



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

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.*

A Case Study of a Partnership Promotion Program for Christmas Trees

Roger A. Hinson, Brian D. Marx, and Alden C. Main

Louisiana State University

In Louisiana, the locally produced Christmas tree crop is increasing in importance as a farm enterprise. The number of trees sold by the state's tree growers increased from 117,000 in 1985 to about 170,000 in 1989 (Cooperative Extension Service). Both retail and wholesale market channels are available to growers. Many growers with small acreage prefer to use choose-and-cut (CC) selling. This is a retail channel variant where the customer comes to the farm, chooses and cuts the tree, and takes it home. Growers avoid one set of marketing expenses (harvest labor and perhaps transportation), but incur other costs. These include a higher level of farm maintenance needed for visual appeal, provision of other amenities such as restroom facilities, advertising to attract customers, and liability insurance. However, growers expect a retail rather than wholesale price.

Growers with relatively small acreage of trees are likely to have relatively small advertising budgets. Historically, this kind of grower has advertised in newspapers, helped with more general community promotions, and used radio announcements, signs, and direct mailings. Campaigns from national associations have indirectly supported local advertising efforts. For example, a 1988 promotion by the National Christmas Tree Association used national television advertising and a \$1 discount coupon distributed through *TV Guide* magazine. However, while growers may individually and collectively understand that effective advertising can increase product demand, there has been little evidence of support at the local level for generic advertising campaigns to expand the market. Growers apparently have not been willing to pay for these long-term (but not immediately observable) gains.

Delivery of advertising messages to broad markets using television is costly and beyond the reach of individual tree growers. A technique for overcoming this barrier is partnership advertising, where businesses with different product lines share advertising expenses. Firms use the attributes of one product to complement the other, enhancing the image of both. An effective advertisement

should increase sales of both products. A recent television example was melted cheese as a sauce over cooked broccoli.

This paper summarizes an innovative partnership promotion effort conducted in southern Louisiana that involved both television and coupon advertisements. The objectives are to determine the impact of the promotional program in three areas:

- (a) characteristics of customers who saw the television portion of the program;
- (b) coupon redemption rates and characteristics of users and non-users; and
- (c) response to the program and its effectiveness compared with past promotional efforts.

Previous Research

We did not identify research designed to test the effectiveness of local advertising. Though individual growers test the level and pattern of sales at season's end, comparing results to historical patterns while implicitly accounting for promotional effort, these results have not been available for analysis.

An approach commonly used in Christmas tree marketing research has included identification of customer demographics, combined with cultural and societal trends, to develop marketing strategies and programs. Hildebrandt's (1991) research illustrates this approach. She collected demographic characteristics from a survey, and compared the results with earlier work including Hildebrandt et al. (1989); Gwinner; Hu and Burns; Chafin; and Ishler and Herrmann. Respondent characteristics were similar among these studies, being young to middle aged families with children, living in single family dwellings, planning a family oriented Christmas, and having upper middle incomes. Hildebrandt (1991) then used knowledge of consumer perceptions, behaviors, and market forces (taken from other research) to suggest marketing ideas and strategies for tree growers.

Situation and Advertising Objectives

In 1989, 20 New Orleans, La. area tree growers formed a promotional partnership with a national restaurant that specializes in take-out and home-delivery of pizza. In the New Orleans television trade area, the restaurant has about 40 establishments. The restaurant's cooperation with these tree growers provided it a seasonal promotion tied to a family oriented activity. The tree growers' goal was to expand sales compared with competing segments of the industry (natural trees from lots, artificial trees). They also sought to encourage tree use among that segment of the population that does not use a Christmas

tree. They made the effort more affordable to these mostly small-acreage growers through cost-sharing with the restaurant chain.

The program included (1) a television advertisement, and (2) a flyer that provided (i) a map locating each grower and (ii) a discount coupon. They were to deliver the flyer with each pizza sold in the service area. The television advertisement, placed in the post-news hours, featured a pizza delivery to a parents-with-children family and a family selecting and taking home a tree from a farm. Thus, households who normally did not watch television during the selected time slot or who did not patronize this pizza establishment would have less opportunity to be aware of the promotional effort.

Research Procedures

Of 20 growers who participated in the promotional program, six agreed to participate in the study of program effectiveness by providing a customer guest list. Others expressed no interest or concerns about confidentiality of those lists. We interviewed customers by telephone. The caller initially tried to interview the household member who made the tree choice decision. If that person was unavailable, however, we asked an available adult who was knowledgeable about the tree purchase to respond. We began the survey in the week following Thanksgiving, continuing for three weeks. The selling season started on the day following Thanksgiving.

While most restaurants received the coupon with enough lead time, others did not. In some cases, management did not adequately communicate instructions on delivery of the coupon to the customer to employees. The companion television advertisement initially began to air on Monday following Thanksgiving, and continued for eight days. Therefore, most of the program was not started until after a weekend of sales was complete.

We surveyed all growers who participated in the promotional program by mail. We asked about sales results for the promotion (1989) season and for the preceding season. Information included number of trees offered for sale, trees actually sold, evaluation of strength of sales, a description of the grower's promotional program in each year, and the number of coupons redeemed.

Christmas Tree Purchasing Behavior

Responses were available from 290 households. Among these customers, 95 percent had put up a tree in the previous season, 96 percent had used a natural tree, and 80 percent of trees were from CC farms. A household was defined as a new customer if it did not purchase from the same farm as in 1988. Only 250 of

the original 290 respondents answered this fourth question (a respondent could answer the previous three questions without knowing the fourth). New customers were 45 percent of the total while 55 percent were repeat.

Recall of the Television Advertisement and Use of the Coupon

Respondents indicated whether the promotional campaign reached or had an impact on potential customers. If respondents recalled seeing the ad or had received a coupon, we asked whether the decision about kind and source of tree already had been made. If the answer was no, we asked whether the ad or coupon had an impact on putting up a tree; whether a natural tree was chosen after seeing the ad; and whether the ad had an impact on source of the natural tree.

1. The advertisement. Twelve percent of the 257 households that responded to the new/repeat customer distinction saw the ad (Table 1). Of those, 41 percent were new customers while 59 percent were repeat customers. Among customers who did not see the ad, 46 percent were new and 54 percent were repeat customers. The proportions of new and repeat customers who saw the ad compared with the proportions who did not see the ad were not statistically different. Based on standard Chi-square tests for independence for two way frequency tables (Mendenhall, Wackerly and Scheaffer), there was no evidence that the likelihood of a customer seeing the ad was statistically dependent on his being a new or repeat customer ($p>.58$).

2. The coupon/map. Seventeen percent of respondents received a coupon while 83 percent did not. New customers who received a coupon accounted for 52 percent of all new customers. Repeat customers who received a coupon were 44 percent of all repeat customers. As with the ad, there was no significant dependence between receiving the coupon and customer status ($p>.30$).

Table 1.

Number of Customers Who Saw the Advertisement and Who Received a Coupon, by Whether the Household Was a New or Repeat Customer

Item	Response	Customer Status					
		New		Repeat		Total	
Saw the ad	yes	13	(41)	19	(59)	32	(12.5)
	no	103	(46)	122	(54)	225	(87.5)
	total	116	(45.1)	141	(54.9)	257	
Received a coupon	yes	23	(52)	21	(48)	44	(17.2)
	no	93	(44)	119	(56)	212	(82.8)
	total	116	(45.1)	140	(54.9)	256	

Source: Customer survey of six (6) Louisiana choose-and-cut tree farms.

Impact of Promotion Components on Purchase Behavior

Thirty-two and 28 respondents answered questions about impact of the ad and impact of the coupon. A high proportion of repeat customers had already decided on kind and source of tree before contact with the promotional program (Table 2). The proportion of new customers who had not made this decision was much higher than for repeat customers. We did not use statistical tests to test these responses due to small sample size. For respondents who had not already decided to use a tree, repeat customers were less influenced by the program compared with new customers. This relationship held true for tree type and tree source as well. In addition, across the tree use, type and source responses, the advertisement influenced a higher proportion of respondents than the coupon.

Tree Sales Results, 1989 versus 1988

We used information provided by 10 of the 20 farms to compare sales results. About 49 percent of the 11,500 trees offered for sale in 1988 by these growers were sold. In 1989, growers offered about 11,450 trees and about 56 percent of them sold, for an increase in sales of about 780 trees. Also, we asked growers to choose one of five categories ranging from very weak (=1) to very strong (=5) to describe strength of sales for each year. On average, growers rated sales as

Table 2.
Percentages of Households That Were Influenced by the Promotional program, by Customer Status, New Orleans Television Service Area, 1989

	Advertisement		Coupon	
	New	Repeat	New	Repeat
	percent			
Have you decided on tree type?	n = 32		n = 39	
Yes	19	53	33	49
No	22	6	18	0
Component affected tree use?	n = 10		n = 24	
Yes	20	0	0	0
No	50	30	54	46
Component affected tree type?	n = 10		n = 24	
Yes	30	0	12	4
No	40	30	42	42
Component affected tree source?	n = 11		n = 24	
Yes	18	0	17	0
No	55	27	36	47

Source: Customer survey of six (6) Louisiana choose-and-cut tree farms.

slightly stronger in 1989 than in 1988, assigning rankings of 3.1 and 2.9 to the respective years.

Coupon Redemption Rates and Other Tree Promotion Programs

Twenty thousand coupons were printed, though no information was available about the number actually distributed. A total of 236 coupons were redeemed by the 10 growers in the post-season survey. If we used a similar percentage to project redemption rates for non-responding farms, the overall rate would have been about 2.4 percent.

This coupon promotion was a minuscule portion of the 273.4 billion coupons issued in 1989 (Food Marketing Institute). Redemption rates for coupons of all descriptions and product groups were less than 3 percent. Comparison redemption rates were free-standing insert coupons, 2.9 percent; run-of-newspaper coupons, 1 percent; and direct mail delivered coupons, 4.5 percent.

Demographic Characteristics

We observed differences in demographic characteristics by whether the household was a new or a repeat customer and by whether it was reached by the ad or the coupon. As expected, the number of households that saw the ad or received a coupon was much lower than the number that did not. We did not apply statistical tests to the data presented in these tables.

1. Kind of Household. As expected because of the importance of Christmas to children, kind of household was dominated (about 77 percent) by those including at least one child (Table 3).

Table 3.
Kind of Household by Whether the Customer Saw the Ad or Received a Coupon, by New or Repeat Customer, Louisiana, 1989.

Item	Saw the TV Ad		Received a Coupon	
	Yes	No	Yes	No
	Percent			
Kind of Household*	New Customer			
1	0	2.9	0	3
2	2.9	20.6	22	21
3	7.7	4.9	13	3
4	69.2	71.6	65	74
	Repeat Customer			
1	0	5.0	0	5
2	16.7	12.6	10	14
3	5.6	0.8	0	2
4	77.8	81.5	90	79

*1 = single adult; 2 = two adults; 3 = one parent with children; 4 = two parents with children.

(a) The advertisement. Compared with repeat customers, there was a broader distribution across categories among new customers. Higher percentages occurred in the households without children and in the single parent categories that saw the ad compared with percentages that did not. These categories had a higher proportion of new to repeat customers.

(b) The coupon. Again, household types were more broadly distributed among the new customers than among repeats. This was particularly true with a higher proportion of new customers receiving a coupon in the two adult and single parent households.

2. Occupation of the Household Head. Among occupations,¹ the professional/managerial group was largest with 32 percent of all respondents. From 252 respondents, 12 percent saw the ad while 17.5 percent received a coupon.

(a) The advertisement. The percentages in each figure refer to a proportion of the new or repeat customers. As an example, 23 percent and 32 percent of the new customers who saw and did not see the ad, respectively, reported professional occupations (Figure 1). Repeat customers tended to be more evenly distributed across the occupational groups. The percentage of new customers who saw the ad was higher than the repeat customer percentage in the service, technicians, 'other', and mid/lower managers categories.

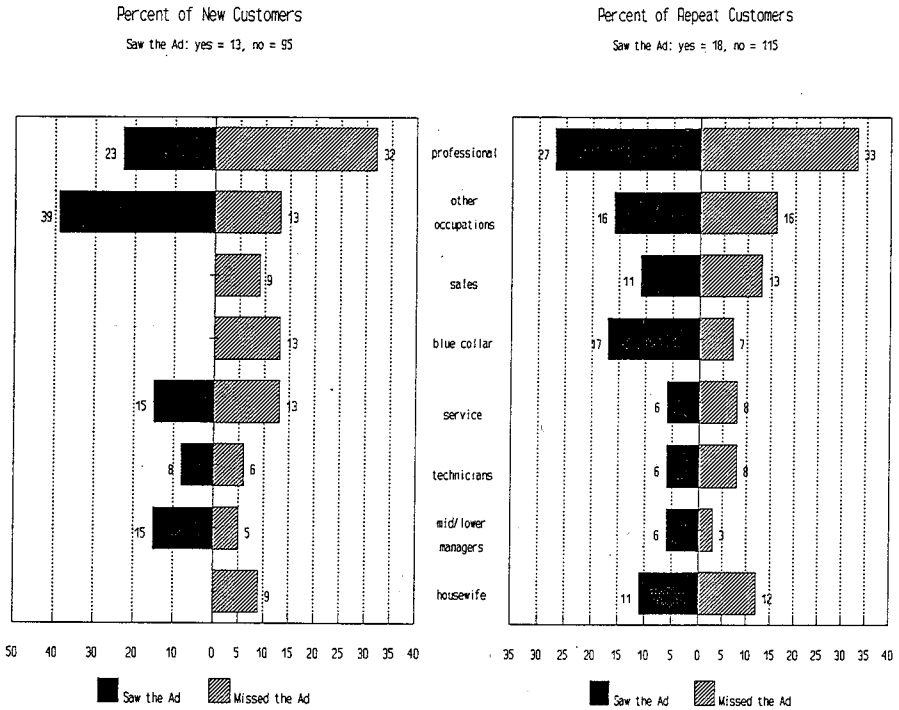
(b) The coupon. Among both new and repeat customers, the distribution among occupational groups was more consistent among those who did not receive a coupon than among those who did (Figure 2). The mid/lower level managers group, with less than 5 percent, was lowest.

3. Income. Because some respondents declined to provide household income, sample size for this variable was lower and additional sampling bias may be introduced. The specific income ranges and percentages of respondents were: below \$15,000 (5.1); \$15,000 to \$29,999 (26.6); \$30,000 to \$44,999 (27.1); \$45,000 to \$59,999 (19.2); \$60,000 to \$74,999 (8.4); and above \$75,000 (13.6). A majority, 55 percent, of responding customers had incomes between \$15,000 and \$45,000.

(a) The advertisement. Half of new customers who saw the ad had incomes between \$15,000 and \$30,000 (Figure 3). Of repeat customers who saw the ad 72 percent reported income levels between \$30,000 and \$60,000. On the other hand, incomes of both new and repeat customers who did not see the ad were more frequently in the two ranges from \$15,000 to \$44,999. A relatively high proportion of repeat customers (21 percent) had income in the top range.

(b) The coupon. Among customers who did not receive a coupon, the percentages in the income ranges were very similar to advertisement results (Figure 4). However, an interesting pattern appeared among the customers who received a coupon. The percentage of new customers who received a coupon

Figure 1:
 Percentage of Households With Primary Occupation in the Indicated Category by
 Whether the Ad Was Seen

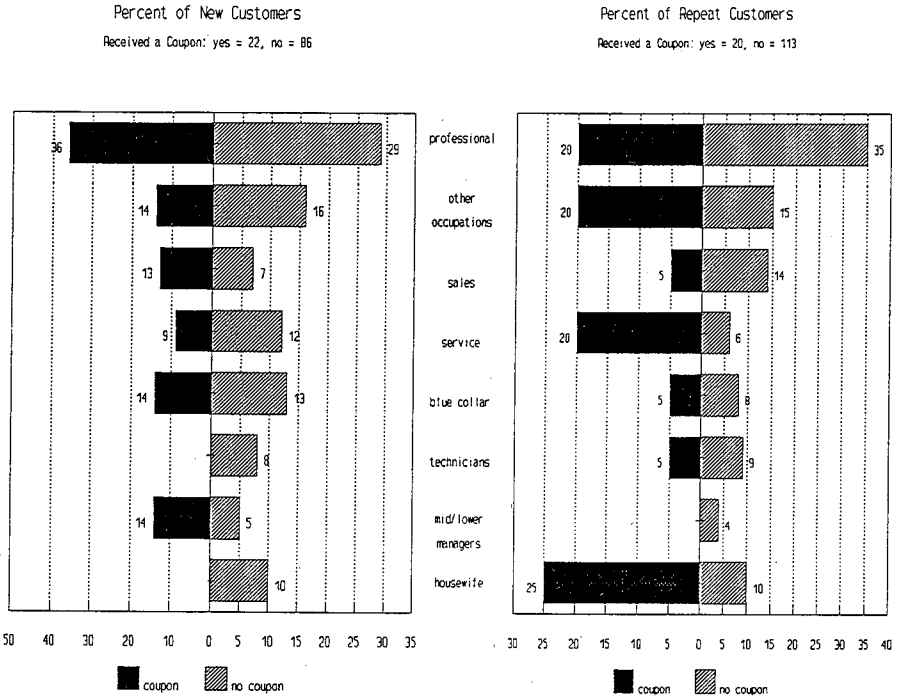


declined as income increased, while the percentage of repeat customers was positively related to increases in income.

4. *Miles Traveled to the Farm.* (a) The advertisement. New customers who saw the ad traveled farther to buy a tree, an average of about 40 miles (one way) compared with slightly less than 25 for repeat customers (Figure 5). Customers who did not see the ad reported an average trip of about 30 miles.

(b) The coupon. Respondents said that the average distance traveled from home to the farm (one way) was between 23 and 24 miles if the customer had a coupon/map. However, it was 32.9 and 30.7 for new and repeat customers, respectively, if they had no coupon.

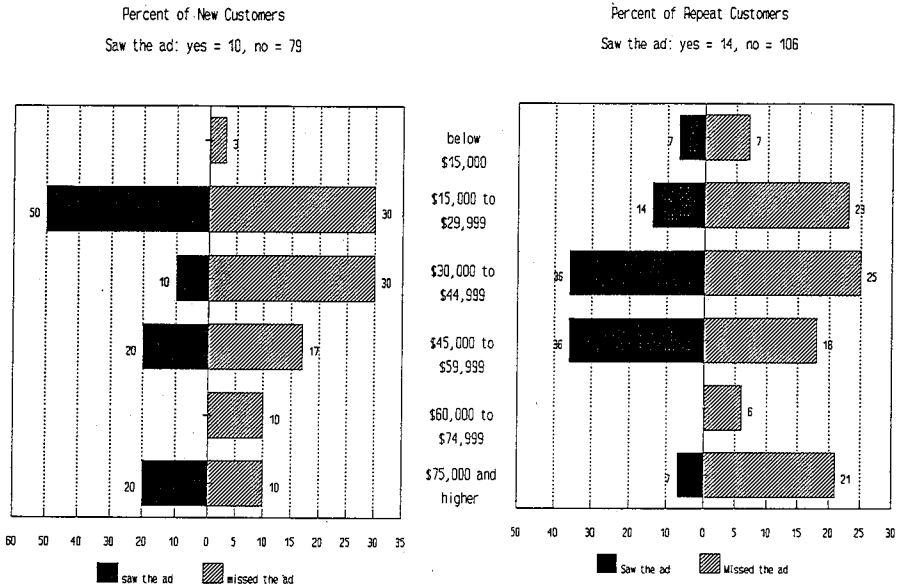
Figure 2:
Percentage of Households with Primary Occupation in the Indicated Category by Whether a Coupon was Received



Conclusions

If we evaluated this promotion only on the basis of the number of customers influenced, the low numbers reported in Table 2 suggest the program did not meet its goal. In specific areas, however, the program did seem effective. The general customer base description from previous research was similar to the characteristics of repeat customers from this survey. However, households who saw the advertisement or who received a flyer were more diverse. This was clear when we evaluated kind of household, where we noted penetration to smaller households, and in the more diverse occupational and income categories. We can interpret the increased diversity among new customers as a goal achievement for an industry segment that has catered to the traditional family, parents-with-children market. The distance traveled by new and repeat customers with coupons (fewer miles) showed that the map helped in farm location. Also,

Figure 3:
Percentage of Households with Income in the Specified Range by Whether the Ad Was Seen

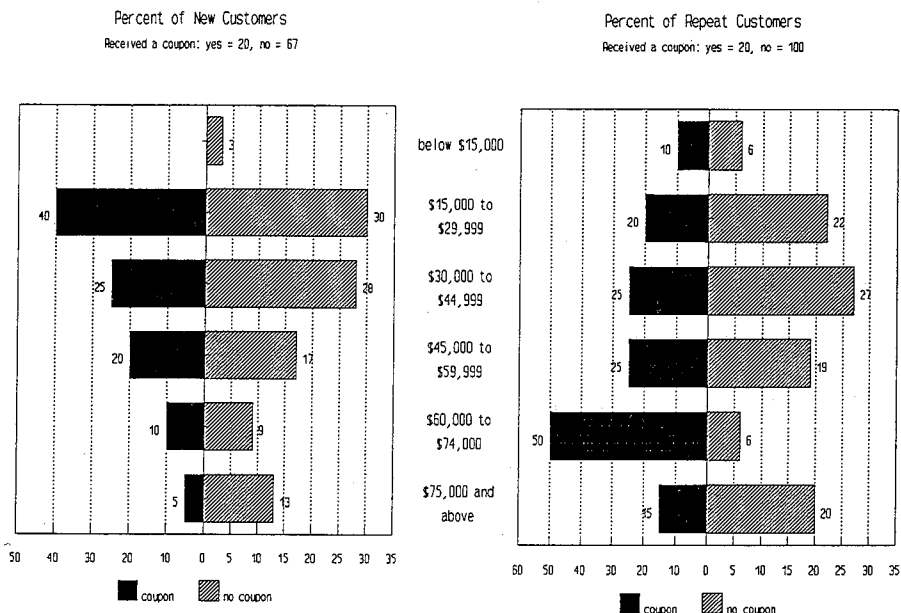


distance traveled by new customers who saw the ad was highest among the miles traveled comparisons, showing that the customer was stimulated to search for one of the program farms. Thus, the coupon may have encouraged shopping closer to home, while the ad might have enticed customers to drive further in search of a tree.

The coupon reached more new customers. While 11 percent and 13 percent of new and repeat customers, respectively, saw the ad, a higher proportion of new customers received a coupon compared with the same customer group that saw the ad. However, more customers said they were influenced by the television ad than by the coupon.

Finally, the information from this survey contained far more respondents who did not see the advertisement and far more who did not receive a coupon than respondents exposed to either. Thus, despite the cross-classification only on the basis of new or repeat customer, we could provide statistical analysis only for very limited portion of the information. Also, information on comparable

Figure 4:
Percentage of Households with Income in the Specified Range, by Whether a Coupon was Received



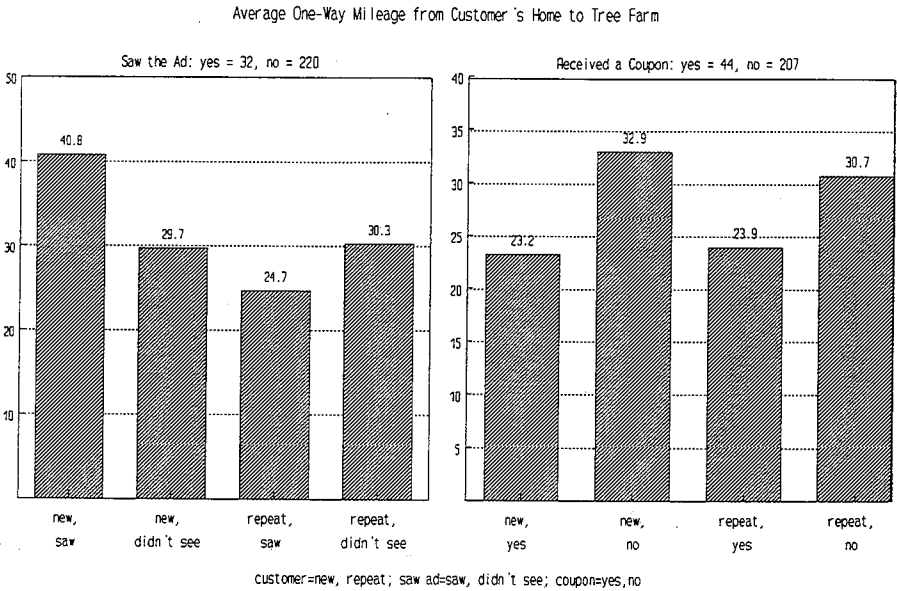
programs was not available to provide a bench-mark to evaluate changes in customer behavior.

Notes

This manuscript has been approved by the Director of the Louisiana Agricultural Experiment Station as Manuscript Number 92-05-6005.

- Occupations and examples are: professional and managerial (executives); mid- and lower level managers (of retail stores); sales (financial services); blue collar (machinist); service (waitress); technician (computer repair); housewife; other (independent business or retired).

Figure 5:
Miles Traveled to the Farm by Specified Groups, by Whether the Ad was Seen and
by Whether a Coupon was Received



References

- Chafin, D.G. 1988. "Consumer Practices, Attitudes About Christmas Tree Purchases." *Christmas Trees*. 16(1):30-32.
- Food Marketing Institute. 1990. Fairlawn, N.J. March 17, 1990, p2.
- Gwinner, M. 1987. "How Would You Spend Half A Million." *Christmas Trees*. 15(4):24-27.
- Hildebrandt, R. 1991. "Marketing Christmas Trees." *J. Forestry*. 89(7):33-37.
- Hildebrandt, R., W.L. Loucks and D.B. Erickson. 1989. *Marketing Christmas Trees in Kansas: Consumers' Purchasing Habits*. Rep. Program 579, KSU Contribution 90-121-S. Ag. Exp. Stn., Manhattan: Kansas State Univ.
- Hu, S.C. and P.Y. Burns. 1981. *Christmas Tree Marketing Studies in the Baton Rouge Area*. Forestry Note 132. Baton Rouge, LA.: LAES, La. State Univ.
- Ishler, A.S. and R.O. Herrmann. 1988. "Marketing Pennsylvania-Grown Christmas Trees." *Christmas Trees*. 16(3):22-30.
- Mendenhall, W., D. Wackerly and R. Scheaffer. 1990. *Mathematical Statistics with Applications*. 4th ed. Boston: PWS-Kent.