

Bulletin #1202

Farmer Skill & Knowledge Checklist: Poultry—Meat Production

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This checklist is a guide to the types of skills and knowledge useful to a poultry meat producer in Maine. Increasing your levels of knowledge and skill can help you:

- improve your farm management skills,
- increase your chances of having a profitable egg enterprise, or
- gain employment in a successful egg operation.

If you are just starting out, don't be intimidated by this list; just use it to prioritize your learning. If you are experienced, remember that you can always improve and learn more, whatever your skill level.

Circle your current and desired (target) competence using this scale:

1=No knowledge/skill 2=Some knowledge/skill 3=Well-informed/experienced

| Recommended knowledge | My current level | | | My target level | | |
|--|---------------------|---|---|--------------------|---|---|
| | | | | | | |
| Breed Selection | | | | | | |
| Be able to identify and list the characteristics you are seeking for your operation. | 1 | 2 | 3 | 1 | 2 | 3 |
| Be familiar with common breeds of meat poultry (chickens, ducks, turkeys, and game birds). | 1 | 2 | 3 | 1 | 2 | 3 |
| Be able to visually recognize specific poultry breeds for meat production. | 1 | 2 | 3 | 1 | 2 | 3 |
| Know the difference between purebred, crossbred, and hybrid poultry breeds. | 1 | 2 | 3 | 1 | 2 | 3 |
| Know how to effectively select a breed and species for your farm. | 1 | 2 | 3 | 1 | 2 | 3 |
| Know how and where to order chicks or poults. | 1 | 2 | 3 | 1 | 2 | 3 |
| Be familiar with USDA's National Poultry Improvement Plan (NPIP); see contact information below. | 1 | 2 | 3 | 1 | 2 | 3 |

| Brooding and Chick Care | | | | | | |
|--|---|---|---|---|---|---|
| Know how to select a brooder. | 1 | 2 | 3 | 1 | 2 | 3 |
| Be able to properly set up, use, and maintain a brooder. | 1 | 2 | 3 | 1 | 2 | 3 |
| Know how to receive and properly handle day-old birds. | 1 | 2 | 3 | 1 | 2 | 3 |
| Be able to provide ample clean water to young birds. | 1 | 2 | 3 | 1 | 2 | 3 |
| Know how to select the proper feed for day-old birds. | 1 | 2 | 3 | 1 | 2 | 3 |
| Know when and how to change feed from starter to growers. | 1 | 2 | 3 | 1 | 2 | 3 |
| Poultry Health Care | | | | | | |
| Understand the importance of sanitation and biosecurity on your farm-and when visiting other farms. | 1 | 2 | 3 | 1 | 2 | 3 |
| Be able to develop a biosecurity plan for everyday practices and for biosecurity emergency. | 1 | 2 | 3 | 1 | 2 | 3 |
| Be able to select and use suitable disinfectants. | 1 | 2 | 3 | 1 | 2 | 3 |
| Be familiar with pathogens common to poultry. | 1 | 2 | 3 | 1 | 2 | 3 |
| Know which disinfectants work effectively on pathogens. | 1 | 2 | 3 | 1 | 2 | 3 |
| Understand the importance of and know how to use personal protective equipment. | 1 | 2 | 3 | 1 | 2 | 3 |
| Know how and where to submit poultry to a diagnostic lab. | 1 | 2 | 3 | 1 | 2 | 3 |
| Be familiar with common poultry medications and their proper uses. | 1 | 2 | 3 | 1 | 2 | 3 |
| Be familiar with typical vaccines and their applications. | 1 | 2 | 3 | 1 | 2 | 3 |
| Be able to effectively observe birds in their flocks. | 1 | 2 | 3 | 1 | 2 | 3 |
| Be able to recognize and detect an unhealthy bird. | 1 | 2 | 3 | 1 | 2 | 3 |
| Understand the significance of reportable diseases such as Avian Influenza and know where to find information. | 1 | 2 | 3 | 1 | 2 | 3 |
| Be able to detect external parasites on birds. | 1 | 2 | 3 | 1 | 2 | 3 |
| Be able to effectively prevent and/or treat specific external parasites like mites, lice, and bedbugs. | 1 | 2 | 3 | 1 | 2 | 3 |
| Be aware of potential risk for internal parasites, depending on poultry breed and length of production cycle. | 1 | 2 | 3 | 1 | 2 | 3 |
| Poultry Nutrition | | | | | | |
| Be familiar with the digestive tract of poultry. | 1 | 2 | 3 | 1 | 2 | 3 |
| Be familiar with the daily nutrient requirements of your poultry species. | 1 | 2 | 3 | 1 | 2 | 3 |
| Know how nutrients are balanced in a feed ration (protein energy, vitamins and minerals, and water). | 1 | 2 | 3 | 1 | 2 | 3 |
| Understand the nutrient value of different feed ingredients. | 1 | 2 | 3 | 1 | 2 | 3 |
| Be able to read and understand a feed bag label. | 1 | 2 | 3 | 1 | 2 | 3 |
| Be able to select the proper feed for different ages and productive stages. | 1 | 2 | 3 | 1 | 2 | 3 |
| Understand the importance of clean water to meat bird productivity. | 1 | 2 | 3 | 1 | 2 | 3 |
| Be familiar with methods to prevent drinking water from freezing. | 1 | 2 | 3 | 1 | 2 | 3 |

| General Management | | | | | | |
|--|---|---|---|---|---|---|
| Be familiar with poultry-related terms. | 1 | 2 | 3 | 1 | 2 | 3 |
| Know the body parts of poultry. | 1 | 2 | 3 | 1 | 2 | 3 |
| Be able to differentiate a cockerel from a pullet. | 1 | 2 | 3 | 1 | 2 | 3 |
| Be able to differentiate a rooster from a hen. | 1 | 2 | 3 | 1 | 2 | 3 |
| Be able to properly catch a bird without harm to the bird or yourself. | 1 | 2 | 3 | 1 | 2 | 3 |
| Know how to properly hold a single bird. | 1 | 2 | 3 | 1 | 2 | 3 |
| Know how to hold several birds at one time. | 1 | 2 | 3 | 1 | 2 | 3 |
| Be able to effectively weigh single birds. | 1 | 2 | 3 | 1 | 2 | 3 |
| Know how to transport birds safely and humanely. | 1 | 2 | 3 | 1 | 2 | 3 |
| Be familiar with sources of poultry equipment. | 1 | 2 | 3 | 1 | 2 | 3 |
| Know how to detect excess levels of ammonia. | 1 | 2 | 3 | 1 | 2 | 3 |
| Be able to detect signs of rodents on the farm. | 1 | 2 | 3 | 1 | 2 | 3 |
| Know how to effectively control rodent populations. | 1 | 2 | 3 | 1 | 2 | 3 |
| Be able to detect signs of predatory animals in Maine. | 1 | 2 | 3 | 1 | 2 | 3 |
| Be able to effectively protect poultry from predators. | 1 | 2 | 3 | 1 | 2 | 3 |
| Know how to recognize types of cannibalism. | 1 | 2 | 3 | 1 | 2 | 3 |
| Be familiar with the causes of cannibalism, and know how to prevent/correct it. | 1 | 2 | 3 | 1 | 2 | 3 |
| Understand the influence of light quality and quantity on growth. | 1 | 2 | 3 | 1 | 2 | 3 |
| Be familiar with the certifying agency for organic products. | 1 | 2 | 3 | 1 | 2 | 3 |
| Facilities | | | | | | |
| Know the minimum space requirements for your poultry species. | 1 | 2 | 3 | 1 | 2 | 3 |
| Be able to calculate and provide enough roosting space. | 1 | 2 | 3 | 1 | 2 | 3 |
| Be able to select proper bedding for poultry. | 1 | 2 | 3 | 1 | 2 | 3 |
| Understand the importance of ventilation and air exchange in the poultry house. | 1 | 2 | 3 | 1 | 2 | 3 |
| Be able to effectively maintain temperature for birds in extreme weather conditions. | 1 | 2 | 3 | 1 | 2 | 3 |
| Pastured Poultry | | | | | | |
| Understand the advantages and limitations of raising poultry on pasture in a portable house. | 1 | 2 | 3 | 1 | 2 | 3 |
| Be able to recognize when birds need to be moved to fresh pasture. | 1 | 2 | 3 | 1 | 2 | 3 |
| Be able to protect birds from inclement weather when at pasture. | 1 | 2 | 3 | 1 | 2 | 3 |
| Know which pasture crops are best for pastured poultry production. | 1 | 2 | 3 | 1 | 2 | 3 |
| Know how to maintain pastures, and address issues such as structures, fencing, and predators. | 1 | 2 | 3 | 1 | 2 | 3 |
| Manure | | | | | | |
| Understand the nutrient value of poultry manure as fertilizer. | 1 | 2 | 3 | 1 | 2 | 3 |
| Understand how manure can pollute water supplies; be able to develop and implement a manure management plan. | 1 | 2 | 3 | 1 | 2 | 3 |
| Be able to control filth flies. | 1 | 2 | 3 | 1 | 2 | 3 |
| Know how to effectively use poultry manure. | 1 | 2 | 3 | 1 | 2 | 3 |
| | | | | | | |

| Productivity | | | | | | |
|---|---|---|---|---|---|---|
| Know how to maintain records for mortality, growth rate, and feed consumption. | 1 | 2 | 3 | 1 | 2 | 3 |
| Know how to calculate feed efficiency of group of birds. | 1 | 2 | 3 | 1 | 2 | 3 |
| | 1 | Z | 3 | 1 | Ζ | 3 |
| Culling Poorly Performing Birds | 1 | 2 | 2 | 1 | 2 | 2 |
| Be able to set and follow a standard for culling birds from your flock. | 1 | 2 | 3 | 1 | 2 | 3 |
| Be familiar with typical growth rates for meat birds. | 1 | 2 | 3 | 1 | 2 | 3 |
| Know how to recognize birds with poor performance such as those with leg problems. | 1 | 2 | 3 | 1 | 2 | 3 |
| Know how to properly and humanely euthanize culled birds. | 1 | 2 | 3 | 1 | 2 | 3 |
| Know how to properly dispose of dead birds. | 1 | 2 | 3 | 1 | 2 | 3 |
| Know how to compost poultry carcasses effectively. | 1 | 2 | 3 | 1 | 2 | 3 |
| Food Safety | | | | | | |
| Be familiar with state regulations for selling poultry. | 1 | 2 | 3 | 1 | 2 | 3 |
| Know who can answer questions about state regulations related to poultry. | 1 | 2 | 3 | 1 | 2 | 3 |
| Be familiar with proper processing of birds for meat. | 1 | 2 | 3 | 1 | 2 | 3 |
| Know the proper temperature for poultry meat in a refrigerator and how to check it. | 1 | 2 | 3 | 1 | 2 | 3 |
| Know how to recognize freshness in poultry meat. | 1 | 2 | 3 | 1 | 2 | 3 |
| Be able to recognize and discard poultry meat that is not suitable for human consumption. | 1 | 2 | 3 | 1 | 2 | 3 |
| Know what a HACCP plan is and why processors need one. | 1 | 2 | 3 | 1 | 2 | 3 |
| Know how to obtain a list of Maine's poultry processors. | 1 | 2 | 3 | 1 | 2 | 3 |
| Be able to explain the correct handling of poultry meat to customers. | 1 | 2 | 3 | 1 | 2 | 3 |
| Selling Your Product | | | | | | |
| Be familiar with, and be able to explain to potential customers, the value of poultry as food. | 1 | 2 | 3 | 1 | 2 | 3 |
| Be familiar with, and be able to explain, the value of locally produced food. | 1 | 2 | 3 | 1 | 2 | 3 |
| Be familiar with the use of poultry in a variety of recipes. | 1 | 2 | 3 | 1 | 2 | 3 |
| Understand the importance of value-added poultry products. | 1 | 2 | 3 | 1 | 2 | 3 |
| Economics | | | | | | |
| Be able to keep and use financial records effectively. | 1 | 2 | 3 | 1 | 2 | 3 |
| Know how to develop and use and enterprise budget for your operation. | 1 | 2 | 3 | 1 | 2 | 3 |
| Be able to determine the break-even point for your product or products. | 1 | 2 | 3 | 1 | 2 | 3 |
| Be able to identify and implement money-saving or labor-saving practices. | 1 | 2 | 3 | 1 | 2 | 3 |
| Know how to transfer financial records to income tax Schedule F, "Profit or Loss From Farming." | 1 | 2 | 3 | 1 | 2 | 3 |
| | | | | | | |

Sources of Information

ATTRA/National Sustainable Agriculture Information Service

(formerly known as the "Appropriate Technology Transfer for Rural Areas" project) (800) 346-9140 attra.ncat.org

Maine Organic Farmers and Gardeners Association (MOFGA)

Diane Schivera, organic livestock specialist (207) 568-4142, <u>dianes@mofga.org</u> www.mofga.org

Maine Department of Agriculture

National Poultry Improvement Plan contacts: Donald E. Hoenig, state veterinarian (207) 287-3701, <u>donald.e.hoenig@maine.gov</u> Elizabeth McEvoy, assistant state veterinarian (207) 287-7610, <u>elizabeth.o.mcevoy@maine.gov</u>

University of Maine Animal Disease Diagnostic Laboratory

Anne Lichtenwalner, Extension veterinarian (207) 581-2789, <u>anne.lichtenwalner@maine.edu</u> <u>www.umaine.edu/vetlab</u>

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(county office contacts; books and publications) extension.umaine.edu



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