

Managing Manure from the Backyard Flock



In recent years, increasing numbers of urban and rural landowners across the country have been “flocking” to raise backyard poultry. Backyard poultry enthusiasts have discovered the opportunity to be more self-sufficient and live in a more sustainable manner by producing their own eggs and meat right at home.

However, many of these new small flock owners are left searching for answers to questions because of a lack of current information to meet their needs and a shortage of knowledgeable experts. One question small flock owners have, especially urban owners, is **what to do with the manure the chickens produce.**

Poultry waste can be either a plus or a minus, depending on how you approach it. If allowed to accumulate without proper storage or processing, it can certainly be a problem and become an odor and fly nuisance. However, if properly processed (or composted), it is an excellent soil amendment and fertilizer. The key is to understand and follow the steps necessary to produce quality compost from poultry waste.

What to Do?

Something that backyard flock owners discover is that much of what goes in one end of their birds comes out the other. Although the number of birds is often small, backyard birds produce a considerable amount of manure that must be properly managed. **A typical layer will produce 0.19 pound of manure per day** (ASAE, 2005). That amounts to just over 69 pounds of manure per year. When you have 10 laying hens, that’s almost 700 pounds of manure to manage per year. Composting is the best way for small flock owners to manage this manure.

The traditional and most common method of composting is accomplished by creating a large pile of litter, maintaining the proper moisture content, and turning the pile on a regular basis for several weeks until the process is complete. In this case, litter can be poultry manure, bedding material, kitchen scraps, dry leaves, grass clippings, and so forth. The process takes time and effort but yields a high-quality, natural, slow-release fertilizer that is great for the vegetable or flower garden. **Composting is an excellent disposal method** for manure generated by the backyard flock. It is safe, efficient, and beneficial.

Before starting your backyard flock, check with your local city or county government and become familiar with the rules and regulations regarding keeping poultry and disposing of poultry waste in your area. Composting is a common and accepted practice in many areas to dispose of yard and kitchen waste. Composting is a process in which aerobic (oxygen-consuming) bacteria and fungi feed on organic waste in a properly managed pile, which converts the waste to compost. Like almost anything else, there are proper steps and procedures to follow for composting poultry manure to maintain sanitary conditions (not to mention staying on good terms with your neighbors).



Backyard birds headed for the roost.



Backyard birds at work in the garden.

Where to Find Help

Many small backyard poultry flock owners may not know how to find answers to questions they have concerning their flock. This is not surprising when you consider that in 1950, there were poultry science departments at more than 40 state colleges and universities; **today only six poultry science departments remain** (Jacob, 2013). These six remaining poultry science departments are located in states that have strong commercial poultry industry presences, including Auburn University, Mississippi State University, North Carolina State University, Texas A&M University, the University of Arkansas, and the University of Georgia. These universities have multiple Extension poultry experts.

Questions from backyard enthusiasts can be varied and may include topics like manure management, protection from predators, what to feed the birds, light management to keep hens laying through the winter, what breeds work best for their particular situation, pen construction, providing shelter, keeping urban poultry, and so forth. The local county Extension office is always a good first place to start. No one is an expert in everything, and your local county Extension agent may not be trained in poultry. However, he or she should have access to a poultry expert at the university level. Land-grant universities often have Extension personnel on campus with poultry expertise regardless of whether the state has a large commercial poultry industry. Smaller schools may also have personnel with poultry backgrounds that can be a valuable resource. In addition, <http://extension.msstate.edu/agriculture/live-stock/poultry> has information on a variety of topics related to small and backyard flocks, as well as an "Ask an Expert" feature that is available to anyone at any time.

Summary

Managing poultry waste from the backyard flock can be challenging if you don't know what to do. Many newcomers to the world of backyard poultry may need assistance with manure management but may not know where to turn for help. However, help is available from your local county Extension office, Extension poultry specialists at land-grant universities, and professionals with poultry expertise at smaller colleges and universities.

References

- ASAE (American Society of Agricultural Engineers). 2005. Manure production and characteristics. Available at: <https://elibrary.asabe.org/abstract.asp?aid=32018>.
- Jacob, J. 2013. Small and backyard flocks animal manure management. Available at: <https://thepoultrysite.com/articles/managing-manure-from-the-backyard-flock>.

Information Sheet 1973 (POD-02-20)

By **Tom Tabler**, PhD, Extension Professor, Poultry Science; **F. Dustan Clark**, Extension Poultry Health Veterinarian, University of Arkansas Cooperative Extension Service; **Jonathan R. Moyle**, Extension Poultry Specialist, University of Maryland Extension; **Morgan Farnell**, PhD, Associate Professor, Poultry Science, Texas A&M University; and **Jessica Wells**, PhD, Assistant Clinical/Extension Professor, Poultry Science.



Copyright 2020 by Mississippi State University. All rights reserved. This publication may be copied and distributed without alteration for nonprofit educational purposes provided that credit is given to the Mississippi State University Extension Service.

Produced by Agricultural Communications.

Mississippi State University is an equal opportunity institution. Discrimination in university employment, programs, or activities based on race, color, ethnicity, sex, pregnancy, religion, national origin, disability, age, sexual orientation, genetic information, status as a U.S. veteran, or any other status protected by applicable law is prohibited. Questions about equal opportunity programs or compliance should be directed to the Office of Compliance and Integrity, 56 Morgan Avenue, P.O. 6044, Mississippi State, MS 39762, (662) 325-5839.

Extension Service of Mississippi State University, cooperating with U.S. Department of Agriculture. Published in furtherance of Acts of Congress, May 8 and June 30, 1914. GARY B. JACKSON, Director