United States Department of Agriculture

Overview of How Values for Commercial Poultry are Established

When appraising the value of commercial poultry,[1] the USDA's Animal and Plant Health Inspection Service (APHIS) considers the cost of producing the birds and the expected profits that the birds would generate. Production costs and bird productivity are established using data gathered annually from poultry firms by Agri Stats, a national poultry data analysis company. Data on production costs and bird productivity are updated quarterly with current feed and bird prices using various USDA sources.

The first step in determining the value of meat birds is to make sure that feed prices are up to date so that the final cost at slaughter is current. Next, a portion of the profit margin is added to these production costs to arrive at an appraisal value at slaughter. A value for birds older than one day but not yet ready for slaughter is based on the percentage of production days completed. Profit margins predominantly go to pay income taxes, dividends, debt retirement, or capital expenditures. Consequently, 10 percent of the profit margin allocated across the various production phases is added to the birds' value.

Establishing the value of breeders/layers is a little more complex. APHIS uses three points of value for these birds: day-old birds, capitalization (when birds are able to produce eggs/semen), and salvage value. The cost of day-old birds; the cost of raising birds to sexual maturity, often labeled capitalization cost; and the salvage value are established using data from Agri Stats. A share of the profit margin (determined by number of eggs, the value of eggs, and the costs to produce the eggs) is added to the cost of day-old birds and to the capitalization costs, when determining bird-value at these two pricing points. The appraisal value for birds increases weekly, until the birds start producing eggs/semen. Once in production, the birds' value declines weekly as they age, ending at the birds' salvage value.

During periods of negative profit margins, nothing is added to or deducted from the cost of the birds when determining their value. This approach ensures that appraisal values will always cover a company's investment in their meat birds and immature breeder/layer stock as well as the yet un-recouped costs of their breeder/layer stock.

For laying/breeding hens, data from Agri Stats are used to estimate the number of eggs that broiler and turkey breeder hens lay during their lifetime. For table-egg layers, however, Agri Stats provided expected egg production up to 60 weeks of age, a common industry benchmark. Initially, APHIS calculated total egg production based on a first lay of birds up to 80 weeks of age. After industry input, however, APHIS based their calculations on a first lay up to 90 weeks of age.

The concepts behind indemnity calculators and training on their use have been presented on an on-going basis in response to government and industry requests. Additional data provided to improve the quality of calculator estimates is always welcome.

[1] Broilers: meat and breeders, turkeys: meat and breeders, and table-egg layers.