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United States Department of Agriculture

Animal and Plant Health Inspection Service

Veterinary Services

and

Farm Service Agency

and

Farm Production and Conservation Business Center

July 2023



# **Veterinary Services Indemnity Table for 2023**



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# **Acronyms**

APHIS	Animal and Plant Health Inspection Service
AMS	Agricultural Marketing Service
CEAH	Center for Epidemiology and Animal Health
CWT	Hundredweight
ERS	Economic Research Service
FPAC-BC	Farm Production and Conservation Business Center
FSA	Farm Service Agency
FMV	Fair Market Value
LIP	Livestock Indemnity Program
LMIC	Livestock Marketing Information Center
NASS	National Agricultural Statistics Service
USDA	United States Department of Agriculture
VS	Veterinary Services

# **Definitions**

Indemnity	Monetary payment(s) made to a livestock owner for livestock deaths in excess of normal mortality caused by adverse weather or by attacks by animals reintroduced into the wild by the Federal Government; and animals and animal products taken/destroyed to control/eradicate a disease.
Valuation Method	The method used to estimate the monetary value of an asset.  Methods include establishment of indemnity tables, appraisal evaluation, and Farm Service Agency (FSA) historical evaluation.

# **Executive Summary**

This document contains indemnity values for animal agricultural commodities intended for use across U.S. Department of Agriculture (USDA) agencies or business units that deal with indemnity programs. These entities include the USDA Animal and Plant Health Inspection Service (APHIS) Veterinary Services (VS), USDA Farm Service Agency (FSA), and the USDA Farm Production and Conservation Business Center (FPAC–BC).

The values calculated from government data sources represent harmonized methods at the USDA level. Use of these values by APHIS–VS, FSA, and FPAC–BC will vary according to program differences across these agencies and business units. In addition, values based on five-year Census surveys, limited industry surveys, and publicly available, nationally representative online sources are included for USDA–APHIS–VS programs.

# Introduction

#### 1. Background and Goals

In 2019, the Animal and Plant Health Inspection Service's (APHIS) Veterinary Services (VS) began work on a new approach to indemnity value determination for animals. APHIS provides indemnity as incentive for producers to report disease and is authorized by Title 9, Code of Federal Regulations (9 CFR).

This effort was initiated to meet the following goals:

- Harmonize valuation approaches across U.S. Department of Agriculture (USDA) agencies.
- Address stakeholder requests for a more simplified and unified approach.
- Develop an approach that uses currently available vetted data.
- Simplify and document the methods used to calculate values.

To achieve these goals, economists in the USDA developed harmonized methods to determine values for animal indemnity. The result of this effort was a 2020 table of indemnity values for commercial animal agricultural commodities intended for use across USDA agencies or business units that deal with indemnity programs, including the APHIS–VS, USDA Farm Service Agency (FSA), and the USDA Farm Production and Conservation Business Center (FPAC–BC). Updated versions of this table with explicit methods were produced by VS annually through 2022 under the title "USDA Commercial Indemnity Table." The data sources are primarily Agricultural Marketing Service (AMS), Economic Research Service (ERS), and National Agricultural Statistics Service (NASS).

The USDA Commercial Indemnity Table did not include specialty or niche production classes of animals (e.g., purebred animals raised for seedstock, exotic breeds, organic animals, or special exhibition animals). Because VS indemnifies a broader range of animals than FSA, there is a need for many additional categories. Therefore, in 2022, VS developed a supplemental table to provide indemnity values for specialty production classes called the "VS Specialty Indemnity Table." The data sources expanded to include five-year Census surveys, limited industry surveys, and publicly available, nationally representative online sources.

Now, in 2023, VS is publishing one table with the values specifically for VS programs called the "VS Indemnity Table." This table includes many of the same categories as FSA and FPAC–BC. However, some categories differ in the level of aggregation, although the base prices are consistent. The VS categories and estimation methods for the shared commodities are described in the section on values from government sources (originally found in the USDA Commercial Indemnity Table). The remaining sections describe the methods for values from additional data sources (originally found in the VS Specialty Indemnity Table).

# 2. Overview of Updates

In addition to the transition to one "VS Indemnity Table" described above, notable changes have occurred since the last publication. Additions or deletions to the production classes contained within this document, along with any substantive changes in calculation methods, are noted in this section.

- The Weekly National Turkey Report began publishing the values for turkey hens, turkey toms, geese, and ducks in September 2022 (<a href="https://www.ams.usda.gov/mnreports/ams\_3647.pdf">https://www.ams.usda.gov/mnreports/ams\_3647.pdf</a>).
- The value for swine, sows, boars, barrows, gilts (50–149 lbs.) is calculated using an average of (1) the nursery pigs price per pound and (2) the swine, sows, boars, barrows, gilts (150–299 lbs.) price per pound rather than the average of the values for those categories. This change was to harmonize methods across USDA agencies.
- Darlington Livestock Auction, Humeston Livestock Auction, Russellville Stockyards, and St. Joseph Stockyards Market did not observe goat sales in 2022.

- Ring-necked pheasant (*Phasianus colchicus*), Hun (*Perdix perdix*)/redleg partridge (*Alectoris rufa*), chukar partridge (*Alectoris chukar*), and quail (*Coturnix coturnix*) values and age categories were provided based on a survey conducted by the North American Gamebird Association.
- Bird types that are raised in the United States exclusively for pet, exhibition, or ornamental purposes were excluded from the list because APHIS does not consider them poultry.
- There are no premiums for organic dairy cattle or "other" cattle categories, but there is a premium for beef cattle in this update.
- Ostrich was added by FSA in 2023.
- Standard and exotic fowl categories are based on age instead of weight to aid in disease response. Male and female values were differentiated in this update. The standard and exotic fowl values are for producers with less than 500 birds.
- June 2023: added molted hen (86-115 weeks), spent one-cycle hen (86+ weeks), and spent molted hen (116+ weeks) based on LOHMANN-LSL-Lite-Cage-1.pdf (lohmann-breeders.com).

# 3. Indemnity Values

# **Table 1. VS Indemnity Table for 2023**

Class	\$ Value per head 2023
	(100% market value)
Beef	
Non-adult beef cattle, <12 months of age	
Non-adult (<250 lbs.)	266.26
Non-adult (<400 lbs., changed to 250–399 lbs. for 2020)	720.63
Non-adult (400–799 lbs.) steers	1,037.18
Non-adult (400–799 lbs.) heifers	912.72
Non-age specific (intended for larger feeder animals rather than breeding animals)	
Feeder steers or heifers (800+ lbs.)	1,659.48
Adult beef cattle, 12+ months of age	
Adult cull cow (non-bred)	1,010.50
Adult cow bred	1,550.97
Adult bull	2,016.26
Adult open heifer or cow (non-cull)	1,161.64
Adult bred heifer	1,298.34
Dairy	
Non-adult dairy cattle, <12 months of age	
Non-adult (<250 lbs.)	70.84
Non-adult (<400 lbs., changed to 250–399 lbs. for 2020)	399.38
Non-adult (400–799 lbs.) steers	798.75
Non-adult (400–799 lbs.) heifers	798.75
Non-age specific (intended for larger feeder animals rather than breeding animals)	
Steers or heifers (800+ lbs.)	1,304.63
Adult dairy cattle, 12+ months of age	
Adult heifer or cow	1,597.50
Adult bull	1,672.03
Buffalo/bison	
Non-adult buffalo/bison, <12 months of age	
Non-adult (<250 lbs.)	441.06
Non-adult (250–399 lbs.)	784.53
Non-adult (400–799 lbs.)	1,599.98
Non-age specific (intended for larger feeder animals rather than breeding animals)	,
Steers or heifers (800+ lbs.)	2,147.89

Adult heifer or cow	1,946.91
Adult bull	2,348.86
Beefalo	
Non-adult beefalo, <12 months of age	
Non-adult (<250 lbs.)	331.81
Non-adult (250–399 lbs.)	744.59
Non-adult (400–799 lbs.)	1,222.30
Non-age specific (intended for larger feeder animals rather than breeding animals)	
Steers or heifers (800+ lbs.)	1,842.63
Adult beefalo, 12+ months of age	
Adult heifer or cow	1,699.45
Adult bull	2,140.99
Swine	
Isoweans (<15 lbs.)	50.34
Nursery (15–49 lbs.)	79.14
Swine, sows, boars, barrows, gilts (50–149 lbs.)	135.53
Swine, sows, boars, barrows, gilts (150–299 lbs.)	190.34
Swine, sows, boars, barrows, gilts (300–449 lbs.)	289.17
Swine, sows/boars (450+ lbs.)	355.86
Sheep	
Baby lambs (<50 lbs.)	122.81
Lambs (51–99 lbs.), includes replacement ewe lambs retained for breeding	296.63
Slaughter lambs (100+ lbs.)	244.44
Yearling ewes maintained for breeding (12–24 months) (not late gestation)	311.14
Yearling ewes (12–24 months), late gestation (last 4 weeks)	403.25
Young ewes maintained for breeding (25–48 months) (not late gestation)	248.52
Young ewes (25–48 months), late gestation (last 4 weeks)	340.63
Middle-aged ewes maintained for breeding (49–72 months) (not late gestation)	219.83
Middle-aged ewes (49–72 months), late gestation (last 4 weeks)	311.94
Aged ewes (73+ months) (not late gestation), includes mature sheep in slaughter channels and wethers too old to slaughter as lambs (12+ months based on eruption of first incisors)	198.67
Aged ewes (6+ years), late gestation (last 4 weeks)	290.78
Sire rams of reproductive age	739.70
Goats	
Bucks maintained for breeding (12+ months)	287.50
Seedstock nannies/does maintained for breeding (12+ months) (not late gestation)	183.57

Seedstock nannies/does maintained for breeding (12+ months), late gestation (last 4 weeks)	278.60
Other adult goats (nannies/does/bucks) not maintained for breeding (12+ months)	138.96
Other adult nannies/does (12+ months), late gestation (last 4 weeks)	234.00
Kids (<40 lbs.)	126.71
Kids (40–60 lbs.)	159.79
Kids (60–80 lbs.)	203.51
Kids (81+ lbs.)	273.96
Chickens, layers	
Table eggs (\$/dozen)	2.33
Chick (0–1 week)	0.42
Pullet (2–17 weeks)	4.65
Layer 1 <sup>st</sup> lay (18–45 weeks)	18.31
Layer 2 <sup>nd</sup> lay (46–65 weeks)	9.16
Pre-spent hen (66–85 weeks)	4.58
Molted hen (86-115 weeks)	4.58
Spent one-cycle hen (86+ weeks)	0.01
Spent molted hen (116+ weeks)	0.01
Chickens, broilers	
Chickens, deboning/roasters, super roasters/parts (49+ days of age)	7.78
Chickens, roasters (42–48 days of age)	5.92
Chickens, broilers (32–41 days of age)	4.65
Chickens, broilers (<32 days of age) and small Cornish hens	3.13
Chickens, chicks	0.42
Turkeys	
Turkeys, toms (84+ days of age)	36.39
Turkeys, toms (49–83 days of age)	29.77
Turkeys, hens (77+ days of age)	23.13
Turkeys, hens (49–77 days of age)	16.52
Turkeys, fryers and roasters (8–49 days of age)	11.57
Turkeys, poults (0–7 days of age)	3.11
Other	
Ducks (12+ weeks of age)	5.72
Ducklings (<12 weeks of age)	0.91
Goose (12+ weeks of age)	58.11
Gosling (<12 weeks of age)	12.20

Deer, caribou, reindeer <sup>1</sup>	657.18
Elk <sup>2</sup>	912.23
Equine	1,114.10
Alpaca	486.66
Llama	393.39
Emu	262.14
Ostrich	1,191.04
Beef – organic	
Adult beef cattle, 12+ months of age	
Adult cull cow (non-bred) – organic	1173.20
Adult cow bred – organic	1800.69
Adult open heifer or cow (non-cull) – organic	1348.67
Adult bred heifer – organic	1507.39
Swine – organic	
Isoweans (<15 lbs.) – organic	81.89
Nursery (15–49 lbs.) – organic	128.74
Swine, sows, boars, barrows, gilts (50–149 lbs.) – organic	220.47
Swine, sows, boars, barrows, gilts (150–299 lbs.) – organic	309.63
Swine, sows, boars, barrows, gilts (300–449 lbs.) – organic	470.40
Swine, sows/boars (450+ lbs.) – organic	578.88
Chickens, broilers – organic	
Chickens, deboning/roasters, super roasters/parts (49+ days of age) – organic	11.47
Chickens, roasters (42–48 days of age) – organic	8.73
Chickens, broilers (32–41 days of age) – organic	6.86
Chickens, broilers (8–31 days of age) and small Cornish hens – organic	4.61
Chickens, chicks (0–7 days of age) – organic	0.62
Turkeys – organic	
Turkeys, toms (84+ days of age) – organic	58.11
Turkeys, toms (49–83 days of age) – organic	47.55
Turkeys, hens (78+ days of age) – organic	24.88
Turkeys, hens (49–77 days of age) – organic	17.77
Turkeys, fryers and roasters (8–48 days of age) – organic	16.59
Turkeys, poults (0–7 days of age) – organic	4.45
Turkeys – breeder	
Turkeys, male (392+ days of age, spent) – breeder	36.39

 $<sup>^{\</sup>rm 1}\,{\rm VS}$  uses this value for a dult animals produced for meat. It does not include non-adult animals.

 $<sup>^{2}</sup>$  VS uses this value for adult animals produced for meat. It does not include non-adult animals.

Turkeys, male (238–391 days of age) – breeder	119.49
Turkeys, male (196–237 days of age) – breeder	202.59
Turkeys, male (49–195 days of age) – breeder	133.51
Turkeys, male (8–48 days of age) – breeder	64.43
Turkeys, male (0–7 days of age) – breeder	17.29
Turkeys, female (392+ days of age, spent) – breeder	23.13
Turkeys, female (238–391 days of age) – breeder	61.38
Turkeys, female (196–237 days of age) – breeder	99.64
Turkeys, female (49–195 days of age) – breeder	74.74
Turkeys, female (8–48 days of age) – breeder	49.84
Turkeys, female (0–7 days of age) – breeder	13.38
Upland game fowl	
Ring-necked pheasant, hatching egg	0.78
Ring-necked pheasant, chick (0–20 days)	1.65
Ring-necked pheasant, 3 weeks (21–41 days)	4.27
Ring-necked pheasant, 6 weeks (42–62 days)	6.88
Ring-necked pheasant, 9 weeks (63–83 days)	9.50
Ring-necked pheasant, 12 weeks (84–104 days)	12.12
Ring-necked pheasant, 15 weeks (105–125 days)	14.73
Ring-necked pheasant, 18 weeks (126–146 days)	17.35
Ring-necked pheasant, breeder	52.05
Hun/redleg partridge, hatching egg	2.26
Hun/redleg partridge, chick (0–20 days)	4.16
Hun/redleg partridge, 3 weeks (21–41 days)	6.51
Hun/redleg partridge, 6 weeks (42–62 days)	8.85
Hun/redleg partridge, 9 weeks (63–83 days)	11.20
Hun/redleg partridge, 12 weeks (84–104 days)	13.54
Hun/redleg partridge, 15 weeks (105–125 days)	15.89
Hun/redleg partridge, breeder	47.67
Chukar partridge, hatching egg	1.28
Chukar partridge, chick (0–20 days)	1.78
Chukar partridge, 3 weeks (21–41 days)	3.75
Chukar partridge, 6 weeks (42–62 days)	5.71
Chukar partridge, 9 weeks (63–83 days)	7.68
Chukar partridge, 12 weeks (84–104 days)	9.64
Chukar partridge, 15 weeks (105–125 days)	11.61
Chukar partridge, breeder	34.83
Quail, hatching egg	0.51
Quail, chick (0–20 days)	1.15
Quail, 3 weeks (21–41 days)	2.73
Quail, 6 weeks (42–62 days)	4.30
Quail, 9 weeks (63–83 days)	5.88

985.77 657.18 2028.16 811.27 253.52
657.18 2028.16 811.27 253.52
657.18 2028.16 811.27 253.52
657.18 2028.16 811.27 253.52
2028.16 811.27 253.52
811.27 253.52
253.52
135.21
1368.34
912.23
2396.43
958.57
299.55
159.76
1453.33
692.75
7.05
11.89
32.01
41.43
11.89
29.94
37.29
2.82
4.76
14.18
23.60
4.76
12.11
19.46
19.46
25.10
59.25
70.81

Ducks, show, juvenile female (71–315 days)	57.60
Ducks, show, adult female (316+ days)	67.50
Ducks, hatching eggs	5.95
Ducks, young male (0–70 days)	10.04
Ducks, juvenile male (71–315 days)	21.60
Ducks, adult male (316+ days)	33.16
Ducks, young female (0–70 days)	10.04
Ducks, juvenile female (71–315 days)	19.95
Ducks, adult female (316+ days)	29.86
Geese, show, hatching eggs	35.61
Geese, show, young male (0–56 days)	60.08
Geese, show, juvenile male (57–1036 days)	150.56
Geese, show, adult male (1037+ days)	186.97
Geese, show, young female (0–56 days)	60.08
Geese, show, juvenile female (57–1036 days)	144.17
Geese, show, adult female (1037+ days)	174.2
Geese, hatching eggs	14.24
Geese, young male (0–56 days)	24.03
Geese, juvenile male (57–1036 days)	60.44
Geese, adult male (1037+ days)	96.85
Geese, young female (0–56 days)	24.03
Geese, juvenile female (57–1036 days)	54.06
Geese, adult female (1037+ days)	84.08
Guineas, hatching eggs	4.62
Guineas, young male (0–35 days)	7.79
Guineas, juvenile male (36–364 days)	15.56
Guineas, adult male (365+ days)	23.32
Guineas, young female (0–35 days)	7.79
Guineas, juvenile female (36–364 days)	14.26
Guineas, adult female (365+ days)	20.73
Peafowl, hatching eggs	28.39
Peafowl, young male (0–133 days)	47.9
Peafowl, juvenile male (134–791 days)	75.25
Peafowl, adult male (792+ days)	102.59
Peafowl, young female (0–133 days)	47.90
Peafowl, juvenile female (134–791 days)	65.78
Peafowl, adult female (792+ days)	83.66
Squab, hatching eggs	1.52
Squab, young male (0–35 days)	2.51
Squab, juvenile male (36–252 days)	10.6
Squab, adult male (253+ days)	16.17
Squab, young female (0–35 days)	2.62
Squab, juvenile female (36–252 days)	10.71

Squab, adult female (253+ days)	16.17
Turkeys, show, hatching eggs	20.91
Turkeys, show, young male (0–56 days)	35.29
Turkeys, show, juvenile male (57–315 days)	111.94
Turkeys, show, adult male (316+ days)	156.83
Turkeys, show, young female (0–56 days)	35.29
Turkeys, show, juvenile female (57–315 days)	91.85
Turkeys, show, adult female (316+ days)	116.66
Turkeys, hatching eggs	8.37
Turkeys, young male (0–56 days)	14.11
Turkeys, juvenile male (57–315 days)	59.01
Turkeys, adult male (316+ days)	103.90
Turkeys, young female (0–56 days)	14.11
Turkeys, juvenile female (57–315 days)	38.92
Turkeys, adult female (316+ days)	63.73

# Appendix. Calculation Methods and Data Sources for VS Indemnity Valuations

Note. The term hundredweight (cwt) is used in this section.

#### Values Calculated from Government Data Sources

#### 1. Beef Section

#### Non-adult beef cattle, <12 months of age

Beef non-adult (<250 lbs.)

This estimated value retains the proportional difference between beef non-adult (<250 lbs.) and beef non-adult (250–399 lbs.) estimated by FSA in 2020.

Beef non-adult (250-399 lbs.)

Estimated value is 375 lbs. worth of the NASS cattle (calves). The data used for these calculations are NASS Quick Stats values for CATTLE, CALVES - PRICE RECEIVED, MEASURED IN \$ / CWT available at https://quickstats.nass.usda.gov.

The parameters for downloading the necessary report are:

Program: Survey

Sector: Animals & Products

Group: Livestock Commodity: Cattle

Category: Prices Received

Data Item(s): "CATTLE, CALVES - PRICE RECEIVED, MEASURED IN \$ / CWT"

Domain: Total

Geographic Level: National

State: US Total

Year: [enter year as needed]

Period Type: Monthly

Period: January through December

#### Beef non-adult (400-799 lbs.) steers

Estimated value is 625 lbs. worth of the average annual cwt value obtained from the Oklahoma National Stockyards Feeder Cattle sales report: <a href="https://www.ams.usda.gov/mnreports/ams">https://www.ams.usda.gov/mnreports/ams</a> 1280.pdf.

#### Beef non-adult (400-799 lbs.) heifers

Estimated value is 550 lbs. worth of the average annual cwt value obtained from the Oklahoma National Stockyards Feeder Cattle sales report: https://www.ams.usda.gov/mnreports/ams 1280.pdf.

#### Non-age specific (intended for larger feeder animals rather than breeding animals)

Beef feeder steers or heifers (800+ lbs.)

Estimated value is 1,000 lbs. worth of the average annual cwt value obtained from the Oklahoma National Stockyards Feeder Cattle sales report: https://www.ams.usda.gov/mnreports/ams\_1280.pdf.

#### Adult beef cattle, 12+ months of age

Adult cull cow (non-bred)

Estimated value is 1,200 lbs. worth of the NASS cattle. The data used for these calculations are NASS Quick Stats values for CATTLE, COWS - PRICE RECEIVED, MEASURED IN \$ / CWT available at <a href="https://quickstats.nass.usda.gov">https://quickstats.nass.usda.gov</a>.

The parameters for downloading the necessary report are:

Program: Survey

Sector: Animals & Products

Group: Livestock Commodity: Cattle

Category: Prices Received

Data Item(s): "CATTLE, COWS - PRICE RECEIVED, MEASURED IN \$ / CWT"

Domain: Total

Geographic Level: National

State: US Total

Year: [enter year as needed]

Period Type: Monthly

Period: January through December

#### Adult cow bred

Estimated value is based on the adult cull cow value plus 75 percent of the beef non-adult (250–400 lbs.) value.

#### Adult bull

Estimated value is based on the adult cow bred value plus 30 percent.

#### Adult open heifers (or cows)

Estimated value is 700 lbs. worth of the average annual cwt value obtained from the Oklahoma National Stockyards Feeder Cattle sales report: <a href="https://www.ams.usda.gov/mnreports/ams">https://www.ams.usda.gov/mnreports/ams</a> 1280.pdf.

#### **Bred** heifers

Estimated value is 900 lbs. worth of the NASS plus 75 percent of the beef non-adult (250-400 lbs.) value.

The data used for these calculations are NASS Quick Stats values for CATTLE, COWS - PRICE RECEIVED, MEASURED IN \$ / HUNDREDWEIGHT (CWT) available at <a href="https://quickstats.nass.usda.gov">https://quickstats.nass.usda.gov</a>.

The parameters for downloading the necessary report are:

Program: Survey

Sector: Animals & Products

Group: Livestock Commodity: Cattle

Category: Prices Received

Data Item(s): "CATTLE, COWS - PRICE RECEIVED, MEASURED IN \$ / CWT"

Domain: Total

Geographic Level: National

State: US Total

Year: [enter year as needed]

Period Type: Monthly

Period: January through December

#### 2. Dairy Section

#### Non-adult dairy cattle, <12 months of age

Dairy non-adult (<250 lbs.)

This estimated value retains the proportional difference between dairy non-adult (<250 lbs.) and dairy non-adult (250–399 lbs.) estimated by FSA in 2020.

Dairy non-adult (250-399 lbs.)

Value is based on 25 percent of the adult cow value.

Dairy non-adult (400–799 lbs.) steers and heifers Value is based on 50 percent of the adult cow value.

#### Non-age specific (intended for larger feeder animals rather than breeding animals)

Dairy steers or heifers (800+ lbs.)

Assumes 1,000 lbs. of representative weight. Uses the average of per pound price of adult dairy cows and non-adult dairy cows (400–799 lbs.) as the price. The 2020 formula is 1,000\*(average (adult dairy cow value per head/representative weight), non-adult (400–799 lbs.)/representative weight).

#### Adult dairy cattle, 12+ months of age

Dairy adult cow (or heifer)

The data used for these calculations are quarterly NASS Quick Stats values for CATTLE, COWS, MILK - PRICE RECEIVED, MEASURED IN \$ / CWT available at <a href="https://quickstats.nass.usda.gov">https://quickstats.nass.usda.gov</a>.

The parameters for downloading the necessary report are:

Program: Survey

Sector: Animals & Products

Group: Livestock Commodity: Cattle

Category: Prices Received

Data Item(s): "CATTLE, COWS, MILK - PRICE RECEIVED, MEASURED IN \$ / CWT"

Domain: Total

Geographic Level: National

State: US Total

Year: [enter year as needed]

Period Type: Monthly

Period: January through December

#### Dairy adult bull

The data source for bulls is the AMS report (LM\_CT168) National Weekly Direct Cow and Bull Report - Negotiated Price, available at <a href="https://mpr.datamart.ams.usda.gov/menu.do?path=Products\Cattle\Weekly Cattle\(LM\_CT168)">https://mpr.datamart.ams.usda.gov/menu.do?path=Products\Cattle\Weekly Cattle\(LM\_CT168)</a> National Weekly Direct Cow and Bull Report - Negotiated Price.

Select "Detail" for "Sub Reports Type" and select dates for the report (in "Report Dates" field on the webpage). Leave the rest as default settings and press "Continue." Use the default settings, select "CSV" file format, and press "Generate Report." Select "Download Detail File." Convert the .csv file to a .xlsx file. In the converted file, create a pivot table as follows. "Selling Basis" goes in the "Filters" area. Select the options of DRESSED and DRESSED – DOMESTIC for Selling Basis. "Classification," "Weight Range," and "Sum Values" go into the "Columns" area ("Sum Values" shows up automatically). "Region Name" goes in the "Rows" area. "Head Count," "Average Weight," and "Weighted Avg Price" go into the "Sum Values" area. In the "Sum Values" area, click on each field to bring up a pull-down menu. Pick "Value Field Settings" from the pull-down menu. This brings up options for summarizing each of the fields in the area. For "Head Count," select "Sum." For the other two fields, select "Average."

This pivot table includes carcass prices in \$/cwt for bulls 600+ lbs. along with average carcass weights. The assumed dressing percentage is 60 percent based on an analysis of USDA NASS data (USDA NASS, February 2020). These data were downloaded from <a href="https://quickstats.nass.usda.gov">https://quickstats.nass.usda.gov</a>.

The parameters for downloading the necessary report are:

Program: Survey

Sector: Animals & Products

Group: Livestock
Commodity: Cattle
Category: Slaughtered

Data Item(s): "CATTLE, GE 500 LBS, SLAUGHTER, COMMERCIAL, FI - SLAUGHTERED, MEASURED IN LB / HEAD, DRESSED BASIS" and "CATTLE, GE 500 LBS, SLAUGHTER, COMMERCIAL - SLAUGHTERED, MEASURED IN LB / HEAD,

LIVE BASIS" Domain: Total

Geographic Level: National

State: US Total

Year: [enter year as needed]

Period Type: Monthly

Period: January through December

Multiply the carcass prices by the dressing percentage to get the price of a 1,000+ lbs. live weight bull in \$/cwt.

Divide the average carcass weights of bulls in the 600+ lbs. category by the dressing percentage to get the average live weight of bulls in the 1,000+ lbs. category.

Multiple the live weight price in \$/cwt by the average live weight and divide the result by 100 to get \$/head for bulls in the 1,000+ lbs. category.

## 3. Buffalo/Bison and Beefalo Section

#### **Buffalo/bison**

Estimated values for all buffalo/bison categories are indexed forward from the previous year's values using weighted annual average bison carcass values (weighted by type and number of head). Bison carcass values are obtained from the AMS NW\_LS\_526 reports.

#### Beefalo

Values for all beefalo categories are assumed to be a weighted average of 3/8 of the value of bison and 5/8 of the value of beef cattle for the equivalent cohort category. For the beef 400–799 lbs. category, an average of the steer and heifer value is used.

#### 4. Swine Section

Unless otherwise noted, all values for the swine section are calculated using information from the Livestock Marketing Information Center (LMIC) website (LMIC, January 2021). The specific information is found in the following spreadsheets posted on the LMIC site:

- Weekly National Feeder Pig Prices (FeederPigsNational.xls)
- Daily National Sow Price (PriorDaySowPurchaseNational.xls)
- Weekly Prices & Volumes for Barrows & Gilts and Sows (WeeklyDirectSwine.xls).

To download these spreadsheets, go to the LMIC website at <a href="http://www.lmic.info/">http://www.lmic.info/</a>.

Accessing the necessary information from LMIC requires member access (USDA is a member), including username and password. Once logged in, go to "Members Only" on the toolbar to get a drop-down menu and select "Spreadsheets," then "Hogs" and "Prices." The spreadsheets listed above can be found in the Prices section.

#### Isoweans (<15 lbs.)

The data used for these calculations are found in the FeederPigsNational.xls spreadsheet in the "EW10-12" tab under the column headings of Total Composite (Price per Head) > Formula & Cash > Wtd Avg Price. The values in this column are reported weekly. The calculation is an annual average across the weekly prices. The assumed average weight for isoweans is 11 lbs. (The weight is not used in the calculations.)

#### Nursery pigs (15-49 lbs.)

The data used for these calculations are found in the FeederPigsNational.xls spreadsheet in the "40" tab under the column headings of Total Composite (Price per Head) > Formula & Cash > Wtd Avg Price. The values in this column are reported weekly. The calculation is an annual average across the weekly prices. The assumed average weight for nursery pigs is 40 lbs. (The weight is not used in the calculations.)

#### Swine, sows, boars, barrows, gilts (50–149 lb) <sup>3</sup>

This value is calculated as 100 lbs. times an average of the nursery pigs price per pound above and the swine, sows, boars, barrows, gilts (150–299 lbs.) price per pound described below.

#### Swine, sows, boars, barrows, gilts (150-299 lbs.) 4

The value for this category is based on the HOGS, BARROWS & GILTS - PRICE RECEIVED, MEASURED IN \$ / CWT from NASS Quick Stats available at <a href="https://quickstats.nass.usda.gov">https://quickstats.nass.usda.gov</a>.

The parameters for downloading the necessary report are:

Program: Survey

Sector: Animals & Products

Group: Livestock Commodity: Hogs

Category: Prices Received

Data Item(s): "HOGS, BARROWS & GILTS - PRICE RECEIVED, MEASURED IN \$ / CWT"

Domain: Total

Geographic Level: National

State: US Total

Year: [enter year as needed]

Period Type: Monthly

Period: January through December

The calculation is an annual average across the monthly prices. The prices are presented in \$/cwt. To convert to \$/head, this price is multiplied by an assumed average weight (260 lbs.) and then divided by 100.

#### Swine, sows, boars, barrows, gilts (300–449 lbs.) <sup>5</sup>

The data used for these calculations are also based on the HOGS, BARROWS & GILTS - PRICE RECEIVED, MEASURED IN \$ / CWT from NASS Quick Stats [same as above: swine, sows, boars, barrows, gilts (150–299 lbs.)]. The calculation is an annual average across monthly prices. To convert to \$/head, this price is multiplied by an assumed average weight (395 lbs.) and then divided by 100.

<sup>&</sup>lt;sup>3</sup> The breakpoint between the 50–149 lbs. and the 150–299 lbs. groups is based on prior USDA Farm Service Agency swine categories. Weights of market hogs have been increasing rapidly in recent years. This breakpoint may need to be re-evaluated in the future.

<sup>&</sup>lt;sup>4</sup> This category differs from FSA because it is based on different datasets due to differences in categories. FSA averages values for feeder pigs and swine 150–450 lbs.

<sup>&</sup>lt;sup>5</sup> Used NASS data for these categories rather than the LMIC data used for the previous year due to COVID-19 market disruptions evident in the data source. Using the NASS data as described gave a slightly higher value for the 300–449 lbs. category.

#### Swine, sows, boars, barrows, gilts (450+ lbs.)

The data used for these calculations are NASS Quick Stats values for HOGS, SOWS - PRICE RECEIVED, MEASURED IN \$ / CWT available at https://quickstats.nass.usda.gov.

The parameters for downloading the necessary report are:

Program: Survey

Sector: Animals & Products

Group: Livestock Commodity: Hogs

Category: Prices Received

Data Item(s): "HOGS, SOWS - PRICE RECEIVED, MEASURED IN \$ / CWT"

Domain: Total

Geographic Level: National

State: US Total

Year: [enter year as needed]

Period Type: Monthly

Period: January through December

The calculation is an annual average across monthly prices. To convert to \$/head, this price is multiplied by an assumed average weight (525 lbs.) and then divided by 100.

# 5. Sheep and Goat Section

#### Sheep

The values for the sheep section can be obtained from reports downloaded from the AMS website (USDA AMS, January 2021b) at <a href="https://www.ams.usda.gov/market-news/search-market-news">https://www.ams.usda.gov/market-news/search-market-news</a>.

From this page, search for the National Monthly Replacement Sheep Report GL\_LS336. This report is released monthly. Values for the sheep categories shown in Table 1 can be found in these reports. An annual average is taken of the monthly prices shown in these reports.

The value from this report for ewe lambs under 12 months of age is used as representative of lambs from 51–99 lbs., including replacement ewe lambs retained for breeding.

For ewes in late gestation (last 4 weeks), 75 percent of the baby lamb value is added to the corresponding ewe category.

The ram value is calculated using the reported values for rams under 12 months (the only information available) times 1.3 to account for cost of feeding older rams.

The slaughter lamb price is calculated using weekly values in cents per pound from the AMS St. Joseph report (<a href="https://www.ams.usda.gov/mnreports/lm\_lm352.txt">https://www.ams.usda.gov/mnreports/lm\_lm352.txt</a>) times the representative weight (140 lbs.) divided by 100 to get the dollar value.

#### Goats

Values for bucks and nannies are calculated from the following market report auction prices obtained from USDA AMS, available at https://mymarketnews.ams.usda.gov/.

- Buffalo Livestock Market
- Calhoun
- Cullman Stockyards
- Eastanollee
- Kalona Livestock Auction
- Montgomery County Livestock Auction
- Orangeburg Livestock Auction
- Producers Auction Yards (Missouri)
- Producers Livestock Auction Co San Angelo
- Public Auction Yards
- Saluda Livestock Auction
- SEMO Livestock Sales
- Sioux Falls Regional Livestock
- TS White Sheep and Goat Sale

An annual average is calculated from the monthly reported values. The annual average buck value is multiplied by 1.3 to allow for the cost of feeding bucks to maturity since the bucks sold at market are young animals less than 12 months of age.

Remaining values for the goat section are calculated from San Angelo, TX, auction prices obtained from the LMIC. For the other adult goats category, an annual average is taken across meat goats for slaughter bucks and nannies (converted from \$/cwt to \$/head at a representative live weight of 100 lbs.). For each of the kid categories, an annual average is taken across all grades for the given weight categories of feeder and slaughter kids (converted from \$/cwt to \$/head at representative live weights of 35, 50, 70, and 90 lbs. for each of the four kid goat categories).

For nannies in late gestation (last 4 weeks), 75 percent of the kid goat (<40 lbs.) value is added to the corresponding adult goat category.

# 6. Poultry Section

#### Chickens, broilers

Based on (a) NASS Quick Stats broiler value times (b) representative weight within weight range.

(a) NASS Quick Stats Broiler Value: <a href="https://quickstats.nass.usda.gov/">https://quickstats.nass.usda.gov/</a>. The parameters for downloading the necessary report are:

Program: Survey

Sector: Animals & Products

Group: Poultry

Commodity: Chickens Category: Prices Received

Data Item(s): "CHICKENS. BROILERS-PRICES RECEIVED, MEASURED IN \$/LB"

Domain: Total

Geographic Level: National

State: US Total

Year: [enter year as needed]

Period Type: Monthly

Period: January through December

#### (b) Representative Weight within Weight Range

Category	Pounds
Chickens, deboning/roasters (>7.75 lbs.) [Super roasters/parts]	9.2
Chickens, (6.26–7.75 lbs.) [Roasters]	7
Chickens, (4.26–6.25 lbs.) [Broilers/Pullets]	5.5
Chickens, (<4.25 lbs.) [Broilers/Cornish hens small]	3.7
Chickens, chicks	0.5

Weights were converted to age ranges using the publicly available Aviagen Ross 308 and Ross 308 FF performance objectives for 2019 (Aviagen, 2019).

#### Chickens, layers

Layer 1st lay (18–45 weeks)

NASS Chicken and Eggs Annual Summary (page 63) reported in February 2022 at https://usda.library.cornell.edu/concern/publications/1v53jw96n?locale=en.

Value per head; United States: December 1, 2020–2021 [Excludes commercial broilers]

2023 value = 2022 value per head times (table egg price 2023/table egg price 2022).

Layer 2nd lay (46-65 weeks): half layer 1st lay value.

Pre-spent hen (66–85 <sup>6</sup> weeks): half layer 2nd lay value.

Pullets and chicks are the same values as in the broiler section.

Spent hens are assigned a value of \$0.01.

#### Table eggs (\$/dozen)

Access NASS Quick Stats at <a href="https://quickstats.nass.usda.gov/">https://quickstats.nass.usda.gov/</a>.

<sup>&</sup>lt;sup>6</sup> Spent hen at 86 weeks reference: Karcher, Darrin and Joy Mench, "Overview of commercial poultry production systems and their main welfare challenges" in Advances in Poultry Welfare, Woodhead Publishing Series in Food Science, Technology and Nutrition 2018, pages 3–25.

The parameter values for downloading the necessary report are as follows:

Program: Survey

Sector: Animals and Products

Group: Poultry Commodity: Eggs

Category: Price Received

Data Item: Eggs, Table – Price Received, Measured in \$/dozen

Domain: Total

Geographic Level: National

State: US Total

Year: [enter year as needed]

Period Type: Monthly

Period: [enter month as needed]

The annual value is calculated using the monthly data for the previous calendar year.

#### **Turkeys**

#### Hens and toms

The AMS Weekly National Fresh and Frozen Whole Young Turkeys Report (USDA AMS, January 2021b) is the data source for the turkey commercial indemnity values. The report is available prior to September 2022 at <a href="https://www.ams.usda.gov/market-news/turkey-market-news-reports">https://www.ams.usda.gov/market-news/turkey-market-news-reports</a>. Starting in September 2022, the information is reported at <a href="https://mymarketnews.ams.usda.gov/viewReport/3647">https://mymarketnews.ams.usda.gov/viewReport/3647</a>. The report provides weekly values for fresh hens (8–16 lbs.) and toms (16–24 lbs.) in cents per pound to be used when calculating the annual values for the previous calendar year. The estimated weights for each age range are as follows: hens age 49–77 days (10 lbs.), hens age 78+ days (14 lbs.), toms age 49–83 days (18 lbs.), and toms age 84+ days (22 lbs.). The weights are then multiplied by the average annual value for each classification. An additional category for roasters and fryers (5–9 lbs.) is calculated using the midpoint weight, 7 lbs., times the average price per pound for hens and toms combined.

Weights were converted to age ranges using the publicly available Aviagen performance objectives for Nicholas Select, B.U.T 6, and Premium turkeys (Aviagen, undated).

#### **Poults**

Annual average value based on weekly reports from Graystone Small Animal Auction Sale, available at <a href="https://www.ams.usda.gov/mnreports/ams">https://www.ams.usda.gov/mnreports/ams</a> 2753.pdf.

#### 7. Other Commodity Categories

Methods and data sources adopted from USDA FSA LIP Table for 2021 adjusted to 100 percent of market value (USDA FSA, January 2021).

#### Ducks (12+ weeks of age)

Initial data source: USDA AMS WEEKLY CENTRAL REGION DUCKLING (NW\_PY046). (1) Assuming 4.5 lbs. per duck times the average annual mid-point price per lbs. (2) Take farm price of broilers NASS Quick Stats. (3) AMS report

2758 monthly composite weighted average. (4) Obtain the ratio of (2)/(3) for the reporting year. (5) Take the 4-year rolling average of the ratio (4). (6) Multiply the price obtained in (1) by the ratio obtained in (5).

#### Ducklings (<12 weeks of age)

Assumes 16 percent of the value of mature duck.

#### Goose (12+ weeks of age)

Initial data source: USDA AMS WHOLESALE NEW YORK CITY GOOSE PRICE (AJ\_PY038). (1) Assuming 12 lbs. per goose times the average annual mid-point price per lbs. (2) Take farm price of broilers NASS Quick Stats. (3) AMS report 2758 monthly composite weighted average. (4) Obtain the ratio of (2)/(3) for the reporting year. (5) Take the 4-year rolling average of the ratio (4). (6) Multiply the price obtained in (1) by the ratio obtained in (5).

#### Gosling (<12 weeks of age)

Assumes 21 percent value of mature goose.

#### Deer, caribou, reindeer

Initial public data source: None. Adjusts the FSA LIP payment rate of the previous year by the year-over-year value change in adult beef (cull) cow. (See Beef Section above).

#### Elk

Initial public data source: None. Adjusts the FSA LIP payment rate of the previous year by the year-over-year value change in adult beef (cull) cow. (See Beef Section above).

#### Equine, alpaca, llama, ostrich, and emu

Distinct values for each species. Initial public data source: None. Adjust the FSA LIP payment rate of the previous year by the year-over-year value change in adult beef (cull) cow. (See Beef Section above).

## Values Calculated from Five-year Census Surveys

#### Organic

The calculated values are based on Census of Agriculture surveys conducted at five-year intervals by NASS in connection with the Census of Agriculture. Information regarding the Census of Agriculture is available at <a href="https://www.nass.usda.gov/AgCensus/index.php">https://www.nass.usda.gov/AgCensus/index.php</a>. More about the Organic Survey is available at <a href="https://www.nass.usda.gov/Publications/AgCensus/2017/Online">https://www.nass.usda.gov/Publications/AgCensus/2017/Online</a> Resources/Organics/index.php. Data from the Census of Agriculture can be obtained from: <a href="https://quickstats.nass.usda.gov/">https://quickstats.nass.usda.gov/</a>.

Calculated values are shown in relation to the 2023 USDA Commercial Indemnity Table and estimated premium values. The premiums are calculated as the value from the 2019 Organic Survey relative to the 2023 USDA Commercial Table value expressed as a percentage.

Specialty animal group	Organic value (2019)	Commercial	Premium
		table value (2023)	
Beef cow	\$1,348.67	\$1,161.64 <sup>7</sup>	16.10%
Hogs and pigs	\$309.63	\$190.34 <sup>8</sup>	62.67%
Chickens, broilers	\$6.86	\$4.65 <sup>9</sup>	47.43%
Turkeys	\$47.42	\$33.08 <sup>10</sup>	43.35% <sup>11</sup>

The premium percentages calculated above are applied to the values provided in the commercial table to estimate the values for organic cattle, organic swine, and organic broilers shown in Table 1. The premium percentage for organic turkeys calculated above is applied to those organic turkey categories shown in Table 1 that are not covered in the section below regarding values calculated from limited industry surveys.

#### Other non-organic animal species

These calculated values from the five-year Census surveys are shown in comparison to those currently used in the FSA Livestock Indemnity Program (LIP). These values are available at <a href="https://www.fsa.usda.gov/Assets/USDA-FSA-Public/usdafiles/FactSheets/livestock\_indemnity\_program\_lip-fact\_sheet.pdf">https://www.fsa.usda.gov/Assets/USDA-FSA-Public/usdafiles/FactSheets/livestock\_indemnity\_program\_lip-fact\_sheet.pdf</a>. Note that the LIP values are adjusted to 75 percent of market meat value. The values from the five-year Census surveys are aggregates, not limited to meat values. Therefore, a premium percentage is not calculated between the two values.

Specialty animal group	Survey value (2017)	FSA "Other" value (100% market value) 2023
Alpaca	\$1,453.33	\$486.66
Deer	\$1,622.53	\$657.18
Elk	\$1,917.14	\$912.23
Llama	\$692.75	\$393.39

The values presented above from the 2017 survey are applied to adult alpacas and llamas used specifically as genetic seedstock. Other adult Alpacas and Llamas are valued as indicated in the USDA Commercial Table. The values presented above for deer and elk are used in the calculations described below for specialty deer and elk categories.

#### Subcategories of animal production classes not included in commercial indemnity tables

A set of indemnity values for deer and elk is estimated based on the values presented above and a set of adjustment factors developed for deer and applied to both deer and elk values from the 2017 Census survey. The adjusted values for various subcategories of deer and elk are presented below and in Table 1.

#### <u>Subdivisions of deer values:</u>

Buck deer for meat \$985.77 Doe deer for meat \$657.18

<sup>&</sup>lt;sup>7</sup> This is the value for an adult open beef heifer or cow (non-cull) from the USDA Commercial Indemnity Table.

<sup>8</sup> This is the value for swine, sows, boars, barrows, and gilts (150–300 lbs.) from the USDA Commercial Indemnity Table.

<sup>&</sup>lt;sup>9</sup> This is the value for broilers/pullets regular size from the USDA Commercial Indemnity Table.

<sup>&</sup>lt;sup>10</sup> This is an average value for tom turkeys from the USDA Commercial Indemnity Table.

<sup>&</sup>lt;sup>11</sup> See the values for organic turkeys and the related footnote in the Values Calculated from Limited Industry Surveys section.

Buck deer for breeding/stocking <sup>12</sup>	\$2,028.16
buck deer for breeding/stocking	• •
Doe deer for breeding/stocking	\$811.27
Non-adult male deer	\$253.52
Non-adult female deer	\$135.21
Subdivisions of elk values:	
Bull elk for meat	\$1,368.34
Cow elk for meat	\$912.23
Bull elk for breeding/stocking	\$2,396.43

Cow elk for breeding/stocking \$2,396.43

Cow elk for breeding/stocking \$958.57

Non-adult male elk \$299.55

Non-adult female elk \$159.76

These values are obtained by multiplying the aggregate survey values for deer and elk and the FSA values for deer and elk by the adjustment factors described below.

<u>Factor</u> <u>Adjustment</u>

Buck deer for meat FSA value times 1.5 <sup>13</sup>
Doe deer for meat FSA value times 1

Buck deer for breeding/stocking

Survey value times 1.25 <sup>14</sup>

Survey value times .5 <sup>15</sup>

<u>Factor</u> <u>Adjustment</u>

Non-adult male deer Breeding buck value divided by 8 <sup>16</sup> Non-adult female deer Breeding doe value divided by 6 <sup>17</sup>

Bull elk for meat FSA value times 1.5
Cow elk for meat FSA value times 1
Bull elk for breeding/stocking Survey value times 1.25
Cow elk for breeding/stocking Survey value times .5

Non-adult male elk Breeding bull value divided by 8 Non-adult female elk Breeding cow value divided by 6

<sup>&</sup>lt;sup>12</sup> Stocker deer and elk are those deer and elk sold to hunting operations.

<sup>&</sup>lt;sup>13</sup> The FSA deer value (at 100 percent market value) is assumed to be the meat value of a doe deer. A buck is assumed to weigh 1.5 times the weight of a doe deer. A factor of one and one half (1.5) is therefore used to adjust the FSA deer value to a meat value for a buck.

<sup>&</sup>lt;sup>14</sup> Assumes that a 4-year-old buck of common quality with a Safari Club International (SCI) antler score from 160–169 is valued at \$2,000. This value divided by the 2017 survey value of \$1,622.53 yields an adjustment factor of 1.23. A factor of one and one quarter (1.25) is therefore used to adjust the 2017 survey value to a value for a common quality buck.

<sup>&</sup>lt;sup>15</sup> Assumes that a 2-year-old doe from a common quality sire is valued at \$750. This value divided by the 2017 survey value of \$1,622.53 yields an adjustment factor of 0.46. A factor of one-half (0.5) is therefore used to adjust the 2017 survey value to a value for a common quality doe.

<sup>&</sup>lt;sup>16</sup> Assumes that a buck fawn from a common quality sire is valued at \$250. This value divided by the breeding buck value calculated above yields an adjustment factor of 0.123. A factor of one eighth (0.125) is therefore used to adjust the value of the calculated breeding buck value to a value of a buck fawn.

<sup>&</sup>lt;sup>17</sup> Assumes that a doe fawn from a common quality sire is valued at \$125. This value divided by the breeding doe value calculated above yields an adjustment factor of 0.154. A factor of one sixth (0.167) is therefore used to adjust the value of the calculated breeding doe value to a value of a doe fawn.

## Values Calculated from Limited Industry Surveys

Limited industry surveys provide data from commodity-specific industry representatives to support the development of possible premium values for application to specialty production categories. Data may include sales data or cost data regarding the specific specialty category. Appropriate sales data would document nationally representative sales of animals in the specialty category. Appropriate cost data would document nationally representative production costs for animals in the specialty category in relation to production costs for conventionally produced animal categories such as those that appear in the USDA Commercial Indemnity Table.

#### Subcategories of turkey production classes not included in commercial indemnity tables

Values are from a limited survey conducted by the National Turkey Federation (NTF) in 2020, using a cost approach. NTF reported the values from 2019. These calculated values are shown in relation to values from the 2023 USDA Commercial Indemnity Table for conventional production turkeys, along with estimated premium values.

Specialty turkey group	Calculated value from survey (2019)	Commercial table value (2023)	Premium
Organic <sup>18</sup>			
Hens	\$21.33	\$19.83	7.56%
Toms	\$52.83	\$33.08	59.70%
Breeder			
Hens	\$85.41	\$19.83	330.72%
Toms	\$184.18	\$33.08	456.77%

The premium percentages calculated above are applied to the values provided in the commercial table to estimate the values shown in Table 1. Age ranges are adjusted for productive phases of breeders. Two additional categories are added at the end of the productive life: (1) spent breeder turkeys are valued the same as full-grown commercial turkeys; (2) breeder turkeys 238–391 days of age are valued at the midpoint of the spent value and the peak production value.

#### Subcategories for gamebird production classes

The North American Gamebird Association (NAGA) is a trade association representing 300 of the largest pheasant, partridge, and quail farms, along with game bird hunting preserves across the United States. NAGA provided 2023 values to ensure indemnity values are in line with industry averages based on data that was not available to APHIS. NAGA conducted a nationally representative survey of ring-necked pheasant, Hun/redleg partridge, chukar partridge, and quail producers to estimate values for three-week age categories. A breeder bird is 6–18 months old, currently used for breeding, and females are in lay. NAGA also proposed average ages for these gamebirds to reach maturity.

# Values Calculated from Publicly Available, Nationally Representative Online Sources

These values were calculated using online sources that are nationally representative of two broad categories of backyard poultry: standard fowl and exotic fowl. These online sources are the catalogs posted by national hatcheries

<sup>&</sup>lt;sup>18</sup> An aggregate value for organic turkeys is available in the five-year Organic Survey. However, this value does not distinguish between hens and toms.

Murray McMurray, Stromberg Chickens, Meyer Farms, and Metzer Farms<sup>19</sup> – for most varieties of backyard fowl.
 Backyard fowl values are for non-commercial production of less than 500 birds.

Within each category of backyard poultry, bird indemnity values are further segregated by age and, for standard fowl, by weight. The age groupings include fertilized eggs, young birds less than one-month old, juvenile birds which are fully feathered but not capable of reproducing yet, and adult birds. The basic formulas for calculating each age group are listed below:

Fertilized eggs = Day old values \* Hatch rate %

Young birds = Day old values

Juvenile birds = Day old values + [Cost of feed to bring to adult weight / 2]

Adult birds = Day old values + Cost of feed to bring to adult weight

Values are calculated by combining the base price per young bird at national hatcheries with the costs of feed incurred in raising a bird. The resulting values are presented in Table 1.

<sup>&</sup>lt;sup>19</sup> Metzer Farms breeds and sells only waterfowl (ducks and geese) and meat-production chickens. Only their waterfowl prices are relevant to the calculations discussed herein. Meat production poultry is captured in the Commercial Indemnity Table.

#### **References and Data Sources**

Aviagen. 2019. Ross 308 and Ross 308 FF performance objectives.

https://en.aviagen.com/assets/Tech\_Center/Ross\_Broiler/Ross308-308FF-BroilerPO2019-EN.pdf

Aviagen. Undated. Nicholas Select, B.U.T 6, and Premium turkey performance objectives.

https://www.aviagenturkeys.us/uploads/2021/01/14/Nicholas%20Comm%20Perf%20Obj%20Select.pdf,

https://www.aviagenturkeys.us/uploads/2018/06/27/BUT%206%20Comm%20Perf%20Obj.pdf,

https://www.aviagenturkeys.us/uploads/2021/08/11/Premium%20Commercial%20Performance%20Objectives.pdf.

Chewy, Inc. 2022. Chicken feed & treats in bulk. [accessed August 2022]. https://www.chewy.com/b/chicken-951.

Food and Agriculture Organization of the United Nations (FAO). 2010. Agribusiness handbook for poultry meat & eggs. <a href="http://www.fao.org/3/al175e/al175e.pdf">http://www.fao.org/3/al175e/al175e.pdf</a>.

Livestock Marketing Information Center (LMIC). [accessed January 30, 2023]. https://www.lmic.info/.

Metzer Farms. [accessed August 2022]. https://www.metzerfarms.com.

Meyer Hatchery. [accessed August 2022]. https://www.meyerhatchery.com.

Murray McMurray Hatchery. [accessed August 2022]. https://www.mcmurrayhatchery.com/index.html.

Penn State (Pennsylvania State University) Extension. 2017. Growth charts for dairy heifers.

https://extension.psu.edu/growth-charts-for-dairy-heifers.

Stromberg's Chickens. [accessed August 2022]. https://www.strombergschickens.com.

United States Department of Agriculture, Agricultural Marketing Service (USDA AMS). 2023. Custom reports. https://www.ams.usda.gov/market-news/custom-reports.

United States Department of Agriculture, Agricultural Marketing Service (USDA AMS). 2023a. Data mart. https://mpr.datamart.ams.usda.gov.

United States Department of Agriculture, Agricultural Marketing Service (USDA AMS). 2023b. Market news. <a href="https://www.ams.usda.gov/market-news/search-market-news">https://www.ams.usda.gov/market-news/search-market-news</a>.

United States Department of Agriculture, Agricultural Marketing Service (USDA AMS). 2023c. Weekly national turkey report. https://usda.library.cornell.edu/concern/publications/wh248043v?locale=en.

United States Department of Agriculture, Animal and Plant Health Inspection Service (USDA APHIS). Title 9, Parts 50-56, Code of Federal Regulations.

United States Department of Agriculture, Animal and Plant Health Inspection Service, Veterinary Services (USDA APHIS VS). USDA commercial indemnity table for 2022.

https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/sa-epidemiology-animalhealth-ceah/producer-indemnity-comp.

United States Department of Agriculture, Animal and Plant Health Inspection Service, Veterinary Services (USDA APHIS VS). 2018. Policy and process recommendations to improve indemnity for species regulated under Title 9, Parts 50-56, in the Code of Federal Regulations.

United States Department of Agriculture, Farm Production and Conservation Business Center (USDA FPAC–BC). 2023. Livestock values 1\_17\_2023. xlsx, unpublished Excel spreadsheet. Washington, DC.

United States Department of Agriculture, Farm Service Agency (USDA FSA). 2022. Livestock indemnity program, fact sheet. Washington, DC. (draft). Most recent public version of this factsheet is available at <a href="https://www.fsa.usda.gov/Assets/USDA-FSA-Public/usdafiles/FactSheets/livestock\_indemnity\_program\_lip-fact\_sheet.pdf">https://www.fsa.usda.gov/Assets/USDA-FSA-Public/usdafiles/FactSheets/livestock\_indemnity\_program\_lip-fact\_sheet.pdf</a>.

United States Department of Agriculture, National Agricultural Statistics Service (USDA NASS). 2019. Census of agriculture 2017. <a href="https://www.nass.usda.gov/AgCensus/index.php">https://www.nass.usda.gov/AgCensus/index.php</a>.

United States Department of Agriculture, National Agricultural Statistics Service (USDA NASS). 2022. Chickens and eggs annual summary. <a href="https://usda.library.cornell.edu/concern/publications/1v53jw96n?locale=en">https://usda.library.cornell.edu/concern/publications/1v53jw96n?locale=en</a>.

United States Department of Agriculture, National Agricultural Statistics Service (USDA NASS). Quick stats. [accessed January 2022]. <a href="https://quickstats.nass.usda.gov/">https://quickstats.nass.usda.gov/</a>.

United States Department of Agriculture, National Agricultural Statistics Service (USDA NASS). 2020. Organic survey 2019. https://www.nass.usda.gov/Publications/AgCensus/2017/Online Resources/Organics/index.php.

#### For more information

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