.63	28.35	22.15	20.68	31.77	
Weapons	75.45	47.40	60.44	38.02	68.78	
Other	33.09	7.01	3.45	2.75	4.53	
Total Season Fixed	135.23	122.73	158.79	114.38	199.24	
Daily Season Fixed	85.01	90.13	100.14	65.24	116.32	
Total Season Expenses	476.45	379.71	424.63	358.32	469.96	
Daily Season Total	304.90	277.47	260.60	207.92	276.69	
Days Participated	1.91	1.69	1.96	2.15	2.00	

Table 8. Resident Gratis Antelope Hunter Expenditures, Real (2002) Dollars

	Average Per Hunter					
Expenditure Category	1982	1986	1990	1996	2001	
Variable Expenses						
Access Fees	0.00	0.00	0.00	0.00	0.00	
Ammunition	12.75	10.85	8.59	5.71	6.57	
Film	1.04	0.41	0.92	0.32	0.92	
Food and Beverage	12.08	10.60	9.08	6.43	9.46	
Guide Fees	na	na	na	0.00	0.00	
Lodging	0.00	0.00	1.21	0.00	1.39	
Meat Processing	2.57	12.80	20.12	14.28	18.08	
Taxidermy	23.64	13.30	15.47	8.73	14.47	
Transportation	44.52	23.82	25.63	15.75	22.33	
Other	0.00	0.07	1.94	0.56	0.51	
Total Season Variable	96.61	71.85	82.99	51.79	73.74	
Daily Season Variable	58.46	45.58	48.13	32.85	42.92	
Fixed Expenses						
Binoculars/Optics	na	6.02	16.79	10.88	24.89	
Camping Equipment	0.00	0.15	3.44	1.67	3.36	
Clothing	5.67	4.66	8.01	9.61	10.24	
Vehicle	0.80	8.09	1.67	0.21	12.26	
Weapons	80.41	16.71	29.17	36.12	64.62	
Other	12.70	0.95	0.94	3.10	2.99	
Total Season Fixed	99.57	36.57	60.01	61.58	118.35	
Daily Season Fixed	55.95	23.78	38.47	37.26	58.89	
Total Season Expenses	196.17	108.42	143.00	113.37	192.09	
Daily Season Total	114.41	69.37	86.61	70.11	101.80	
Days Participated	2.62	2.00	2.91	3.01	2.46	

Table 9. Resident Special Big Game Hunter Expenditures, Real (2002) Dollars

	Average Per Hunter					
Expenditure Category	1981	1982	1986	1990	1996	2001
Variable Expenses						
Access Fees	0.34	na	4.10	19.22	24.53	9.42
Ammunition	14.68	35.96	34.55	24.49	18.63	27.24
Film	24.09	16.89	18.40	19.59	11.97	9.87
Food and Beverage	147.28	156.71	110.30	144.95	124.41	122.52
Guide Fees	na	na	na	na	14.25	12.00
Lodging	49.97	127.10	57.53	105.85	74.76	97.40
Meat Processing	143.15	74.46	132.43	113.86	88.04	97.59
Taxidermy	194.60	372.31	182.15	122.28	188.94	97.04
Transportation	181.58	208.57	124.52	228.76	171.53	186.09
Other	0.83	16.44	7.78	22.84	24.38	11.15
Total Season Variable	756.51	1,008.45	671.77	801.83	741.44	670.31
Daily Season Variable	425.62	389.14	293.75	278.04	307.56	226.13
Fixed Expenses						
Binoculars/Optics	na	na	na	40.33	38.41	69.45
Camping Equipment	1.64	1.64	26.28	7.91	8.09	15.47
Clothing	2.32	19.41	39.30	56.67	37.84	43.93
Vehicle	13.36	10.63	28.35	22.15	20.68	31.77
Weapons	71.25	94.31	190.59	97.11	47.54	90.52
Other	8.25	38.38	31.35	67.83	17.41	22.10
Total Season Fixed	96.80	164.37	315.88	292.00	169.96	273.25
Daily Season Fixed	75.17	85.74	149.53	97.93	55.62	89.40
Total Season Expenses	853.31	1,172.82	987.64	1,093.83	911.40	943.57
Daily Season Total	500.79	474.88	443.28	375.97	636.18	315.53
Days Participated	3.50	4.41	3.79	4.75	5.31	5.47

Table 10. Resident Archery Deer Hunter Expenditures, Real (2002) Dollars

	Average Per Hunter					
Expenditure Category	1981	1982	1986	1990	1996	2001
Variable Expenses						
Access Fees	1.33	0.89	0.39	2.19	1.80	3.44
Film	6.25	2.74	3.56	5.08	5.54	5.48
Food and Beverage	70.14	40.60	53.44	66.14	74.31	58.41
Guide Fees	na	na	na	na	0.02	0.01
Lodging	4.61	4.27	5.71	7.68	7.66	9.00
Meat Processing	13.04	9.69	12.92	17.85	34.63	29.30
Taxidermy	3.92	6.73	9.73	13.31	22.68	25.49
Transportation	168.46	139.02	127.82	147.44	152.63	134.30
Other	30.56	7.03	5.27	7.42	8.47	11.10
Total Season Variable	298.29	211.00	218.85	267.10	307.73	276.51
Daily Season Variable	37.40	23.28	20.78	30.38	30.22	36.81
Fixed Expenses						
Binoculars/Optics	na	na	35.44	23.29	36.81	56.69
Camping Equipment	19.20	1.55	24.72	31.05	23.06	20.81
Clothing	30.89	27.63	52.36	52.04	72.27	95.79
Vehicle	13.36	10.63	28.35	22.15	20.68	31.77
Weapons	124.72	87.71	107.18	103.81	128.22	130.56
Other	21.75	15.68	16.74	14.07	21.18	31.95
Total Season Fixed	209.90	143.19	264.79	246.40	302.22	367.58
Daily Season Fixed	35.47	17.19	34.45	26.55	30.45	53.02
Total Season Expenses	508.19	354.19	483.65	513.49	609.95	644.09
Daily Season Total	73.17	40.47	55.23	56.93	60.68	89.83
Days Participated	12.61	12.51	13.03	12.93	15.94	12.71

Table 11. Resident Firearm Deer Hunter Expenditures, Real (2002) Dollars

			Average P	er Hunter		
Expenditure Category	1981	1982	1986	1990	1996	2001
Variable Expenses						
Access Fees	0.89	0.30	0.46	0.30	0.22	0.82
Ammunition	19.69	23.00	19.52	25.85	19.56	19.19
Film	2.57	0.93	1.64	4.16	2.64	2.27
Food and Beverage	43.32	35.48	39.25	54.47	45.88	42.69
Guide Fees	na	na	na	na	0.57	0.00
Lodging	11.04	1.77	8.95	10.09	8.52	7.03
Meat Processing	38.02	36.61	46.39	57.52	55.39	63.70
Taxidermy	4.35	4.12	0.00	8.00	6.91	14.03
Transportation	92.23	81.06	73.52	93.86	79.17	68.49
Other	5.50	0.24	10.11	3.28	2.22	4.74
Total Season Variable	217.62	183.54	199.83	257.52	221.10	222.97
Daily Season Variable	74.85	63.55	63.72	70.06	66.50	73.26
Fixed Expenses						
Binoculars/Optics	na	na	25.89	34.73	20.10	41.85
Camping Equipment	6.39	2.89	15.99	2.93	1.08	10.17
Clothing	21.57	16.18	25.36	30.08	34.17	41.14
Vehicle	13.36	10.63	28.35	22.15	20.68	31.77
Weapons	75.09	76.36	69.65	100.29	50.84	83.21
Other	5.82	9.96	6.88	3.85	4.29	6.46
Total Season Fixed	122.23	115.99	172.10	194.01	131.17	214.59
Daily Season Fixed	41.84	39.48	62.67	50.53	41.40	77.81
Total Season Expenses	339.85	299.53	371.93	451.53	352.27	437.56
Daily Season Total	116.69	103.04	126.39	120.59	107.91	151.07
Days Participated	3.69	4.10	4.48	4.46	4.34	4.42

Table 12. Resident Gratis Deer Hunter Expenditures, Real (2002) Dollars

	Average Per Hunter			
Expenditure Category	1982	1990	1996	2001
Variable Expenses				
Access Fees	0.00	0.00	0.00	0.00
Ammunition	17.37	15.09	13.87	11.69
Film	0.35	0.83	0.61	1.28
Food and Beverage	11.33	20.89	14.53	25.14
Guide Fees	na	na	0.00	0.00
Lodging	0.00	0.45	0.00	3.19
Meat Processing	43.47	47.49	73.59	53.07
Taxidermy	0.21	6.43	10.89	13.64
Transportation	34.95	36.28	27.21	30.66
Other	0.21	1.34	1.52	1.38
Total Season Variable	107.90	128.79	142.33	140.04
Daily Season Variable	46.23	42.45	54.15	61.23
Fixed Expenses				
Binoculars/Optics	na	7.52	0.00	17.32
Camping Equipment	0.00	0.19	0.00	0.00
Clothing	11.73	13.13	9.52	21.29
Vehicle	0.80	1.67	0.21	12.26
Weapons	43.33	28.81	77.39	32.50
Other	1.27	1.24	1.52	2.52
Total Season Fixed	57.12	52.55	88.64	85.88
Daily Season Fixed	24.05	12.37	39.44	41.49
Total Season Expenses	165.02	181.35	230.97	225.92
Daily Season Total	70.28	54.82	93.90	102.72
Days Participated	3.06	3.86	3.87	3.57

Table 13. Resident Muzzleloader Deer Hunter Expenditures, Real (2002) Dollars

	Average Pe	er Person	
Expenditure Category	1990	1996	
Variable Expenses			
Access Fees	1.65	1.20	
Ammunition	14.65	15.32	
Film	1.17	1.10	
Food and Beverage	25.81	23.84	
Guide Fees	na	0.13	
Lodging	2.15	2.34	
Meat Processing	15.64	15.44	
Taxidermy	1.97	7.65	
Transportation	55.06	55.64	
Other	1.51	2.56	
Total Season Variable	119.60	125.22	
Daily Season Variable	37.48	42.60	
Fixed Expenses			
Binoculars/Optics	27.90	27.82	
Camping Equipment	1.87	7.77	
Clothing	26.79	34.66	
Vehicle	22.15	20.68	
Weapons	94.44	83.49	
Other	6.87	14.53	
Total Season Fixed	180.00	188.95	
Daily Season Fixed	57.31	74.86	
Total Season Expenses	299.59	314.17	
Daily Season Total	94.80	117.46	
Days Participated	3.97	3.69	

Table 14. Resident Furbearer Expenditures, Real (2002) Dollars

			Average P	er Hunter		
Expenditure Category	1981	1982	1986	1990	1996	2001
Variable Expenses						
Access Fees	10.35	0.58	0.51	0.23	0.07	1.97
Ammunition	59.04	45.86	27.20	35.95	30.56	27.03
Film	na	na	2.54	3.04	2.18	2.07
Food and Beverage	58.23	44.43	38.47	54.09	47.82	44.76
Guide Fees	na	na	na	na	0.00	0.00
Lodging	na	na	4.33	8.59	7.92	8.85
Taxidermy	6.29	12.38	4.89	8.82	7.99	10.44
Transportation	309.27	204.96	119.07	152.37	142.07	104.12
Other	48.78	6.64	3.43	8.59	5.61	1.39
Total Season Variable	491.96	314.82	200.45	270.73	244.24	200.62
Daily Season Variable	37.27	26.40	25.75	31.77	30.87	40.65
Fixed Expenses						
Binoculars/Optics	na	na	32.30	56.94	62.58	87.84
Calls (predator)	na	na	na	9.19	9.39	15.69
Camping Equipment	na	na	3.17	13.76	16.97	12.48
Clothing	na	na	34.16	42.34	52.96	60.36
Skinning Equipment	na	na	5.97	6.79	7.07	4.65
Traps	42.51	29.16	25.23	7.90	18.15	7.57
Vehicle	13.36	10.63	28.35	22.15	20.68	31.77
Weapons	112.61	110.33	125.90	148.97	155.10	154.40
Other	34.57	42.95	20.50	8.11	5.52	3.95
Total Season Fixed	203.06	193.08	275.58	316.17	348.44	378.72
Daily Season Fixed	18.98	12.96	44.40	52.06	53.66	86.54
Total Season Expenses	695.02	507.90	476.03	586.90	592.67	579.35
Daily Season Total	56.25	39.35	70.15	83.82	84.53	127.19
Days Participated	18.09	18.42	12.37	11.39	13.07	11.47

Table 15. Resident Open Water Fishing Expenditures, Real (2002) Dollars

	Average Per Angler				
Expenditure Category	1982	1986	1990	1996	2001
Variable Expenses					
Access Fees	8.52	8.83	4.16	7.52	5.85
Bait	49.48	39.10	46.70	45.78	45.78
Fuel (boat)	66.37	58.55	72.81	74.78	80.78
Film	7.08	7.39	8.51	8.04	8.89
Food and Beverage	145.78	127.44	165.13	146.64	189.02
Guide Fees	na	na	na	na	2.54
Lodging	28.45	25.44	37.76	40.07	74.46
Meat Processing	4.74	2.48	1.98	2.87	3.91
Rental (equipment)	0.43	4.33	2.57	3.21	5.13
Repairs	27.96	35.62	65.55	59.74	66.18
Taxidermy	0.00	8.31	14.08	6.43	2.88
Transportation	251.30	167.47	211.48	189.74	210.01
Other	8.09	3.68	6.73	11.28	3.65
Total Season Variable	598.22	488.64	637.45	596.09	699.07
Daily Season Variable	42.58	44.04	60.23	43.72	45.27
Fixed Expenses					
Boat, Motor, Trailer	397.51	554.90	714.25	816.43	897.30
Camera (underwater)	na	na	na	na	6.15
Camping Equipment	99.53	62.74	198.43	111.32	138.40
Clothing	12.27	15.54	14.51	21.62	26.69
Electronics (fish/depth)	26.83	31.01	39.50	33.10	47.77
Rods/reels	61.95	55.92	58.47	66.01	82.00
Tackle	7.16	50.05	62.24	62.90	79.54
Vehicle	34.04	45.24	89.55	114.69	84.70
Other	38.31	20.76	5.40	59.53	10.19
Total Season Fixed	677.56	836.19	1,182.34	1,285.63	1,372.73
Daily Season Fixed	52.11	91.10	133.68	109.41	100.00
Total Season Expenses	1,275.78	1,324.83	1,819.80	1,881.72	2,071.80
Daily Season Total	94.69	135.14	193.91	153.13	145.27
Days Participated	14.57	12.88	12.33	16.99	17.79

Table 16. Resident Ice Fishing Expenditures, Real (2002) Dollars

	Average Per Angler			
Expenditure Category	1986	1990	1996	2001
Variable Expenses				
Access Fees	na	na	na	0.46
Bait	22.68	22.45	22.81	22.50
Fuel (heaters)	9.68	12.36	12.33	29.20
Film	2.02	0.87	1.61	2.53
Food and Beverage	85.16	73.21	64.20	69.27
Guide Fees	na	na	na	0.00
Lodging	7.29	3.23	7.49	13.59
Meat Processing	3.69	1.10	1.79	2.59
Rental (equipment)	2.53	0.85	0.36	0.11
Repairs	17.01	12.29	14.03	10.90
Taxidermy	7.19	4.68	4.92	4.48
Transportation	130.90	112.95	101.74	119.82
Other	1.76	0.41	5.13	2.98
Total Season Variable	289.91	244.41	236.37	278.43
Daily Season Variable	38.41	28.12	32.77	28.03
Fixed Expenses				
Augers (ice)	36.00	27.14	41.46	42.52
Camera (underwater)	na	na	na	26.89
Clothing	23.19	22.15	33.88	25.18
Electronics (fish/depth)	12.47	21.72	18.16	37.15
Fish Houses/Heaters	20.98	21.50	48.95	60.68
Rods/reels	15.28	22.11	26.33	37.31
Tackle	21.08	20.05	26.97	31.68
Vehicle	45.24	89.55	114.69	84.70
Other	1.77	0.12	20.60	4.26
Total Season Fixed	176.01	224.33	331.04	350.37
Daily Season Fixed	26.95	45.77	54.08	50.23
Total Season Expenses	465.92	468.74	567.41	628.81
Daily Season Total	65.36	73.89	86.85	78.26
Days Participated	12.15	9.75	10.35	13.21

Table 17. Resident Season-long Fishing Expenditures, Real (2002) Dollars

	Average Per Angler		
Expenditure Category	1981	2001	
Variable Expenses			
Access Fees	7.88	7.27	
Bait	55.61	53.86	
Fuel (boat, heaters)	76.83	108.79	
Film	13.46	8.74	
Food and Beverage	237.29	191.98	
Guide Fees	na	1.45	
Lodging	27.67	51.94	
Meat Processing	3.27	6.32	
Rental (equipment)	10.71	15.12	
Repairs	61.43	78.63	
Taxidermy	8.25	6.22	
Transportation	333.44	237.81	
Other	10.41	4.86	
Total Season Variable	846.26	772.98	
Daily Season Variable	68.50	43.91	
Fixed Expenses			
Augers (ice)	na	25.57	
Boat, Motor, Trailer	331.08	1,278.97	
Camera (underwater)	na	9.62	
Camping Equipment	71.76	161.48	
Clothing	24.46	33.94	
Electronics (fish/depth)	27.21	45.34	
Fish Houses/Heaters	na	49.46	
Rods/reels	70.18	82.99	
Tackle	46.37	82.12	
Vehicle	53.75	84.70	
Other	33.74	10.58	
Total Season Fixed	658.56	1,864.76	
Daily Season Fixed	71.19	136.88	
Total Season Expenses	1,504.83	2,637.74	
Daily Season Total	139.68	180.79	
Days Participated	22.99	24.86	

Table 18. Resident Darkhouse Spearing Expenditures, Real (2002) Dollars

	Average per Person	
Expenditure Category	2001	
Variable Expenses		_
Access Fees	0.22	
Bait	5.10	
Fuel (heaters)	17.37	
Film	1.56	
Food and Beverage	35.26	
Guide Fees	0.51	
Lodging	3.92	
Meat Processing	1.90	
Rental (equipment)	28.21	
Repairs	8.11	
Taxidermy	1.65	
Transportation	62.21	
Other	9.20	
Total Season Variable	175.22	
Daily Season Variable	36.44	
Fixed Expenses		
Augers, Saws, Chisels	60.08	
Clothing	9.15	
Electronics (fish/depth)	19.55	
Fish Houses/Heaters	47.56	
Spears	30.86	
Tackle, Decoys	20.68	
Vehicle	84.70	
Other	10.16	
Total Season Fixed	282.74	
Daily Season Fixed	81.53	
Total Season Expenses	457.96	
Daily Season Total	117.97	
Days Participated	7.63	

Table 19. Resident Fall Turkey Hunter Expenditures, Real (2002) Dollars

			Average P	er Hunter		
Expenditure Category	1981	1982	1986	1990	1996	2001
Variable Expenses						
Access Fees	0.32	1.34	0.36	0.99	0.84	0.43
Ammunition	9.62	11.58	6.80	8.59	8.45	8.70
Film	2.20	1.70	1.82	1.97	1.59	1.97
Food and Beverage	32.77	20.39	22.95	38.79	26.93	29.05
Guide Fees	na	na	na	na	0.02	0.06
Lodging	8.99	2.72	4.53	14.38	10.74	15.31
Meat Processing	na	na	na	0.50	0.87	0.53
Taxidermy	0.75	1.16	3.30	0.66	1.54	2.05
Transportation	59.43	53.22	40.33	59.65	43.77	50.96
Other	0.69	3.41	0.95	1.78	1.71	0.65
Total Season Variable	114.77	95.61	81.04	127.32	96.45	109.72
Daily Season Variable	72.57	54.68	50.92	69.50	55.22	48.01
Fixed Expenses						
Binoculars/Optics	na	na	9.83	11.96	9.33	18.04
Camping Equipment	4.04	0.75	6.86	13.81	1.78	11.32
Clothing	8.04	4.44	11.70	21.25	16.43	25.74
Vehicle	13.36	na	28.35	22.15	20.68	31.77
Weapons	43.62	17.58	37.31	30.25	26.53	42.63
Other	4.53	0.07	3.56	2.12	2.37	5.54
Total Season Fixed	73.58	22.84	97.63	101.53	77.12	135.04
Daily Season Fixed	48.47	13.24	73.37	59.92	46.47	61.28
Total Season Expenses	188.35	118.34	178.67	228.85	173.57	244.76
Daily Season Total	121.04	67.91	124.99	129.41	101.69	109.29
Days Participated	1.82	1.99	2.06	2.37	2.26	2.99

Table 20. Resident Gratis Fall Turkey Hunter Expenditures, Real (2002) Dollars

	Average Per Hunter			
Expenditure Category	1986	1990	1996	2001
Variable Expenses				
Access Fees	0.00	0.00	0.00	0.00
Ammunition	3.51	5.20	7.84	5.28
Film	0.87	0.45	0.08	0.71
Food and Beverage	5.94	11.14	7.84	20.07
Guide Fees	na	na	0.00	0.00
Lodging	0.00	0.54	0.00	3.42
Meat Processing	0.00	0.00	0.57	0.36
Taxidermy	0.33	0.00	0.00	1.03
Transportation	18.25	24.86	20.51	31.60
Other	0.00	0.00	0.00	0.41
Total Season Variable	28.91	42.20	36.85	62.88
Daily Season Variable	14.26	16.89	12.15	18.11
Fixed Expenses				
Binoculars/Optics	6.16	17.89	3.38	17.64
Camping Equipment	2.27	0.00	1.02	0.00
Clothing	7.71	9.30	12.27	20.94
Vehicle	8.09	1.67	0.21	12.26
Weapons	5.33	0.00	3.07	14.26
Other	4.10	2.59	0.78	1.57
Total Season Fixed	33.67	31.45	20.72	66.67
Daily Season Fixed	16.27	14.63	7.80	32.16
Total Season Expenses	62.57	73.65	57.57	129.55
Daily Season Total	30.53	31.52	19.95	50.27
Days Participated	2.95	3.18	2.66	4.34

Table 21. Resident Spring Turkey Hunter Expenditures, Real (2002) Dollars

	Average Po	er Hunter	
Expenditure Category	1990	1996	
Variable Expenses			
Access Fees	0.25	0.15	
Ammunition	6.19	6.95	
Film	2.31	2.10	
Food and Beverage	21.65	23.52	
Guide Fees	na	na	
Lodging	5.41	4.31	
Meat Processing	0.33	0.55	
Taxidermy	8.74	6.71	
Transportation	45.86	49.90	
Other	0.92	2.61	
Total Season Variable	91.67	96.80	
Daily Season Variable	45.24	42.31	
Fixed Expenses			
Binoculars/Optics	18.73	16.48	
Camping Equipment	1.07	5.43	
Clothing	9.61	34.82	
Vehicle	22.15	20.68	
Weapons	19.70	53.50	
Other	4.21	21.27	
Total Season Fixed	75.46	152.19	
Daily Season Fixed	42.33	66.71	
Total Season Expenses	167.13	248.98	
Daily Season Total	87.57	109.02	
Days Participated	3.31	2.99	

Table 22. Resident Gratis Spring Turkey Hunter Expenditures, Real (2002) Dollars

	Average Per Hunter	
Expenditure Category	1996	
Variable Expenses		
Access Fees	0.00	
Ammunition	5.18	
Film	0.47	
Food and Beverage	9.53	
Guide Fees	na	
Lodging	0.00	
Meat Processing	0.63	
Taxidermy	1.58	
Transportation	39.94	
Other	0.00	
Total Season Variable	57.33	
Daily Season Variable	24.31	
Fixed Expenses		
Binoculars/Optics	13.38	
Camping Equipment	10.51	
Clothing	27.52	
Vehicle	0.21	
Weapons	47.78	
Other	7.65	
Total Season Fixed	107.03	
Daily Season Fixed	20.20	
Total Season Expenses	164.36	
Daily Season Total	44.51	
Days Participated	3.53	

Table 23. Resident Upland Game Hunter Expenditures, Real (2002) Dollars

	Average Per Hunter					
Expenditure Category	1981	1982	1986	1990	1996	2001
Variable Expenses						
Access Fees	0.30	na	0.64	0.77	2.41	5.17
Ammunition	61.04	na	45.24	65.27	62.97	50.91
Film	4.41	na	3.12	4.68	6.31	3.93
Food and Beverage	68.91	na	62.75	103.93	104.64	74.20
Guide Fees	na	na	na	na	3.05	1.95
Lodging	10.71	na	16.09	21.76	27.95	20.74
Meat Processing	na	na	na	17.38	22.84	10.76
Taxidermy	4.91	na	5.96	10.96	17.97	9.18
Transportation	177.92	na	119.20	210.26	182.80	136.95
Veterninarian/Dog Care	na	na	9.50	21.06	20.19	14.12
Other	9.28	na	3.87	8.47	4.61	3.92
Total Season Variable	337.48	170.45	266.37	464.55	455.74	331.82
Daily Season Variable	32.54	25.86	37.08	47.35	72.91	49.96
Fixed Expenses						
Binoculars/Optics	na	na	na	20.05	20.25	39.63
Camping Equipment	24.68	na	45.02	13.83	17.30	90.54
Clothing	27.77	na	45.04	68.92	59.24	83.90
Hunting Dog	27.03	na	11.64	8.82	12.20	19.06
Vehicle	13.36	na	28.35	22.15	20.68	31.77
Weapons	83.00	na	78.61	94.35	92.13	122.62
Other	20.90	na	10.90	6.73	6.72	14.64
Total Season Fixed	196.74	151.68	219.56	234.86	228.52	402.17
Daily Season Fixed	24.09	25.56	38.79	26.17	37.26	64.02
Total Season Expenses	534.22	322.12	485.93	699.41	684.25	733.99
Daily Season Total	56.62	51.42	75.87	73.52	110.18	113.97
Days Participated	14.70	9.04	9.21	11.64	9.35	8.61

Table 24. Resident Waterfowl Hunter Expenditures, Real (2002) Dollars

	Average Per Hunter					
Expenditure Category	1981	1982	1986	1990	1996	2001
Variable Expenses						
Access Fees	1.62	na	0.89	2.13	1.25	1.33
Ammunition	80.69	na	56.32	85.15	82.37	69.44
Film	3.82	na	2.89	8.08	4.59	4.33
Food and Beverage	79.64	na	62.18	95.03	76.56	71.39
Guide Fees	na	na	na	na	0.06	1.20
Lodging	9.26	na	9.36	33.16	20.63	15.09
Meat Processing	na	na	na	11.29	9.12	11.33
Taxidermy	4.91	na	4.81	14.03	15.04	16.45
Transportation	187.80	na	121.05	180.56	154.48	152.35
Veterinarian/Dog Care	na	na	3.73	12.83	13.35	14.40
Other	8.89	na	2.87	7.93	4.00	2.61
Total Season Variable	376.64	187.41	266.88	468.40	398.25	380.42
Daily Season Variable	41.84	27.68	38.46	48.64	59.01	57.16
Fixed Expenses						
Binoculars/Optics	na	na	na	29.02	24.82	43.96
Camping Equipment	8.57	na	4.22	15.09	16.16	23.93
Clothing	25.02	na	40.82	81.68	80.12	89.51
Decoys	19.02	na	23.85	30.52	38.14	56.31
Duck Boat/Motors	3.01	na	4.05	0.15	22.76	26.21
Hunting Dog	19.71	na	6.53	12.25	12.18	29.61
Vehicle	13.36	na	28.35	22.15	20.68	31.77
Weapons	80.91	na	47.83	128.99	150.28	131.22
Other	19.75	na	12.18	2.68	4.82	9.58
Total Season Fixed	189.32	145.00	167.85	322.50	369.96	442.10
Daily Season Fixed	26.52	25.26	26.66	50.49	65.84	85.24
Total Season Expenses	565.96	332.41	434.73	790.90	768.20	822.52
Daily Season Total	68.36	52.94	65.12	99.13	124.85	142.40
Days Participated	11.54	8.81	8.42	9.80	8.54	8.30

Table 25. Nonresident Archery Antelope Hunter Expenditures, Real (2002) Dollars

	Average per Hunter		
Expenditure Category	1990	1996	2001
Variable Expenses			
Access Fees	0.00	36.21	74.63
Film	38.02	9.23	13.54
Food and Beverage	170.02	169.57	125.11
Guide Fees	na	0.00	37.32
Lodging	54.23	61.86	81.22
Meat Processing	6.69	15.69	5.70
Taxidermy	23.21	33.79	30.86
Transportation	143.25	207.90	218.81
Other	14.98	43.57	17.83
Total Season Variable	450.38	577.82	604.22
Daily Season Variable	72.50	97.78	114.46
ixed Expenses			
Binoculars/Optics	3.01	20.48	34.23
Camping Equipment	11.27	20.23	10.47
Clothing	16.74	35.38	47.48
Vehicle	3.74	2.18	4.97
Weapons	9.41	4.09	2.21
Other	7.31	66.34	3.53
Total Season Fixed	51.49	148.70	102.88
Daily Season Fixed	7.34	26.49	19.51
otal Season Expenses	501.88	726.53	707.11
Daily Season Total	79.83	124.27	133.98
ays Participated	6.80	6.21	6.49

Table 26. Nonresident Archery Deer Hunter Expenditures, Real (2002) Dollars

	Average per Hunter			
Expenditure Category	1983	1990	1996	2001
Variable Expenses				
Access Fees	2.96	44.20	99.44	175.19
Film	6.94	14.29	9.07	13.34
Food and Beverage	111.34	148.59	154.55	151.72
Guide Fees	na	na	80.95	227.71
Lodging	21.73	80.81	104.24	123.61
Meat Processing	5.08	10.89	10.67	14.11
Taxidermy	3.87	13.21	12.44	17.66
Transportation	158.48	178.07	180.53	190.46
Other	1.55	6.62	48.16	89.46
Total Season Variable	311.95	496.66	700.04	1,003.25
Daily Season Variable	59.91	82.79	118.02	169.70
Fixed Expenses				
Binoculars/Optics	na	2.60	6.29	35.54
Camping Equipment	3.76	7.38	11.40	14.43
Clothing	34.32	22.45	43.03	67.48
Vehicle	2.58	3.74	2.18	4.97
Weapons	67.39	32.79	18.14	27.34
Other	11.11	6.41	19.14	35.09
Total Season Fixed	119.16	75.37	100.19	184.86
Daily Season Fixed	26.55	11.05	14.07	24.17
Total Season Expenses	431.11	572.03	800.23	1,188.11
Daily Season Total	86.46	93.85	132.09	193.87
Days Participated	7.19	7.94	7.38	7.73

Table 27. Nonresident Firearm Deer Hunter Expenditures, Real (2002) Dollars

<u>-</u>	Average per Hunter			
Expenditure Category	1983	1990	1996	2001
Variable Expenses				
Access Fees	2.46	2.52	0.73	7.54
Ammunition	12.73	17.77	15.89	17.90
Film	4.55	4.61	3.74	5.15
Food and Beverage	150.40	124.84	125.96	121.97
Guide Fees	na	na	3.70	1.00
Lodging	41.63	40.73	41.72	51.05
Meat Processing	26.05	32.90	40.83	44.90
Taxidermy	12.48	11.82	9.12	12.01
Transportation	220.03	181.83	158.48	125.43
Other	2.82	9.39	27.90	20.43
Total Season Variable	473.19	426.39	428.07	407.37
Daily Season Variable	147.32	117.69	140.00	149.50
Fixed Expenses				
Binoculars/Optics	na	9.58	8.15	13.67
Camping Equipment	0.79	3.07	8.00	3.41
Clothing	13.17	22.85	23.87	35.99
Vehicle	2.58	3.74	2.18	4.97
Weapons	29.93	19.15	29.91	18.71
Other	30.25	4.23	6.04	15.00
Total Season Fixed	76.71	62.63	78.15	91.75
Daily Season Fixed	23.08	14.48	26.20	32.95
Total Season Expenses	549.91	489.02	506.22	499.12
Daily Season Total	170.40	132.17	166.20	182.45
Days Participated	3.98	4.02	3.60	3.45

Table 28. Nonresident Small Game Hunter Expenditures, Real (2002) Dollars

	Average per Hunter			
Expenditure Category	1983	1990	1996	2001
Variable Expenses				
Access Fees	14.40	7.39	8.81	19.99
Ammunition	na	38.02	41.41	48.94
Film	4.88	6.13	5.38	5.39
Food and Beverage	172.10	163.15	171.05	162.19
Guide Fees	na	na	46.47	38.35
Lodging	97.52	100.48	143.07	174.27
Meat Processing	6.52	2.01	5.40	3.41
Taxidermy	5.18	6.54	8.83	9.19
Transportation	204.43	211.19	180.18	152.91
Veterinarian/Dog Care	1.07	2.97	5.24	5.82
Other	5.08	16.72	23.46	19.15
Total Season Variable	511.16	561.28	656.71	650.90
Daily Season Variable	na	127.53	125.74	133.80
Fixed Expenses				
Binoculars/Optics	na	1.76	1.52	3.45
Camping Equipment	3.97	2.92	2.50	11.15
Clothing	36.92	28.45	28.61	41.69
Decoys	19.40	9.00	7.28	18.76
Duck Boat/Motors	0.07	0.01	1.74	8.10
Hunting Dogs	na	4.34	0.24	1.78
Vehicle	2.58	3.74	2.18	4.97
Weapons	63.34	22.08	17.34	21.15
Other	56.10	4.56	14.38	18.18
Total Season Fixed	182.37	76.85	75.78	129.24
Daily Season Fixed	na	17.56	12.91	23.80
Total Season Expenses	693.54	638.13	732.49	780.14
Daily Season Total	na	145.06	138.65	157.60
Days Participated	na	5.54	6.47	5.53

Table 29. Nonresident Season-long Fishing Expenditures, Real (2002) Dollars

	Average per Angler				
Expenditure Category	1983	1990	1996	2001	
Variable Expenses					
Access Fees	1.90	2.96	2.52	2.72	
Bait	24.73	28.05	27.17	27.19	
Fuel (boat, heaters)	20.59	22.26	34.26	43.21	
Film	9.92	4.90	5.61	4.72	
Food and Beverage	189.45	142.92	160.30	155.45	
Guide Fees	na	na	na	24.56	
Lodging	62.98	67.09	84.32	153.27	
Meat Processing	1.59	2.26	1.19	2.07	
Rental (equipment)	8.76	4.98	3.93	3.69	
Repairs	13.69	7.79	14.22	13.72	
Taxidermy	1.81	6.52	3.62	4.51	
Transportation	197.04	145.79	164.99	135.84	
Other	22.56	15.97	21.77	8.66	
Total Season Variable	555.02	451.50	523.91	579.62	
Daily Season Variable	102.05	107.47	90.20	138.63	
Fixed Expenses					
Augers (ice)	na	10.16	5.37	2.63	
Boat, Motor, Trailer	313.67	272.37	313.21	217.81	
Camera (underwater)	na	na	na	2.11	
Camping Equipment	9.45	9.03	8.00	8.98	
Clothing	5.62	10.43	13.46	17.69	
Electronics (fish/depth)	10.77	18.64	8.79	8.65	
Fish Houses/Heaters	na	0.73	0.00	3.24	
Rods/reels	23.84	17.03	20.13	15.71	
Tackle	35.53	32.87	30.10	28.59	
Vehicle	na	0.77	13.67	9.04	
Other	6.94	13.98	64.84	3.51	
Total Season Fixed	405.80	386.01	477.66	317.97	
Daily Season Fixed	53.21	46.63	38.63	42.87	
Total Season Expenses	960.82	837.51	1,001.57	897.59	
Daily Season Total	155.26	154.11	128.83	181.49	
Days Participated	7.63	5.80	9.48	5.90	

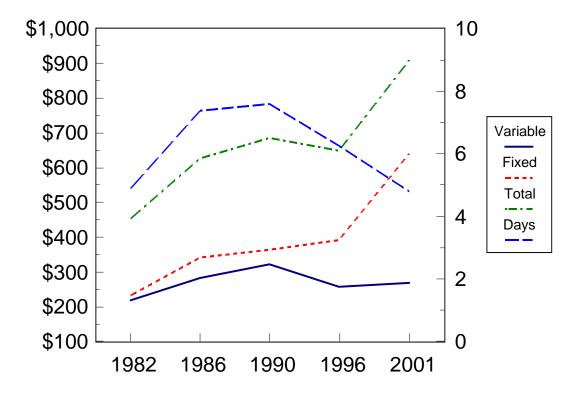


Figure 1. Season Variable, Fixed, and Total Expenses, and Days Participated, Resident Antelope Archery, Real (2002) Dollars

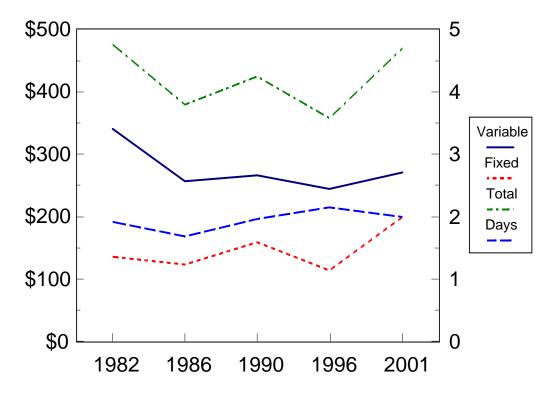


Figure 2. Season Variable, Fixed, and Total Expenses, and Days Participated, Resident Antelope Firearm, Real (2002) Dollars

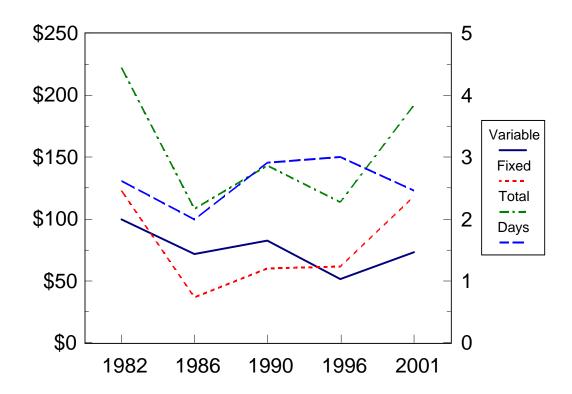


Figure 3. Season Variable, Fixed, and Total Expenses, and Days Participated, Resident Antelope Firearm Gratis, Real (2002) Dollars

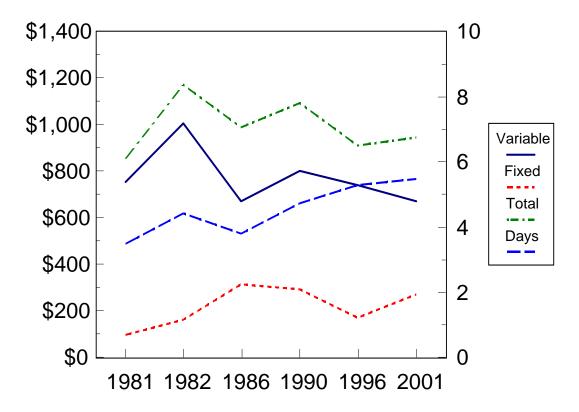


Figure 4. Season Variable, Fixed, and Total Expenses, and Days Participated, Resident Big Game, Real (2002) Dollars

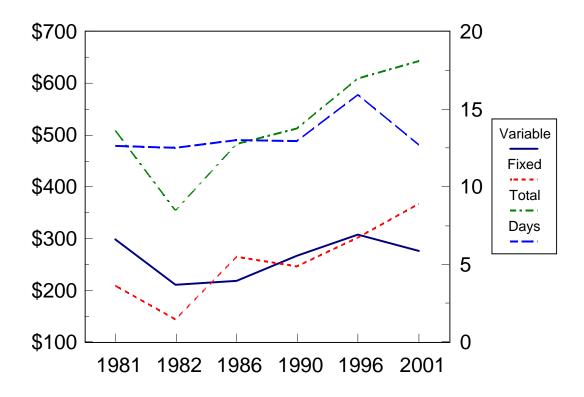


Figure 5. Season Variable, Fixed, and Total Expenses, and Days Participated, Resident Deer Archery, Real (2002) Dollars

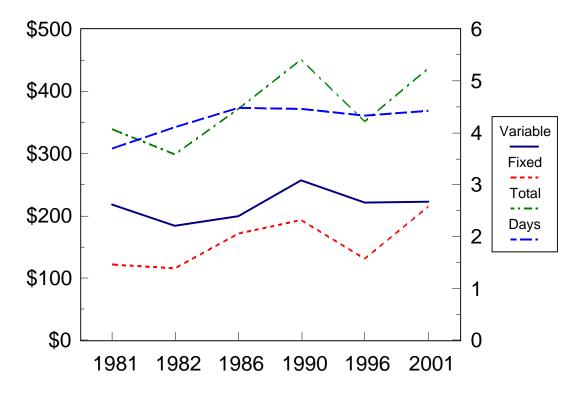


Figure 6. Season Variable, Fixed, and Total Expenses, and Days Participated, Resident Deer Firearm, Real (2002) Dollars

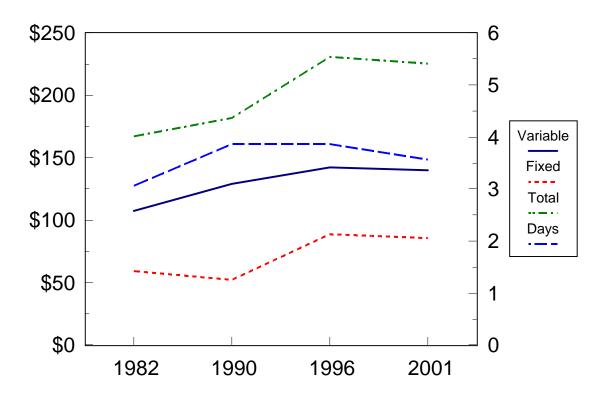


Figure 7. Season Variable, Fixed, and Total Expenses, and Days Participated, Resident Deer Firearm Gratis, Real (2002) Dollars

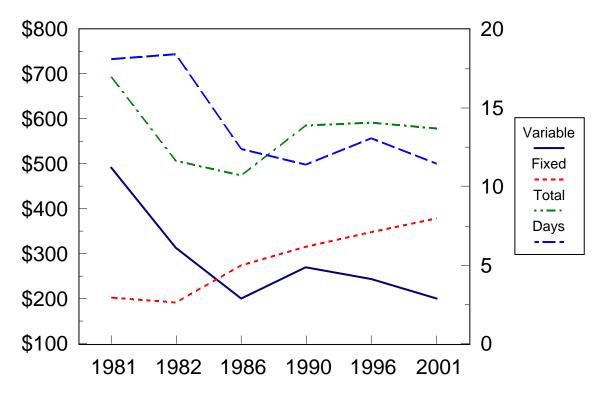


Figure 8. Season Variable, Fixed, and Total Expenses, and Days Participated, Resident Furbearer, Real (2002) Dollars

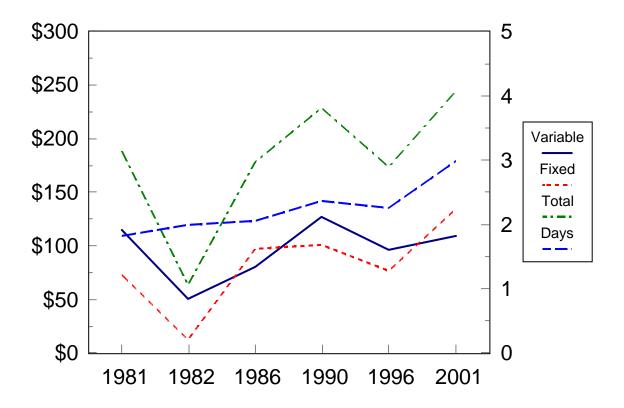


Figure 9. Season Variable, Fixed, and Total Expenses, and Days Participated, Resident Fall Turkey, Real (2002) Dollars

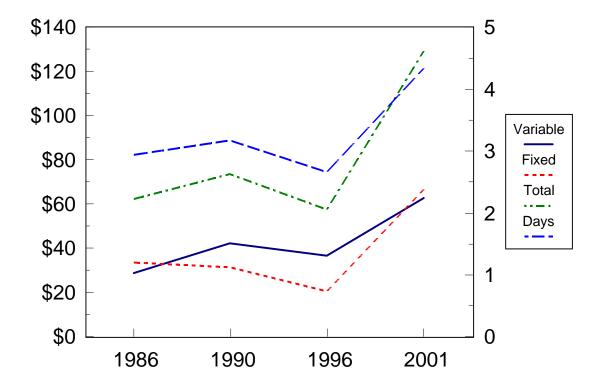


Figure 10. Season Variable, Fixed, and Total Expenses, and Days Participated, Resident Fall Turkey Gratis, Real (2002) Dollars

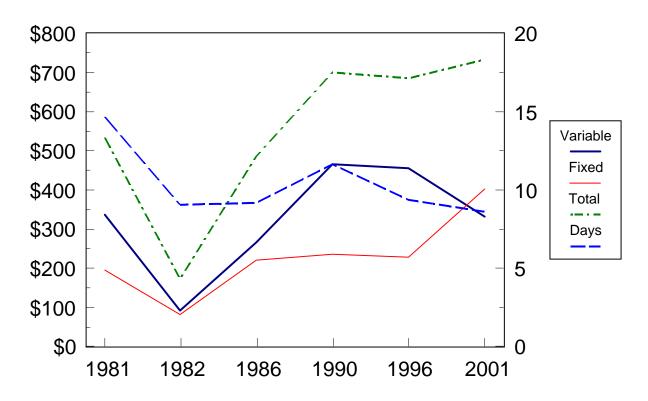


Figure 11. Season Variable, Fixed, and Total Expenses, and Days Participated, Resident Upland Game, Real (2002) Dollars

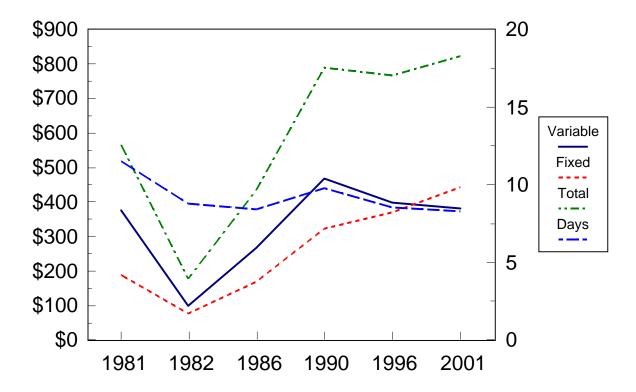


Figure 12. Season Variable, Fixed, and Total Expenses, and Days Participated, Resident Waterfowl, Real (2002) Dollars

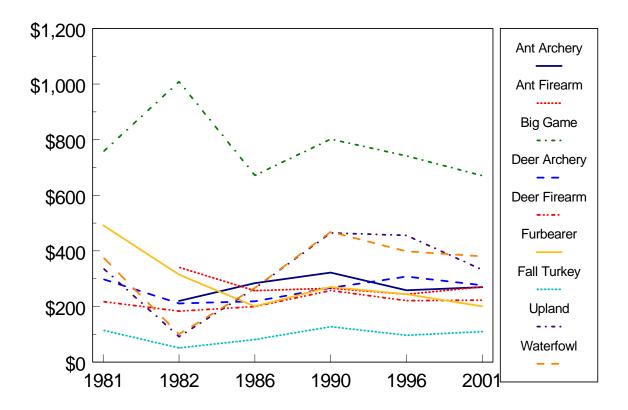


Figure 13. Major Survey Groups, Resident Hunting, Season Variable Expenses, Real (2002) Dollars

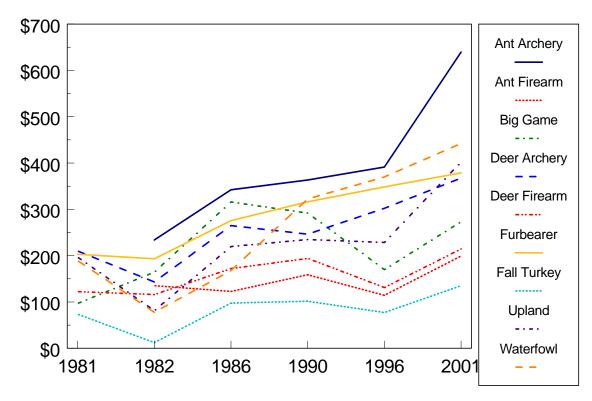


Figure 14. Major Survey Groups, Resident Hunting, Season Fixed Expenses, Real (2002) Dollars

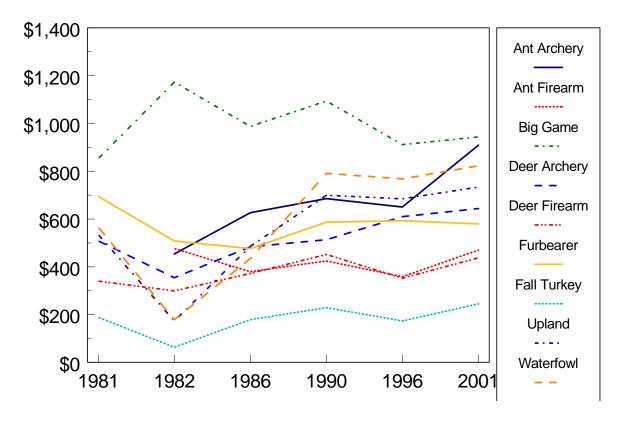


Figure 15. Major Survey Groups, Resident Hunting, Season Total Expenses, Real (2002) Dollars

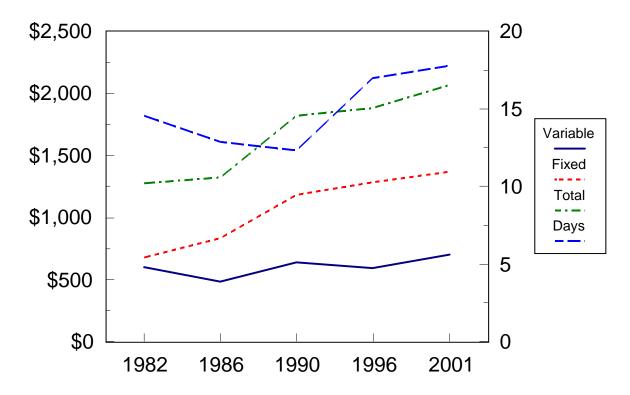


Figure 16. Season Variable, Fixed, and Total Expenses, and Days Participated, Resident Summer Fishing, Real (2002) Dollars

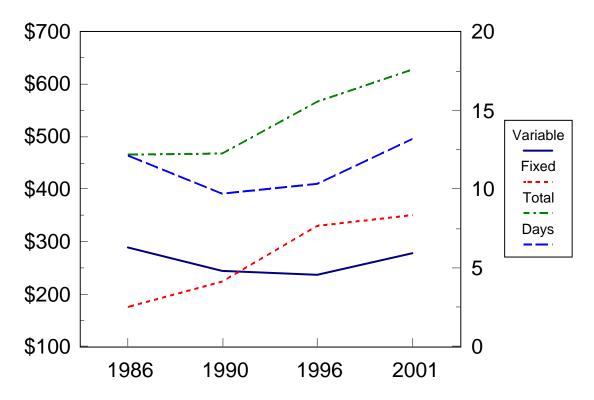


Figure 17. Season Variable, Fixed, and Total Expenses, and Days Participated, Resident Winter Fishing, Real (2002) Dollars

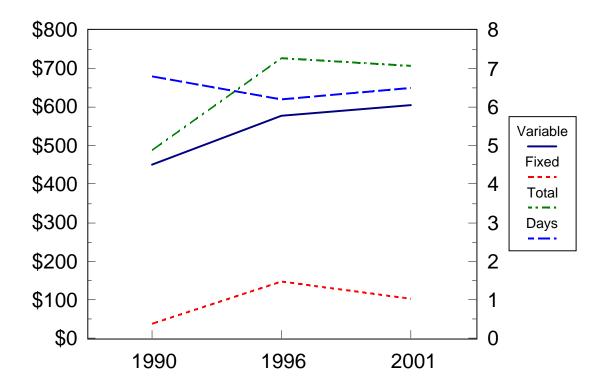


Figure 18. Season Variable, Fixed, and Total Expenses, and Days Participated, Nonresident Antelope Archery, Real (2002) Dollars

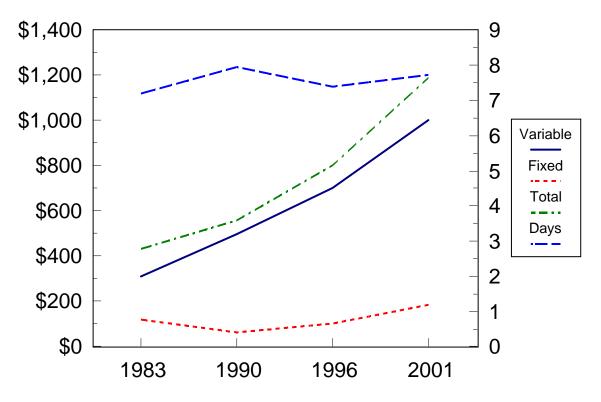


Figure 19. Season Variable, Fixed, and Total Expenses, and Days Participated, Nonresident Deer Archery, Real (2002) Dollars

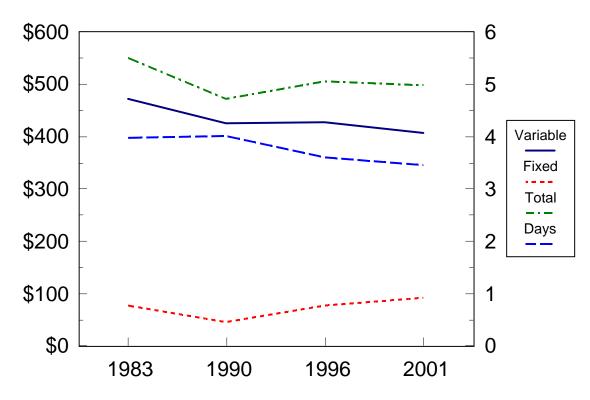


Figure 20. Season Variable, Fixed, and Total Expenses, and Days Participated, Nonresident Deer Firearm, Real (2002) Dollars

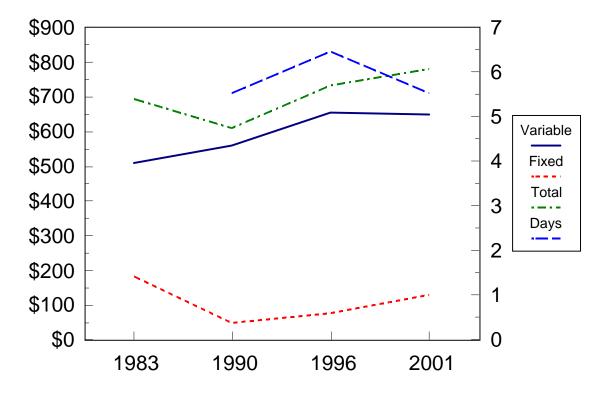


Figure 21. Season Variable, Fixed, and Total Expenses, and Days Participated, Nonresident Small Game, Real (2002) Dollars

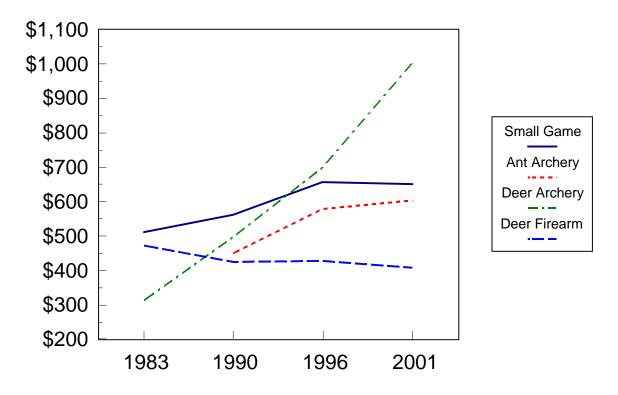


Figure 22. Major Survey Groups, Nonresident Hunting, Season Variable Expenses, Real (2002) Dollars

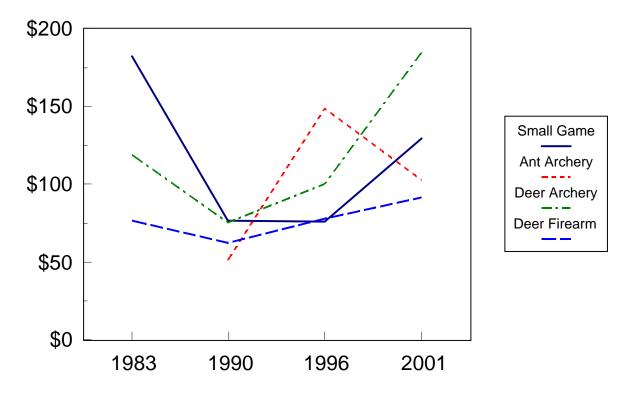


Figure 23. Major Survey Groups, Nonresident Hunting, Season Fixed Expenses, Real (2002) Dollars

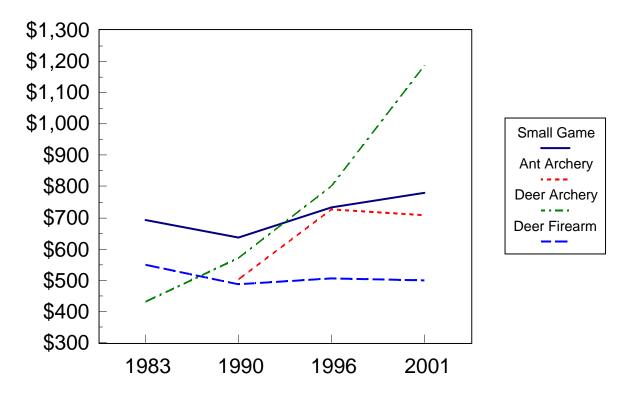


Figure 24. Major Survey Groups, Nonresident Hunting, Season Total Expenses, Real (2002) Dollars

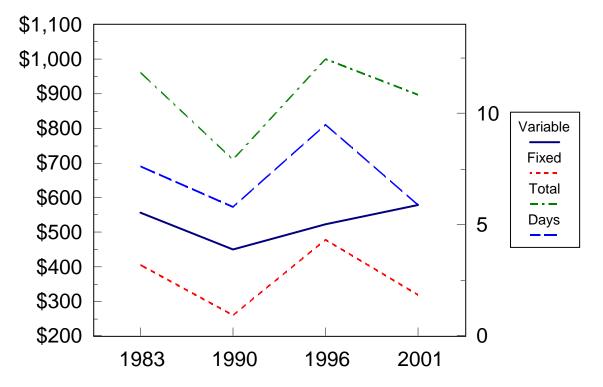


Figure 25. Season Variable, Fixed, and Total Expenses, and Days Participated, Nonresident Seasonal Fishing, Real (2002) Dollars

SECTION B

Seasonal Variable and Fixed Expenses, and Spending by Major Components of Variable and Fixed Expenditures, by Year and Survey Group

Figures 26 through 63

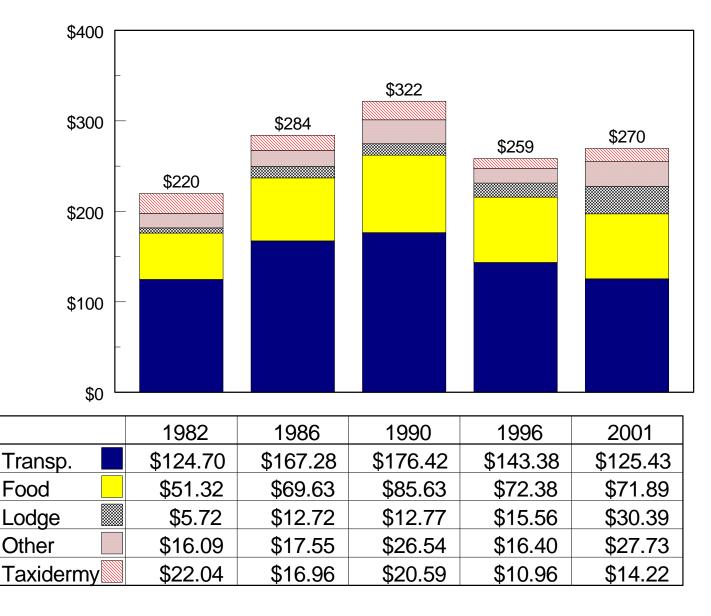


Figure 26. Major Components of Total Variable Expenses, Resident Antelope Archery, Real (2002) Dollars

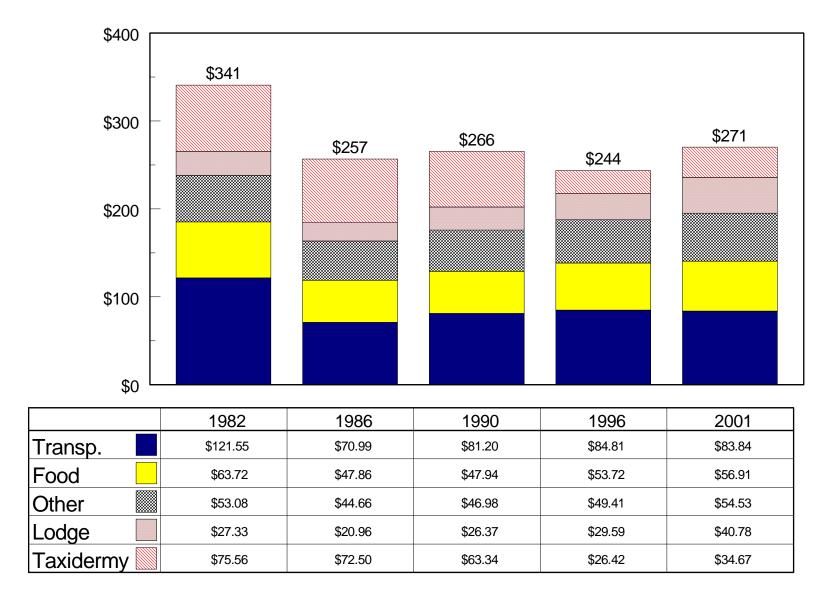


Figure 27. Major Components of Total Variable Expenses, Resident Antelope Firearm, Real (2002) Dollars

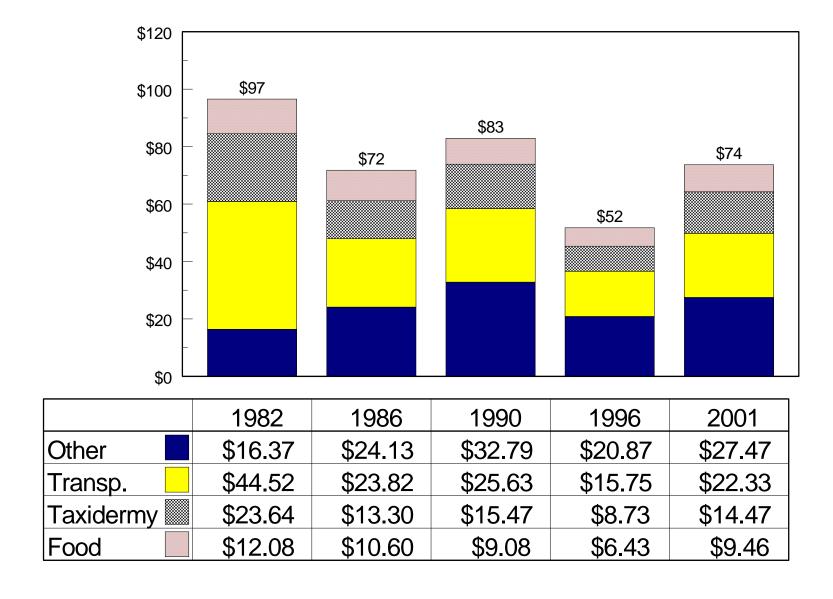


Figure 28. Major Components of Total Variable Expenses, Resident Antelope Firearm Gratis, Real (2002) Dollars

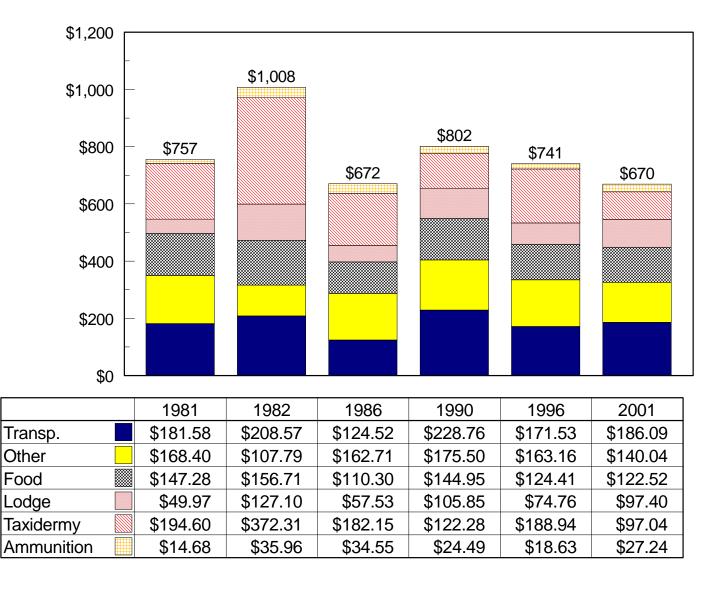
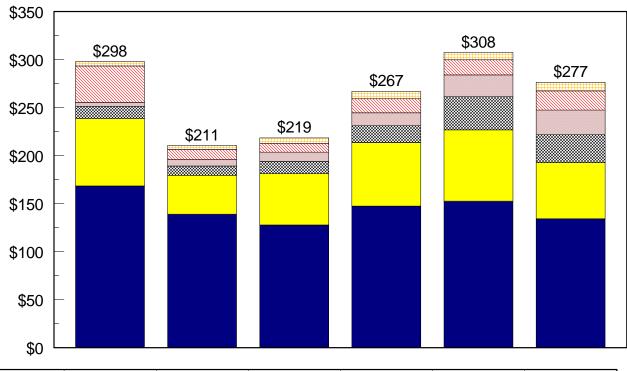


Figure 29. Major Components of Total Variable Expenses, Resident Big Game, Real (2002) Dollars



	1981	1982	1986	1990	1996	2001
Transp.	\$168.46	\$139.02	\$127.82	\$147.44	\$152.63	\$134.30
Food	\$70.14	\$40.60	\$53.44	\$66.14	\$74.31	\$58.41
Meat Proc.	\$13.04	\$9.69	\$12.92	\$17.85	\$34.63	\$29.30
Taxidermy	\$3.92	\$6.73	\$9.73	\$13.31	\$22.68	\$25.49
Other	\$38.14	\$10.66	\$9.22	\$14.69	\$15.83	\$20.03
Lodge	\$4.61	\$4.27	\$5.71	\$7.68	\$7.66	\$9.00

Figure 30. Major Components of Total Variable Expenses, Resident Deer Archery, Real (2002) Dollars

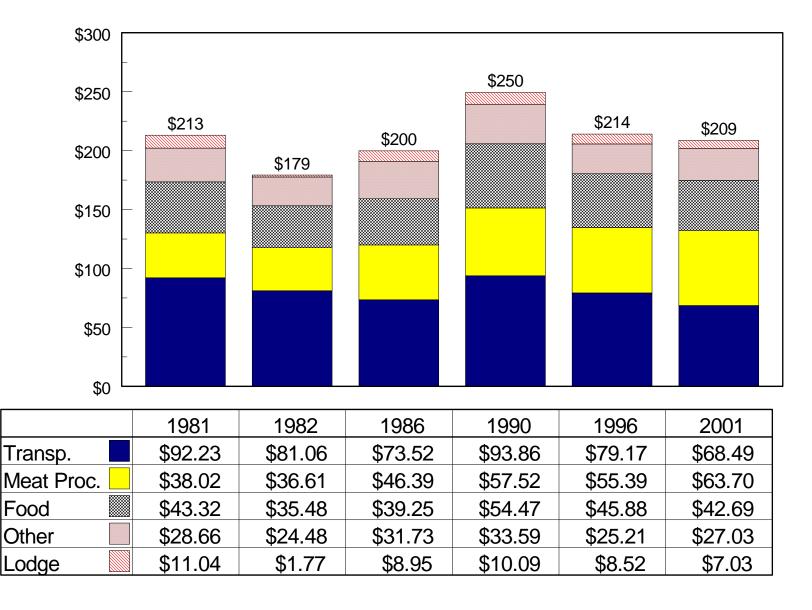


Figure 31. Major Components of Total Variable Expenses, Resident Deer Firearm, Real (2002) Dollars

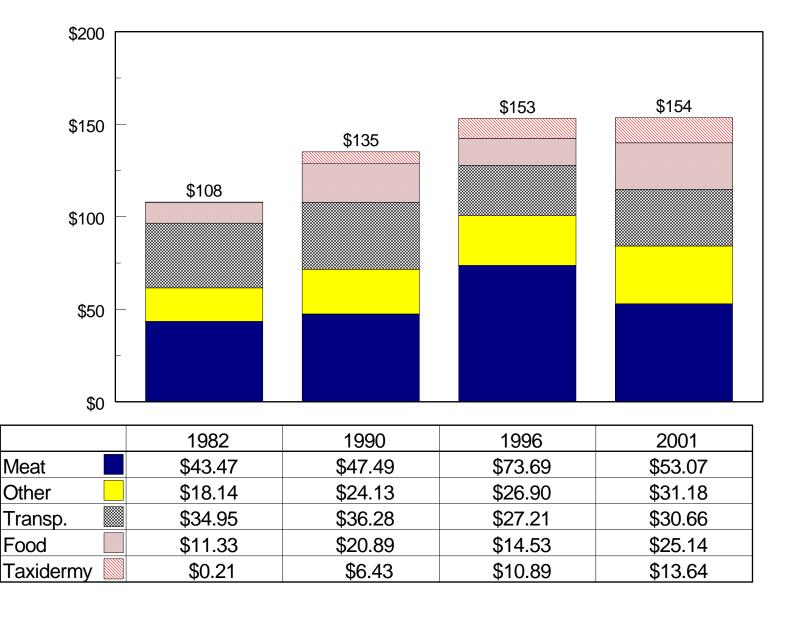


Figure 32. Major Components of Total Variable Expenses, Resident Deer Firearm Gratis, Real (2002) Dollars

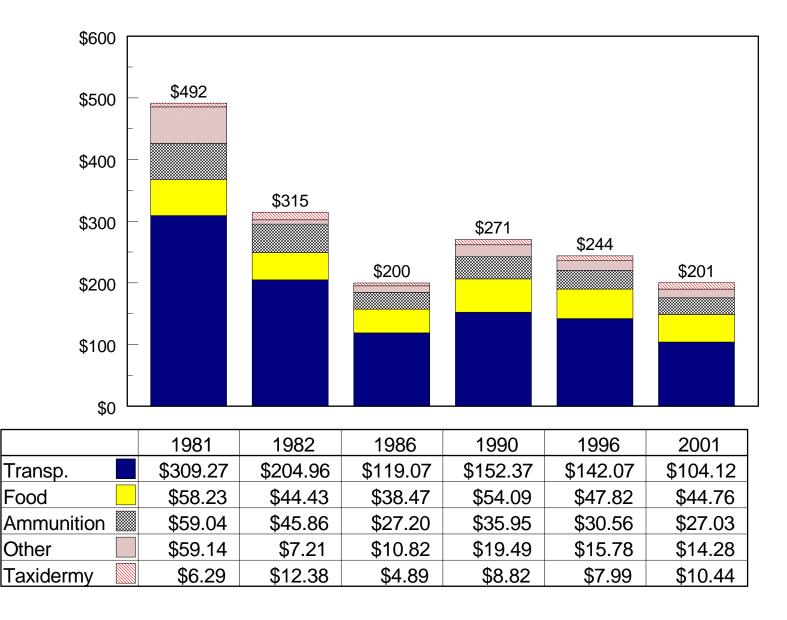


Figure 33. Major Components of Total Variable Expenses, Resident Furbearer, Real (2002) Dollars

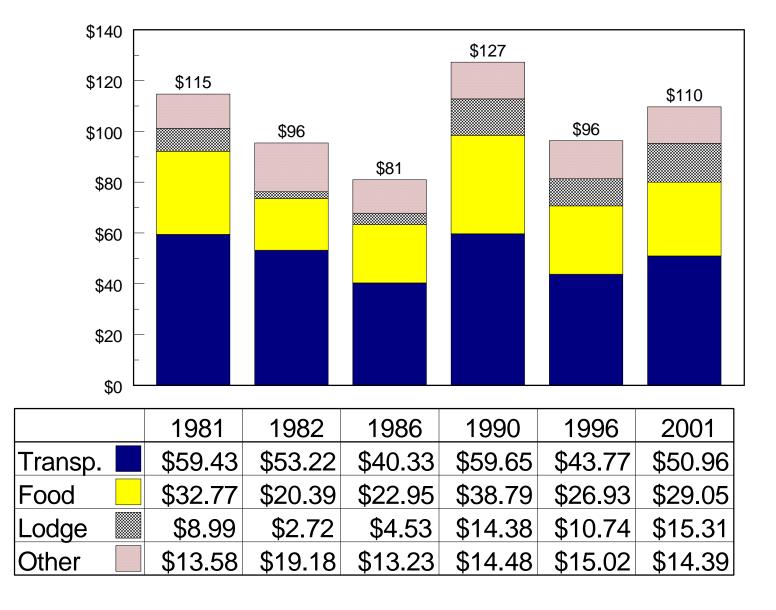


Figure 34. Major Components of Total Variable Expenses, Resident Fall Turkey, Real (2002) Dollars

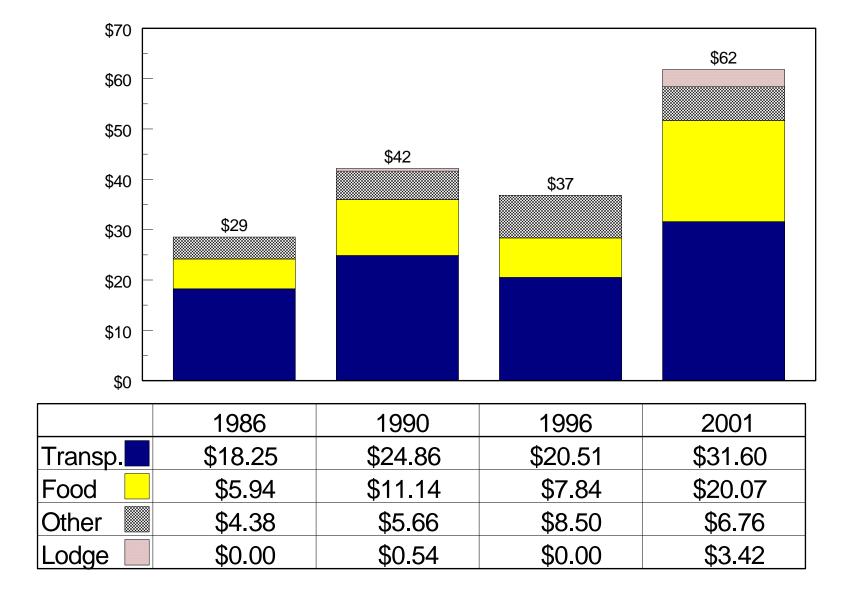


Figure 35. Major Components of Total Variable Expenses, Resident Fall Turkey Gratis, Real (2002) Dollars

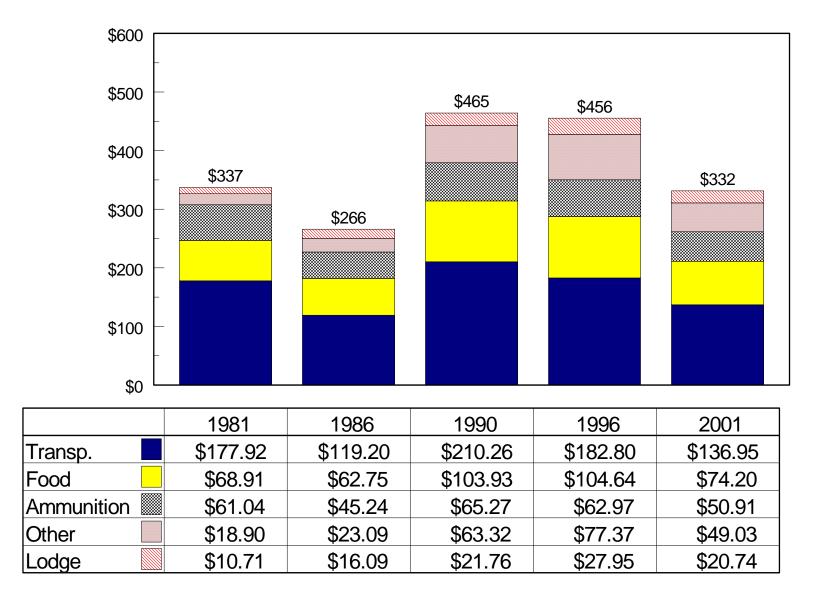


Figure 36. Major Components of Total Variable Expenses, Resident Upland Game, Real (2002) Dollars

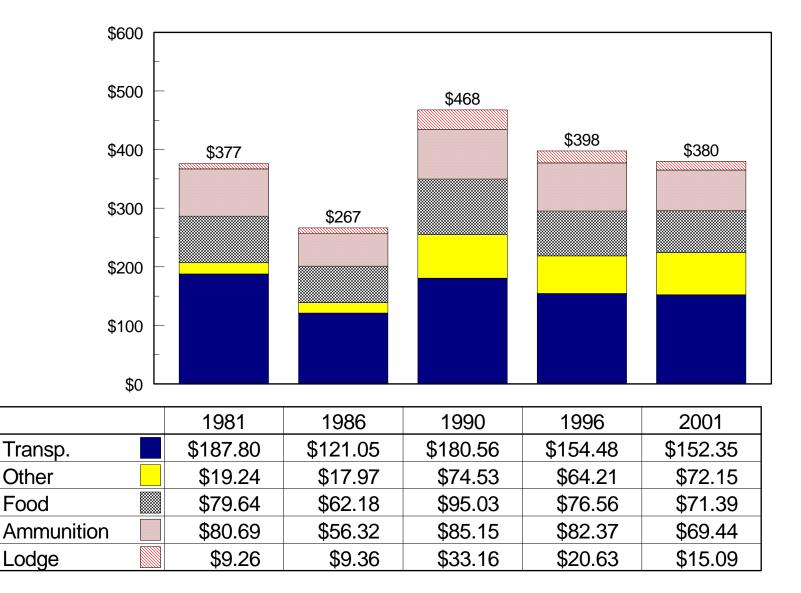


Figure 37. Major Components of Total Variable Expenses, Resident Waterfowl, Real (2002) Dollars

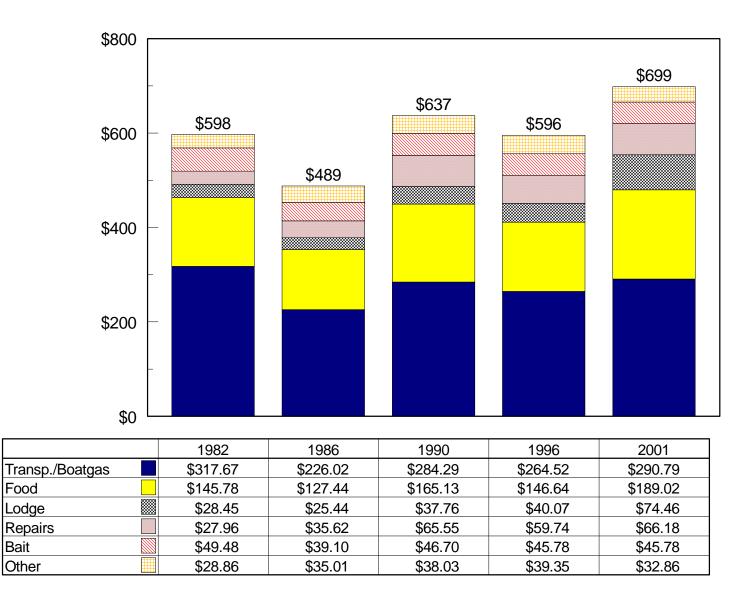


Figure 38. Major Components of Total Variable Expenses, Resident Summer Fishing, Real (2002) Dollars

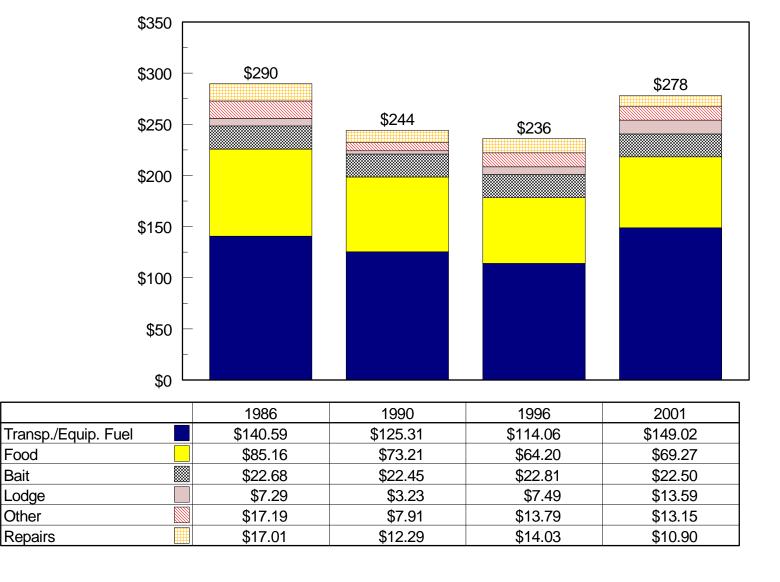


Figure 39. Major Components of Total Variable Expenses, Resident Winter Fishing, Real (2002) Dollars

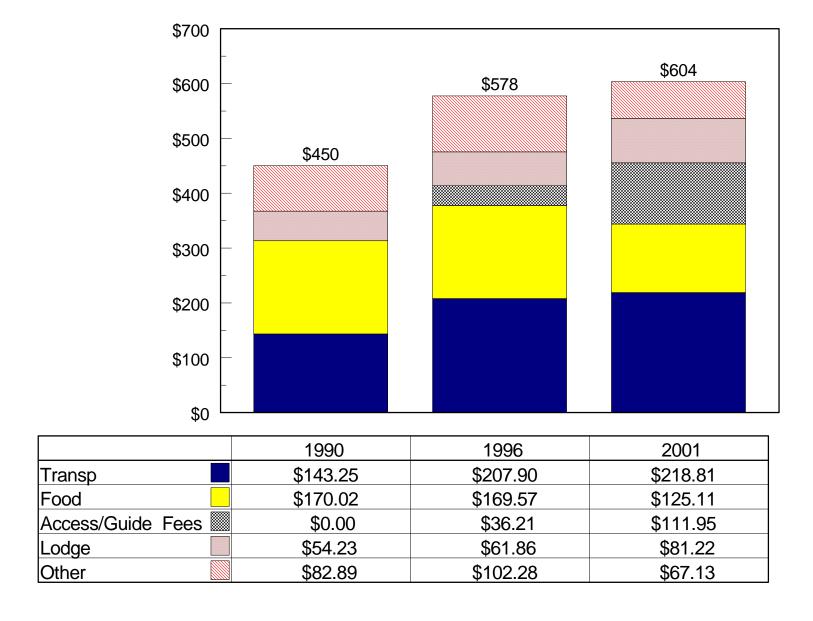


Figure 40. Major Components of Total Variable Expenses, Nonresident Antelope Archery, Real (2002) Dollars

Food

Other

Lodge

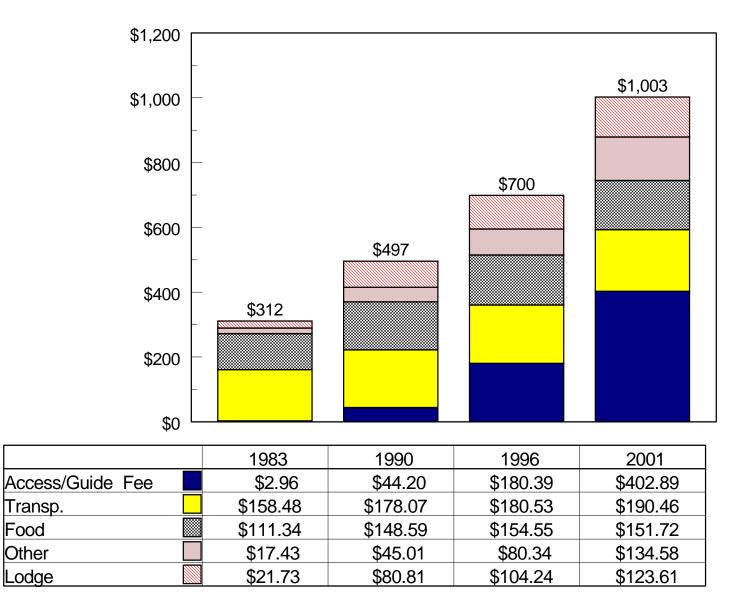


Figure 41. Major Components of Total Variable Expenses, Nonresident Deer Archery, Real (2002) Dollars

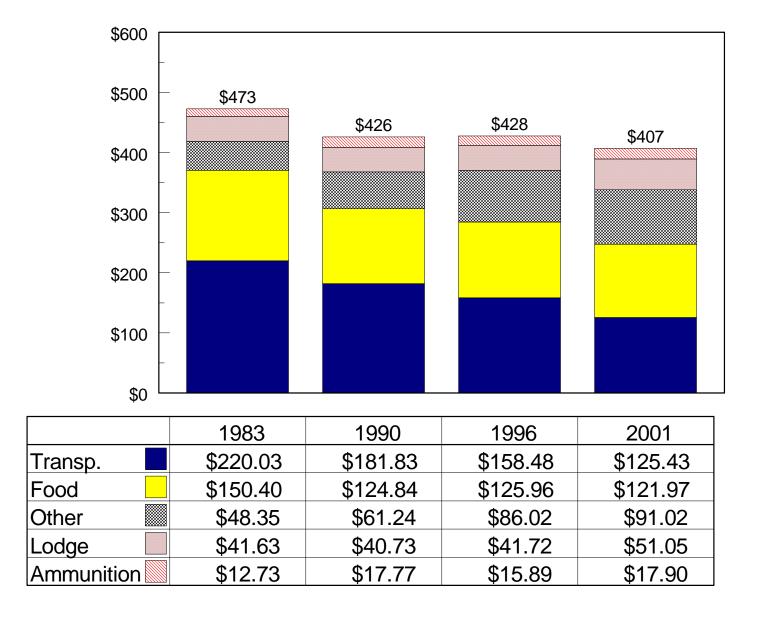


Figure 42. Major Components of Total Variable Expenses, Nonresident Deer Firearm, Real (2002) Dollars

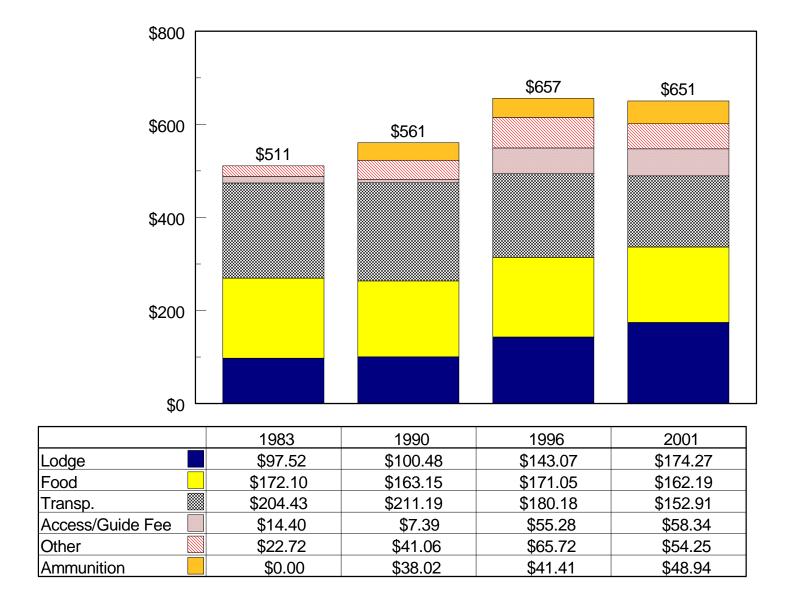


Figure 43. Major Components of Total Variable Expenses, Nonresident Small Game, Real (2002) Dollars

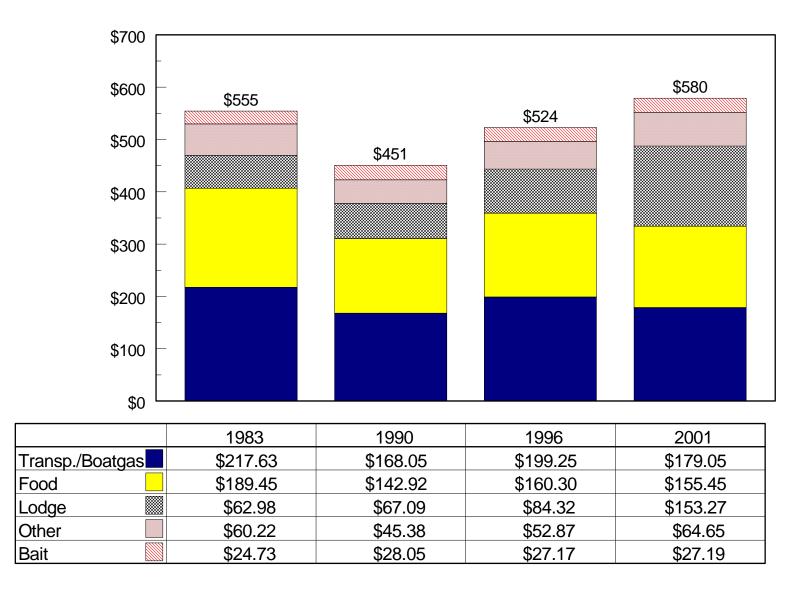
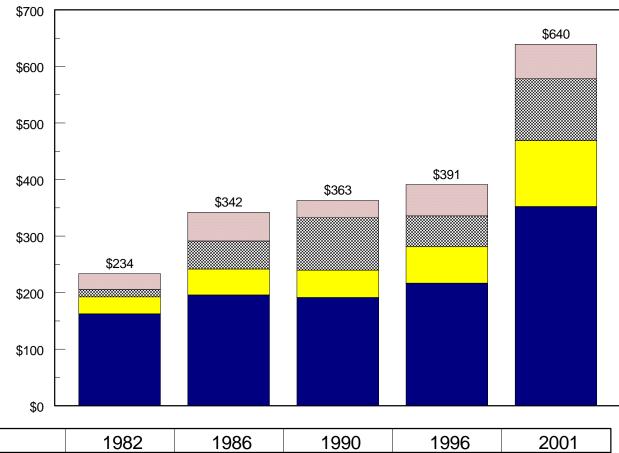


Figure 44. Major Components of Total Variable Expenses, Nonresident Seasonal Fishing, Real (2002) Dollars



	1982	1986	1990	1996	2001
Weapon/Optics	\$162.60	\$195.89	\$191.52	\$216.93	\$352.35
Clothing	\$30.03	\$45.91	\$48.52	\$64.31	\$116.62
Camping	\$13.31	\$49.74	\$92.83	\$54.66	\$109.70
Other	\$27.83	\$50.79	\$30.39	\$55.54	\$60.90

Figure 45. Major Components of Total Fixed Expenses, Resident Antelope Archery, Real (2002) Dollars

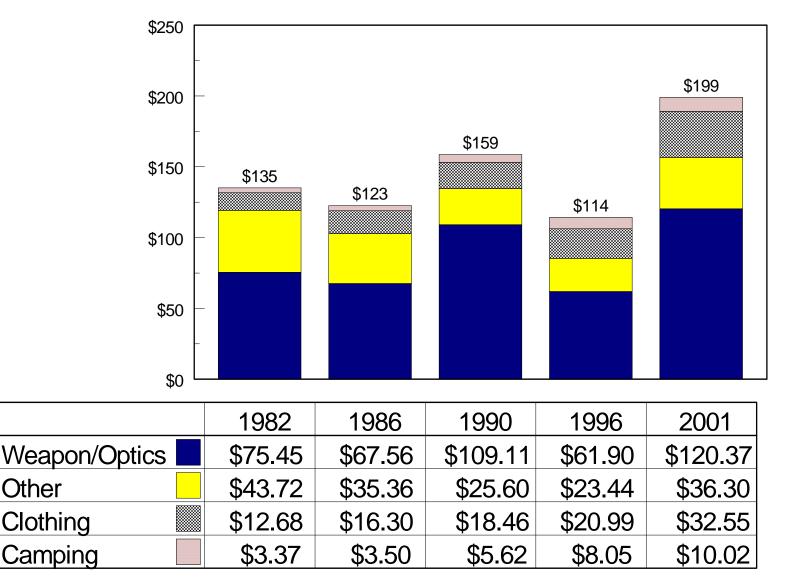


Figure 46. Major Components of Total Fixed Expenses, Resident Antelope Firearm, Real (2002) Dollars

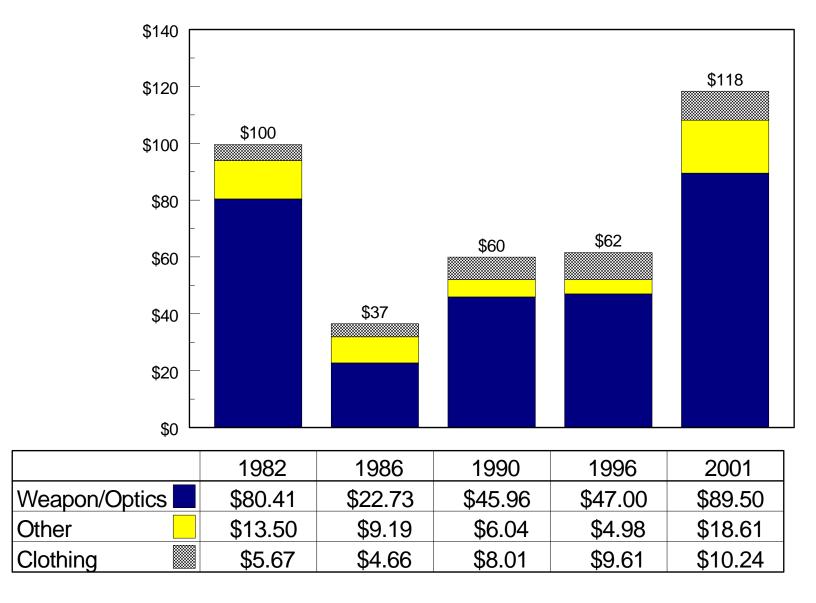


Figure 47. Major Components of Total Fixed Expenses, Resident Antelope Firearm Gratis, Real (2002) Dollars

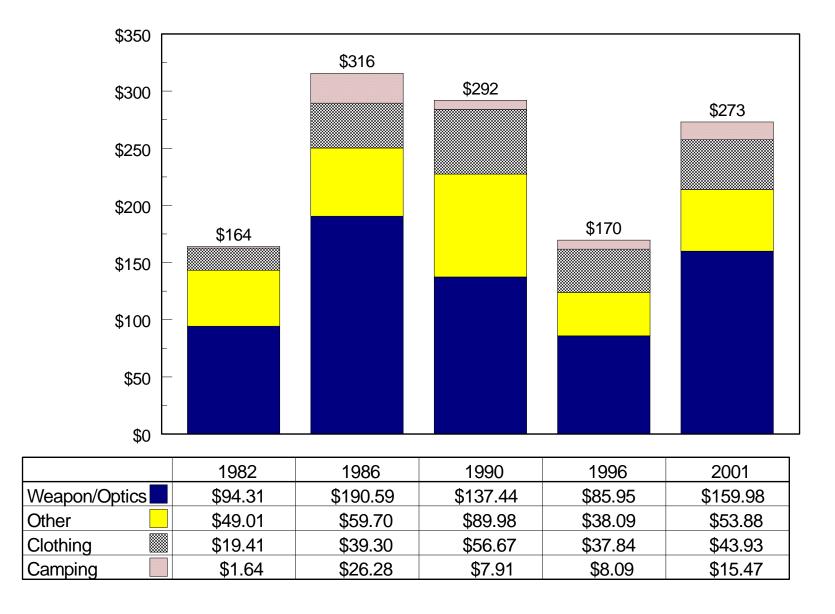


Figure 48. Major Components of Total Fixed Expenses, Resident Big Game, Real (2002) Dollars

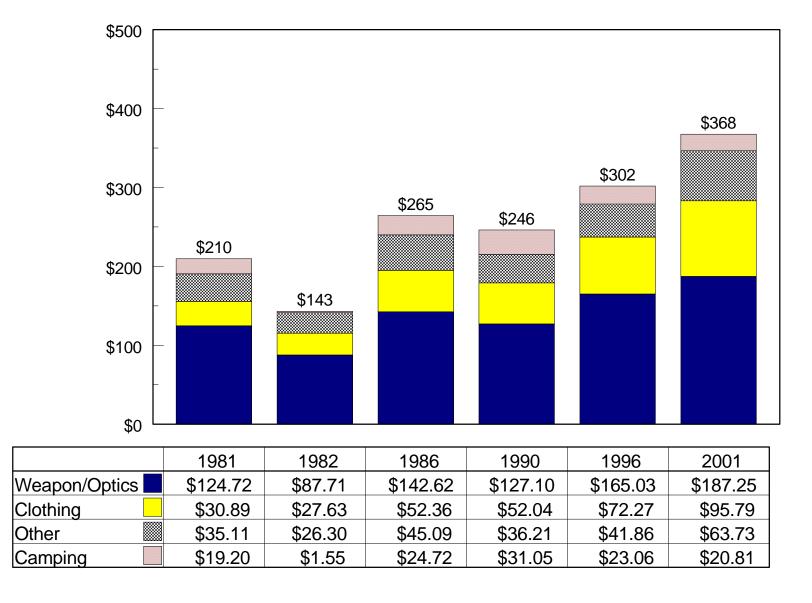


Figure 49. Major Components of Total Fixed Expenses, Resident Deer Archery, Real (2002) Dollars

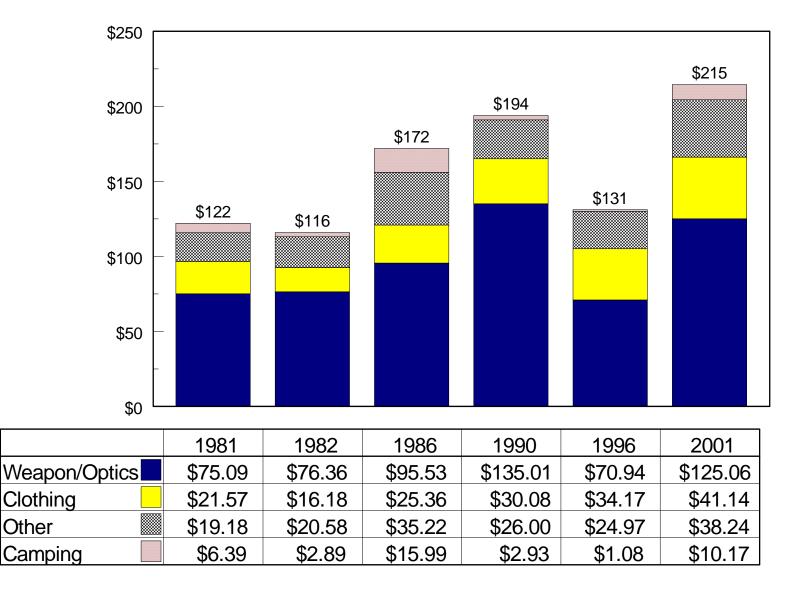


Figure 50. Major Components of Total Fixed Expenses, Resident Deer Firearm, Real (2002) Dollars

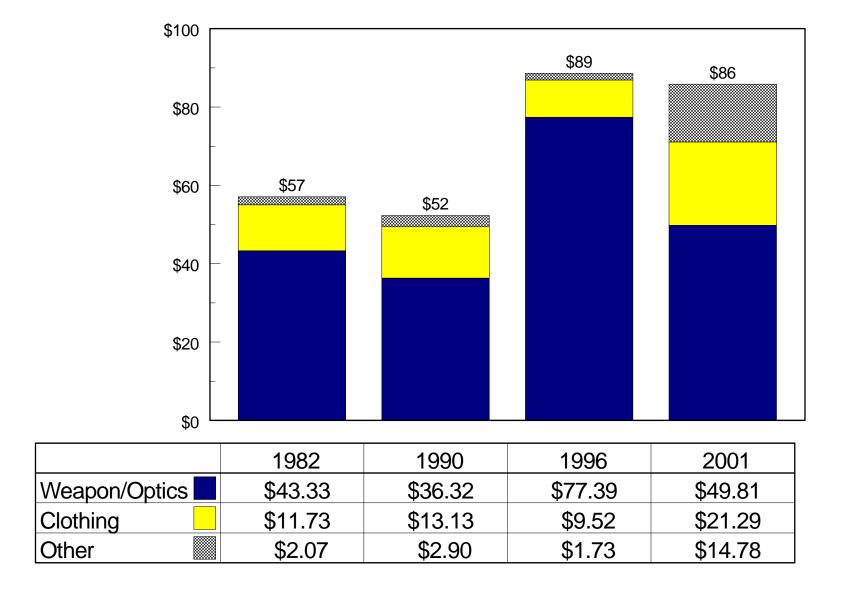


Figure 51. Major Components of Total Fixed Expenses, Resident Deer Firearm Gratis, Real (2002) Dollars

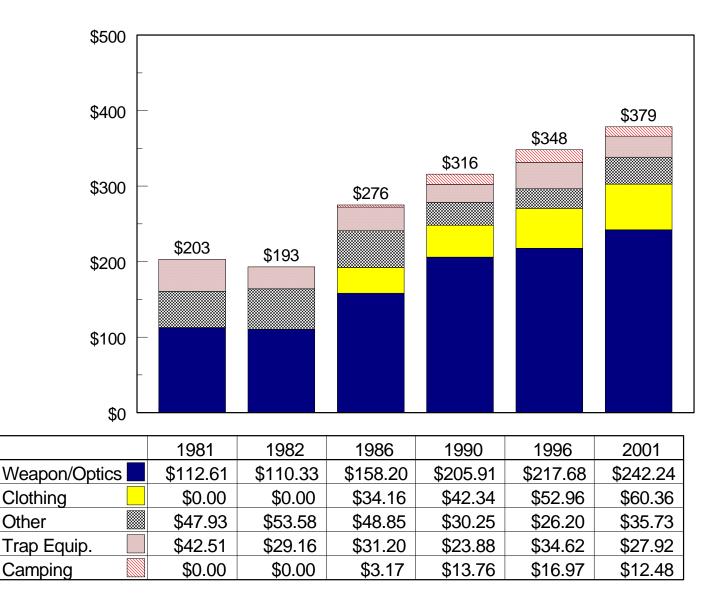


Figure 52. Major Components of Total Fixed Expenses, Resident Furbearer, Real (2002) Dollars

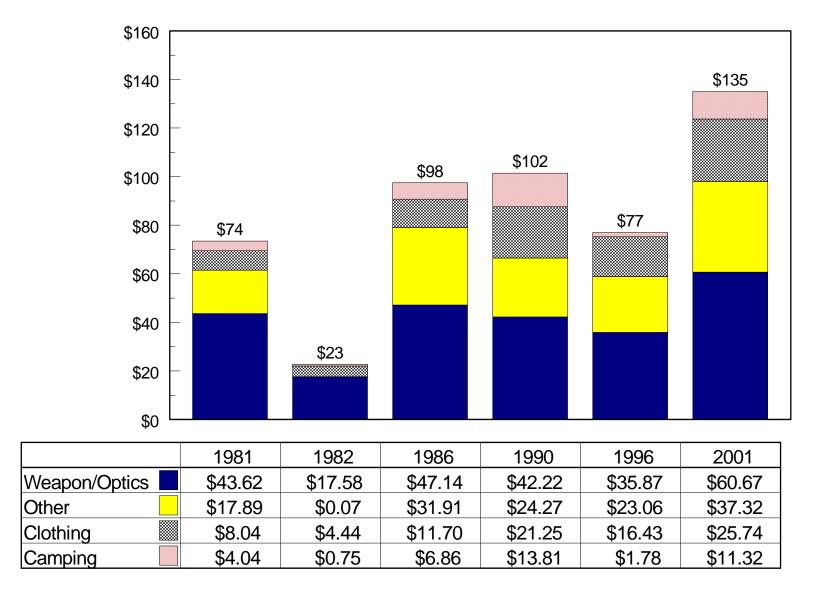


Figure 53. Major Components of Total Fixed Expenses, Resident Fall Turkey, Real (2002) Dollars

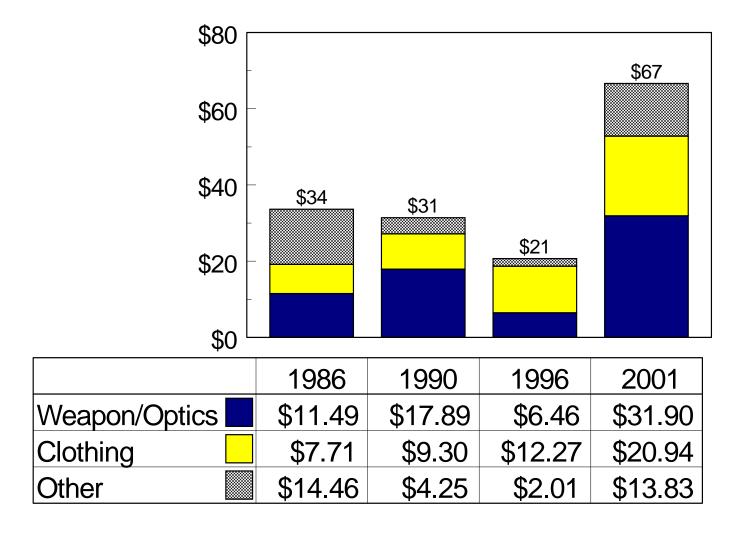
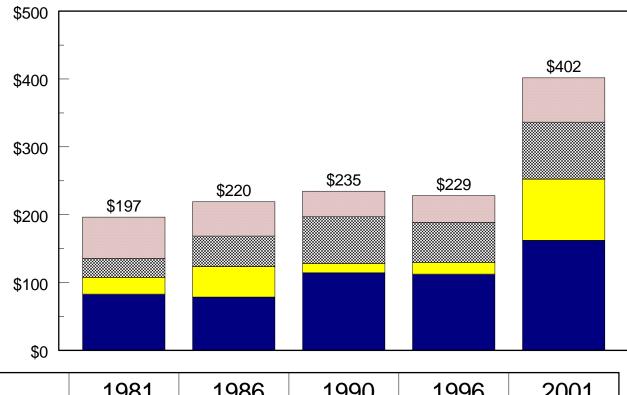


Figure 54. Major Components of Total Fixed Expenses, Resident Fall Turkey Gratis, Real (2002) Dollars



	1981	1986	1990	1996	2001
Weapon/Optics	\$83.00	\$78.61	\$114.41	\$112.38	\$162.25
Camping	\$24.68	\$45.02	\$13.83	\$17.30	\$90.54
Clothing	\$27.77	\$45.04	\$68.92	\$59.24	\$83.90
Other	\$61.29	\$50.88	\$37.70	\$39.60	\$65.48

Figure 55. Major Components of Total Fixed Expenses, Resident Upland Game, Real (2002) Dollars

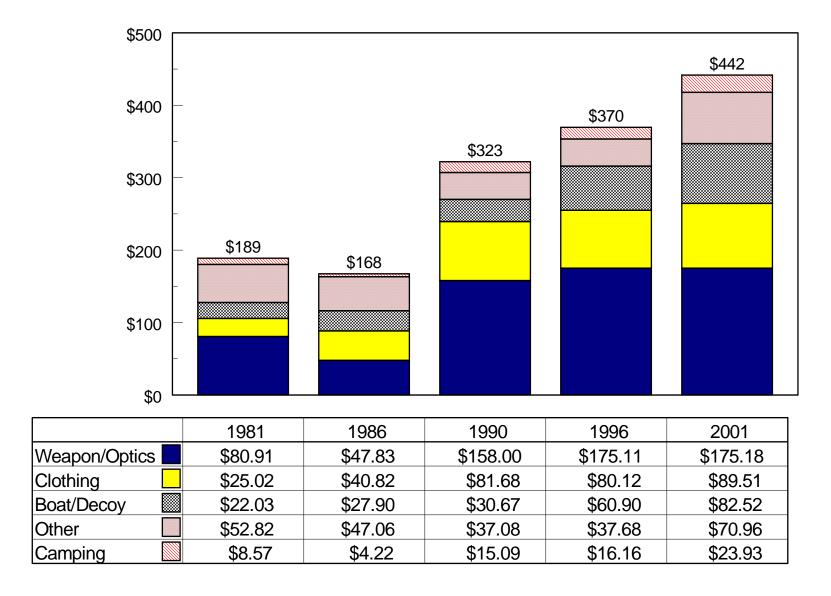


Figure 56. Major Components of Total Fixed Expenses, Resident Waterfowl, Real (2002) Dollars

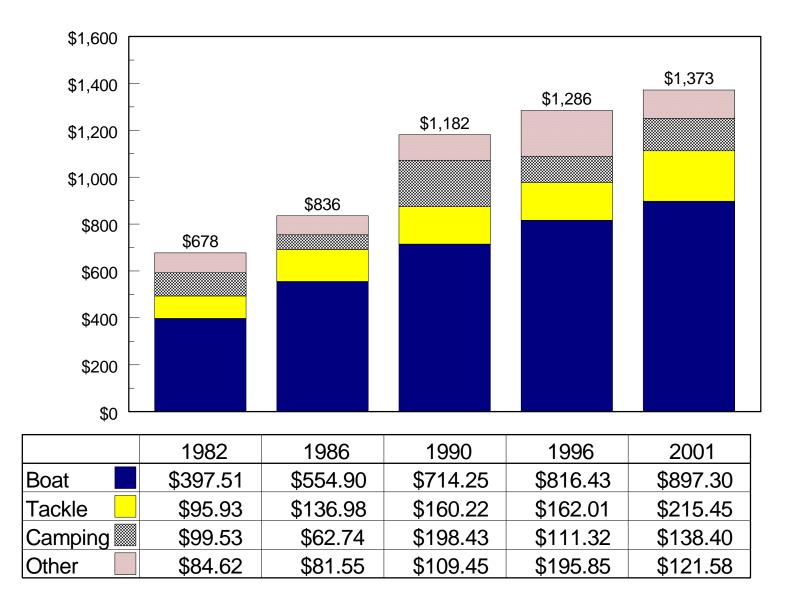


Figure 57. Major Components of Total Fixed Expenses, Resident Summer Fishing, Real (2002) Dollars

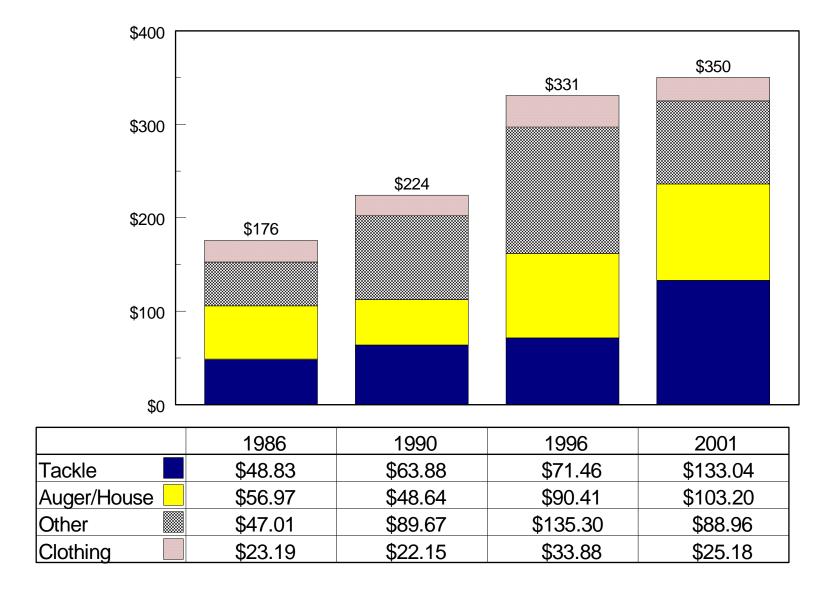


Figure 58. Major Components of Total Fixed Expenses, Resident Winter Fishing, Real (2002) Dollars

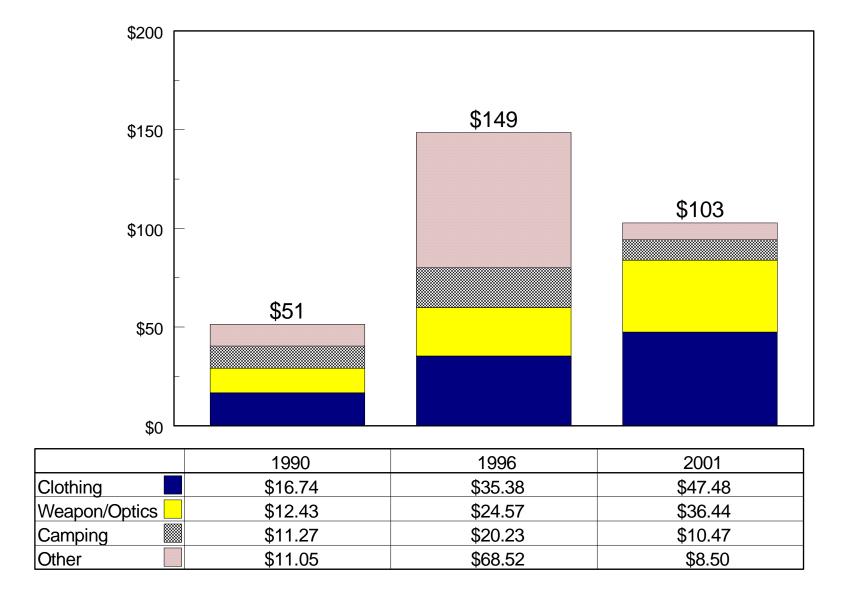


Figure 59. Major Components of Total Fixed Expenses, Nonresident Antelope Archery, Real (2002) Dollars

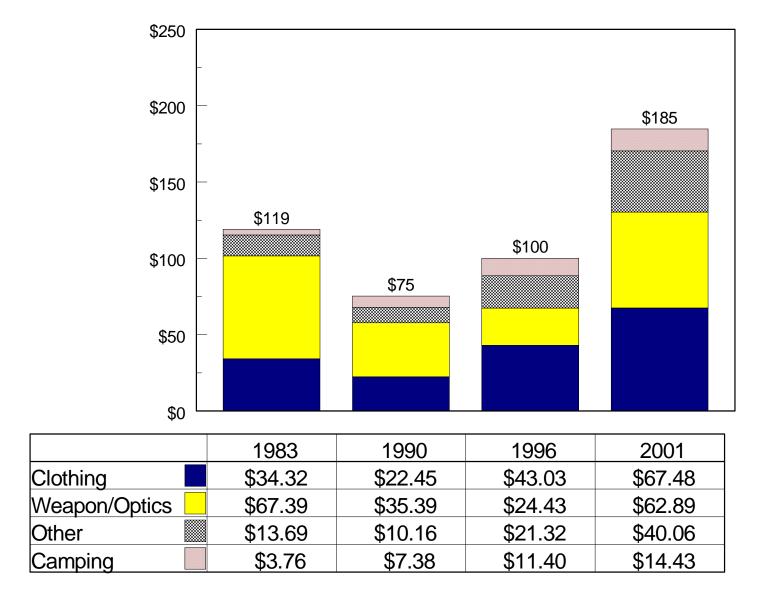


Figure 60. Major Components of Total Fixed Expenses, Nonresident Deer Archery, Real (2002) Dollars

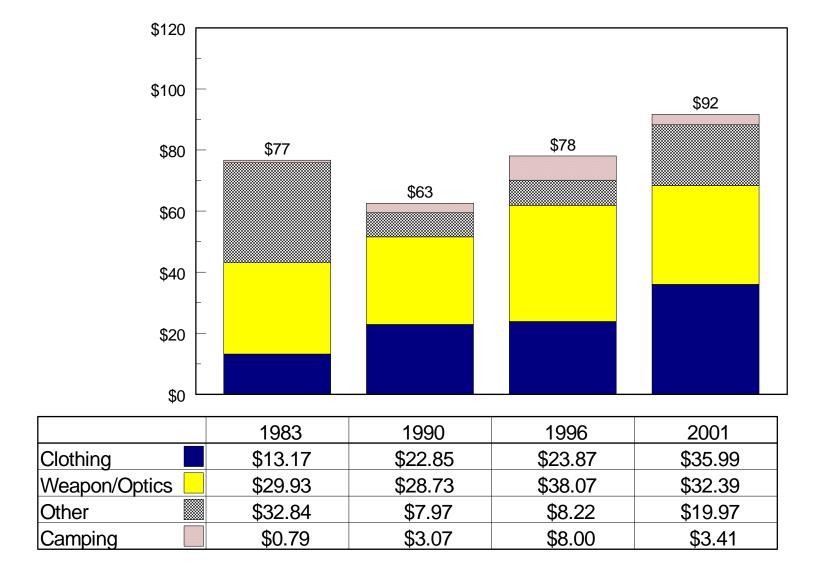


Figure 61. Major Components of Total Fixed Expenses, Nonresident Deer Firearm, Real (2002) Dollars

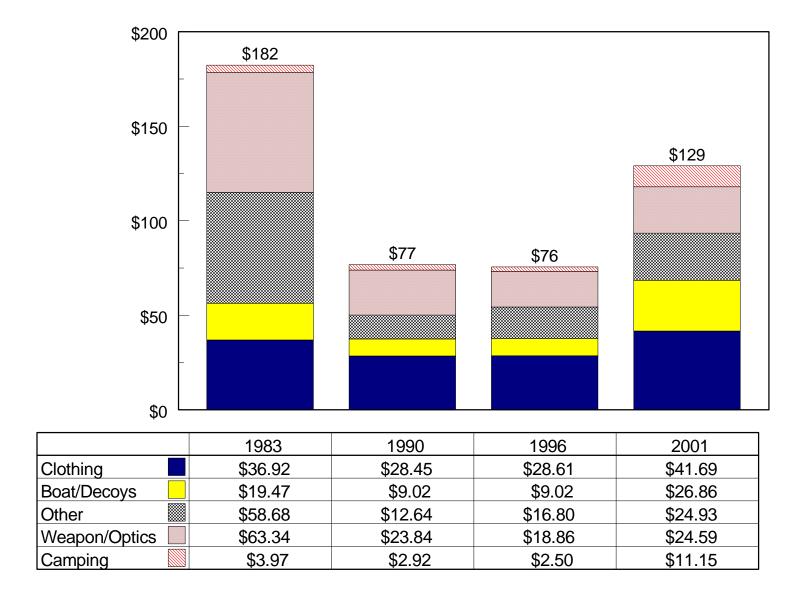


Figure 62. Major Components of Total Fixed Expenses, Nonresident Small Game, Real (2002) Dollars

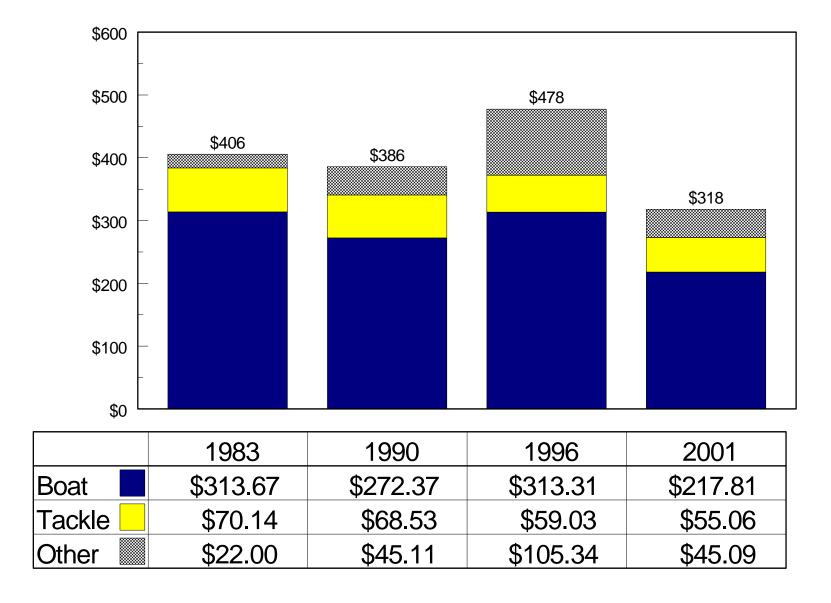


Figure 63. Major Components of Total Fixed Expenses, Nonresident Seasonal Fishing, Real (2002) Dollars

SECTION C

Daily Variable, Fixed, and Total Spending, by Year and Survey Group

Figures 64 through 88

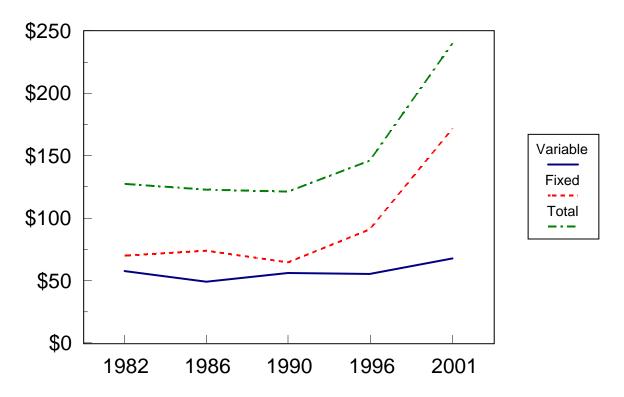


Figure 64. Average Daily Expenses, Resident Antelope Archery, Real (2002) Dollars

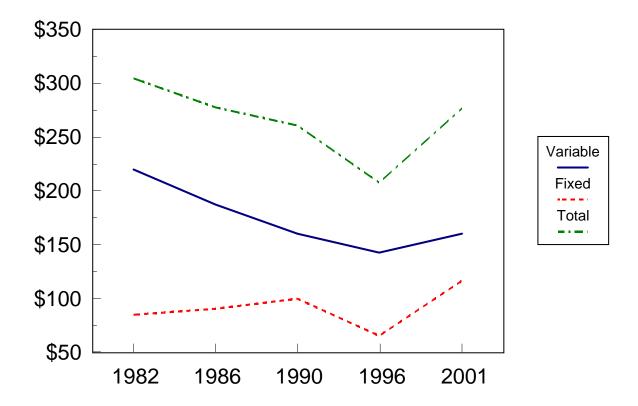


Figure 65. Average Daily Expenses, Resident Antelope Firearm, Real (2002) Dollars

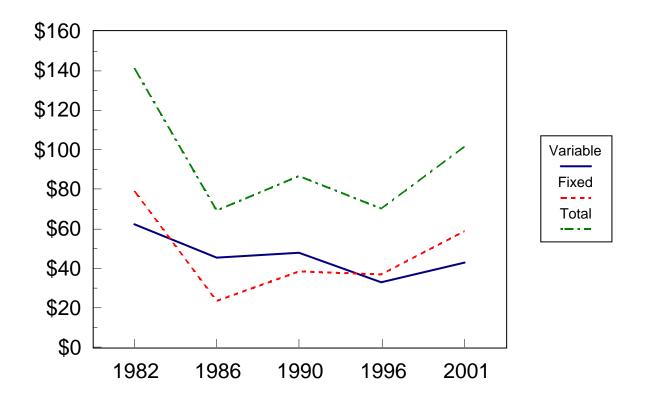


Figure 66. Average Daily Expenses, Resident Antelope Firearm Gratis, Real (2002) Dollars

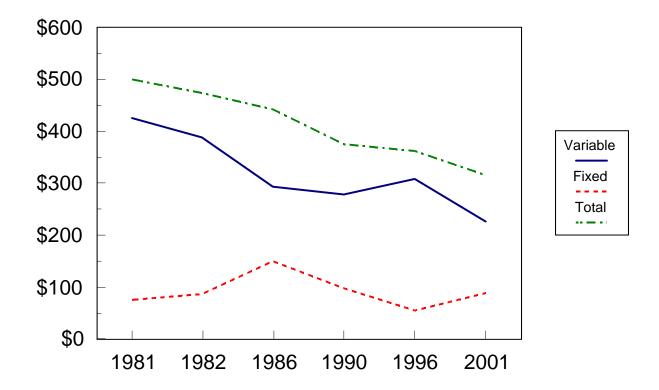


Figure 67. Average Daily Expenses, Resident Big Game, Real (2002) Dollars

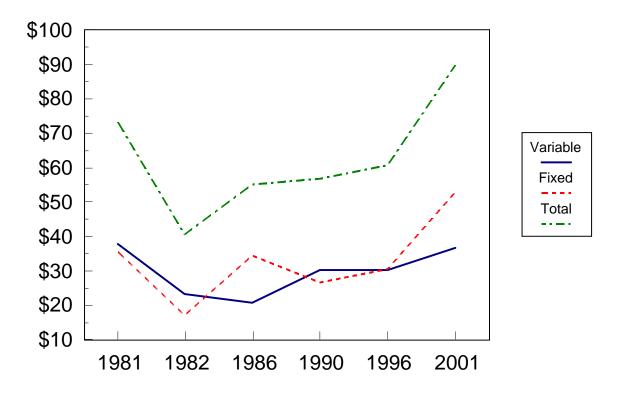


Figure 68. Average Daily Expenses, Resident Deer Archery, Real (2002) Dollars

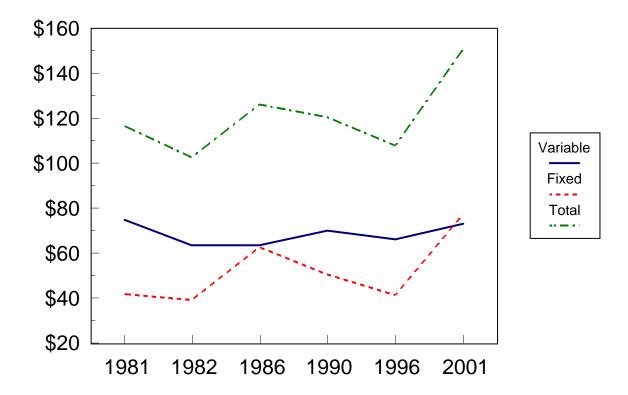


Figure 69. Average Daily Expenses, Resident Deer Firearm, Real (2002) Dollars

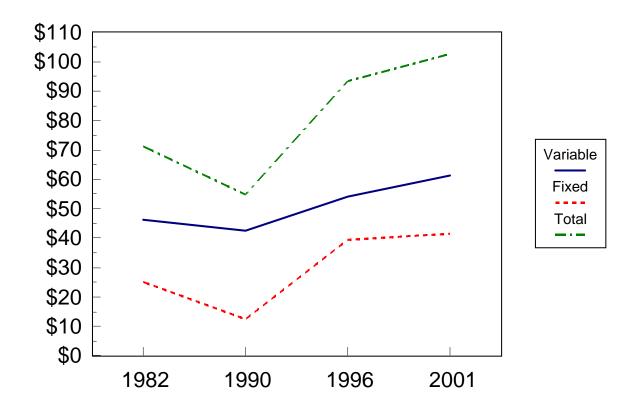


Figure 70. Average Daily Expenses, Resident Deer Firearm Gratis, Real (2002) Dollars

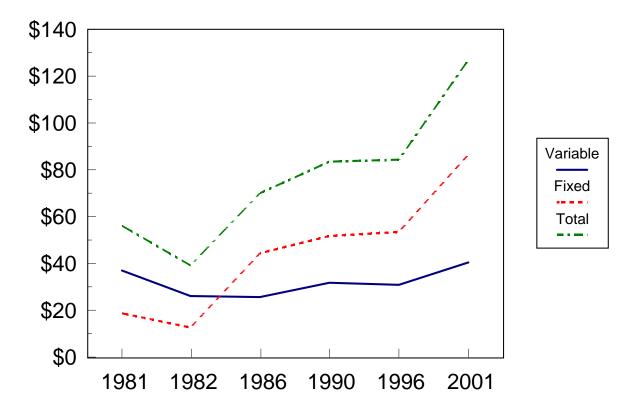
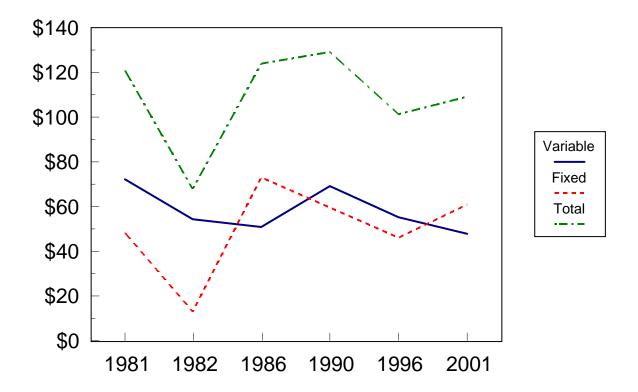
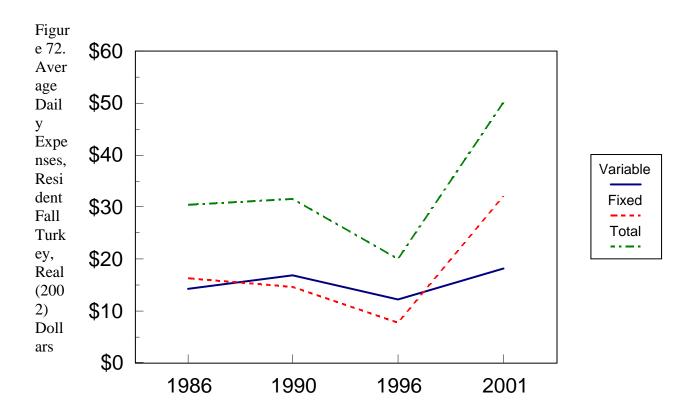
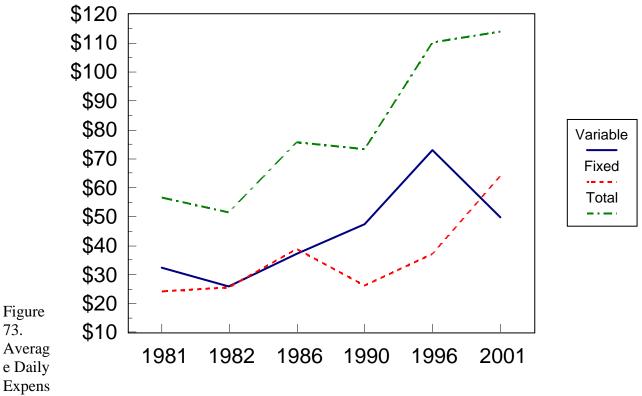


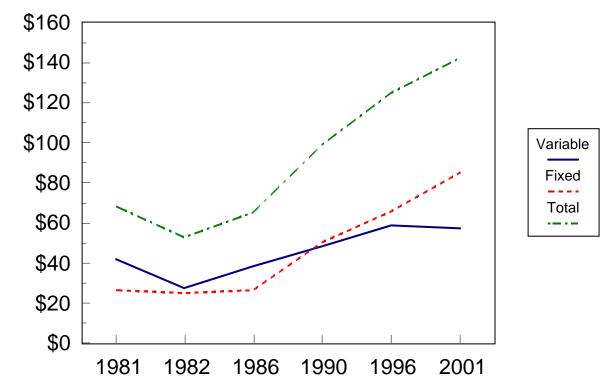
Figure 71. Average Daily Expenses, Resident Furbearer, Real (2002) Dollars



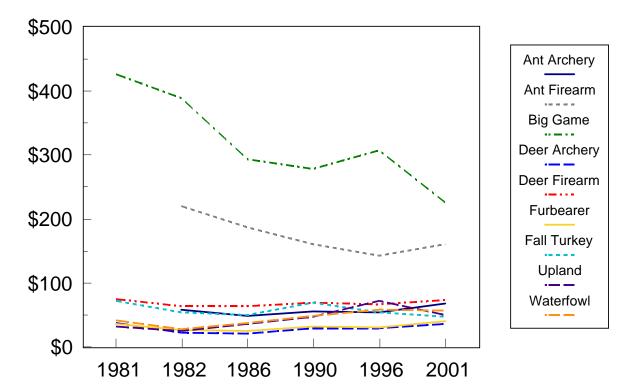




es, Resident Fall Turkey Gratis, Real (2002) Dollars

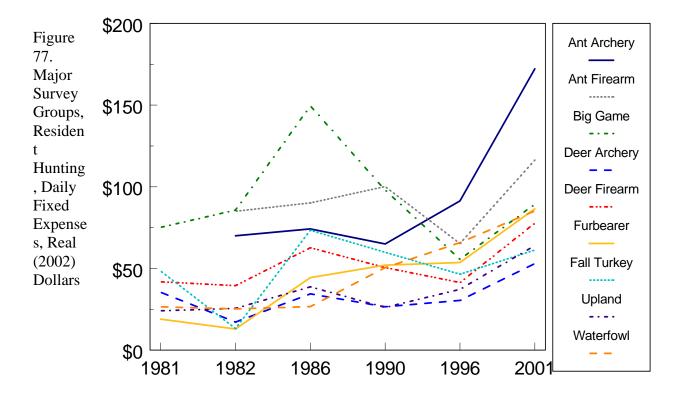


Figur e 74. Average Daily Expenses, Resident Upland Game, Real (2002) Dollars



Figu re 75. Average Daily Expenses, Resident Waterfowl, Real (2002) Dollars

Figure 76. Major Survey Groups, Resident Hunting, Daily Variable Expenses, Real (2002) Dollars



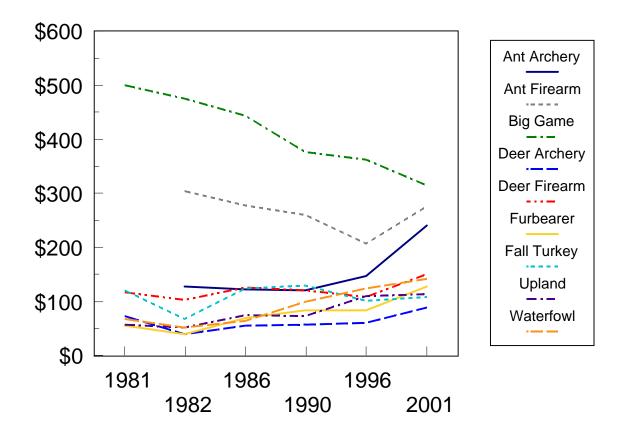


Figure 78. Major Survey Groups, Resident Hunting, Daily Total Expenses, Real (2002) Dollars

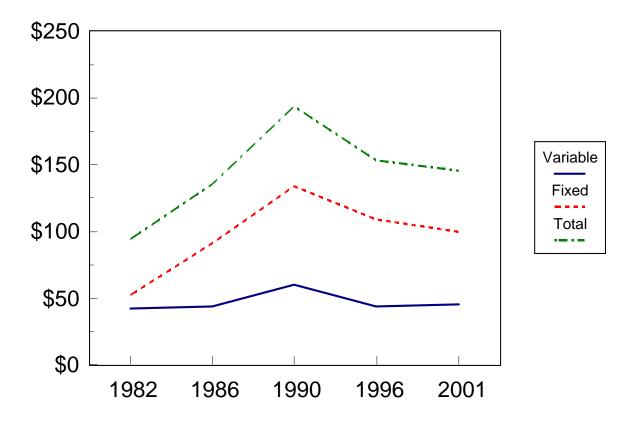


Figure 79. Average Daily Expenses, Resident Summer Fishing, Real (2002) Dollars

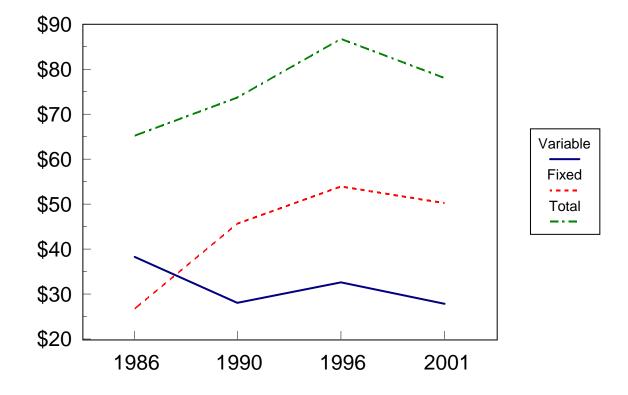


Figure 80. Average Daily Expenses, Resident Winter Fishing, Real (2002) Dollars

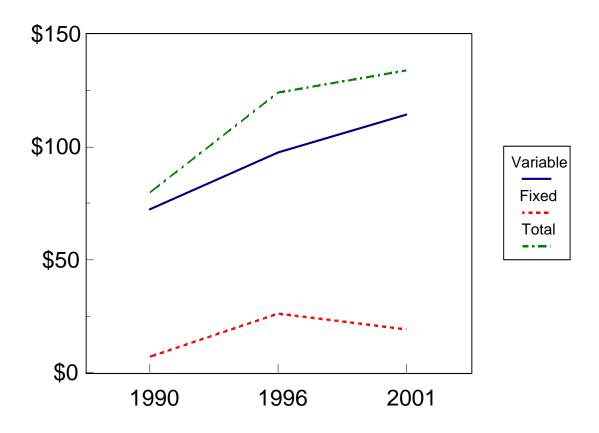


Figure 81. Average Daily Expenses, Nonresident Antelope Archery, Real (2002) Dollars

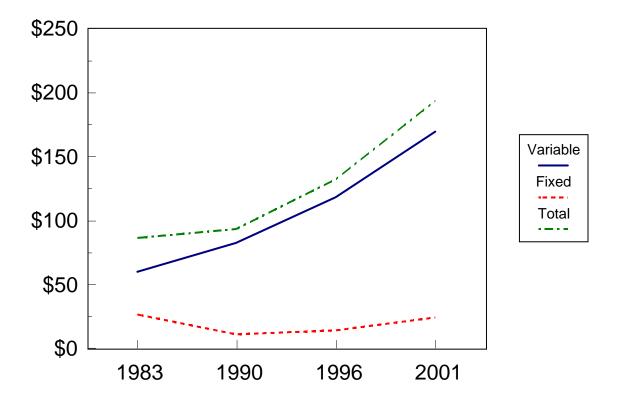


Figure 82. Average Daily Expenses, Nonresident Deer Archery, Real (2002) Dollars

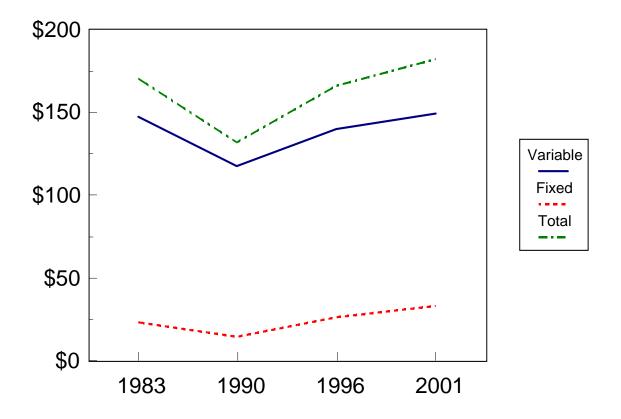
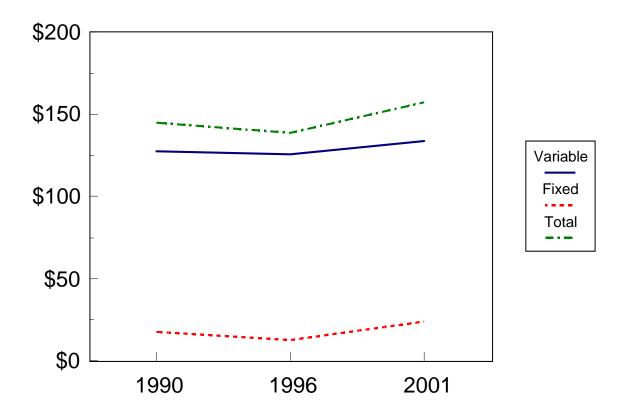
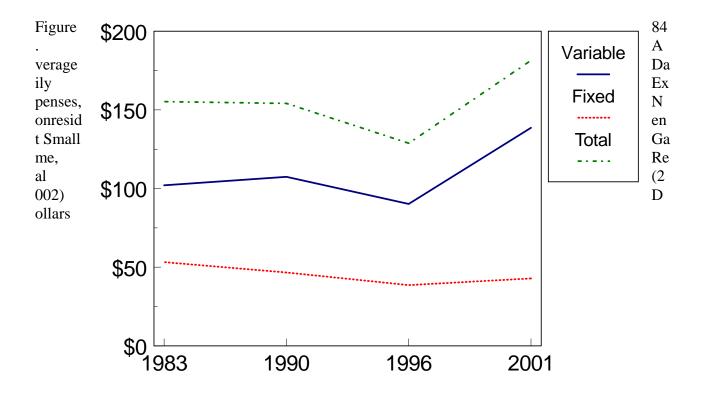
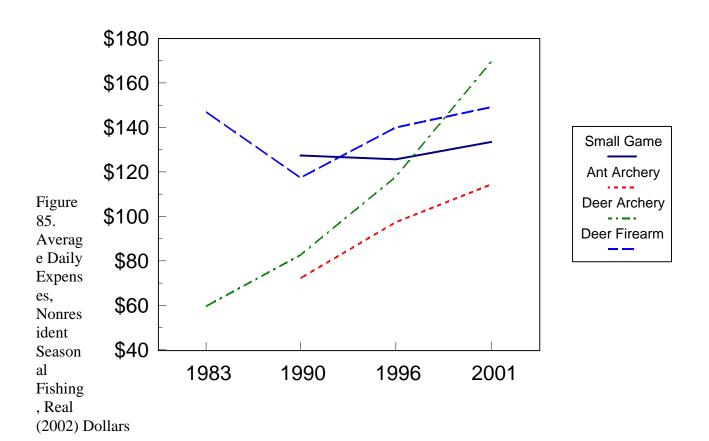


Figure 83. Average Daily Expenses, Nonresident Deer Firearm, Real (2002) Dollars







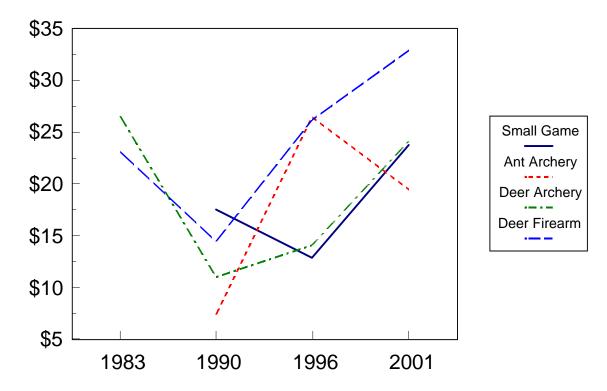
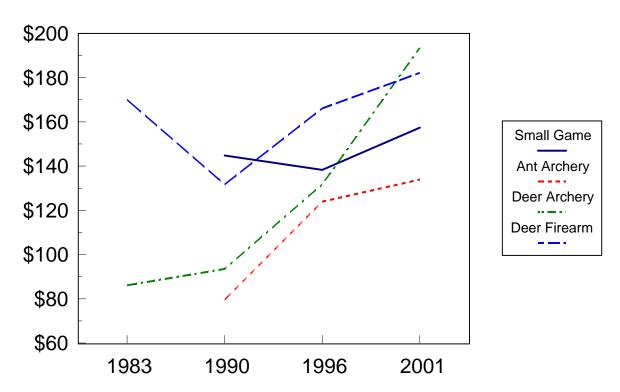


Figure 86. Major Survey Groups, Nonresident Hunting, Daily Variable Expenses, Real (2002) Dollars

Figure 87. Major Survey Groups, Nonresident Hunting, Daily Fixed Expenses, Real (2002) Dollars

Figure 88. Major Survey Groups, Nonresident Hunting, Daily Total Expenses, Real (2002) Dollars



SECTION D

Total Spending, combined with the Proportion of Total Spending for Variable and Fixed expenses, by Year and Survey Group

Figures 89 through 107

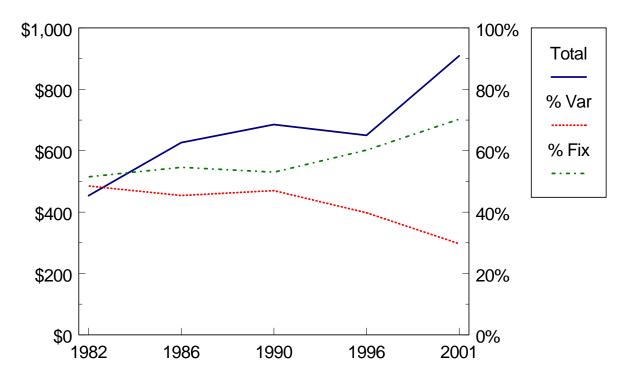


Figure 89. Total Spending and Percentage of Total Spending for Variable and Fixed Expenses, Resident Antelope Archery, Real (2002) Dollars

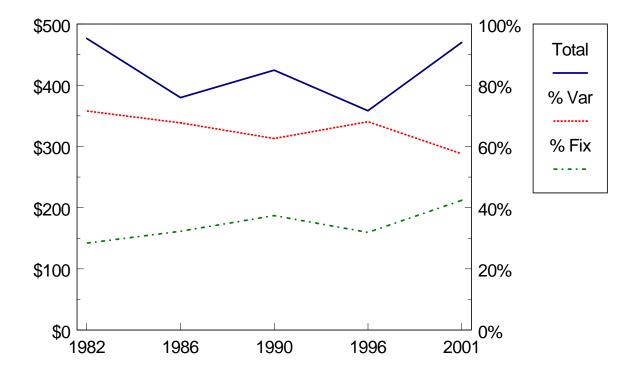


Figure 90. Total Spending and Percentage of Total Spending for Variable and Fixed Expenses, Resident Antelope Firearm, Real (2002) Dollars

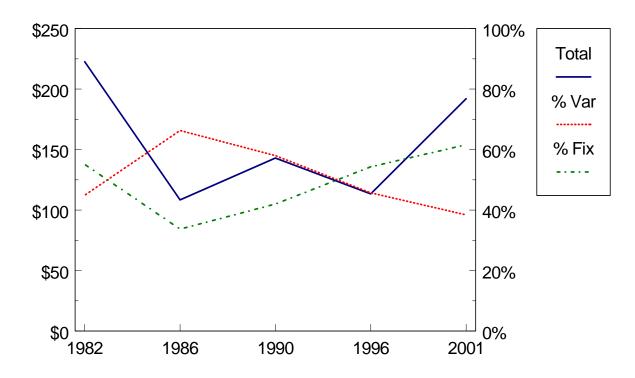


Figure 91. Total Spending and Percentage of Total Spending for Variable and Fixed Expenses, Resident Antelope Firearm Gratis, Real (2002) Dollars

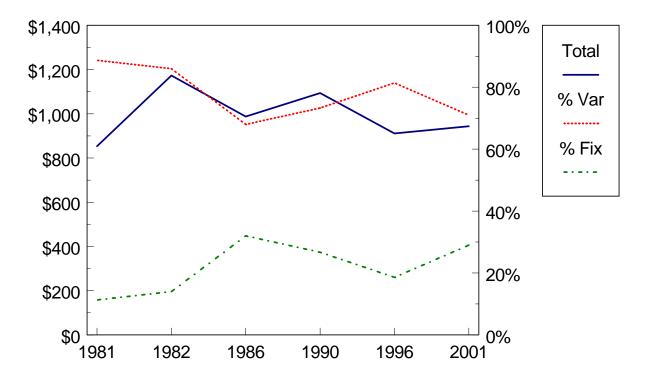


Figure 92. Total Spending and Percentage of Total Spending for Variable and Fixed Expenses, Resident Big Game, Real (2002) Dollars

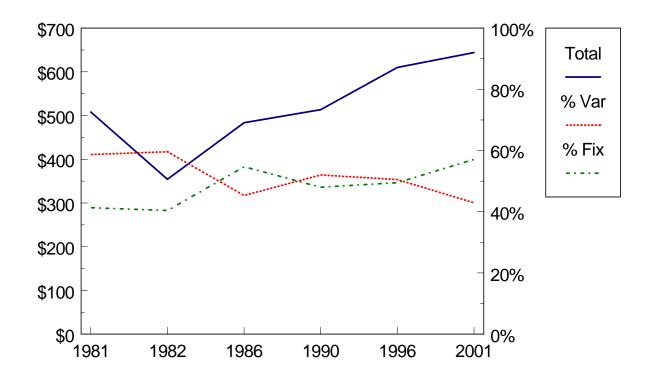


Figure 93. Total Spending and Percentage of Total Spending for Variable and Fixed Expenses, Resident Deer Archery, Real (2002) Dollars

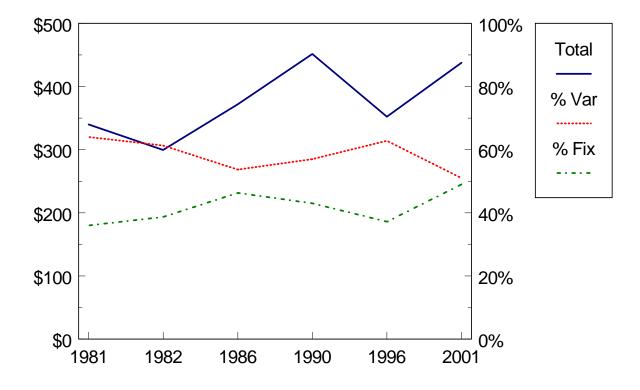


Figure 94. Total Spending and Percentage of Total Spending for Variable and Fixed Expenses, Resident Deer Firearm, Real (2002) Dollars

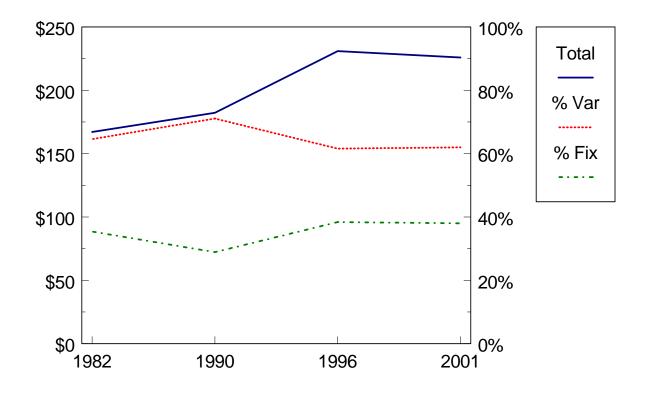


Figure 95. Total Spending and Percentage of Total Spending for Variable and Fixed Expenses, Resident Deer Firearm Gratis, Real (2002) Dollars

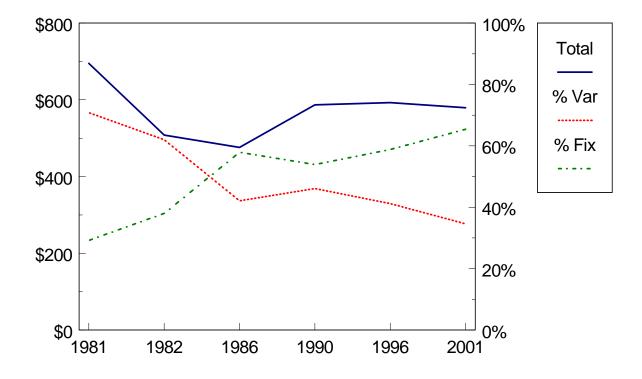


Figure 96. Total Spending and Percentage of Total Spending for Variable and Fixed Expenses, Resident Furbearer, Real (2002) Dollars

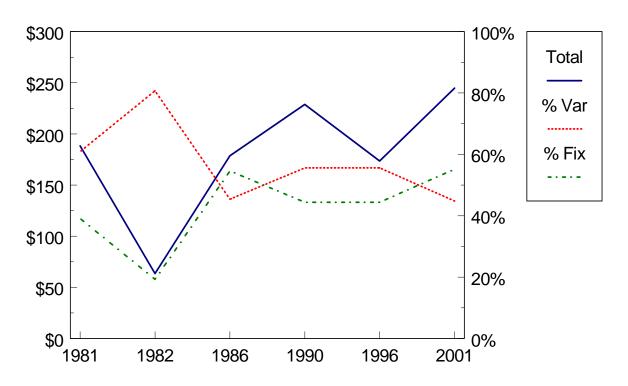


Figure 97. Total Spending and Percentage of Total Spending for Variable and Fixed Expenses, Resident Fall Turkey, Real (2002) Dollars

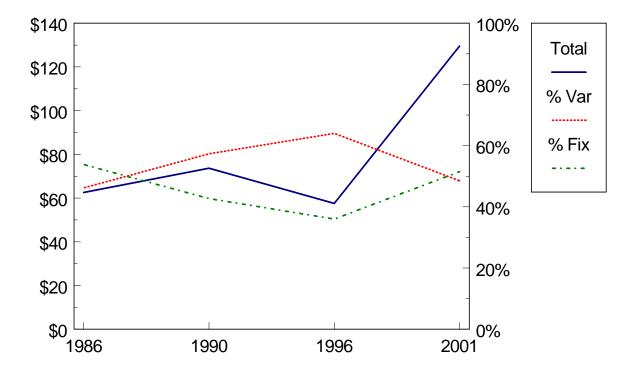


Figure 98. Total Spending and Percentage of Total Spending for Variable and Fixed Expenses, Resident Fall Turkey Gratis, Real (2002) Dollars

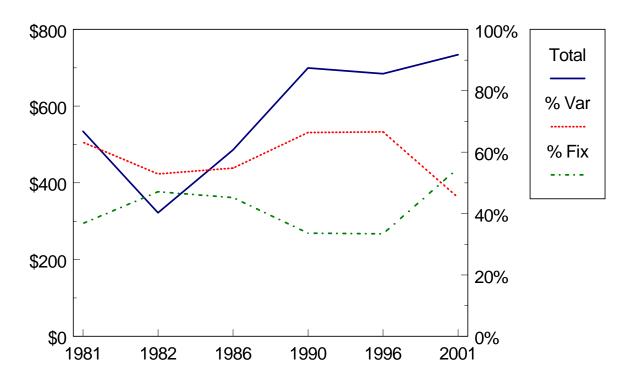


Figure 99. Total Spending and Percentage of Total Spending for Variable and Fixed Expenses, Resident Upland Game, Real (2002) Dollars

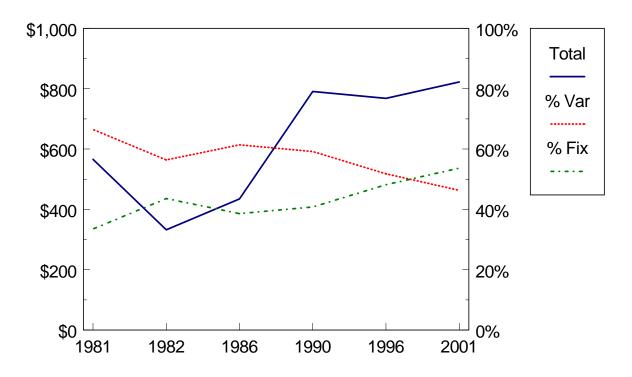


Figure 100. Total Spending and Percentage of Total Spending for Variable and Fixed Expenses, Resident Waterfowl, Real (2002) Dollars

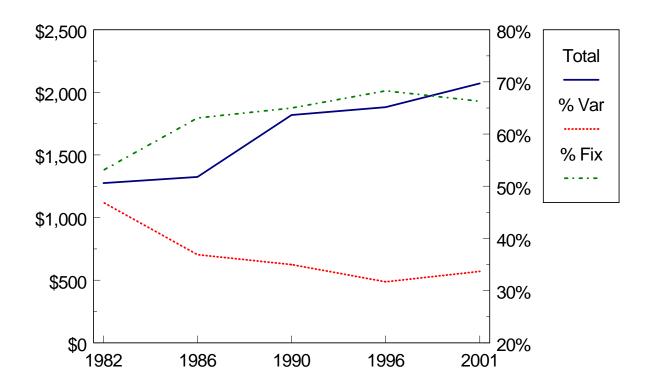


Figure 101. Total Spending and Percentage of Total Spending for Variable and Fixed Expenses, Resident Summer Fishing, Real (2002) Dollars

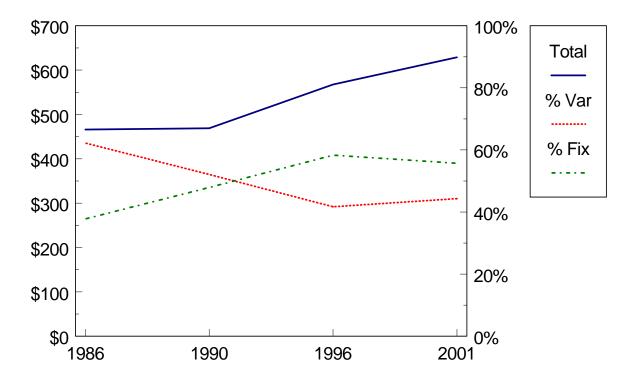


Figure 102. Total Spending and Percentage of Total Spending for Variable and Fixed Expenses, Resident Winter Fishing, Real (2002) Dollars

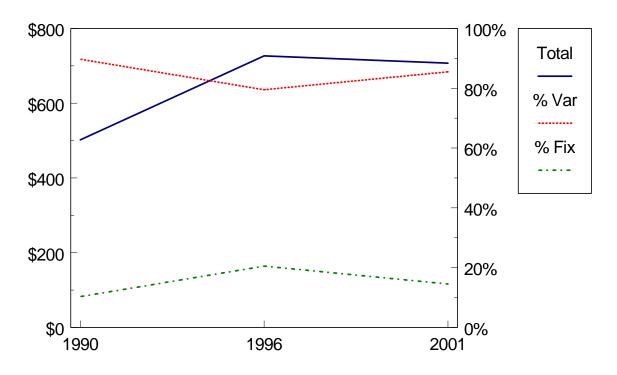


Figure 103. Total Spending and Percentage of Total Spending for Variable and Fixed Expenses, Nonresident Antelope Archery, Real (2002) Dollars

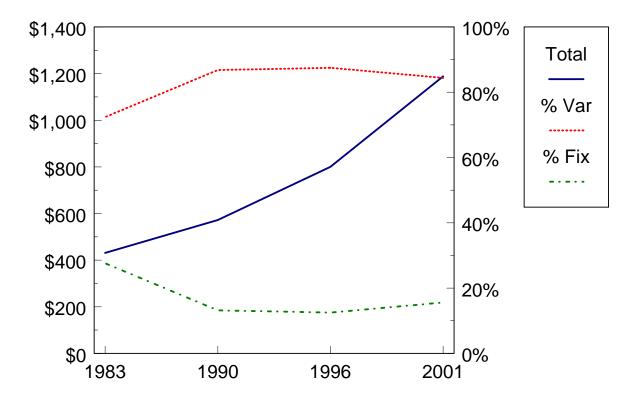


Figure 104. Total Spending and Percentage of Total Spending for Variable and Fixed Expenses, Nonresident Deer Archery, Real (2002) Dollars

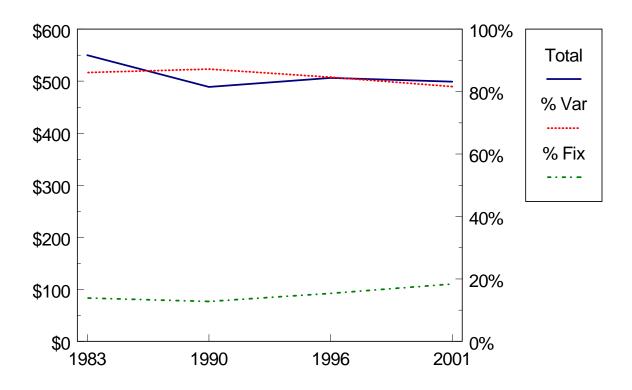


Figure 105. Total Spending and Percentage of Total Spending for Variable and Fixed Expenses, Nonresident Deer Firearm, Real (2002) Dollars

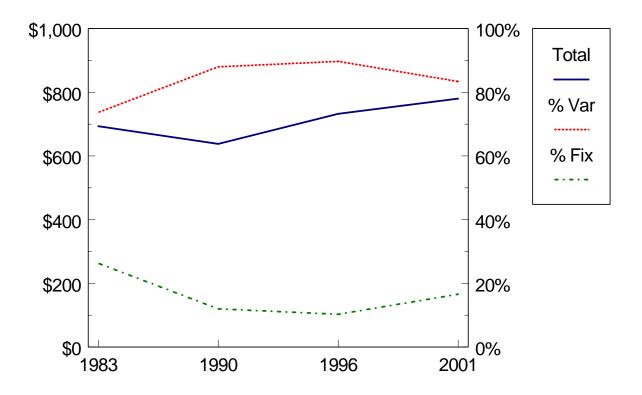


Figure 106. Total Spending and Percentage of Total Spending for Variable and Fixed Expenses, Nonresident Small Game, Real (2002) Dollars

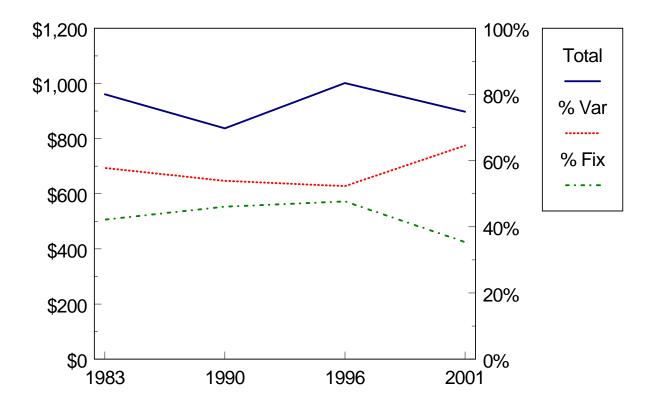


Figure 107. Total Spending and Percentage of Total Spending for Variable and Fixed Expenses, Nonresident Seasonal Fishing, Real (2002) Dollars

SECTION E

Proportion of Variable and Fixed Spending by Major Expense Category, by Year and Survey Group

Figures 108 through 159

In the following section several figures were created to compare spending data for multiple survey groups on a single graph. The intent of those figures was not necessarily to track each survey group individually within the graph but rather to plot general trends across a broad class of activities, such as resident hunting or nonresident hunting.

In figures 132 through 138, data on the percentage of spending for various expenditure categories for durable and nondurable goods for all major resident hunting activities were combined. In figures 153 through 159, the same percentages for all major nonresident hunting activities were combined. In those figures, the following abbreviations were used:

Survey Groups
Resident Antelope Archery
Resident Antelope Firearm
Resident Big Game
Resident Deer Archery
Resident Deer Firearm
Resident Furbearer
Resident Fall Turkey
Resident Upland Game
Resident Waterfowl
Nonresident Antelope Archery
Nonresident Deer Archery
Nonresident Deer Firearm
Nonresident Small Game

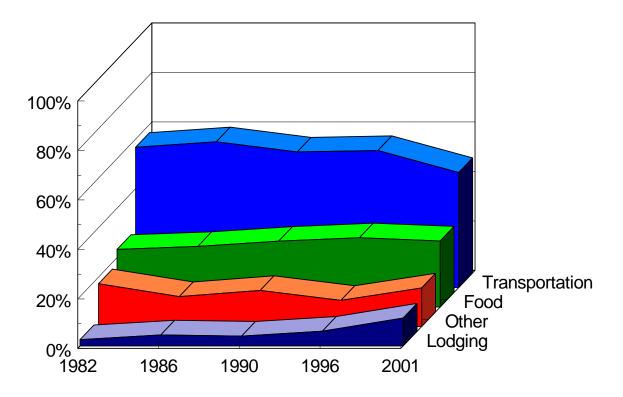
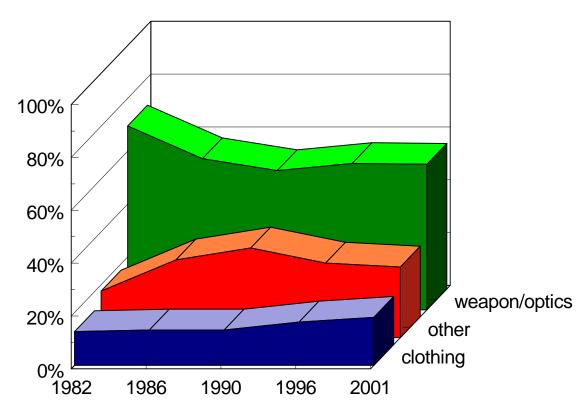
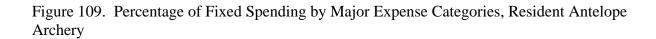


Figure 108. Percentage of Variable Spending by Major Expense Categories, Resident Antelope Archery





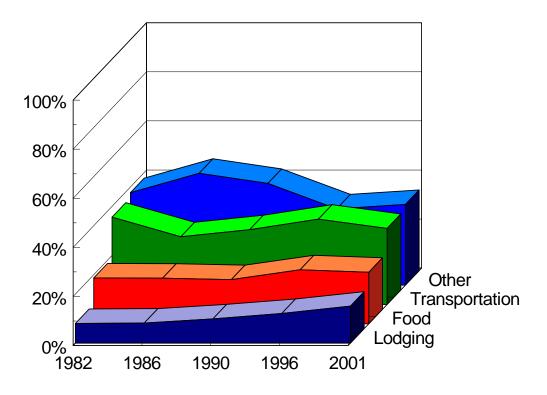


Figure 110. Percentage of Variable Spending by Major Expense Categories, Resident Antelope Firearm

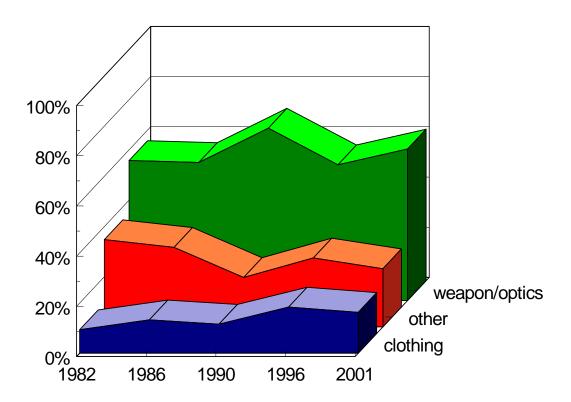


Figure 111. Percentage of Fixed Spending by Major Expense Categories, Resident Antelope Firearm

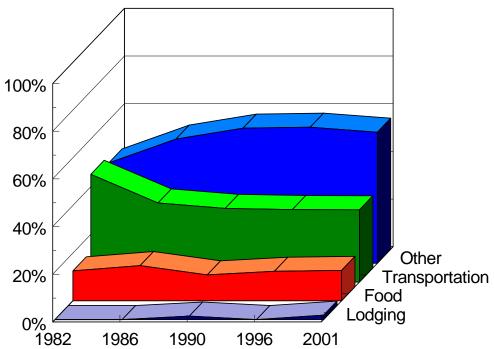


Figure 112. Percentage of Variable Spending by Major Expense Categories, Resident Antelope Firearm Gratis

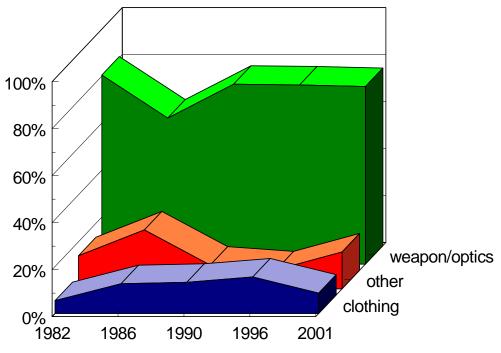


Figure 113. Percentage of Fixed Spending by Major Expense Categories, Resident Antelope Firearm Gratis

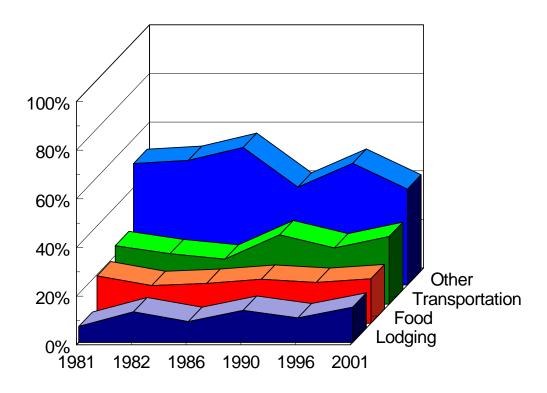
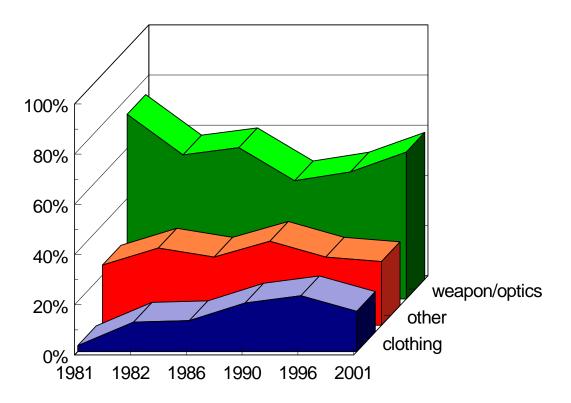
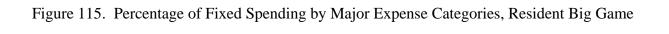


Figure 114. Percentage of Variable Spending by Major Expense Categories, Resident Big Game





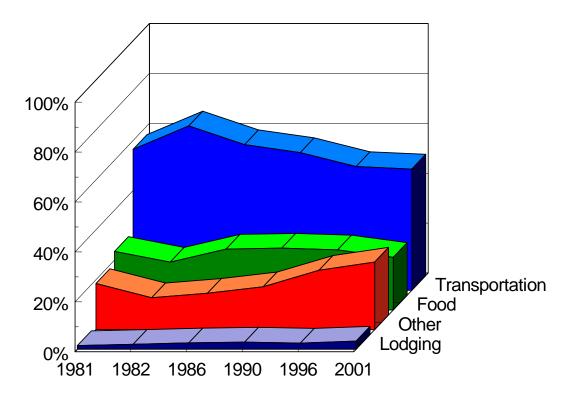
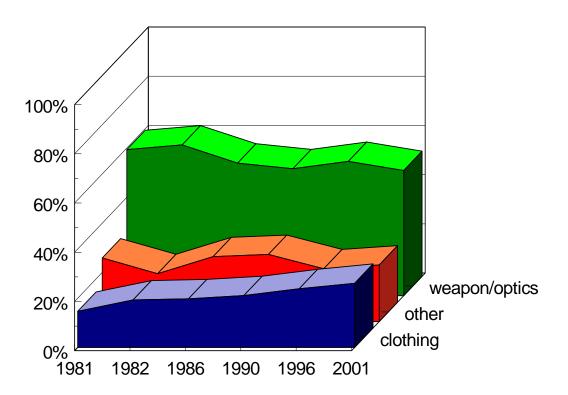
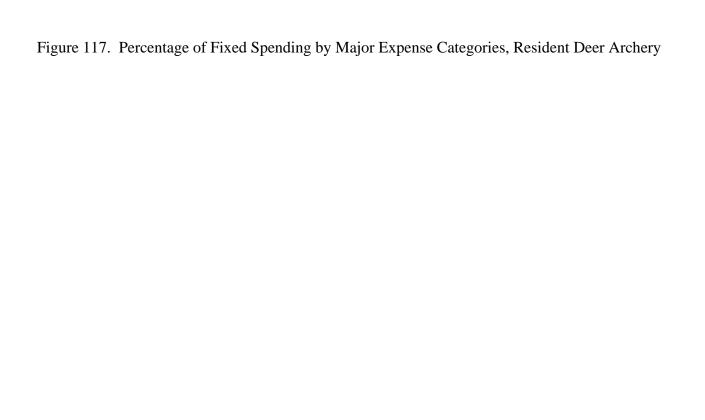


Figure 116. Percentage of Variable Spending by Major Expense Categories, Resident Deer Archery





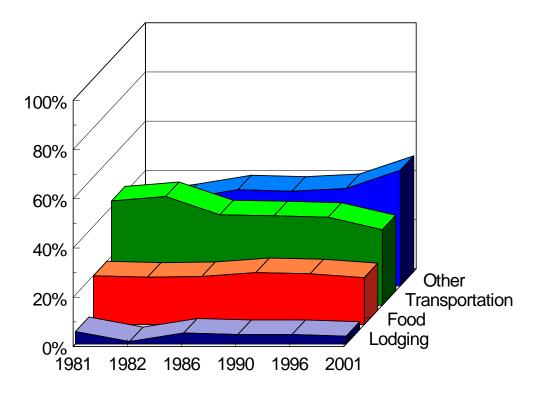
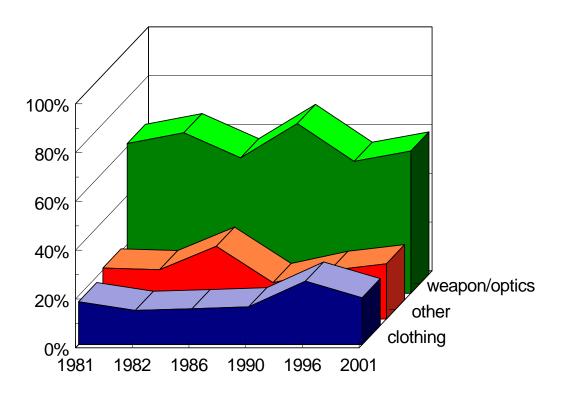
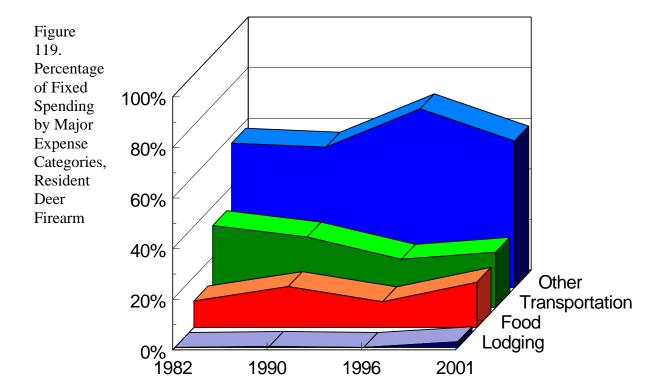
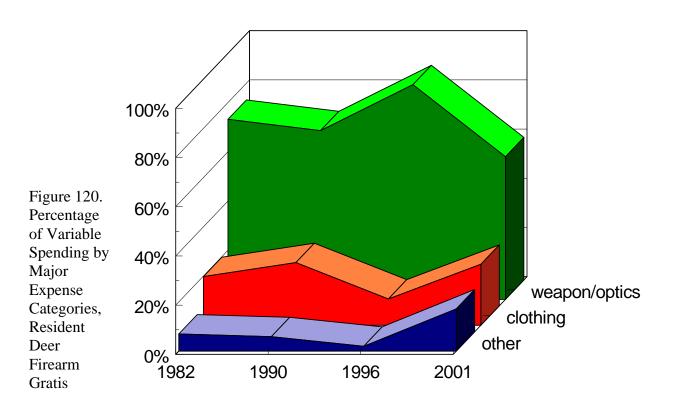


Figure 118. Percentage of Variable Spending by Major Expense Categories, Resident Deer Firearm









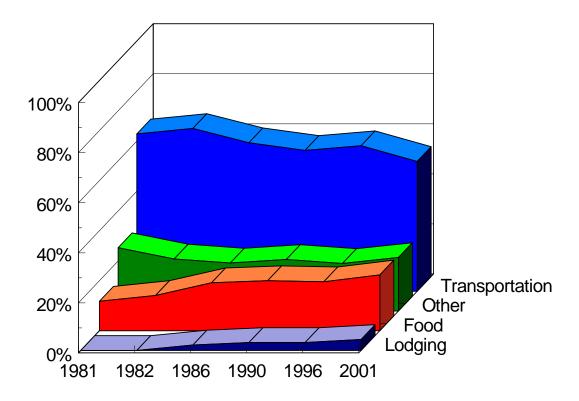


Figure 122. Percentage of Variable Spending by Major Expense Categories, Resident Furbearer

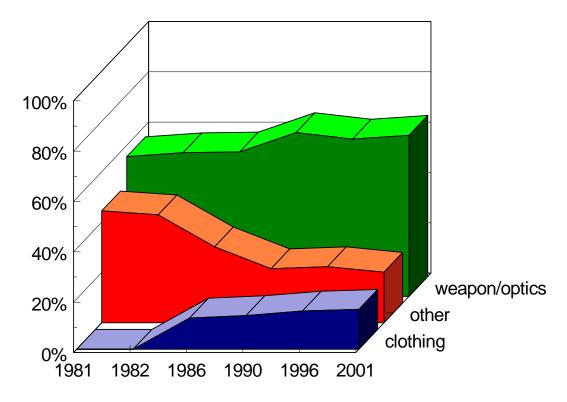


Figure 123. Percentage of Fixed Spending by Major Expense Categories, Resident Furbearer

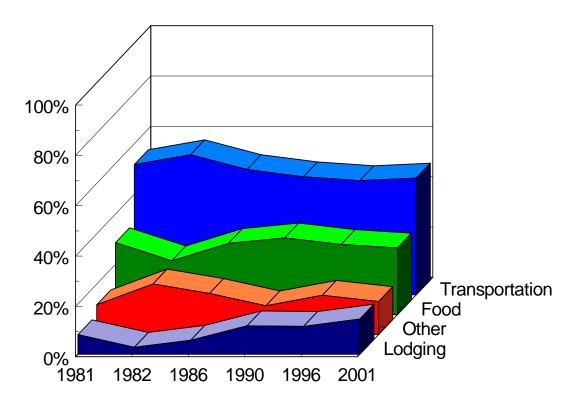
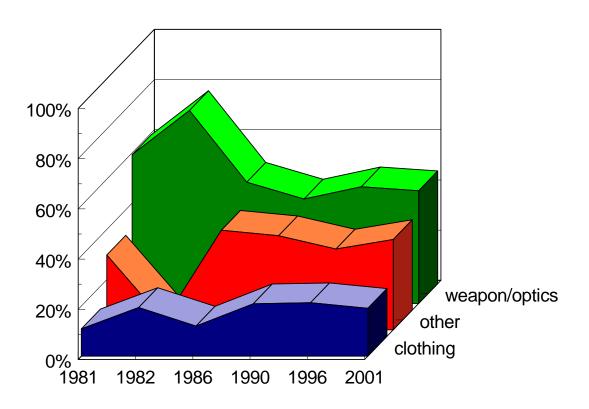
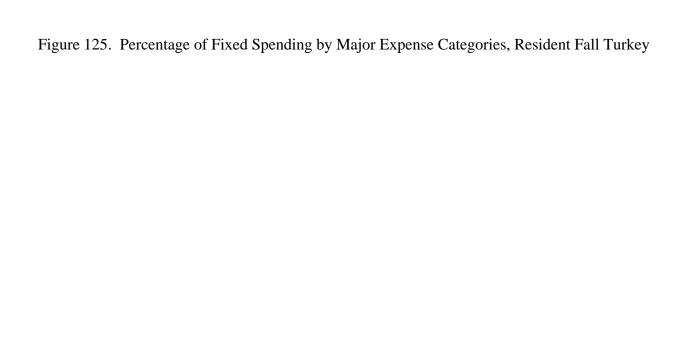


Figure 124. Percentage of Variable Spending by Major Expense Categories, Resident Fall Turkey





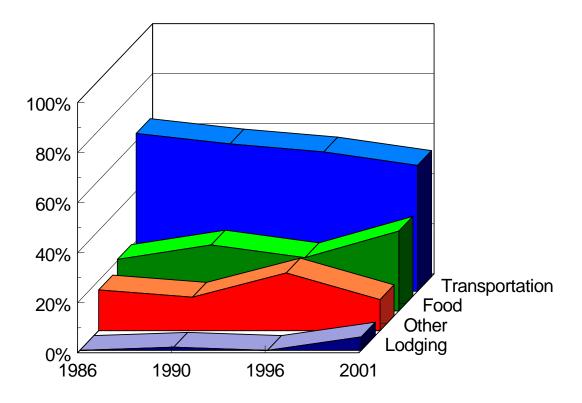
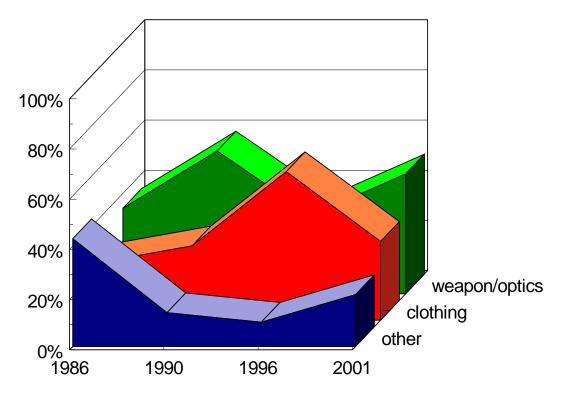
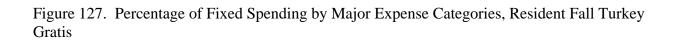


Figure 126. Percentage of Variable Spending by Major Expense Categories, Resident Fall Turkey Gratis





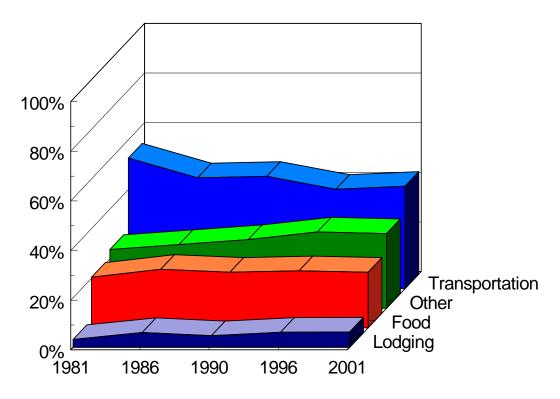


Figure 128. Percentage of Variable Spending by Major Expense Categories, Resident Upland Game

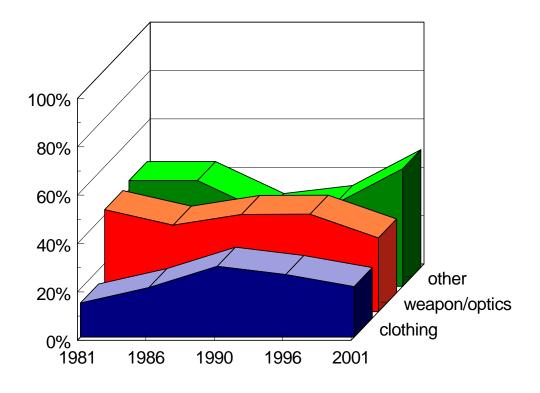


Figure 129. Percentage of Fixed Spending by Major Expense Categories, Resident Upland Game

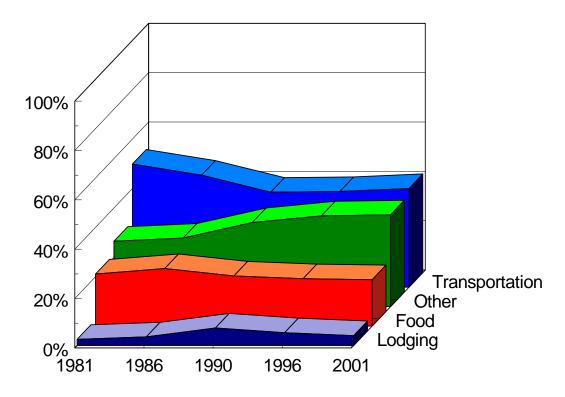
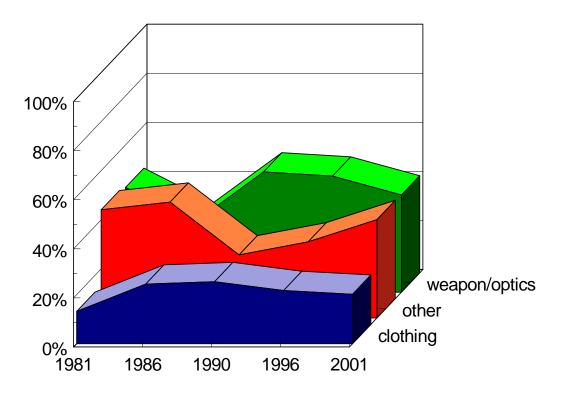
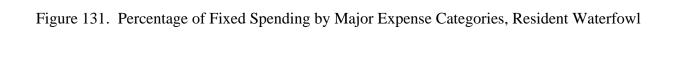
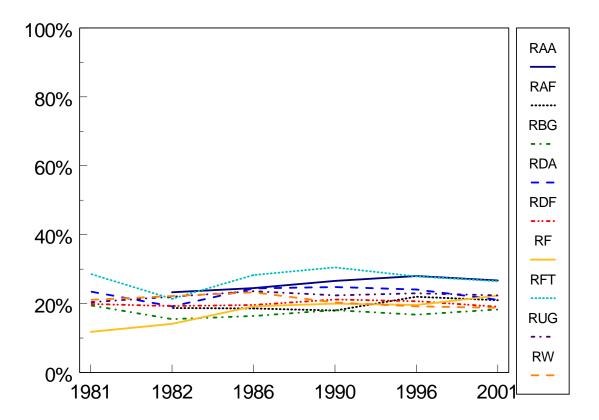
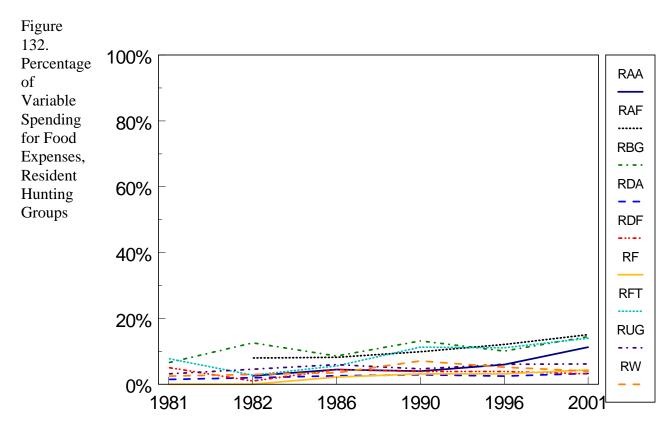


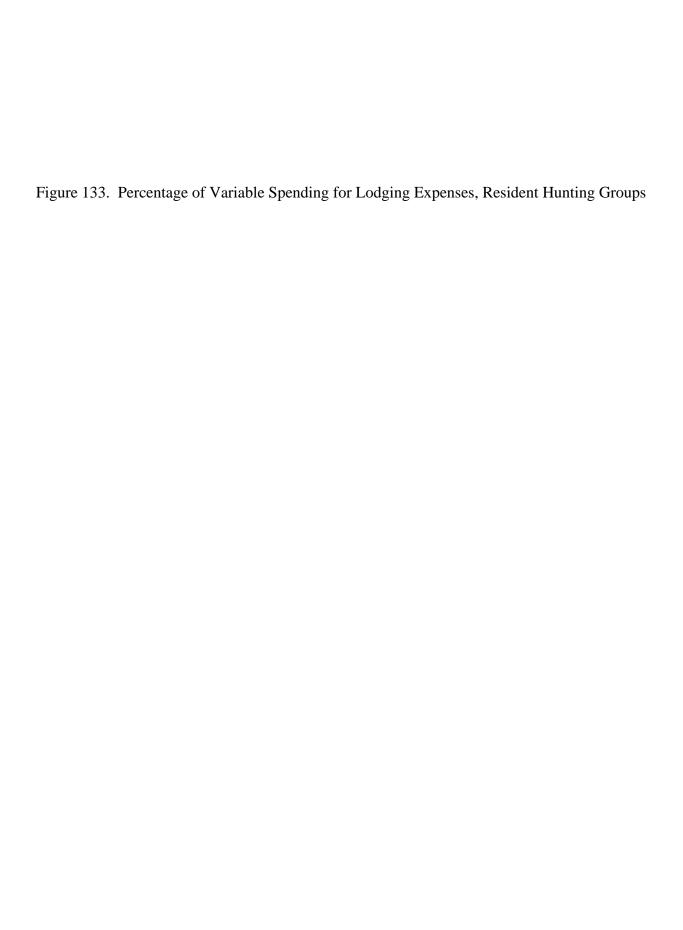
Figure 130. Percentage of Variable Spending by Major Expense Categories, Resident Waterfowl











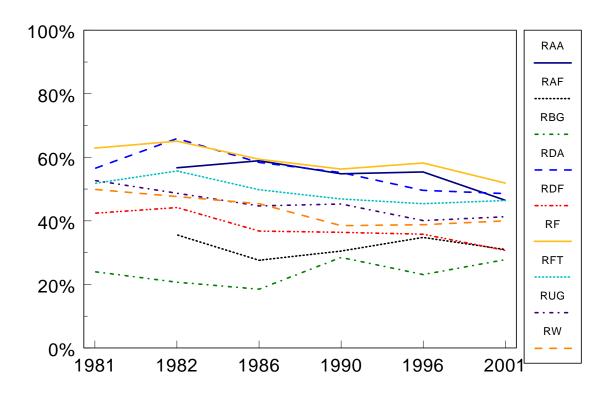


Figure 134. Percentage of Variable Spending for Transportation Expenses, Resident Hunting Groups

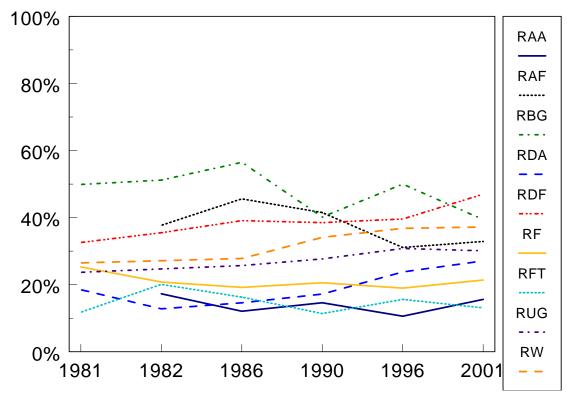


Figure 135. Percentage of Variable Spending for Other Variable Expenses, Resident Hunting Groups

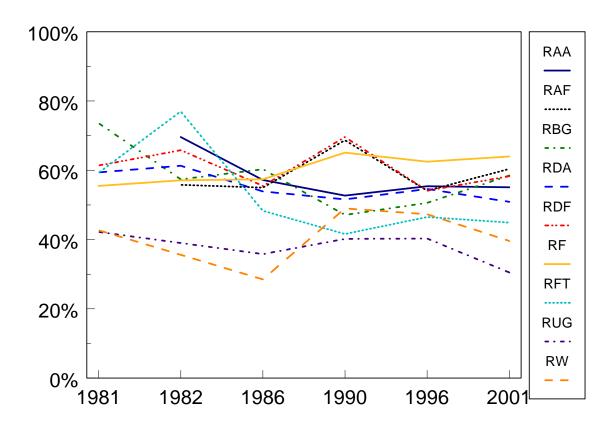


Figure 136. Percentage of Fixed Spending for Weapons/Optics, Resident Hunting Groups

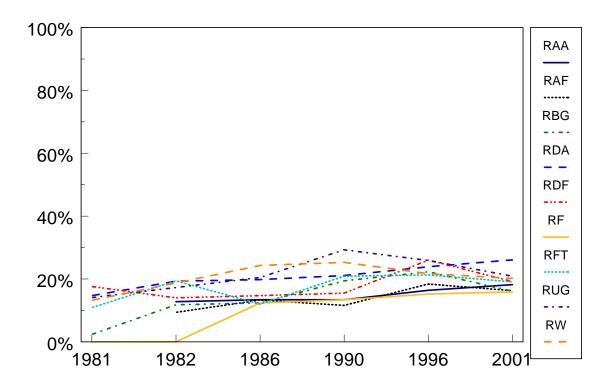


Figure 137. Percentage of Fixed Spending for Clothing, Resident Hunting Groups

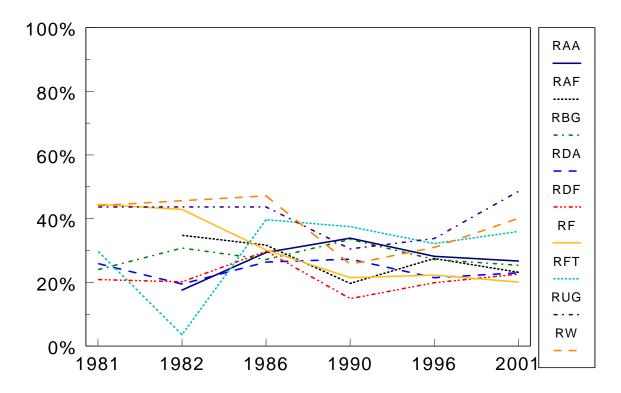


Figure 138. Percentage of Fixed Spending for Other Fixed Expenses, Resident Hunting Groups

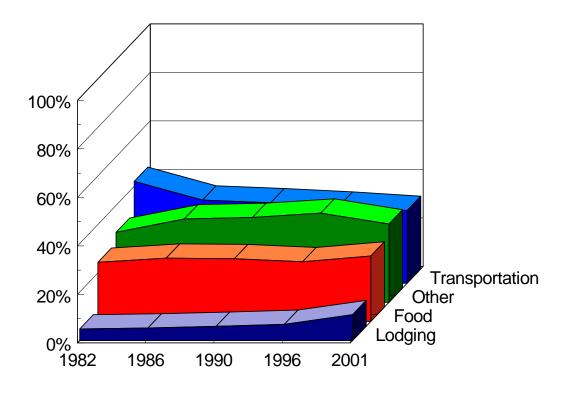


Figure 139. Percentage of Variable Spending by Major Expense Categories, Resident Summer Fishing

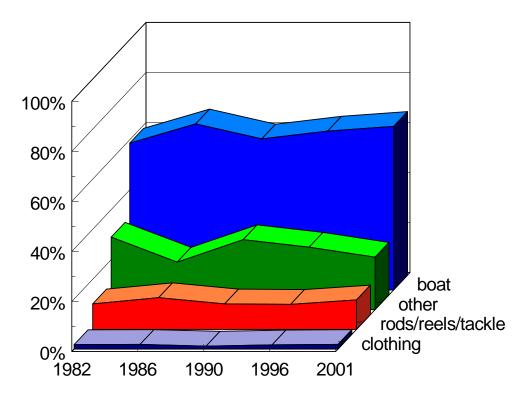


Figure 140. Percentage of Fixed Spending by Major Expense Categories, Resident Summer Fishing

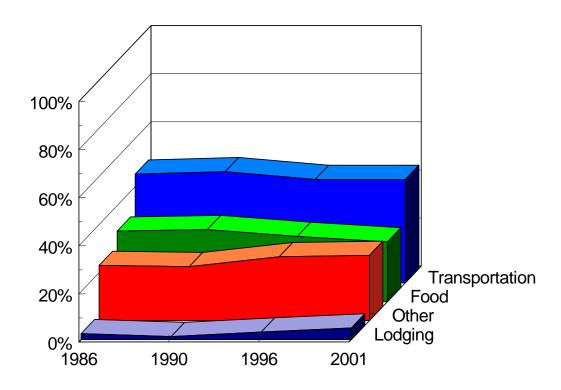


Figure 141. Percentage of Variable Spending by Major Expense Categories, Resident Winter Fishing

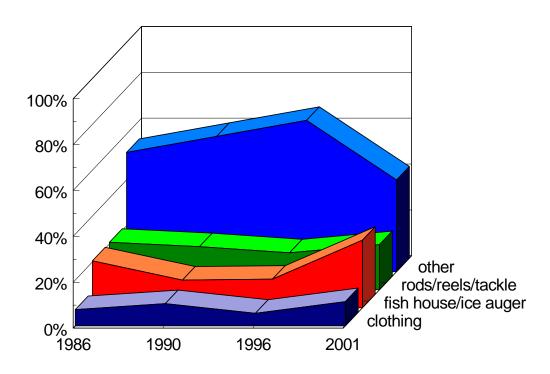


Figure 142. Percentage of Fixed Spending by Major Expense Categories, Resident Winter Fishing

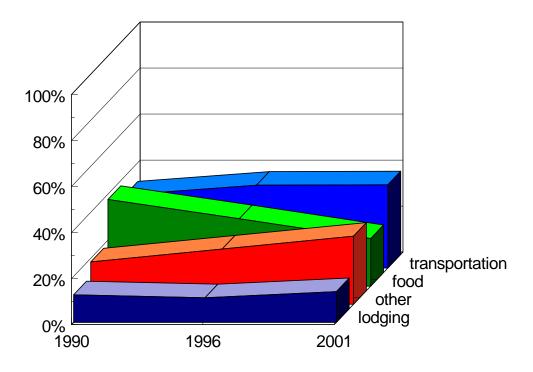
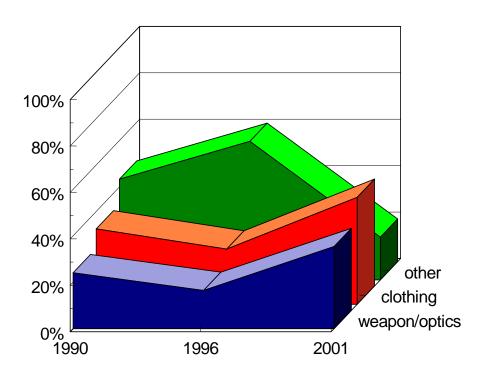
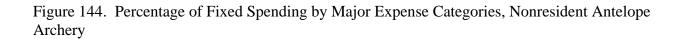


Figure 143. Percentage of Variable Spending by Major Expense Categories, Nonresident Antelope Archery





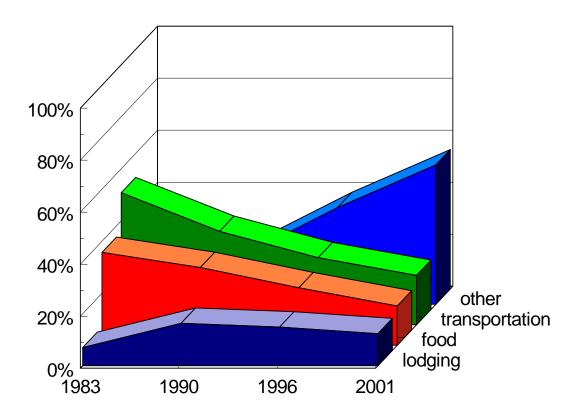
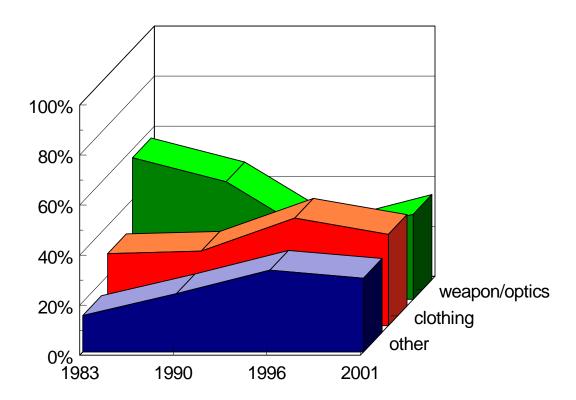
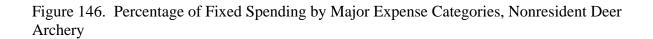


Figure 145. Percentage of Variable Spending by Major Expense Categories, Nonresident Deer Archery





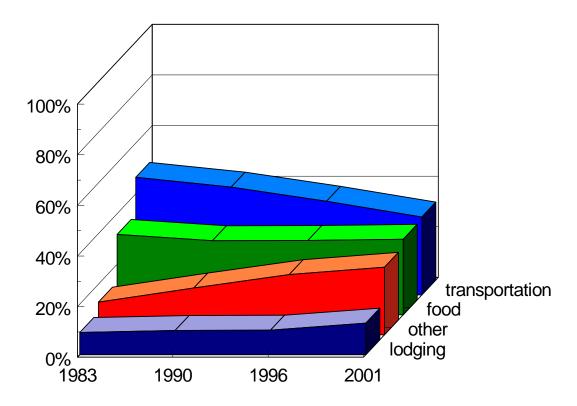
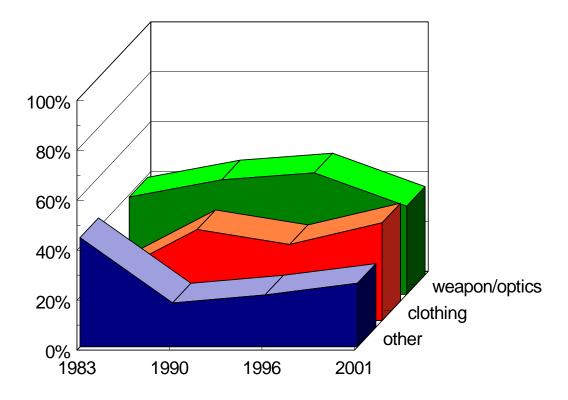
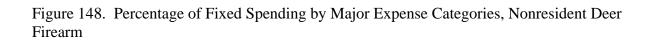


Figure 147. Percentage of Variable Spending by Major Expense Categories, Nonresident Deer Firearm





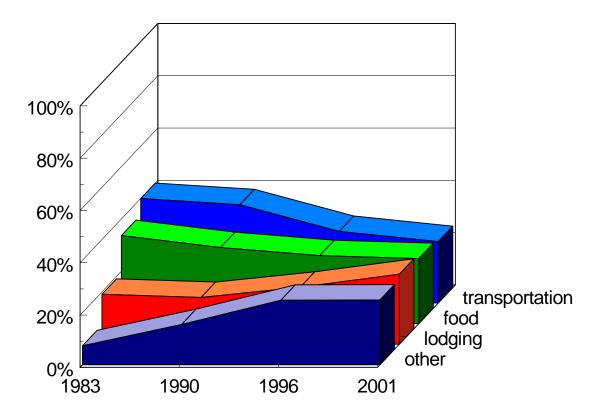
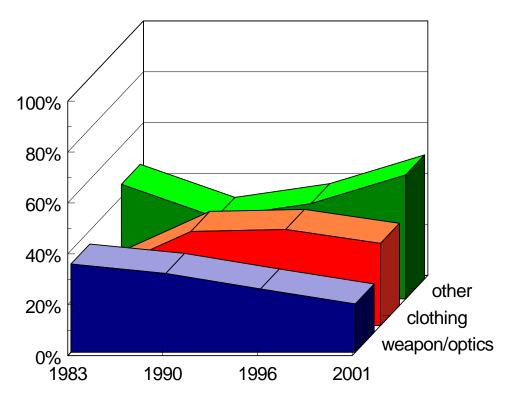
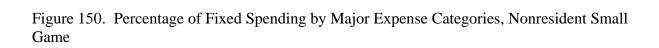


Figure 149. Percentage of Variable Spending by Major Expense Categories, Nonresident Small Game





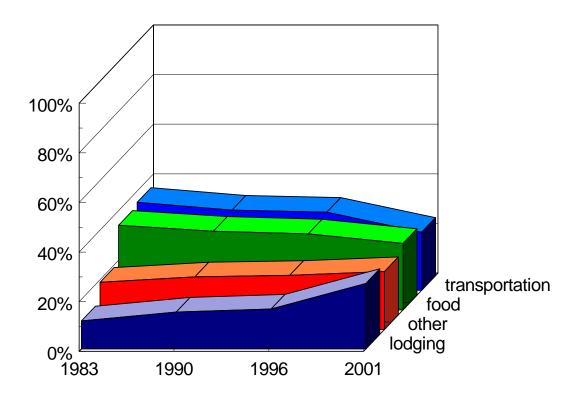
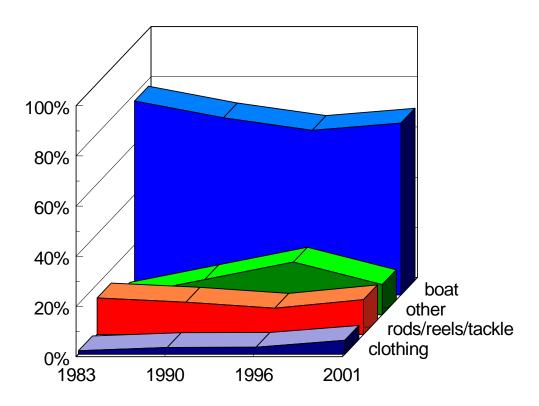
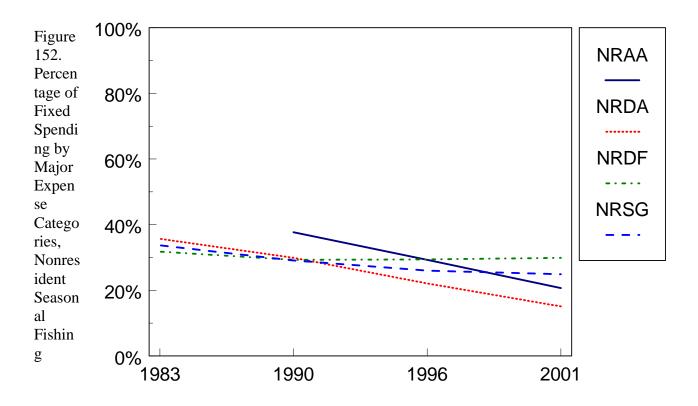
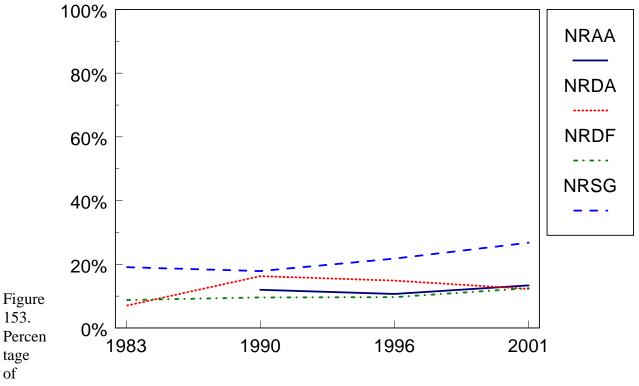


Figure 151. Percentage of Variable Spending by Major Expense Categories, Nonresident Seasonal Fishing







Variable Spending for Food Expenses, Nonresident Hunting Groups



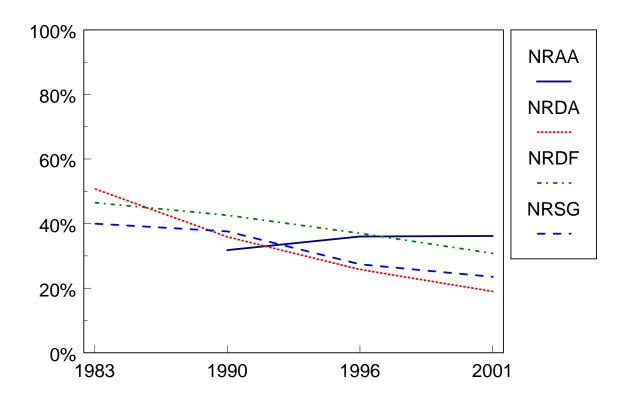


Figure 155. Percentage of Variable Spending for Transportation Expenses, Nonresident Hunting Groups

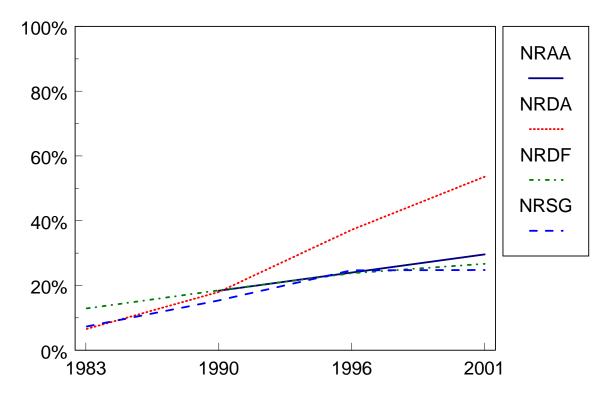


Figure 156. Percentage of Variable Spending for Other Variable Expenses, Nonresident Hunting Groups

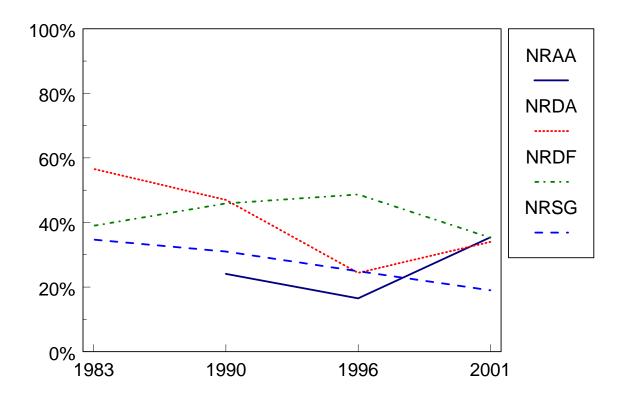


Figure 157. Percentage of Fixed Spending for Weapons/Optics, Nonresident Hunting Groups

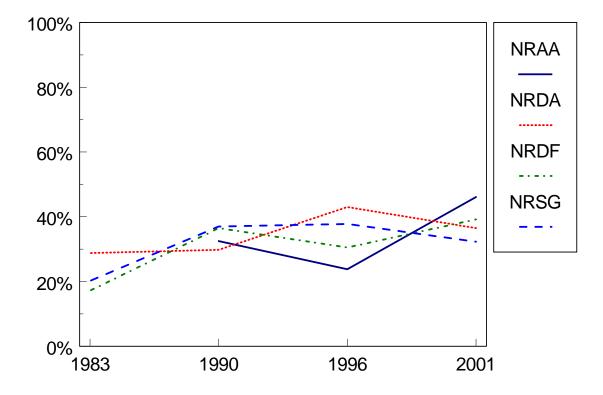


Figure 158. Percentage of Fixed Spending for Clothing, Nonresident Hunting Groups

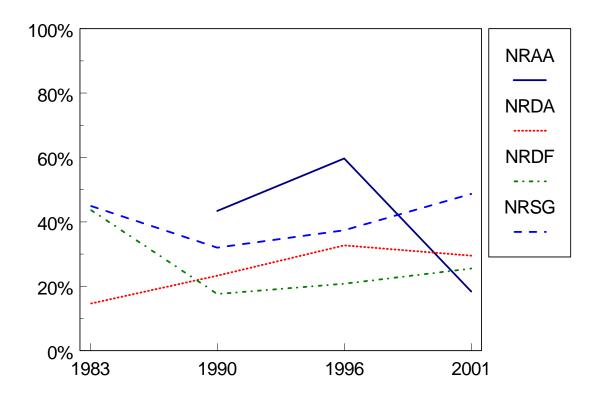


Figure 159. Percentage of Fixed Spending for Other Fixed Expenses, Nonresident Hunting Groups

SECTION F

Percentage of Resident and Nonresident Hunter and Angler Survey Respondents reporting Expenses, by Expenditure Category, by Year and Survey Group

Figures 160 through 256

Although every attempt was made to assure that data was comparable among the survey years, the manner in which some questions were structured in the 1981 survey produced data that was not directly comparable to other survey periods. As a result, observations on the percentage of resident hunting participants having purchases of camping, clothing, vehicles, and weapons were omitted from the figures for 1981. Also, observations on the percentage of resident fishing participants having purchases of boats, camping, clothing, electronics, rods and reels, tackle, and vehicles were omitted from the figures for 1981.

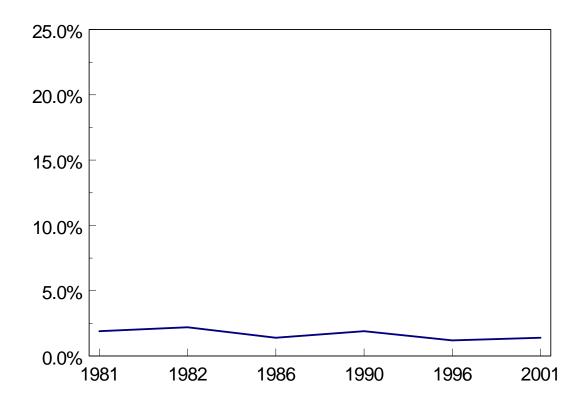


Figure 160. Percentage of Survey Respondents Reporting Access Fees, Resident Hunters

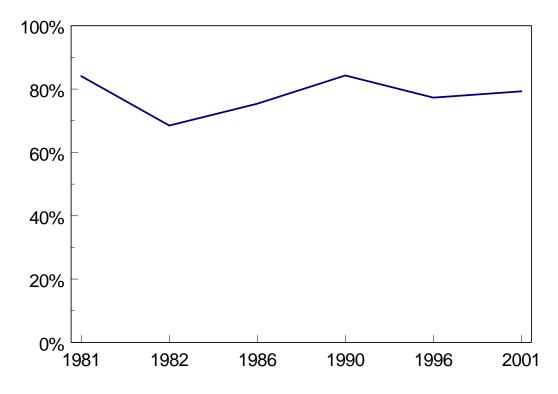


Figure 161. Percentage of Survey Respondents Reporting Ammunition Expenses, Resident Hunters

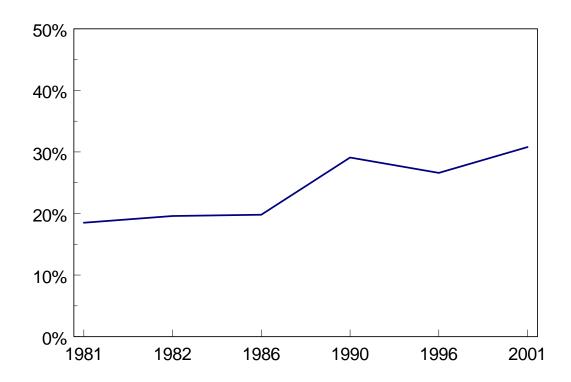


Figure 162. Percentage of Survey Respondents Reporting Film and Film Processing Expenses, Resident Hunters

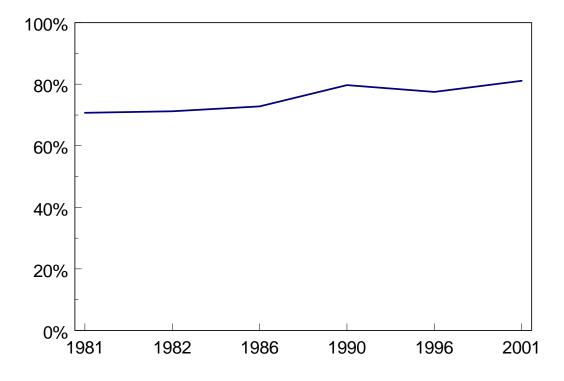


Figure 163. Percentage of Survey Respondents Reporting Food Expenses, Resident Hunters

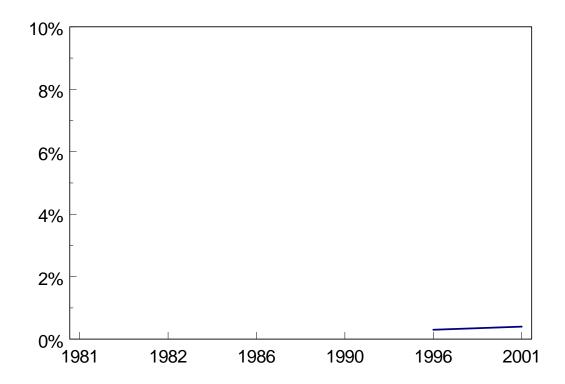


Figure 164. Percentage of Survey Respondents Reporting Guide Fees, Resident Hunters

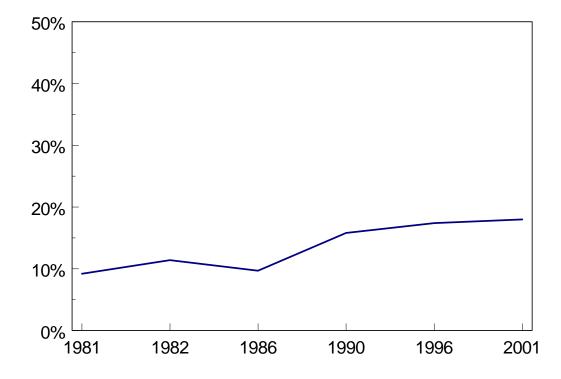


Figure 165. Percentage of Survey Respondents Reporting Lodging Expenses, Resident Hunters

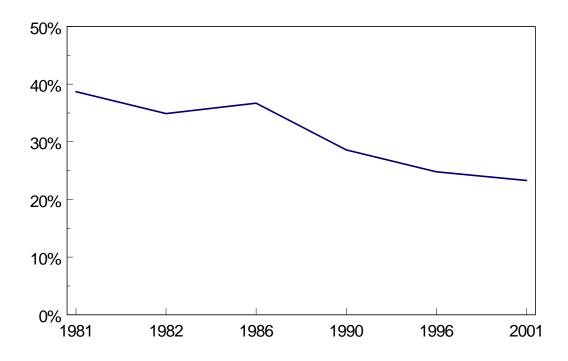


Figure 166. Percentage of Survey Respondents Reporting Meat Processing Expenses, Resident Hunters

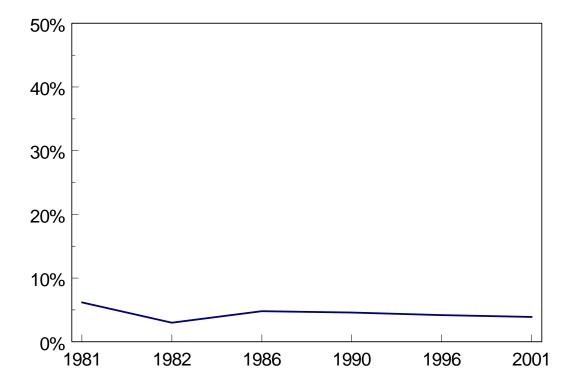


Figure 167. Percentage of Survey Respondents Reporting Other Variable Expenses, Resident Hunters

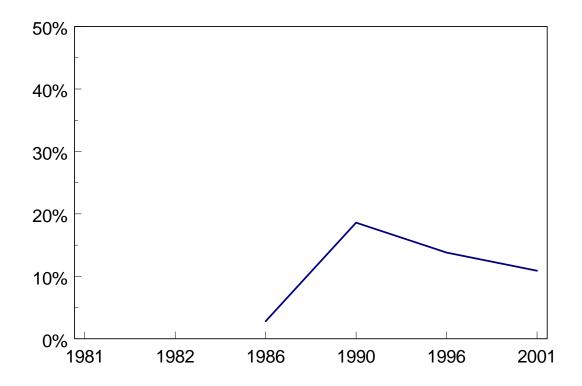


Figure 168. Percentage of Survey Respondents Reporting Repairs, Resident Hunters

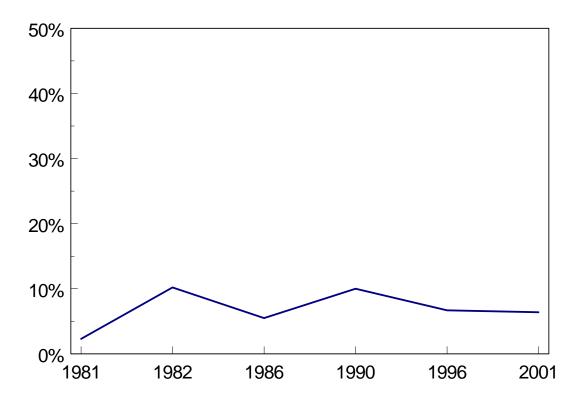


Figure 169. Percentage of Survey Respondents Reporting Taxidermy Expenses, Resident Hunters

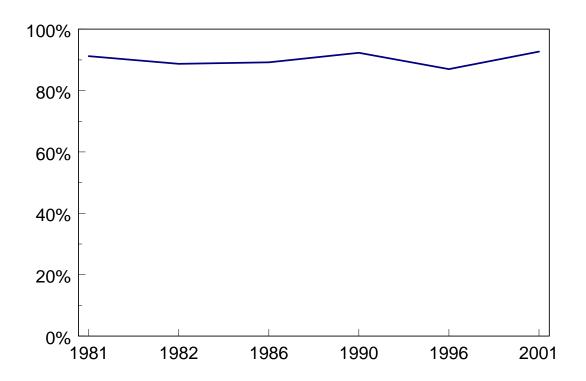


Figure 170. Percentage of Survey Respondents Reporting Transportation Expenses, Resident Hunters

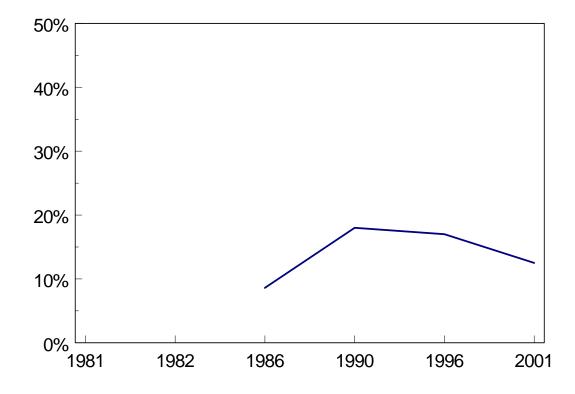


Figure 171. Percentage of Survey Respondents Reporting Veterinary Expenses, Resident Hunters

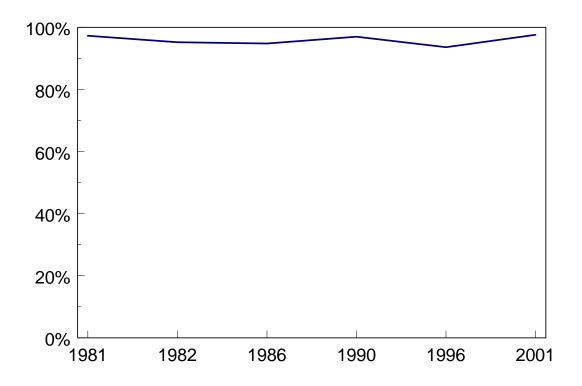


Figure 172. Percentage of Survey Respondents Reporting Variable Expenses, Resident Hunters

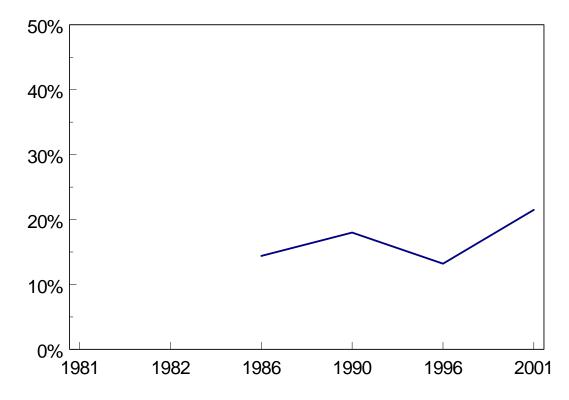


Figure 173. Percentage of Survey Respondents Reporting Binocular/Optics Expenses, Resident Hunters

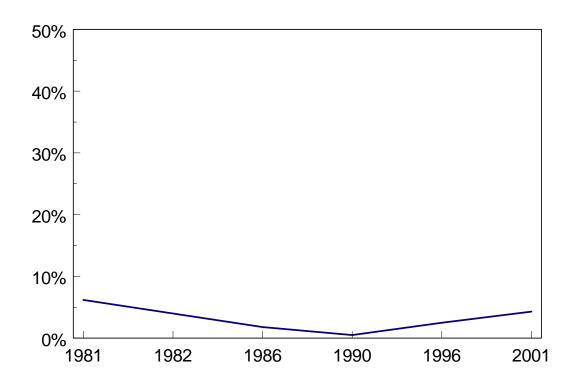


Figure 174. Percentage of Survey Respondents Reporting Boat Purchases, Resident Hunters

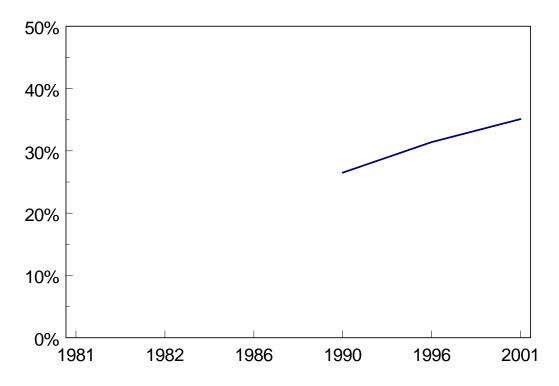


Figure 175. Percentage of Survey Respondents Reporting Purchases of Game Calls, Resident Hunters

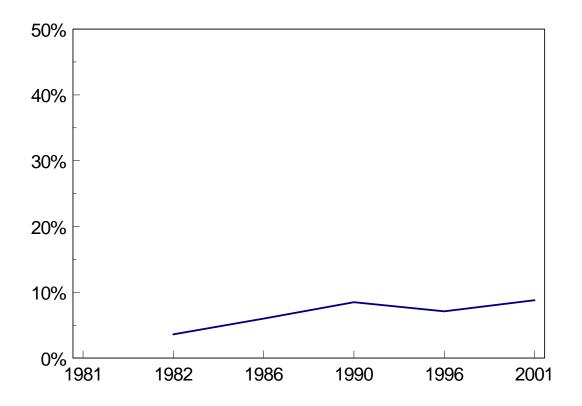
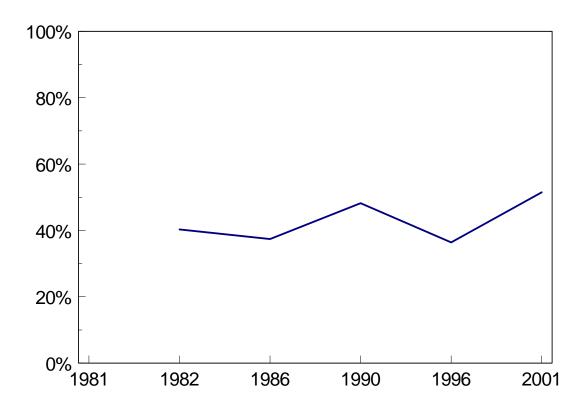
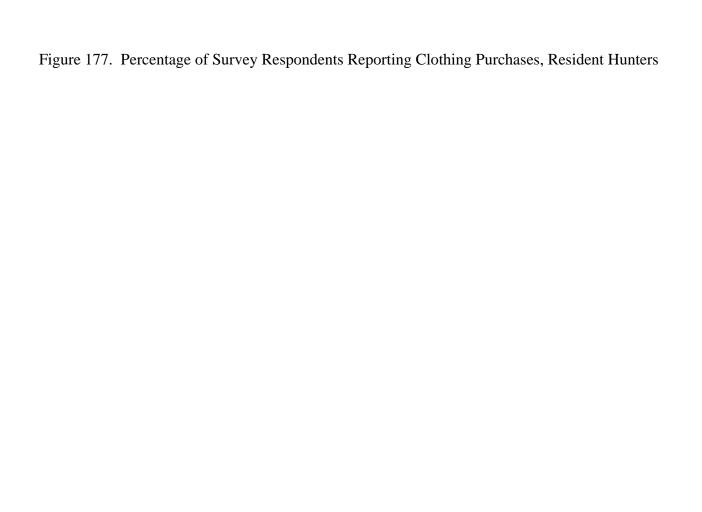


Figure 176. Percentage of Survey Respondents Reporting Camping Equipment Purchases, Resident Hunters





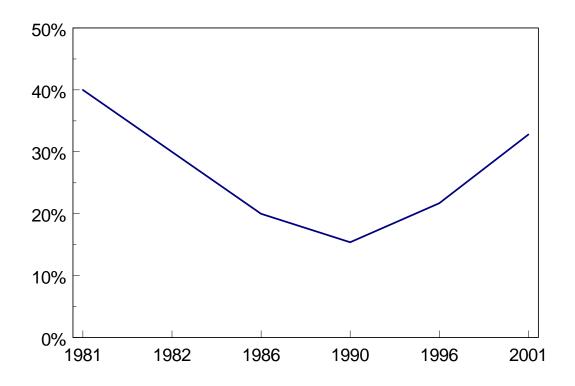


Figure 178. Percentage of Survey Respondents Reporting Purchases of Decoys, Resident Hunters

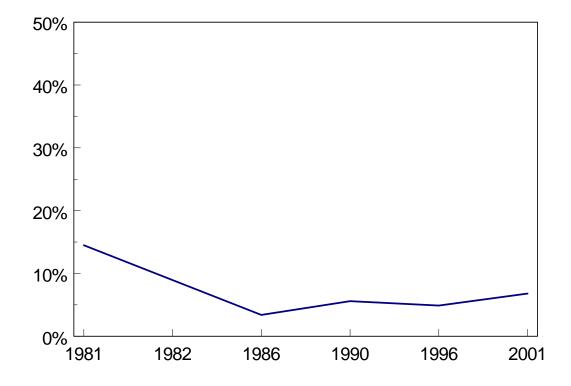


Figure 179. Percentage of Survey Respondents Reporting Dog Purchases, Resident Hunters

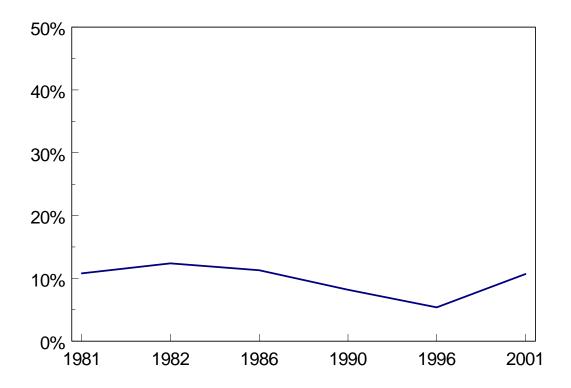
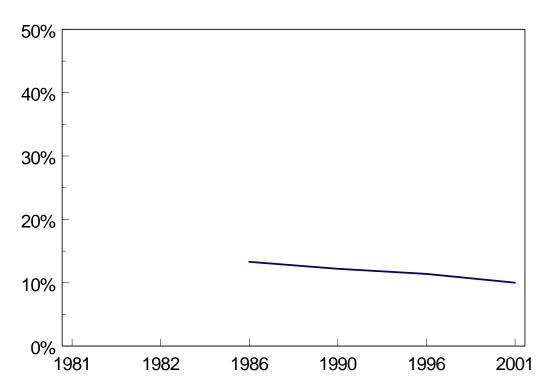
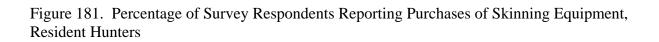


Figure 180. Percentage of Survey Respondents Reporting Other Fixed Expenses, Resident Hunters





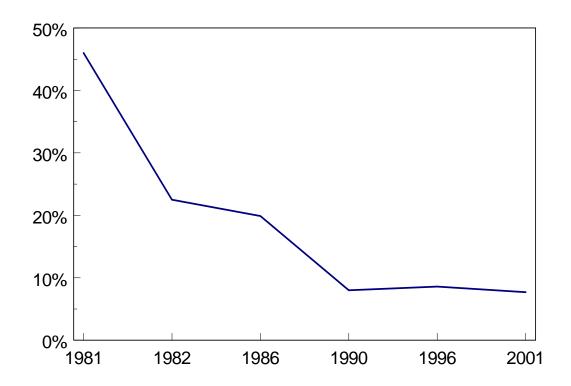


Figure 182. Percentage of Survey Respondents Reporting Purchases of Traps, Resident Hunters

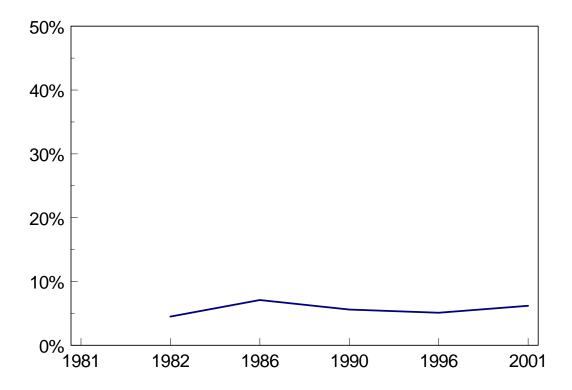


Figure 183. Percentage of Survey Respondents Reporting Vehicle Purchases, Resident Hunters

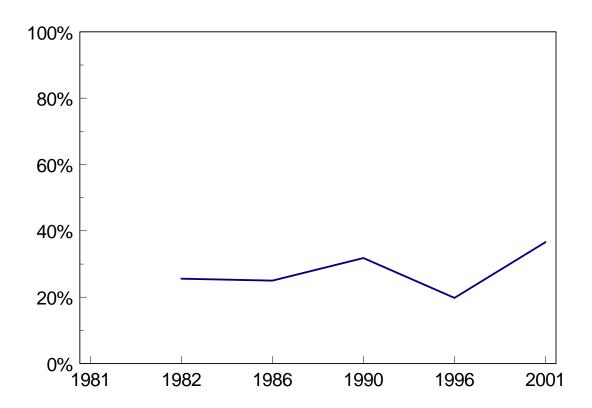


Figure 184. Percentage of Survey Respondents Reporting Purchases of Weapons, Resident Hunters

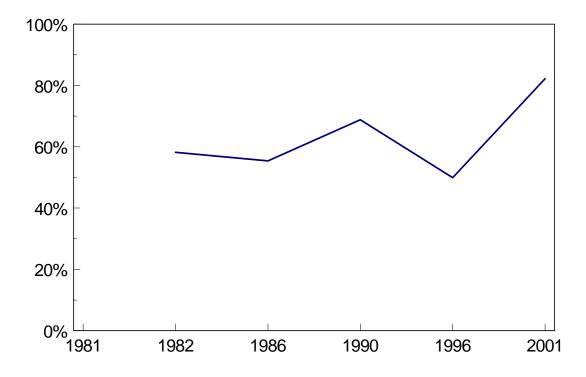


Figure 185. Percentage of Survey Respondents Reporting Fixed Expenses, Resident Hunters

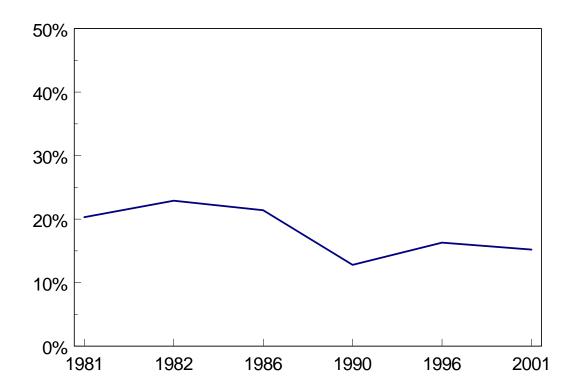
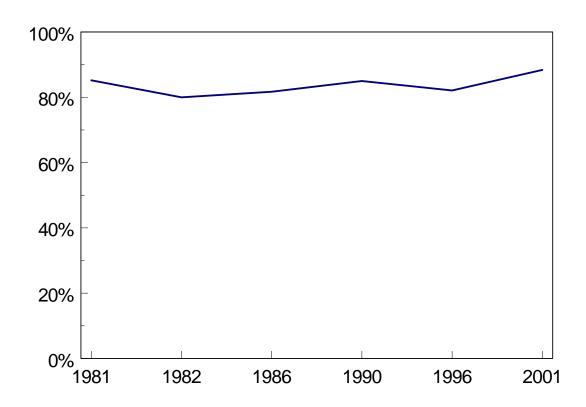
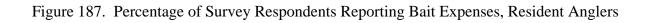


Figure 186. Percentage of Survey Respondents Reporting Access Fees, Resident Anglers





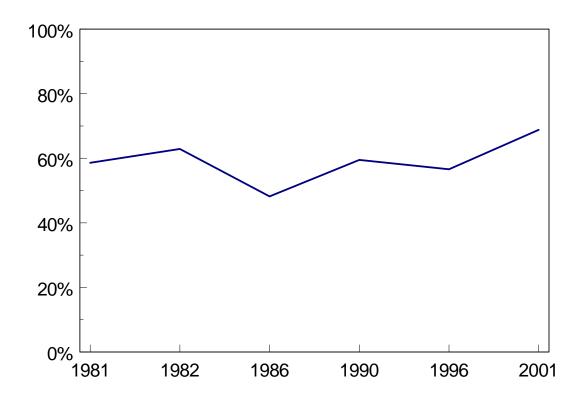


Figure 188. Percentage of Survey Respondents Reporting Fuel (equipment) Expenses, Resident Anglers

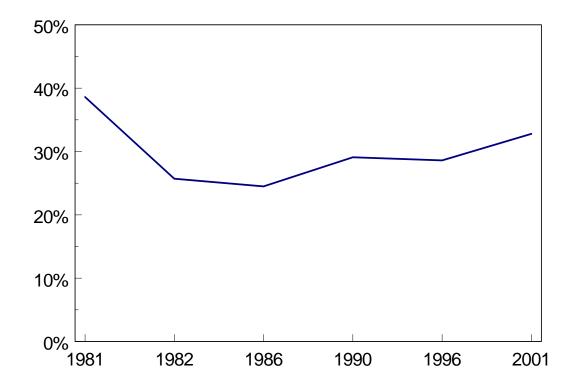


Figure 189. Percentage of Survey Respondents Reporting Film and Film Processing Expenses, Resident Anglers

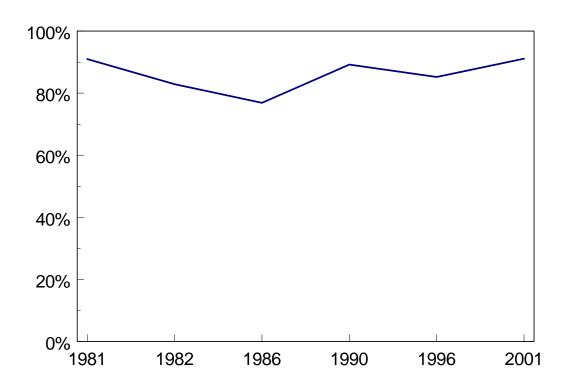


Figure 190. Percentage of Survey Respondents Reporting Food Expenses, Resident Anglers

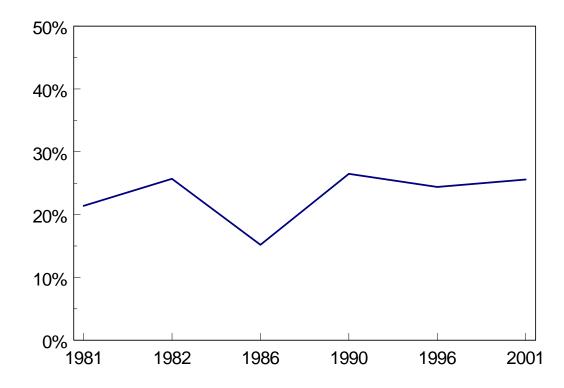


Figure 191. Percentage of Survey Respondents Reporting Lodging Expenses, Resident Anglers

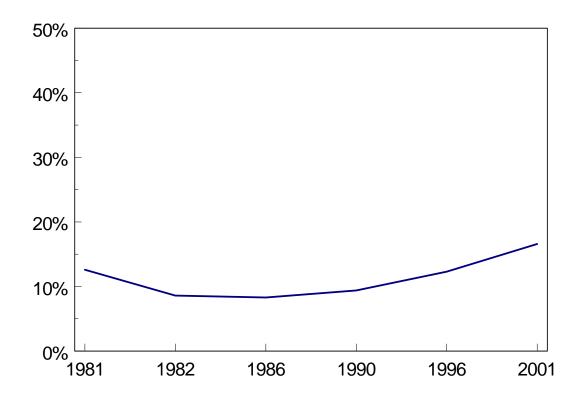


Figure 192. Percentage of Survey Respondents Reporting Meat Processing Expenses, Resident Anglers

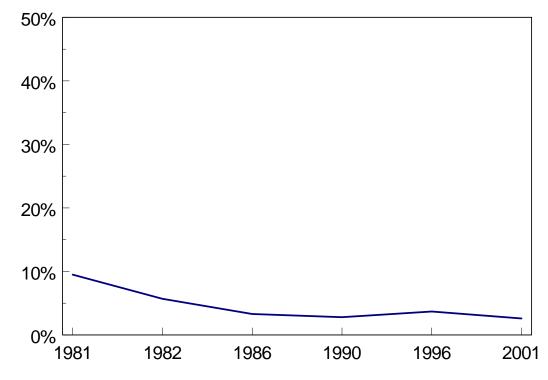


Figure 193. Percentage of Survey Respondents Reporting Other Variable Expenses, Resident Anglers

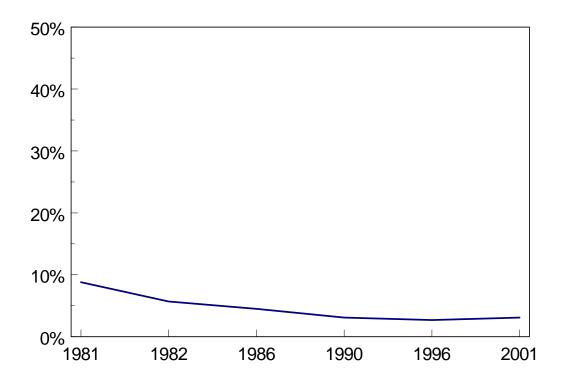


Figure 194. Percentage of Survey Respondents Reporting Rental Expenses, Resident Anglers

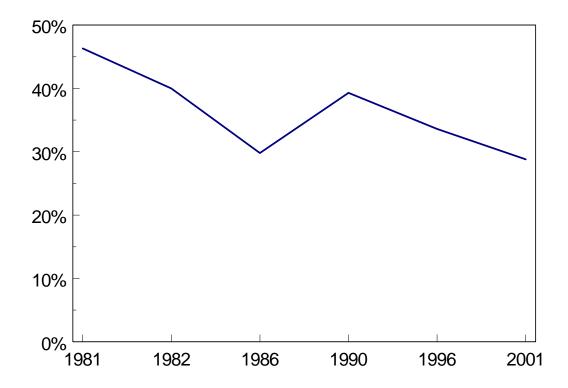


Figure 195. Percentage of Survey Respondents Reporting Repairs, Resident Anglers

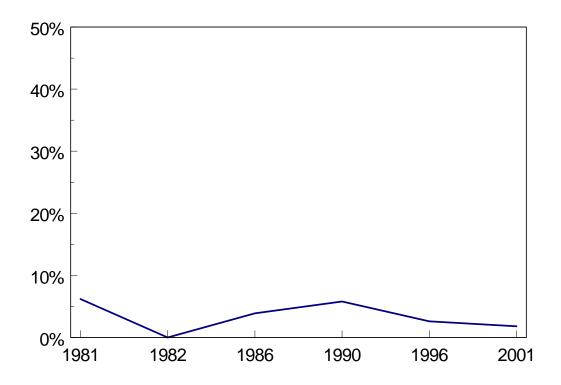


Figure 196. Percentage of Survey Respondents Reporting Taxidermy Expenses, Resident Anglers

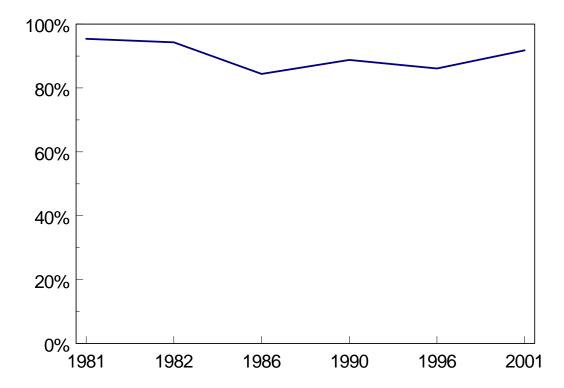


Figure 197. Percentage of Survey Respondents Reporting Transportation Expenses, Resident Anglers

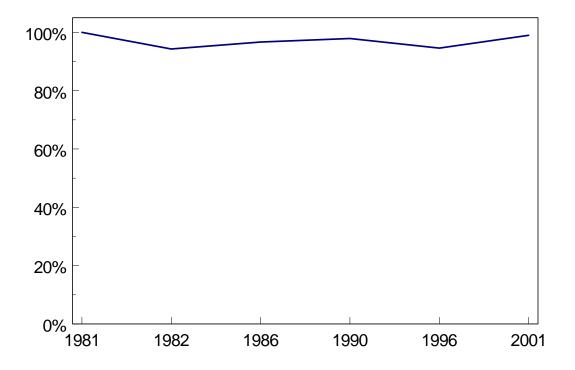


Figure 198. Percentage of Survey Respondents Reporting Variable Expenses, Resident Anglers

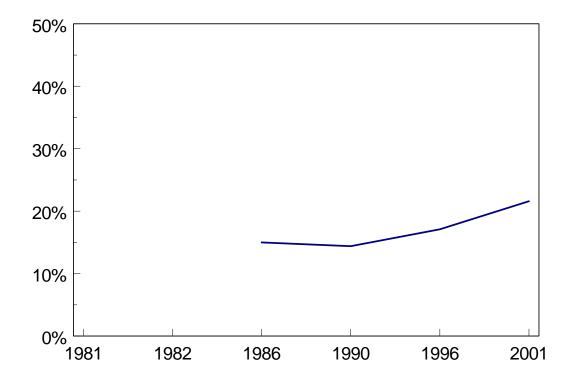


Figure 199. Percentage of Survey Respondents Reporting Ice Auger Purchases, Resident Anglers

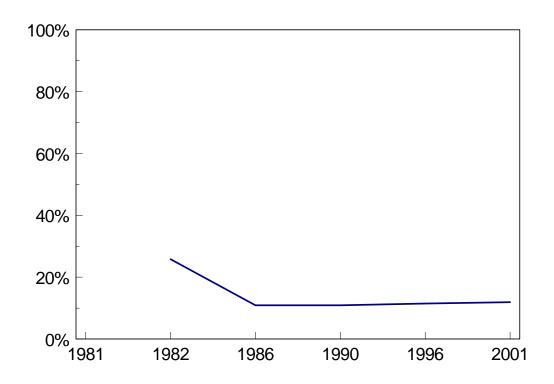


Figure 200. Percentage of Survey Respondents Reporting Boat Purchases, Resident Anglers

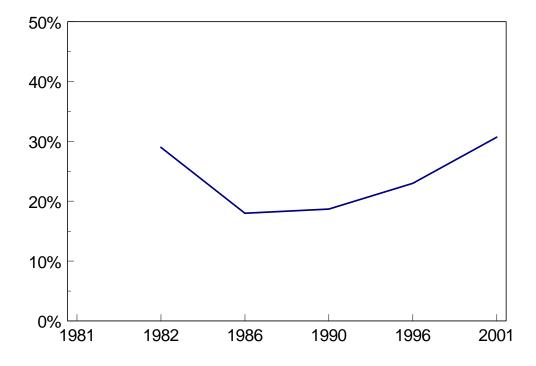


Figure 201. Percentage of Survey Respondents Reporting Camping Equipment Purchases, Resident Anglers

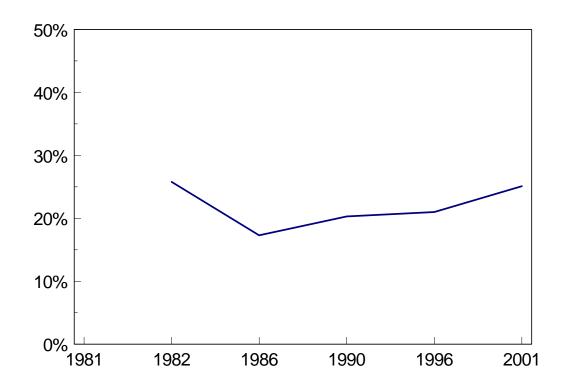


Figure 202. Percentage of Survey Respondents Reporting Clothing Purchases, Resident Anglers

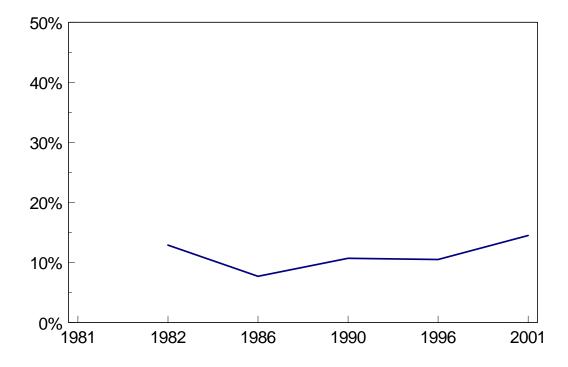


Figure 203. Percentage of Survey Respondents Reporting Purchases of Fishing Electronics, Resident Anglers

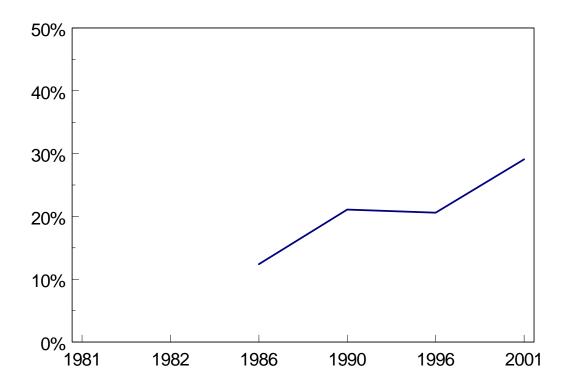


Figure 204. Percentage of Survey Respondents Reporting Ice Fish House Purchases, Resident Anglers

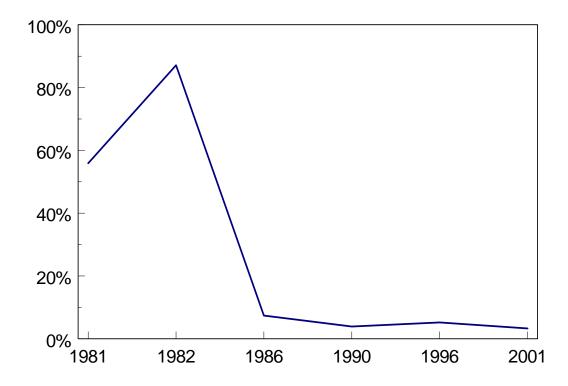


Figure 205. Percentage of Survey Respondents Reporting Other Fixed Expenses, Resident Anglers

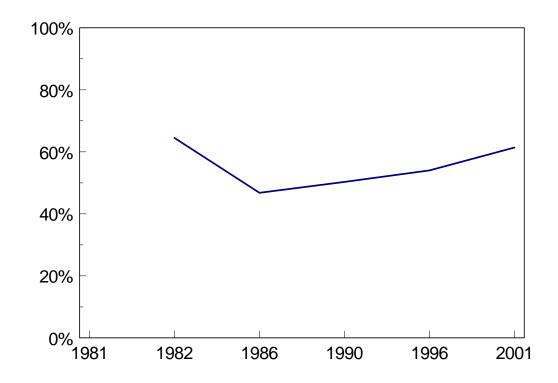


Figure 206. Percentage of Survey Respondents Reporting Purchases of Rods/Reels, Resident Anglers

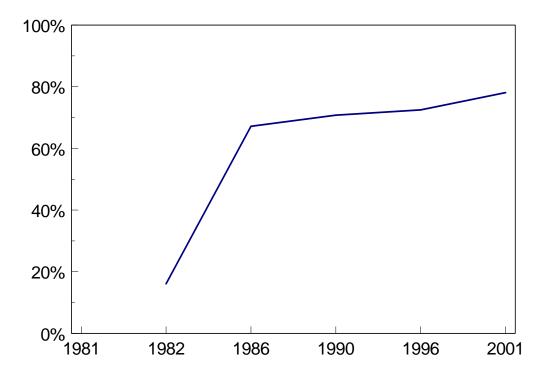


Figure 207. Percentage of Survey Respondents Reporting Tackle Expenses, Resident Anglers

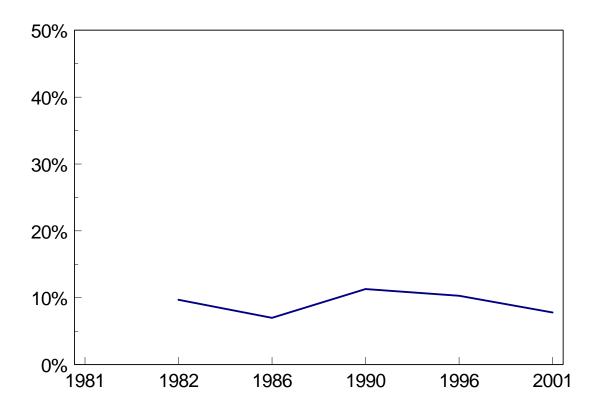


Figure 208. Percentage of Survey Respondents Reporting Vehicle Purchases, Resident Anglers

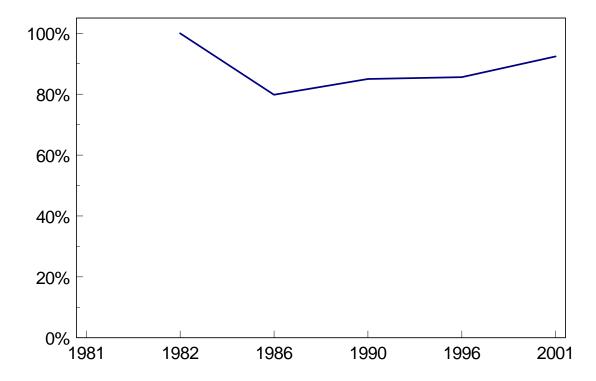


Figure 209. Percentage of Survey Respondents Reporting Fixed Expenses, Resident Anglers

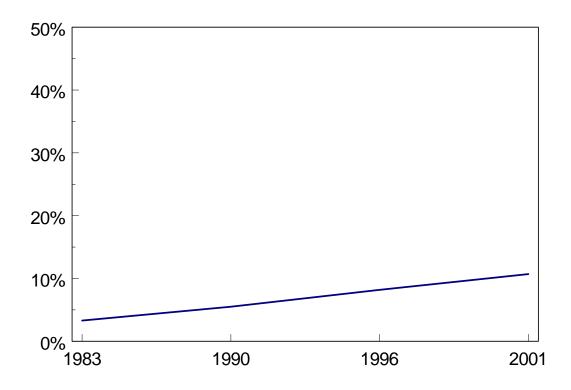


Figure 210. Percentage of Survey Respondents Reporting Access Fees, Nonresident Hunters

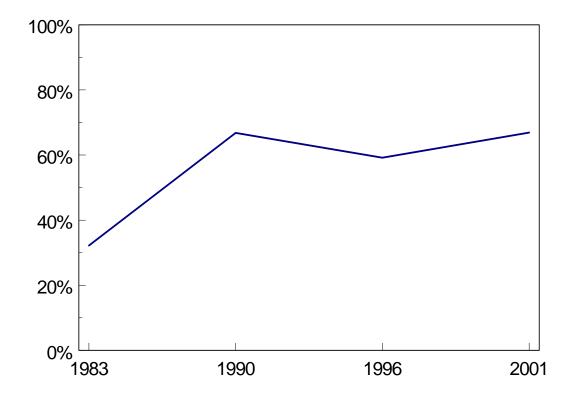


Figure 211. Percentage of Survey Respondents Reporting Ammunition Expenses, Nonresident Hunters

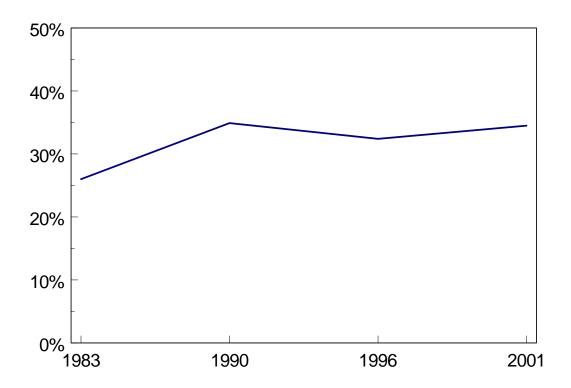
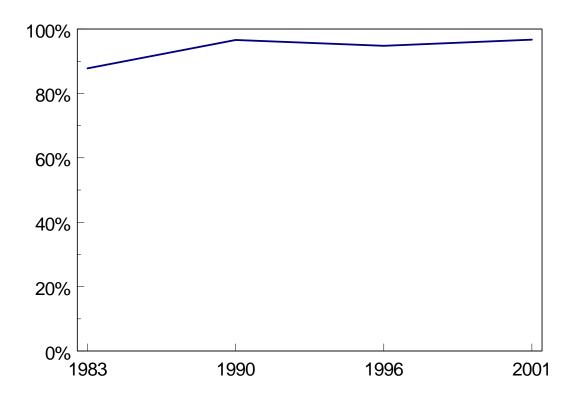
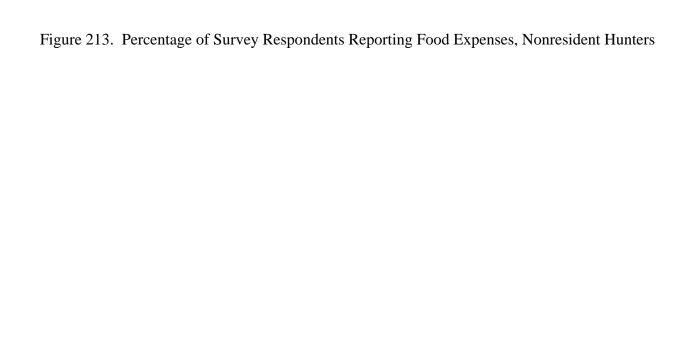


Figure 212. Percentage of Survey Respondents Reporting Film and Film Processing Expenses, Nonresident Hunters





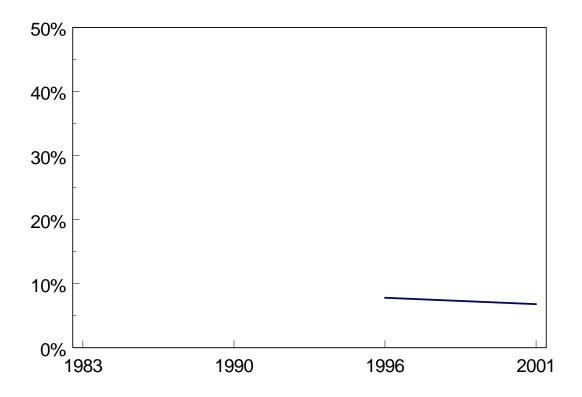
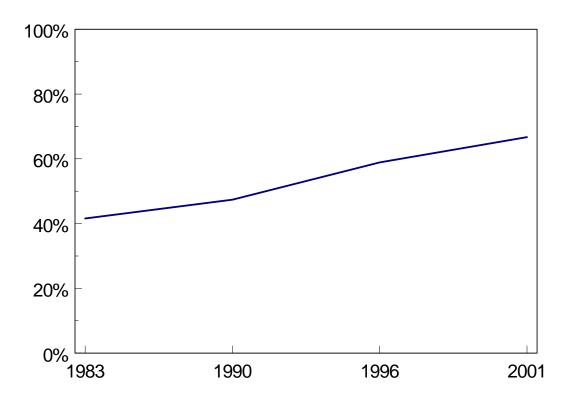
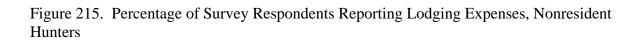


Figure 214. Percentage of Survey Respondents Reporting Guide Fees, Nonresident Hunters





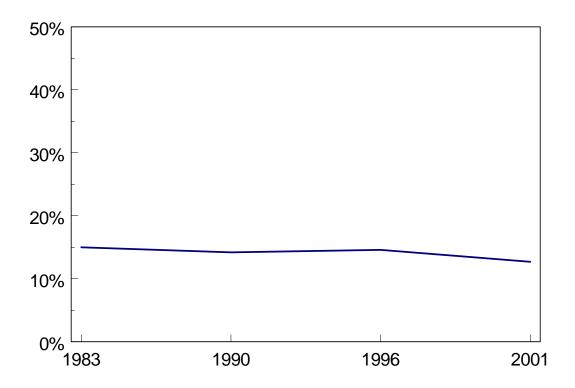
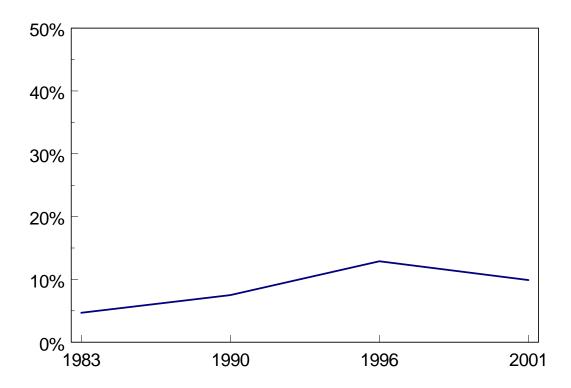
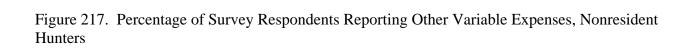


Figure 216. Percentage of Survey Respondents Reporting Meat Processing Expenses, Nonresident Hunters





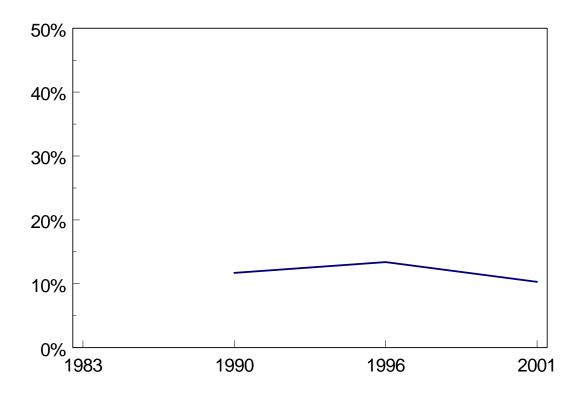
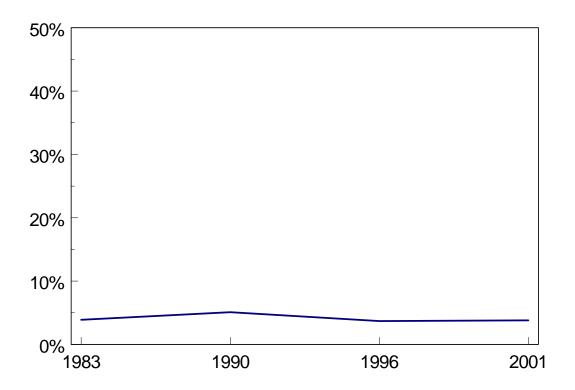
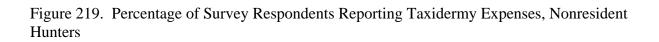


Figure 218. Percentage of Survey Respondents Reporting Repairs, Nonresident Hunters





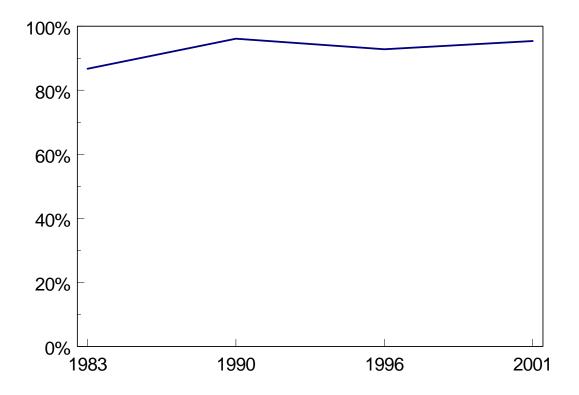
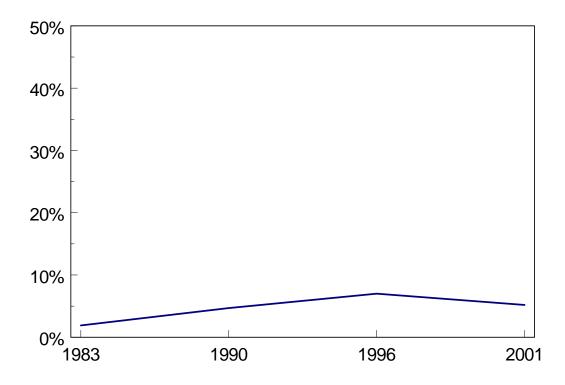
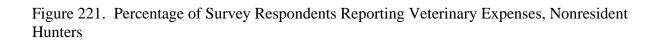


Figure 220. Percentage of Survey Respondents Reporting Transportation Expenses, Nonresident Hunters





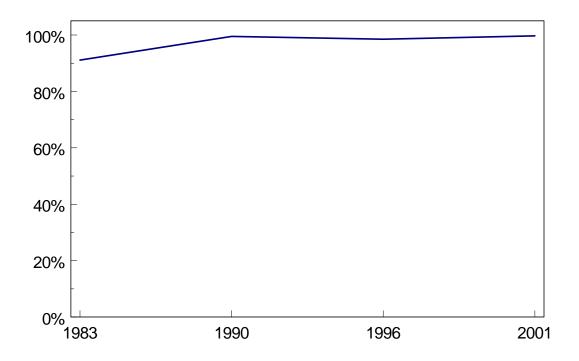


Figure 222. Percentage of Survey Respondents Reporting Variable Expenses, Nonresident Hunters

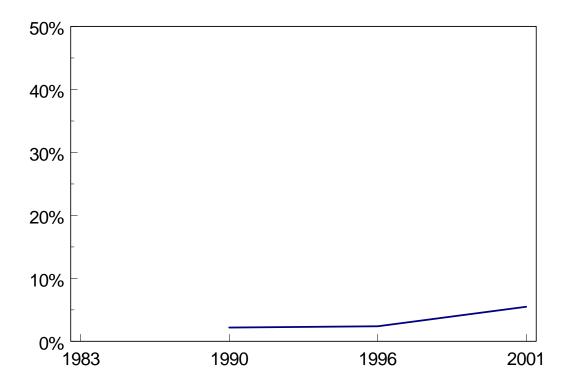


Figure 223. Percentage of Survey Respondents Reporting Binocular/Optics Expenses, Nonresident Hunters

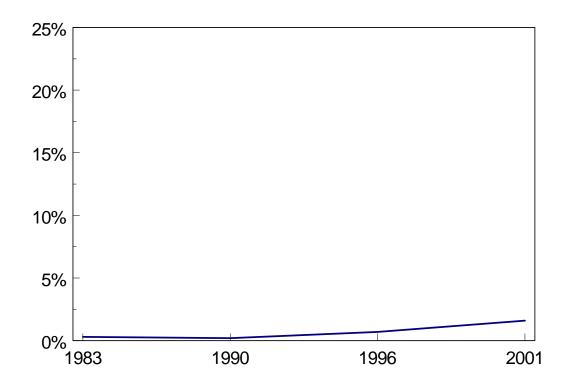


Figure 224. Percentage of Survey Respondents Reporting Boat Purchases, Nonresident Hunters

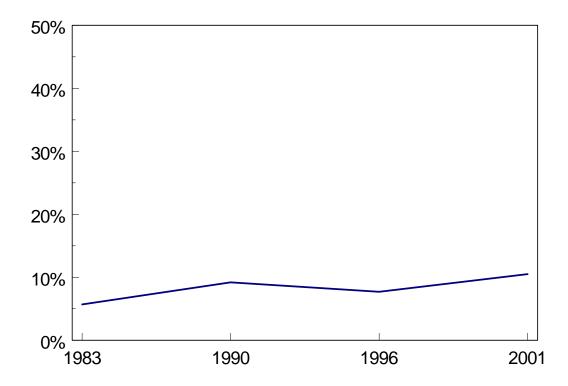


Figure 225. Percentage of Survey Respondents Reporting Camping Equipment Purchases, Nonresident Hunters

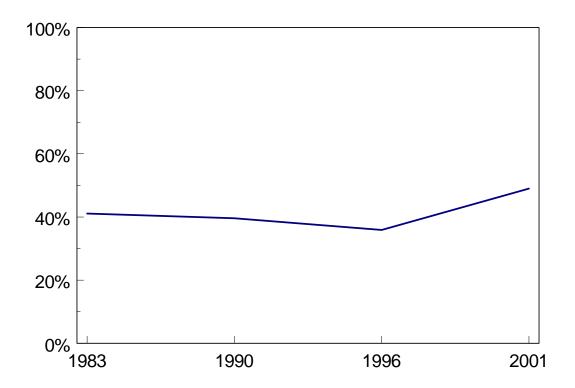


Figure 226. Percentage of Survey Respondents Reporting Clothing Purchases, Nonresident Hunters

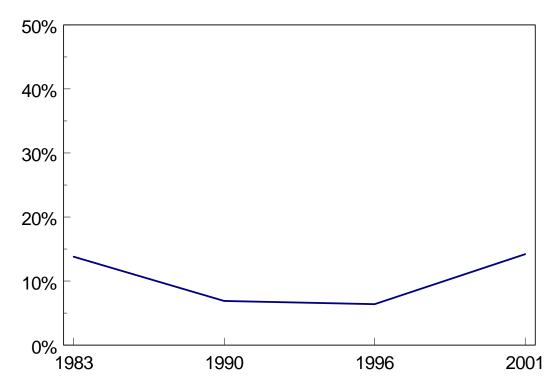


Figure 227.
Percentage of Survey Respondents Reporting Purchases of Decoys, Nonresident Hunters

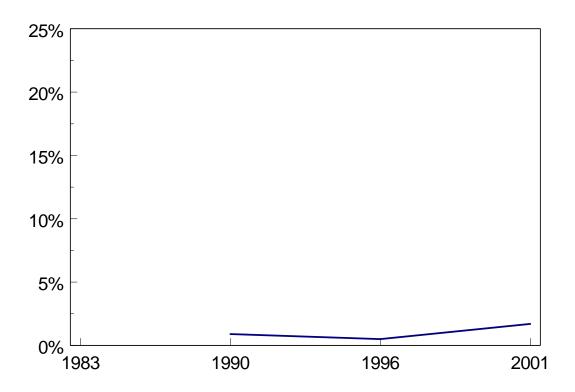
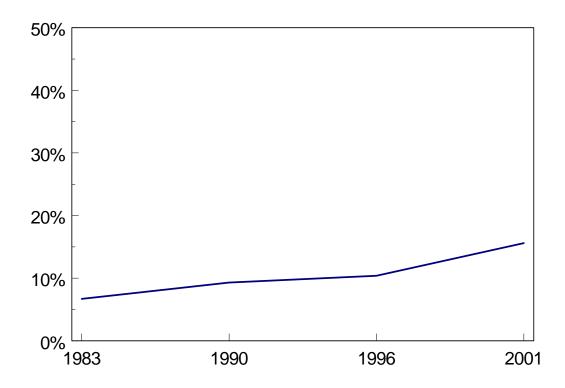
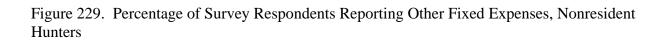


Figure 228. Percentage of Survey Respondents Reporting Dog Purchases, Nonresident Hunters





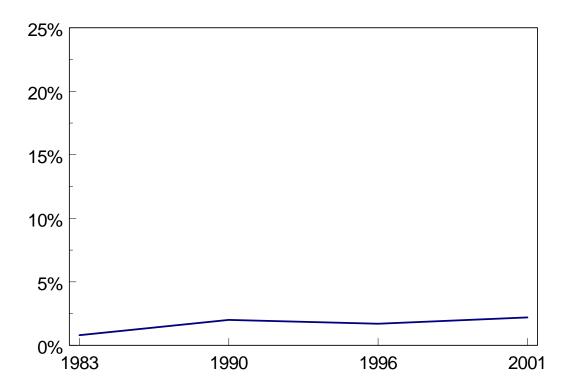
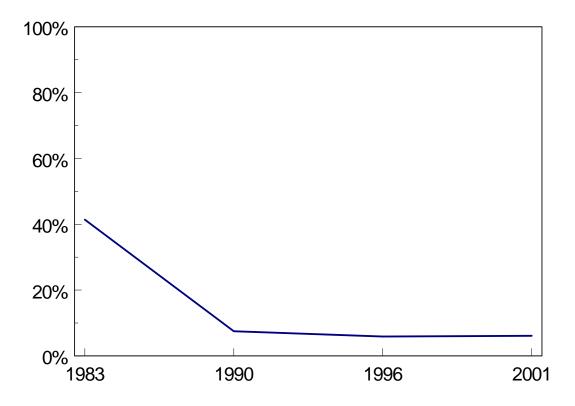
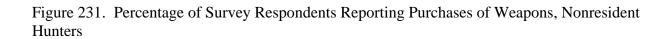


Figure 230. Percentage of Survey Respondents Reporting Vehicle Purchases, Nonresident Hunters





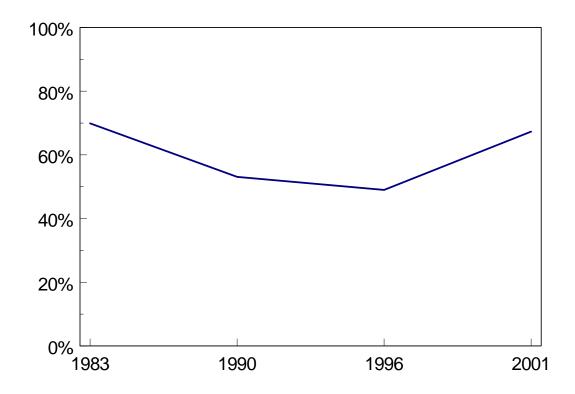


Figure 232. Percentage of Survey Respondents Reporting Fixed Expenses, Nonresident Hunters

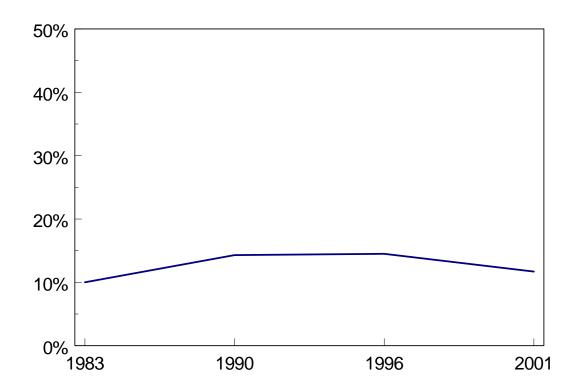
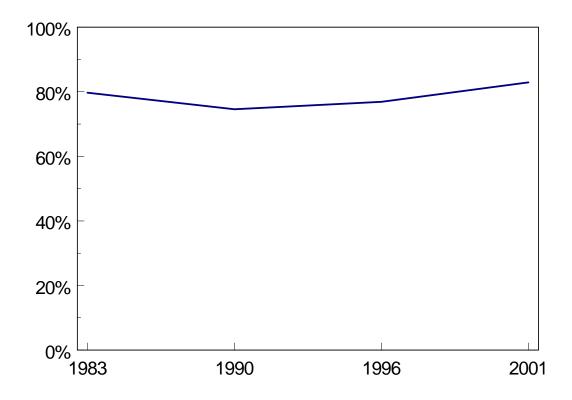
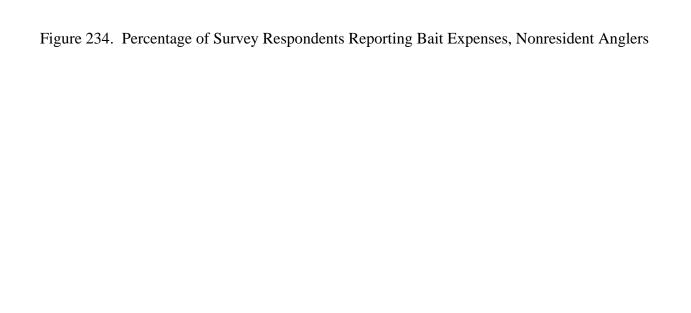


Figure 233. Percentage of Survey Respondents Reporting Access Fees, Nonresident Anglers





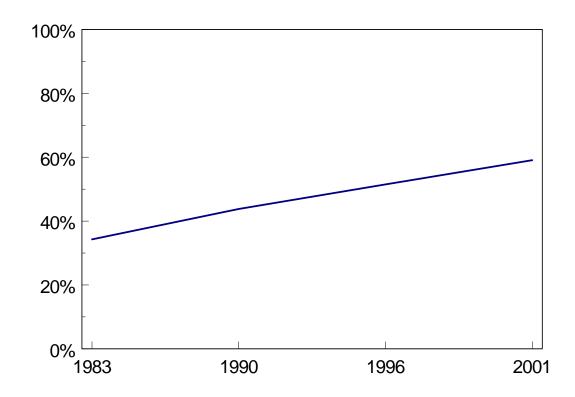


Figure 235. Percentage of Survey Respondents Reporting Fuel (equipment) Expenses, Nonresident Anglers

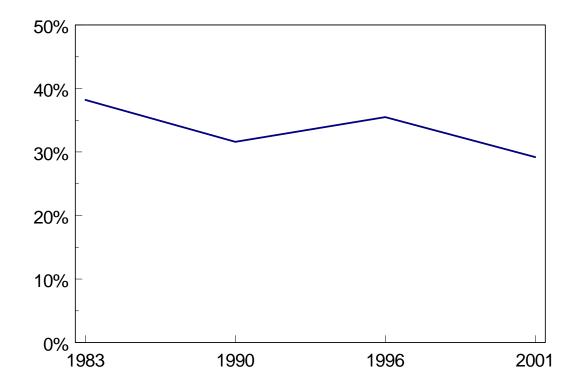


Figure 236. Percentage of Survey Respondents Reporting Film and Film Processing Expenses, Nonresident Anglers

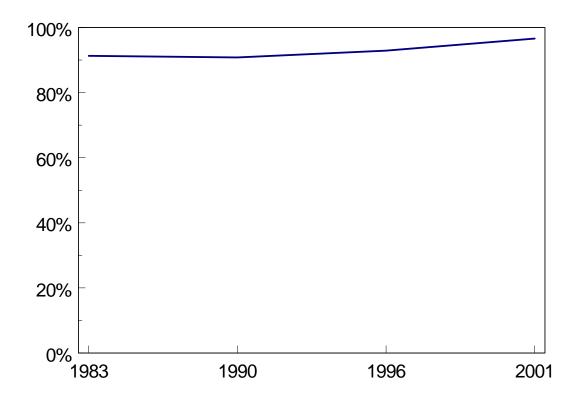


Figure 237. Percentage of Survey Respondents Reporting Food Expenses, Nonresident Anglers

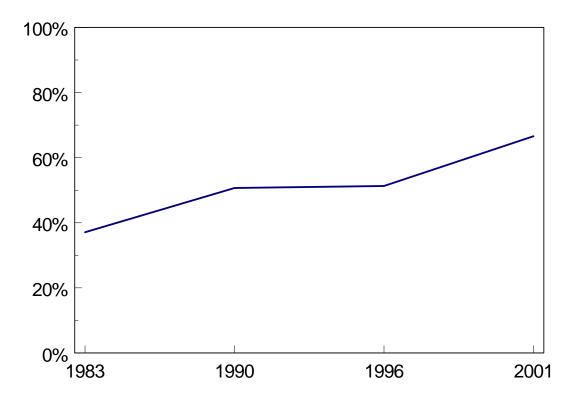


Figure 238. Percentage of Survey Respondents Reporting Lodging Expenses, Nonresident Anglers

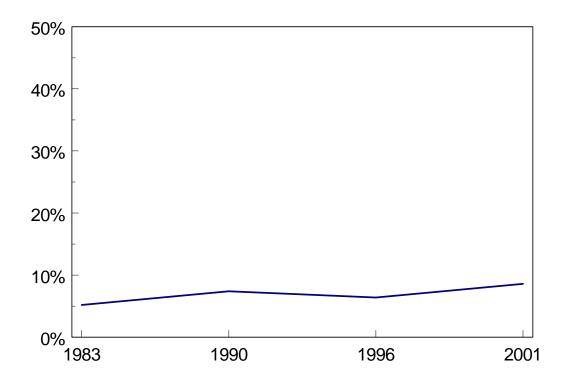
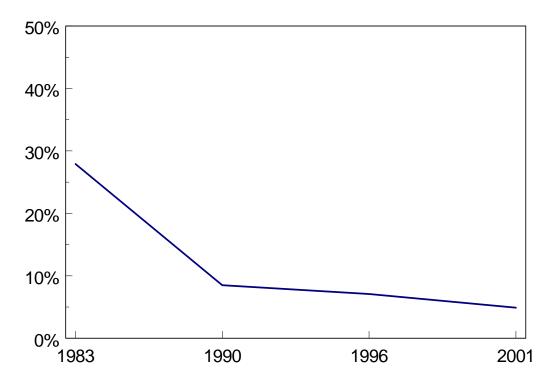
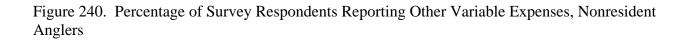


Figure 239. Percentage of Survey Respondents Reporting Meat Processing Expenses, Nonresident Anglers





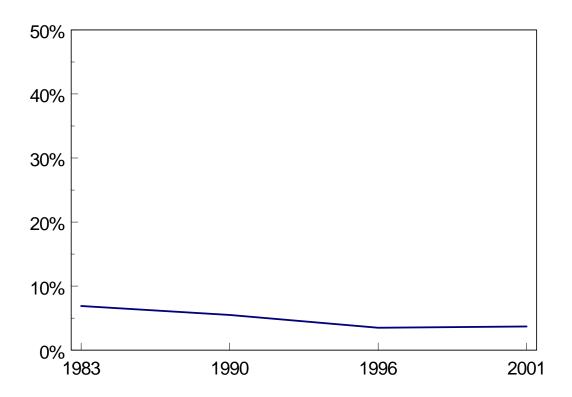


Figure 241. Percentage of Survey Respondents Reporting Rental Expenses, Nonresident Anglers

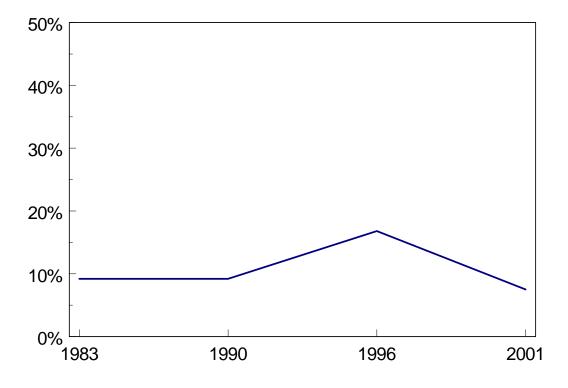


Figure 242. Percentage of Survey Respondents Reporting Repairs, Nonresident Anglers

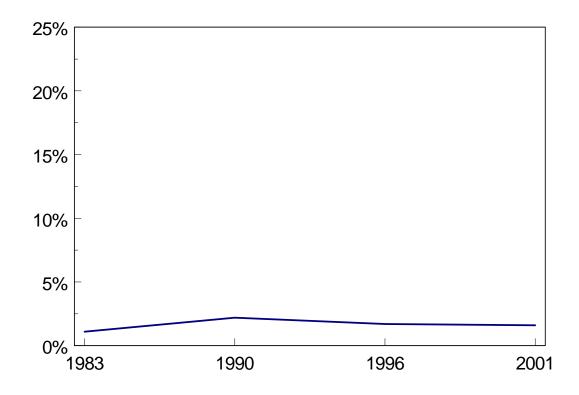
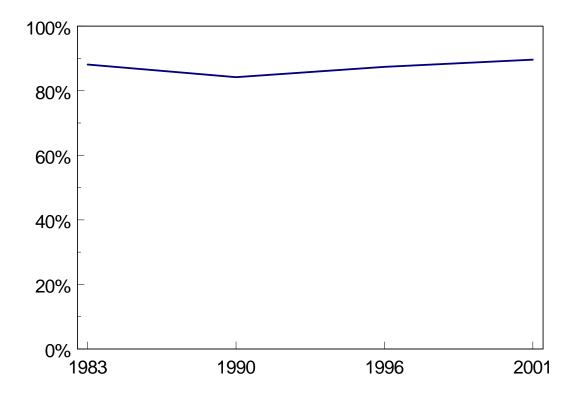
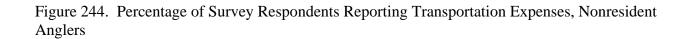


Figure 243. Percentage of Survey Respondents Reporting Taxidermy Expenses, Nonresident Anglers





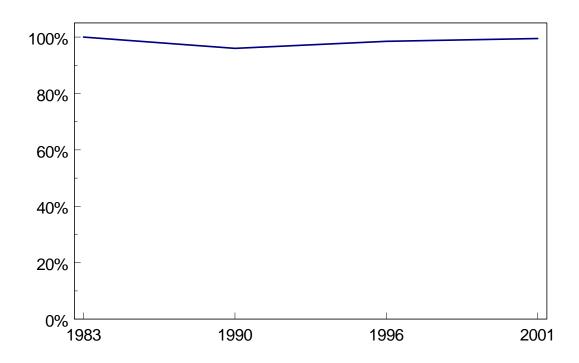


Figure 245. Percentage of Survey Respondents Reporting Variable Expenses, Nonresident Anglers

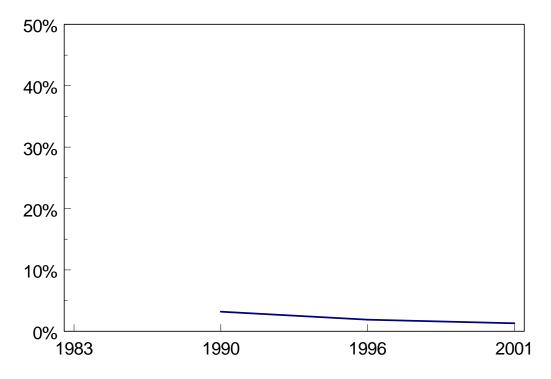


Figure 246. Percentage of Survey Respondents Reporting Ice Auger Purchases, Nonresident Anglers

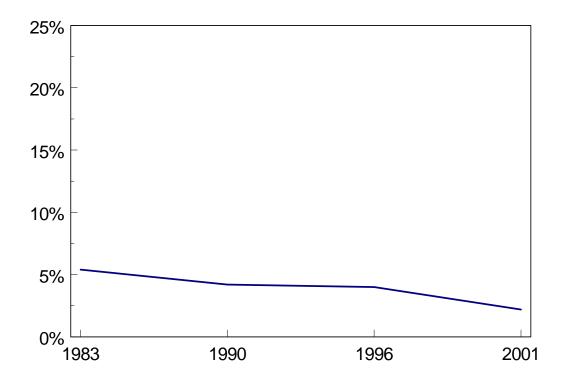


Figure 247. Percentage of Survey Respondents Reporting Boat Purchases, Nonresident Anglers

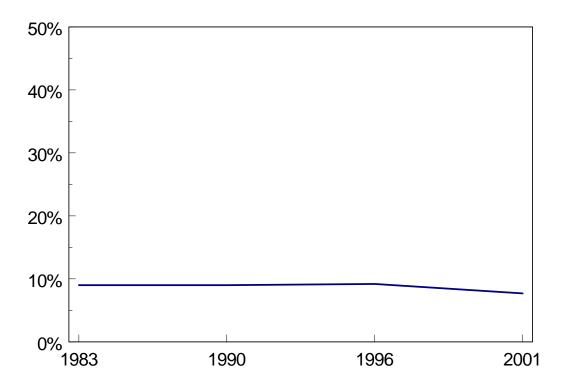


Figure 248. Percentage of Survey Respondents Reporting Camping Equipment Purchases, Nonresident Anglers

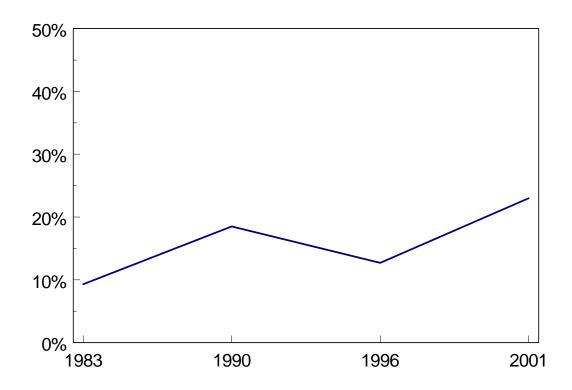


Figure 249. Percentage of Survey Respondents Reporting Clothing Purchases, Nonresident Anglers

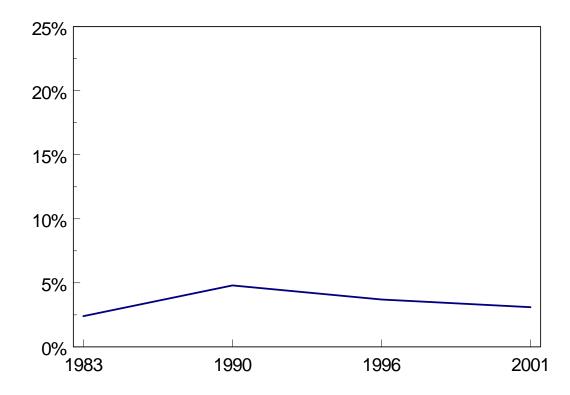


Figure 250. Percentage of Survey Respondents Reporting Purchases of Fishing Electronics, Nonresident Anglers

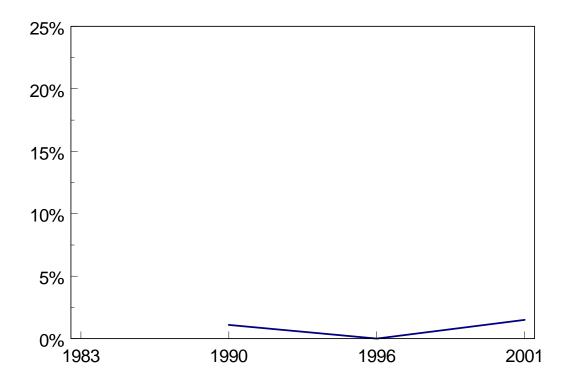


Figure 251. Percentage of Survey Respondents Reporting Ice Fish House Purchases, Nonresident Anglers

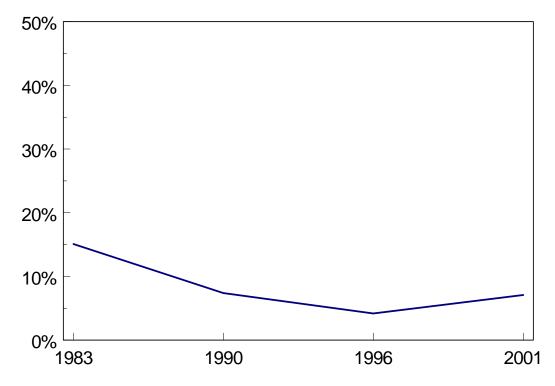


Figure 252. Percentage of Survey Respondents Reporting Other Fixed Expenses, Nonresident Anglers

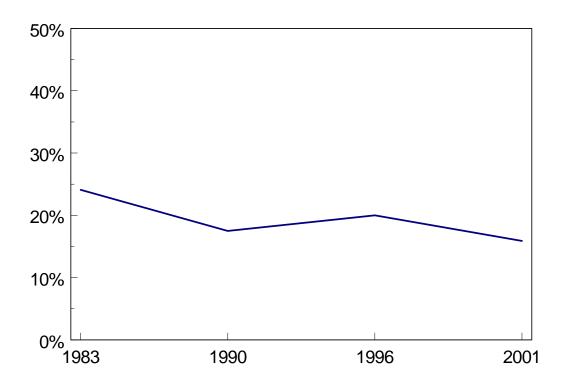


Figure 253. Percentage of Survey Respondents Reporting Purchases of Rods/Reels, Nonresident Anglers

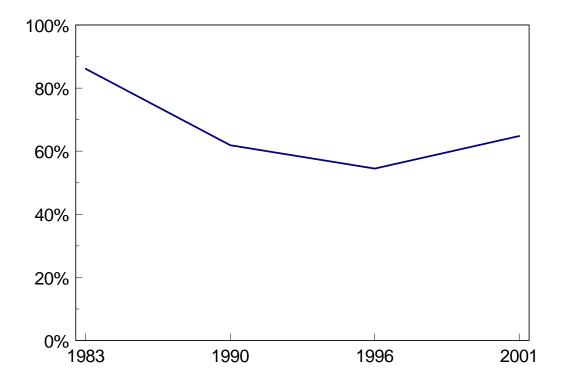


Figure 254. Percentage of Survey Respondents Reporting Tackle Expenses, Nonresident Anglers

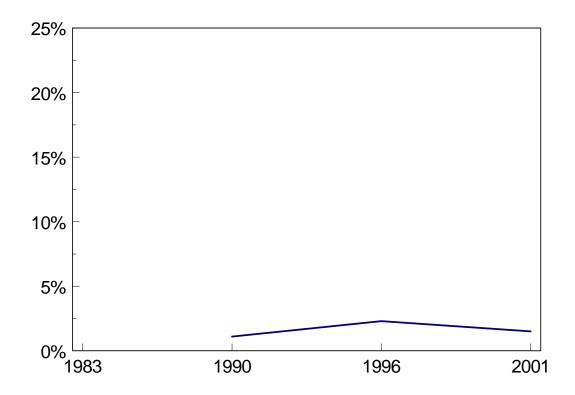


Figure 255. Percentage of Survey Respondents Reporting Vehicle Purchases, Nonresident Anglers

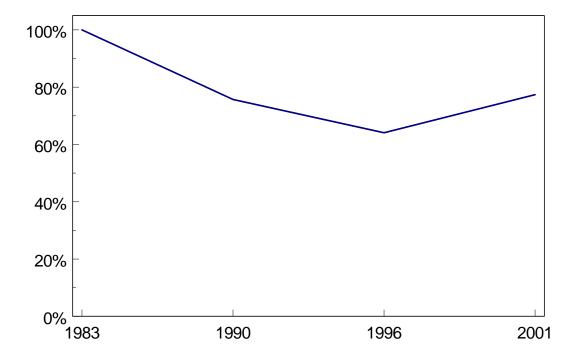


Figure 256. Percentage of Survey Respondents Reporting Fixed Expenses, Nonresident Anglers

SECTION G

Spending Differences within Survey Groups over Time and Spending Differences according to Characteristic and Demographic Variables, by Survey Group

Tables 30 through 419

Most tables in Sections G and I contain letters next to spending levels. Those letters are used to signify statistical difference among spending estimates. Since spending estimates can be numerically different without being statistically different, spending estimates without letters are not statistically different given the testing method and confidence level used. Although a number of spending estimates were found to be statistically different for average spending based on selected participant characteristics, the statistical testing procedure is somewhat influenced by the number of observations. As such, care should be exercised in drawing conclusions from situations were statistical differences in spending are indicated, but the number of observations are low (please refer to pages 11-12 for a more complete discussion of the methodology used to make statistical tests and the limitations associated with the procedure).

To assist in understanding how to interpret tables in Sections G and I, the following hypothetical example is discussed. The following is a listing of average spending based on survey participants' hair color.

	Number of Survey	Average Seasonal		
Characteristic	Respondents	Spending for Durable Goods		
Red	5	\$108.90 ^c		
White	35	\$285.70 ^{bc}		
Black	80	\$409.52 ^{bc}		
Brown	112	\$620.40 ^{ab}		
Blond	52	\$1,025.23 ^a		
Rainbow	3	\$568.00 ^{abc}		
No hair (bald)	27	\$121.45 ^c		

Spending estimates with the same letter are not statistically different. Thus, given the above hypothetical example, average spending for participants with red hair or no hair is statistically different from participants with blond or brown hair, but spending averages are not statistically different from participants with white, black, or rainbow-colored hair. Average spending for participants with white or black hair is statistically different only from participants with blond hair. Spending by participants with blond hair is statistically different from those with white, red, no hair, and black hair, but not statistically difference from brown or rainbow-colored hair. Average spending for participants with rainbow-colored hair is not statistically different from any other hair color. Average spending is not statistically different between participants with brown, blond, or rainbow-colored hair. However, due the low number of survey respondents (i.e., observations) with rainbow and red colored hair, the statistical difference may be misrepresented. In other words, if more observations yielded the same averages for either group, participants with red hair may be statistically different from all other groups and participants with rainbow-colored hair may be statistically different from blond, and/or red and no hair participants.

In most situations in the following tables, average spending, based on various participant characteristics, may be numerically different, yet the spending averages may not be statistically significant (e.g., as is the case above with the difference in spending between blond and brown hair participants). The abbreviation Obs in the tables refers to the number of observations.

Table 30. Nonresident Antelope Archery, Average Variable Spending, by Miles Traveled

	1990		1	1996		2001	
Miles Traveled	Obs	Value	Obs	Value	Obs	Value	
no miles	0		1	573.30	2	342.80	
1 to 300	3	118.80	0		3	458.80	
301 to 600	3	451.90	2	475.30	3	1,056.80	
601 to 900	1	254.60	1	315.30	4	698.40	
901 to 1200	11	445.50	4	541.80	6	423.30	
over 1200	22	497.00	7	698.90	27	649.20	

Table 31. Nonresident Antelope Archery, Average Fixed Spending, by Miles Traveled

	1990		1996		2001	
Miles Traveled	Obs	Value	Obs	Value	Obs	Value
no miles	0		1	2.20	2	30.40
1 to 300	2	24.39	0		1	35.40
301 to 600	2	17.51	0		0	
601 to 900	0		1	59.50	1	25.30
901 to 1200	9	39.38	4	204.30	2	116.70
over 1200	18	66.98	6	175.90	16	123.50

264

Table 32. Nonresident Antelope Archery, Average Variable Spending, by Days Participated

Days	1	990	1	1996 2001		001
Participated	Obs	Value	Obs	Value	Obs	Value
1 to 3	3	233.50	1	235.10	5	693.80
4 to 6	17	407.90	10	567.80	23	620.90
7 to 9	15	496.70	7	671.20	18	590.70
10 to 15	7	547.20	1	366.90	2	312.40
16 to 25	0		0		1	599.30
over 25	0		0		0	

Table 33. Nonresident Antelope Archery, Average Fixed Spending, by Days Participated

Days _	1	990	1	1996 2001		001
Participated	Obs	Value	Obs	Value	Obs	Value
1 to 3	2	24.39	1	2.20	2	30.40
4 to 6	12	34.48	7	212.50	12	167.20
7 to 9	12	50.20	5	111.10	7	29.60
10 to 15	6	97.11	1	36.60	1	35.40
16 to 25	0		0		1	55.80
over 25	0		0		0	

265

Table 34. Nonresident Antelope Archery, Average Variable Spending, with and without Access Fees and/or Guide Fees

Access Fees and/or Guide		990	1	996	2	001
Fees	Obs	Value	Obs	Value	Obs	Value
With Fees	0		1	1,341.50 ^a	10	1,197.10 ^a
Without Fees	42	450.38	18	535.40 ^b	39	452.20 ^b

Table 35. Nonresident Antelope Archery, Average Fixed Spending, with and without Access Fees and/or Guide Fees

Access Fees and/or Guide	1	990	1	996	2	001
Fees	Obs	Value	Obs	Value	Obs	Value
With Fees	0		1	59.50	2	335.11 ^a
Without Fees	32	51.48	13	155.60	21	80.77 ^b

266

Table 36. Nonresident Antelope Archery, Average Variable Spending, Rural and Urban Residence

Location of	1	1990		996	2	2001		
Residence	Obs	Value	Obs	Value	Obs	Value		
Rural	21	469.76	8	596.70	22	671.90		
Urban	21	431.02	11	564.10	27	549.10		

Table 37. Nonresident Antelope Archery, Average Fixed Spending, Rural and Urban Residence

Location of	1	1990		996	2	2001		
Residence	Obs	Value	Obs	Value	Obs	Value		
Rural	14	69.22	6	218.10	12	113.74		
Urban	18	37.70	8	96.60	11	91.03		

267

Table 38. Nonresident Antelope Archery, Average Variable Spending, by Location of Residence

	1	1990		1996		001
Type of Residence	Obs	Value	Obs	Value	Obs	Value
rural non-farm	10	356.90	4	615.70	9	795.90
farm or ranch	7	610.90	3	665.00	7	651.90
city under 2,500 population	4	504.80	1	315.30	6	509.40
city 2,500 to 50,000 population	17	433.60	7	410.80	18	539.20
over 50,000 population	4	420.20	4	832.40	9	568.90

Table 39. Nonresident Antelope Archery, Average Fixed Spending, by Location of Residence

	1	1990		1996		001
Type of Residence	Obs	Value	Obs	Value	Obs	Value
rural non-farm	6	85.18	3	403.50	1	45.60
farm or ranch	4	53.98	2	19.40	7	163.90
city under 2,500 population	4	60.52	1	59.50	4	43.10
city 2,500 to 50,000 population	16	29.04	5	141.80	5	98.80
over 50,000 population	2	106.98	3	21.30	6	84.50

Table 40. Nonresident Antelope Archery, Average Variable Spending, by Amount of Rural Spending

	1990		1996		2001	
Amount of Rural Spending	Obs	Value	Obs	Value	Obs	Value
Zero	0		0		2	182.80
1 to 24.9 percent	3	490.00	0		3	543.50
25 to 49.9 percent	5	566.00	2	574.40	2	426.60
50 to 74.9 percent	1	729.50	6	588.20	11	732.50
75 to 100 percent	31	414.20	9	581.10	24	627.60

Table 41. Nonresident Antelope Archery, Average Fixed Spending, by Amount of Rural Spending

	1	1990		1996		.001
Amount of Rural Spending	Obs	Value	Obs	Value	Obs	Value
Zero	0		0		1	5.00
1 to 24.9 percent	2	124.18	0		1	157.30
25 to 49.9 percent	4	51.58	2	279.70	2	45.60
50 to 74.9 percent	1	3.74	4	339.00	5	157.70
75 to 100 percent	23	51.38	7	23.50	11	116.20

269

Table 42. Nonresident Antelope Archery, Average Variable Spending, by Age of Participant

Age of	1	1990		996	2001		
Participant	Obs	Value	Obs	Value	Obs	Value	
6 to 18 years	0		0		1	35.60	
19 to 45 years	30	424.50	14	586.90	32	611.50	
46 to 65 years	9	522.10	4	598.80	16	625.10	
over 65 years	2	376.50	0		0		

Table 43. Nonresident Antelope Archery, Average Fixed Spending, by Age of Participant

Age of	1	1990		996	2001		
Participant	Obs	Value	Obs	Value	Obs	Value	
6 to 18 years	0		0		0		
19 to 45 years	23	48.63	10	179.90	16	110.48	
46 to 65 years	7	52.90	3	82.10	7	85.51	
over 65 years	1	155.15	0		0		

271

Table 44. Nonresident Antelope Archery, Average Variable Spending, by Income of Participant

	1990	1	996	2	2001
Income of Participant	Obs Value	e Obs	Value	Obs	Value
Under \$10,000	na	0		0	
\$10,000 to \$25,000	na	2	450.60	1	0.00
\$25,000 to \$50,000	na	9	634.20	15	478.60
over \$50,000	na	8	546.20	30	708.00

Table 45. Nonresident Antelope Archery, Average Fixed Spending, by Income of Participant

	1990		1	996	2001	
Income of Participant	Obs	Value	Obs	Value	Obs	Value
Under \$10,000		na	0		0	
\$10,000 to \$25,000		na	0		1	5.00
\$25,000 to \$50,000		na	7	125.80	9	145.10
over \$50,000		na	7	171.50	10	86.70

Table 46. Nonresident Antelope Archery, Average Variable Spending, by Value Placed on a Day of Hunting

Value per Day of	1	1990		.996	2001		
Hunting	Obs	Value	Obs	Value	Obs	Value	
Zero	0		0		1	1,249.40	
\$1 to \$50	9	277.00	4	447.50 ^b	17	428.50	
\$51 to \$100	12	433.80	9	534.70 ^{ab}	12	514.50	
\$101 to \$200	11	556.10	1	940.20 ^{ab}	6	743.60	
\$201 to \$500	3	587.30	1	1,341.50 ^a	5	1,279.90	
\$501 to \$5,000	0		0		1	751.70	
\$5,001 to \$15,000	0		0		0		
Over \$15,000 (priceless)	0		0		0		

Table 47. Nonresident Antelope Archery, Average Fixed Spending, by Value Placed on a Day of Hunting

Value per Day of	1	1990		996	2001	
Hunting	Obs	Value	Obs	Value	Obs	Value
Zero	0		0		0	
\$1 to \$50	8	52.78	2	30.80	10	43.80
\$51 to \$100	8	50.20	9	172.80	6	117.60
\$101 to \$200	8	66.89	1	403.50	0	
\$201 to \$500	3	51.92	1	59.50	3	275.90
\$501 to \$5,000	0		0		1	309.70
\$5,001 to \$15,000	0		0		0	
Over \$15,000 (priceless)	0		0		0	

Table 48. Resident Antelope Archery, Average Variable Spending, by Miles Traveled

_	1982	1986	1990	1996	2001
Miles Traveled	Obs Value	Obs Value	Obs Value	Obs Value	Obs Value
no miles	9 341.78 ^{bc}	$2 0.00^{c}$	2 17.20 ^b	0	0
1 to 300	157 144.20 ^d	70 145.30 ^{bc}	56 166.80 ^b	98 133.73 ^c	63 147.23 ^c
301 to 600	58 225.54 ^{cd}	62 255.20 ^{bc}	34 308.20 ^{ab}	85 207.26 ^{bc}	87 221.14 ^c
601 to 900	24 281.81 ^{bcd}	28 278.50 ^{bc}	31 326.20 ^{ab}	51 278.49 ^b	34 267.61 ^{bc}
901 to 1200	17 407.61 ^{ab}	32 370.80 ^{ab}	31 388.00 ^{ab}	40 399.73 ^a	49 382.86 ^{ab}
over 1200	18 540.84 ^a	31 648.40 ^a	31 566.80 ^a	50 458.90 ^a	47 417.87 ^a

Table 49. Resident Antelope Archery, Average Fixed Spending, by Miles Traveled

_	1982		1986		1	1990		1996		2001
Miles Traveled	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value
no miles	6	268.51	2	53.00	2	22.10	0		0	
1 to 300	93	211.24	69	235.10	52	196.00	85	231.40	38	579.40
301 to 600	47	215.42	62	346.70	33	523.10	79	293.00	68	510.20
601 to 900	15	293.62	28	293.50	28	264.60	46	441.40	29	548.30
901 to 1200	13	292.70	32	306.10	27	424.60	37	533.00	40	1,117.70
over 1200	16	301.68	31	735.70	28	606.60	47	589.70	45	510.90

Table 50. Resident Antelope Archery, Average Variable Spending, by Days Participated

Days		1982		1986		1990		1996		001
Participated	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value
1 to 3	109	157.90 ^{ab}	54	164.06 ^b	54	161.48 ^c	120	162.20 ^b	110	215.80
4 to 6	99	213.60 ^{ab}	78	221.52 ^b	48	308.64 ^{bc}	125	252.70 ^{ab}	114	242.40
7 to 9	44	271.60 ^{ab}	49	371.48 ^{ab}	35	316.62 ^{bc}	40	294.70 ^{ab}	38	371.50
10 to 15	19	427.70 ^a	43	349.55 ^{ab}	39	458.53 ^b	55	389.20 ^{ab}	18	536.10
16 to 25	3	556.20 ^a	9	555.90 ^a	11	349.24 ^{bc}	18	460.50 ^{ab}	1	609.50
over 25	1	0.00^{b}	7	574.97 ^a	6	1,027.74 ^a	2	516.00 ^a	1	375.80

Table 51. Resident Antelope Archery, Average Fixed Spending, by Days Participated

Days1982		1	1986		1990		996	2001		
Participated	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value
1 to 3	66	209.00	54	356.90	49	209.10^{b}	108	294.40 ^b	79	719.20
4 to 6	66	240.00	78	293.60	43	406.70^{b}	111	349.70^{b}	88	572.90
7 to 9	34	238.20	49	326.10	35	241.10^{b}	37	458.20 ^b	35	606.30
10 to 15	14	296.50	43	425.70	35	367.00^{b}	54	517.40 ^b	17	340.10
16 to 25	3	156.70	9	526.80	9	385.40^{b}	18	598.60 ^b	1	336.50
over 25	1	85.20	7	226.00	6	1,921.60 ^a	2	1,539.90 ^a	1	509.20

276

Table 52. Resident Antelope Archery, Average Variable Spending, with and without Access Fees and/or Guide Fees

Access Fees and/or Guide	1	982	1	986		1990	1	996	2	001
Fees	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value
With Fees	1	978.70 ^a	5	518.70	1	1,598.00 ^a	5	431.80	2	683.10 ^a
Without Fees	282	217.20^{b}	238	279.20	197	315.50^{b}	360	256.30	289	266.80^{b}

Table 53. Resident Antelope Archery, Average Fixed Spending, with and without Access Fees and/or Guide Fees

Access Fees and/or Guide	1	982	1	986	. <u> </u>	1990	1	996	2	2001
Fees	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value
With Fees	1	653.80	5	402.90	1	1,715.20	5	256.90	2	1,295.40
Without Fees	189	231.60	237	342.10	180	357.50	326	391.50	227	633.80

Table 54. Resident Antelope Archery, Average Variable Spending, Rural and Urban Residence

Location of	1982	1986	1990		1996		2	001
Residence	Obs Value	Obs Value	Obs	Value	Obs	Value	Obs	Value
Rural	na	na	68	253.93 ^b	149	230.12	80	252.11
Urban	na	na	127	360.07 ^a	215	279.35	202	273.06

277

Table 55. Resident Antelope Archery, Average Fixed Spending, Rural and Urban Residence

Location of	1982	1986	1990	1996	2001		
Residence	Obs Value	Obs Value	Obs Value	Obs Value	Obs Value		
Rural	na	na	64 328.70	142 279.07 ^b	67 518.90		
Urban	na	na	115 387.10) 193 474.13 ^a	156 687.90		

Table 56. Resident Antelope Archery, Average Variable Spending, by Location of Residence

	1982	1986	1990		1996		2001	
Type of Residence	Obs Value	Obs Value	Obs	Value	Obs	Value	Obs	Value
rural non-farm	na	na	18	250.82	31	249.00	21	261.50
farm or ranch	na	na	20	235.10	48	201.25	16	188.24
city under 2,500 population	na	na	30	268.36	70	241.55	43	271.29
city 2,500 to 50,000 population	na	na	99	352.44	152	275.71	125	265.69
over 50,000 population	na	na	28	387.07	63	288.12	77	285.03

Table 57. Resident Antelope Archery, Average Fixed Spending, by Location of Residence

	1982	1986	1990		1996		2001	
Type of Residence	Obs Value	Obs Value	Obs	Value	Obs	Value	Obs	Value
rural non-farm	na	na	16	196.60	29	177.10 ^b	16	251.30
farm or ranch	na	na	19	411.00	47	371.90 ^{ab}	14	893.40
city under 2,500 population	na	na	29	347.60	66	257.80 ^{ab}	37	492.90
city 2,500 to 50,000 population	na	na	89	447.00	134	432.30 ^{ab}	91	647.20
over 50,000 population	na	na	26	181.90	59	569.20 ^a	65	744.80

Table 58. Resident Antelope Archery, Average Variable Spending, by Amount of Rural Spending

	1982 1986		1990	1996	2001
Amount of Rural Spending	Obs Value	Obs Value	Obs Value	Obs Value	Obs Value
Zero	na	na	34 186.22 ^b	51 159.02 ^b	2 111.70
1 to 24.9 percent	na	na	30 431.42 ^a	52 280.19 ^{ab}	38 241.10
25 to 49.9 percent	na	na	22 401.23 ^a	48 245.66 ^{ab}	40 274.30
50 to 74.9 percent	na	na	28 419.52 ^a	62 294.49 ^a	54 295.60
75 to 100 percent	na	na	77 286.85 ^{ab}	133 288.16 ^a	115 301.30

Table 59. Resident Antelope Archery, Average Fixed Spending, by Amount of Rural Spending

	1982	1986	1990		1996		2001	
Amount of Rural Spending	Obs Value	Obs Value	Obs	Value	Obs	Value	Obs	Value
Zero	na	na	30	134.30	47	245.20 ^b	2	1,738.30 ^a
1 to 24.9 percent	na	na	26	690.90	49	651.50 ^a	34	624.70 ^{ab}
25 to 49.9 percent	na	na	22	376.30	45	476.20 ^{ab}	36	923.00 ^{ab}
50 to 74.9 percent	na	na	26	525.80	54	320.30 ^{ab}	49	299.80 ^b
75 to 100 percent	na	na	74 2	285.80	122	378.90 ^{ab}	82	711.90 ^{ab}

280

Table 60. Resident Antelope Archery, Average Variable Spending, by Age of Participant

Age of	8		1986		1	1990		996	2	2001	
Participant	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value	
6 to 18 years	11	201.68		na		na	34	180.40	21	238.72	
19 to 45 years	256	219.39		na		na	253	272.30	201	279.19	
46 to 65 years	13	259.99		na		na	50	250.00	66	252.24	
over 65 years	0			na		na	3	180.40	0		

Table 61. Resident Antelope Archery, Average Fixed Spending, by Age of Participant

Age of	Age of1982		1	1986		1990		1996		001
Participant	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value
6 to 18 years	11	196.37		na		na	33	312.60	19	626.80
19 to 45 years	170	240.36		na		na	236	374.50	158	653.40
46 to 65 years	7	188.53		na		na	41	606.10	50	623.30
over 65 years	0			na		na	3	177.40	0	

281

Table 62. Resident Antelope Archery, Average Variable Spending, by Income of Participant

	1982	1986	1990	1996		2001	
Income of Participant	Obs Value	Obs Value	Obs Value	Obs	Value	Obs	Value
Under \$10,000	na	na	na	13	221.91	12	248.45
\$10,000 to \$25,000	na	na	na	64	300.93	26	215.55
\$25,000 to \$50,000	na	na	na	142	269.63	100	306.50
over \$50,000	na	na	na	119	242.62	127	261.95

Table 63. Resident Antelope Archery, Average Fixed Spending, by Income of Participant

	1982	1986	1990	1996		2001	
Income of Participant	Obs Value	Obs Value	Obs Value	Obs	Value	Obs	Value
Under \$10,000	na	na	na	13	373.80	10	749.40
\$10,000 to \$25,000	na	na	na	62	426.70	19	468.70
\$25,000 to \$50,000	na	na	na	130	348.20	80	619.50
over \$50,000	na	na	na	110	439.30	101	714.30

282

Table 64. Resident Antelope Archery, Average Variable Spending, by Value Placed on a Day of Hunting

Value per Day of	1	982	1	1986		1990		1996		001
Hunting	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value
Zero		na	0		1	300.10	2	226.50	0	
\$1 to \$50		na	113	272.00	88	233.20	144	187.80	90	163.20
\$51 to \$100		na	57	270.40	53	363.60	109	285.90	92	300.60
\$101 to \$200		na	24	391.60	31	419.80	60	368.10	53	371.60
\$201 to \$500		na	5	336.50	4	462.80	5	536.60	12	521.40
\$501 to \$5,000		na	2	79.60	2	454.20	6	424.20	0	
\$5,001 to \$15,000		na	0		0		0		1	101.60
Over \$15,000 (priceless)		na	0		0		0		0	

Table 65. Resident Antelope Archery, Average Fixed Spending, by Value Placed on a Day of Hunting

Value per Day of	1982	1	1986		1990		1996		2001	
Hunting	Obs Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value	
Zero	na	0		0		2	118.10	0		
\$1 to \$50	na	113	326.40	83	337.90	133	273.30	66	371.50^{b}	
\$51 to \$100	na	57	394.30	49	301.70	100	465.80	72	755.80 ^b	
\$101 to \$200	na	24	329.10	28	304.20	56	565.90	49	670.10^{b}	
\$201 to \$500	na	5	441.00	3	430.50	5	545.80	11	1,739.50 ^a	
\$501 to \$5,000	na	2	249.90	2	352.50	6	863.40	0		
\$5,001 to \$15,000	na	0		0		0		0		
Over \$15,000 (priceless)	na	0		0		0		0		

Table 66. Resident Antelope Firearm, Average Variable Spending, by Miles Traveled

	1	982	1986		1990		1996		2001	
Miles Traveled	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value
no miles	5	574.56 ^a	3	123.44	0		1	341.70	1	96.50 ^b
1 to 300	92	213.66 ^c	87	182.95	76	169.41 ^c	216	146.00	77	132.98 ^b
301 to 600	124	336.08 ^{bc}	109	272.02	77	242.18 ^{bc}	305	235.50	170	227.74 ^{ab}
601 to 900	82	325.06 ^{bc}	48	316.39	61	344.04 ^{ab}	199	267.00	137	310.05 ^{ab}
901 to 1200	61	482.72 ^{ab}	27	356.73	32	348.67 ^{ab}	125	357.10	76	360.08 ^{ab}
over 1200	22	533.09 ^a	5	210.25	6	435.87 ^a	60	428.60	36	449.33 ^a

Table 67. Resident Antelope Firearm, Average Fixed Spending, by Miles Traveled

	1	1982		1986		1990		1996		.001
Miles Traveled	Obs	Value								
no miles	4	251.60	3	83.06	0		1	20.70	0	
1 to 300	63	104.80	87	97.60	54	151.90	212	74.80	36	121.9 ^{8b}
301 to 600	96	120.00	109	117.55	59	74.50	297	115.00	86	173.96 ^{ab}
601 to 900	60	178.10	48	164.21	45	194.20	199	129.00	72	172.39 ^b
901 to 1200	50	121.50	27	122.42	24	306.00	124	140.10	47	248.90 ^{ab}
over 1200	17	202.90	5	139.07	5	141.90	59	188.80	30	366.42 ^a

284

Table 68. Resident Antelope Firearm, Average Variable Spending, by Days Participated

Days	1	1982		1986		1990		1996		001
Participated	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value
1 to 3	357	330.80 ^{ab}	279	257.30	236	259.20	893	237.10	465	256.60 ^a
4 to 6	27	493.60 ^a	9	270.30	20	344.10	96	293.10	42	437.30 ^a
7 to 9	3	210.70^{b}	1	49.20	2	142.50	13	341.20	1	60.90^{b}
10 to 15	0		0		0		1	364.60	0	
16 to 25	0		0		0		0		0	
over 25	0		0		0		0		0	

Table 69. Resident Antelope Firearm, Average Fixed Spending, by Days Participated

Days	1	1982		1986		1990		1996		001
Participated	Obs	Value								
1 to 3	266	128.80	279	125.00	172	159.40	879	109.80	244	187.80
4 to 6	23	203.60	9	63.90	16	177.00	95	141.50	30	292.26
7 to 9	2	197.10	1	28.30	2	26.30	12	167.70	0	
10 to 15	0		0		0		1	32.20	0	
16 to 25	0		0		0		0		0	
over 25	0		0		0		0		0	

Table 70. Resident Antelope Firearm, Average Variable Spending, with and without Access Fees and/or Guide Fees

Access Fees and/or Guide	1000		1	986	1	990	1	996	2001		
Fees	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value	
With Fees	18	499.83 ^a	7	645.45 ^a	2	476.20	11	363.26 ^a	5	378.08	
Without Fees	369	333.48 ^b	282	247.33 ^b	258	264.20	1,006	242.64 ^b	505	269.66	

Table 71. Resident Antelope Firearm, Average Fixed Spending, with and without Access Fees and/or Guide Fees

Access Fees and/or Guide	1	982	1	986	1	990	1	996	2	001
Fees	Obs	Value								
With Fees	14	263.37	7	176.30	2	318.10	11	211.02	2	438.10
Without Fees	277	128.75	282	121.40	189	157.10	988	113.30	270	198.60

Table 72. Resident Antelope Firearm, Average Variable Spending, Rural and Urban Residence

Location of	1982	1986	1	990	1	996	2	001
Residence	Obs Value	Obs Value	Obs	Value	Obs	Value	Obs	Value
Rural	na	na	133	258.54	430	232.51	213	273.12
Urban	na	na	126	274.74	577	253.57	290	270.20

Table 73. Resident Antelope Firearm, Average Fixed Spending, Rural and Urban Residence

Location of	1982	1986	1	990	1	996	2	001
Residence	Obs Value	Obs Value	Obs	Value	Obs	Value	Obs	Value
Rural	na	na	93	185.16	420	95.12 ^b	114	173.68
Urban	na	na	97	134.90	569	130.21 ^a	159	218.56

287

Table 74. Resident Antelope Firearm, Average Variable Spending, by Location of Residence

	1982	1986	1990	1996	2001
Type of Residence	Obs Value	Obs Value	Obs Value	Obs Value	Obs Value
rural non-farm	na	na	31 229.95	114 220.31	51 262.66
farm or ranch	na	na	42 282.60	122 240.66	60 272.15
city under 2,500 population	na	na	60 256.48	194 234.56	102 278.93
city 2,500 to 50,000 population	na	na	92 256.35	333 240.64	155 256.91
over 50,000 population	na	na	34 324.51	244 271.22	135 285.45

Table 75. Resident Antelope Firearm, Average Fixed Spending, by Location of Residence

	1982	1986		990	1996		2001	
Type of Residence	Obs Value	Obs Value	Obs	Value	Obs	Value	Obs	Value
rural non-farm	na	na	21	124.20	108	120.55	27	211.35
farm or ranch	na	na	28	271.18	120	79.17	39	132.16
city under 2,500 population	na	na	44	159.51	192	90.79	48	186.22
city 2,500 to 50,000 population	na	na	70	120.11	328	109.04	82	226.92
over 50,000 population	na	na	27	173.25	241	159.02	77	209.65

Table 76. Resident Antelope Firearm, Average Variable Spending, by Amount of Rural Spending

	1982	1986	1990		1996		2001	
Amount of Rural Spending	Obs Value	Obs Value	Obs	Value	Obs	Value	Obs	Value
Zero	na	na	32	221.82	90	167.19 ^c	26	146.20 ^b
1 to 24.9 percent	na	na	18	306.33	96	255.26 ^{ab}	26	229.42 ^{ab}
25 to 49.9 percent	na	na	23	242.25	94	319.45 ^a	36	341.96 ^a
50 to 74.9 percent	na	na	38	310.20	159	268.41 ^{ab}	100	245.45 ^{ab}
75 to 100 percent	na	na	138	271.32	514	246.15 ^b	297	287.91 ^a

Table 77. Resident Antelope Firearm, Average Fixed Spending, by Amount of Rural Spending

	1982	1986	1990		1996		2001	
Amount of Rural Spending	Obs Value	Obs Value	Obs	Value	Obs	Value	Obs	Value
Zero	na	na	23	101.68	88	85.49 ^b	17	103.54
1 to 24.9 percent	na	na	15	171.26	94	218.32 ^a	13	114.45
25 to 49.9 percent	na	na	16	300.27	93	202.13 ^a	23	251.32
50 to 74.9 percent	na	na	29	191.26	158	167.59 ^{ab}	59	184.59
75 to 100 percent	na	na	103	143.15	504	75.20 ^b	152	207.47

289

Table 78. Resident Antelope Firearm, Average Variable Spending, by Age of Participant

Age of	Age of1982		1986		1	1990		996	2	001
Participant	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value
6 to 18 years	24	217.57		na		na	63	187.68	24	214.97
19 to 45 years	275	358.76		na		na	594	258.78	280	293.66
46 to 65 years	70	319.45		na		na	282	223.85	175	253.71
over 65 years	13	338.29		na		na	35	235.02	27	199.21

Table 79. Resident Antelope Firearm, Average Fixed Spending, by Age of Participant

Age of	1982		1986	1990	1	996	2	001
Participant	Obs	Value	Obs Value	Obs Value	Obs	Value	Obs	Value
6 to 18 years	17	55.26	na	na	62	78.31	12	286.00
19 to 45 years	208	142.75	na	na	584	123.02	169	209.50
46 to 65 years	52	115.31	na	na	277	94.22	83	184.50
over 65 years	10	170.95	na	na	34	110.89	8	45.70

Table 80. Resident Antelope Firearm, Average Variable Spending, by Income of Participant

	1982	1982 1986		1	1996		001
Income of Participant	Obs Value	Obs Value	Obs Value	Obs	Value	Obs	Value
Under \$10,000	na	na	na	40	137.59 ^b	11	166.78
\$10,000 to \$25,000	na	na	na	161	248.19 ^a	40	272.11
\$25,000 to \$50,000	na	na	na	410	241.80 ^a	173	279.82
over \$50,000	na	na	na	306	270.13 ^a	223	266.15

Table 81. Resident Antelope Firearm, Average Fixed Spending, by Income of Participant

	1982	1982 1986		1996		2001	
Income of Participant	Obs Value	Obs Value	Obs Value	Obs	Value	Obs	Value
Under \$10,000	na	na	na	39	76.01	3	349.70
\$10,000 to \$25,000	na	na	na	159	118.03	23	282.20
\$25,000 to \$50,000	na	na	na	403	111.35	87	155.00
over \$50,000	na	na	na	302	125.72	121	224.50

Table 82. Resident Antelope Firearm, Average Variable Spending, by Value Placed on a Day of Hunting

Value per Day of	1982	19	1986		1990		1996	2	001
Hunting	Obs Val	ue Obs	Value	Obs	Value	Obs	Value	Obs	Value
Zero	na		na	1	345.50	4	167.70	4	366.96 ^{ab}
\$1 to \$50	na		na	47	190.30	192	170.30	56	173.54 ^b
\$51 to \$100	na		na	79	266.10	333	243.10	156	256.08 ^{ab}
\$101 to \$200	na		na	65	281.90	268	286.30	169	297.40 ^{ab}
\$201 to \$500	na		na	19	323.80	69	386.70	45	399.48 ^a
\$501 to \$5,000	na		na	5	530.20	15	303.40	11	254.23 ^{ab}
\$5,001 to \$15,000	na		na	1	567.10	1	192.60	0	
Over \$15,000 (priceless)	na		na	0		0		0	

Table 83. Resident Antelope Firearm, Average Fixed Spending, by Value Placed on a Day of Hunting

Value per Day of	1982	1986	1990		1	996	2001	
Hunting	Obs Value	Obs Value	Obs	Value	Obs	Value	Obs	Value
Zero	na	na	0		4	62.50	3	58.90
\$1 to \$50	na	na	41	101.50 ^b	185	87.70	32	165.60
\$51 to \$100	na	na	52	85.80^{b}	331	87.20	77	194.90
\$101 to \$200	na	na	50	195.70 ^b	265	128.90	95	199.20
\$201 to \$500	na	na	16	87.20 ^b	68	250.00	31	273.40
\$501 to \$5,000	na	na	4	1,230.00 ^a	15	262.20	8	148.00
\$5,001 to \$15,000	na	na	1	435.10 ^b	1	508.00	0	
Over \$15,000 (priceless)	na	na	0		0		0	

Table 84. Resident Antelope Firearm Gratis, Average Variable Spending, by Miles Traveled

<u>-</u>	1	982	1	986	1	1990		1996		001
Miles Traveled	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value
no miles	3	60.30	3	27.36	6	30.05 ^b	2	80.83	0	
1 to 300	75	96.80	97	65.86	131	80.30 ^b	85	86.55	61	71.42 ^b
301 to 600	2	214.40	2	217.28	2	117.00 ^b	7	169.53	4	162.53 ^a
601 to 900	0		1	147.73	2	467.30 ^a	0		0	
901 to 1200	0		0		0		0		0	
over 1200	0		1	16.41	0		0		0	

Table 85. Resident Antelope Firearm Gratis, Average Fixed Spending, by Miles Traveled

<u>-</u>	1	982	1	986	1	990	1996		2	001
Miles Traveled	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value
no miles	1	0.80	3	14.93	5	1.70	2	0.20	0	
1 to 300	43	95.31	97	33.78	85	60.60	83	81.90	28	131.80
301 to 600	1	0.80	2	8.09	2	9.90	7	124.70	3	44.40
601 to 900	0		1	8.09	2	301.00	0		0	
901 to 1200	0		0		0		0		0	
over 1200	0		1	40.92	0		0		0	

Table 86. Resident Antelope Firearm Gratis, Average Variable Spending, by Days Participated

Days	1	982	1	986	1	990	1	996	2	001
Participated	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value
1 to 3	64	102.74	102	70.53	111	76.49	156	56.82	55	81.97
4 to 6	11	93.21	10	91.62	24	94.34	30	47.16	13	42.98
7 to 9	3	32.94	1	8.21	9	197.44	6	36.50	2	106.66
10 to 15	4	55.46	0		2	27.53	4	0.00	1	11.17
16 to 25	0		0		3	25.69	5	21.79	0	
over 25	0		0		0		0		0	

Table 87. Resident Antelope Firearm Gratis, Average Fixed Spending, by Days Participated

Days	1	982	1	986	1	990	1	996	2	001
Participated	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value
1 to 3	36	73.60	102	33.12	70	73.20	155	70.75	23	107.30
4 to 6	7	209.10	10	74.57	16	11.10	31	45.92	9	193.90
7 to 9	3	156.20	1	8.09	5	117.30	6	28.87	1	12.30
10 to 15	1	97.70	0		2	1.70	4	21.70	1	12.30
16 to 25	0		0		3	15.40	6	0.21	0	
over 25	0		0		0		0		0	

294

Table 88. Resident Antelope Firearm Gratis, Average Variable Spending, with and without Access Fees and/or Guide Fees

Access Fees and/or Guide	1982	1986	1990	1996	2001
Fees	Obs Value				
With Fees	na	na	na	na	na
Without Fees	na	na	na	na	na

Table 89. Resident Antelope Firearm Gratis, Average Fixed Spending, with and without Access Fees and/or Guide Fees

Access Fees and/or Guide	1982	1986	1990	1996	2001
Fees	Obs Value				
With Fees	na	na	na	na	na
Without Fees	na	na	na	na	na

Table 90. Resident Antelope Firearm Gratis, Average Variable Spending, Rural and Urban Residence

Location of	1982	1986	1990	1996	2001
Residence	Obs Value				
Rural	na	na	na	123 69.03	53 57.48 ^b
Urban	na	na	na	13 123.21	8 181.07 ^a

Table 91. Resident Antelope Firearm Gratis, Average Fixed Spending, Rural and Urban Residence

Location of	1982	1986	1990	1996	2001
Residence	Obs Value				
Rural	na	na	na	122 62.29	25 129.50
Urban	na	na	na	13 119.28	4 164.60

Table 92. Resident Antelope Firearm Gratis, Average Variable Spending, by Location of Residence

	1982	1986	1990	1996		2001	
Type of Residence	Obs Value	Obs Value	Obs Value	Obs	Value	Obs	Value
rural non-farm	na	na	na	8	125.84	1	50.79
farm or ranch	na	na	na	96	58.42	41	51.36
city under 2,500 population	na	na	na	19	98.73	11	80.90
city 2,500 to 50,000 population	na	na	na	7	64.54	5	148.51
over 50,000 population	na	na	na	6	191.67	3	235.33

Table 93. Resident Antelope Firearm Gratis, Average Fixed Spending, by Location of Residence

	1982	1986	1990	1996	2001
Type of Residence	Obs Value				
rural non-farm	na	na	na	8 147.8	0 1 63.10
farm or ranch	na	na	na	94 50.7	0 17 89.40
city under 2,500 population	na	na	na	20 82.7	0 7 236.50
city 2,500 to 50,000 population	na	na	na	7 123.1	0 2 291.60
over 50,000 population	na	na	na	6 114.9	0 2 37.70

297

Table 94. Resident Antelope Firearm Gratis, Average Variable Spending, by Amount of Rural Spending

	1982	1986	1	990	1	996	2	001
Amount of Rural Spending	Obs Value	Obs Value	Obs	Value	Obs	Value	Obs	Value
Zero	na	na	14	27.43	29	35.98	5	32.90
1 to 24.9 percent	na	na	6	150.03	3	49.69	1	71.10
25 to 49.9 percent	na	na	1	240.88	5	53.20	1	121.90
50 to 74.9 percent	na	na	7	99.10	12	123.16	1	157.50
75 to 100 percent	na	na	103	90.68	92	75.01	52	83.10

Table 95. Resident Antelope Firearm Gratis, Average Fixed Spending, by Amount of Rural Spending

	1982	1986		1990		996	2001	
Amount of Rural Spending	Obs Value	Obs Value	Obs	Value	Obs	Value	Obs	Value
Zero	na	na	14	61.60	30	42.60 ^b	3	29.20
1 to 24.9 percent	na	na	5	228.00	3	294.50 ^{ab}	1	12.30
25 to 49.9 percent	na	na	1	49.80	5	378.60 ^a	1	83.40
50 to 74.9 percent	na	na	4	92.90	12	201.30 ^{ab}	1	58.00
75 to 100 percent	na	na	64	51.50	91	55.50 ^b	25	150.30

Table 96. Resident Antelope Firearm Gratis, Average Variable Spending, by Age of Participant

Age of1982		1986	1990	1	996	2001		
Participant	Obs	Value	Obs Value	Obs Value	Obs	Value	Obs	Value
6 to 18 years	8	34.72	na	na	16	56.97	8	88.76
19 to 45 years	50	129.34	na	na	90	55.21	23	75.04
46 to 65 years	19	52.49	na	na	71	36.22	35	80.97
over 65 years	4	14.91	na	na	16	48.95	6	17.78

Table 97. Resident Antelope Firearm Gratis, Average Fixed Spending, by Age of Participant

Age of1982		982	1986 1990		990) 1996			2001		
Participant	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value	
6 to 18 years	6	113.00		na		na	16	28.15	5	27.10	
19 to 45 years	30	91.20		na		na	90	91.11	13	220.00	
46 to 65 years	8	76.50		na		na	72	29.78	16	71.20	
over 65 years	2	0.80		na		na	16	27.08	2	63.10	

Table 98. Resident Antelope Firearm Gratis, Average Variable Spending, by Income of Participant

	1982	1986	1990	1	1996		001
Income of Participant	Obs Value	Obs Value	Obs Value	Obs	Value	Obs	Value
Under \$10,000	na	na	na	17	74.26	6	91.08
\$10,000 to \$25,000	na	na	na	37	36.57	7	44.55
\$25,000 to \$50,000	na	na	na	51	47.95	11	40.36
over \$50,000	na	na	na	68	75.39	34	93.13

Table 99. Resident Antelope Firearm Gratis, Average Fixed Spending, by Income of Participant

	1982	1986	1990	1996	2001	
Income of Participant	Obs Value					
Under \$10,000	na	na	na	18 96.39	1 12.30	
\$10,000 to \$25,000	na	na	na	38 49.63	4 175.00	
\$25,000 to \$50,000	na	na	na	51 52.61	5 22.40	
over \$50,000	na	na	na	67 81.75	18 150.40	

Table 100. Resident Antelope Firearm Gratis, Average Variable Spending, by Value Placed on a Day of Hunting

Value per Day of	1982	19	1986		1990		996	2001	
Hunting	Obs Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value
Zero	na		na	3	6.88	8	6.02^{b}	1	76.19
\$1 to \$50	na		na	50	71.11	67	46.82 ^b	37	54.52
\$51 to \$100	na		na	29	103.52	28	43.04 ^b	6	79.06
\$101 to \$200	na		na	19	104.61	32	96.99 ^a	10	171.57
\$201 to \$500	na		na	5	101.03	7	232.43 ^a	2	165.07
\$501 to \$5,000	na		na	0		2	14.33 ^b	2	3.05
\$5,001 to \$15,000	na		na	0		0		0	
Over \$15,000 (priceless)	na		na	0		0		0	

Table 101. Resident Antelope Firearm Gratis, Average Fixed Spending, by Value Placed on a Day of Hunting

Value per Day of	1982	1986	1	990	1996		2001	
Hunting	Obs Value	Obs Value	Obs	Value	Obs	Value	Obs	Value
Zero	na	na	2	1.70^{b}	7	16.60	1	12.30
\$1 to \$50	na	na	31	16.80^{b}	67	50.50	21	124.30
\$51 to \$100	na	na	19	107.40 ^a	30	108.10	3	224.90
\$101 to \$200	na	na	13	27.60^{b}	30	119.90	5	123.00
\$201 to \$500	na	na	5	449.00 ^a	7	187.40	1	113.80
\$501 to \$5,000	na	na	0		2	17.40	1	12.30
\$5,001 to \$15,000	na	na	0		0		0	
Over \$15,000 (priceless)	na	na	0		0		0	

301

Table 102. Resident Big Game, Average Variable Spending, by Miles Traveled

_	1981	1982	1986	1990	1996	2001	
Miles Traveled	Obs Value	Obs Value	Obs Value	Obs Value	Obs Value	Obs Value	
no miles	1 785.70	1 324.40	0	0	0	1 145.30 ^b	
1 to 300	6 573.60	4 1,305.00	41 482.70 ^b	18 505.30 ^c	22 553.30	56 327.90 ^a	
301 to 600	2 1,212.20	3 681.70	28 709.00 ^b	23 471.40 ^c	19 866.80	49 590.40 ^a	
601 to 900	1 870.80	6 992.40	19 679.40 ^b	24 720.70 ^{bc}	21 655.00	26 529.70 ^a	
901 to 1200	2 777.80	1 1,025.30	4 1,377.60 ^a	18 883.70 ^{ab}	16 948.30	39 704.10 ^a	
over 1200	0	2 1,287.30	14 997.00 ^{ab}	46 1,093.40 ^a	24 1,055.40	92 970.20 ^a	

Table 103. Resident Big Game, Average Fixed Spending, by Miles Traveled

_	1	981	1	982	1986		1990		1996		2001	
Miles Traveled	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value
no miles	1	52.90	1	16.20	0		0		0		0	
1 to 300	6	38.80	4	208.70	29	155.90	13	281.60	21	201.35	36	112.50 ^b
301 to 600	2	369.60	3	10.60	23	481.50	13	151.80	19	174.57	39	186.59 ^{ab}
601 to 900	1	13.40	6	209.50	15	326.00	21	211.20	21	141.40	20	335.40 ^{ab}
901 to 1200	2	61.80	1	633.30	2	89.90	12	452.90	16	243.91	31	209.08 ^{ab}
over 1200	0		2	10.60	13	424.80	37	365.90	24	150.49	81	406.72 ^a

302

Table 104. Resident Big Game, Average Variable Spending, by Days Participated

Days	1	1981		1982		1986		1990		1996		001
Participated	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value
1 to 3	8	753.00	8	937.00	69	610.60 ^b	67	694.90	50	784.90	112	552.00
4 to 6	2	749.10	6	1,190.30	20	736.60^{ab}	34	759.10	32	732.90	62	711.80
7 to 9	1	708.50	2	674.90	10	561.90 ^b	17	1,022.30	13	770.30	39	759.90
10 to 15	1	847.10	1	1,155.80	7	1,028.80 ^{ab}	15	1,081.00	14	677.30	45	817.30
16 to 25	0		0		2	1,433.80 ^a	1	1,485.20	5	495.10	8	862.00
over 25	0		0		0		0		0		1	543.50

Table 105. Resident Big Game, Average Fixed Spending, by Days Participated

Days	1981		1982		1986		1990		1996		2001	
Participated	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value
1 to 3	8	121.50	8	258.80	51	347.20^{ab}	52	210.20	49	128.67	87	207.40
4 to 6	2	33.10	6	10.60	17	200.50^{b}	28	299.10	32	139.21	51	307.10
7 to 9	1	60.90	2	324.80	8	285.40^{ab}	10	801.20	13	151.66	32	301.50
10 to 15	1	62.80	1	10.60	5	112.10 ^b	9	203.40	14	299.06	34	323.20
16 to 25	0		0		2	1,129.70 ^a	1	51.10	5	177.77	6	527.50
over 25	0		0		0		0		0		1	590.50

303

Table 106. Resident Big Game, Average Variable Spending, with and without Access Fees and/or Guide Fees

Access Fees and/or Guide	and/or Guide1981		1982		1986		1990		1996		2001	
Fees	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value
With Fees	1	453.20		na	7	696.10	7	1,075.40	9	1,487.60 ^a	18	1,243.20 ^a
Without Fees	11	784.10		na	101	670.10	127	786.80	106	678.10^{b}	252	629.40^{b}

Table 107. Resident Big Game, Average Fixed Spending, with and without Access Fees and/or Guide Fees

Access Fees and/or Guide	1	981	1982		1986		1990		1996		2001	
Fees	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value
With Fees	1	33.10		na	6	654.10	5	685.60	9	348.10^{a}	14	487.20 ^a
Without Fees	11	102.60		na	77	289.50	95	271.30	105	154.69 ^b	198	256.60 ^b

Table 108. Resident Big Game, Average Variable Spending, Rural and Urban Residence

Location of	1981	1982	1986	1990	1996	2001	
Residence	Obs Value						
Rural	na	na	na	84 780.93	67 697.30	147 602.98 ^b	
Urban	na	na	na	48 814.33	45 833.10	123 750.78 ^a	

Table 109. Resident Big Game, Average Fixed Spending, Rural and Urban Residence

Location of	1981	1982	1986	1990	1996	2001	
Residence	Obs Value						
Rural	na	na	na	62 286.60	66 193.40	108 220.19 ^b	
Urban	na	na	na	37 255.20	45 122.60	106 327.32 ^a	

Table 110. Resident Big Game, Average Variable Spending, by Location of Residence

Type of	1981	1982	1986	1990	1996	2001	
Residence	Obs Value	Obs Value	Obs Value	Obs Value	Obs Value	Obs Value	
rural nonfarm	na	na	na	8 1,132.80	11 847.90	24 691.90	
farm or ranch	na	na	na	41 718.80	22 684.00	65 597.50	
city under 2,500 population	na	na	na	35 773.20	34 657.20	58 572.40	
city 2,500 to 50,000 population	na	na	na	36 860.10	35 750.90	77 737.70	
over 50,000 population	na	na	na	12 677.00	10 1,120.60	46 772.60	

Table 111. Resident Big Game, Average Fixed Spending, by Location of Residence

Type of	1	1981		1982		1986		1990		1996		2001	
Residence	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value	
rural nonfarm		na		na		na	8	501.80	11	316.09	20	300.96	
farm or ranch		na		na		na	27	381.40	22	189.29	48	219.15	
city under 2,500 population		na		na		na	27	127.90	33	155.25	40	181.05	
city 2,500 to 50,000 population		na		na		na	27	270.70	35	128.40	67	366.07	
over 50,000 population		na		na		na	10	213.30	10	102.32	39	260.75	

306

Table 112. Resident Big Game, Average Variable Spending, by Amount of Rural Spending

Amount of Rural	1981	1982	1986	1990	1996	2001	
Spending	Obs Value	Obs Value	Obs Value	Obs Value	Obs Value	Obs Value	
Zero	na	na	na	3 617.10	4 1,771.50 ^a	10 384.10 ^b	
1 to 24.9 percent	na	na	na	7 604.60	7 604.60 ^b	17 509.20 ^{ab}	
25 to 49.9 percent	na	na	na	7 1,196.30	13 849.10 ^b	22 886.90 ^a	
50 to 74.9 percent	na	na	na	24 721.70	12 822.50 ^b	47 718.50 ^{ab}	
75 to 100 percent	na	na	na	83 845.50	71 738.90 ^b	164 670.80 ^{ab}	

Table 113. Resident Big Game, Average Fixed Spending, by Amount of Rural Spending

Amount of Rural .	1981	1982	1986	1990	1996	2001	
Spending	Obs Value	Obs Value	Obs Value	Obs Value	Obs Value	Obs Value	
Zero	na	na	na	$3 38.20^{b}$	4 60.80	9 232.50	
1 to 24.9 percent	na	na	na	5 556.20 ^{ab}	7 259.00	15 307.70	
25 to 49.9 percent	na	na	na	6 1,415.60 ^a	12 229.70	20 509.60	
50 to 74.9 percent	na	na	na	19 281.10 ^b	12 250.50	41 337.40	
75 to 100 percent	na	na	na	62 150.50 ^b	71 149.60	123 212.70	

Table 114. Resident Big Game, Average Variable Spending, by Age of Participant

Age of	1981		1982		1986			1990		1996		2001	
Participant	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value	
6 to 18 years	1	534.40	1	1,638.70 ^a		na		na	9	657.10	16	739.90	
19 to 45 years	9	791.40	9	1,060.10 ^{ab}		na		na	69	733.40	133	743.80	
46 to 65 years	2	710.50	5	1,070.80 ^{ab}		na		na	26	881.10	97	592.20	
over 65 years	0		2	304.80 ^b		na		na	5	460.50	23	549.30	

Table 115. Resident Big Game, Average Fixed Spending, by Age of Participant

Age of	1981		1982		1986		1990		1996		2001	
Participant	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value
6 to 18 years	1	13.40	1	10.60		na		na	9	285.55	16	366.00
19 to 45 years	9	119.40	9	83.10		na		na	68	149.09	107	288.70
46 to 65 years	2	37.10	5	294.70		na		na	26	159.29	75	249.80
over 65 years	0		2	280.90		na		na	5	32.15	16	187.10

308

Table 116. Resident Big Game, Average Variable Spending, by Income of Participant

Income of	1	981	1982	1986	1990	1	996	2	001
Participant	Obs	Value	Obs Value	Obs Value	Obs Value	Obs	Value	Obs	Value
Under \$10,000	2	690.70	na	na	na	5	583.80	10	462.50
\$10,000 to \$25,000	3	455.20	na	na	na	19	802.20	29	542.90
\$25,000 to \$50,000	5	997.50	na	na	na	44	733.50	74	628.90
over \$50,000	1	558.10	na	na	na	33	833.80	120	747.80

Table 117. Resident Big Game, Average Fixed Spending, by Income of Participant

Income of	1	981	1982	1986	1990	1	996	2	001
Participant	Obs	Value	Obs Value	Obs Value	Obs Value	Obs	Value	Obs	Value
Under \$10,000	2	38.10	na	na	na	5	84.90	7	182.70
\$10,000 to \$25,000	3	20.00	na	na	na	18	237.30	22	281.20
\$25,000 to \$50,000	5	189.10	na	na	na	44	181.70	62	255.30
over \$50,000	1	27.20	na	na	na	33	161.50	98	289.10

30

Table 118. Resident Big Game, Average Variable Spending, by Value Placed on a Day of Hunting

Value per Day of	1	981		1982	1	986		1990		1996	2	001
Hunting	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value
Zero	0		0		0		0		1	2,006.50 ^a	4	822.0 ^{ab}
\$1 to \$50	0		0		0		10	399.40 ^b	15	561.60 ^b	32	360.30 ^b
\$51 to \$100	2	915.30	2	1,019.70	0		28	709.20 ^{ab}	31	605.60 ^b	42	605.30 ^{ab}
\$101 to \$200	2	592.70	6	1,118.90	0		43	831.40 ^{ab}	27	1,047.50 ^{ab}	82	714.70 ^{ab}
\$201 to \$500	0		1	1,549.20	0		22	909.10 ^{ab}	7	1,231.10 ^{ab}	32	905.00 ^a
\$501 to \$5,000	3	994.20	4	1,147.00	8	497.70	5	1,214.30 ^a	7	632.40 ^{ab}	14	713.80 ^{ab}
\$5,001 to \$15,000	0		0		26	561.00	0		0		0	
Over \$15,000 (priceless)	0		0		40	899.40	0		0		0	

Table 119. Resident Big Game, Average Fixed Spending, by Value Placed on a Day of Hunting

Value per Day of	1	981	1	982	1	986	1	990	1	996	2	001
Hunting	Obs	Value										
Zero	0		0		0		0		1	135.30	4	222.20
\$1 to \$50	0		0		0		6	49.40	14	145.50	26	129.40
\$51 to \$100	2	97.50	2	10.60	0		20	431.70	31	179.00	35	317.10
\$101 to \$200	2	13.40	6	336.60	0		30	254.10	27	139.80	62	267.90
\$201 to \$500	0		1	10.60	0		21	168.60	7	306.50	28	305.60
\$501 to \$5,000	3	255.50	4	173.70	6	285.00	5	126.20	7	249.00	12	333.70
\$5,001 to \$15,000	0		0		21	252.20	0		0		0	
Over \$15,000 (priceless)	0		0		29	389.50	0		0		0	

Table 120. Nonresident Deer Archery, Average Variable Spending, by Miles Traveled

	1	1983		1990	1996			2001
Miles Traveled	Obs	Value	Obs	Value	Obs	Value	Obs	Value
no miles	19	332.00	0		0		1	0.00
1 to 300	14	161.40	18	287.90 ^b	28	370.30 ^b	13	524.50
301 to 600	12	262.80	33	423.69 ^{ab}	50	702.20 ^a	24	624.10
601 to 900	7	255.70	37	470.11 ^{ab}	50	619.10 ^{ab}	13	576.40
901 to 1200	8	430.10	33	471.57 ^{ab}	46	647.50 ^{ab}	26	933.30
over 1200	10	488.60	67	627.22 ^a	118	890.40 ^a	94	1,180.00

Table 121. Nonresident Deer Archery, Average Fixed Spending, by Miles Traveled

_	1983		1	990	1	1996 2001		
Miles Traveled	Obs	Value	Obs	Value	Obs	Value	Obs	Value
no miles	7	58.60	0		0		1	5.00
1 to 300	7	145.30	17	71.67	24	66.53	6	28.90
301 to 600	4	159.30	28	63.23	34	74.51	16	111.60
601 to 900	4	138.50	28	43.07	28	122.08	9	27.00
901 to 1200	2	192.20	31	111.59	29	99.24	14	264.70
over 1200	1	47.70	53	89.52	88	129.96	55	244.50

 $\frac{\omega}{1}$

Table 122. Nonresident Deer Archery, Average Variable Spending, by Days Participated

Days	1983		1	990	1996		2001
Participated	Obs	Value	Obs	Value	Obs	Value	Obs Value
1 to 3	9	352.80	16	397.10	35	416.30 ^b	14 1,027.00
4 to 6	23	301.30	81	522.10	157	704.70^{ab}	59 916.00
7 to 9	24	296.30	67	494.90	118	726.70^{ab}	72 1,033.40
10 to 15	9	302.60	33	434.80	52	709.40^{ab}	26 1,116.00
16 to 25	1	903.10	9	645.50	12	881.50 ^{ab}	12 1,120.10
over 25	2	257.40	4	529.90	5	1,166.10 ^a	1 320.00

Table 123. Nonresident Deer Archery, Average Fixed Spending, by Days Participated

Days	Days1983		1	1990	1	1996	2	001
Participated	Obs	Value	Obs	Value	Obs	Value	Obs	Value
1 to 3	7	131.30	15	55.31 ^c	20	66.96 ^b	6	76.90
4 to 6	6	108.80	67	48.06 ^c	104	71.35 ^b	30	148.50
7 to 9	5	130.10	53	55.01 ^c	70	104.65 ^b	44	190.40
10 to 15	4	155.20	23	74.36 ^{bc}	42	115.25 ^b	16	229.10
16 to 25	0		9	302.43 ^{ab}	10	183.24 ^{ab}	9	300.70
over 25	2	70.30	4	377.10 ^a	5	375.97 ^a	1	106.50

312

Table 124. Nonresident Deer Archery, Average Variable Spending, with and without Access Fees and/or Guide Fees

Access Fees and/or Guide	1	983	1	990	1	1996	2	2001
Fees	Obs	Value	Obs	Value	Obs	Value	Obs	Value
With Fees	4	482.70	24	897.66 ^a	127	1,053.90 ^a	83	1,432.00 ^a
Without Fees	66	301.60	187	445.20 ^b	257	525.18 ^b	102	654.40 ^b

Table 125. Nonresident Deer Archery, Average Fixed Spending, with and without Access Fees and/or Guide Fees

Access Fees and/or Guide	1	983	1	990	1	996	2	001
Fees	Obs	Value	Obs	Value	Obs	Value	Obs	Value
With Fees	0		20	24.80	78	83.44	42	165.36
Without Fees	25	122.01	152	82.03	177	108.12	65	197.46

314

Table 126. Nonresident Deer Archery, Average Variable Spending, Rural and Urban Residence

Location of	1983	1990	1996	2001
Residence	Obs Value	Obs Value	Obs Value	Obs Value
Rural	na	97 445.24	180 691.17	96 855.70 ^b
Urban	na	109 540.84	202 702.65	89 1,162.40 ^a

Table 127. Nonresident Deer Archery, Average Fixed Spending, Rural and Urban Residence

Location of	1983	1990	1996	2001
Residence	Obs Value	Obs Value	Obs Value	Obs Value
Rural	na	76 84.52	129 82.05	53 152.50
Urban	na	91 68.95	127 118.61	54 216.61

315

Table 128. Nonresident Deer Archery, Average Variable Spending, by Location of Residence

	1983	1990	1996	2001
Type of Residence	Obs Value	Obs Va	lue Obs Value	Obs Value
rural non-farm	na	56 46	5.97 92 597.30	b 42 869.60
farm or ranch	na	19 38	1.27 31 938.50	a 23 865.50
city under 2,500 population	na	22 44	7.72 57 708.20	ab 31 829.60
city 2,500 to 50,000 population	na	64 533	3.22 130 614.70	b 52 1,216.90
over 50,000 population	na	45 55	1.67 72 861.50	ab 37 1,085.90

Table 129. Nonresident Deer Archery, Average Fixed Spending, by Location of Residence

	1983		1	1990		1996		001
Type of Residence	Obs	Value	Obs	Value	Obs	Value	Obs	Value
rural non-farm		na	43	92.70	66	64.91	23	184.01
farm or ranch		na	15	40.82	24	142.40	11	126.40
city under 2,500 population		na	18	101.39	39	73.91	19	129.46
city 2,500 to 50,000 population		na	53	74.85	82	86.51	33	218.04
over 50,000 population		na	38	60.72	45	177.10	21	214.37

316

Table 130. Nonresident Deer Archery, Average Variable Spending, by Amount of Rural Spending

	1983	1990		1996	2001
Amount of Rural Spending	Obs Value	Obs	Value	Obs Value	Obs Value
Zero	na	8	381.60	16 461.00 ^b	6 662.50
1 to 24.9 percent	na	7	595.40	27 989.90 ^a	11 1,050.40
25 to 49.9 percent	na	19	678.70	21 634.20 ^{ab}	11 824.80
50 to 74.9 percent	na	27	411.30	42 694.00 ^{ab}	25 847.20
75 to 100 percent	na	139	456.40	258 689.30 ^{ab}	119 1,074.30

Table 131. Nonresident Deer Archery, Average Fixed Spending, by Amount of Rural Spending

	1	1983		1990		1996		2001
Amount of Rural Spending	Obs	Value	Obs	Value	Obs	Value	Obs	Value
Zero		na	6	97.80 ^{ab}	14	45.59	3	89.60 ^b
1 to 24.9 percent		na	6	157.68 ^{ab}	19	142.97	8	601.10 ^a
25 to 49.9 percent		na	16	294.43 ^a	16	91.97	5	138.20 ^b
50 to 74.9 percent		na	20	52.06 ^b	25	167.75	18	194.90 ^{ab}
75 to 100 percent		na	116	48.35 ^b	170	95.46	68	132.50 ^b

Table 132. Nonresident Deer Archery, Average Variable Spending, by Age of Participant

Age of	1	1983		1990		1996	2001	
Participant	Obs	Value	Obs	Value	Obs	Value	Obs	Value
6 to 18 years	3	252.90	5	281.10	6	1,194.40	4	636.20
19 to 45 years	60	290.70	141	465.30	254	707.60	102	988.60
46 to 65 years	6	590.60	55	595.20	103	636.20	72	1,057.90
over 65 years	1	90.30	10	505.30	3	496.90	5	731.40

Table 133. Nonresident Deer Archery, Average Fixed Spending, by Age of Participant

Age of	1983		1	1990		996	2001		
Participant	Obs	Value	Obs	Value	Obs	Value	Obs	Value	
6 to 18 years	2	79.30	5	20.26	5	131.30	2	5.00	
19 to 45 years	22	124.60	114	91.06	175	104.10	62	239.10	
46 to 65 years	2	99.20	46	46.86	63	91.20	42	117.60	
over 65 years	0		7	46.61	2	2.20	0		

318

Table 134. Nonresident Deer Archery, Average Variable Spending, by Income of Participant

	1983	1990	1996	2001
Income of Participant	Obs Value	Obs Value	Obs Value	Obs Value
Under \$10,000	na	na	1 137.60	0
\$10,000 to \$25,000	na	na	19 725.60	5 1,125.10
\$25,000 to \$50,000	na	na	150 597.80	46 1,088.60
over \$50,000	na	na	198 769.00	121 996.90

Table 135. Nonresident Deer Archery, Average Fixed Spending, by Income of Participant

	1983	1990	1996		2	001
Income of Participant	Obs Value	Obs Value	Obs	Value	Obs	Value
Under \$10,000	na	na	1	2.20	0	
\$10,000 to \$25,000	na	na	12	126.90	2	91.30
\$25,000 to \$50,000	na	na	98	90.40	32	228.20
over \$50,000	na	na	137	104.90	66	162.90

319

Table 136. Nonresident Deer Archery, Average Variable Spending, by Value Placed on a Day of Hunting

Value per Day of	1	1983		1990		1996	2001	
Hunting	Obs	Value	Obs	Value	Obs	Value	Obs	Value
Zero	0		1	172.10	3	781.60 ^{bc}	1	431.70 ^b
\$1 to \$50	24	244.10	66	353.20	57	375.40 ^c	34	367.80^{b}
\$51 to \$100	21	366.10	46	474.90	97	560.80 ^c	28	863.40 ^b
\$101 to \$200	6	426.60	34	715.30	123	862.80 ^{abc}	58	1,068.60 ^b
\$201 to \$500	1	316.10	8	810.40	22	1,361.90 ^{ab}	27	1,500.80 ^b
\$501 to \$5,000	3	178.80	2	609.10	5	1,547.40 ^a	3	3,619.00 ^a
\$5,001 to \$15,000	0		0		0		0	
Over \$15,000 (priceless)	0		0		0		0	

Table 137. Nonresident Deer Archery, Average Fixed Spending, by Value Placed on a Day of Hunting

Value per Day of	1983		1	1990		996	2	2001	
Hunting	Obs	Value	Obs	Value	Obs	Value	Obs	Value	
Zero	0		0		2	76.71	1	5.00 ^b	
\$1 to \$50	9	100.50	58	115.35	42	63.79	22	179.10 ^b	
\$51 to \$100	5	171.30	39	58.70	69	86.16	18	86.20 ^b	
\$101 to \$200	4	123.10	28	41.84	74	86.62	31	255.30 ^b	
\$201 to \$500	1	47.70	7	143.35	20	130.88	16	107.50 ^b	
\$501 to \$5,000	1	38.70	0		4	130.88	1	1,122.40 ^a	
\$5,001 to \$15,000	0		0		0		0		
Over \$15,000 (priceless)	0		0		0		0		

Table 138. Resident Deer Archery, Average Variable Spending, by Miles Traveled

	1	981		1982	1	1986		1990		996	2001	
Miles Traveled	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value
no miles	14	198.10 ^b	5	82.00 ^b	14	64.95 ^d	10	5.23 ^d	2	28.70 ^c	4	22.35 ^d
1 to 300	125	154.00 ^b	50	135.80 ^{ab}	322	116.79 ^{cd}	225	121.05 ^{cd}	243	149.10 ^{bc}	341	134.02 ^{cd}
301 to 600	46	289.10^{b}	12	202.00^{ab}	123	243.76 ^{bc}	107	255.40 ^{bc}	114 2	285.60 ^{bc}	154	264.61 ^{bc}
601 to 900	15	767.10 ^a	2	434.40 ^{ab}	43	292.07 ^b	48	396.21 ^b	38 4	468.30 ^{ab}	60	333.27 ^{bc}
901 to 1200	15	713.00 ^a	10	529.40 ^a	37	523.84 ^a	36	383.49 ^b	44 4	423.10 ^{abc}	75	384.06 ^b
over 1200	14	777.90 ^a	4	431.10 ^{ab}	46	654.18 ^a	74	667.59 ^a	63 8	335.00 ^a	102	680.95 ^a

Table 139. Resident Deer Archery, Average Fixed Spending, by Miles Traveled

_	1981	1982	1986	1990	1996	2001
Miles Traveled	Obs Value	Obs Value	Obs Value	Obs Value	Obs Value	Obs Value
no miles	12 203.85 ^b	3 85.82 ^b	14 223.79 ^b	10 116.20 ^b	0	4 214.40
1 to 300	104 168.68 ^b	36 126.57 ^b	293 187.88 ^b	200 166.30 ^b	218 239.34 ^b	255 256.30
301 to 600	45 186.42 ^b	10 161.63 ^b	117 302.72 ^b	97 239.70 ^{ab}	104 306.89 ^b	134 372.70
601 to 900	12 357.89 ^{ab}	2 457.11 ^a	40 362.25 ^{ab}	42 279.60 ^{ab}	34 365.57 ^{ab}	53 414.10
901 to 1200	15 294.79 ^{ab}	9 142.99 ^b	36 421.42 ^{ab}	33 596.80 ^a	41 316.90 ^b	70 415.60
over 1200	12 459.48 ^a	3 175.30 ^b	45 554.53 ^a	73 364.10 ^{ab}	62 494.04 ^a	89 621.80

Table 140. Resident Deer Archery, Average Variable Spending, by Days Participated

Days	1981	1982	1986	1990	1996	2001	
Participated	Obs Value	Obs Value	Obs Value	Obs Value	Obs Value	Obs Value	
1 to 3	34 133.65 ^b	13 84.50 ^b	77 61.06 ^d	71 134.52 ^d	86 113.69 ^c	124 140.97 ^d	
4 to 6	37 218.88 ^b	22 127.40 ^{ab}	130 113.16 ^{cd}	92 150.82 ^d	90 183.12 ^c	135 165.74 ^d	
7 to 9	38 270.56 ^b	5 444.10 ^a	88 183.66 ^{bc}	75 184.96 ^{cd}	49 221.48 ^{bc}	121 221.59 ^{cd}	
10 to 15	56 291.00 ^b	16 173.40 ^{ab}	145 253.78 ^b	135 289.11 ^{bc}	152 244.63 ^{bc}	164 304.95 ^{bc}	
16 to 25	31 342.51 ^{ab}	18 328.00 ^{ab}	114 287.37 ^b	113 382.43 ^{ab}	97 378.92 ^b	117 378.92 ^{ab}	
over 25	28 597.05 ^a	8 322.70 ^{ab}	66 478.95 ^a	51 475.90 ^a	108 626.05 ^a	103 483.49 ^a	

Table 141. Resident Deer Archery, Average Fixed Spending, by Days Participated

Days	1981	1982	1986	1990	1996	2001	
Participated	Obs Value	Obs Value	Obs Value	Obs Value	Obs Value	Obs Value	
1 to 3	31 201.76 ^{ab}	7 147.25 ^{ab}	64 202.98 ^b	58 146.10 ^b	71 123.49 ^c	84 267.08 ^b	
4 to 6	34 185.60 ^b	16 98.95 ^b	119 174.92 ^b	78 145.96 ^b	80 214.77 ^c	114 260.15 ^b	
7 to 9	35 162.36 ^b	3 54.13 ^b	81 241.46 ^b	67 187.83 ^{ab}	47 220.46 ^c	97 335.14 ^b	
10 to 15	51 162.99 ^b	13 114.31 ^{ab}	139 293.98 ^{ab}	127 289.37 ^{ab}	139 272.87 ^{bc}	138 365.15 ^b	
16 to 25	30 220.04 ^{ab}	16 142.52 ^{ab}	110 296.14 ^{ab}	111 283.15 ^{ab}	93 398.50 ^{ab}	102 407.51 ^{ab}	
over 25	27 361.97 ^a	8 296.56 ^a	65 430.08 ^a	49 387.01 ^a	106 469.11 ^a	95 572.72 ^a	

Table 142. Resident Deer Archery, Average Variable Spending, with and without Access Fees and/or Guide Fees

Access Fees and/or Guide	1981		1982		1986		1990		1996		2	2001	
Fees	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value	
With Fees	4	295.90	2	312.30	8	988.60 ^a	10	681.89 ^a	6	506.40	12	715.47 ^a	
Without Fees	226	298.30	81	205.80	634	209.10^{b}	550	259.56 ^b	594	305.70	768	269.66 ^b	

Table 143. Resident Deer Archery, Average Fixed Spending, with and without Access Fees and/or Guide Fees

Access Fees and/or Guide	1981		1982		1986		1990		1996		2001	
Fees	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value
With Fees	4	488.30 ^a	2	89.86	8	620.90 ^a	10	441.30	5	659.30 ^a	10	382.70
Without Fees	197	206.80^{b}	61	147.17	585	259.90 ^b	495	245.00	538	301.90 ^b	625	365.90

Table 144. Resident Deer Archery, Average Variable Spending, Rural and Urban Residence

Location of	1981	1982	1986	1990	1996	2001	
Residence	Obs Value	Obs Value	Obs Value	Obs Value	Obs Value	Obs Value	
Rural	na	na	na	261 217.76 ^b	276 254.32 ^b	371 218.95 ^b	
Urban	na	na	na	292 310.85 ^a	318 357.72 ^a	403 325.97 ^a	

Table 145. Resident Deer Archery, Average Fixed Spending, Rural and Urban Residence

Location of	1981	1982	1986	1990	1996	2001	
Residence	Obs Value	Obs Value	Obs Value	Obs Value	Obs Value	Obs Value	
Rural	na	na	na	245 196.47 ^b	259 299.88	299 330.23 ^b	
Urban	na	na	na	264 292.13 ^a	288 306.44	338 403.72 ^a	

Table 146. Resident Deer Archery, Average Variable Spending, by Location of Residence

Type of	1981	1982	1986	1990	1996	2001
Residence	Obs Value	Obs Value	Obs Value	Obs Value	Obs Value	Obs Value
rural nonfarm	na	na	na	52 279.87 ^a	82 250.61 ^{ab}	84 181.81 ^c
farm or ranch	na	na	na	77 140.61 ^b	67 199.35 ^b	108 222.49 ^{bc}
city under 2,500 population	na	na	na	132 238.29 ^{ab}	127 285.71 ^{ab}	179 234.24 ^{abc}
city 2,500 to 50,000 population	na	na	na	198 312.39 ^a	174 331.06 ^{ab}	241 317.11 ^{ab}
over 50,000 population	na	na	na	94 307.60 ^a	144 389.93 ^a	162 339.14 ^a

Table 147. Resident Deer Archery, Average Fixed Spending, by Location of Residence

Type of	1981	1982	1986	1990	1996	2001
Residence	Obs Value	Obs Value				
rural nonfarm	na	na	na	50 175.4	5 79 323.57	64 314.95
farm or ranch	na	na	na	75 196.5	3 64 229.08	94 372.46
city under 2,500 population	na	na	na	120 205.1	9 116 322.81	141 309.00
city 2,500 to 50,000 population	na	na	na	178 306.2	9 158 314.54	206 379.23
over 50,000 population	na	na	na	86 262.8	1 130 296.61	132 441.95

Table 148. Resident Deer Archery, Average Variable Spending, by Amount of Rural Spending

Amount of Rural .	1981	1982	1986	1990	1996	2001	
Spending	Obs Value	Obs Value	Obs Value	Obs Value	Obs Value	Obs Value	
Zero	na	na	na	129 157.03 ^c	123 200.96 ^b	137 182.31 ^b	
1 to 24.9 percent	na	na	na	82 404.45 ^a	82 406.97 ^a	83 327.89 ^a	
25 to 49.9 percent	na	na	na	45 356.22 ^{ab}	71 422.03 ^a	61 344.29 ^a	
50 to 74.9 percent	na	na	na	62 281.86 ^{abc}	84 363.44 ^{ab}	104 353.07 ^a	
75 to 100 percent	na	na	na	213 269.34 ^{bc}	187 297.73 ^{ab}	324 285.13 ^{ab}	

Table 149. Resident Deer Archery, Average Fixed Spending, by Amount of Rural Spending

Amount of Rural .	1981	1982	1986	1990	1996	2001	
Spending	Obs Value	Obs Value	Obs Value	Obs Value	Obs Value	Obs Value	
Zero	na	na	na	120 173.43 ^b	124 249.94	122 268.49 ^c	
1 to 24.9 percent	na	na	na	76 356.04 ^{ab}	77 393.49	74 537.69 ^a	
25 to 49.9 percent	na	na	na	44 491.73 ^a	68 383.09	60 473.91 ^{ab}	
50 to 74.9 percent	na	na	na	60 262.24 ^b	78 346.77	95 409.03 ^{abc}	
75 to 100 percent	na	na	na	191 191.41 ^b	163 272.52	252 328.17 ^{bc}	

Table 150. Resident Deer Archery, Average Variable Spending, by Age of Participant

Age of	1981		1982		1	1986		1990		1996		2001	
Participant	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value	
6 to 18 years	23	234.80	10	379.70		na		na	65	211.30	95	175.76	
19 to 45 years	197	311.20	65	196.80		na		na	399	338.80	482	290.21	
46 to 65 years	9	190.00	7	126.00		na		na	95	238.30	191	294.12	
over 65 years	0		0			na		na	5	60.80	11	212.95	

Table 151. Resident Deer Archery, Average Fixed Spending, by Age of Participant

Age of	1981		1982		1986		1990		1996		2001	
Participant	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value
6 to 18 years	16	168.72	9	124.55		na		na	64	268.30	84	335.60
19 to 45 years	183	204.88	51	149.49		na		na	371	324.80	399	393.60
46 to 65 years	11	333.61	6	117.51		na		na	82	235.40	151	328.50
over 65 years	0		0			na		na	4	143.90	8	151.10

Table 152. Resident Deer Archery, Average Variable Spending, by Income of Participant

Income of	1981		1982	1986	1990	1996		2001	
Participant	Obs	Value	Obs Value	Obs Value	Obs Value	Obs	Value	Obs	Value
Under \$10,000	19	461.90	na	na	na	37	293.53	31	142.48 ^b
\$10,000 to \$25,000	38	286.60	na	na	na	101	255.60	75	395.61 ^a
\$25,000 to \$50,000	88	289.20	na	na	na	271	327.46	263	272.77 ^{ab}
over \$50,000	29	389.10	na	na	na	159	333.79	322	285.63 ^a

Table 153. Resident Deer Archery, Average Fixed Spending, by Income of Participant

Income of	1981		1982	1986	1990	1996		2001	
Participant	Obs	Value	Obs Value	Obs Value	Obs Value	Obs	Value	Obs	Value
Under \$10,000	16	302.50	na	na	na	34	237.02	25	343.71
\$10,000 to \$25,000	36	276.30	na	na	na	95	267.72	67	336.99
\$25,000 to \$50,000	82	179.80	na	na	na	243	287.57	226	393.13
over \$50,000	29	259.24	na	na	na	151	378.95	255	384.46

Table 154. Resident Deer Archery, Average Variable Spending, by Value Placed on a Day of Hunting

Value per Day of	1981		1982	1986		1990		1996		2	2001	
Hunting	Obs	Value	Obs Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value	
Zero	0		na	16	184.56	4	28.90	10	138.90	11	61.04 ^b	
\$1 to \$50	112	244.50	na	327	204.14	309	244.60	327	260.60	477	234.39 ^a	
\$51 to \$100	36	462.40	na	51	337.44	61	365.70	107	504.60	101	407.65 ^a	
\$101 to \$200	10	296.90	na	35	360.67	31	323.40	57	378.20	52	439.87 ^a	
\$201 to \$500	1	19.80	na	8	290.02	7	259.80	4	172.00	8	454.45 ^a	
\$501 to \$5,000	7	566.00	na	8	337.72	5	511.80	4	177.70	11	494.15 ^a	
\$5,001 to \$15,000	0		na	0		1	6.90	0		0		
Over \$15,000 (priceless)	5	724.70	na	0		0		0		0		

Table 155. Resident Deer Archery, Average Fixed Spending, by Value Placed on a Day of Hunting

Value per Day of	1981		1982	1	1986		1990		1996		2001	
Hunting	Obs	Value	Obs Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value	
Zero	0		na	14	126.50	2	50.40	10	333.10	10	197.90 ^b	
\$1 to \$50	98	180.80	na	310	254.40	284	218.20	303	262.90	392	336.80^{a}	
\$51 to \$100	35	233.40	na	48	400.90	52	323.10	98	412.90	89	471.10 ^a	
\$101 to \$200	11	224.40	na	33	328.10	29	276.70	51	370.80	49	425.80 ^a	
\$201 to \$500	1	488.30	na	7	410.10	7	267.90	4	142.50	6	252.70 ^b	
\$501 to \$5,000	7	324.60	na	8	212.20	5	155.70	4	384.70	10	804.70 ^a	
\$5,001 to \$15,000	0		na	0		1	242.40	0		0		
Over \$15,000 (priceless)	5	547.70	na	0		0		0		0		

329

Table 156. Nonresident Deer Firearm, Average Variable Spending, by Miles Traveled

	1983	1990	1996	2001
Miles Traveled	Obs Value	Obs Value	Obs Value	Obs Value
no miles	76 591.28 ^{ab}	2 929.10 ^a	0	1 233.60
1 to 300	33 321.33 ^b	86 314.50 ^b	75 300.41 ^b	117 277.60
301 to 600	38 394.80 ^{ab}	88 295.90 ^b	75 314.33 ^b	111 310.80
601 to 900	33 377.06 ^{ab}	40 541.50 ^{ab}	55 365.64 ^b	53 406.20
901 to 1200	26 347.77 ^{ab}	13 475.60 ^b	48 466.21 ^b	50 438.50
over 1200	38 629.09 ^a	30 910.00 ^a	72 805.77 ^a	117 648.10

Table 157. Nonresident Deer Firearm, Average Fixed Spending, by Miles Traveled

	1	983		1990		1996		001
Miles Traveled	Obs	Value	Obs	Value	Obs	Value	Obs	Value
no miles	76	27.80	2	258.38 ^a	0		0	
1 to 300	33	93.40	63	80.32 ^{ab}	75	125.23	68	81.57
301 to 600	38	74.10	61	46.19 ^{ab}	75	94.32	71	79.64
601 to 900	33	45.30	30	23.84 ^b	55	70.77	21	93.49
901 to 1200	26	18.20	8	21.47 ^b	48	44.51	30	72.52
over 1200	38	238.80	26	94.59 ^{ab}	72	52.49	70	125.62

330

Table 158. Nonresident Deer Firearm, Average Variable Spending, by Days Participated

Days	1983			1990		996	2001		
Participated	Obs	Value	Obs	Value	Obs	Value	Obs	Value	
1 to 3	125	415.20	144	336.13 ^c	258	375.30	317	342.80^{b}	
4 to 6	96	509.70	85	470.47 ^{bc}	128	470.90	125	498.50 ^{ab}	
7 to 9	19	593.80	24	680.02 ^{ab}	25	736.50	37	606.20 ^{ab}	
10 to 15	5	763.30	9	776.00 ^a	6	499.90	8	500.30 ^{ab}	
16 to 25	0		0		1	688.00	2	900.00 ^a	

Table 159. Nonresident Deer Firearm, Average Fixed Spending, by Days Participated

Days	1983		1990		1	996	2001		
Participated	Obs	Value	Obs	Value	Obs	Value	Obs	Value	
1 to 3	127	46.50	99	50.31 ^b	258	90.11	173	65.00	
4 to 6	96	131.40	62	34.40^{b}	128	54.50	78	141.40	
7 to 9	21	16.20	22	128.00 ^{ab}	25	60.33	24	111.40	
10 to 15	5	49.50	8	253.22 ^a	6	77.66	2	121.80	
16 to 25	0		0		1	93.91	1	309.70	

Table 160. Nonresident Deer Firearm, Average Variable Spending, with and without Access Fees and/or Guide Fees

Access Fees and/or Guide	1002		1	990	1	1996	2001		
Fees	Obs	Value	Obs	Value	Obs	Value	Obs	Value	
With Fees	4	727.90	11	476.10	6	1,217.70 ^a	25	799.81 ^a	
Without Fees	241	469.00	252	424.20	415	416.60 ^b	464	386.23 ^b	

Table 161. Nonresident Deer Firearm, Average Fixed Spending, with and without Access Fees and/or Guide Fees

Access Fees and/or Guide	1	983	1	990	1	996	2001		
Fees	Obs	Value	Obs	Value	Obs	Value	Obs	Value	
With Fees	4	22.00	11	36.78	6	37.15	17	60.96	
Without Fees	241	78.85	181	64.19	415	78.75	261	93.76	

Table 162. Nonresident Deer Firearm, Average Variable Spending, Rural and Urban Residence

Location of	1983	1990)	19	96	2001		
Residence	Obs Value	Obs V	'alue (Obs	Value	Obs	Value	
Rural	na	81 3	67.29	90	340.73 ^b	125	338.49 ^b	
Urban	na	179 4	54.25	329	452.46 ^a	358	431.06 ^a	

Table 163. Nonresident Deer Firearm, Average Fixed Spending, Rural and Urban Residence

Location of _	1983	1990		1	996	2001		
Residence	Obs Value	Obs	Value	Obs	Value	Obs	Value	
Rural	na	55	88.26	90	65.51	67	82.53	
Urban	na	134	53.38	329	81.73	207	95.30	

334

Table 164. Nonresident Deer Firearm, Average Variable Spending, by Location of Residence

	1983	1990		1996		2001	
Type of Residence	Obs Value	Obs	Value	Obs	Value	Obs	Value
rural non-farm	na	27	348.29	49	308.83	48	353.51
farm or ranch	na	22	407.24	14	355.44	23	293.92
city under 2,500 population	na	32	355.85	27	390.99	54	344.12
city 2,500 to 50,000 population	na	89	441.26	149	425.20	159	425.34
over 50,000 population	na	90	467.10	180	475.02	199	435.62

Table 165. Nonresident Deer Firearm, Average Fixed Spending, by Location of Residence

	1983		1	1990		1996		001
Type of Residence	Obs	Value	Obs	Value	Obs	Value	Obs	Value
rural non-farm		na	17	18.88 ^b	49	86.00	25	86.52
farm or ranch		na	17	74.43 ^{ab}	14	33.22	15	73.50
city under 2,500 population		na	21	155.61 ^a	27	45.07	27	83.86
city 2,500 to 50,000 population		na	63	63.78 ^{ab}	149	93.01	90	81.07
over 50,000 population		na	71	44.15 ^{ab}	180	72.38	117	106.24

Table 166. Nonresident Deer Firearm, Average Variable Spending, by Amount of Rural Spending

	1983	1990		1996	2001
Amount of Rural Spending	Obs Value	Obs	Value	Obs Value	Obs Value
Zero	na	13	368.40	42 298.96 ^b	34 226.26 ^b
1 to 24.9 percent	na	23	511.90	39 477.48 ^{ab}	48 494.04 ^a
25 to 49.9 percent	na	24	415.80	29 582.71 ^a	39 494.52 ^a
50 to 74.9 percent	na	31	376.70	63 546.63 ^a	70 361.05 ^{ab}
75 to 100 percent	na	164	432.60	218 418.23 ^{ab}	283 427.58 ^a

Table 167. Nonresident Deer Firearm, Average Fixed Spending, by Amount of Rural Spending

	1983	1990		1996		2001	
Amount of Rural Spending	Obs Value	Obs	Value	Obs	Value	Obs	Value
Zero	na	10	59.76	42	43.62 ^b	20	29.85 ^b
1 to 24.9 percent	na	17	139.44	39	261.13 ^a	27	134.39 ^{ab}
25 to 49.9 percent	na	20	22.33	29	142.89 ^{ab}	24	150.14 ^a
50 to 74.9 percent	na	23	61.20	63	100.04 ^{ab}	42	66.59 ^{ab}
75 to 100 percent	na	119	59.46	218	41.25 ^b	161	90.95 ^{ab}

336

Table 168. Nonresident Deer Firearm, Average Variable Spending, by Age of Participant

Age of	Age of <u>1983</u>		1990		1	996	2	2001	
Participant	Obs	Value	Obs	Value	Obs	Value	Obs	Value	
6 to 18 years	6	358.50	7	325.60	9	248.20	19	273.41	
19 to 45 years	156	458.50	163	407.70	224	411.00	239	413.09	
46 to 65 years	66	497.90	80	442.20	154	452.70	199	428.36	
over 65 years	15	588.50	12	582.90	19	442.20	29	321.47	

Table 169. Nonresident Deer Firearm, Average Fixed Spending, by Age of Participant

Age of1983		1990		1	996	2001		
Participant	Obs	Value	Obs	Value	Obs	Value	Obs	Value
6 to 18 years	8	125.60	5	16.68 ^b	9	39.12	12	16.82
19 to 45 years	157	103.40	131	60.90 ^b	224	74.88	142	112.51
46 to 65 years	66	24.70	50	47.43 ^b	154	67.49	109	79.75
over 65 years	16	13.90	5	284.54 ^a	19	65.18	14	45.09

337

Table 170. Nonresident Deer Firearm, Average Variable Spending, by Income of Participant

	1983	1990	1996	2001
Income of Participant	Obs Value	Obs Value	Obs Value	Obs Value
Under \$10,000	na	na	2 495.90	9 305.10
\$10,000 to \$25,000	na	na	26 379.00	17 391.70
\$25,000 to \$50,000	na	na	139 408.60	101 350.40
over \$50,000	na	na	236 456.50	328 422.60

Table 171. Nonresident Deer Firearm, Average Fixed Spending, by Income of Participant

	1983	1990	1	1996		001
Income of Participant	Obs Value	Obs Value	Obs	Value	Obs	Value
Under \$10,000	na	na	2	25.10	2	4.97
\$10,000 to \$25,000	na	na	26	101.40	9	121.22
\$25,000 to \$50,000	na	na	139	135.60	62	82.45
over \$50,000	na	na	236	47.00	191	95.98

338

Table 172. Nonresident Deer Firearm, Average Variable Spending, by Value Placed on a Day of Hunting

Value per Day of	1	.983	1	990	1	996	2001		
Hunting	Obs	Value	Obs	Value	Obs	Value	Obs	Value	
Zero	3	246.90 ^b	0		1	57.30 ^b	3	62.60 ^c	
\$1 to \$50	47	316.00 ^{ab}	61	340.60	82	261.80 ^a	87	239.30 ^{bc}	
\$51 to \$100	63	399.90 ^{ab}	80	432.20	98	359.90 ^a	131	325.60 ^{bc}	
\$101 to \$200	52	507.50 ^{ab}	61	497.50	99	441.50 ^a	128	447.10^{ab}	
\$201 to \$500	21	772.80 ^a	14	595.60	54	804.60 ^a	56	721.80 ^a	
\$501 to \$5,000	8	710.30 ^{ab}	5	554.70	3	879.10 ^a	13	594.60 ^{ab}	
\$5,001 to \$15,000	0		0		0		0		
Over \$15,000 (priceless)	0		0		0		0		

Table 173. Nonresident Deer Firearm, Average Fixed Spending, by Value Placed on a Day of Hunting

Value per Day of	1	983	1	990	1	996	2	001
Hunting	Obs	Value	Obs	Value	Obs	Value	Obs	Value
Zero	3	2.60	0		1	2.20	3	13.43
\$1 to \$50	48	71.10	46	55.69	82	48.20	49	44.89
\$51 to \$100	63	23.70	63	73.16	98	58.20	80	64.61
\$101 to \$200	52	211.70	42	78.92	99	134.00	75	104.60
\$201 to \$500	22	32.10	13	59.22	54	62.70	35	138.10
\$501 to \$5,000	8	207.60	5	28.80	3	97.70	7	123.96
\$5,001 to \$15,000	0		0		0		0	
Over \$15,000 (priceless)	0		0		0		0	

Table 174. Resident Deer Firearm, Average Variable Spending, by Miles Traveled

	1	981	1	982	1986		1990		1996		2001	
Miles Traveled	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value
no miles	66	134.94 ^d	27	160.05 ^b	30	56.38 ^d	1	392.30 ^{ab}	0		2	2.54 ^d
1 to 300	797	167.99 ^d	488	154.55 ^b	690	139.68 ^d	135	166.90 ^b	265	165.56 ^d	365	175.93 ^{cd}
301 to 600	229	314.95 ^c	130	265.84 ^b	260	261.93 ^c	73	321.40^{b}	116	274.83 ^{cd}	156 2	256.21 ^{bcd}
601 to 900	77	395.92 ^c	21	270.67 ^b	83	318.85 ^{bc}	22	343.70 ^{ab}	28	343.91 ^{bc}	47 3	302.69 ^{abc}
901 to 1200	29	592.16 ^b	7	557.14 ^a	42	389.60 ^b	12	487.90 ^{ab}	16	460.36 ^b	23 5	513.25 ^{ab}
over 1200	10	794.61 ^a	3	668.02 ^a	30	553.67 ^a	5	716.30 ^a	17	684.65 ^a	14 5	532.65 ^a

Table 175. Resident Deer Firearm, Average Fixed Spending, by Miles Traveled

	1	981	1	982	1	986	1	990		1996	2	001
Miles Traveled	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value
no miles	58	82.12	20	109.40^{b}	29	98.53 ^b	1	49.70	0		2	31.80
1 to 300	787	101.62	374	106.00^{b}	685	142.95 ^b	117	157.90	265	96.68 ^b	225	182.40
301 to 600	225	174.46	111	145.30 ^b	259	156.39 ^b	64	169.20	116	164.15 ^{ab}	108	243.50
601 to 900	77	165.52	19	122.20 ^b	83	169.33 ^b	20	338.90	28	179.12 ^{ab}	34	310.30
901 to 1200	29	194.69	6	82.10 ^b	42	181.43 ^b	10	127.30	16	239.54 ^{ab}	17	273.80
over 1200	10	191.48	3	499.10 ^a	30	864.43 ^a	4	484.30	17	296.54 ^a	7	372.80

34(

Table 176. Resident Deer Firearm, Average Variable Spending, by Days Participated

Days	1	.981		1982	1	986		1990		1996	2	2001
Participated	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value
1 to 3	691	200.00	363	156.89 ^b	601	164.23 ^c	122	189.00 ^b	280	168.17 ^b	348	179.03 ^c
4 to 6	449	243.92	209	205.74 ^{ab}	340	205.32 ^c	84	277.40 ^{ab}	161	257.55 ^{ab}	171	244.25 ^c
7 to 9	79	223.76	62	264.12 ^a	151	222.95 ^c	27	312.60 ^{ab}	75	288.16 ^{ab}	80	250.38 ^{bc}
10 to 15	24	242.69	54	184.11 ^b	71	333.89 ^b	19	508.60 ^{ab}	22	289.20 ^{ab}	47	374.68 ^{ab}
16 to 25	0		0		24	473.07 ^a	1	591.90 ^a	8	414.06 ^a	13	402.10 ^a

Table 177. Resident Deer Firearm, Average Fixed Spending, by Days Participated

Days	1	981	1	982	1	986	1	990	1	996		2001
Participated	Obs	Value										
1 to 3	677	110.47	274	106.93	597	162.61	109	119.22	280	103.76	230	192.45 ^{ab}
4 to 6	441	131.92	172	128.30	339	151.30	72	297.51	161	142.47	109	251.07 ^{ab}
7 to 9	79	179.05	57	123.72	151	195.44	25	201.74	75	175.63	44	165.17 ^b
10 to 15	24	118.42	42	114.27	71	295.63	14	241.49	22	189.39	34	250.77 ^{ab}
16 to 25	0		0		24	137.09	0		8	196.83	9	443.74 ^a

34

Table 178. Resident Deer Firearm, Average Variable Spending, with and without Access Fees and/or Guide Fees

Access Fees and/or Guide	1	981	1	982	1	986	1	990	1	996	2	001
Fees	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value
With Fees	21	430.03 ^a	5	335.56 ^a	15	316.03 ^a	4	237.80	6	495.14 ^a	5	446.14 ^a
Without Fees	1,229	213.98 ^b	683	182.42 ^b	1,192	198.38 ^b	251	257.80	546	218.08^{b}	654	221.26^{b}

Table 179. Resident Deer Firearm, Average Fixed Spending, with and without Access Fees and/or Guide Fees

Access Fees and/or Guide	1	981	1	982	1	986	1	990	1	996	2	001
Fees	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value
With Fees	21	157.08	5	365.60 ^a	15	277.50	4	326.70	6	200.10	4	212.10
Without Fees	1,207	121.62	540	113.70 ^b	1,184	170.40	218	191.60	546	130.40	420	213.30

342

Table 180. Resident Deer Firearm, Average Variable Spending, Rural and Urban Residence

Location of	198	1	1	982	1	986	1	990	1	996	2	001
Residence	Obs V	/alue	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value
Rural		na		na		na	138	231.04 ^b	283	209.12	313	222.15
Urban		na		na		na	109	288.05 ^a	258	232.62	339	226.39

Table 181. Resident Deer Firearm, Average Fixed Spending, Rural and Urban Residence

Location of	1981	1982	1986	1990	1996	2001
Residence	Obs Value	Obs Value	Obs Value	Obs Value	Obs Value	Obs Value
Rural	na	na	na	117 193.53	283 120.73	198 198.94
Urban	na	na	na	98 189.79	258 140.43	223 231.86

343

Table 182. Resident Deer Firearm, Average Variable Spending, by Location of Residence

Type of .	1981	1982	1986	1990	1996	2001
Residence	Obs Value	Obs Value				
rural nonfarm	na	na	na	22 237.81	72 267.89 ^a	64 194.68 ^{ab}
farm or ranch	na	na	na	59 187.82	92 168.80 ^b	104 181.42 ^b
city under 2,500 population	na	na	na	57 273.16	119 204.74 ^{ab}	145 263.40 ^a
city 2,500 to 50,000 population	na	na	na	71 301.77	167 228.47 ^{ab}	184 222.42 ^{ab}
over 50,000 population	na	na	na	38 262.43	91 240.24 ^{ab}	155 231.11 ^{ab}

Table 183. Resident Deer Firearm, Average Fixed Spending, by Location of Residence

Type of	1981	1982	1986	1990	1996	2001
Residence	Obs Value	Obs Value				
rural nonfarm	na	na	na	20 159.93	72 148.62	41 202.36
farm or ranch	na	na	na	47 193.18	92 124.23	62 131.14
city under 2,500 population	na	na	na	50 207.30	119 101.16	95 242.37
city 2,500 to 50,000 population	na	na	na	62 230.74	167 128.20	120 249.79
over 50,000 population	na	na	na	36 119.26	91 162.87	103 210.97

344

Table 184. Resident Deer Firearm, Average Variable Spending, by Amount of Rural Spending

Amount of Rural .	1981	1982	1986	1	990	1	996	2001
Spending	Obs Value	Obs Value	Obs Value	Obs	Value	Obs	Value	Obs Value
Zero	na	na	na	33	214.22	74	145.79	93 164.73 ^b
1 to 24.9 percent	na	na	na	24	284.23	57	255.81	71 223.38 ^{ab}
25 to 49.9 percent	na	na	na	18	293.26	37	259.73	52 281.36 ^a
50 to 74.9 percent	na	na	na	19	209.84	63	247.24	68 227.00 ^{ab}
75 to 100 percent	na	na	na	145	269.30	249	241.09	331 241.00 ^{ab}

Table 185. Resident Deer Firearm, Average Fixed Spending, by Amount of Rural Spending

Amount of Rural	1981	1982	1986	1	990	1996	2	2001
Spending	Obs Value	Obs Value	Obs Value	Obs	Value	Obs Value	Obs	Value
Zero	na	na	na	32	184.31	74 149.74 ^{ab}	58	146.14
1 to 24.9 percent	na	na	na	22	202.52	57 224.21a	61	306.43
25 to 49.9 percent	na	na	na	15	416.27	37 171.14 ^{ab}	41	306.61
50 to 74.9 percent	na	na	na	18	344.92	63 181.43 ^{ab}	45	283.13
75 to 100 percent	na	na	na	124	153.76	249 93.11 ^b	202	184.17

Table 186. Resident Deer Firearm, Average Variable Spending, by Age of Participant

Age of	1	981	1	982	1	.986	1	990	1	1996	2	2001
Participant	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value
6 to 18 years	129	191.39 ^a	78	203.61 ^a		na		na	37	173.72 ^{ab}	58	196.91 ^{ab}
19 to 45 years	823	240.97 ^a	467	195.01 ^a		na		na	301	240.97 ^a	359	230.84 ^a
46 to 65 years	240	174.84 ^a	113	148.68 ^a		na		na	149	212.57 ^{ab}	200	236.08 ^a
over 65 years	38	65.26 ^b	26	72.85 ^b		na		na	21	105.18 ^b	36	140.04 ^b

Table 187. Resident Deer Firearm, Average Fixed Spending, by Age of Participant

Age of	1	981	1	982	1	986	1	990	1	996	2	001
Participant	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value
6 to 18 years	125	133.56 ^a	74	115.05		na		na	37	112.41	42	219.99
19 to 45 years	812	131.24 ^a	378	122.72		na		na	301	132.79	247	214.88
46 to 65 years	235	97.70 ^{ab}	74	97.16		na		na	149	146.38	123	223.09
over 65 years	37	36.79 ^b	15	63.32		na		na	21	45.31	13	124.99

346

Table 188. Resident Deer Firearm, Average Variable Spending, by Income of Participant

Income of	1	981	1982	1986	1990	1	996	2	.001
Participant	Obs	Value	Obs Value	Obs Value	Obs Value	Obs	Value	Obs	Value
Under \$10,000	82	201.02	na	na	na	28	196.80	37	208.05
\$10,000 to \$25,000	197	207.79	na	na	na	97	228.25	82	199.57
\$25,000 to \$50,000	417	239.22	na	na	na	227	225.98	214	217.28
over \$50,000	213	250.17	na	na	na	147	241.60	265	240.87

Table 189. Resident Deer Firearm, Average Fixed Spending, by Income of Participant

Income of	1	981	1982	1986	1990	1	996	2	001
Participant	Obs	Value	Obs Value	Obs Value	Obs Value	Obs	Value	Obs	Value
Under \$10,000	81	115.66	na	na	na	28	155.41	22	186.69
\$10,000 to \$25,000	195	116.10	na	na	na	97	71.24	49	212.49
\$25,000 to \$50,000	413	130.11	na	na	na	227	133.82	148	220.44
over \$50,000	213	138.21	na	na	na	147	178.38	174	214.68

Table 190. Resident Deer Firearm, Average Variable Spending, by Value Placed on a Day of Hunting

Value per Day of	19	981	1982	1	986	1	990	1	996	20	001
Hunting	Obs	Value	Obs Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value
Zero	7	267.46	na	9	490.46 ^a	1	82.60	2	604.80	5	80.25 ^c
\$1 to \$50	424	182.66	na	537	161.17 ^c	81	245.80	231	168.60	249	164.29 ^b
\$51 to \$100	319	221.99	na	265	237.49 ^b	71	292.70	150	257.90	197	248.05 ^b
\$101 to \$200	174	286.13	na	125	300.50^{b}	47	338.90	71	360.00	85	304.80^{b}
\$201 to \$500	50	322.71	na	25	360.85 ^a	6	336.80	8	457.20	16	534.89 ^a
\$501 to \$5,000	46	259.95	na	12	159.42 ^c	2	360.60	1	136.40	9	256.89 ^b
\$5,001 to \$15,000	0		na	0		0		0		0	
Over \$15,000 (priceless)	0		na	0		0		0		0	

Table 191. Resident Deer Firearm, Average Fixed Spending, by Value Placed on a Day of Hunting

Value per Day of .	1	981	1982	1	986	1	990	1	996	20	001
Hunting	Obs	Value	Obs Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value
Zero	7	154.16	na	9	166.00	1	22.10	2	186.90 ^b	5	39.90^{b}
\$1 to \$50	418	111.88	na	538	127.00	72	134.50	231	95.90 ^b	152	159.80 ^b
\$51 to \$100	313	111.12	na	266	183.90	65	237.30	150	150.00^{b}	133	232.70^{b}
\$101 to \$200	171	166.07	na	126	372.40	41	299.30	71	218.70^{b}	62	279.60 ^a
\$201 to \$500	50	136.97	na	25	501.20	6	88.90	8	334.60 ^a	13	674.90 ^a
\$501 to \$5,000	45	227.81	na	12	245.00	2	524.50	1	880.60 ^a	8	128.30 ^b
\$5,001 to \$15,000	0		na	0		0		0		0	
Over \$15,000 (priceless)	0		na	0		0		0		0	

348

Table 192. Resident Deer Firearm Gratis, Average Variable Spending, by Miles Traveled

	1982		1990		1	996	2001		
Miles Traveled	Obs	Value	Obs	Value	Obs	Value	Obs	Value	
no miles	11	81.01 ^b	17	25.42 ^d	0		14	39.4°	
1 to 300	112	110.72 ^b	134	114.51 ^{cd}	18	216.38	174	127.0 ^{bc}	
301 to 600	5	262.86 ^a	11	311.07 ^{bc}	0		7	324.8 ^{bc}	
601 to 900	0		2	472.12 ^b	0		3	294.9 ^{bc}	
901 to 1200	0		1	757.04 ^a	0		1	518.1 ^b	
over 1200	0		0		0		2	1,382.0 ^a	

Table 193. Resident Deer Firearm Gratis, Average Fixed Spending, by Miles Traveled

	1	982	1	990	1	996	2	001
Miles Traveled	Obs	Value	Obs	Value	Obs	Value	Obs	Value
no miles	8	18.98	15	42.90 ^b	0		10	46.80
1 to 300	77	67.33	105	40.90^{b}	18	113.90	100	72.20
301 to 600	4	54.86	8	163.40 ^b	0		4	313.70
601 to 900	0		2	53.30 ^b	0		2	202.70
901 to 1200	0		1	744.90 ^a	0		0	
over 1200	0		0		0		1	317.00

349

Table 194. Resident Deer Firearm Gratis, Average Variable Spending, by Days Participated

Days	1982	1990	1996	2001
Participated	Obs Value	Obs Value	Obs Value	Obs Value
1 to 3	98 96.03 ^{ab}	105 89.60 ^b	21 104.00 ^b	152 132.20
4 to 6	30 120.62 ^{ab}	45 171.04 ^{ab}	5 229.50 ^{ab}	50 136.70
7 to 9	8 218.58 ^a	14 224.46 ^a	1 103.20 ^b	18 152.40
10 to 15	1 5.59 ^b	15 203.44 ^a	2 142.20 ^{ab}	14 209.00
16 to 25	0	0	1 550.40 ^a	2 223.50

Table 195. Resident Deer Firearm Gratis, Average Fixed Spending, by Days Participated

Days	1	1982		1990		996	2001		
Participated	Obs	Value	Obs	Value	Obs	Value	Obs	Value	
1 to 3	67	49.24	85	16.47	21	90.00	82	91.09	
4 to 6	24	81.51	37	111.11	5	23.10	27	78.03	
7 to 9	7	49.01	8	46.40	1	57.50	12	82.94	
10 to 15	0		12	92.51	2	298.30	7	75.39	
16 to 25	0		0		1	0.20	2	32.58	

35(

Table 196. Resident Deer Firearm Gratis, Average Variable Spending, with and without Access Fees and/or Guide Fees

Access Fees and/or Guide	1982	1990	1990 1996	
Fees	Obs Value	Obs Value	Obs Value	Obs Value
With Fees	na	na	na	na
Without Fees	na	na	na	na

Table 197. Resident Deer Firearm Gratis, Average Fixed Spending, with and without Access Fees and/or Guide Fees

Access Fees and/or Guide	1982	1990 1996		2001	
Fees	Obs Value	Obs Value	Obs Value	Obs Value	
With Fees	na	na	na	na	
Without Fees	na	na	na	na	

Table 198. Resident Deer Firearm Gratis, Average Variable Spending, Rural and Urban Residence

Location of	1982	1990	1996	2001
Residence	Obs Value	Obs Value	Obs Value	Obs Value
Rural	na	na	17 150.90	170 126.90 ^b
Urban	na	na	3 154.80	22 212.17 ^a

Table 199. Resident Deer Firearm Gratis, Average Fixed Spending, Rural and Urban Residence

Location of	1982	1990	1996	2001	
Residence	Obs Value	Obs Value	Obs Value	Obs Value	
Rural	na	na	17 67.70	95 83.04	
Urban	na	na	3 286.90	14 146.86	

Table 200. Resident Deer Firearm Gratis, Average Variable Spending, by Location of Residence

	1982	1990	1996	2001
Type of Residence	Obs Value	Obs Value	Obs Value	Obs Value
rural non-farm	na	na	2 310.20	5 206.82
farm or ranch	na	na	15 129.70	146 124.51
city under 2,500 population	na	na	0	19 124.20
city 2,500 to 50,000 population	na	na	3 154.80	15 216.71
over 50,000 population	na	na	0	7 202.44

Table 201. Resident Deer Firearm Gratis, Average Fixed Spending, by Location of Residence

	1982	1990	1	1996		2001
Type of Residence	Obs Value	Obs Value	Obs	Value	Obs	Value
rural non-farm	na	na	2	57.50	3	149.40 ^{ab}
farm or ranch	na	na	15	69.00	83	86.21 ^b
city under 2,500 population	na	na	0		9	31.67 ^b
city 2,500 to 50,000 population	na	na	3	286.90	11	73.67 ^b
over 50,000 population	na	na	0		3	415.20 ^a

Table 202. Resident Deer Firearm Gratis, Average Variable Spending, by Amount of Rural Spending

	1982	1990		1996		2001
Amount of Rural Spending	Obs Value	Obs	Value	Obs	Value	Obs Value
Zero	na	11	113.37	2	158.20	23 65.10 ^c
1 to 24.9 percent	na	4	345.14	2	159.40	6 349.64 ^{ab}
25 to 49.9 percent	na	3	162.88	2	413.30	6 388.04 ^a
50 to 74.9 percent	na	8	140.40	2	126.10	17 180.69 ^{abc}
75 to 100 percent	na	121	146.57	14	144.40	159 144.23 ^{bc}

Table 203. Resident Deer Firearm Gratis, Average Fixed Spending, by Amount of Rural Spending

	1982	1990	1996	2001
Amount of Rural Spending	Obs Value	Obs Value	Obs Value	Obs Value
Zero	na	11 15.30 ^c	2 0.20	18 64.52 ^{bc}
1 to 24.9 percent	na	4 295.88 ^{ab}	2 11.70	5 348.49 ^a
25 to 49.9 percent	na	2 400.14 ^a	2 487.50	4 274.34 ^{ab}
50 to 74.9 percent	na	7 171.36 ^{bc}	2 444.50	11 161.68 ^{abc}
75 to 100 percent	na	98 29.70 ^c	14 52.60	83 54.06 ^c

354

Table 204. Resident Deer Firearm Gratis, Average Variable Spending, by Age of Participant

Age of	1982	1990	1996	2001
Participant	Obs Value	Obs Value	Obs Value	Obs Value
6 to 18 years	10 72.33 ^{ab}	na	2 143.30	7 124.80
19 to 45 years	67 144.99 ^a	na	13 166.00	79 155.37
46 to 65 years	43 80.86 ^{ab}	na	8 138.50	103 158.09
over 65 years	17 51.10 ^b	na	6 119.60	40 66.29

Table 205. Resident Deer Firearm Gratis, Average Fixed Spending, by Age of Participant

Age of	1	982	1990		1990 1996 200		001	
Participant	Obs	Value	Obs	Value	Obs	Value	Obs	Value
6 to 18 years	10	10.87		na	2	28.90	5	68.13
19 to 45 years	53	78.54		na	13	131.20	44	56.26
46 to 65 years	25	49.27		na	8	4.40	58	104.02
over 65 years	10	9.56		na	6	143.50	21	100.10

Table 206. Resident Deer Firearm Gratis, Average Variable Spending, by Income of Participant

	1982	1990	1996		2001	
Income of Participant	Obs Value	Obs Value	Obs	Value	Obs	Value
Under \$10,000	na	na	1	103.20	7	87.97
\$10,000 to \$25,000	na	na	4	106.90	39	122.44
\$25,000 to \$50,000	na	na	11	113.20	55	113.11
over \$50,000	na	na	10	229.90	95	166.28

Table 207. Resident Deer Firearm Gratis, Average Fixed Spending, by Income of Participant

	1982	1990	1996		2	001
Income of Participant	Obs Value	Obs Value	Obs	Value	Obs	Value
Under \$10,000	na	na	1	57.50	5	139.24
\$10,000 to \$25,000	na	na	4	20.30	21	56.71
\$25,000 to \$50,000	na	na	11	135.20	32	55.08
over \$50,000	na	na	10	57.40	58	108.92

356

Table 208. Resident Deer Firearm Gratis, Average Variable Spending, by Value Placed on a Day of Hunting

Value per Day of	1982	1	.990	1	996	2	2001
Hunting	Obs Value	Obs	Value	Obs	Value	Obs	Value
Zero	na	3	21.10^{b}	1	45.90	13	30.30^{b}
\$1 to \$50	na	67	120.10^{b}	15	152.80	93	114.60 ^b
\$51 to \$100	na	31	188.20 ^{ab}	3	77.20	47	152.30 ^b
\$101 to \$200	na	13	223.00^{ab}	0		26	282.10^{b}
\$201 to \$500	na	4	473.50 ^a	1	183.50	8	249.40^{b}
\$501 to \$5,000	na	1	82.60 ^b	0		1	1,880.30 ^a
\$5,001 to \$15,000	na	0		0		0	
Over \$15,000 (priceless)	na	0		0		0	

Table 209. Resident Deer Firearm Gratis, Average Fixed Spending, by Value Placed on a Day of Hunting

Value per Day of	1982		1	1990		1996		2001	
Hunting	Obs	Value	Obs	Value	Obs	Value	Obs	Value	
Zero		na	2	8.50	1	5.90	9	39.46 ^b	
\$1 to \$50		na	56	68.80	15	106.10	47	46.71 ^b	
\$51 to \$100		na	27	28.80	3	296.00	26	77.43 ^a	
\$101 to \$200		na	8	74.60	0		17	137.03 ^a	
\$201 to \$500		na	4	343.40	1	0.20	7	90.77 ^a	
\$501 to \$5,000		na	1	8.50	0		1	317.00 ^a	
\$5,001 to \$15,000		na	0		0		0		
Over \$15,000 (priceless)		na	0		0		0		

357

Table 210. Resident Deer Muzzleloader, Average Variable Spending, by Miles Traveled

_	1990		1	1996
Miles Traveled	Obs	Value	Obs	Value
no miles	7	28.91 ^d	78	92.58 ^b
1 to 300	309	94.24 ^{cd}	273	106.67 ^b
301 to 600	91	172.81 ^{bc}	82	174.39 ^{ab}
601 to 900	13	247.33 ^{ab}	16	267.30 ^{ab}
901 to 1200	4	233.65 ^b	4	217.57 ^{ab}
over 1200	3	373.47 ^a	4	359.17 ^a

Table 211. Resident Deer Muzzleloader, Average Fixed Spending, by Miles Traveled

_	1	990	1	1996		
Miles Traveled	Obs	Value	Obs	Value		
no miles	4	77.20	47	124.60		
1 to 300	229	153.50	189	191.30		
301 to 600	72	227.80	64	221.30		
601 to 900	12	356.70	14	294.10		
901 to 1200	3	274.50	2	112.40		
over 1200	2	82.00	3	20.70		

358

Table 212. Resident Deer Muzzleloader, Average Variable Spending, by Days Participated

Days	1990		1996		
Participated	Obs	Value	Obs	Value	
1 to 3	208	103.10 ^b	240	96.53 ^b	
4 to 6	191	128.89 ^{ab}	164	166.93 ^a	
7 to 9	58	150.22 ^a	52	128.22 ^{ab}	
10 to 15	0		0		
16 to 25	0		0		

Table 213. Resident Deer Muzzleloader, Average Fixed Spending, by Days Participated

Days	1	990	1996		
Participated	Obs Value		Obs	Value	
1 to 3	158	147.49	171	196.83	
4 to 6	144	204.73	110	177.90	
7 to 9	45	215.03	41	189.82	
10 to 15	0		0		
16 to 25	0		0		

359

Table 214. Resident Deer Muzzleloader, Average Variable Spending, with and without Access Fees and/or Guide Fees

Access Fees and/or Guide	1990		1996		
Fees	Obs	Value	Obs	Value	
With Fees	2	660.00 ^a	5	368.51 ^a	
Without Fees	456	117.23 ^b	452	122.53 ^b	

Table 215. Resident Deer Muzzleloader, Average Fixed Spending, with and without Access Fees and/or Guide Fees

Access Fees and/or Guide	1990		1996		
Fees	Obs	Value	Obs	Value	
With Fees	2	693.20 ^a	5	529.80 ^a	
Without Fees	344	176.80 ^b	314	184.50 ^b	

360

Table 216. Resident Deer Muzzleloader, Average Variable Spending, Rural and Urban Residence

Location of	1	990	1996		
Residence	Obs	Value	Obs	Value	
Rural	244	113.14	241	113.74 ^b	
Urban	204	129.88	196	148.44 ^a	

Table 217. Resident Deer Muzzleloader, Average Fixed Spending, Rural and Urban Residence

Location of	1	990	1996		
Residence	Obs	Value	Obs	Value	
Rural	181	155.65 ^b	166	173.76	
Urban	159	209.78 ^a	144	215.33	

361

Table 218. Resident Deer Muzzleloader, Average Variable Spending, by Location of Residence

	1	1990		1996
Type of Residence	Obs	Value	Obs	Value
rural non-farm	54	105.42	54	98.54 ^{ab}
farm or ranch	77	115.85	87	93.14 ^b
city under 2,500 population	113	114.99	100	139.86 ^{ab}
city 2,500 to 50,000 population	133	122.34	102	137.31 ^{ab}
over 50,000 population	71	144.00	94	160.51 ^a

Table 219. Resident Deer Muzzleloader, Average Fixed Spending, by Location of Residence

	1	1990		996
Type of Residence	Obs	Value	Obs	Value
rural non-farm	37	140.52	41	122.81
farm or ranch	62	169.63	51	180.33
city under 2,500 population	82	151.92	74	197.46
city 2,500 to 50,000 population	102	213.20	74	202.87
over 50,000 population	57	203.67	70	228.50

362

Table 220. Resident Deer Muzzleloader, Average Variable Spending, by Amount of Rural Spending

	1	1990	1996		
Amount of Rural Spending	Obs	Value	Obs	Value	
Zero	117	91.48 ^c	95	88.50 ^b	
1 to 24.9 percent	35	173.16 ^{ab}	46	159.28 ^{ab}	
25 to 49.9 percent	25	193.14 ^a	25	172.17 ^a	
50 to 74.9 percent	38	127.21 ^{bc}	60	117.11 ^{ab}	
75 to 100 percent	211	120.58 ^{bc}	191	143.26 ^{ab}	

Table 221. Resident Deer Muzzleloader, Average Variable Spending, by Amount of Rural Spending

		1990	1996		
Amount of Rural Spending	Obs	Value	Obs	Value	
Zero	91	158.10 ^c	74	196.02 ^{bc}	
1 to 24.9 percent	30	335.06 ^{ab}	35	464.09 ^a	
25 to 49.9 percent	24	374.46 ^a	18	334.34 ^{ab}	
50 to 74.9 percent	33	207.55 ^{bc}	41	192.51 ^{bc}	
75 to 100 percent	153	127.68 ^c	131	112.04 ^c	

364

Table 222. Resident Deer Muzzleloader, Average Variable Spending, by Age of Participant

Age of	1	990	1	996
Participant	Obs	Obs Value		Value
6 to 18 years		na	16	105.77
19 to 45 years		na	275	128.26
46 to 65 years		na	132	111.94
over 65 years		na	13	192.72

Table 223. Resident Deer Muzzleloader, Average Fixed Spending, by Age of Participant

Age of	1	990	1	1996			
Participant	Obs	Value	Obs	Value			
6 to 18 years		na	10	112.30			
19 to 45 years		na	192	225.57			
46 to 65 years		na	96	137.96			
over 65 years		na	11	89.58			

365

Table 224. Resident Deer Muzzleloader, Average Variable Spending, by Income of Participant

	1	990	1996		
Income of Participant	Obs	Value	Obs	Value	
Under \$10,000		na	16	98.25	
\$10,000 to \$25,000		na	71	98.54	
\$25,000 to \$50,000		na	189	141.01	
over \$50,000		na	138	131.87	

Table 225. Resident Deer Muzzleloader, Average Fixed Spending, by Income of Participant

	1	990	1996		
Income of Participant	Obs	Value	Obs	Value	
Under \$10,000		na	13	183.41	
\$10,000 to \$25,000		na	49	154.06	
\$25,000 to \$50,000		na	133	229.26	
over \$50,000		na	96	194.91	

360

Table 226. Resident Deer Muzzleloader, Average Variable Spending, by Value Placed on a Day of Hunting

Value per Day of	1	990	1	1996		
Hunting	Obs	Value	Obs	Value		
Zero	2	48.18	4	91.73 ^b		
\$1 to \$50	226	111.91	199	100.54 ^b		
\$51 to \$100	77	147.98	89	167.45 ^{ab}		
\$101 to \$200	42	140.30	33	139.15 ^{ab}		
\$201 to \$500	9	218.39	16	304.78 ^a		
\$501 to \$5,000	3	247.76	5	248.12 ^{ab}		
\$5,001 to \$15,000	0		0			
Over \$15,000 (priceless)	1	55.06	0			

Table 227. Resident Deer Muzzleloader, Average Fixed Spending, by Value Placed on a Day of Hunting

Value per Day of	1	990	1996		
Hunting	Obs	Value	Obs	Value	
Zero	1	22.10	1	284.40	
\$1 to \$50	171	136.40	136	140.50	
\$51 to \$100	67	314.20	71	260.60	
\$101 to \$200	33	208.00	22	239.30	
\$201 to \$500	7	296.30	13	331.10	
\$501 to \$5,000	3	100.10	4	320.20	
\$5,001 to \$15,000	0		0		
Over \$15,000 (priceless)	1	503.90	0		

367

Table 228. Resident Furbearer, Average Variable Spending, by Miles Traveled

		1981	1982		1986 1990		1996		2001			
Miles Traveled	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value
no miles	17	650.30 ^{ab}	13	374.10 ^{bc}		na	2	20.60^{b}	0		54	94.04 ^d
1 to 300	53	171.40 ^b	109	141.20 ^c		na	141	107.00^{b}	345	104.12 ^c	254	90.59 ^d
301 to 600	20	450.80 ^b	31	349.50 ^{bc}		na	63	239.30 ^b	137	243.95 ^{bc}	107	182.59 ^{cd}
601 to 900	5	385.90 ^b	9	551.00 ^{ab}		na	12	324.60 ^b	33	335.85 ^{bc}	24	257.34 ^{bc}
901 to 1200	12	720.20 ^{ab}	12	545.30 ^{ab}		na	14	381.50 ^b	48	452.33 ^b	32	388.96 ^b
over 1200	21	1,143.40 ^a	28	817.10 ^a		na	33	1,027.20 ^a	72	1,007.84 ^a	45	828.34 ^a

Table 229. Resident Furbearer, Average Fixed Spending, by Miles Traveled

_	1	981		1982	1	1986		1990		1996		2001	
Miles Traveled	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value	
no miles	13	193.00	10	139.80 ^{bc}		na	2	118.50	0		31	269.00 ^{bc}	
1 to 300	45	175.90	87	93.10 ^c		na	110	193.10	239	215.00 ^c	196	229.80 ^c	
301 to 600	18	172.30	28	223.00 ^{abc}		na	51	317.00	112	290.30 ^{bc}	76	446.10 ^{abc}	
601 to 900	4	102.40	8	583.90 ^a		na	11	471.40	31	597.30 ^{ab}	19	442.70 ^{abc}	
901 to 1200	11	191.80	12	23.10 ^c		na	12	593.90	46	483.80 ^{bc}	31	655.30 ^{ab}	
over 1200	18	359.90	26	472.10 ^{ab}		na	32	559.90	67	952.90 ^a	43	785.30 ^a	

Table 230. Resident Furbearer, Average Variable Spending, by Days Participated

Days1981		1982	1986	1990	1996	2001	
Participated	Obs Value	Obs Value	Obs Value	Obs Value	Obs Value	Obs Value	
1 to 3	17 160.50 ^b	33 101.30 ^b	266 79.66 ^c	72 97.57 ^c	232 83.44 ^c	184 120.10 ^c	
4 to 6	21 180.00 ^b	35 215.30 ^{ab}	232 134.30 ^{bc}	70 159.08 ^c	174 165.02 ^{bc}	140 137.17 ^c	
7 to 9	6 456.80 ^{ab}	6 149.10 ^b	98 156.06 ^{bc}	17 236.18 ^c	53 244.09 ^{bc}	22 250.35 ^{bc}	
10 to 15	27 502.10 ^{ab}	48 246.90 ^{ab}	230 221.65 ^b	54 309.65 ^{bc}	147 292.01 ^{bc}	82 244.27 ^{bc}	
16 to 25	27 498.10 ^{ab}	28 490.80 ^a	114 366.51 ^a	22 582.61 ^{ab}	75 364.28 ^b	31 345.34 ^b	
over 25	26 929.40 ^a	44 512.30 ^a	123 446.13 ^a	27 711.82 ^a	74 664.73 ^a	42 558.57 ^a	

Table 231. Resident Furbearer, Average Fixed Spending, by Days Participated

Days	1	981	1	982		1986	1	990	1	1996	2	001
Participated	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value
1 to 3	14	128.60	21	30.90	150	200.95 ^c	56	227.00	153	212.50 ^b	127	306.60
4 to 6	18	83.90	31	81.60	154	229.22 ^{bc}	56	266.30	122	266.50 ^b	112	319.10
7 to 9	4	249.40	4	40.90	68	190.83 ^c	15	360.70	44	432.00 ^{ab}	17	276.60
10 to 15	21	195.50	40	168.50	173	285.45 ^{bc}	48	348.50	121	400.90 ^{ab}	66	486.30
16 to 25	25	267.60	26	329.20	84	366.69 ^{ab}	19	392.60	71	330.90 ^b	29	493.40
over 25	24	288.90	43	306.60	107	440.99 ^a	23	391.00	64	702.30 ^a	40	604.50

369

Table 232. Resident Furbearer, Average Variable Spending, with and without Access Fees and/or Guide Fees

Access Fees and/or Guide	1981		1982		1986		1990	1996		2001	
Fees	Obs	Value	Obs	Value	Obs	Value	Obs Value	Obs	Value	Obs	Value
With Fees	7	833.20	3	463.60	5	902.50 ^a	1 1,364.00 ^a	3	328.70	3 1	,166.50 ^a
Without Fees	125	472.80	206	312.70	1,102	197.30 ^b	290 267.00 ^b	792	243.90	513	195.00 ^b

Table 233. Resident Furbearer, Average Fixed Spending, with and without Access Fees and/or Guide Fees

Access Fees and/or Guide	1	981	1982		1986		1990		1996		2001	
Fees	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value
With Fees	7	224.60	3	193.90	5	435.70	1	1,046.20	3	702.90	3	1,462.40 ^a
Without Fees	106	201.60	175	193.10	767	274.50	236	312.80	598	346.90	393	370.00 ^b

370

Table 234. Resident Furbearer, Average Variable Spending, Rural and Urban Residence

Location of	1981	1982	1986	1990	1996	2001
Residence	Obs Value	Obs Value	Obs Value	Obs Value	Obs Value	Obs Value
Rural	na	na	na	155 237.79	430 227.14	268 183.08
Urban	na	na	na	108 317.69	361 253.40	248 219.59

Table 235. Resident Furbearer, Average Fixed Spending, Rural and Urban Residence

Location of	1981	1982	1986	1990	1996	2001
Residence	Obs Value	Obs Value	Obs Value	Obs Value	Obs Value	Obs Value
Rural	na	na	na	126 266.93	330 320.12	211 374.04
Urban	na	na	na	88 363.77	273 384.17	191 383.89

371

Table 236. Resident Furbearer, Average Variable Spending, by Location of Residence

Type of	1981	1982	1986	1990	1996	2001	
Residence	Obs Value	Obs Value					
rural nonfarm	na	na	na	27 272.79	86 208.51	48 155.59	
farm or ranch	na	na	na	62 204.51	164 202.32	105 190.39	
city under 2,500 population	na	na	na	66 254.72	180 258.66	115 187.87	
city 2,500 to 50,000 population	na	na	na	75 362.52	193 265.12	122 210.67	
over 50,000 population	na	na	na	33 215.81	168 239.93	126 228.23	

Table 237. Resident Furbearer, Average Fixed Spending, by Location of Residence

Type of .	1981	1982	1986	1990	1996	2001	
Residence	Obs Value	Obs Value					
rural nonfarm	na	na	na	25 287.96	63 256.81	38 483.17	
farm or ranch	na	na	na	51 184.57	130 317.07	81 377.78	
city under 2,500 population	na	na	na	50 340.43	137 352.12	92 325.69	
city 2,500 to 50,000 population	na	na	na	61 413.62	145 451.85	92 441.85	
over 50,000 population	na	na	na	27 251.14	128 307.49	99 330.02	

Table 238. Resident Furbearer, Average Variable Spending, by Amount of Rural Spending

Amount of Rural	1981	1982	1986	1990		1996		2001	
Spending	Obs Value	Obs Value	Obs Value	Obs	Value	Obs	Value	Obs	Value
Zero	na	na	na	40	151.80	83	100.20 ^b	79	112.47 ^b
1 to 24.9 percent	na	na	na	30	320.00	50	272.36 ^{ab}	30	217.38 ^{ab}
25 to 49.9 percent	na	na	na	21	307.50	32	535.64 ^a	36	287.47 ^a
50 to 74.9 percent	na	na	na	26	372.30	80	260.13 ^b	55	258.98 ^{ab}
75 to 100 percent	na	na	na	155	266.70	481	257.19 ^b	293	209.50 ^{ab}

Table 239. Resident Furbearer, Average Fixed Spending, by Amount of Rural Spending

Amount of Rural	1981	1982	1986	1990		1996		2001	
Spending	Obs Value	Obs Value	Obs Value	Obs	Value	Obs	Value	Obs	Value
Zero	na	na	na	32	277.30	57	235.90	61	457.30 ^{ab}
1 to 24.9 percent	na	na	na	30	405.50	44	623.10	26	693.00 ^a
25 to 49.9 percent	na	na	na	19	445.30	28	606.30	33	641.10 ^a
50 to 74.9 percent	na	na	na	25	326.20	69	403.90	49	377.50 ^{ab}
75 to 100 percent	na	na	na	122	276.10	360	332.90	224	286.00 ^b

Table 240. Resident Furbearer, Average Variable Spending, by Age of Participant

Age of	1981		1	1982		1986		1990		1996		001
Participant	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value
6 to 18 years	16	449.00	25	263.20		na		na	30	220.70	14	133.80
19 to 45 years	96	518.60	144	301.70		na		na	515	251.50	277	206.59
46 to 65 years	16	326.40	31	429.10		na		na	218	249.10	200	212.27
over 65 years	2	1,142.90	6	276.50		na		na	17	51.00	21	89.00

Table 241. Resident Furbearer, Average Fixed Spending, by Age of Participant

Age of	1981		1982		1	1986		1990		1996		001
Participant	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value
6 to 18 years	15	122.30	24	193.60		na		na	26	317.80	12	234.50
19 to 45 years	82	234.00	121	205.20		na		na	393	344.20	211	393.70
46 to 65 years	13	137.70	24	156.80		na		na	164	376.80	162	370.70
over 65 years	2	38.10	6	155.10		na		na	13	112.70	14	438.50

Table 242. Resident Furbearer, Average Variable Spending, by Income of Participant

	1981	1982 1986		1990	1996		2001	
Income of Participant	Obs Value	Obs Value	Obs Value	Obs Value	Obs	Value	Obs	Value
Under \$10,000	na	na	na	na	34	166.05	24	258.78
\$10,000 to \$25,000	na	na	na	na	107	368.39	54	195.30
\$25,000 to \$50,000	na	na	na	na	333	203.47	163	178.74
over \$50,000	na	na	na	na	255	258.38	229	216.19

Table 243. Resident Furbearer, Average Fixed Spending, by Income of Participant

_	1981	1982	1986	1990	1996		2001	
Income of Participant	Obs Value	Obs Value	Obs Value	Obs Value	Obs	Value	Obs	Value
Under \$10,000	na	na	na	na	27	162.60	20	309.80
\$10,000 to \$25,000	na	na	na	na	87	374.70	44	475.50
\$25,000 to \$50,000	na	na	na	na	248	353.80	124	343.00
over \$50,000	na	na	na	na	198	382.50	183	386.50

375

Table 244. Resident Furbearer, Average Variable Spending, by Value Placed on a Day of Hunting

Value per Day of		1981	1	982	1	986	1	.990		1996	2	001
Hunting	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value
Zero	0		0			na	3	112.00	15	100.50	24	71.00^{b}
\$1 to \$50	42	524.50	82	307.10		na	126	201.20	436	202.60	257	145.60 ^b
\$51 to \$100	26	497.80	40	331.90		na	48	326.70	138	379.40	99	285.70 ^b
\$101 to \$200	13	636.10	17	269.50		na	30	471.20	49	449.50	44	391.50 ^b
\$201 to \$500	4	1,277.50	2	368.20		na	6	658.20	14	547.10	15	405.00 ^b
\$501 to \$5,000	5	498.70	0			na	2	134.20	1	1,106.50	3	1,295.20 ^a
\$5,001 to \$15,000	0		1	426.90		na	0		0		1	121.90 ^b
Over \$15,000	0		0			na	0		0		0	

Table 245. Resident Furbearer, Average Fixed Spending, by Value Placed on a Day of Hunting

Value per Day of	1	1981	1	.982	1	986	_	1990		1996		2001
Hunting	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value
Zero	0		0			na	2	22.10^{b}	12	223.70^{b}	20	126.00 ^c
\$1 to \$50	41	112.60	74	207.00		na	110	255.70 ^b	334	261.10 ^b	203	306.90 ^{bc}
\$51 to \$100	23	263.30	37	149.90		na	38	331.50^{b}	115	433.20 ^b	85	396.10 ^{bc}
\$101 to \$200	12	335.00	15	219.90		na	25	517.90 ^b	41	662.70^{ab}	41	579.70 ^{bc}
\$201 to \$500	4	281.50	2	229.70		na	6	371.50 ^b	13	1,874.70 ^a	11	832.30 ^{ab}
\$50 to \$5,000	5	256.80	0			na	2	1,439.20 ^a	1	511.40 ^b	3	1,487.80 ^a
\$5,001 to \$15,000	0		1	10.60		na	0		0		0	
Over \$15,000	0		0			na	0		0		0	

37

Table 246. Resident Fall Turkey, Average Variable Spending, by Miles Traveled

	1981	1982	1986	1990	1996	2001
Miles Traveled	Obs Value	Obs Value	Obs Value	Obs Value	Obs Value	Obs Value
no miles	8 35.62 ^b	2 41.95 ^c	58 52.59 ^b	0	3 50.83 ^c	133 62.69 ^e
1 to 300	136 82.95 ^b	137 70.39 ^c	772 61.76 ^b	136 72.53 ^c	927 60.56 ^c	1,290 55.94 ^e
301 to 600	30 195.80 ^{ab}	16 156.83 ^{bc}	195 121.73 ^{ab}	48 161.24 ^{bc}	201 164.65 ^{bc}	453 153.00 ^d
601 to 900	13 329.14 ^a	5 276.28 ^b	65 171.64 ^a	26 270.42 ^{ab}	117 225.12 ^b	188 224.46 ^c
901 to 1200	2 236.50 ^{ab}	1 559.27 ^a	19 190.38 ^a	12 324.04 ^{ab}	26 282.24 ^b	75 281.11 ^b
over 1200	2 240.46 ^{ab}	0	3 192.65 ^a	2 415.68 ^a	14 479.85 ^a	55 506.13 ^a

Table 247. Resident Fall Turkey, Average Fixed Spending, by Miles Traveled

_	1	981	1	982	1	986	1	990	1	996	2	001
Miles Traveled	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value
no miles	6	25.23	2	0.00	58	104.50	0		3	20.68	71	99.85
1 to 300	133	75.05	103	17.65	745	92.00	91	78.30	915	66.75	789	110.70
301 to 600	29	73.21	14	57.53	188	104.20	31	115.40	201	113.08	294	181.24
601 to 900	13	102.57	4	0.00	64	101.00	20	193.90	117	112.07	130	141.84
901 to 1200	2	74.71	1	0.00	19	98.90	7	162.50	25	60.59	50	207.81
over 1200	2	38.10	0		3	51.30	2	22.10	14	194.47	45	224.26

37

Table 248. Resident Fall Turkey, Average Variable Spending, by Days Participated

Days	1	981	1	982	1	986	1	990	1	996	2	001
Participated	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value
1 to 3	183	113.88	139	90.38	991	75.86	196	113.12	1,224	88.56	1,601	88.24 ^b
4 to 6	13	125.29	16	115.82	131	113.30	33	225.61	181	146.15	404	149.66 ^b
7 to 9	2	127.65	5	108.13	24	118.20	6	103.46	29	139.69	111	174.44 ^{ab}
10 to 15	0		0		5	100.13	2	178.94	17	114.66	63	230.94 ^{ab}
16 to 25	0		0		2	50.88	0		0		16	323.47 ^a
over 25	0		0		0		0		3	59.24	3	117.16 ^b

Table 249. Resident Fall Turkey, Average Fixed Spending, by Days Participated

Days	1	981	1	982	1	986	1	990	1	996	2	001
Participated	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value
1 to 3	177	71.08 ^b	105	23.79	960	101.10	131	100.80	1,209	76.09	975	117.00
4 to 6	13	59.18 ^b	14	6.92	126	71.10	21	122.30	181	92.50	279	184.60
7 to 9	2	389.39 ^a	4	0.00	24	111.90	5	40.00	29	34.13	75	135.00
10 to 15	0		0		5	42.10	2	80.60	16	60.10	46	219.60
16 to 25	0		0		1	28.30	0		0		10	141.20
over 25	0		0		0		0		3	20.68	2	31.80

378

Table 250. Resident Fall Turkey, Average Variable Spending, with and without Access Fees and/or Guide Fees

Access Fees and/or Guide	1	981	1	982	1	986	1	990	1	996	2	001
Fees	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value
With Fees	4	149.42	11	144.73	23	132.52 ^a	11	131.76	23	203.79 ^a	31	219.51 ^a
Without Fees	194	114.05	151	91.93	1,143	79.96 ^b	230	127.10	1,457	94.76 ^b	2,167	108.15 ^b

Table 251. Resident Fall Turkey, Average Fixed Spending, with and without Access Fees and/or Guide Fees

Access Fees and/or Guide	1	981	1	982	1	986	1	990	1	996	2	.001
Fees	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value
With Fees	4	77.68	9	33.76	23	92.93	10	90.69	23	169.79 ^a	25	237.17
Without Fees	188	73.50	116	22.00	1,106	97.72	149	102.78	1,441	75.64 ^b	1,354	133.46

Table 252. Resident Fall Turkey, Average Variable Spending, Rural and Urban Residence

Location of	Location of 1981		1986	1990	1996	2001
Residence	Obs Value	Obs Value	Obs Value	Obs Value	Obs Value	Obs Value
Rural	na	na	na	96 103.07	568 89.65	870 105.18
Urban	na	na	na	127 134.59	899 100.85	1,305 113.48

Table 253. Resident Fall Turkey, Average Fixed Spending, Rural and Urban Residence

Location of	1981	1982	1986	1990	1996	2001
Residence	Obs Value					
Rural	na	na	na	64 92.67	562 72.53	540 118.06
Urban	na	na	na	83 100.85	889 79.47	831 147.61

380

Table 254. Resident Fall Turkey, Average Variable Spending, by Location of Residence

Type of	1981	1982	1986	1990		1996		2001	
Residence	Obs Value	Obs Value	Obs Value	Obs	Value	Obs	Value	Obs	Value
rural nonfarm	na	na	na	15	136.91	152	93.86 ^{ab}	175	111.22
farm or ranch	na	na	na	39	110.86	166	99.55 ^{ab}	221	101.59
city under 2,500 population	na	na	na	42	83.77	250	80.52 ^b	474	104.63
city 2,500 to 50,000 population	na	na	na	90	133.38	528	91.92 ^{ab}	719	109.65
over 50,000 population	na	na	na	37	137.53	371	113.58 ^a	586	118.19

Table 255. Resident Fall Turkey, Average Fixed Spending, by Location of Residence

Type of	1981	1982	1986	1990	1996	2001	
Residence	Obs Value	Obs Value					
rural nonfarm	na	na	na	10 63.85	150 81.12	117 117.50	
farm or ranch	na	na	na	24 152.33	166 89.71	142 116.49	
city under 2,500 population	na	na	na	30 54.54	246 55.69	281 119.08	
city 2,500 to 50,000 population	na	na	na	60 105.90	519 62.49	461 173.30	
over 50,000 population	na	na	na	23 87.68	370 103.28	370 115.61	

Table 256. Resident Fall Turkey, Average Variable Spending, by Amount of Rural Spending

Amount of Rural -	1981	1982	1986	1990	1996	2001	
Spending	Obs Value	Obs Value	Obs Value	Obs Value	Obs Value	Obs Value	
Zero	na	na	na	53 75.47 ^b	361 56.37 ^c	547 57.13 ^b	
1 to 24.9 percent	na	na	na	12 228.49 ^a	77 117.56 ^b	117 132.89 ^a	
25 to 49.9 percent	na	na	na	14 145.51 ^{ab}	82 161.63 ^a	99 159.72 ^a	
50 to 74.9 percent	na	na	na	24 139.36 ^{ab}	165 132.07 ^{ab}	220 161.44 ^a	
75 to 100 percent	na	na	na	118 141.27 ^{ab}	621 113.07 ^b	1,059 126.67 ^a	

Table 257. Resident Fall Turkey, Average Fixed Spending, by Amount of Rural Spending

Amount of Rural _	1981	1982	1986	1990		1996		2001	
Spending	Obs Value	Obs Value	Obs Value	Obs	Value	Obs	Value	Obs	Value
Zero	na	na	na	38	93.00	356	54.36 ^b	367	94.96 ^b
1 to 24.9 percent	na	na	na	7	208.95	77	270.95 ^a	88	344.40 ^a
25 to 49.9 percent	na	na	na	12	166.90	82	104.47 ^b	72	167.51 ^b
50 to 74.9 percent	na	na	na	17	89.59	165	102.02 ^b	152	183.34 ^b
75 to 100 percent	na	na	na	76	97.05	612	64.65 ^b	663	116.09 ^b

Table 258. Resident Fall Turkey, Average Variable Spending, by Age of Participant

Age of	1981		1	1982		1986		1990		1996		2001	
Participant	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value	
6 to 18 years	19	84.27	26	116.30		na		na	179	70.10^{b}	246	62.99 ^b	
19 to 45 years	139	126.48	100	100.63		na		na	722	103.43 ^a	972	120.07 ^a	
46 to 65 years	36	92.96	30	67.73		na		na	431	94.34 ^{ab}	787	106.20 ^a	
over 65 years	2	24.74	6	59.03		na		na	85	104.12 ^a	177	132.79 ^a	

Table 259. Resident Fall Turkey, Average Fixed Spending, by Age of Participant

Age of	1981		1982		1	1986		1990		1996		2001	
Participant	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value	
6 to 18 years	19	74.19	22	27.62		na		na	174	73.24	174	108.57	
19 to 45 years	135	76.94	78	19.84		na		na	714	84.76	618	137.73	
46 to 65 years	35	45.42	22	31.10		na		na	428	66.70	474	155.45	
over 65 years	2	18.31	3	5.59		na		na	85	83.34	110	74.84	

383

Table 260. Resident Fall Turkey, Average Variable Spending, by Income of Participant

Income of	1981		1982	1986	1990	1996		2001	
Participant	Obs	Value	Obs Value	Obs Value	Obs Value	Obs	Value	Obs	Value
Under \$10,000	6	62.67	na	na	na	73	110.23	106	66.90
\$10,000 to \$25,000	13	142.34	na	na	na	198	87.59	179	109.50
\$25,000 to \$50,000	73	101.21	na	na	na	532	92.82	655	110.80
over \$50,000	57	129.89	na	na	na	511	108.68	973	114.92

Table 261. Resident Fall Turkey, Average Fixed Spending, by Income of Participant

Income of	1981		1982	1986	1990	1996		2001	
Participant	Obs	Value	Obs Value	Obs Value	Obs Value	Obs	Value	Obs	Value
Under \$10,000	6	33.10	na	na	na	73	102.81	71	101.39
\$10,000 to \$25,000	13	46.85	na	na	na	194	65.17	114	98.84
\$25,000 to \$50,000	73	80.00	na	na	na	527	75.01	437	167.32
over \$50,000	55	79.60	na	na	na	506	83.23	606	129.75

384

Table 262. Resident Fall Turkey, Average Variable Spending, by Value Placed on a Day of Hunting

Value per Day of	1981		1982		1	1986		1990		1996		001
Hunting	Obs V	/alue	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value
Zero	0			na	63	94.78 ^b	1	0.00	5	177.49 ^{abc}	61	72.07 ^c
\$1 to \$50	53 10)2.99		na	358	62.49 ^b	89	76.00	615	65.87 ^c	941	66.44 ^c
\$51 to \$100	50 13	31.10		na	201	93.09 ^b	57	155.70	393	108.14 ^c	488	146.18 ^b
\$101 to \$200	30 16	50.04		na	144	113.98 ^b	36	240.00	151	170.29 ^{bc}	241	201.56 ^{ab}
\$201 to \$500	8 15	52.39		na	31	195.82 ^a	3	202.30	24	288.37 ^a	34	236.59 ^a
\$501 to \$5,000	4 16	50.80		na	12	79.38 ^b	1	95.00	15	224.96 ^{ab}	20	185.54 ^{ab}
\$5,001 to \$15,000	0			na	0		0		0		0	
Over \$15,000	0			na	0		0		0		0	

Table 263. Resident Fall Turkey, Average Fixed Spending, by Value Placed on a Day of Hunting

Value per Day of	1981		1982	1986		1990		1996		2	001
Hunting	Obs	Value	Obs Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value
Zero	0		na	62	223.25	1	22.10	5	192.67	47	81.59
\$1 to \$50	51	49.45	na	351	71.87	61	85.50	607	58.43	595	92.87
\$51 to \$100	48	92.81	na	201	122.82	41	119.00	390	81.12	327	136.24
\$101 to \$200	30	79.72	na	140	118.17	24	165.90	150	159.70	163	257.67
\$201 to \$500	8	105.39	na	31	207.05	3	42.80	24	176.38	25	283.78
\$501 to \$5,000	4	41.07	na	12	196.87	0		14	178.26	14	140.61
\$5,001 to \$15,000	0		na	0		0		0		0	
Over \$15,000	0		na	0		0		0		0	

Table 264. Resident Fall Turkey Gratis, Average Variable Spending, by Miles Traveled

	1	986	1990			1996	2	2001
Miles Traveled	Obs	Value	Obs	Value	Obs	Value	Obs	Value
no miles	7	5.50 ^b	3	0.00^{c}	1	12.61 ^b	25	70.74 ^b
1 to 300	33	26.82 ^b	45	35.60 ^{bc}	31	31.85 ^b	66	40.89 ^b
301 to 600	1	190.41 ^a	3	199.58 ^a	5	148.83 ^{ab}	7	206.06 ^{ab}
601 to 900	0		0		1	252.25 ^a	1	314.90 ^a
901 to 1200	0		1	166.55 ^{ab}	0		0	
over 1200	1	32.83 ^b	0		0		0	

Table 265. Resident Fall Turkey Gratis, Average Fixed Spending, by Miles Traveled

	1	986	1990		1	996	2001	
Miles Traveled	Obs	Value	Obs	Value	Obs	Value	Obs	Value
no miles	7	25.68	3	7.63	1	69.00	13	33.36
1 to 300	28	32.01	30	38.65	31	21.55	40	79.13
301 to 600	1	172.23	2	29.19	5	80.47	3	63.05
601 to 900	0		0		1	0.21	1	12.26
901 to 1200	0		1	1.67	0		0	
over 1200	1	8.09	0		0		0	

Table 266. Resident Fall Turkey Gratis, Average Variable Spending, by Days Participated

Days	1	986	1990 1996		2001			
Participated	Obs	Value	Obs	Value	Obs	Value	Obs	Value
1 to 3	30	21.27 ^b	43	34.25	40	22.04 ^b	68	34.25 ^c
4 to 6	11	40.89 ^b	14	78.95	7	78.79 ^{ab}	21	81.85 ^{bc}
7 to 9	1	8.21 ^b	1	0.00	2	45.86 ^{ab}	4	85.07 ^{bc}
10 to 15	0		4	30.63	2	162.82 ^a	2	513.49 ^a
16 to 25	1	32.83 ^b	0		0		2	274.27 ^b
over 25	1	172.35 ^a	0		0		2	130.53 ^{bc}

Table 267. Resident Fall Turkey Gratis, Average Fixed Spending, by Days Participated

Days1986		986	1	990	1	996	2001	
Participated	Obs	Value	Obs	Value	Obs	Value	Obs	Value
1 to 3	27	32.29	28	35.73	40	16.49 ^b	41	58.00
4 to 6	10	45.02	9	34.70	7	13.97 ^b	9	61.40
7 to 9	1	8.09	0		2	0.21^{b}	3	181.60
10 to 15	0		3	1.67	2	200.86 ^a	1	35.60
16 to 25	1	8.09	0		0		2	37.70
over 25	1	8.09	0		0		1	215.40

387

Table 268. Resident Fall Turkey Gratis, Average Variable Spending, with and without Access Fees and/or Guide Fees

Access Fees and/or Guide	1986	1990	1996	2001		
Fees	Obs Value	Obs Value	Obs Value	Obs Value		
With Fees	na	na	na	na		
Without Fees	na	na	na	na		

Table 269. Resident Fall Turkey Gratis, Average Fixed Spending, with and without Access Fees and/or Guide Fees

Access Fees and/or Guide	1986	1990	1996	2001	
Fees	Obs Value	Obs Value	Obs Value	Obs Value	
With Fees	na	na	na	na	
Without Fees	na	na	na	na	

Table 270. Resident Fall Turkey Gratis, Average Variable Spending, Rural and Urban Residence

Location of	1986	1990	1996	2001	
Residence	Obs Value	Obs Value	Obs Value	Obs Value	
Rural	na	na	29 32.93	60 44.05 ^b	
Urban	na	na	3 101.28	26 112.29 ^a	

Table 271. Resident Fall Turkey Gratis, Average Fixed Spending, Rural and Urban Residence

Location of	1986	1990	1996	2001
Residence	Obs Value	Obs Value	Obs Value	Obs Value
Rural	na	na	29 29.74	37 81.12
Urban	na	na	3 0.21	14 51.08

Table 272. Resident Fall Turkey Gratis, Average Variable Spending, by Location of Residence

	1986	1990	1996		2001	
Type of Residence	Obs Value	Obs Value	Obs	Value	Obs	Value
rural non-farm	na	na	1	12.61	0	
farm or ranch	na	na	25	35.54	52	42.70
city under 2,500 population	na	na	3	17.96	8	52.82
city 2,500 to 50,000 population	na	na	2	140.46	7	50.79
over 50,000 population	na	na	1	22.93	19	134.94

Table 273. Resident Fall Turkey Gratis, Average Fixed Spending, by Location of Residence

	1986	1990	1996		2001	
Type of Residence	Obs Value	Obs Value	Obs	Value	Obs	Value
rural non-farm	na	na	1	0.21	0	
farm or ranch	na	na	25	26.76	33	87.52
city under 2,500 population	na	na	3	64.42	4	28.26
city 2,500 to 50,000 population	na	na	2	0.21	4	19.88
over 50,000 population	na	na	1	0.21	10	63.56

ယ

Table 274. Resident Fall Turkey Gratis, Average Variable Spending, by Amount of Rural Spending

	1986	1	990	1996		2001	
Amount of Rural Spending	Obs Value	Obs	Value	Obs	Value	Obs	Value
Zero	na	11	52.81	14	19.49 ^b	12	29.00
1 to 24.9 percent	na	2	101.17	2	174.86 ^a	0	
25 to 49.9 percent	na	1	57.81	0		1	50.80
50 to 74.9 percent	na	5	108.19	2	86.57 ^{ab}	8	203.20
75 to 100 percent	na	20	51.48	22	53.42 ^{ab}	53	72.90

Table 275. Resident Fall Turkey Gratis, Average Fixed Spending, by Amount of Rural Spending

	1	986	1	990	1	1996 2001		001
Amount of Rural Spending	Obs	Value	Obs	Value	Obs	Value	Obs	Value
Zero		na	8	53.28	14	3.48	10	28.51
1 to 24.9 percent		na	2	8.55	2	0.21	0	
25 to 49.9 percent		na	1	242.54	0		1	12.26
50 to 74.9 percent		na	5	12.68	2	0.21	5	82.35
75 to 100 percent		na	15	31.49	22	37.05	34	88.39

Table 276. Resident Fall Turkey Gratis, Average Variable Spending, by Age of Participant

Age of	Age of1986		1	996	2001	
Participant	Obs Value	Obs Value	Obs	Value	Obs	Value
6 to 18 years	na	na	6	75.48	7	54.71
19 to 45 years	na	na	16	37.55	28	97.34
46 to 65 years	na	na	23	29.11	48	54.32
over 65 years	na	na	8	33.82	15	31.29

Table 277. Resident Fall Turkey Gratis, Average Fixed Spending, by Age of Participant

Age of	1986	1990	1	996	2001		
Participant	Obs Value	Obs Value	Obs	Value	Obs	Value	
6 to 18 years	na	na	6	78.56	5	145.33	
19 to 45 years	na	na	16	7.37	18	46.57	
46 to 65 years	na	na	23	22.49	25	84.99	
over 65 years	na	na	8	6.66	8	12.26	

Table 278. Resident Fall Turkey Gratis, Average Variable Spending, by Income of Participant

	1986	1990	1	996	2	001
Income of Participant	Obs Value	Obs Value	Obs	Value	Obs	Value
Under \$10,000	na	na	1	45.86	3	76.86
\$10,000 to \$25,000	na	na	13	20.20	10	19.00
\$25,000 to \$50,000	na	na	15	32.79	23	43.46
over \$50,000	na	na	18	47.46	47	80.49

Table 279. Resident Fall Turkey Gratis, Average Fixed Spending, by Income of Participant

	1986	1990	1996	2001
Income of Participant	Obs Value	Obs Value	Obs Value	Obs Value
Under \$10,000	na	na	1 0.21	2 52.89
\$10,000 to \$25,000	na	na	13 12.91	5 22.42
\$25,000 to \$50,000	na	na	15 28.11	16 67.18
over \$50,000	na	na	18 17.09	30 61.63

393

Table 280. Resident Fall Turkey Gratis, Average Variable Spending, by Value Placed on a Day of Hunting

Value per Day of	1	986	1	990	1	996		2001
Hunting	Obs	Value	Obs	Value	Obs	Value	Obs	Value
Zero	4	4.10	1	16.52	2	0.00	4	3.81^{b}
\$1 to \$50	17	30.42	24	65.95	25	35.77	34	38.24 ^b
\$51 to \$100	3	74.67	10	28.08	8	69.08	17	89.99 ^b
\$101 to \$200	6	42.15	7	93.20	5	42.65	8	143.48 ^b
\$201 to \$500	1	15.18	0		0		2	4.57 ^b
\$501 to \$5,000	0		0		0		1	1,015.81 ^a
\$5,001 to \$15,000	0		0		0		0	
Over \$15,000 (priceless)	0		0		0		0	

Table 281. Resident Fall Turkey Gratis, Average Fixed Spending, by Value Placed on a Day of Hunting

Value per Day of	1	986	1	990	1	996	2	001
Hunting	Obs	Value	Obs	Value	Obs	Value	Obs	Value
Zero	4	8.09	1	1.67	2	0.21	3	12.30
\$1 to \$50	16	13.53	18	22.01	25	30.57	19	112.00
\$51 to \$100	3	103.84	8	78.23	8	38.19	11	40.00
\$101 to \$200	6	71.01	5	56.17	5	3.65	6	147.70
\$201 to \$500	1	90.16	0		0		2	12.30
\$501 to \$5,000	0		0		0		0	
\$5,001 to \$15,000	0		0		0		0	
Over \$15,000 (priceless)	0		0		0		0	

394

Table 282. Resident Spring Turkey, Average Variable Spending, by Miles Traveled

_	1990		1996
Miles Traveled	Obs	Value	Obs Value
no miles	6	1.15 ^c	1 29.81°
1 to 300	141	69.40 ^{bc}	456 69.32 ^{bc}
301 to 600	43	149.36 ^{ab}	182 142.06 ^{abc}
601 to 900	14	190.24 ^a	42 164.75 ^{abc}
901 to 1200	5	164.35 ^{ab}	22 192.63 ^{ab}
over 1200	0		7 288.61 ^a

Table 283. Resident Spring Turkey, Average Fixed Spending, by Miles Traveled

_	1	990	1	996
Miles Traveled	Obs	Value	Obs	Value
no miles	5	22.10	1	28.70
1 to 300	96	58.50	155	141.00
301 to 600	35	133.40	96	175.00
601 to 900	8	38.10	17	203.70
901 to 1200	2	101.30	14	101.50
over 1200	0		5	189.00

Table 284. Resident Spring Turkey, Average Variable Spending, by Days Participated

Days	1	990	1	1996		
Participated	Obs	Value	Obs	Value		
1 to 3	160	88.49	509	84.31 ^b		
4 to 6	46	101.29	198	105.62 ^{ab}		
7 to 9	13	107.68	54	137.12 ^{ab}		
10 to 15	4	88.44	30	182.35 ^a		
16 to 25	0		4	61.34 ^b		
over 25	0		0			

Table 285. Resident Spring Turkey, Average Fixed Spending, by Days Participated

Days	1	990	1996		
Participated	Obs	Value	Obs	Value	
1 to 3	110	86.23	172	151.50	
4 to 6	37	45.03	93	142.90	
7 to 9	9	89.44	29	172.40	
10 to 15	3	31.32	19	178.90	
16 to 25	0		1	34.40	
over 25	0		0		

Table 286. Resident Spring Turkey, Average Variable Spending, with and without Access Fees and/or Guide Fees

Access Fees and/or Guide	1	990	1996		
Fees	Obs	Value	Obs	Value	
With Fees	1	56.43	6	127.84	
Without Fees	225	91.82	789	96.55	

Table 287. Resident Spring Turkey, Average Fixed Spending, with and without Access Fees and/or Guide Fees

Access Fees and/or Guide	1	990	1996		
Fees	Obs	Value	Obs	Value	
With Fees	0		4	182.35	
Without Fees	158	76.08	305	151.10	

397

Table 288. Resident Spring Turkey, Average Variable Spending, Rural and Urban Residence

Location of	1990		1996	
Residence	Obs	Value	Obs	Value
Rural	119	73.75 ^b		na
Urban	104	113.62 ^a		na

Table 289. Resident Spring Turkey, Average Fixed Spending, Rural and Urban Residence

Location of	1	990	1996		
Residence	Obs	Value	Obs	Value	
Rural	77	68.00		na	
Urban	82	83.10		na	

398

Table 290. Resident Spring Turkey, Average Variable Spending, by Location of Residence

	1	990	1996		
Type of Residence	Obs	Value	Obs	Value	
rural non-farm	24	74.38 ^{ab}		na	
farm or ranch	47	49.55 ^b		na	
city under 2,500 population	48	97.12 ^{ab}		na	
city 2,500 to 50,000 population	64	127.43 ^a		na	
over 50,000 population	40	91.53 ^{ab}		na	

Table 291. Resident Spring Turkey, Average Fixed Spending, by Location of Residence

	1	990	1	996
Type of Residence	Obs	Value	Obs	Value
rural non-farm	14	100.90		na
farm or ranch	32	61.68		na
city under 2,500 population	31	59.67		na
city 2,500 to 50,000 population	49	105.07		na
over 50,000 population	33	50.47		na

399

Table 292. Resident Spring Turkey, Average Variable Spending, by Amount of Rural Spending

	1	990	1996		
Amount of Rural Spending	Obs	Value	Obs	Value	
Zero	49	76.41		na	
1 to 24.9 percent	15	131.40		na	
25 to 49.9 percent	13	168.88		na	
50 to 74.9 percent	13	122.50		na	
75 to 100 percent	97	95.09		na	

Table 293. Resident Spring Turkey, Average Fixed Spending, by Amount of Rural Spending

	1	990	1	996
Amount of Rural Spending	Obs	Value	Obs	Value
Zero	44	45.48 ^b		na
1 to 24.9 percent	13	102.93 ^b		na
25 to 49.9 percent	9	389.04 ^a		na
50 to 74.9 percent	12	28.23 ^b		na
75 to 100 percent	66	61.19 ^b		na

Table 294. Resident Spring Turkey, Average Variable Spending, by Age of Participant

Age of	1990	1996
Participant	Obs Value	Obs Value
6 to 18 years	na	na
19 to 45 years	na	na
46 to 65 years	na	na
over 65 years	na	na

Table 295. Resident Spring Turkey, Average Fixed Spending by Age of Participant

Age of	19	990	1	996
Participant	Obs	Value	Obs	Value
6 to 18 years		na		na
19 to 45 years		na		na
46 to 65 years		na		na
over 65 years		na		na

Table 296. Resident Spring Turkey, Average Variable Spending, by Income of Participant

	1	990	1996		
Income of Participant	Obs	Value	Obs	Value	
Under \$10,000		na		na	
\$10,000 to \$25,000		na		na	
\$25,000 to \$50,000		na		na	
over \$50,000		na		na	

Table 297. Resident Spring Turkey, Average Fixed Spending, by Income of Participant

	1990	1996
Income of Participant	Obs Value	Obs Value
Under \$10,000	na	na
\$10,000 to \$25,000	na	na
\$25,000 to \$50,000	na	na
over \$50,000	na	na

Table 298. Resident Spring Turkey, Average Variable Spending, by Value Placed on a Day of Hunting

Value per Day of	1	990		1996
Hunting	Obs	Value	Obs	Value
Zero	3	16.52 ^b	5	159.83
\$1 to \$50	83	73.76 ^b	327	87.67
\$51 to \$100	50	114.66 ^b	82	116.59
\$101 to \$200	19	146.05 ^b	58	129.41
\$201 to \$500	4	346.17 ^a	26	112.10
\$501 to \$5,000	2	28.22 ^b	18	150.08
\$5,001 to \$15,000	0		0	
Over \$15,000 (priceless)	0		0	

Table 299. Resident Spring Turkey, Average Fixed Spending, by Value Placed on a Day of Hunting

Value per Day of	1	990	1996		
Hunting	Obs	Value	Obs	Value	
Zero	3	31.30^{b}	5	92.46	
\$1 to \$50	58	45.90 ^b	119	161.71	
\$51 to \$100	40	81.60 ^b	41	201.20	
\$101 to \$200	12	41.20 ^b	23	118.24	
\$201 to \$500	3	913.20 ^a	15	74.27	
\$501 to \$5,000	1	22.10^{b}	10	271.79	
\$5,001 to \$15,000	0		0		
Over \$15,000 (priceless)	0		0		

403

Table 300. Resident Upland Game, Average Variable Spending, by Miles Traveled

		1981	1	982		1986		1990		1996		2001
Miles Traveled	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value
no miles	15	341.86 ^{cd}		na	9	63.47 ^d	2	8.30 ^c	1	5.70 ^b	4	419.50 ^{bc}
1 to 300	188	175.89 ^d		na	386	140.44 ^{cd}	114	204.10 ^{bc}	150	172.70 ^b	194	116.40 ^c
301 to 600	65	328.44 ^d		na	150	288.67 ^{bc}	76	381.90 ^{abc}	106	291.30 ^{ab}	129	214.10 ^{bc}
601 to 900	34	518.12 ^{bc}		na	42	418.86 ^b	22	677.30 ^{ab}	52	366.10 ^{ab}	45	356.90 ^{bc}
901 to 1200	28	697.14 ^{ab}		na	44	384.86 ^b	40	598.00 ^{abc}	64	549.00 ^{ab}	62	494.00 ^b
over 1200	27	881.43 ^a		na	66	851.53 ^a	64	960.90 ^a	90	1,109.50 ^a	88	851.30 ^a

Table 301. Resident Upland Game, Average Fixed Spending, by Miles Traveled

		1981	1	982	1986		1990		1996		2	001
Miles Traveled	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value
no miles	15	145.43 ^b		na	9	210.50	2	42.80	1	20.70	2	31.80
1 to 300	180	157.64 ^b		na	348	509.50	97	107.70	150	113.20	112	182.40
301 to 600	65	184.02 ^{ab}		na	145	191.00	66	245.80	106	142.10	80	208.60
601 to 900	34	254.58 ^{ab}		na	40	228.50	20	259.90	52	170.50	31	482.90
901 to 1200	28	299.06 ^{ab}		na	39	262.40	39	339.50	64	223.90	48	879.20
over 1200	26	354.60 ^a		na	61	336.70	60	355.60	90	570.20	73	620.00

404

Table 302. Resident Upland Game, Average Variable Spending, by Days Participated

Days		1981		1982		1986		1990		1996		2001	
Participated	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value	
1 to 3	54	118.93 ^c	152	83.27 ^d	204	112.85	50	119.64 ^d	170	222.93 ^b	172	134.91 ^d	
4 to 6	62	160.31 ^c	117	106.77 ^d	161	172.00 ^{de}	75	307.61 ^{cd}	142	389.03 ^b	137	290.91 ^{cd}	
7 to 9	47	260.57 ^{bc}	53	143.93 ^{cd}	70	260.39 ^{cd}	35	509.67 ^{bc}	42	481.65 ^b	51	291.42 ^{cd}	
10 to 15	71	330.68 ^b	99	226.35 ^{bc}	196	340.15 ^{bc}	95	446.83 ^{bc}	42	481.65 ^b	111	424.81 ^c	
16 to 25	70	526.75 ^a	47	419.54 ^a	64	449.24 ^b	48	739.40 ^b	57	886.56 ^a	54	649.37 ^b	
over 25	48	603.01 ^a	32	330.90 ^{ab}	40	813.41 ^a	24	1,140.15 ^a	28	1,080.01 ^a	23	943.38 ^a	

Table 303. Resident Upland Game, Average Fixed Spending, by Days Participated

Days	-	1981		1982		1986		1990		1996		2001	
Participated	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value	
1 to 3	51	135.83 ^{bc}	55	64.30 ^b	177	127.30	40	59.62 ^b	170	111.80 ^c	93	169.10	
4 to 6	62	119.34 ^c	41	113.30 ^{ab}	144	238.50	65	170.84 ^{ab}	142	191.11 ^c	91	435.00	
7 to 9	46	154.35 ^{bc}	17	134.10 ^{ab}	64	188.90	32	271.93 ^a	42	278.39 ^{bc}	30	500.50	
10 to 15	70	193.15 ^{abc}	35	273.90 ^{ab}	179	234.50	83	278.83 ^a	121	234.90 ^c	82	565.20	
16 to 25	69	259.71 ^{ab}	13	367.10 ^a	63	233.40	46	340.79 ^a	57	510.88 ^a	46	440.00	
over 25	48	303.01 ^a	7	109.20 ^{ab}	39	448.00	22	322.21 ^a	28	467.08 ^{ab}	18	437.20	

Table 304. Resident Upland Game, Average Variable Spending, with and without Access Fees and/or Guide Fees

Access Fees and/or Guide	1001		1	982	1	1986		1990		1996	2	2001		
Fees	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value		
With Fees	3	232.20		na	10	867.20 ^a	6	652.70	14	1,536.80 ^a	17	980.40 ^a		
Without Fees	354	338.40		na	735	258.20 ^b	335	461.20	549	428.20^{b}	531	311.10 ^b		

Table 305. Resident Upland Game, Average Fixed Spending, with and without Access Fees and/or Guide Fees

Access Fees and/or Guide	1	981	1982		1	1986		1990		1996		2001	
Fees	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value	
With Fees	3	138.70		na	10	578.60	6	350.20	14	575.40 ^a	12	1,030.30 ^a	
Without Fees	345	198.10		na	665	212.00	294	233.20	549	219.70^{b}	344	382.30 ^b	

406

Table 306. Resident Upland Game, Average Variable Spending, Rural and Urban Residence

Location of	1981	1982	1986	1990	1996	2001	
Residence	Obs Value	Obs Value	Obs Value	Obs Value	Obs Value	Obs Value	
Rural	na	na	na	168 383.07 ^b	249 384.28 ^b	171 311.84	
Urban	na	na	na	167 551.40 ^a	310 512.34 ^a	374 342.14	

Table 307. Resident Upland Game, Average Fixed Spending, Rural and Urban Residence

Location of	1981	1982	1986	1990	1996	2001	
Residence	Obs Value	Obs Value	Obs Value	Obs Value	Obs Value	Obs Value	
Rural	na	na	na	144 190.00 ^b	249 187.54	102 295.20	
Urban	na	na	na	152 283.23 ^a	310 260.12	256 440.90	

407

Table 308. Resident Upland Game, Average Variable Spending, by Location of Residence

Type of .	1981	1982	1986	1990	1996	2001	
Residence	Obs Value	Obs Value	Obs Value	Obs Value	Obs Value	Obs Value	
rural nonfarm	na	na	na	30 439.13	49 443.03	50 403.13	
farm or ranch	na	na	na	68 313.50	72 334.79	56 224.86	
city under 2,500 population	na	na	na	70 426.64	128 389.63	65 316.56	
city 2,500 to 50,000 population	na	na	na	112 531.98	153 504.24	144 287.62	
over 50,000 population	na	na	na	55 590.94	157 520.24	230 376.27	

Table 309. Resident Upland Game, Average Fixed Spending, by Location of Residence

Type of	1981	1982	1986	1990	1996	2001	
Residence	Obs Value	Obs Value	Obs Value	Obs Value	Obs Value	Obs Value	
rural nonfarm	na	na	na	27 302.74 ^{ab}	49 167.03	27 219.80	
farm or ranch	na	na	na	60 138.78 ^b	72 187.00	36 204.30	
city under 2,500 population	na	na	na	57 190.51 ^{ab}	128 195.70	39 431.30	
city 2,500 to 50,000 population	na	na	na	100 248.52 ^{ab}	153 246.53	100 533.20	
over 50,000 population	na	na	na	52 349.98 ^a	157 273.37	156 381.80	

Table 310. Resident Upland Game, Average Variable Spending, by Amount of Rural Spending

Amount of Rural	1981	1982	1986	1990	1996	2001	
Spending	Obs Value	Obs Value	Obs Value	Obs Value	Obs Value	Obs Value	
Zero	na	na	na	30 193.60 ^b	71 195.21 ^b	102 203.14 ^b	
1 to 24.9 percent	na	na	na	43 535.70 ^a	67 475.82 ^a	78 396.11 ^{ab}	
25 to 49.9 percent	na	na	na	45 483.30 ^{ab}	59 627.22 ^a	48 297.97 ^{ab}	
50 to 74.9 percent	na	na	na	48 706.10 ^a	80 602.09 ^a	83 416.38 ^a	
75 to 100 percent	na	na	na	160 439.60 ^{ab}	249 479.44 ^a	207 366.33 ^{ab}	

Table 311. Resident Upland Game, Average Fixed Spending, by Amount of Rural Spending

Amount of Rural .	1981	1982	1986	1990		1996		2001	
Spending	Obs Value	Obs Value	Obs Value	Obs	Value	Obs	Value	Obs	Value
Zero	na	na	na	26	149.15	71	112.52 ^b	67	283.80
1 to 24.9 percent	na	na	na	41	271.42	67	347.34 ^a	60	745.20
25 to 49.9 percent	na	na	na	42	277.34	59	384.10 ^a	31	379.00
50 to 74.9 percent	na	na	na	46	339.36	80	308.71 ^{ab}	60	334.00
75 to 100 percent	na	na	na	137	193.19	249	191.30 ^{ab}	132	359.20

Table 312. Resident Upland Game, Average Variable Spending, by Age of Participant

Age of	1981		1982		1	1986		1990		1996		2001	
Participant	Obs	Value	Obs	Value	Obs Value		Obs	Value	Obs	Value	Obs	Value	
6 to 18 years	49	336.73	77	124.42		na		na	37	360.20	22	222.19	
19 to 45 years	234	341.23	327	195.10		na		na	330	489.20	249	361.05	
46 to 65 years	58	329.76	67	127.27		na		na	156	456.70	248	321.25	
over 65 years	12	381.80	12	96.32		na		na	32	244.50	28	258.89	

Table 313. Resident Upland Game, Average Fixed Spending, by Age of Participant

Age of	1981		1982		1	1986		1990		1996		2001	
Participant	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value	
6 to 18 years	46	157.19	33	135.90		na		na	37	247.52	19	229.60	
19 to 45 years	230	202.83	103	147.10		na		na	330	243.89	180	490.90	
46 to 65 years	60	221.36	16	164.40		na		na	156	229.15	144	341.90	
over 65 years	12	135.24	1	0.00		na		na	32	34.84	17	165.60	

410

Table 314. Resident Upland Game, Average Variable Spending, by Income of Participant

Income of	1	981	1982	1986	1990	1	996	2	001
Participant	Obs	Value	Obs Value	Obs Value	Obs Value	Obs	Value	Obs	Value
Under \$10,000	39	296.92	na	na	na	40	301.50	12	157.20
\$10,000 to \$25,000	51	298.69	na	na	na	85	479.30	49	317.80
\$25,000 to \$50,000	115	369.01	na	na	na	225	449.41	169	285.50
over \$50,000	78	398.26	na	na	na	183	520.55	265	370.40

Table 315. Resident Upland Game, Average Fixed Spending by Income of Participant

Income of	1	981	1982	1986	1990	1	996	2	001
Participant	Obs	Value	Obs Value	Obs Value	Obs Value	Obs	Value	Obs	Value
Under \$10,000	39	187.11	na	na	na	40	126.17	11	179.50
\$10,000 to \$25,000	51	157.76	na	na	na	85	291.91	36	188.00
\$25,000 to \$50,000	116	201.70	na	na	na	225	197.90	100	519.60
over \$50,000	77	227.82	na	na	na	183	264.52	190	403.20

Table 316. Resident Upland Game, Average Variable Spending, by Value Placed on a Day of Hunting

Value per Day of		1981	1	982		1986	1	990		1996		2001
Hunting	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value
Zero	3	432.10		na	8	381.60 ^b	1	0.00	3	263.30 ^{ab}	11	321.10 ^{bc}
\$1 to \$50	125	264.00		na	355	220.00^{b}	177	363.10	257	337.80 ^{ab}	230	218.20 ^c
\$51 to \$100	94	373.20		na	148	352.30^{b}	87	582.70	153	571.70 ^{ab}	145	383.90 ^{bc}
\$101 to \$200	45	517.00		na	75	335.70^{b}	46	706.10	51	909.50 ^{ab}	76	536.50 ^{bc}
\$201 to \$500	7	454.30		na	29	375.90^{b}	4	836.20	8	1,413.00 ^a	10	1,395.20 ^a
\$501 to \$5,000	8	553.70		na	15	371.40^{b}	0		3	107.00^{b}	8	683.10 ^b
\$5,001 to \$15,000	0			na	1	1,214.70 ^a	0		1	630.60 ^{ab}	0	
Over \$15,000	0			na	0		0		0		0	

Table 317. Resident Upland Game, Average Fixed Spending, by Value Placed on a Day of Hunting

Value per Day of		1981	1982		1986		1990	1	.996		2001
Hunting	Obs	Value	Obs Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value
Zero	3	188.80	na	8	178.10	1	22.10	3	173.60	8	307.30
\$1 to \$50	123	172.70	na	320	143.70	160	159.90	257	161.70	143	245.60
\$51 to \$100	93	209.40	na	136	271.70	73	326.10	153	291.00	98	286.90
\$101 to \$200	44	255.80	na	67	278.40	42	338.00	51	478.60	62	920.20
\$201 to \$500	7	326.30	na	29	130.40	4	147.70	8	834.50	10	1,289.90
\$501 to \$5,000	8	228.60	na	15	286.10	0		3	58.90	6	516.00
\$5,001 to \$15,000	0		na	1	28.30	0		1	708.60	0	
Over \$15,000	0		na	0		0		0		0	

412

Table 318. Resident Waterfowl, Average Variable Spending, by Miles Traveled

		1981	1	982		1986		1990		1996		2001
Miles Traveled	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value
no miles	21	370.28 ^c		na	8	217.28 ^{bc}	0		0		5	242.40 ^{bc}
1 to 300	159	224.30 ^c		na	253	131.09 ^c	70	133.30 ^c	132	157.45 ^d	131	136.40 ^c
301 to 600	60	420.03 ^c		na	114	313.81 ^{bc}	45	334.90 ^{bc}	67	356.49 ^{cd}	83	256.50 ^{bc}
601 to 900	23	383.69 ^c		na	27	399.41 ^b	19	613.60 ^b	18	457.62 ^{bc}	20	462.40 ^{bc}
901 to 1200	28	718.20^{b}		na	30	659.28 ^a	21	523.80 ^b	36	675.41 ^b	25	583.50 ^b
over 1200	14	1,235.66 ^a		na	33	775.98 ^a	37	1,207.80 ^a	61	1,047.70 ^a	55	1,095.70 ^a

Table 319. Resident Waterfowl, Average Fixed Spending, by Miles Traveled

	1	981	1	982	1	986		1990	1	996	2	001
Miles Traveled	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value
no miles	21	176.21		na	8	303.08	0		0		3	336.50
1 to 300	154	149.61		na	214	130.00	55	200.90^{b}	131	329.70	74	257.20
301 to 600	60	229.87		na	105	171.06	42	226.30 ^{ab}	66	269.70	55	347.00
601 to 900	21	165.84		na	26	275.57	16	280.10 ^{ab}	18	343.60	17	311.40
901 to 1200	28	285.48		na	29	324.45	20	510.60 ^{ab}	36	362.30	19	816.90
over 1200	14	226.25		na	32	220.86	35	568.10 ^a	61	836.80	47	668.30

413

Table 320. Resident Waterfowl, Average Variable Spending, by Days Participated

Days		1981		1982		1986		1990		1996		2001
Participated	Obs	Value	Obs	Value								
1 to 3	38	139.21 ^c	117	82.20 ^c	153	108.15 ^e	38	105.60 ^c	103	148.70 ^d	105	139.40 ^c
4 to 6	71	283.23 ^{bc}	113	145.18 ^{bc}	126	184.97 ^{de}	39	281.60 ^c	120	327.50 ^{cd}	79	301.90 ^{bc}
7 to 9	48	331.99 ^{bc}	59	166.04 ^{bc}	43	286.76 ^{cd}	33	483.70 ^{bc}	39	507.20 ^{bc}	31	443.00 ^{bc}
10 to 15	71	382.72 ^{ab}	109	270.90 ^b	124	375.76 ^c	59	497.60 ^{bc}	89	534.40 ^{bc}	81	493.30 ^b
16 to 25	51	605.64 ^a	44	260.27 ^b	37	554.51 ^b	23	861.30 ^{ab}	33	669.10 ^b	29	986.60 ^a
over 25	24	621.44 ^a	17	518.48 ^a	19	803.28 ^a	6	929.10 ^a	12	1,202.30 ^a	14	605.40 ^b

Table 321. Resident Waterfowl, Average Fixed Spending, by Days Participated

Days	1	981	1	982		1986		1990	1	996	2	001
Participated	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value
1 to 3	39	156.36	118	79.29	123	74.36 ^b	29	266.70 ^b	102	186.20	61	356.00
4 to 6	71	124.86	113	184.66	110	160.86 ^{ab}	30	267.60 ^b	119	533.40	54	362.70
7 to 9	48	228.67	59	155.33	36	173.02 ^{ab}	34	171.10 ^b	39	318.50	23	326.80
10 to 15	68	215.40	109	144.01	114	241.67 ^{ab}	54	245.00 ^b	89	373.00	53	536.20
16 to 25	52	232.13	44	161.26	36	189.30 ^{ab}	21	545.10 ^{ab}	33	359.50	25	686.40
over 25	25	200.03	17	282.93	19	331.45 ^a	6	718.40 ^a	12	542.90	14	570.90

Table 322. Resident Waterfowl, Average Variable Spending, with and without Access Fees and/or Guide Fees

Access Fees and/or Guide	1	981	1	982	1	986		1990		1996	2	001
Fees	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value
With Fees	6	598.70		na	7	470.70	6	1,904.50 ^a	7	1,254.20 ^a	9	647.70
Without Fees	299	372.20		na	499	264.00	204	426.20 ^b	391	382.90^{b}	332	373.20

Table 323. Resident Waterfowl, Average Fixed Spending, with and without Access Fees and/or Guide Fees

Access Fees and/or Guide	1	981	1	982	1	986	1	990		1996	2	001
Fees	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value
With Fees	6	260.09		na	6	117.30	6	964.30 ^a	7	1,709.40 ^a	8	204.50
Without Fees	292	183.62		na	435	168.50	174	301.20^{b}	389	345.90 ^b	217	455.40

41:

Table 324. Resident Waterfowl, Average Variable Spending, Rural and Urban Residence

Location of	1981	1982	1986	1990	1996	2001
Residence	Obs Value	Obs Value	Obs Value	Obs Value	Obs Value	Obs Value
Rural	na	na	na	88 429.09	170 383.14	112 313.70
Urban	na	na	na	118 500.91	223 415.37	227 416.23

Table 325. Resident Waterfowl, Average Fixed Spending, Rural and Urban Residence

Location of	1981	1982	1986	1990	1996	2001
Residence	Obs Value	Obs Value	Obs Value	Obs Value	Obs Value	Obs Value
Rural	na	na	na	73 294.91	169 241.90	81 370.90
Urban	na	na	na	105 350.79	222 471.40	151 480.29

Table 326. Resident Waterfowl, Average Variable Spending, by Location of Residence

Type of .	1981	1982	1986	1990	1996	2001	
Residence	Obs Value	Obs Value					
rural nonfarm	na	na	na	20 458.10	39 396.72	22 494.60	
farm or ranch	na	na	na	30 271.20	44 279.74	41 271.00	
city under 2,500 population	na	na	na	38 538.40	87 429.34	49 268.30	
city 2,500 to 50,000 population	na	na	na	78 423.00	101 373.79	90 400.60	
over 50,000 population	na	na	na	40 652.80	122 449.79	137 426.50	

Table 327. Resident Waterfowl, Average Fixed Spending, by Location of Residence

Type of .	1981	1982	1986	1990	1996	2001
Residence	Obs Value	Obs Value				
rural nonfarm	na	na	na	18 427.40	38 165.80	19 481.50
farm or ranch	na	na	na	22 171.60	44 98.00	28 349.20
city under 2,500 population	na	na	na	33 304.90	87 287.90	34 327.00
city 2,500 to 50,000 population	na	na	na	69 292.60	100 317.70	58 513.70
over 50,000 population	na	na	na	36 462.30	122 487.70	93 459.50

Table 328. Resident Waterfowl, Average Variable Spending, by Amount of Rural Spending

Amount of Rural	1981	1982	1986	1990		1996	2001	
Spending	Obs Value	Obs Value	Obs Value	Obs	Value	Obs Value	Obs Value	
Zero	na	na	na	24	254.80	18 228.40 ^b	64 174.20 ^b	
1 to 24.9 percent	na	na	na	26	433.80	62 501.10 ^{ab}	37 490.30 ^a	
25 to 49.9 percent	na	na	na	25	516.60	38 621.90 ^a	34 633.10 ^a	
50 to 74.9 percent	na	na	na	29	602.40	59 523.90 ^{ab}	55 539.70 ^a	
75 to 100 percent	na	na	na	97	509.50	143 410.60 ^{ab}	125 364.90 ^{ab}	

Table 329. Resident Waterfowl, Average Fixed Spending, by Amount of Rural Spending

Amount of Rural	1981	1982	1986	1990	1996	2001	
Spending	Obs Value	Obs Value					
Zero	na	na	na	21 383.3	0 18 193.90	44 180.80 ^b	
1 to 24.9 percent	na	na	na	21 274.1	0 62 465.10	32 611.60 ^a	
25 to 49.9 percent	na	na	na	24 324.8	0 38 523.00	25 669.50 ^a	
50 to 74.9 percent	na	na	na	25 421.3	0 58 497.90	43 458.80 ^{ab}	
75 to 100 percent	na	na	na	82 314.1	0 143 202.50	77 372.00 ^{ab}	

418

Table 330. Resident Waterfowl, Average Variable Spending, by Age of Participant

Age of	1	1981		1982		1986		990	1996		2001	
Participant	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value
6 to 18 years	37	348.40	62	147.16		na		na	26	241.10	11	676.30
19 to 45 years	201	386.40	292	202.31		na		na	232	436.10	175	396.30
46 to 65 years	54	365.30	76	204.55		na		na	105	400.30	133	353.00
over 65 years	12	360.00	24	109.76		na		na	25	237.50	21	284.40

Table 331. Resident Waterfowl, Average Fixed Spending, by Age of Participant

Age of	1	1981		1982		1986		990	1	996	2001	
Participant	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value
6 to 18 years	35	172.48	62	305.35 ^a		na		na	26	323.60	11	498.60
19 to 45 years	202	178.00	293	134.33 ^{ab}		na		na	232	385.70	129	436.20
46 to 65 years	56	258.66	76	94.73 ^{ab}		na		na	103	438.20	80	473.20
over 65 years	11	109.44	24	23.69 ^b		na		na	25	107.60	12	246.40

Table 332. Resident Waterfowl, Average Variable Spending, by Income of Participant

Income of	1981	1982	1986	1990	1996	2001	
Participant	Obs Value	Obs Value	Obs Value	Obs Value	Obs Value	Obs Value	<u>e</u>
Under \$10,000	37 316.44 ^b	na	na	na	18 328.80	11 204.2	20
\$10,000 to \$25,000	51 318.67 ^b	na	na	na	53 372.40	26 364.8	80
\$25,000 to \$50,000	104 368.34 ^{ab}	na	na	na	154 413.20	88 333.5	50
over \$50,000	61 530.40 ^a	na	na	na	145 436.70	186 437.7	70

Table 333. Resident Waterfowl, Average Fixed Spending, by Income of Participant

Income of	1981		1982	1986	1990	1	996	2001	
Participant	Obs	Value	Obs Value	Obs Value	Obs Value	Obs	Value	Obs	Value
Under \$10,000	36	189.66	na	na	na	18	159.50	9	320.70
\$10,000 to \$25,000	50	158.74	na	na	na	53	256.20	21	375.70
\$25,000 to \$50,000	104	172.20	na	na	na	153	331.40	59	400.10
over \$50,000	63	239.04	na	na	na	144	504.60	129	492.50

420

Table 334. Resident Waterfowl, Average Variable Spending, by Value Placed on a Day of Hunting

Value per Day of	1981	1982	<u> </u>	1986		1990	_ ,	1996		2001
Hunting	Obs Value	e Obs Value	Obs	Value	Obs	Value	Ob	Value	Obs	Value
Zero	8 107.40	O ^c na	5	355.50 ^{ab}	1	308.30	1	1,031.90	11	219.90 ^b
\$1 to \$50	107 282.90	O ^{bc} na	240	213.20 ^b	97	343.10	171	349.50	121	262.50 ^b
\$51 to \$100	79 408.90	O ^{bc} na	113	285.40^{b}	52	553.10	104	463.13	94	440.90 ^b
\$101 to \$200	35 619.50	O ^{ab} na	51	454.90 ^{ab}	24	778.30	35	621.00	45	562.40^{b}
\$201 to \$500	71,030.0	0 ^a na	18	349.90^{ab}	6	1,344.10	8	1,125.10	10	740.00^{b}
\$501 to \$5,000	6 570.00	O ^{abc} na	11	610.80^{a}	3	267.90	1	154.80	3	1,982.50 ^a
\$5,001 to \$15,000	0	na	0		0		0		0	
Over \$15,000	0	na	0		0		0		0	

Table 335. Resident Waterfowl, Average Fixed Spending, by Value Placed on a Day of Hunting

Value per Day of	1981		1982		1	1986		1990	1996		2001	
Hunting	Obs	Value	Obs	Value	Obs	Value	Ob	Value	Ob	Value	Obs	Value
Zero	7	122.49 ^b		na	4	69.40	1	77.20^{b}	1	124.00	10	103.90
\$1 to \$50	104	149.50 ^b		na	203	125.00	81	149.60^{b}	170	350.00	75	386.80
\$51 to \$100	81	211.15 ^{ab}		na	106	174.00	49	380.80^{b}	104	363.00	66	416.50
\$101 to \$200	36	257.61 ^{ab}		na	44	352.70	21	522.60 ^b	34	480.00	37	527.50
\$201 to \$500	7	443.67 ^a		na	18	192.00	6	1,556.20 ^a	8	2,414.00	8	706.00
\$501 to \$5,000	6	343.21 ^{ab}		na	10	318.90	3	641.50^{b}	1	307.00	1	717.40
\$5,001 to \$15,000	0			na	0		0		0		0	
Over \$15,000	0			na	0		0		0		0	

421

Table 336. Nonresident Small Game, Average Variable Spending, by Miles Traveled

	1983		1	1990		996	2001		
Miles Traveled	Obs	Value	Obs	Value	Obs	Value	Obs	Value	
no miles	220	486.96 ^{ab}	0		1	458.60	4	444.40	
1 to 300	62	352.65 ^b	121	536.50 ^b	88	525.60	252	478.60	
301 to 600	70	437.90 ^{ab}	287	451.74 ^b	146	541.60	326	518.20	
601 to 900	48	510.46 ^{ab}	127	526.51 ^b	123	538.20	233	521.70	
901 to 1200	63	540.26 ^{ab}	38	946.52 ^a	170	598.00	329	625.30	
over 1200	122	662.64 ^a	52	953.13 ^a	376	878.90	666	847.60	

Table 337. Nonresident Small Game, Average Fixed Spending, by Miles Traveled

	1983		1	990	1	996	2	001
Miles Traveled	Obs	Value	Obs	Value	Obs	Value	Obs	Value
no miles	105	135.70	0		0		4	26.60
1 to 300	31	54.90	90	112.22	50	24.51	107	78.70
301 to 600	37	132.30	166	62.59	97	65.31	158	111.90
601 to 900	31	108.20	73	49.35	66	55.60	103	110.80
901 to 1200	33	110.10	29	101.95	116	65.10	145	161.90
over 1200	76	389.10	35	97.50	238	113.66	340	146.40

423

Table 338. Nonresident Small Game, Average Variable Spending, by Days Participated

Days	ys <u>1983</u>		1990		1996	2001	
Participated	Obs Value	Obs	Value	Obs	Value	Obs	Value
1 to 3	na	174	441.30 ^b	203	493.70 ^b	429	544.20 ^b
4 to 6	na	287	514.00 ^b	622	623.00^{b}	989	587.70 ^b
7 to 9	na	108	581.80 ^b	271	692.50 ^b	340	758.50 ^b
10 to 15	na	59	804.50 ^b	124	892.30 ^b	150	1,004.50 ^b
16 to 25	na	8	2,326.20 ^a	13	1,405.70 ^a	17	1,835.20 ^a
over 25	na	2	585.00 ^b	6	1,597.80 ^a	3	629.80 ^b

Table 339. Nonresident Small Game, Average Fixed Spending, by Days Participated

Days	Days1983		1990		996	2	2001		
Participated	Obs Value	Obs	Value	Obs	Value	Obs	Value		
1 to 3	na	95	63.70	107	50.08	176	87.50		
4 to 6	na	177	70.77	367	60.59	434	118.80		
7 to 9	na	74	68.40	177	65.98	183	144.70		
10 to 15	na	49	118.75	90	175.79	85	225.50		
16 to 25	na	6	217.09	9	186.91	10	225.00		
over 25	na	2	299.68	5	88.17	2	251.30		

425

Table 340. Nonresident Small Game, Average Variable Spending, with and without Access Fees and/or Guide Fees

Access Fees and/or Guide		1983	1	990		1996		2001
Fees	Obs	Value	Obs	Value	Obs	Value	Obs	Value
With Fees	22	1,198.60 ^a	31	775.02 ^a	184	1,046.99 ^a	325	1,060.80 ^a
Without Fees	563	484.30 ^b	646	551.03 ^b	1,057	588.78 ^b	1,606	567.96 ^b

Table 341. Nonresident Small Game, Average Fixed Spending, with and without Access Fees and/or Guide Fees

Access Fees and/or Guide	1	983	1	990	1	996	2	2001
Fees	Obs	Value	Obs	Value	Obs	Value	Obs	Value
With Fees	12	194.00	23	71.91	108	69.91	153	152.67
Without Fees	301	183.00	399	77.13	644	77.02	739	124.49

426

Table 342. Nonresident Small Game, Average Variable Spending, Rural and Urban Residence

Location of 1983		983	1990		1996		2001	
Residence	Obs	Value	Obs	Value	Obs	Value	Obs	Value
Rural		na	139	469.42 ^b	389	615.80	609	627.10
Urban		na	514	578.15 ^a	839	678.80	1,309	664.17

Table 343. Nonresident Small Game, Average Fixed Spending, Rural and Urban Residence

Location of	1983	1990		1	996	2001	
Residence	Obs Value	Obs	Value	Obs	Value	Obs	Value
Rural	na	89	86.28	245	65.57	284	130.65
Urban	na	318	74.95	499	80.36	605	128.76

427

Table 344. Nonresident Small Game, Average Variable Spending, by Location of Residence

	1983	1990		1996		2001	
Type of Residence	Obs Value	Obs	Value	Obs	Value	Obs	Value
rural non-farm	na	70	468.66	186	561.45	289	562.99 ^c
farm or ranch	na	24	487.37	52	619.16	102	807.00 ^a
city under 2,500 population	na	45	461.04	151	681.59	218	627.93 ^{bc}
city 2,500 to 50,000 population	na	214	522.62	398	671.20	698	622.81 ^{bc}
over 50,000 population	na	300	617.75	441	685.66	611	711.42 ^{ab}

Table 345. Nonresident Small Game, Average Fixed Spending, by Location of Residence

	1	1983		1990		1996		001
Type of Residence	Obs	Value	Obs	Value	Obs	Value	Obs	Value
rural non-farm		na	39	55.45	119	64.19	133	93.64
farm or ranch		na	20	57.98	33	69.79	53	157.05
city under 2,500 population		na	30	145.24	93	65.83	98	166.60
city 2,500 to 50,000 population		na	121	110.34	241	80.62	317	146.12
over 50,000 population		na	197	53.20	258	80.12	288	109.66

428

Table 346. Nonresident Small Game, Average Variable Spending, by Amount of Rural Spending

	1983	1990	1996	2001
Amount of Rural Spending	Obs Value	Obs Value	Obs Value	Obs Value
Zero	na	50 439.33 ^b	33 655.26	49 524.08 ^b
1 to 24.9 percent	na	51 691.46 ^{ab}	80 846.03	98 591.11 ^{ab}
25 to 49.9 percent	na	45 711.46 ^a	62 846.24	109 766.36 ^a
50 to 74.9 percent	na	106 538.52 ^{ab}	138 707.61	189 718.77 ^{ab}
75 to 100 percent	na	404 553.51 ^{ab}	867 624.66	1,424 647.73 ^{ab}

Table 347. Nonresident Small Game, Average Fixed Spending, by Amount of Rural Spending

	1983		1990		1996		2001
Amount of Rural Spending	Obs Val	ue Obs	Value	Obs	Value	Obs	Value
Zero	na	33	26.27 ^b	17	98.63	27	49.89 ^b
1 to 24.9 percent	na	38	121.72 ^a	55	101.64	46	123.33 ^{ab}
25 to 49.9 percent	na	36	131.91 ^a	44	135.63	55	322.51 ^a
50 to 74.9 percent	na	i 68	99.43 ^{ab}	86	134.97	103	182.41 ^{ab}
75 to 100 percent	na	240	62.99 ^{ab}	513	61.36	641	109.98 ^b

Table 348. Nonresident Small Game, Average Variable Spending, by Age of Participant

Age of	1	1983	1	1990 1996		996	2001	
Participant	Obs	Value	Obs	Value	Obs	Value	Obs	Value
6 to 18 years	21	279.80 ^b	20	319.30 ^b	20	502.89	54	558.15
19 to 45 years	366	487.30 ^{ab}	356	547.20 ^{ab}	608	634.54	1,040	630.32
46 to 65 years	170	591.50 ^a	234	577.70 ^{ab}	499	697.79	721	690.44
over 65 years	24	511.50 ^{ab}	46	619.80 ^a	92	667.33	100	631.64

Table 349. Nonresident Small Game, Average Fixed Spending, by Age of Participant

Age of	1	1983		1990		996	2001		
Participant	Obs	Value	Obs	Value	Obs	Value	Obs	Value	
6 to 18 years	10	43.10 ^b	13	58.80	18	39.76	29	77.69	
19 to 45 years	206	117.00 ^b	242	61.90	384	72.68	518	133.58	
46 to 65 years	91	149.20 ^b	25	96.24	286	75.04	299	128.29	
over 65 years	11	1,815.00 ^a	130	103.41	52	108.79	40	130.55	

Table 350. Nonresident Small Game, Average Variable Spending, by Income of Participant

	1983	1990	1996		2001	
Income of Participant	Obs Value	Obs Value	Obs	Value	Obs	Value
Under \$10,000	na	na	6	745.30	22	640.40
\$10,000 to \$25,000	na	na	62	630.30	80	465.70
\$25,000 to \$50,000	na	na	376	600.70	370	571.70
over \$50,000	na	na	744	693.00	1,342	696.30

Table 351. Nonresident Small Game, Average Fixed Spending, by Income of Participant

	1983	1990	1996		2001	
Income of Participant	Obs Value	Obs Value	Obs	Value	Obs	Value
Under \$10,000	na	na	5	43.69	10	58.91
\$10,000 to \$25,000	na	na	37	81.20	40	75.67
\$25,000 to \$50,000	na	na	220	97.77	177	81.36
over \$50,000	na	na	461	67.24	625	133.52

431

Table 352. Nonresident Small Game, Average Variable Spending, by Value Placed on a Day of Hunting

Value per Day of	1	983	1	990	1	996		2001
Hunting	Obs	Value	Obs	Value	Obs	Value	Obs	Value
Zero	0		9	569.10 ^c	0		20	459.50 ^c
\$1 to \$50	93	274.62 ^c	143	366.70 ^c	211	400.10^{d}	275	413.36 ^c
\$51 to \$100	155	429.07 ^{bc}	179	490.80 ^c	355	598.60 ^c	556	523.07 ^c
\$101 to \$200	166	600.48^{ab}	169	660.30^{b}	389	762.10 ^c	585	680.14 ^c
\$201 to \$500	53	807.68 ^a	35	1,126.10 ^b	81	1,146.90 ^b	205	1,178.25 ^b
\$501 to \$5,000	14	601.73 ^{ab}	5	1,648.10 ^a	8	1,603.20 ^a	26	1,923.91 ^a
\$5,001 to \$15,000	0		0		0		0	
Over \$15,000 (priceless)	0		0		0		0	

Table 353. Nonresident Small Game, Average Fixed Spending, by Value Placed on a Day of Hunting

Value per Day of	1	983	1	1990 1996			2	001
Hunting	Obs	Value	Obs	Value	Obs	Value	Obs	Value
Zero	0		5	64.31	0		12	41.80
\$1 to \$50	37	79.80	98	82.07	115	86.83	138	73.40
\$51 to \$100	80	96.20	111	73.74	222	61.26	238	129.40
\$101 to \$200	106	320.60	104	61.05	237	81.48	279	129.00
\$201 to \$500	32	187.50	23	174.72	51	101.57	117	201.40
\$501 to \$5,000	8	226.10	3	141.39	7	64.42	12	256.00
\$5,001 to \$15,000	0		0		0		0	
Over \$15,000 (priceless)	0		0		0		0	

432

Table 354. Resident Summer Fishing, Average Variable Spending, by Miles Traveled

	1982		1986			1990		1996		2001	
Miles Traveled	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value	
no miles	0		28	252.70^{d}	28	117.70 ^d	2	52.70 ^c	5	213.90 ^b	
1 to 300	15	249.60 ^b	413	168.70 ^d	187	190.30 ^d	613	237.10 ^{bc}	146	215.40^{b}	
301 to 600	4	409.70^{ab}	189	432.00 ^{cd}	81	373.50 ^{cd}	323	477.10 ^{bc}	87	405.00^{b}	
601 to 900	6	668.00^{ab}	65	591.50 ^{bc}	27	692.60 ^c	129	695.80 ^{bc}	43	467.30 ^b	
901 to 1200	4	1,016.00 ^{ab}	68	780.60 ^b	32	1,176.20 ^b	157	862.40^{ab}	64	938.90 ^{ab}	
over 1200	6	1,247.20 ^a	114	1,720.90 ^a	85	1,878.10 ^a	269	1,619.20 ^a	109	1,613.30 ^a	

Table 355. Resident Summer Fishing, Average Fixed Spending, by Miles Traveled

	1982			1986		1990		1996		2001	
Miles Traveled	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value	
no miles	0		28	477.50 ^b	19	1,208.90	2	126.00	5	395.00	
1 to 300	12	1,004.40	406	349.50 ^b	160	869.60	516	888.00	125	699.00	
301 to 600	4	161.70	188	989.40 ^b	75	1,032.60	294	833.00	78	445.00	
601 to 900	6	258.40	65	904.20 ^b	23	768.90	118	1,427.00	37	1,876.00	
901 to 1200	3	588.30	68	1,237.10 ^{ab}	32	728.30	149	1,493.00	62	872.00	
over 1200	6	831.60	114	2,560.80 ^a	82	2,115.80	264	2,744.00	103	3,058.00	

433

Table 356. Resident Summer Fishing, Average Variable Spending, by Days Participated

Days		1982		1986		1990		1996		2001
Participated	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value
1 to 3	8	75.30 ^b	224	109.54 ^d	111	161.30°	318	111.24	56	131.30 ^c
4 to 6	4	230.70^{b}	176	250.12 ^{cd}	84	348.70 ^c	318	276.94 ^{de}	80	267.10 ^c
7 to 9	3	468.50 ^{ab}	47	365.01 ^{cd}	29	325.80 ^c	110	343.57 ^{cd}	22	465.40 ^{bc}
10 to 15	8	519.00 ^{ab}	212	463.54 ^c	112	567.90 ^c	402	489.38 ^c	132	520.00 ^{bc}
16 to 25	6	1,013.20 ^{ab}	122	738.18 ^b	49	1,024.80 ^b	324	861.15 ^b	82	952.40 ^{ab}
over 25	6	1,296.00 ^a	116	1,319.99 ^a	59	1,970.90 ^a	357	1,278.87 ^a	97	1,475.20 ^a

Table 357. Resident Summer Fishing, Average Fixed Spending, by Days Participated

Days	1982		1986		1990		1996	2001
Participated	Obs	Value	Obs	Value	Obs	Value	Obs Value	Obs Value
1 to 3	5	69.10	225	240.50 ^b	94	505.10	245 424.70 ^b	43 593.10 ^{ab}
4 to 6	4	838.00	175	307.00^{b}	69	841.60	278 804.90 ^b	70 435.40 ^b
7 to 9	3	302.50	47	1,220.30 ^{ab}	25	870.50	106 535.30 ^b	19 836.10 ^{ab}
10 to 15	8	335.40	215	849.40 ^b	105	1,673.70	366 1,357.10 ^{ab}	123 865.20 ^{ab}
16 to 25	6	750.80	123	1,311.20 ^{ab}	47	1,575.70	307 1,061.00 ^b	76 1,665.70 ^{ab}
over 25	5	1,842.40	117	1,960.30 ^a	59	1,865.60	352 2,553.80 ^a	95 2,994.30 ^a

434

Table 358. Resident Summer Fishing, Average Variable Spending, with and without Access Fees and/or Guide Fees

Access Fees and/or Guide	1982	1986	1990	1996	2001
Fees	Obs Value	Obs Value	Obs Value	Obs Value	Obs Value
With Fees	8 1,134.40 ^a	207 881.34 ^a	60 1,456.00 ^a	302 1,136.71 ^a	106 1,182.8 ^a
Without Fees	27 439.30 ^b	762 381.99 ^b	410 517.70 ^b	1,549 490.68 ^b	368 559.7 ^b

Table 359. Resident Summer Fishing, Average Fixed Spending, with and without Access Fees and/or Guide Fees

Access Fees and/or Guide	1	982	1	.986	1	1990	1	996	2	2001
Fees	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value
With Fees	8	651.30	207	1,792.80 ^a	57	2,376.10 ^a	298	2,540.70 ^a	98	2,262.4 ^a
Without Fees	23	686.70	754	579.70 ^b	359	1,007.50 ^b	1,375	1,014.00 ^b	325	1,080.7 ^b

Table 360. Resident Summer Fishing, Average Variable Spending, Rural and Urban Residence

Location of	1982	1986	1990	1996	2001
Residence	Obs Value	Obs Value	Obs Value	Obs Value	Obs Value
Rural	na	na	235 588.47	930 488.97 ^b	162 569.00
Urban	na	na	231 689.96	919 704.37 ^a	311 768.20

Table 361. Resident Summer Fishing, Average Fixed Spending, Rural and Urban Residence

Location of	1982	1986	1990	1996	2001
Residence	Obs Value	Obs Value	Obs Value	Obs Value	Obs Value
Rural	na	na	204 924.80	825 1,061.60	145 889.60
Urban	na	na	216 1,436.50	849 1,505.10	284 1,623.40

436

Table 362. Resident Summer Fishing, Average Variable Spending, by Location of Residence

	1982	1986	199	90	1996		001
Type of Residence	Obs Value	Obs Value	Obs V	Value Ob	s Value	Obs	Value
rural non-farm	na	na	40	672.30 21	5 519.93 ^{bc}	41	536.70
farm or ranch	na	na	86 4	459.80 29	7 406.77 ^c	39	397.20
city under 2,500 population	na	na	109	659.20 41	7 531.49 ^{bc}	82	667.00
city 2,500 to 50,000 population	na	na	181 7	752.40 61	5 719.66 ^a	100	685.30
over 50,000 population	na	na	50 4	463.70 30	3 673.29 ^{ab}	211	807.50

Table 363. Resident Summer Fishing, Average Fixed Spending, by Location of Residence

	1982		1986			1990		1996		2001
Type of Residence	Obs Va	alue	Obs	Value	Obs	Value	Obs	Value	Obs	Value
rural non-farm	r	na		na	37	1,734.60	199	995.90	41	866.70
farm or ranch	r	na		na	68	881.30	264	1,192.30	32	975.10
city under 2,500 population	r	na		na	99	652.10	362	1,002.40	72	864.70
city 2,500 to 50,000 population	r	na		na	170	1,348.10	564	1,414.20	95	1,622.90
over 50,000 population	r	na		na	46	1,763.20	285	1,685.00	189	1,623.60

437

Table 364. Resident Summer Fishing, Average Variable Spending, by Amount of Rural Spending

	1982	1986	1990	1996	2001	
Amount of Rural Spending	Obs Value	Obs Value	Obs Value	Obs Value	Obs Value	
Zero	na	na	77 294.30 ^b	251 426.42 ^d	78 344.10 ^b	
1 to 24.9 percent	na	na	63 877.50 ^a	321 911.96 ^{ab}	86 777.00 ^{ab}	
25 to 49.9 percent	na	na	30 894.90 ^a	100 960.76 ^a	50 1,189.80 ^a	
50 to 74.9 percent	na	na	40 820.90 ^{ab}	191 706.58 ^{bc}	70 767.60 ^{ab}	
75 to 100 percent	na	na	208 704.50 ^{ab}	698 556.61 ^{cd}	180 676.60 ^b	

Table 365. Resident Summer Fishing, Average Fixed Spending, by Amount of Rural Spending

	1982	1986	1990	1996	2001
Type of Residence	Obs Value	Obs Value	Obs Value	Obs Value	Obs Value
Zero	na	na	73 928.70	229 1,531.50	71 1,082.90
1 to 24.9 percent	na	na	63 1,007.50	313 2,067.60	81 1,675.80
25 to 49.9 percent	na	na	29 1,411.50	95 1,041.40	46 2,803.50
50 to 74.9 percent	na	na	37 1,172.40	181 978.50	63 995.90
75 to 100 percent	na	na	187 1,393.10	617 901.80	160 1,121.00

Table 366. Resident Summer Fishing, Average Variable Spending, by Age of Participant

Age of	1	982	1	1986 1990		1	1996		001	
Participant	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value
6 to 18 years	0			na		na	46	450.70	6	641.30
19 to 45 years	16	456.00		na		na	1,001	655.10	226	708.30
46 to 65 years	14	880.10		na		na	561	579.10	158	872.00
over 65 years	5	264.00		na		na	239	412.60	68	349.60

Table 367. Resident Summer Fishing, Average Fixed Spending, by Age of Participant

Age of	1982	1986	1990	1996	2001
Participant	Obs Value	Obs Value	Obs Value	Obs Value	Obs Value
6 to 18 years	0	na	na	43 2,423.60 ^a	5 360.00
19 to 45 years	15 290.30	na	na	938 1,162.50 ^{ab}	207 1,536.00
46 to 65 years	13 1,043.30	na	na	497 1,742.50 ^{ab}	143 1,401.00
over 65 years	3 1,028.90	na	na	194 471.90 ^b	61 1,085.00

Table 368. Resident Summer Fishing, Average Variable Spending, by Income of Participant

	1982	1986	1990	1996	2001	
Income of Participant	Obs Value					
Under \$10,000	na	na	na	na	16 276.10	
\$10,000 to \$25,000	na	na	na	na	49 438.20	
\$25,000 to \$50,000	na	na	na	na	154 634.50	
over \$50,000	na	na	na	na	213 889.20	

Table 369. Resident Summer Fishing, Average Fixed Spending, by Income of Participant

	1982	1986	1990	1996	2001
Income of Participant	Obs Value				
Under \$10,000	na	na	na	na	16 1,564.00
\$10,000 to \$25,000	na	na	na	na	43 929.10
\$25,000 to \$50,000	na	na	na	na	131 1,034.10
over \$50,000	na	na	na	na	201 1,796.70

Table 370. Resident Summer Fishing, Average Variable Spending, by Value Placed on a Day of Fishing

Value per Day of		1982		1986		1990		1996		2001
Fishing	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value
Zero		na	18	684.70	9	243.50^{b}	7	54.40 ^d	10	534.90
\$1 to \$50		na	475	343.80	208	490.70^{b}	831	397.40 ^{cd}	192	476.60
\$51 to \$100		na	167	892.30	96	915.70 ^b	396	916.80 ^{bc}	126	749.80
\$101 to \$200		na	65	904.00	35	$1,058.60^{b}$	194	1,049.50 ^{abc}	66	1,456.10
\$201 to \$500		na	14	1,111.70	3	3,994.00 ^a	34	1,608.00 ^a	12	1,352.30
\$501 to \$5,000		na	3	666.40	2	1,176.90 ^b	14	1,158.50 ^{ab}	4	339.50
\$5,001 to \$15,000		na	0		0		0		0	
Over \$15,000 (priceless)		na	0		1	1,693.00 ^b	0		0	

Table 371. Resident Summer Fishing, Average Fixed Spending, by Value Placed on a Day of Fishing

Value per Day of		1982		1986		1990		1996		2001
Fishing	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value
Zero		na	18	1,109.00	5	363.00^{b}	7	139.00 ^c	10	2,902.00
\$1 to \$50		na	478	670.00	190	989.00 ^b	750	699.00 ^c	172	533.00
\$51 to \$100		na	165	1,578.00	88	1,538.00 ^b	369	1,983.00 ^{bc}	112	1,573.00
\$101 to \$200		na	66	1,419.00	33	$2,002.00^{b}$	182	1,458.00 ^{bc}	62	3,597.00
\$201 to \$500		na	13	977.00	3	15,173.00 ^a	32	4,846.00 ^{ab}	12	977.00
\$501 to \$5,000		na	3	249.00	2	262.00^{b}	12	$7,826.00^{a}$	3	127.00
\$5,001 to \$15,000		na	0		0		0		0	
Over \$15,000 (priceless)		na	0		1	522.00 ^b	0		0	

Table 372. Resident Winter Fishing, Average Variable Spending, by Miles Traveled

	1986		1	1990		1996		2001
Miles Traveled	Obs	Value	Obs	Value	Obs	Value	Obs	Value
no miles	1	0.00^{b}	0		1	137.60 ^b	0	
1 to 300	90	121.10 ^b	44	108.18 ^c	315	123.30 ^b	107	124.02 ^c
301 to 600	29	277.00 ^{ab}	19	214.72 ^{bc}	114	268.30 ^b	52	278.95 ^{bc}
601 to 900	6	426.60 ^{ab}	7	333.88 ^b	36	403.40 ^{ab}	17	357.86 ^b
901 to 1200	14	560.70 ^{ab}	8	403.98 ^b	26	430.40 ^{ab}	15	407.75 ^b
over 1200	23	816.40 ^a	14	708.57 ^a	44	908.40 ^a	30	769.41 ^a

Table 373. Resident Winter Fishing, Average Fixed Spending, by Miles Traveled

	1986		1	1990		1996		2001
Miles Traveled	Obs	Value	Obs	Value	Obs	Value	Obs	Value
no miles	1	45.20	0		0		0	
1 to 300	75	123.20	36	193.55	211	259.84 ^b	82	238.09 ^b
301 to 600	29	150.20	18	239.35	99	364.28 ^b	50	356.55 ^{ab}
601 to 900	6	244.10	6	156.54	33	317.26 ^b	16	471.21 ^{ab}
901 to 1200	13	219.60	8	204.83	25	472.66 ^{ab}	15	327.54 ^b
over 1200	23	338.30	14	346.06	43	677.62 ^a	27	590.72 ^a

442

Table 374. Resident Winter Fishing, Average Variable Spending, by Days Participated

Days1986		1	1990		1996	2	2001	
Participated	Obs	Value	Obs	Value	Obs	Value	Obs	Value
1 to 3	49	129.40 ^b	33	54.85 ^c	191	89.58 ^d	55	73.55 ^c
4 to 6	36	167.40 ^b	13	188.57 ^{bc}	121	136.64 ^{cd}	40	181.53 ^c
7 to 9	7	200.70^{b}	6	182.38 ^{bc}	52	181.01 ^{cd}	20	172.13 ^c
10 to 15	35	264.60 ^b	21	306.81 ^{bc}	135	264.06 ^c	45	265.01 ^{bc}
16 to 25	16	663.20 ^a	18	387.31 ^b	62	432.75 ^b	35	444.90 ^{ab}
over 25	20	674.20 ^a	3	839.63 ^a	55	728.50 ^a	34	639.78 ^a

Table 375. Resident Winter Fishing, Average Fixed Spending, by Days Participated

Days	1986	1990	1996	2001	
Participated	Obs Value	Obs Value	Obs Value	Obs Value	
1 to 3	41 101.37 ^b	25 181.83 ^b	121 196.63 ^c	40 207.99 ^b	
4 to 6	32 126.54 ^b	12 196.80 ^b	88 277.11 ^{bc}	38 283.05 ^b	
7 to 9	6 78.34 ^b	5 144.61 ^b	40 294.85 ^{bc}	19 193.87 ^b	
10 to 15	33 165.36 ^b	18 223.45 ^{ab}	112 343.40 ^{bc}	39 398.56 ^{ab}	
16 to 25	16 426.87 ^a	18 281.95 ^{ab}	60 423.91 ^{ab}	33 425.55 ^{ab}	
over 25	19 254.04 ^a	3 476.79 ^a	54 618.15 ^a	29 583.39 ^a	

Table 376. Resident Winter Fishing, Average Variable Spending, with and without Access Fees and/or Guide Fees

Access Fees and/or Guide	1986	1990	1996	20	001
Fees	Obs Value	Obs Value	Obs Value	Obs	Value
With Fees	na	na	na	5	387.80
Without Fees	na	na	na	225	276.00

Table 377. Resident Winter Fishing, Average Fixed Spending, with and without Access Fees and/or Guide Fees

Access Fees and/or Guide	1986	1990	1996	2001	
Fees	Obs Value	Obs Value	Obs Value	Obs Value	
With Fees	na	na	na	4 313.30	
Without Fees	na	na	na	192 351.50	

444

Table 378. Resident Winter Fishing, Average Variable Spending, Rural and Urban Residence

Location of	1986	199	1990		1996		2001	
Residence	Obs Value	Obs V	/alue	Obs	Value	Obs	Value	
Rural	na	53 2	276.64	313	241.32	138	254.07	
Urban	na	46 2	217.96	302	231.80	91	318.34	

Table 379. Resident Winter Fishing, Average Fixed Spending, Rural and Urban Residence

Location of	1986	1	1990		1996		2001	
Residence	Obs Valu	e Obs	Value	Obs	Value	Obs	Value	
Rural	na	46	203.85	242	355.28	116	326.35	
Urban	na	40	252.76	232	305.57	82	387.61	

Table 380. Resident Winter Fishing, Average Variable Spending, by Location of Residence

	1986	1	1990		1996		001
Type of Residence	Obs Value	Obs	Value	Obs	Value	Obs	Value
rural non-farm	na	11	347.90	69	257.97	20	297.73
farm or ranch	na	13	149.00	99	259.72	48	192.06
city under 2,500 population	na	29	306.80	145	220.84	70	284.11
city 2,500 to 50,000 population	na	39	219.30	213	238.18	68	293.52
over 50,000 population	na	7	210.20	89	216.55	23	391.71

Table 381. Resident Winter Fishing, Average Fixed Spending, by Location of Residence

	1986	1990		1996		2001	
Type of Residence	Obs Value	Obs	Value	Obs	Value	Obs	Value
rural non-farm	na	10	163.88	55	447.64	19	306.41
farm or ranch	na	8	176.78	74	304.92	39	324.74
city under 2,500 population	na	28	225.87	113	343.30	58	333.96
city 2,500 to 50,000 population	na	34	264.16	170	316.65	60	341.73
over 50,000 population	na	6	188.20	62	275.18	22	512.72

Table 382. Resident Winter Fishing, Average Variable Spending, by Amount of Rural Spending

	1986	1990		1996	2001	
Amount of Rural Spending	Obs Value	Obs	Value	Obs Value	Obs	Value
Zero	na	17	124.00	17 141.03 ^b	50	215.30
1 to 24.9 percent	na	16	293.40	77 331.98 ^{ab}	18	497.50
25 to 49.9 percent	na	5	237.30	19 432.02 ^a	13	403.50
50 to 74.9 percent	na	10	376.50	56 472.17 ^a	16	417.90
75 to 100 percent	na	42	294.00	226 200.58 ^{ab}	122	240.80

Table 383. Resident Winter Fishing, Average Fixed Spending, by Amount of Rural Spending

	1986	1990	1996	2001
Amount of Rural Spending	Obs Value	Obs Value	Obs Value	Obs Value
Zero	na	13 185.69 ^{ab}	11 277.30	46 287.60
1 to 24.9 percent	na	16 248.01 ^{ab}	72 370.61	17 408.70
25 to 49.9 percent	na	4 118.80 ^b	17 311.97	13 500.90
50 to 74.9 percent	na	10 376.68 ^a	47 438.42	15 551.30
75 to 100 percent	na	38 200.86 ^{ab}	163 307.63	102 319.10

Table 384. Resident Winter Fishing, Average Variable Spending, by Age of Participant

Age of	1986	1990	1996	2001
Participant	Obs Value	Obs Value	Obs Value	Obs Value
6 to 18 years	na	na	22 268.30	7 184.40
19 to 45 years	na	na	379 240.27	112 296.20
46 to 65 years	na	na	144 251.08	88 266.50
over 65 years	na	na	71 175.80	16 196.00

Table 385. Resident Winter Fishing, Average Fixed Spending, by Age of Participant

Age of	1986	1990	1996	2001	
Participant	Obs Value	Obs Value	Obs Value	Obs Value	
6 to 18 years	na	na	21 422.74	7 325.20	
19 to 45 years	na	na	293 344.84	103 325.80	
46 to 65 years	na	na	108 305.42	72 387.90	
over 65 years	na	na	53 270.67	11 210.30	

448

Table 386. Resident Winter Fishing, Average Variable Spending, by Income of Participant

	1986	1990	1996	2001
Income of Participant	Obs Value	Obs Value	Obs Value	Obs Value
Under \$10,000	na	na	na	11 182.29
\$10,000 to \$25,000	na	na	na	39 291.43
\$25,000 to \$50,000	na	na	na	70 258.44
over \$50,000	na	na	na	91 311.00

Table 387. Resident Winter Fishing, Average Fixed Spending, by Income of Participant

	1986	1990	1996	20	001
Income of Participant	Obs Value	Obs Value	Obs Value	Obs	Value
Under \$10,000	na	na	na	8	174.90
\$10,000 to \$25,000	na	na	na	32	326.50
\$25,000 to \$50,000	na	na	na	64	312.40
over \$50,000	na	na	na	80	430.60

449

Table 388. Resident Winter Fishing, Average Variable Spending, by Value Placed on a Day of Fishing

Value per Day of	1986		1	1990		1996		2001	
Fishing	Obs	Value	Obs	Value	Obs	Value	Obs	Value	
Zero	0		1	48.20^{b}	0		2	247.30^{b}	
\$1 to \$50	118	250.70	72	218.70 ^{ab}	397	219.80	126	231.00^{b}	
\$51 to \$100	13	554.50	15	395.70 ^{ab}	68	272.90	46	378.90 ^{ab}	
\$101 to \$200	5	584.80	3	485.40 ^{ab}	26	311.90	16	476.70 ^{ab}	
\$201 to \$500	1	91.90	0		6	702.70	4	210.30^{b}	
\$501 to \$5,000	1	673.00	1	846.50 ^a	1	172.00	2	182.80^{b}	
\$5,001 to \$15,000	0		0		0		1	1,234.20 ^a	
Over \$15,000 (priceless)	0		0		0		0		

Table 389. Resident Winter Fishing, Average Fixed Spending, by Value Placed on a Day of Fishing

Value per Day of	1	1986		1990		1996		2001	
Fishing	Obs	Value	Obs	Value	Obs	Value	Obs	Value	
Zero	0		1	89.60	0		4	205.80^{b}	
\$1 to \$50	108	164.50	62	212.80	309	314.10	108	304.80^{b}	
\$51 to \$100	13	315.10	14	288.20	55	427.60	45	470.70^{b}	
\$101 to \$200	5	274.70	3	323.50	25	353.40	13	582.00 ^{ab}	
\$201 to \$500	1	398.10	0		6	889.60	4	273.10^{b}	
\$501 to \$5,000	1	94.50	1	89.60	1	1,261.30	1	84.70^{b}	
\$5,001 to \$15,000	0		0		0		1	1,416.40 ^a	
Over \$15,000 (priceless)	0		0		0		0		

450

Table 390. Nonresident Seasonal Fishing, Average Variable Spending, by Miles Traveled

		1983	1990		1996		2001	
Miles Traveled	Obs	Value	Obs	Value	Obs	Value	Obs	Value
no miles	0		0		2	34.40^{b}	5	315.90 ^b
1 to 300	175	536.05	100	394.70 ^b	128	238.70 ^b	134	298.10 ^b
301 to 600	143	516.15	71	440.60 ^b	108	464.60 ^{ab}	122	420.20 ^b
601 to 900	85	623.89	52	430.50 ^b	52	465.60 ^{ab}	88	523.40 ^{ab}
901 to 1200	45	495.75	15	637.00^{ab}	64	650.20 ^{ab}	63	604.50^{ab}
over 1200	136	631.82	15	807.90 ^a	130	935.40 ^a	162	1,001.90 ^a

Table 391. Nonresident Seasonal Fishing, Average Fixed Spending, by Miles Traveled

_	1	983	1990		1996		2001	
Miles Traveled	Obs	Value	Obs	Value	Obs	Value	Obs	Value
no miles	0		0		2	42.00	5	40.70
1 to 300	102	982.10	66	722.50	118	235.00	92	63.90
301 to 600	81	135.40	52	299.90	102	207.00	80	530.30
601 to 900	44	83.50	32	44.60	46	104.00	64	76.50
901 to 1200	28	65.50	11	284.80	56	871.00	54	872.70
over 1200	68	86.80	12	244.50	127	1,091.00	138	300.90

451

Table 392. Nonresident Seasonal Fishing, Average Variable Spending, by Days Participated

Days		1983		1990		1996	2001	
Participated	Obs	Value	Obs	Value	Obs	Value	Obs	Value
1 to 3	198	284.43 ^c	125	301.50^{b}	212	292.53 ^d	288	361.40^{d}
4 to 6	164	451.49 ^c	64	475.40 ^b	152	445.92 ^{cd}	170	563.80 ^{cd}
7 to 9	65	510.22 ^{bc}	27	509.60 ^b	64	530.82 ^{cd}	62	678.10 ^{cd}
10 to 15	72	768.77 ^b	19	1,012.20 ^a	84	680.16 ^{bc}	50	1,073.40 ^b
16 to 25	38	1,372.92 ^a	8	677.40 ^{ab}	30	941.91 ^{ab}	25	913.50 ^{bc}
over 25	27	1,238.40 ^a	8	586.20 ^b	51	1,211.16 ^a	11	2,172.80 ^a

Table 393. Nonresident Seasonal Fishing, Average Fixed Spending, by Days Participated

Days	1983			1990		1996	2001	
Participated	Obs	Value	Obs	Value	Obs	Value	Obs	Value
1 to 3	78	262.40 ^b	77	54.00	200	85.30 ^b	189	56.40
4 to 6	90	75.80 ^b	46	99.70	147	146.00 ^b	134	267.60
7 to 9	41	129.30 ^b	19	1,387.90	62	80.40 ^b	52	100.20
10 to 15	55	410.20 ^b	16	201.20	84	438.50 ^b	41	1,724.70
16 to 25	31	1,054.20 ^{ab}	8	2,069.60	29	1,823.10 ^a	21	776.50
over 25	18	1,740.00 ^a	8	2,007.80	51	2,763.50 ^a	8	376.60

452

Table 394. Nonresident Seasonal Fishing, Average Variable Spending, with and without Access Fees and/or Guide Fees

Access Fees and/or Guide	1	983	1	990	1	996	2	001
Fees	Obs	Value	Obs	Value	Obs	Value	Obs	Value
With Fees	61	711.00	39	747.09 ^a	86	747.40 ^a	121	913.75 ^a
Without Fees	551	537.75	233	402.02 ^b	508	486.07 ^b	493	497.61 ^b

Table 395. Nonresident Seasonal Fishing, Average Fixed Spending, with and without Access Fees and/or Guide Fees

Access Fees and/or Guide	1983			1990		1996		2001	
Fees	Obs	Value	Obs	Value	Obs	Value	Obs	Value	
With Fees	42	860.30	29	1,478.90 ^a	84	488.80	93	253.60	
Without Fees	284	298.40	159	188.90 ^b	466	498.30	359	334.70	

Table 396. Nonresident Seasonal Fishing, Average Variable Spending, Rural and Urban Residence

Location of	1983	1990	1996	2001	
Residence	Obs Value	Obs Value	Obs Value	Obs Value	
Rural	na	100 399.74	226 536.53	209 553.12	
Urban	na	167 478.16	366 516.12	400 598.26	

Table 397. Nonresident Seasonal Fishing, Average Fixed Spending, Rural and Urban Residence

Location of	Location of 1983		1990		1996		001
Residence	Obs Value	Obs	Value	Obs	Value	Obs	Value
Rural	na	66	285.50	224	585.60	162	253.10
Urban	na	120	439.00	348	401.60	286	358.80

454

Table 398. Nonresident Seasonal Fishing, Average Variable Spending, by Location of Residence

	1983	1990		1996		2001	
Type of Residence	Obs Value	Obs	Value	Obs	Value	Obs	Value
rural non-farm	na	36	395.00	98	523.02	68	476.00
farm or ranch	na	24	401.30	41	490.12	44	622.60
city under 2,500 population	na	40	403.10	87	573.61	97	575.60
city 2,500 to 50,000 population	na	89	448.20	184	523.56	212	577.80
over 50,000 population	na	78	512.30	182	508.59	188	621.30

Table 399. Nonresident Seasonal Fishing, Average Fixed Spending, by Location of Residence

	1983		1	1990		1996		001
Type of Residence	Obs	Value	Obs	Value	Obs	Value	Obs	Value
rural non-farm		na	22	646.70	96	462.00	49	296.80
farm or ranch		na	15	89.60	38	548.40	33	535.50
city under 2,500 population		na	29	112.90	90	733.20	80	109.80
city 2,500 to 50,000 population		na	68	699.70	179	379.20	158	548.00
over 50,000 population		na	52	98.20	169	425.30	128	125.20

455

Table 400. Nonresident Seasonal Fishing, Average Variable Spending, by Amount of Rural Spending

	1983	1990		1996		2001
Amount of Rural Spending	Obs Value	Obs	Value	Obs	Value	Obs Value
Zero	na	35	303.10	13	260.50	75 448.50 ^b
1 to 24.9 percent	na	30	568.40	60	695.20	51 565.20 ^b
25 to 49.9 percent	na	13	455.70	23	697.40	46 663.30 ^{ab}
50 to 74.9 percent	na	21	632.90	70	487.20	63 916.80 ^a
75 to 100 percent	na	133	483.50	300	565.80	347 557.70 ^b

Table 401. Nonresident Seasonal Fishing, Average Fixed Spending, by Amount of Rural Spending

	1983	1990		1996		2001	
Amount of Rural Spending	Obs Value	Obs	Value	Obs	Value	Obs	Value
Zero	na	25	66.3	11	43.90	56	348.00
1 to 24.9 percent	na	24	1,618.8	58	1,032.20	45	432.30
25 to 49.9 percent	na	12	61.3	23	201.50	40	1,000.10
50 to 74.9 percent	na	13	225.4	66	256.10	53	161.00
75 to 100 percent	na	93	288.4	284	599.30	239	231.30

Table 402. Nonresident Seasonal Fishing, Average Variable Spending, by Age of Participant

Age of	Age of1983		1	1990		996	2	2001	
Participant	Obs	Value	Obs	Value	Obs	Value	Obs	Value	
6 to 18 years	29	416.80	6	339.30	2	309.60	7	448.40	
19 to 45 years	330	462.00	139	424.60	250	481.40	231	578.90	
46 to 65 years	185	712.10	91	536.40	240	588.90	259	577.20	
over 65 years	64	655.70	34	347.50	102	479.40	63	511.20	

Table 403. Nonresident Seasonal Fishing, Average Fixed Spending, by Age of Participant

Age of	1983		1	1990		996	2	2001	
Participant	Obs	Value	Obs	Value	Obs	Value	Obs	Value	
6 to 18 years	17	104.10	4	121.20	2	28.00	5	61.10	
19 to 45 years	176	290.40	100	241.90	239	385.70	167	204.20	
46 to 65 years	107	554.00	64	715.60	232	579.00	193	530.30	
over 65 years	29	776.90	19	120.40	101	471.30	43	77.10	

Table 404. Nonresident Seasonal Fishing, Average Variable Spending, by Income of Participant

	1983	1990	1996	2	.001
Income of Participant	Obs Value	Obs Value	Obs Value	Obs	Value
Under \$10,000	na	na	na	10	251.70
\$10,000 to \$25,000	na	na	na	25	272.80
\$25,000 to \$50,000	na	na	na	135	630.60
over \$50,000	na	na	na	407	595.20

Table 405. Nonresident Seasonal Fishing, Average Fixed Spending, by Income of Participant

	1983	1990	1996	2	001
Income of Participant	Obs Value	Obs Value	Obs Value	Obs	Value
Under \$10,000	na	na	na	9	53.60
\$10,000 to \$25,000	na	na	na	21	67.40
\$25,000 to \$50,000	na	na	na	100	712.30
over \$50,000	na	na	na	296	228.10

Table 406. Nonresident Seasonal Fishing, Average Variable Spending, by Value Placed on a Day of Fishing

Value per Day of	1983		1990		_	1996		2001	
Fishing	Obs	Value	Obs	Value	Obs	Value	Obs	Value	
Zero	6	184.80 ^b	6	214.50	1	137.60	7	478.60 ^{ab}	
\$1 to \$50	223	486.40^{b}	90	359.70	164	453.00	158	373.90 ^b	
\$51 to \$100	125	652.20 ^b	66	418.00	132	497.90	163	547.10 ^{ab}	
\$101 to \$200	59	793.30 ^b	41	594.50	94	739.10	158	697.10 ^{ab}	
\$201 to \$500	14	527.70 ^b	7	712.20	20	683.50	45	1,144.70 ^a	
\$501 to \$5,000	7	1,152.60 ^b	1	798.30	12	1,001.50	7	916.40 ^{ab}	
\$5,001 to \$15,000	0		0		0		0		
Over \$15,000 (priceless)	1	2,624.40 ^a	0		0		0		

Table 407. Nonresident Seasonal Fishing, Average Fixed Spending, by Value Placed on a Day of Fishing

Value per Day of	1983			1990		1996		2001	
Fishing	Obs	Value	Obs	Value	Obs	Value	Obs	Value	
Zero	2	23.00	3	12.00 ^b	1	14.00	7	19.90	
\$1 to \$50	203	116.00	60	83.00 ^b	156	110.00	117	173.60	
\$51 to \$100	69	305.00	45	367.00^{b}	119	376.00	119	247.60	
\$101 to \$200	39	591.00	31	821.00 ^b	90	1,298.00	120	625.70	
\$201 to \$500	8	114.00	5	680.00^{b}	19	1,325.00	34	115.40	
\$501 to \$5,000	5	92.00	1	14,522.00 ^a	10	73.00	6	132.60	
\$5,001 to \$15,000	0		0		0		0		
Over \$15,000 (priceless)	1	1,129.00	0		0		0		

459

Table 408. Resident Antelope Hunting, Average Variable Spending, by Year

	Archery		Fin	rearm	Gratis	
Year	Obs	Value	Obs	Value	Obs	Value
1981		na		na		na
1982	283	219.88 ^b	387	341.22 ^a	82	96.60 ^a
1986	243	284.11 ^a	289	256.98 ^b	113	71.84 ^{ab}
1990	198	321.95 ^a	260	265.85 ^b	153	82.98 ^{ab}
1996	365	258.67 ^{ab}	1,017	243.94 ^b	205	51.79 ^b
2001	291	269.67 ^{ab}	510	270.73 ^b	73	73.74 ^{ab}

Table 409. Resident Antelope Hunting, Average Fixed Spending, by Year

	Ar	Archery		rearm	G	ratis
Year	Obs	Value	Obs	Value	Obs	Value
1981		na		na		na
1982	190	233.78 ^b	291	135.22 ^{ab}	47	99.57
1986	243	342.31 ^b	289	122.73 ^b	113	36.57
1990	182	363.25 ^b	191	158.78 ^{ab}	100	60.01
1996	335	391.45 ^b	999	114.38 ^b	206	61.58
2001	229	639.57 ^a	274	199.24 ^a	36	118.36

Table 410. Resident Deer Hunting, Average Variable Spending, by Year

		Archery		Firearm		Gratis		leloader
Year	Obs	Value	Obs	Value	Obs	Value	Obs	Value
1981	230	298.28 ^{ab}	1,250	217.61 ^{bc}		na		na
1982	83	211.00 ^c	688	183.53 ^c	137	107.91		na
1986	642	218.86 ^{bc}	1,207	199.85 ^{bc}		na		na
1990	560	267.10 ^{abc}	255	257.52 ^a	181	128.80	458	119.59
1996	600	307.73 ^a	552	221.10^{b}	30	142.33	457	125.22
2001	780	276.52 ^{abc}	659	222.97 ^{ab}	236	140.04		na

Table 411. Resident Deer Hunting, Average Fixed Spending, by Year

	A	Archery		Firearm		ratis	Muzz	leloader
Year	Obs	Value	Obs	Value	Obs	Value	Obs	Value
1981	211	209.91 ^{bc}	1,228	122.22 ^b		na		na
1982	66	143.19 ^c	545	116.00 ^b	98	57.13		na
1986	600	264.79 ^{ab}	1,202	172.10 ^{ab}		na		na
1990	514	246.39 ^{bc}	222	194.01 ^a	143	52.56	347	180.00
1996	551	302.22 ^{ab}	552	131.17 ^b	30	88.65	323	188.95
2001	643	367.58 ^a	426	214.59 ^a	130	85.88		na

462

Table 412. Resident Big Game, Furbearer, Upland Game, and Waterfowl, Average Variable Spending, by Year

	Big Game		Furbearer		Upland Game		Wat	erfowl
Year	Obs	Value	Obs	Value	Obs	Value	Obs	Value
1981	12	756.50	132	491.96 ^a	357	337.47 ^b	305	376.64 ^a
1982	17	1,008.40	209	314.82 ^b	502	170.45 ^c	464	187.41 ^b
1986	108	671.80	1,107	200.44 ^c	745	266.40^{b}	506	266.90 ^b
1990	134	801.80	291	270.74 ^{bc}	341	464.54 ^a	210	468.41 ^a
1996	115	741.40	795	244.23 ^{bc}	563	455.74 ^a	398	398.24 ^a
2001	270	670.30	516	200.63 ^c	548	331.82 ^b	341	380.42 ^a

Table 413. Resident Big Game, Furbearer, Upland Game, and Waterfowl, Average Fixed Spending, by Year

	Big Game		Fu	Furbearer		Upland Game		terfowl
Year	Obs	Value	Obs	Value	Obs	Value	Obs	Value
1981	12	96.80	113	203.05 ^b	351	196.73 ^b	305	189.32 ^{bc}
1982	17	164.40	178	193.07 ^b	169	151.67 ^b	465	145.01 ^c
1986	83	315.90	772	275.58 ^{ab}	676	219.56 ^b	441	167.85 ^{bc}
1990	100	292.00	238	316.17 ^{ab}	301	234.86 ^b	182	322.50 ^{ab}
1996	114	170.00	606	348.44 ^a	563	228.52 ^b	396	369.96 ^a
2001	214	273.30	402	378.72 ^a	360	402.17 ^a	232	442.10 ^a

464

Table 414. Resident Turkey Hunting, Average Variable Spending, by Year

		Fall		Fall Gratis		pring
Year	Obs	Value	Obs	Value	Obs	Value
1981	198	114.76 ^{ab}		na		na
1982	162	95.51 ^{bc}		na		na
1986	1,166	80.99 ^c	45	28.91		na
1990	241	127.31 ^a	64	42.20	226	91.67
1996	1,480	96.45 ^{bc}	56	36.85	795	96.79
2001	2,198	109.72 ^{ab}	99	62.88		na

Table 415. Resident Turkey Hunting, Average Fixed Spending, by Year

]	Fall		Fall Gratis		pring
Year	Obs	Value	Obs	Value	Obs	Value
1981	192	73.59 ^{ab}		na		na
1982	125	22.85 ^b		na		na
1986	1,129	97.63 ^a	40	33.66		na
1990	160	101.52 ^a	42	31.46	160	75.45 ^b
1996	1,464	77.12 ^{ab}	56	20.72	314	152.18 ^a
2001	1,387	135.04 ^a	57	66.67		na

466

Table 416. Resident Fishing, Average Variable Spending, by Year

	Su	mmer	Winter		Sea	sonal
Year	Obs	Value	Obs	Value	Obs	Value
1981		na		na	546	846.26
1982	35	598.20		na		na
1986	969	488.70	169	289.91		na
1990	470	637.50	103	244.42		na
1996	1,851	596.10	616	236.37		na
2001	474	699.10	230	278.43	631	772.99

Table 417. Resident Fishing, Average Fixed Spending, by Year

	S	ummer	nmer Winter		Se	asonal
Year	Obs	Value	Obs	Value	Obs	Value
1981		na		na	546	658.60 ^b
1982	31	677.60		na		na
1986	971	836.20	153	176.01 ^c		na
1990	423	1,182.30	90	224.33 ^{bc}		na
1996	1,676	1,285.60	475	331.05 ^{ab}		na
2001	430	1,372.70	199	350.38 ^a	563	1,864.80 ^a

467

Table 418. Nonresident Hunting and Fishing, Average Variable Spending, by Year

	Antelop	Antelope Archery		Deer Archery		Deer Firearm		l Game	Season	al Fishing
Year	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value
1983		na	70	311.96 ^d	245	473.19	585	511.16 ^b	612	555.02 ^{ab}
1990	42	450.39	211	496.66 ^c	263	426.39	677	561.28 ^b	272	451.50 ^b
1996	19	577.82	384	700.04 ^b	421	428.06	1,241	656.71 ^a	594	523.91 ^{ab}
2001	49	604.22	185	1,003.26 ^a	489	407.37	1,931	650.90 ^a	614	579.62 ^a

Table 419. Nonresident Hunting and Fishing, Average Fixed Spending, by Year

	Antelope Archery	Deer Archery	Deer Firearm	Small Game	Seasonal Fishing
Year	Obs Value	Obs Value	Obs Value	Obs Value	Obs Value
1983		26 119.15 ^{ab}	249 76.71	319 182.37 ^a	332 405.80
1990	32 51.49	172 75.37 ^b	192 62.62	422 76.84 ^b	189 386.00
1996	14 148.70	256 100.19 ^{ab}	421 78.15	755 75.78 ^b	574 477.70
2001	23 102.88	107 184.86 ^a	278 91.75	893 129.24 ^{ab}	452 318.00

SECTION H

Results of Cross-tabulation of Respondent Characteristics for Resident and Nonresident Hunters and Anglers in 2001

Tables 420 through 531

469

Table 420. Distribution of Days Participated by Miles Traveled, Resident Hunters, 2001

_								
Miles Traveled	1 to 3	4 to 6	7 to 9	10 to 15	16 to 25	Over 25	Totals	Percent
no miles	158	37	14	16	6	8	239	3.82
1 to 300	1,956	608	185	198	59	48	3,054	48.81
301 to 600	723	358	104	141	49	25	1,400	22.37
601 to 900	331	111	61	43	26	10	582	9.30
901 to 1200	164	97	52	80	34	25	452	7.22
over 1200	61	112	75	127	89	66	530	8.47
Totals	3,393	1,323	491	605	263	182	6,257	
Percent	54.23	21.14	7.85	9.67	4.20	2.91		

Table 421. Distribution of Days Participated by Access and/or Guide Fees, Resident Hunters, 2001

Access and/or								
Guide Fees	1 to 3	4 to 6	7 to 9	10 to 15	16 to 25	Over 25	Totals	Percent
with fees	50	17	8	17	7	1	100	1.55
without fees	3,446	1,351	510	611	266	188	6,372	98.45
Totals	3,496	1,368	518	628	273	189	6,472	
Percent	54.02	21.14	8.00	9.70	4.22	2.92		

470

Table 422. Distribution of Days Participated by Type of Residence, Resident Hunters, 2001

			Days Par	rticipated				
Type of Residence	1 to 3	4 to 6	7 to 9	10 to 15	16 to 25	Over 25	Totals	Percent
city over 50,000 population	1,004	387	128	159	65	32	1,775	26.06
city 2,500 to 50,000 population	1,105	411	148	194	75	48	1,981	29.09
city under 2,500 population	670	295	136	139	65	51	1,356	19.91
farm or ranch	620	212	92	102	55	44	1,125	16.52
rural nonfarm	291	125	45	58	28	26	573	8.41
Totals	3,690	1,430	549	652	288	201	6,810	
Percent	54.19	21.00	8.06	9.57	4.23	2.95		

Table 423. Distribution of Days Participated by Rural/Urban Residence, Resident Hunters, 2001

Urban or Rural								
Residence	1 to 3	4 to 6	7 to 9	10 to 15	16 to 25	Over 25	Totals	Percent
urban	2,109	798	276	353	140	80	3,756	55.15
rural	1,581	632	273	299	148	121	3,054	44.85
Totals	3,690	1,430	549	652	288	201	6,810	
Percent	54.19	21.00	8.06	9.57	4.23	2.95		

Table 424. Distribution of Days Participated by Percentage of Rural Spending, Resident Hunters, 2001

Amount of Rural								
Spending	1 to 3	4 to 6	7 to 9	10 to 15	16 to 25	Over 25	Totals	Percent
zero	693	208	67	79	33	20	1,100	18.32
1 to 24.9 percent	226	113	45	71	31	17	503	8.37
25 to 49.9 percent	191	90	53	57	24	15	430	7.16
50 to 74.9 percent	423	174	66	80	40	24	807	13.44
75 to 100 percent	1,688	684	260	307	125	102	3,166	52.71
Totals	3,221	1,269	491	594	253	178	6,006	
Percent	53.63	21.13	8.18	9.89	4.21	2.96		

Table 425. Distribution of Days Participated by Income, Resident Hunters, 2001

<u>-</u>								
Income	1 to 3	4 to 6	7 to 9	10 to 15	16 to 25	Over 25	Totals	Percent
over \$50,000	1,627	641	241	286	125	72	2,992	49.98
\$25,000 to \$50,000	1,098	420	163	206	88	71	2,046	34.18
\$10,000 to \$25,000	324	131	63	65	36	29	648	10.83
under \$10,000	173	61	19	31	6	10	300	5.01
Totals	3,222	1,253	486	588	255	182	5,986	
Percent	53.83	20.93	8.12	9.82	4.26	3.04		

472

Table 426. Distribution of Days Participated by Age, Resident Hunters, 2001

<u>-</u>	_							
Age	1 to 3	4 to 6	7 to 9	10 to 15	16 to 25	Over 25	Totals	Percent
6 to 18 years	348	139	51	67	24	23	652	9.41
19 to 45 years	1,763	722	268	348	166	111	3,378	48.76
46 to 65 years	1,364	521	198	205	89	63	2,440	35.22
over 65 years	290	74	35	40	14	5	458	6.61
Totals	3,765	1,456	552	660	293	202	6,928	
Percent	54.34	21.02	7.97	9.53	4.23	2.92		

Table 427. Distribution of Miles Traveled by Access and/or Guide Fees, Resident Hunters, 2001

Access and	or_								
Guide Fee	es	No Miles	1 to 300	301 to 600	601 to 900	901 to 1200	Over 1200	Totals	Percent
with fees		1	26	20	13	11	26	97	1.54
without fees		242	3,046	1,386	572	446	510	6,202	98.46
Т	Γotals	243	3,072	1,406	585	457	536	6,299	
Pe	ercent	3.86	48.77	22.32	9.29	7.26	8.51		

Table 428. Distribution of Miles Traveled by Type of Residence, Resident Hunters, 2001

			Miles T	raveled				
Type of Residence	No Miles	1 to 300	301 to 600	601 to 900	901 to 1200	Over 1200	Totals	Percent
city over 50,000 population	45	621	458	198	156	171	1,649	26.64
city 2,500 to 50,000 population	49	856	454	166	145	167	1,837	29.68
city under 2,500 population	39	693	233	105	69	92	1,231	19.89
farm or ranch	74	580	135	58	44	57	948	15.32
rural nonfarm	27	248	113	50	40	47	525	8.48
Totals	234	2,998	1,393	577	454	534	6,190	
Percent	3.78	48.43	22.50	9.32	7.33	8.63		

Table 429. Distribution of Miles Traveled by Rural/Urban Residence, Resident Hunters, 2001

Urban or Rural			Miles T					
Residence	No miles	1 to 300	301 to 600	601 to 900	901 to 1200	Over 1200	Totals	Percent
urban	94	1,477	912	364	301	338	3,486	56.32
rural	140	1,521	481	213	153	196	2,704	43.68
Totals	234	2,998	1,393	577	454	534	6,190	
Percent	3.78	48.43	22.50	9.32	7.33	8.63		

Table 430. Distribution of Miles Traveled by Percentage of Rural Spending, Resident Hunters, 2001

Amount of Rural	Miles Traveled							
Spending	No Miles	1 to 300	301 to 600	601 to 900	901 to 1200	Over 1200	Totals	Percent
zero	71	697	177	50	39	34	1,068	18.24
1 to 24.9 percent	8	179	140	59	56	53	495	8.46
25 to 49.9 percent	7	131	106	57	50	74	425	7.26
50 to 74.9 percent	13	261	237	101	81	100	793	13.55
75 to 100 percent	109	1,538	656	293	216	261	3,073	52.49
Totals	208	2,806	1,316	560	442	522	5,854	
Percent	3.55	47.93	22.48	9.57	7.55	8.92		

Table 431. Distribution of Miles Traveled by Income, Resident Hunters, 2001

	Miles Traveled							
Income	No Miles	1 to 300	301 to 600	601 to 900	901 to 1200	Over 1200	Totals	Percent
over \$50,000	77	1,299	693	261	208	257	2,795	50.05
\$25,000 to \$50,000	79	928	416	192	159	162	1,936	34.67
\$10,000 to \$25,000	23	316	111	46	43	54	593	10.62
under \$10,000	25	146	43	19	14	13	260	4.66
Totals	204	2,689	1,263	518	424	486	5,584	
Percent	3.65	48.16	22.62	9.28	7.59	8.70		

Table 432. Distribution of Miles Traveled by Age, Resident Hunters, 2001

Age	No Miles	1 to 300	301 to 600	601 to 900	901 to 1200	Over 1200	Totals	Percent
6 to 18 years	29	313	86	34	25	22	509	8.13
19 to 45 years	96	1,470	709	312	266	302	3,155	50.40
46 to 65 years	91	1,064	534	191	138	189	2,207	35.26
over 65 years	27	200	72	42	27	21	389	6.21
Totals	243	3,047	1,401	579	456	534	6,260	
Percent	3.88	48.67	22.38	9.25	7.28	8.53		

Table 433. Distribution of Survey Respondents with/without Access and/or Guide Fees by Type of Residence, Resident Hunters, 2001

<u>-</u>	Access and/	or Guide Fees		
Type of Residence	With Fees	Without Fees	Totals	Percent
city over 50,000 population	38	1,645	1,683	26.32
city 2,500 to 50,000 population	23	1,861	1,884	29.46
city under 2,500 population	14	1,254	1,268	19.83
farm or ranch	14	1,001	1,015	15.87
rural nonfarm	13	532	545	8.52
Totals	102	6,293	6,395	
Percent	1.59	98.41		

476

Table 434. Distribution of Survey Respondents with/without Access and/or Guide Fees by Rural/Urban Residence, Resident Hunters, 2001

Urban or Rural Residence		Access and/	or Guide Fees		
		With Fees	Without Fees	Totals	Percent
urban		61	3,506	3,567	55.78
rural		41	2,787	2,828	44.22
	Totals	102	6,293	6,395	
	Percent	1.59	98.41		

Table 435. Distribution of Survey Respondents with/without Access and/or Guide Fees by Percentage of Rural Spending, Resident Hunters, 2001

Amount of Rural	Access and/	or Guide Fees		
Spending	With Fees	Without Fees	Totals	Percent
zero	5	1,095	1,100	18.24
1 to 24.9 percent	5	499	504	8.36
25 to 49.9 percent	13	423	436	7.23
50 to 74.9 percent	15	797	812	13.46
75 to 100 percent	60	3,119	3,179	52.71
Totals	98	5,933	6,031	
Percent	1.62	98.38		

Table 436. Distribution of Survey Respondents with/without Access and/or Guide Fees by Income, Resident Hunters, 2001

	Access and/	or Guide Fees		
Income	With Fees	Without Fees	Totals	Percent
over \$50,000	56	2,830	2,886	50.10
\$25,000 to \$50,000	33	1,955	1,988	34.51
\$10,000 to \$25,000	3	613	616	10.69
under \$10,000	4	266	270	4.69
Totals	96	5,664	5,760	
Percent	1.67	98.33		

Table 437. Distribution of Survey Respondents with/without Access and/or Guide Fees by Age, Resident Hunters, 2001

	Access and/	or Guide Fees		
Age	With Fees	Without Fees	Totals	Percent
6 to 18 years	3	526	529	8.17
19 to 45 years	51	3,207	3,258	50.32
46 to 65 years	43	2,240	2,283	35.26
over 65 years	5	400	405	6.25
Totals	102	6,373	6,475	
Percent	1.58	98.42		

Table 438. Distribution of Type of Residence by Rural/Urban Residence, Resident Hunters, 2001

			Ty					
	or Rural	City over 50,000 Population	City 2,500 to 50,000 Population	City under 2,500 Population	Farm or Ranch	Rural Nonfarm	Totals	Percent
urban		2,207	2,386	0	0	0	4,593	55.22
rural		0	0	1,643	1,370	711	3,724	44.78
	Totals	2,207	2,386	1,643	1,370	711	8,317	
	Percent	26.54	28.69	19.75	16.47	8.55		

Table 439. Distribution of Type of Residence by Percentage of Rural Spending, Resident Hunters, 2001

		Ty					
Amount of Rural Spending	City over 50,000 Population	City 2,500 to 50,000 Population	City under 2,500 Population	Farm or Ranch	Rural Nonfarm	Totals	Percent
zero	411	454	74	84	72	1,095	18.40
1 to 24.9 percent	202	192	38	36	34	502	8.44
25 to 49.9 percent	145	151	54	44	35	429	7.21
50 to 74.9 percent	276	265	101	91	69	802	13.48
75 to 100 percent	561	661	916	685	299	3,122	52.47
Totals	1,595	1,723	1,183	940	509	5,950	
Percent	26.81	28.96	19.88	15.80	8.55		

Table 440. Distribution of Type of Residence by Income, Resident Hunters, 2001

		Ty					
Income	City over 50,000 Population	City 2,500 to 50,000 Population	City under 2,500 Population	Farm or Ranch	Rural Nonfarm	Totals	Percent
over \$50,000	1,208	1,077	540	475	292	3,592	50.44
\$25,000 to \$50,000	544	719	549	396	227	2,435	34.19
\$10,000 to \$25,000	122	179	225	153	56	735	10.32
under \$10,000	64	105	83	84	24	360	5.05
Totals	1,938	2,080	1,397	1,108	599	7,122	
Percent	27.21	29.21	19.62	15.56	8.41		

Table 441. Distribution of Type of Residence by Age, Resident Hunters, 2001

		Ty	_				
Age	City over 50,000 Population	City 2,500 to 50,000 Population	City under 2,500 Population	Farm or Ranch	Rural Nonfarm	Totals	Percent
6 to 18 years	136	215	164	127	54	696	8.45
19 to 45 years	1,133	1,159	738	565	361	3,956	48.02
46 to 65 years	780	858	593	517	254	3,002	36.44
over 65 years	135	136	134	146	33	584	7.09
Totals	2,184	2,368	1,629	1,355	702	8,238	
Percent	26.51	28.74	19.77	16.45	8.52		

Table 442. Distribution of Rural/Urban Residence by Percentage of Rural Spending, Resident Hunters, 2001

Amount of Rural	Location of	Residence		
Spending	Urban Rural		Totals	Percent
zero	865 230		1,095	18.40
1 to 24.9 percent	394	108	502	8.44
25 to 49.9 percent	296	133	429	7.21
50 to 74.9 percent	541	261	802	13.48
75 to 100 percent	1,222	1,900	3,122	52.47
Totals	3,318	2,632	5,950	
Percent	55.76	44.24		

Table 443. Distribution of Rural/Urban Residence by Income, Resident Hunters, 2001

	Location of	Residence		
Income	Urban Rural		Totals	Percent
over \$50,000	2,285	1,307	3,592	50.44
\$25,000 to \$50,000	1,263	1,172	2,435	34.19
\$10,000 to \$25,000	301	434	735	10.32
under \$10,000	169	191	360	5.05
Totals	4,018	3,104	7,122	
Percent	56.42	43.58		

481

Table 444. Distribution of Rural/Urban Residence by Age, Resident Hunters, 2001

	Location of	Residence		
Age	Urban	rban Rural		Percent
6 to 18 years	351	345	696	8.45
19 to 45 years	2,292	1,664	3,956	48.02
46 to 65 years	to 65 years 1,638		3,002	36.44
over 65 years	over 65 years 271		584	7.09
Totals	4,552	3,686	8,238	
Percent	55.26	44.74		

Table 445. Distribution of Percentage of Rural Spending by Income, Resident Hunters, 2001

<u>-</u>	Amount of Rural Spending						
Income	Zero	1 to 24.9 Percent	25 to 49.9 Percent	50 to 74.9 Percent	75 to 100 Percent	Totals	Percent
over \$50,000	531	247	208	409	1,331	2,726	50.55
\$25,000 to \$50,000	313	168	141	233	1,002	1,857	34.43
\$10,000 to \$25,000	73	37	34	75	344	563	10.44
under \$10,000	50	18	15	24	140	247	4.58
Totals	967	470	398	741	2,817	5,393	
Percent	17.93	8.72	7.38	13.74	52.23		

Table 446. Distribution of Percentage of Rural Spending by Age, Resident Hunters, 2001

_		Amou	nt of Rural Sp	ending			
Age	Zero	1 to 24.9 Percent	25 to 49.9 Percent	50 to 74.9 Percent	75 to 100 Percent	Totals	Percent
6 to 18 years	115	37	33	46	257	488	8.11
19 to 45 years	541	306	240	458	1,528	3,073	51.09
46 to 65 years	393	146	141	266	1,160	2,106	35.01
over 65 years	55	16	19	38	220	348	5.79
Totals	1,104	505	433	808	3,165	6,015	
Percent	18.35	8.40	7.20	13.43	52.62		

Table 447. Distribution of Age by Income, Resident Hunters, 2001

_		A	ge			
Income	6 to 18 Years	19 to 45 Years	46 to 65 Years	Over 65 Years	Totals	Percent
over \$50,000	244	1,692	1,563	123	3,622	50.32
\$25,000 to \$50,000	111	1,347	798	204	2,460	34.18
\$10,000 to \$25,000	21	419	212	101	753	10.46
under \$10,000	157	143	34	29	363	5.04
Totals	533	3,601	2,607	457	7,198	
Percent	7.40	50.03	36.22	6.35		

Table 448. Distribution of Days Participated by Miles Traveled, Resident Anglers, 2001

_								
Miles Traveled	1 to 3	4 to 6	7 to 9	10 to 15	16 to 25	Over 25	Totals	Percent
no miles	7	3	2	1	0	2	15	0.91
1 to 300	252	131	33	109	59	57	641	38.90
301 to 600	44	74	41	78	50	49	336	20.39
601 to 900	10	32	10	46	20	25	143	8.68
901 to 1200	2	19	18	60	48	56	203	12.32
over 1200	4	8	16	52	75	155	310	18.81
Totals	319	267	120	346	252	344	1,648	
Percent	19.36	16.20	7.28	21.00	15.29	20.87		

Table 449. Distribution of Days Participated by Access and/or Guide Fees, Resident Anglers, 2001

Access and/or _								
Guide Fees	1 to 3	4 to 6	7 to 9	10 to 15	16 to 25	Over 25	Totals	Percent
with fees	17	21	10	41	48	79	216	12.62
without fees	313	256	115	316	218	278	1,496	87.38
Totals	330	277	125	357	266	357	1,712	
Percent	19.28	16.18	7.30	20.85	15.54	20.85		

484

Table 450. Distribution of Days Participated by Type of Residence, Resident Anglers, 2001

_								
Type of Residence	1 to 3	4 to 6	7 to 9	10 to 15	16 to 25	Over 25	Totals	Percent
city over 50,000 population	95	87	37	105	77	87	488	26.70
city 2,500 to 50,000 population	104	88	37	103	72	147	551	30.14
city under 2,500 population	68	52	22	86	55	74	357	19.53
farm or ranch	62	45	20	54	43	37	261	14.28
rural nonfarm	41	24	14	33	29	30	171	9.35
Totals	370	296	130	381	276	375	1,828	
Percent	20.24	16.19	7.11	20.84	15.10	20.51		

Table 451. Distribution of Days Participated by Rural/Urban Residence, Resident Anglers, 2001

Urban or Rural									
Residence	1 to 3	4 to 6	7 to 9	10 to 15	16 to 25	Over 25	Totals	Percent	
urban	199	175	74	208	149	234	1,039	56.84	
rural	171	121	56	173	127	141	789	43.16	
Totals	370	296	130	381	276	375	1,828		
Percent	20.24	16.19	7.11	20.84	15.10	20.51			

485

Table 452. Distribution of Days Participated by Percentage of Rural Spending, Resident Anglers, 2001

Amount of Rural			Days Par	ticipated				
Spending	1 to 3	4 to 6	7 to 9	10 to 15	16 to 25	Over 25	Totals	Percent
zero	93	52	27	57	34	28	291	17.67
1 to 24.9 percent	28	37	22	58	46	58	249	15.12
25 to 49.9 percent	31	24	10	28	23	53	169	10.26
50 to 74.9 percent	31	27	17	43	31	52	201	12.20
75 to 100 percent	128	125	42	162	123	157	737	44.75
Totals	311	265	118	348	257	348	1,647	
Percent	18.88	16.09	7.16	21.13	15.60	21.13		

Table 453. Distribution of Days Participated by Income, Resident Anglers, 2001

_	Days Participated									
Income	1 to 3	4 to 6	7 to 9	10 to 15	16 to 25	Over 25	Totals	Percent		
over \$50,000	159	134	48	147	121	151	760	47.18		
\$25,000 to \$50,000	101	97	43	120	86	109	556	34.51		
\$10,000 to \$25,000	42	27	20	48	30	58	225	13.97		
under \$10,000	19	10	5	15	6	15	70	4.35		
Totals	321	268	116	330	243	333	1,611			
Percent	19.93	16.64	7.20	20.48	15.08	20.67				

486

Table 454. Distribution of Days Participated by Age, Resident Anglers, 2001

_	Days Participated								
Age	1 to 3	4 to 6	7 to 9	10 to 15	16 to 25	Over 25	Totals	Percent	
6 to 18 years	21	7	5	11	8	10	62	3.42	
19 to 45 years	172	133	55	183	132	183	858	47.30	
46 to 65 years	142	120	57	137	108	136	700	38.59	
over 65 years	30	34	11	47	35	37	194	10.69	
Totals	365	294	128	378	283	366	1,814		
Percent	20.12	16.21	7.06	20.84	15.60	20.18			

Table 455. Distribution of Miles Traveled by Access and/or Guide Fees, Resident Anglers, 2001

Access and/o	r							
Guide Fees	No Miles	1 to 300	301 to 600	601 to 900	901 to 1200	Over 1200	Totals	Percent
with fees	1	40	27	24	43	79	214	12.17
without fees	16	666	335	131	165	232	1,545	87.83
To	otals 17	706	362	155	208	311	1,759	
Pero	cent 0.97	40.14	20.58	8.81	11.82	17.68		

487

Table 456. Distribution of Miles Traveled by Type of Residence, Resident Anglers, 2001

Miles Traveled								
Type of Residence	No Miles	1 to 300	301 to 600	601 to 900	901 to 1200	Over 1200	Totals	Percent
city over 50,000 population	8	125	104	45	70	112	464	26.50
city 2,500 to 50,000 population	2	224	99	52	57	104	538	30.73
city under 2,500 population	4	148	65	27	44	55	343	19.59
farm or ranch	2	128	53	16	27	19	245	13.99
rural nonfarm	1	77	39	14	10	20	161	9.19
Totals	17	702	360	154	208	310	1,751	
Percent	0.97	40.09	20.56	8.79	11.88	17.70		

Table 457. Distribution of Miles Traveled by Rural/Urban Residence, Resident Anglers, 2001

Urban or Rural								
Residence	No miles	1 to 300	301 to 600	601 to 900	901 to 1200	Over 1200	Totals	Percent
urban	10	349	203	97	127	216	1,002	57.22
rural	7	353	157	57	81	94	749	42.78
Totals	17	702	360	154	208	310	1,751	
Percent	0.97	40.09	20.56	8.79	11.88	17.70		

488

Table 458. Distribution of Miles Traveled by Percentage of Rural Spending, Resident Anglers, 2001

Amount of Rural		Miles Traveled						
Spending	No Miles	1 to 300	301 to 600	601 to 900	901 to 1200	Over 1200	Totals	Percent
zero	11	157	53	18	25	22	286	16.94
1 to 24.9 percent	1	68	59	28	34	68	258	15.28
25 to 49.9 percent	0	45	35	19	24	50	173	10.25
50 to 74.9 percent	1	56	56	21	29	53	216	12.80
75 to 100 percent	3	340	145	64	94	109	755	44.73
Totals	16	666	348	150	206	302	1,688	
Percent	0.95	39.45	20.62	8.89	12.20	17.89		

Table 459. Distribution of Miles Traveled by Income, Resident Anglers, 2001

	Miles Traveled							
Income	No Miles	1 to 300	301 to 600	601 to 900	901 to 1200	Over 1200	Totals	Percent
over \$50,000	8	269	146	71	91	159	744	46.85
\$25,000 to \$50,000	1	238	117	52	67	91	566	35.64
\$10,000 to \$25,000	3	87	54	15	26	33	218	13.73
under \$10,000	2	30	14	4	6	4	60	3.78
Totals	14	624	331	142	190	287	1,588	
Percent	0.88	39.29	20.84	8.94	11.96	18.07		

489

Table 460. Distribution of Miles Traveled by Age, Resident Anglers, 2001

		_						
Age	No Miles	1 to 300	301 to 600	601 to 900	901 to 1200	Over 1200	Totals	Percent
6 to 18 years	2	31	14	2	3	0	52	3.03
19 to 45 years	7	347	183	73	96	144	850	49.53
46 to 65 years	7	250	123	63	83	131	657	38.29
over 65 years	0	57	36	13	21	30	157	9.15
Totals	16	685	356	151	203	305	1,716	
Percent	0.93	39.92	20.75	8.80	11.83	17.77		

Table 461. Distribution of Survey Respondents with/without Access and/or Guide Fees by Type of Residence, Resident Anglers, 2001

_	Access and/	or Guide Fees		
Type of Residence	With Fees	Without Fees	Totals	Percent
city over 50,000 population	92	392	484	26.54
city 2,500 to 50,000 population	74	484	558	30.59
city under 2,500 population	26	331	357	19.57
farm or ranch	16	239	255	13.98
rural nonfarm	13	157	170	9.32
Totals	221	1,603	1,824	
Percent	12.12	87.88		

Table 462. Distribution of Survey Respondents with/without Access and/or Guide Fees by Rural/Urban Residence, Resident Anglers, 2001

Urban or Rural Residence		Access and/	or Guide Fees		
		With Fees	Without Fees	Totals	Percent
urban		166	876	1,042	57.13
rural		55	727	782	42.87
	Totals	221	1,603	1,824	
	Percent	12.12	87.88		

Table 463. Distribution of Survey Respondents with/without Access and/or Guide Fees by Percentage of Rural Spending, Resident Anglers, 2001

Amount of Rural	Access and/	or Guide Fees		
Spending	With Fees	Without Fees	Totals	Percent
zero	16	286	302	17.29
1 to 24.9 percent	44	219	263	15.05
25 to 49.9 percent	39	137	176	10.07
50 to 74.9 percent	34	186	220	12.59
75 to 100 percent	82	704	786	44.99
Totals	215	1,532	1,747	
Percent	12.31	87.69		

491

Table 464. Distribution of Survey Respondents with/without Access and/or Guide Fees by Income, Resident Anglers, 2001

	Access and/	or Guide Fees		
Income	With Fees Without Fees		Totals	Percent
over \$50,000	122	648	770	46.87
\$25,000 to \$50,000	58	524	582	35.42
\$10,000 to \$25,000	17	210	227	13.82
under \$10,000	4	60	64	3.90
Totals	201	1,442	1,643	
Percent	12.23	87.77		

Table 465. Distribution of Survey Respondents with/without Access and/or Guide Fees by Age, Resident Anglers, 2001

	Access and/	or Guide Fees		
Age	With Fees	Without Fees	Totals	Percent
6 to 18 years	2	53	55	3.08
19 to 45 years	97	773	870	48.68
46 to 65 years	101	591	692	38.72
over 65 years	18	152	170	9.51
Totals	218	1,569	1,787	
Percent	12.20	87.80		

Table 466. Distribution of Type of Residence by Rural/Urban Residence, Resident Anglers, 2001

			Ty					
	or Rural	City over 50,000 Population	City 2,500 to 50,000 Population	City under 2,500 Population	Farm or Ranch	Rural Nonfarm	Totals	Percent
urban		542	627	0	0	0	1,169	55.91
rural		0	0	423	305	194	922	44.09
	Totals	542	627	423	305	194	2,091	
	Percent	25.92	29.99	20.23	14.59	9.28		

Table 467. Distribution of Type of Residence by Percentage of Rural Spending, Resident Anglers, 2001

		Ty					
Amount of Rural Spending	City over 50,000 Population	City 2,500 to 50,000 Population	City under 2,500 Population	Farm or Ranch	Rural Nonfarm	Totals	Percent
zero	99	147	20	24	16	306	17.50
1 to 24.9 percent	115	91	19	9	26	260	14.87
25 to 49.9 percent	69	61	24	8	14	176	10.06
50 to 74.9 percent	69	64	32	32	24	221	12.64
75 to 100 percent	119	165	246	173	83	786	44.94
Totals	471	528	341	246	163	1,749	
Percent	26.93	30.19	19.50	14.07	9.32		_

Table 468. Distribution of Type of Residence by Income, Resident Anglers, 2001

		Ty					
Income	City over 50,000 Population	City 2,500 to 50,000 Population	City under 2,500 Population	Farm or Ranch	Rural Nonfarm	Totals	Percent
over \$50,000	286	255	136	95	81	853	46.56
\$25,000 to \$50,000	139	211	154	95	50	649	35.43
\$10,000 to \$25,000	43	79	57	51	24	254	13.86
under \$10,000	17	24	22	7	6	76	4.15
Totals	485	569	369	248	161	1,832	
Percent	26.47	31.06	20.14	13.54	8.79		

Table 469. Distribution of Type of Residence by Age, Resident Anglers, 2001

		Ty					
Age	City over 50,000 Population	City 2,500 to 50,000 Population	City under 2,500 Population	Farm or Ranch	Rural Nonfarm	Totals	Percent
6 to 18 years	8	13	16	17	6	60	2.95
19 to 45 years	281	301	186	112	84	964	47.35
46 to 65 years	207	225	150	119	85	786	38.61
over 65 years	32	68	64	47	15	226	11.10
Totals	528	607	416	295	190	2,036	
Percent	25.93	29.81	20.43	14.49	9.33		

Table 470. Distribution of Rural/Urban Residence by Percentage of Rural Spending, Resident Anglers, 2001

Amount of Rural	Location of	Residence		
Spending	Urban	Rural	Totals	Percent
zero	246	60	306	17.50
1 to 24.9 percent	206	54	260	14.87
25 to 49.9 percent	130	46	176	10.06
50 to 74.9 percent	133	88	221	12.64
75 to 100 percent	284	502	786	44.94
Totals	999	750	1,749	
Percent	57.12	42.88		

Table 471. Distribution of Rural/Urban Residence by Income, Resident Anglers, 2001

	Location of	Residence		
Income	Urban Rural		Totals	Percent
over \$50,000	541	312	853	46.56
\$25,000 to \$50,000	350	299	649	35.43
\$10,000 to \$25,000	122	132	254	13.86
under \$10,000	41	35	76	4.15
Totals	1,054	778	1,832	
Percent	57.53	42.47		

495

Table 472. Distribution of Rural/Urban Residence by Age, Resident Anglers, 2001

_	Location of	Residence		
Age	Urban	Rural	Totals	Percent
6 to 18 years	21	39	60	2.95
19 to 45 years	582	382	964	47.35
46 to 65 years	432	354	786	38.61
over 65 years	100	126	226	11.10
Totals	1,135	901	2,036	
Percent	55.75	44.25		

Table 473. Distribution of Percentage of Rural Spending by Income, Resident Anglers, 2001

<u>-</u>		Amou	nt of Rural Sp	ending			
Income	Zero	1 to 24.9 Percent	25 to 49.9 Percent	50 to 74.9 Percent	75 to 100 Percent	Totals	Percent
over \$50,000	132	129	92	102	295	750	47.56
\$25,000 to \$50,000	106	84	53	66	250	559	35.45
\$10,000 to \$25,000	24	22	15	27	127	215	13.63
under \$10,000	10	3	4	5	31	53	3.36
Totals	272	238	164	200	703	1,577	
Percent	17.25	15.09	10.40	12.68	44.58		

Table 474. Distribution of Percentage of Rural Spending by Age, Resident Anglers, 2001

_	Amount of Rural Spending								
Age	Zero	1 to 24.9 Percent	25 to 49.9 Percent	50 to 74.9 Percent	75 to 100 Percent	Totals	Percent		
6 to 18 years	8	6	4	2	30	50	2.92		
19 to 45 years	160	133	86	117	349	845	49.36		
46 to 65 years	117	105	75	78	285	660	38.55		
over 65 years	20	12	8	15	102	157	9.17		
Totals	305	256	173	212	766	1,712			
Percent	17.82	14.95	10.11	12.38	44.74				

Table 475. Distribution of Age by Income, Resident Anglers, 2001

		Aş	ge			
Income	6 to 18 Years	19 to 45 Years	46 to 65 Years	Over 65 Years	Totals	Percent
over \$50,000	17	403	377	36	833	46.30
\$25,000 to \$50,000	15	327	221	80	643	35.74
\$10,000 to \$25,000	4	117	64	61	246	13.67
under \$10,000	17	35	10	15	77	4.28
Totals	53	882	672	192	1,799	
Percent	2.95	49.03	37.35	10.67		

Table 476. Distribution of Days Participated by Miles Traveled, Nonresident Hunters, 2001

_								
Miles Traveled	1 to 3	4 to 6	7 to 9	10 to 15	16 to 25	Over 25	Totals	Percent
no miles	4	2	1	0	0	0	7	0.28
1 to 300	175	164	39	5	1	1	385	15.57
301 to 600	173	206	56	25	2	0	462	18.69
601 to 900	102	131	55	14	0	1	303	12.26
901 to 1200	98	207	81	22	2	1	411	16.63
over 1200	150	399	212	115	27	1	904	36.57
Totals	702	1,109	444	181	32	4	2,472	
Percent	28.40	44.86	17.96	7.32	1.29	0.16		

Table 477. Distribution of Days Participated by Access and/or Guide Fees, Nonresident Hunters, 2001

Access and/or _								
Guide Fees	1 to 3	4 to 6	7 to 9	10 to 15	16 to 25	Over 25	Totals	Percent
with fees	120	193	90	31	8	1	443	16.72
without fees	645	1,003	377	155	24	3	2,207	83.28
Totals	765	1,196	467	186	32	4	2,650	
Percent	28.87	45.13	17.62	7.02	1.21	0.15		

498

Table 478. Distribution of Days Participated by Type of Residence, Nonresident Hunters, 2001

<u>-</u>								
Type of Residence	1 to 3	4 to 6	7 to 9	10 to 15	16 to 25	Over 25	Totals	Percent
city over 50,000 population	301	368	127	64	7	2	869	32.47
city 2,500 to 50,000 population	272	440	154	62	10	1	939	35.09
city under 2,500 population	79	138	67	22	6	1	313	11.70
farm or ranch	30	77	32	16	3	0	158	5.90
rural nonfarm	98	180	88	25	6	0	397	14.84
Totals	780	1,203	468	189	32	4	2,676	
Percent	29.15	44.96	17.49	7.06	1.20	0.15		

Table 479. Distribution of Days Participated by Rural/Urban Residence, Nonresident Hunters, 2001

Urban or Rural									
Residence	1 to 3	4 to 6	7 to 9	10 to 15	16 to 25	Over 25	Totals	Percent	
urban	573	808	281	126	17	3	1,808	67.56	
rural	207	395	187	63	15	1	868	32.44	
Totals	780	1,203	468	189	32	4	2,676		
Percent	29.15	44.96	17.49	7.06	1.20	0.15			

Table 480. Distribution of Days Participated by Percentage of Rural Spending, Nonresident Hunters, 2001

Amount of Rural								
Spending	1 to 3	4 to 6	7 to 9	10 to 15	16 to 25	Over 25	Totals	Percent
zero	45	25	17	2	0	0	89	3.48
1 to 24.9 percent	64	60	25	9	1	1	160	6.26
25 to 49.9 percent	48	73	25	12	3	0	161	6.30
50 to 74.9 percent	86	130	57	15	6	1	295	11.55
75 to 100 percent	488	872	324	142	22	2	1,850	72.41
Totals	731	1,160	448	180	32	4	2,555	
Percent	28.61	45.40	17.53	7.05	1.25	0.16		

Table 481. Distribution of Days Participated by Income, Nonresident Hunters, 2001

Days Participated										
Income	1 to 3	4 to 6	7 to 9	10 to 15	16 to 25	Over 25	Totals	Percent		
over \$50,000	535	828	321	132	18	4	1,838	73.26		
\$25,000 to \$50,000	143	235	103	43	11	0	535	21.32		
\$10,000 to \$25,000	31	50	16	7	1	0	105	4.18		
under \$10,000	13	11	5	1	1	0	31	1.24		
Totals	722	1,124	445	183	31	4	2,509			
Percent	28.78	44.80	17.74	7.29	1.24	0.16				

500

Table 482. Distribution of Days Participated by Age, Nonresident Hunters, 2001

_	Days Participated							
Age	1 to 3	4 to 6	7 to 9	10 to 15	16 to 25	Over 25	Totals	Percent
6 to 18 years	34	36	5	6	0	1	82	3.07
19 to 45 years	390	647	286	80	20	3	1,426	53.35
46 to 65 years	298	462	165	90	10	0	1,025	38.35
over 65 years	57	56	14	12	1	0	140	5.24
Totals	779	1,201	470	188	31	4	2,673	
Percent	29.14	44.93	17.58	7.03	1.16	0.15		

Table 483. Distribution of Miles Traveled by Access and/or Guide Fees, Nonresident Hunters, 2001

Access and/or								
Guide Fees	No Miles	1 to 300	301 to 600	601 to 900	901 to 1200	Over 1200	Totals	Percent
with fees	0	67	63	34	77	164	405	16.36
without fees	8	318	401	269	334	740	2,070	83.64
Tot	als 8	385	464	303	411	904	2,475	
Perc	ent 0.32	15.56	18.75	12.24	16.61	36.53		

Table 484. Distribution of Miles Traveled by Type of Residence, Nonresident Hunters, 2001

Miles Traveled								
Type of Residence	No Miles	1 to 300	301 to 600	601 to 900	901 to 1200	Over 1200	Totals	Percent
city over 50,000 population	4	128	135	109	126	291	793	32.25
city 2,500 to 50,000 population	1	136	174	102	146	309	868	35.30
city under 2,500 population	1	52	47	37	53	102	292	11.87
farm or ranch	0	16	31	10	19	68	144	5.86
rural nonfarm	2	52	73	42	64	129	362	14.72
Totals	8	384	460	300	408	899	2,459	
Percent	0.33	15.62	18.71	12.20	16.59	36.56		

Table 485. Distribution of Miles Traveled by Rural/Urban Residence, Nonresident Hunters, 2001

Urban or Rural	Urban or Rural Miles Traveled							
Residence	No miles	1 to 300	301 to 600	601 to 900	901 to 1200	Over 1200	Totals	Percent
urban	5	264	309	211	272	600	1,661	67.55
rural	3	120	151	89	136	299	798	32.45
Totals	8	384	460	300	408	899	2,459	
Percent	0.33	15.62	18.71	12.20	16.59	36.56		

502

Table 486. Distribution of Miles Traveled by Percentage of Rural Spending, Nonresident Hunters, 2001

Amount of Rural	Miles Traveled							
Spending	No Miles	1 to 300	301 to 600	601 to 900	901 to 1200	Over 1200	Totals	Percent
zero	2	14	24	11	12	19	82	3.43
1 to 24.9 percent	0	27	27	22	21	55	152	6.36
25 to 49.9 percent	0	27	25	17	21	61	151	6.32
50 to 74.9 percent	0	35	55	33	47	106	276	11.55
75 to 100 percent	4	265	316	209	302	632	1,728	72.33
Totals	6	368	447	292	403	873	2,389	
Percent	0.25	15.40	18.71	12.22	16.87	36.54		

Table 487. Distribution of Miles Traveled by Income, Nonresident Hunters, 2001

Income	No Miles	1 to 300	301 to 600	601 to 900	901 to 1200	Over 1200	Totals	Percent
over \$50,000	5	253	323	217	272	624	1,694	72.74
\$25,000 to \$50,000	0	87	88	50	92	192	509	21.85
\$10,000 to \$25,000	1	20	19	13	13	29	95	4.08
under \$10,000	0	4	8	6	8	5	31	1.33
Totals	6	364	438	286	385	850	2,329	
Percent	0.26	15.63	18.81	12.28	16.53	36.50		

503

Table 488. Distribution of Miles Traveled by Age, Nonresident Hunters, 2001

	Miles Traveled							
Age	No Miles	1 to 300	301 to 600	601 to 900	901 to 1200	Over 1200	Totals	Percent
6 to 18 years	0	11	25	5	12	14	67	2.73
19 to 45 years	5	209	244	172	226	472	1,328	54.12
46 to 65 years	2	137	170	106	152	366	933	38.02
over 65 years	1	25	24	16	15	45	126	5.13
Totals	8	382	463	299	405	897	2,454	
Percent	0.33	15.57	18.87	12.18	16.50	36.55		

Table 489. Distribution of Survey Respondents with/without Access and/or Guide Fees by Type of Residence, Nonresident Hunters, 2001

_	Access and/	or Guide Fees		
Type of Residence	With Fees	Without Fees	Totals	Percent
city over 50,000 population	145	711	856	32.49
city 2,500 to 50,000 population	151	776	927	35.18
city under 2,500 population	49	260	309	11.73
farm or ranch	31	124	155	5.88
rural nonfarm	65	323	388	14.72
Totals	441	2,194	2,635	
Percent	16.74	83.26		

504

Table 490. Distribution of Survey Respondents with/without Access and/or Guide Fees by Rural/Urban Residence, Nonresident Hunters, 2001

Urban or Rural		Access and/	or Guide Fees		
Res	idence	With Fees	Without Fees	Totals	Percent
urban		296	1,487	1,783	67.67
rural		145	707	852	32.33
	Totals	441	2,194	2,635	
	Percent	16.74	83.26		

Table 491. Distribution of Survey Respondents with/without Access and/or Guide Fees by Percentage of Rural Spending, Nonresident Hunters, 2001

Amount of Rural	Access and/	or Guide Fees		
Spending	With Fees	Without Fees	Totals	Percent
zero	9	82	91	3.56
1 to 24.9 percent	28	132	160	6.26
25 to 49.9 percent	24	137	161	6.30
50 to 74.9 percent	40	255	295	11.54
75 to 100 percent	324	1,526	1,850	72.35
Totals	425	2,132	2,557	
Percent	16.62	83.38		

Table 492. Distribution of Survey Respondents with/without Access and/or Guide Fees by Income, Nonresident Hunters, 2001

	Access and/	or Guide Fees		
Income	With Fees	Without Fees	Totals	Percent
over \$50,000	333	1,488	1,821	73.22
\$25,000 to \$50,000	73	459	532	21.39
\$10,000 to \$25,000	15	88	103	4.14
under \$10,000	4	27	31	1.25
Totals	425	2,062	2,487	
Percent	17.09	82.91		

Table 493. Distribution of Survey Respondents with/without Access and/or Guide Fees by Age, Nonresident Hunters, 2001

<u>-</u>	Access and/	or Guide Fees		
Age	With Fees	Without Fees	Totals	Percent
6 to 18 years	9	69	78	2.96
19 to 45 years	222	1,191	1,413	53.67
46 to 65 years	190	818	1,008	38.28
over 65 years	19	115	134	5.09
Totals	440	2,193	2,633	
Percent	16.71	83.29		

Table 494. Distribution of Type of Residence by Rural/Urban Residence, Nonresident Hunters, 2001

			Ty					
Urban or Rural Residence		City over 50,000 Population	City 2,500 to 50,000 Population	0,000 2,500 or Rural			Totals	Percent
urban		889	954	0	0	0	1,843	67.78
rural		0	0	316	160	400	876	32.22
	Totals	889	954	316	160	400	2,719	
	Percent	32.70	35.09	11.62	5.88	14.71		

Table 495. Distribution of Type of Residence by Percentage of Rural Spending, Nonresident Hunters, 2001

		Ty					
Amount of Rural Spending	City over 50,000 Population	City 2,500 to 50,000 Population	City under 2,500 Population	Farm or Ranch	Rural Nonfarm	Totals	Percent
zero	32	28	14	3	14	91	3.58
1 to 24.9 percent	62	54	21	5	17	159	6.25
25 to 49.9 percent	58	57	18	13	15	161	6.33
50 to 74.9 percent	88	114	40	11	40	293	11.52
75 to 100 percent	591	639	201	118	290	1,839	72.32
Totals	831	892	294	150	376	2,543	
Percent	32.68	35.08	11.56	5.90	14.79		

Table 496. Distribution of Type of Residence by Income, Nonresident Hunters, 2001

		Ty					
Income	City over 50,000 Population	City 2,500 to 50,000 Population	City under 2,500 Population	Farm or Ranch	Rural Nonfarm	Totals	Percent
over \$50,000	680	666	180	100	233	1,859	7345
\$25,000 to \$50,000	117	184	84	39	111	535	21.14
\$10,000 to \$25,000	23	24	22	8	29	106	4.19
under \$10,000	8	14	4	1	4	31	1.22
Totals	828	888	290	148	377	2,531	
Percent	32.71	35.08	11.46	5.85	14.90		

Table 497. Distribution of Type of Residence by Age, Nonresident Hunters, 2001

		Ty					
Age	City over 50,000 Population	City 2,500 to 50,000 Population	City under 2,500 Population	Farm or Ranch	Rural Nonfarm	Totals	Percent
6 to 18 years	22	32	13	6	7	80	2.97
19 to 45 years	473	522	164	74	206	1,439	53.40
46 to 65 years	347	336	124	73	156	1,036	38.44
over 65 years	42	51	15	4	28	140	5.19
Totals	884	941	316	157	397	2,695	
Percent	32.80	34.92	11.73	5.83	14.73		

Table 498. Distribution of Rural/Urban Residence by Percentage of Rural Spending, Nonresident Hunters, 2001

Amount of Rural	Location of	Residence		
Spending	Urban	Rural	Totals	Percent
zero	60	31	91	3.58
1 to 24.9 percent	116	43	159	6.25
25 to 49.9 percent	115	46	161	6.33
50 to 74.9 percent	202	91	293	11.52
75 to 100 percent	1,230	609	1,839	72.32
Totals	1,723	820	2,543	
Percent	67.75	32.25		

Table 499. Distribution of Rural/Urban Residence by Income, Nonresident Hunters, 2001

	Location of	Residence			
Income	Urban	Rural	Totals Percen		
over \$50,000	1,346	513	1,859	73.45	
\$25,000 to \$50,000	301	234	535	21.14	
\$10,000 to \$25,000	47	59	106	4.19	
under \$10,000	22	9	31	1.22	
Totals	1,716	815	2,531		
Percent	67.80	32.20			

Table 500. Distribution of Rural/Urban Residence by Age, Nonresident Hunters, 2001

	Location of	Residence		
Age	Urban	Rural	Totals	Percent
6 to 18 years	54	26	80	2.97
19 to 45 years	995	444	1,439	53.40
46 to 65 years	683	353	1,036	38.44
over 65 years	93	47	140	5.19
Totals	1,825	870	2,695	
Percent	67.72	32.28		

Table 501. Distribution of Percentage of Rural Spending by Income, Nonresident Hunters, 2001

<u>-</u>		Amou	nt of Rural Sp				
Income	Zero	1 to 24.9 Percent	25 to 49.9 Percent	50 to 74.9 Percent	75 to 100 Percent	Totals	Percent
over \$50,000	65	106	107	195	1,296	1,769	73.65
\$25,000 to \$50,000	15	35	32	73	353	508	21.15
\$10,000 to \$25,000	5	5	11	8	68	97	4.04
under \$10,000	1	4	0	1	22	28	1.17
Totals	86	150	150	277	1,739	2,402	
Percent	3.58	6.24	6.24	11.53	72.40		

Table 502. Distribution of Percentage of Rural Spending by Age, Nonresident Hunters, 2001

_							
Age	Zero	1 to 24.9 Percent	25 to 49.9 Percent	50 to 74.9 Percent	75 to 100 Percent	Totals	Percent
6 to 18 years	3	1	4	7	54	69	2.72
19 to 45 years	43	99	78	158	989	1,367	53.86
46 to 65 years	40	53	72	113	703	981	38.65
over 65 years	5	6	3	14	93	121	4.77
Totals	91	159	157	292	1,839	2,538	
Percent	3.59	6.26	6.19	11.51	72.46		

Table 503. Distribution of Age by Income, Nonresident Hunters, 2001

		Aş				
Income	6 to 18 Years	19 to 45 Years	46 to 65 Years	Over 65 Years	Totals	Percent
over \$50,000	48	964	779	65	1,856	73.36
\$25,000 to \$50,000	8	327	155	46	536	21.19
\$10,000 to \$25,000	2	57	32	15	106	4.19
under \$10,000	13	11	5	3	32	1.26
Totals	71	1,359	971	129	2,530	
Percent	2.81	53.72	38.38	5.10		

Table 504. Distribution of Days Participated by Miles Traveled, Nonresident Anglers, 2001

_								
Miles Traveled	1 to 3	4 to 6	7 to 9	10 to 15	16 to 25	Over 25	Totals	Percent
no miles	1	2	1	0	1	0	5	0.88
1 to 300	83	30	10	5	3	0	131	23.14
301 to 600	78	26	5	7	5	1	122	21.55
601 to 900	44	24	11	5	3	1	88	15.55
901 to 1200	21	28	7	4	3	0	63	11.13
over 1200	37	51	25	27	10	7	157	27.74
Totals	264	161	59	48	25	9	566	
Percent	46.64	28.45	10.42	8.48	4.42	1.59		

Table 505. Distribution of Days Participated by Access and/or Guide Fees, Nonresident Anglers, 2001

Access and/or _								
Guide Fees	1 to 3	4 to 6	7 to 9	10 to 15	16 to 25	Over 25	Totals	Percent
with fees	49	32	17	10	9	2	119	19.64
without fees	239	138	45	40	16	9	487	80.36
Totals	288	170	62	50	25	11	606	
Percent	47.52	28.05	10.23	8.25	4.13	1.82		

512

Table 506. Distribution of Days Participated by Type of Residence, Nonresident Anglers, 2001

<u>-</u>								
Type of Residence	1 to 3	4 to 6	7 to 9	10 to 15	16 to 25	Over 25	Totals	Percent
city over 50,000 population	105	45	21	12	7	4	194	30.99
city 2,500 to 50,000 population	106	60	23	18	9	1	217	34.66
city under 2,500 population	37	34	9	10	6	2	98	15.65
farm or ranch	22	10	3	7	1	3	46	7.35
rural nonfarm	30	27	7	4	2	1	71	11.34
Totals	300	176	63	51	25	11	626	
Percent	47.92	28.12	10.06	8.15	3.99	1.76		

Table 507. Distribution of Days Participated by Rural/Urban Residence, Nonresident Anglers, 2001

Urban or Rural Days Participated								
Residence	1 to 3	4 to 6	7 to 9	10 to 15	16 to 25	Over 25	Totals	Percent
urban	211	105	44	30	16	5	411	65.65
rural	89	71	19	21	9	6	215	34.35
Totals	300	176	63	51	25	11	626	
Percent	47.92	28.12	10.06	8.15	3.99	1.76		

513

Table 508. Distribution of Days Participated by Percentage of Rural Spending, Nonresident Anglers, 2001

Amount of Rural								
Spending	1 to 3	4 to 6	7 to 9	10 to 15	16 to 25	Over 25	Totals	Percent
zero	36	24	7	6	2	0	75	13.02
1 to 24.9 percent	25	8	6	7	4	0	50	8.68
25 to 49.9 percent	17	11	9	4	3	1	45	7.81
50 to 74.9 percent	27	17	5	7	3	3	62	10.76
75 to 100 percent	164	102	33	25	13	7	344	59.72
Totals	269	162	60	49	25	11	576	
Percent	46.70	28.13	10.42	8.51	4.34	1.91		

Table 509. Distribution of Days Participated by Income, Nonresident Anglers, 2001

_	_							
Income	1 to 3	4 to 6	7 to 9	10 to 15	16 to 25	Over 25	Totals	Percent
over \$50,000	211	111	48	29	11	5	415	70.94
\$25,000 to \$50,000	57	38	10	16	8	4	133	22.74
\$10,000 to \$25,000	9	12	1	1	3	1	27	4.62
under \$10,000	5	2	1	1	1	0	10	1.71
Totals	282	163	60	47	23	10	585	
Percent	48.21	27.86	10.26	8.03	3.93	1.71		

Table 510. Distribution of Days Participated by Age, Nonresident Anglers, 2001

_								
Age	1 to 3	4 to 6	7 to 9	10 to 15	16 to 25	Over 25	Totals	Percent
6 to 18 years	3	2	2	1	0	0	8	1.37
19 to 45 years	120	66	21	21	5	6	239	40.92
46 to 65 years	128	78	29	17	11	4	267	45.72
over 65 years	32	17	5	7	9	0	70	11.99
Totals	283	163	57	46	25	10	584	
Percent	48.46	27.91	9.76	7.88	4.28	1.71		

Table 511. Distribution of Miles Traveled by Access and/or Guide Fees, Nonresident Anglers, 2001

Access and/or		Miles Traveled								
Guide Fees	No Miles	1 to 300	301 to 600	601 to 900	901 to 1200	Over 1200	Totals	Percent		
with fees	1	24	24	20	7	36	112	19.51		
without fees	4	110	98	68	56	126	462	80.49		
Totals	5	134	122	88	63	162	574			
Percent	0.87	23.34	21.25	15.33	10.98	28.22				

515

Table 512. Distribution of Miles Traveled by Type of Residence, Nonresident Anglers, 2001

Type of Residence	No Miles	1 to 300	301 to 600	601 to 900	901 to 1200	Over 1200	Totals	Percent
city over 50,000 population	0	40	44	30	15	43	172	30.12
city 2,500 to 50,000 population	4	48	39	26	26	55	198	34.68
city under 2,500 population	0	23	14	14	12	32	95	16.64
farm or ranch	0	7	10	5	3	15	40	7.01
rural nonfarm	0	16	13	13	7	17	66	11.56
Totals	4	134	120	88	63	162	571	
Percent	0.70	23.47	21.02	15.41	11.03	28.37		

Table 513. Distribution of Miles Traveled by Rural/Urban Residence, Nonresident Anglers, 2001

Urban or Rural	Urban or Rural Miles Traveled							
Residence	No miles	1 to 300	301 to 600	601 to 900	901 to 1200	Over 1200	Totals	Percent
urban	4	88	83	56	41	98	370	64.80
rural	0	46	37	32	22	64	201	35.20
Totals	4	134	120	88	63	162	571	
Percent	0.70	23.47	21.02	15.41	11.03	28.37		

516

Table 514. Distribution of Miles Traveled by Percentage of Rural Spending, Nonresident Anglers, 2001

Amount of Rural								
Spending	No Miles	1 to 300	301 to 600	601 to 900	901 to 1200	Over 1200	Totals	Percent
zero	1	22	11	9	7	16	66	12.07
1 to 24.9 percent	1	9	11	6	6	16	49	8.96
25 to 49.9 percent	1	2	14	7	5	17	46	8.41
50 to 74.9 percent	0	14	12	6	8	19	59	10.79
75 to 100 percent	1	80	67	57	32	90	327	59.78
Totals	4	127	115	85	58	158	547	
Percent	0.73	23.22	21.02	15.54	10.60	28.88		

Table 515. Distribution of Miles Traveled by Income, Nonresident Anglers, 2001

	Miles Traveled									
Income	No Miles	1 to 300	301 to 600	601 to 900	901 to 1200	Over 1200	Totals	Percent		
over \$50,000	3	93	83	59	39	113	390	71.69		
\$25,000 to \$50,000	2	25	24	21	12	37	121	22.24		
\$10,000 to \$25,000	0	6	4	6	5	2	23	4.23		
under \$10,000	0	1	5	1	1	2	10	1.84		
Totals	5	125	116	87	57	154	544			
Percent	0.92	22.98	21.32	15.99	10.48	28.31				

Table 516. Distribution of Miles Traveled by Age, Nonresident Anglers, 2001

Age	No Miles	1 to 300	301 to 600	601 to 900	901 to 1200	Over 1200	Totals	Percent
6 to 18 years	0	1	1	1	1	3	7	1.34
19 to 45 years	2	51	55	36	26	50	220	41.98
46 to 65 years	2	57	46	38	25	70	238	45.42
over 65 years	1	16	12	4	6	20	59	11.26
Totals	5	125	114	79	58	143	524	
Percent	0.95	23.85	21.76	15.08	11.07	27.29		

Table 517. Distribution of Survey Respondents with/without Access and/or Guide Fees by Type of Residence, Nonresident Anglers, 2001

_	Access and/	or Guide Fees		
Type of Residence	With Fees	Without Fees	Totals	Percent
city over 50,000 population	44	144	188	30.87
city 2,500 to 50,000 population	46	166	212	34.81
city under 2,500 population	13	84	97	15.93
farm or ranch	7	37	44	7.22
rural nonfarm	11	57	68	11.17
Totals	121	488	609	
Percent	19.87	80.13		

218

Table 518. Distribution of Survey Respondents with/without Access and/or Guide Fees by Rural/Urban Residence, Nonresident Anglers, 2001

Urban or Rural _ Residence		Access and/	or Guide Fees		
		With Fees	Without Fees	Totals	Percent
urban		90	310	400	65.68
rural		31	178	209	34.32
	Totals	121	488	609	
	Percent	19.87	80.13		

Table 519. Distribution of Survey Respondents with/without Access and/or Guide Fees by Percentage of Rural Spending, Nonresident Anglers, 2001

Amount of Rural	Access and/			
Spending	With Fees	Without Fees	Totals	Percent
zero	16	59	75	12.89
1 to 24.9 percent	10	41	51	8.76
25 to 49.9 percent	5	41	46	7.90
50 to 74.9 percent	18	45	63	10.82
75 to 100 percent	67	280	347	59.62
Totals	116	466	582	
Percent	19.93	80.07		

519

Table 520. Distribution of Survey Respondents with/without Access and/or Guide Fees by Income, Nonresident Anglers, 2001

	Access and/	or Guide Fees		
Income	With Fees	Without Fees	Totals	Percent
over \$50,000	87	320	407	70.54
\$25,000 to \$50,000	27	108	135	23.40
\$10,000 to \$25,000	3	22	25	4.33
under \$10,000	1	9	10	1.73
Totals	118	459	577	
Percent	20.45	79.55		

Table 521. Distribution of Survey Respondents with/without Access and/or Guide Fees by Age, Nonresident Anglers, 2001

	Access and/	or Guide Fees		
Age	With Fees	Without Fees	Totals	Percent
6 to 18 years	0	7	7	1.25
19 to 45 years	39	192	231	41.25
46 to 65 years	56	203	259	46.25
over 65 years	15	48	63	11.25
Totals	110	450	560	
Percent	19.64	80.36		

Table 522. Distribution of Type of Residence by Rural/Urban Residence, Nonresident Anglers, 2001

			Ty					
	or Rural idence	City over 50,000 Population	City 2,500 to 50,000 Population	City under 2,500 Population	Farm or Ranch	Rural Nonfarm	Totals	Percent
urban		201	225	0	0	0	426	65.04
rural		0	0	105	48	76	229	34.96
	Totals	201	225	105	48	76	655	
	Percent	30.69	34.35	16.03	7.33	11.60		

Table 523. Distribution of Type of Residence by Percentage of Rural Spending, Nonresident Anglers, 2001

		Ty					
Amount of Rural Spending	City over 50,000 Population	City 2,500 to 50,000 Population	City under 2,500 Population	Farm or Ranch	Rural Nonfarm	Totals	Percent
zero	19	29	15	5	6	74	12.80
1 to 24.9 percent	16	17	9	4	5	51	8.82
25 to 49.9 percent	17	15	6	1	7	46	7.96
50 to 74.9 percent	17	23	13	6	4	63	10.90
75 to 100 percent	110	116	49	26	43	344	59.52
Totals	179	200	92	42	65	578	
Percent	30.97	34.60	15.92	7.27	11.25		

Table 524. Distribution of Type of Residence by Income, Nonresident Anglers, 2001

	-	Ту					
Income	City over 50,000 Population	City 2,500 to 50,000 Population	City under 2,500 Population	Farm or Ranch	Rural Nonfarm	Totals	Percent
over \$50,000	148	156	54	24	45	427	70.23
\$25,000 to \$50,000	28	53	26	12	24	143	23.52
\$10,000 to \$25,000	3	8	11	4	1	27	4.44
under \$10,000	5	1	1	2	2	11	1.81
Totals	184	218	92	42	72	608	
Percent	30.26	35.86	15.13	6.91	11.84		

Table 525. Distribution of Type of Residence by Age, Nonresident Anglers, 2001

	Type of Residence						
Age	City over 50,000 Population	City 2,500 to 50,000 Population	City under 2,500 Population	Farm or Ranch	Rural Nonfarm	Totals	Percent
6 to 18 years	2	4	1	0	1	8	1.33
19 to 45 years	83	86	35	16	25	245	40.83
46 to 65 years	81	91	46	18	38	274	45.67
over 65 years	15	24	16	10	8	73	12.17
Totals	181	205	98	44	72	600	
Percent	30.17	34.17	16.33	7.33	12.00		

Table 526. Distribution of Rural/Urban Residence by Percentage of Rural Spending, Nonresident Anglers, 2001

Amount of Rural	Location of Residence					
Spending	Urban	Rural	Totals	Percent		
zero	48	26	74	12.80		
1 to 24.9 percent	33	18	51	8.82		
25 to 49.9 percent	32	14	46	7.96		
50 to 74.9 percent	40	23	63	10.90		
75 to 100 percent	226	118	344	59.52		
Totals	379	199	578			
Percent	65.57	34.43				

Table 527. Distribution of Rural/Urban Residence by Income, Nonresident Anglers, 2001

	Location of	Residence		
Income	Urban	Rural	Totals	Percent
over \$50,000	304	123	427	70.23
\$25,000 to \$50,000	81	62	143	23.52
\$10,000 to \$25,000	11	16	27	4.44
under \$10,000	6	5	11	1.81
Totals	402	206	608	
Percent	66.12	33.88		

523

Table 528. Distribution of Rural/Urban Residence by Age, Nonresident Anglers, 2001

	Location of	Residence		
Age	Urban	Rural	Totals	Percent
6 to 18 years	6	2	8	1.33
19 to 45 years	169	76	245	40.83
46 to 65 years	172	102	274	45.67
over 65 years	39	34	73	12.17
Totals	386	214	600	
Percent	64.33	35.67		

Table 529. Distribution of Percentage of Rural Spending by Income, Nonresident Anglers, 2001

_		Amou					
Income	Zero	1 to 24.9 Percent	25 to 49.9 Percent	50 to 74.9 Percent	75 to 100 _ Percent	Totals	Percent
over \$50,000	46	30	32	42	247	397	71.79
\$25,000 to \$50,000	19	13	11	14	66	123	22.24
\$10,000 to \$25,000	4	6	1	1	11	23	4.16
under \$10,000	1	1	0	1	7	10	1.81
Totals	70	50	44	58	331	553	
Percent	12.66	9.04	7.96	10.49	59.86		

524

Table 530. Distribution of Percentage of Rural Spending by Age, Nonresident Anglers, 2001

_							
Age	Zero	1 to 24.9 Percent	25 to 49.9 Percent	50 to 74.9 Percent	75 to 100 Percent	Totals	Percent
6 to 18 years	0	0	1	1	4	6	1.13
19 to 45 years	35	14	19	21	133	222	41.89
46 to 65 years	25	26	20	28	146	245	46.23
over 65 years	10	6	3	6	32	57	10.75
Totals	70	46	43	56	315	530	
Percent	13.21	8.68	8.11	10.57	59.43		

Table 531. Distribution of Age by Income, Nonresident Anglers, 2001

		Aş				
Income	6 to 18 Years	19 to 45 Years	46 to 65 Years	Over 65 Years	Totals	Percent
over \$50,000	6	173	183	28	390	69.27
\$25,000 to \$50,000	0	48	61	25	134	23.80
\$10,000 to \$25,000	0	8	11	9	28	4.97
under \$10,000	2	5	3	1	11	1.95
Totals	8	234	258	63	563	
Percent	1.42	41.56	45.83	11.19		

SECTION I

Changes in Days Participated and Miles Traveled, by Year and Survey Group

Tables 532 through 549

526

Table 532. Resident Antelope Hunting, Average Days Participated, by Year

	Ar	chery	Firearm		ery Firearm		G	ratis
Year	Obs	Value	Obs	Value	Obs	Value		
1981		na		na		na		
1982	279	4.89 ^c	401	1.90 ^{bc}	94	2.61 ^{ab}		
1986	250	7.37 ^{ab}	300	1.68 ^c	156	2.00^{b}		
1990	196	7.59 ^a	261	1.96 ^{ab}	150	2.91 ^a		
1996	373	6.26 ^b	1,019	2.14 ^a	245	3.01^{a}		
2001	304	4.78 ^c	538	2.00^{ab}	94	2.45 ^{ab}		

Table 533. Resident Deer Hunting, Average Days Participated, by Year

	Arc	Archery		Firearm		Gratis		Muzzleloader	
Year	Obs	Value	Obs	Value	Obs	Value	Obs	Value	
1981	244	12.61 ^b	1,270	3.68 ^b		na		na	
1982	89	12.50 ^b	729	4.09 ^{ab}	170	3.06		na	
1986	659	13.02 ^{ab}	1,211	4.47 ^a		na		na	
1990	551	12.92 ^{ab}	254	4.46 ^a	181	3.86	462	3.96 ^a	
1996	601	15.94 ^a	551	4.33 ^a	30	3.86	474	3.68^{b}	
2001	856	12.70 ^b	692	4.42 ^a	293	3.57		na	

Table 534. Resident Big Game, Furbearer, Upland Game, and Waterfowl, Average Days Participated, by Year

	Big	Big Game		Furbearer		Upland Game		erfowl
Year	Obs	Value	Obs	Value	Obs	Value	Obs	Value
1981	12	3.50	132	18.09 ^{ab}	360	14.70 ^a	312	11.53 ^a
1982	17	4.41	201	18.41 ^a	500	9.04 ^c	460	8.81 ^b
1986	110	3.79	1,063	12.37 ^c	750	9.21 ^c	522	8.41 ^b
1990	136	4.75	269	11.39 ^c	331	11.63 ^b	203	9.80 ^{ab}
1996	118	5.31	789	13.06 ^{bc}	573	9.34 ^c	402	8.54 ^b
2001	307	5.47	559	11.46 ^c	609	8.60 ^c	389	8.29 ^b

Table 535. Resident Turkey Hunting, Average Days Participated, by Year

	I	Fall		Gratis	St	Spring	
Year	Obs	Value	Obs	Obs Value		Value	
1981	204	1.82 ^b		na		na	
1982	161	1.99 ^b	na		na		
1986	1,319	2.06^{b}	79 2.94		na		
1990	239	2.36 ^b	67	3.17	229	2.99	
1996	1,513	2.25 ^b	56	2.66	882	3.30	
2001	2,598	2.99 ^a	146	4.33		na	

Table 536. Resident Fishing, Average Days Participated, by Year

	Summer		W	Winter		sonal
Year	Obs	Value	Obs	Value	Obs	Value
1981		na		na	515	22.98
1982	35	14.57		na		na
1986	942	12.87	194	12.14 ^{ab}		na
1990	482	12.33	96	9.75 ^b		na
1996	1,885	16.99	640	10.35 ^{ab}		na
2001	517	17.78	251	13.20 ^a	682	24.46

Table 537. Nonresident Hunting and Fishing, Average Days Participated, by Year

	Antelor	oe Archery	Deer	Archery	Deer	Firearm	Sma	ll Game	Seasor	nal Fishir
Year	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value
1983		na	73	7.19	249	3.98^{a}		na	601	7.62
1990	44	6.79	210	7.94	263	4.01 ^a	640	5.54 ^{ab}	259	5.79
1996	19	6.21	391	7.37	418	3.59 ^{ab}	1,253	6.47 ^a	629	9.48
2001	51	6.49	193	7.72	505	3.45 ^b	1,990	5.53 ^b	637	5.89

Table 538. Resident Antelope Hunting, Average Miles Traveled, by Year

	Archery		Fin	earm	Gratis		
Year	Obs	Value	Obs	Value	Obs	Value	
1981		na		na		na	
1982	283	420.70^{b}	386	607.61 ^{ab}	80	64.49	
1986	225	712.20 ^a	279	610.78 ^{ab}	104	96.57	
1990	185	777.41 ^a	252	551.56 ^b	141	75.95	
1996	324	739.54 ^a	906	636.74 ^{ab}	94	90.72	
2001	280	824.42 ^a	497	690.54 ^a	65	83.29	

Table 539. Resident Deer Hunting, Average Miles Traveled, by Year

	Archery		Firearm		Gratis		Muzz	leloader
Year	Obs	Value	Obs	Value	Obs	Value	Obs	Value
1981	229	423.72 ^b	1,208	266.10 ^b		na		na
1982	83	381.89 ^b	676	230.70^{b}	128	75.63		na
1986	585	464.83 ^{ab}	1,135	337.74 ^a		na		na
1990	500	653.80 ^a	248	372.35 ^a	166	116.72	427	247.17
1996	504	672.11 ^a	442	374.62 ^a	18	111.78	457	215.43
2001	736	677.65 ^a	607	355.65 ^a	203	122.41		na

530

Table 540. Resident Big Game, Furbearer, Upland Game, and Waterfowl, Average Miles Traveled, by Year

	Big Game	Furbearer	Upland Game	Waterfowl
Year	Obs Value	Obs Value	Obs Value	Obs Value
1981	12 396.5 ^b	128 737.68	357 476.01 ^b	305 415.10 ^b
1982	17 652.8 ^{ab}	202 615.20	na	na
1986	106 582.6 ^{at}	1,107 636.00	697 522.52 ^b	465 480.42 ^b
1990	129 1,131.0 ^a	265 615.65	318 868.66 ^a	192 904.35 ^a
1996	102 970.0 ^a	635 693.21	463 928.09 ^a	314 803.45 ^a
2001	263 1,080.9 ^a	516 530.30	522 870.25 ^a	319 777.80 ^a

Table 541. Resident Turkey Hunting, Average Miles Traveled, by Year

	I	Fall	Fall Gratis		Sp	oring
Year	Obs	Value	Obs	Value	Obs	Value
1981	191	239.19 ^{cd}		na		na
1982	161	177.63 ^d		na		na
1986	1,112	236.98 ^{cd}	42	98.79		na
1990	224	356.13 ^a	52	98.71	209	269.87
1996	1,288	275.64 ^{bc}	38	131.03	710	311.41
2001	2,194	323.66 ^{ab}	99	100.61		na

Table 542. Resident Fishing, Average Miles Traveled, by Year

	Su	Summer		inter	Se	Seasonal		
Year	Obs	Value	Obs	Value	Obs	Value		
1981		na		na	546	309.73 ^b		
1982	35	590.40		na		na		
1986	877	648.20	163	642.00		na		
1990	440	859.50	92	672.00		na		
1996	1,493	815.40	536	496.00		na		
2001	454	973.70	221	647.80	608	1,012.69 ^a		

Table 543. Nonresident Hunting and Fishing, Average Miles Traveled, by Year

	Antelope Archery	Deer Archery	Deer Firearm	Small Game	Seasonal Fishir
Year	Obs Value	Obs Value	Obs Value	Obs Value	Obs Value
1983		70 560.90 ^c	244 625.00 ^b	641 670.91 ^b	621 831.45
1990	40 1,529.30	188 1,168.70 ^b	259 567.37 ^b	625 609.97 ^c	253 488.55
1996	15 1,896.70	292 1,357.50 ^b	325 993.18 ^a	904 1,369.59 ^a	484 1,048.89
2001	45 1,705.90	171 1,627.50 ^a	449 1,001.09 ^a	1,810 1,250.72 ^b	574 1,030.85

Table 544. Resident Antelope Hunting, Average Miles Traveled per Day of Participation, by Year

	Archery		Fii	earm	Gratis		
Year	Obs Value		Obs	Value	Obs	Value	
1981	na			na	na		
1982	275	103.08 ^c	386	380.32 ^{ab}	80	36.42	
1986	222	125.06 ^c	279	488.00 ^a	104	71.36	
1990	181	136.21 ^b	251	333.02 ^b	138	35.17	
1996	321	165.08 ^b	896	365.43 ^{ab}	93	48.01	
2001	273	203.21 ^a	495	406.65 ^{ab}	63	40.15	

Table 545. Resident Deer Hunting, Average Miles Traveled per Day of Participation, by Year

	Ar	Archery		Firearm		Gratis		Muzzleloader	
Year	Obs	Obs Value		Value	Obs Value		Obs	Value	
1981	223	46.24	1,201	87.52 ^{ab}		na		na	
1982	82	44.07	676	70.58 ^b	128	26.64		na	
1986	569	43.50	1,116	104.83 ^a		na		na	
1990	482	68.45	247	97.93 ^a	165	34.99	426	72.21	
1996	491	61.36	437	99.79 ^a	18	39.56	456	66.54	
2001	722	78.28	607	104.81 ^a	203	46.95		na	

Table 546. Resident Big Game, Furbearer, Upland Game, and Waterfowl, Average Miles Traveled per Day of Participation, by Year

	Big Game		Fur	Furbearer		Upland Game		erfowl
Year	Obs	Value	Obs	Value	Obs	Value	Obs	Value
1981	12	204.70	121	60.11 ^c	352	47.74 ^c	303	49.11 ^c
1982	17	191.69	189	42.85 ^c		na		na
1986	106	189.06	1,063	137.49 ^a	689	76.05 ^b	462	80.56 ^{bc}
1990	129	339.05	239	68.11 ^{bc}	307	92.64 ^b	180	93.06 ^{ab}
1996	101	314.31	612	82.03 ^{bc}	461	144.60 ^a	314	121.04a
2001	260	298.02	501	102.54 ^{ab}	522	132.51 ^a	318	114.82 ^a

Table 547. Resident Turkey Hunting, Average Miles Traveled per Day of Participation, by Year

	I	Fall	Fall	Gratis	Sp	Spring	
Year	Obs	Value	Obs	Value	Obs	Value	
1981	191	139.40 ^{bc}		na		na	
1982	159	109.61 ^c		na		na	
1986	1,100	150.49 ^b	41	20.78		na	
1990	223	199.41 ^a	51	38.62	207	122.61	
1996	1,266	162.79 ^{ab}	35	41.16	710	130.90	
2001	2,194	149.75 ^b	99	38.64		na	

532

Table 548. Resident Fishing, Average Miles Traveled per Day of Participation, by Year

	Su	Summer		inter	Sea	Seasonal		
Year	Obs	Value	Obs	Value	Obs	Value		
1981		na		na	515	27.32 ^b		
1982	35	53.52		na		na		
1986	820	62.18	159	62.36		na		
1990	419	74.18	83	77.27		na		
1996	1,484	64.16	536	58.95		na		
2001	449	449 72.37		65.85	603	64.43 ^a		

Table 549. Nonresident Hunting and Fishing, Average Miles Traveled per Day of Participation, by Year

	Antelop	e Archery	Deer	Archery	Deer	Firearm	Sma	l Game	Season	al Fishir
Year	Obs	Value	Obs	Value	Obs	Value	Obs	Value	Obs	Value
1983		na	68	101.31 ^b	244	198.03 ^b		na	592	246.43
1990	40	231.42	187	180.09 ^{ab}	258	163.00^{b}	588	150.90 ^b	234	139.22
1996	15	367.14	287	219.59 ^a	323	329.37 ^a	902	241.28 ^a	483	194.60
2001	45	304.58	170	252.82 ^a	449	376.34 ^a	1,808	251.07 ^a	566	262.92

SECTION J

Regression Analysis of Spending and Participant Characteristics

Table 550

Given the scope and goals of this study, only a cursory examination of the explanatory capacity of the data set was conducted. The regression analyses performed were not exhaustive, and additional statistical modeling approaches could have been explored in addition to regression analysis (e.g., a Probit model could estimate the probability that an individual would make a purchase of a specific durable or nondurable good based on participation and demographic characteristics). The purpose of using regression analysis was to gauge the ability of existing participant and characteristic data to explain the variation in spending for nondurable and durable goods. The analysis consisted of using a stepwise regression procedure to test five variables (age, income, miles traveled, days participated, and location of residence) on seasonal variable and fixed expenses. Regression on specific expense categories (e.g., transportation, fishing tackle) were not conducted. Only linear regression models were used (i.e., quadratic, logarithmic, and other model specifications were not used). For sake of brevity, t-values (level of statistical significance of the explanatory variable) and parameter estimates (magnitude of the explanatory capacity of the variable) were not presented.

Even though additional statistical analyses were not performed, results from the linear regression models were quite clear; existing demographic and characteristic data were not strong indicators of seasonal spending for either nondurable or durable goods (Table 550). Due to the type of data available and the limited number of explanatory variables, it is likely that alternative regression model specifications would not substantially improve upon the results obtained from the linear models.

For individual survey groups in 2001, existing data explained from 57 percent (furbearers) to 14 percent (resident antelope archery) of the variation in spending on nondurable goods (Table 550). The average of the R-square values for all survey groups was 32 percent.

The ability of the data set to explain seasonal spending for durable goods ranged from 21 percent for resident winter fishing to 0 percent for resident antelope archery, fall turkey gratis, resident antelope gratis, and nonresident antelope archery survey groups (Table 550). The average of the R-square values for the survey groups was 5 percent.

Miles traveled and days participated were statistically significant when examining the variation in spending for nondurable goods in most survey groups. However, miles traveled and days participated generally explained less than one-third of the variation in spending. Other variables, such as income and age, also were not strong predictors of spending for nondurable goods. Information on location of residence (e.g., urban city, rural non-farm) accounted for only a fraction of the variation in spending, and was statistically significant in only a few survey groups.

Miles traveled was the only variable to be statistically significant in a majority of survey groups for spending on durable goods. Days participated was statistically significant in only eight survey groups. The data set would suggest that purchase decisions for durable goods are not necessarily statistically correlated with measures of participation. Other factors, not accounted for with existing data, have much more influence on purchases of durable goods.

Table 550. Explanatory Capacity of Participant Characteristics on Average Seasonal Variable and Fixed Expen for Hunting and Fishing Activities, North Dakota, 2001

	Type of		Exp	olanatory Varial	.bles	
Survey Group	Spending	Miles	Days	Income	Age	Residence
Nonresident Antelope	Variable	X		X		
Archery	Fixed	•	•		•	
Resident Antelope	Variable	X	X			
Archery	Fixed					,
Resident Antelope Gratis	Variable					x
	Fixed					!
Resident Antelope	Variable	X	X	X	X	
Firearm	Fixed	X			X	!
Resident Big Game		X		X	X	
	Fixed	X			X	,
Nonresident Deer Archery	Variable	X	X			X
	Fixed				X	!
Resident Deer Archery	Variable	X	X			X
	Fixed	X	X		X	,
Nonresident Deer Firearm		X	X	X		X
	Fixed	X	X			,

- continued -

Table 550. Continued

Table 330. Continued	Type of		Exp	olanatory Varial	bles		
Survey Group	Spending	Miles	Days	Income	Age	Residence	
Resident Deer Firearm	Variable	X	X		X		
	Fixed	X			•••••		
Resident Deer Gratis	Variable	X	X	X			
	Fixed	X					
Furbearer	Variable	X			••••		
	Fixed	X	••••			X	
Resident Summer Fishing	Variable	X	X	X		<u>.</u>	
	Fixed	X	X	X			
Resident Winter Fishing	Variable	X	X				
	Fixed	X	X	X			
Resident Seasonal Fishing		X	X	X		······	
	Fixed	X		X	X		
Nonresident Seasonal	Variable	X	X	X		······	
Fishing	Fixed		X				
Resident Darkhouse	Variable	X	X	X	X		
Spearing	Fixed		X	X			
Resident Fall Turkey		X	X	X		X	
Gratis	Fixed						

- continued -

Table 550. Continued

	Type of _		Exp	lanatory Varial	bles	
Survey Group	Spending	Miles				Residence
Resident Fall Turkey	Variable	X	X	X	X	
	Fixed	X	X			
Resident Upland Game	Variable	X	X	X		
1	Fixed	X			·····	
Resident Waterfowl	Variable	X	X	X		
200000000000000000000000000000000000000	Fixed	X	······································			·····
Nonresident Small Game	Variable	X	X	X		
11011163244110 23111111 23111111	Fixed	X	X	X	·····	·····
All Resident Hunters	Variable	X	X	X	x	
1111 1100100100 1100110	Fixed	X	X		X	·····
All Resident Anglers	Variable	X	X	X	x	
· ••• • • • • • • • • • • • • • • • • •	Fixed	X	X	X		X
All Nonresident Hunters	Variable	X	X	X		
	Fixed	X	X	X		
All Nonresident Anglers	Variable	X	X	X		
	Fixed		X			

Note: Variables that were statistically significant at the 85 percent confidence level (alpha = 0.15) in the regression analysis are indicated with an X. If an X is missing, the variable was not statistically significant in the regression analysis. R-square is a measure of the explanatory capacity of the variables. For example, an R-square of 0.3 means that the explanatory variables accounted for 30 percent of the variation in spending.

SECTION K

Representative Questionnaires

Survey of

FIREARM DEER HUNTING ACTIVITY IN NORTH DAKOTA



MORTH DAKOTA GAME AND FISH DEPARTMENT DEER HUNTER SURVEY (FIREARM)

DIRECTIONS

For the following questions please check off your answer. Some of the questions will have special instructions, so please note this as you complete the questionnaire.

	DEER HUNTING ACTIVITY		
i n	rst, we would like to know a little about your deer hunting a 1981 season.	activity	dur
٠.	Did you hunt deer in North Dakota during the 1981 firearm	s season?	(6)
	O NO IF NO, PLEASE STOP HERE AND RETURN THIS QU O YES IF YES, PLEASE CONTINUE	ESTIONNAIR	RE
2.	Please mark a "X" on the days that you hunted. (7-8)		
	NOVEMBER S M T W Th F S		
	8 9 10 11 12 13 14		,
	15		
3.	Did you harvest a deer? (9)		
	NO IF NO, PLEASE GO TO QUESTION NUMBER 6 YES IF YES, PLEASE CONTINUE		
١.	What date was the deer shot?	(10-15)	
۶.	What type of deer was it? (16)		
	MULE DEER		
	O ANTLERED BUCK O BUTTON BUCK		
	O LARGE DOE		
	- O SMALL DOE WHITETAIL DEER		
	O ANTLERED BUCK		
	O BUTTON BUCK O LARGE DOE		
	O SMALL DOE		

(17-19)

6. In what unit did you hunt for deer?

7.	Did you	wound	any	deer	that	you	could	not	recover?	(20)

8 NO YES				
O 153	11	TES,	HOW MANY?	 (21-22)

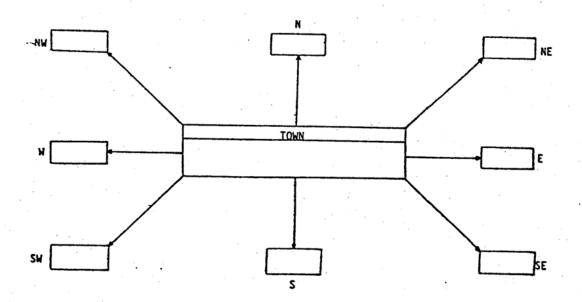
8. Did you make any preseason scouting trips? (23)

O NO YES

9. During the past 7 years, including 1975, how many years have you applied for a firearms deer license?

				-	_		 (24-25)		
How	many	years	did you	receive	۵	license?		(26-27)	,

 Show the location of your principal hunt area by direction and straight line distance from the nearest town or village on the diagram below. Show distance in miles in the appropriate box. (29-31) (32)



DEER HUNTER EXPENSES

One important purpose of this study is to learn how much people spend for preseason scouting and deer hunting. Please estimate, as best you can, the amount of money you spent for preseason scouting and deer hunting with a firearm during the 1981 season in North Dakota.

11.		PRESEASON EXPENSES	SEASON EXPENSES
	FOOD	\$(33-35)	\$ (36-39)
	LODGING TRANSPORTATION EXPENSES	\$(40-42)	\$(43-46)
	(gas, oil, repairs to vehicle during trip)	\$(47-49)	\$ (50-53)
	MILES TRAVELED	miles (54-56)	miles (57-60)
	ALCOHOLIC BEVERAGES	\$(61-63)	\$(64-67)
	FILM TAXIDERMY	\$(68-70)	\$(71-74)
	ACCESS FEES		\$ (75-78)
	MOTEL OR HOTEL PROCESSING OF MEAT	\$(8-10)	\$(1-4) \$(11-14)
	OTHER (Please Specify)	\$ (19-21)	\$(15-18) \$(22-25)

Next, we ask that you try your best to estimate the value and seasonal cost of items that you use for deer hunting with a firearm. Estimated value is what you feel the item is worth today. The estimated seasonal cost is that proportion of the estimated value that you feel could be attributed to the 1981 deer hunting season in North Dakota.

12.		ESTIMATED VALUE	ESTIMATEDSEASONAL COST
	GUN AMMUNITION SPECIAL CLOTHING USED PRIMARILY FOR	\$ (26-30) \$ (35-39)	\$(31-34)
	DEER HUNTING WITH A FIREARM SNOWMOBILE, MOTORBIKE, A.T.Y. PICKUP CAMPER OR VAN MOTOR HOME CAMPING EQUIPMENT USED PRIMARILY FOR	\$(44-48) \$(53-57) \$(62-66) \$(71-75)	1.00
	DEER HUNTING WITH A FIREARM OTHER EQUIPMENT (Please Specify)	\$ (1- 5)	\$ (6- 9)
		\$(10-14)	\$(15-18)

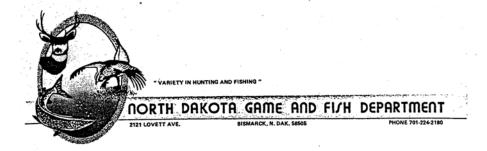
ATTITUDES TOWARD DEER (FIREARM) HUNTING IN NORTH DAKOTA

We would like			_			-		
We would like	your	opinion	of	deer	hunting	10	Manth	Dates
						111	MOLFU	vakota.

13.	How do you feel about the price of North Dakota deer (firearm) hunting licenses? (19)
	O TOO LOW O FAIR O TOO HIGH
14.	If you could put a dollar value on a typical day of North Dakota deer hunting with a firearm, what would it be?
15.	How do you feel about one person being able to take two deer in the same year, one with firearm and one with bow and arrow? (23)
	OSTRONGLY DISAPPROVE ODISAPPROVE OUNDECIDED OAPPROVE OSTRONGLY APPROVE
16.	Do you have any suggestions or comments on how the State Game and Fish Department could improve deer (firearm) hunting or deer management in Nort

17. Did you have any unusually good or bad experiences while deer hunting with a firearm in 1981 in North Dakota? (26)

Fina	lly, we would like to ask some questi	ions about your	self to help	interpret
			· · · · · · · · · · · · · · · · · · ·	
18.	What is your sex? (27)			•
	O MALE O FEMALE			
19.	What is your age?	(28-29)		
20.	What is the highest level of educati	on that you ha	ve completed	? (30)
	O LESS THAN 8 YEARS O FROM 8 TO 11 YEARS O HIGH SCHOOL GRADUATE O SOME COLLEGE OR VOCATIONAL SC O COLLEGE GRADUATE O SOME GRADUATE SCHOOL O GRADUATE DEGREE			
21.	What is your approximate gross incom line 11 on form 1040A of your federa	e per year, fr 1 tax return?	om line 22 o	n form 1040
				(31-3
22.	What other North Dakota licenses/sta	mps did you ha	ve in 1981?	
	DEER, BOW (37) FURBEARER (38) SMALL GAME (39) MOOSE (40) TURKEY (41)			
23.	Did you buy a federal duck stamp? (4	2)	,	
	O YES O NO			
		e e		



Dear Fellow Sportsman:

Your answers to the questions on this survey will help determine future deer management policies for North Dakota. Comparatively few hunters have been contacted, so it is very important that each questionnaire be answered as accurately as possible and the entire questionnaire returned promptly. Enclosed is a return envelope addressed to the Department. No postage is necessary. THANK YOU.

nve	lope	addressed	to the Dep	artment. No	postage is r	ecessary. THA	NK YOU.
	Did	you hunt	deer? Yes_	No_	(15.2)	_	
2.	Did	you hunt	mule deer?	Yes	No	- "	
3.	The CIR	map on CLE WIT	the reverse sid HIN THE SU	le shows the B-UNIT THA	deer manage T YOU HUN	ment subunits. TED THE MC	PLACE A ST.
1.			CLE THE DA YOU HUNTEI		•	y Sunday (Col. 22)	Monday (Col. 23)
		sday . 24)				Saturday (Col. 28)	Sunday (Col. 29)
5.	Did	you harve	est a deer? Yes	No	(31.2) IF YO	U HARVESTE	D A DEER
	(a) On which day did you kill your deer?						
	(b)		"X" on the was killed.	map on ba	ck WITHIN	the sub-unit v	vhere your
	(c)	Was you	r animal a mul	e deer?	; or a wh	nite-tailed deer?	(34.2)
	(d)	Was you	r deer an ANT	LERED BUG	CKE	SUTTON BUCK	(35.2)
				LARGE D	OE	SMALL DOE	(35.4)

FOR COMPUTER PROCESSING

(15.3)

(16.3)

(31.3)

(32-33)

(34.3)

		ase estimate as best you can the money you spent on firearm deer hunting in th Dakota in 1982.	ı
	6.	FOOD AND BEVERAGES \$	
		TRANSPORTATION EXPENSES (gas, oil	
		repairs to vehicle during trip) \$	
		MILES TRAVELED miles	
		FILM \$	
		TAXIDERMY \$	
		ACCESS FEES \$	
		MOTEL OR HOTEL \$	
		PROCESSING OF MEAT \$	
		OTHER (Please Specify) \$	
	Ple the	ase complete the chart below for the items purchased in 1982 and used during firearms deer season.	ıg
	7.	GUN \$	
		AMMUNITION 'S	
		SPECIAL CLOTHING USED PRIMARILY FOR	
		DEER HUNTING WITH A FIREARM \$	
		PICKUP CAMPER OR VAN \$ -	
		MOTOR HOME \$	
~~		CAMPING EQUIPMENT USED PRIMARILY FOR	
		DEER HUNTING WITH A FIREARM \$	
		OTHER EQUIPMENT (Please Specify)	
		\$	
	8.	How do you feel about the system used to select firearm deer license holders? Do you have any suggestions for improvement?	
	9.	How many years in the last seven (1975-81) have you applied for a firearms deer license?	
		How many years during the past seven (1975-81) did you receive a license?	
	10.	What is your sex? MALE FEMALE	
3	11.	What is your age?	

THANK YOU

Survey of FIREARM DEER HUNTING ACTIVITY IN NORTH DAKOTA



NONRESIDENT DEER HUNTER SURVEY

١.	Did you hu	nt deer in North Dakota duriny the 1983 firearms season?
	ONO	If no, please stop here and <u>return</u> <u>this questionnaire</u> .
	OYES	If yes, please continue.

2. Please mark an "X" on the days that you hunted.

S M T W Th F S

4 5

6 7 8 9 10 11 12

13 14 15 16 17 18 19

20

November

- 3. Did you harvest a deer?
 - ONU If no, please yo to question number 5.
 - OYES If yes, please continue.
- 4. What type of deer was it?

Mule Deer	Whitetail Deer
OAntlered Buck	O Antlered Buc
OButton Buck	O Button Buck
OLarge Doe	○ Large Doe
OSmall Doe	⊘ Small Doe

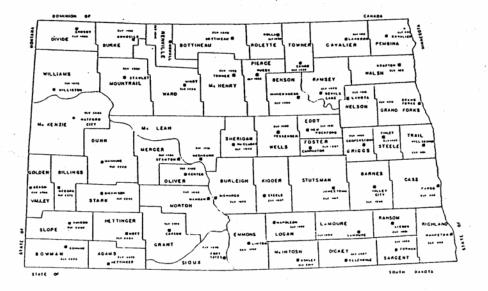
5. In what unit did you hunt deer?

	Food and Beverages	\$
	Motel, Hotel, Campground	\$
	Private Transportation Expenses (<u>your</u> of yas, oil, repairs to vehicle dur	share ing trip) \$
	Miles Traveled (list total if you dro write 0 if you rode)	ve, mile
	Commercial Transportation Expenses (bus or air fare)	\$
	Film	. \$
	Taxidermy	\$
	Access Fees	\$
	Processing of Meat	\$
	Other (please specify)	.
ır	ase complete the chart below for items chased in North Dakota for deer huntin	s of durable equipment that you mg in 1983.
ır	ase complete the chart below for items	s of durable equipment that you
ır	ase complete the chart below for items chased in North Dakota for deer huntin	s of durable equipment that you mg in 1983.
ır	ase complete the chart below for items chased in North Dakota for deer huntin	s of durable equipment that you mg in 1983.
ur	ase complete the chart below for items chased in North Dakota for deer hunting Gun Ammunition Special Clothing Used Primarily	s of durable equipment that you mg in 1983.
ur	ase complete the chart below for items chased in North Dakota for deer huntin Gun Ammunition Special Clothing Used Primarily for Deer Hunting	s of durable equipment that you ng in 1983. \$
ur	ase complete the chart below for items chased in North Dakota for deer huntin Gun Ammunition Special Clothing Used Primarily for Deer Hunting Pickup Camper or Van	s of durable equipment that you ng in 1983. \$
le our	ase complete the chart below for items chased in North Dakota for deer huntin Gun Ammunition Special Clothing Used Primarily for Deer Hunting Pickup Camper or Van Motor Home Camping Equipment Used Primarily	s of durable equipment that you ng in 1983. \$
ur •	ase complete the chart below for items chased in North Dakota for deer huntin Gun Ammunition Special Clothing Used Primarily for Deer Hunting Pickup Camper or Van Motor Home Camping Equipment Used Primarily for Deer Hunting Uther Equipment	s of durable equipment that you mg in 1983. \$
ur	ase complete the chart below for items chased in North Dakota for deer hunting Gun Ammunition Special Clothing Used Primarily for Deer Hunting Pickup Camper or Van Motor Home Camping Equipment Used Primarily for Deer Hunting Uther Equipment (please specify)	s of durable equipment that you mg in 1983. \$
ur	ase complete the chart below for items chased in North Dakota for deer hunting Gun Ammunition Special Clothing Used Primarily for Deer Hunting Pickup Camper or Van Motor Home Camping Equipment Used Primarily for Deer Hunting Other Equipment (please specify) How did you travel from your home to	s of durable equipment that you ng in 1983. \$

9.	low many people made the trip with you from your home to where you hunte	d
	in North Dakota? How many of these also hunted deer?	
10.	If you could put a dollar value on a typical day of North Dakota deer	
	nunting with a firearm, what would it be?	
11.	Indicate the percentage of hunting that you did on each type of land.	
	Federal	
	State%	
	Private	
	Unknown	
	Total	

12. Place an "X" on the map below where you hunted deer the most.

NORTH DAKOTA



13.	what is the one-	way distance	ii dii youi	nome to n	nere Jou	nancca	
		, 104					miles
	4		- ,				
14.	Why did you hunt	deer in Nort	h Dakota?				
	•						
							d Ciab
15.	Do you have any Department could North Dakota?	suggestions of improve fire	or comment earm deer	huntiny o	deer mai	rayement	in .
16.	Did you have any a firearm in 198	y unusually g 83 in North D	ood or bad akota?	1 experien	ces while	deer h	unting with
17.	. What is your se	x?					
	OMale						
	○ Female						
18.	. What is your age		-				

.

19. What is your principal occupation?
○ Farming
O Professional
○ Sales
OLabor
Government
○ Managerial/Executive
○ Craftsman
OEducation
O Studen t
O Unemployed or Retired
Other
20. What type of home area do you live in?
Ocity with 5,000 or more population
O Town with less than 5,000 population
ORural area
21. What other North Dakota licenses/stamps did you have in 1983?
O Deer, Bow
O Antelope, Bow
O Small Game
Offishing, Season
Ofishing, Short term
22. Did you buy a federal duck stamp in 1983?
OYES
O no

Thanks for your cooperation. We hope you enjoyed hunting North Dakota in 1983.

NONRESIDENT HUNTERS IN NORTH DAKOTA

A survey of nonresident hunters in North Dakota in 1976 revealed the following characteristics:

- Over 9,000 hunters came from 47 states and three foreign countries.
- Eighty percent hunted waterfowl.
- They paid a total of \$272,748 for licenses, or 27 percent of all state hunting license revenue.
- They came because they had hunted here before, they had friends or relatives in the state, or they were former residents.
- Only 25 percent of their time was spent hunting on public lands.
- Waterfowl hunters hunted an average of 5.3 days and spent \$311 each.
- Upland game hunters averaged about five days hunting and spent \$241.
- Firearms deer hunters hunted about four days and spent an average of \$280 per hunter.
- Bow and arrow deer hunters stayed the longest, seven days, and spent about \$275.
- Total expenditures, except for licenses, was \$2.5 million, resulting in a gross business volume of \$6.3 million, and employment of over 200 people.

Your response to this year's survey will allow us to compile similar statistics for the impact of nonresident hunters in North Dakota in 1983. This information is very useful to the State Game and Fish Department, as it shows how important nonresident hunters are to the state's economy.

1990 FIREARMS DEER RESIDENT HUNTER SURVEY

The North Dakota Game and Fish Department and the Department of Agricultural Economics, North Dakota State University, would like to determine the economic activity generated by sportsmen and women in the state. To do this we are asking that you fill out this questionnaire and return it in the stamped, self addressed envelope enclosed. Your cooperation is strictly voluntary. Information provided will be kept confidential and used to develop overall statistics. Thank you for your cooperation.

, 1.	PLEASE ESTIMATE AS BEST YOU CAN THE MONEY YOU NORTH DAKOTA IN 1990. INCLUDE YOUR SHARE OF	<u>DU SPENT</u> ON DEER GUN HUNTING IN GROUP EXPENSES.
	Food and Beverages	\$
	Transportation (Gas, oil, repairs to vehicle)	\$
	Miles Traveled (for all trips)	miles
	Lodging (Hotel, motel, campground fees)	\$
	Ammunition	\$
	Film	\$
	Taxidermy	\$
	Land Access Fees	\$
	Meat Processing	\$
	Other (please specify)	\$
	PLEASE INDICATE THE COST OF ANY OF THE FOLLOW DAKOTA DURING 1990 FOR THE DEER GUN SEASON. Weapons (Rifles, muzzleloaders, handguns, etc.)	\$
	Binoculars, Spotting Scope, Rifle Scope	\$
	Clothing Used Primarily For Hunting	\$
	Pickup, Motorhome, or Other Vehicle	\$
	Camping Equipment	\$
	Other Equipment (please specify)	\$
3.	What percentage of your total expenditures listed in questions (communities under 2500 population)?	
4.	Which of the following best describes where you live? city over 50,000 population city between community under 2,500 population farm or recommunity under 2,500 population	
5.	How many days did you hunt deer in North Dakota during the	1990 gun season? days
6.	Did you do any preseason scouting?	Yes No

Please Complete Reverse Side

_						
lf	id you hunt in a state(s) other than North Dakota in YES, what did you hunt? (check all that apply)		£.	Yes	No	
_	Deer	Waterfowl Upland game				
-	Other big game (moose, elk, sheep)	Other (specify)				
1	which state(s) other than North Dakota did you he	unt?	:			
٧	Why did you hunt in this state(s)?					
3						
	ndicate the percentage of deer hunting you did on	each land type.		Federal State		
	ndicate the percentage of deer hunting you did on	each land type.		State Private Unknown	% %	
-	The state Delecte Come and Eigh Department current	rently has a Oro	oram v	State Private Unknown Total	====% ====% !=100%	d food
-	The North Dakota Game and Fish Department curring small acreage from private landowners for up to are signed and open to walking hunting access.	rently has a Oro	oram v	State Private Unknown Total which leases	% 1=100% s habitat anyable contra	2010.
-	The North Dakota Game and Fish Department curring small acreage from private landowners for up to are signed and open to walking hunting access.	rently has a Oro	oram v	State Private Unknown Total which leases	% 1=100% s habitat anyable contra	2010.
-	The North Dakota Game and Fish Department curring small acreage from private landowners for up to are signed and open to walking hunting access.	rently has a pro- ten years throu	gram w gh ann	State Private Unknown Total which leases ually renew ———————————————————————————————————	## A Property of the Control of the	2010.

1996 RESIDENT FIREARMS DEER SURVEY

The North Dakota Game and Fish Department and the Department of Agricultural Economics, North Dakota State University, would like to determine the economic activity generated by sportsmen and women in the state. To do this we are asking that you fill out this questionnaire and return it in the postage-paid, self-addressed envelope. Your best guesses are better than ours! Your cooperation is strictly voluntary. Information provided will be kept confidential and used to develop overall statistics. Thank you for your cooperation. NOTE: If you hunted deer with a gratis license, please disregard questions 2 and 8.



SECTION 1: HUNTER P 1. What is your age?	ROFILI	<u>3</u> ,					.,
2. Which of the followingcity over 50,000 pocity between 2,500community under 2	pulation and 50,0)00 popu		ı live? (C	heck on farm or rural no	ranch	
3. What is your approxima \$50,000 or more _\$40,000 - \$49,999 _\$30,000 - \$39,999 _\$25,000 - \$29,999 _\$20,000 - \$24,999	ate annu	al house	hold inc		\$15,000 \$10,000 \$5,000 Under \$	0 - \$19, 0 - \$14, - \$9,99	999 999
SECTION 2: PARTICIPA 4. Did you hunt deer in N If NO, please stop here	orth Dal	kota duri urn the q	ng the 1	996 firear aire. Tha	rms seas ank you.	on?	_YesN
5. In which county did yo	ou hunt	most?					
6. Please indicate the days	s you hu	nted by 1	narking	them wit	h an X:		
·			NOV	EMBER	1996		
	SUN	MON	TUE	WED	THU	FRI	SAT
						8	9
	10	11	12	13	14	15	16
	17	18	19	20	21	22	23
	24						
7. Did you harvest a deer IF YOU HARVESTEI a) What was the date o	O A DEI	ER			_Yes	_No	
b) In which county was	s your ar	nimal kil	led?				
c) Was your animal a n d) Was your deer a:							Doe?

	Federal	%	
	State	%	
	Private	%	
	Unknown	%	
		Total = 100%	
• .			
SECTION 3: EXPENSES			
9. PLEASE ESTIMATE AS BEST Y	OU CAN THE	MONEY YOU SPEN	T WHILE DEER
HUNTING IN NORTH DAKOTA			
, , , , , , , , , , , , , , , , , , , ,			/
Food and Beverages		\$	
Transportation (Gas, oil, repairs to v	rehicle)	\$	-
Miles Traveled (for all trips)			miles
Lodging (Hotel, motel, campground	fees)	\$	<u> </u>
Ammunition		\$	
Film		\$	
Taxidermy		\$	
Land Access Fees		\$	
Guiding Fees		\$	
Meat Processing		\$	
Other (please specify)		\$	
,			
0. PLEASE INDICATE THE COST			
<u>NORTH DAKOTA</u> DURING 1996	FOR THE FIR	CEARNIS DEER SEA	ASON.
Firearms (Rifles, Muzzleloaders, Ha	andguns, etc.)	\$	
Binoculars or Spotting Scope, Rifle		\$	
Clothing Used Primarily for Huntin		\$	
Pickup, Motor Home, or Other Veh		\$	
Camping Equipment		\$	
Other Equipment (please specify)		\$	-
can Equipment (prease speedy))			
1. What percentage of your total expend	itures listed in ar	estions 9 and 10 abov	e was spent in rural areas
(communities under 2500 populatio		ioniono y una 10 upo i	%
(communities under 2500 populatio			/0
		hunting in North Dake	ota what would that be?
2. If you could put a dollar value on a tvi	nical day of deer		ong mut mound that but
2. If you could put a dollar value on a type	pical day of deer	\$	



NOTICE

PLEASE return this questionnaire within 5 days.

YOU MAY COMPLETE YOUR SURVEY AT **www.esurvey.cc/nddeer**

	\downarrow	ANSWER SURVEY FOR THIS LICENSE ONLY	₩	
-				1
	,			1

PLEASE USE DARK INK

Dear Hunter: If you had a second or third deer license in 2001, please read important note below before filling out this survey.					
Please take a few minutes to fill out this survey and return in the postage paid envelope. All information is confidential and used for management purposes only. Please answer questions 2 and 4b through 4d even if they seem irrelevant for your type of license. Bulk burchase of forms requires sending one similar form to all. Surveys are not sent to all license holders in order to keep costs down. Instead, a random sample of each type of license in each unit is selected to receive a questionnaire. For the sample to accurately represent all licenses of that type for that unit, it is important that all surveys are returned. Thankyou.					
1. Did you hunt deer? Yes No (If No, please stop here and return your survey.)					
If you had an "any antlered deer" or "any antlerless deer" or a gratis license in units south and west of and in (units 3B to 4F), did you actively hunt for mule deer?	ncluding the Missouri River				
☐ Yes ☐ No					
The map on back side shows deer management subunits (they are different than hunting units in some cases). What is the number designation of the management subunit you hunted most?					
3. Please indicate the days on which you hunted by filling in the circles. NOVEMBER 2001 SUN MON TUE WED THU FRI SAT					
9 10					
11 12 13 14 15 16 17					
18 19 20 21 22 23 24					
4. Did you harvest a deer? Yes No					
a) What was the date of kill? 1 1 / 0 1					
b) Using the map, in which management subunit was your animal killed?					
c) Was your deer a Mule Deer White-tailed Deer	(OVER)				
d) Was your deer a Antlered Buck Button Buck Large Doe Small Doe					
IMPORTANT NOTE FOR PERSONS WITH MORE THAN ONE LICENSE! Additional licenses (as well as muzzleloaders, yo or bow) will be sampled separately, and you may or may not receive a survey for those licenses. Please report ONLY your hunting actions of the sampled separately, and you may or may not receive a survey for those licenses.					
during the regular deer gun season (Nov 9-25) on this questionnaire. If your regular deer gun (first) and your second and/or third licens were for the same type of deer in the same unit, assume that the first deer taken during this period pertains to your first license and this survey, regardless of what tag you placed on the animal. Report ALL your days hunted during the regular deer gun season (Nov 9-25)	ses 10345				



Page 2 - Survey Addendum

2001 DEER GUN HUNTER QUESTIONNAIRENorth Dakota Game and Fish Department

North Dakota Game and Fish Department Wildlife Division



YOU MAY COMPLETE YOUR SURVEY AT www.esurvey.cc/nddeer

The North Dakota Game and Fish Department would like to determine the economic activity generated by sportsmen and women in North Dakota. To do this we are asking a select group of hunters to fill out this survey and return it in the postage paid, self addressed envelope provided. Your best guesses are better than ours! Your cooperation is strictly voluntary. The information provided will be kept confidential and used to develop overall statistics only. Thank you for your cooperation!

Note: If you hunted deer with a gratis license, please disregard questions 2 and 4.

PLEASE USE DARK INK	_
1. What is your age?	SORT CODE - PLEASE DO NOT WRITE IN THIS SPACE
2. Would you associate your primary residence with? (Check one) City over 50,000 population City between 2,500 and 50,000 pop. Farm or ranch	on Rural non-farm
3. What is your approximate annual household income? (before taxes and deductions) \$\begin{array}{c} \$150,000 \text{ or more} & \$75,000-\$99,999 \\ \$125,000-\$149,999 & \$50,000-\$74,999 \\ \$100,000-\$124,999 & \$25,000-\$49,999 \end{array}	\$10,000-\$24,999 Under \$10,000
4. Indicate the percentage of deer gun hunting you did on each land ownership type.	
Federal % State % Private % Un	known
5. Please provide your best estimate on the money you spent while deer gun hunting in North Include your share of group expenses.	<u>n Dakota</u> in 2001.
Food and beverages\$.00 Ammunition\$	Guiding fees\$
Transportation\$	Meat processing\$
Miles traveled\$ Taxidermy\$	Other
Lodging\$\$\$	(produce apocary)
6. Please provide the cost of any of the following items you purchased in North Dakota in 200	01 for the 2001 Deer Gun season.
Firearms\$ (Rifles, muzzleloaders, handguns, etc.)	Camping equipment\$
Binoculars, spotting scope\$ 00 Pickup, motorhome \$.00 rifle scope	Other equipment\$.00
7. What percentage of your total expenditures listed in questions 5 and 6 above was spent in <u>rural areas</u> of North Dakota? (communities under 2,500 in population)	
8. If you could put a dollar value on a typical day of deer gun hunting in North Dakota, what w	rould that dollar amount he?
\$.00	
THANK YOU! If you have any suggestions or comments on bow the North Dakota Compared	Draft

THANK YOU! If you have any suggestions or comments on how the North Dakota Game and Fish Department could improve deer hunting or deer management in the state, please enclose them on a separate sheet of paper.



