College of Agriculture

Jack Price, Extension Agent Samuel Nahashon, Professor of Poultry Science Jennifer Goodrich, Extension Agent and County Director John Ferrell, Extension Agent

ANR-P3 2022 Poultry Production

Backyard Poultry Production Costs

Over the past few years, the popularity of growing one's own food has continued to increase. Individuals and families are interested in being more self-sufficient by growing their own vegetables, fruits and meat products. One area that has shown a large increase in interest is raising chickens in the backyard.

Things to consider before getting started:

- Those living in urban or suburban areas should check what restrictions or ordinance their municipality has in place governing poultry production within their jurisdiction. Also, individual subdivisions may have their own restrictions.
- 2. Is your property appropriate to raise poultry (space, manure management, housing, restrictions and noise pollution)?
- 3. How many birds will you need? Start small
- 4. Why are you doing this (safe food supply, being self-sustaining, organic)?
- 5. Will the birds be raised for meat or egg production or both?



Photo source: Tractor Supply Company

- 6. Will you have a confined or free-range operation?
- 7. What brooding and processing equipment might you need?
- 8. What kinds of predators may be an issue?
- 9. Do you have the time to devote to the proper care of the birds?



Poultry feeder

10. What is the cost?

Each one of these factors must be considered before the first chick is purchased.

Don't go into raising birds blindly or the experience might not be a pleasant one. Preparing and planning on the front end will create an environment for success instead of failure.

This factsheet will focus on the costs of the production system, however, other factsheets within this series will provide answers to many of the questions highlighted above.

Production system costs

The costs for growing your birds will depend upon a number of factors including the number and type of birds you decide to raise. (Table 1).



Poultry waterer

Photo source: Tractor Supply Company

Housing: The total cost of housing is dependent on the size of the structure and the quality of the materials that will be used. Adult chickens will need 4 to 5 square feet of space per bird. Costs for housing will vary depending upon how simple or elaborate you decide to make the coop or pen (Clauer, 2009).

Equipment: When purchasing equipment, determine the number of feeders and waterers by the number of chicks you are brooding and adult birds you plan on keeping. This will help save money. A small layer flock will not require large feeder and watering space but a larger, free-range flock will.

Feed: When calculating feed for your birds also remember that broilers will only be fed up to 6-8 weeks. Your layers will be fed year-round until they become unproductive (usually at 8-10 years old however egg production declines as birds age and at some point it becomes uneconomical to keep the birds. At that point you can decide to replace the flock with younger birds, pullets. Layers will stop to lay at 6-7 years of age.). Additional information on feeding can be found in Table 2 and Vest et al. (2015).

Chicks: The average cost of chicks will be determined by sex, quantity, breed and even supply and demand for poultry. One other factor in the cost of chicks will be whether or not they are vaccinated for diseases like coccidiosis and Marek's disease (Greenacre and Morishita, 2015).

Table 1. General Budget Considerations

HOUSING	Quantity	Cost
Соор	1	\$250-\$1000
Chicken Tractor	1	\$250-\$500
EQUIPMENT		
Heat Lamps	2 each	\$25
Feeders and waterers for chicks	2 each	\$30
Feeders and waterers for adults		
(5-gallon waterers and 25 lb. feeders)	2 each	\$125
FEED FOR LAYERS		
Starter	50 lbs.	\$15.99bag
Grower	50 lbs.	\$16.50/bag
Layer	50 lbs.	\$15.99/bag
CHICKS		
Layers based on pullets (only 10 birds)	10	\$44
Broilers based on mixed gender (25 birds)	25	\$100

Costs are subject ot change and should be used only to make estimates. We advise producers to check with their local Farm Supply Store for the most current pricing.



Photo source: Tractor Supply Company

Table 2. Meat type bird feed consumption and cost.									
AGE		FEED TYPE		10 BIRDS		25 BIRDS		50 BIRDS	
				Lbs./week		Lbs./week		Lbs./week	
1 WK		Starter		2.62		6.56		13.13	
2 WK		Starter		5.75		14.38		28.75	
3 WK		Starter		8.75		21.21		42.81	
4 WK		Grower		11.75		29.28		58.75	
5 WK		Grower		16.32		40.78		81.56	
6 WK		Grower		21.57		53.91		107.81	
7 WK		Grower/Finisher		24.07		60.61		120.31	
8 WK		Grower/Finisher		26.63		66.56		133.13	
Total 50 lb. bags				3 bags		6 bags		12 bags	
Total Cost				\$49.50		\$99.00		\$198.00	

Feed cost is \$16.50/bag. Calculations are based on feed labels from Tennessee Farmers Coop, Purina Feeds and Rivers Critters Ranch (RCR) Organic Feed Store.

References and Resources:

Clauer, P, 2009 Small Scale Poultry Housing. Virginia Cooperative Extension. 2902-1092. https://web.uri.edu/4h/files/Small-Scale-Poultry-Housing.virginia.pdf

Frame, D.D. 2008. Principles of Feeding Small Flocks of Chicken at Home. Utah State University Cooperative Extension. Logan, UT. https://digitalcommons.usu.edu/extension_curall/1369/

Greenacre, C. B., T. Y. Morishita. 2015. Backyard Poultry Medicine and Surgery: A Guide for Veterinary Practitioners. John Wiley & Sons, Inc.

North Carolina State University Extension. Backyard flocks and eggs. https://poultry.ces.ncsu.edu/backyard-flocks-eggs/

University of Minnesota Extension. Small-scale poultry. https://extension.umn.edu/poultry/small-scale-poultry

Vest, L., N. Dale, and J. Fowler. 2015. Nutrition for the backyard flock. The University of Georgia Cooperative Extension Service. Leaflet 396, Circular 954. https://extension.uga.edu/publications/detail.html?number=C954&title=Nutrition%20for%20the%20Backyard%20Flock

TSU-22-79(B)-15c-17095 – Tennessee State University does not discriminate against students, employees, or applicants for admission or employment on the basis of race, color, religion, creed, national origin, sex, sexual orientation, gender identity/expression, disability, age, status as a protected veteran, genetic information, or any other legally protected class with respect to all employment, programs and activities sponsored by Tennessee State University. The following person has been designated to handle inquiries regarding non-discrimination policies: Razel Jones, Office of Equity and Inclusion, rjone105@tnstate.edu, 3500 John Merritt Blvd., General Services Building, Second Floor, Nashville, TN 37209, 615-963-7494. The Tennessee State University policy on nondiscrimination can be found at www.tnstate.edu/nondiscrimination.