

Bulletin #1203

Farmer Skill & Knowledge Checklist: Poultry-Egg Production

Developed by Extension Professor Richard Brzozowski, University of Maine Reviewed by Extension Poultry Specialist Michael Darre, University of Connecticut Cooperative Extension; Professor Emeritus Robert Hawes, The University of Maine; and Assistant Professor Jacqueline P. Jacob, University of Minnesota.

This checklist is a guide to the types of skills and knowledge useful to a poultry egg 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/skill	My current level	My target level
Breed Selection		
Be able to identify and list the characteristics you are seeking for your operation.	123	1 2 3
Be familiar with common breeds of egg-laying chickens.	123	1 2 3
Be able to visually recognize specific poultry breeds for egg production.	123	1 2 3
Know the difference between purebred and commercial hybrid chicken breeds.	123	1 2 3
Know how to effectively select a breed.	123	1 2 3
Know how and where to order chicks or pullets.	123	1 2 3

Be familiar with USDA's National Poultry Improvement Plan (NPIP) and its hatchery certification program; see contact information below.	123	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 chicks.	123	1 2 3
Be able to effectively provide ample clean water to chicks.	123	1 2 3
Know how to select the proper feed for day-old chicks.	1 2 3	1 2 3
Know when and how to change feed from starter to grower.	123	1 2 3
Chicken Health		
Understand the importance of sanitation and biosecurity on your farm—and when visiting other farms.	123	123
<i>Be able to develop a biosecurity plan for everyday practices and for a biosecurity emergency.</i>	123	1 2 3
Be able to select and use suitable disinfectants.	123	1 2 3
Be familiar with pathogens common to poultry.	123	123
Know which disinfectants work effectively on pathogens.	123	1 2 3
Understand the importance of and know how to use personalprotective equipment.	123	1 2 3
Know how and where to submit chickens to a diagnostic lab.	123	1 2 3
Be familiar with common poultry medications and their proper uses.	123	123
Be able to effectively observe birds in their flock.	1 2 3	1 2 3
Be able to recognize 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	123	1 2 3
Be able to detect external parasites on birds.	123	123
<i>Be able to effectively prevent and/or treat specific external parasites (like mites, lice, and bedbugs).</i>	123	1 2 3
Be able to detect internal parasites in birds.	123	1 2 3
<i>Be able to effectively prevent and/or treat specific internal parasites—birds on range are more prone to internal parasites.</i>	123	1 2 3

itrition		
Be familiar with the digestive tract of chickens	123	1 2 3
Be familiar with the daily nutrient requirements of egg- laying chickens.	123	1 2 3
Know how nutrients are balanced in a feed ration (protein, energy, vitamins and minerals, and water).	123	1 2 3
Understand the nutritional value of different feed ingredients.	123	1 2 3
Be able to read and understand a feed bag label.	123	1 2 3
Be able to select the proper feed for different ages and productivestages.	123	1 2 3
Understand the importance of clean water to egg-laying productivity.	123	1 2 3
Be familiar with methods to prevent drinking water from freezing.	123	1 2 3
illets		
Know how to locate suitable sources of pullets.	123	1 2 3
Know how to effectively raise replacement pullets, including the use of effective feeding and lighting programs.	123	1 2 3
eneral Management		i i i i i i i i i i i i i i i i i i i
Be familiar with poultry-related terms.	123	1 2 3
Know the body parts of a chicken.	123	1 2 3
Be able to differentiate a cockerel from a pullet.	123	1 2 3
Be able to differentiate a rooster from a hen.	123	123
Be able to properly catch a bird without harm to the bird or yourself.	123	
Know how to properly hold a single bird.	123	1 2 3
Know how to hold several birds at one time.	123	123
Be able to effectively weigh single birds.	123	1 2 3
Know how to transport birds safely and humanely.	123	1 2 3
Be familiar with sources of poultry equipment.	123	123
Be able to detect evidence of whether rodents are active on the farm.	123	1 2 3
Know how to effectively control rodent populations.	123	123
Be able to detect signs of predatory animals in Maine.	123	123
Be able to effectively protect chickens from predators.	123	123
Know how to recognize types of cannibalism.	123	1 2 3

Be familiar with the causes of cannibalism, and know how to prevent/correct it.	123	1 2 3
Understand the influence of light quality and quantity on egg production.	123	1 2 3
Know the causes of decreased egg production.	123	1 2 3
Be familiar with the practice of inducing a molt/rest to extend the productive life of a flock.	123	1 2 3
Be familiar with the certifying agency for organic products.	123	1 2 3
Facilities		
Know the minimum space requirements for egg-laying chickens.	123	123
Be able to calculate and provide adequate roosting space.	123	1 2 3
Be able to provide adequate nesting space.	1 2 3	1 2 3
Be able to properly select and maintain nesting materials.	123	123
Be able to select proper bedding for chickens.	1 2 3	1 2 3
Understand the role of light in egg production.	1 2 3	1 2 3
Understand the importance of ventilation and air exchange in the hen house.	123	123
Know how to detect excess levels of ammonia.	1 2 3	1 2 3
Know how to control ammonia, moisture, and dust levels.	123	1 2 3
Be able to effectively maintain temperature for birds in extreme weather conditions.	123	123
Manure	1	
Understand the nutrient value of chicken manure as fertilizer.	123	123
Understand how manure can pollute water supplies; be able to develop and implement a manure management plan.	123	1 2 3
Be able to effectively control filth flies.	1 2 3	1 2 3
Know how to effectively use poultry manure, including how to properly compost it.	123	1 2 3

roductivity		
Be familiar with how eggs are formed and laid.	1 2 3	1 2 3
Be able to recognize a productive bird by observing physical signs (such as the comb and legs).	123	1 2 3
Know how to maintain records for mortality, egg production, and feed consumption.	123	1 2 3
Know how to calculate annual production of a flock.	1 2 3	1 2 3
ulling Poorly Performing Hens		
Be able to set and follow a standard for culling birds from your flock.	123	1 2 3
Be able to identify an unproductive egg layer by feeling the distance between the pubic bones, and between the pubic bones and the tip of the keel.	123	123
Know how to properly and humanely euthanize culled birds.	123	1 2 3
Know how to properly dispose of dead birds.	1 2 3	1 2 3
Know how to compost chicken carcasses effectively.	123	1 2 3
ood Safety		
Be familiar with the state regulations for selling eggs.	123	1 2 3
Know who can answer questions about state regulations related to poultry.	123	123
Be familiar with the grades and sizes of eggs as set by the USDA.	123	123
Be able to properly gather and clean eggs for use or sale.	1 2 3	1 2 3
Know how to safely store eggs.	1 2 3	1 2 3
Know how to recognize freshness in eggs.	1 2 3	1 2 3
Be able to select and discard eggs that are not suitable for human consumption.	123	1 2 3
Be able to explain the proper handling of eggs to customers.	123	1 2 3
elling Your Product		
Be familiar with, and be able to explain to potential customers, the value of eggs as food.	123	1 2 3
Be able to explain to potential customers the value of eggs asfood.	123	1 2 3
Be familiar with, and be able to explain, the value of locallyproduced food.	123	1 2 3
Be familiar with the use of eggs in a variety of recipes.	1 2 3	1 2 3
Understand the importance of value-added poultry products.	123	123

Economics		
Know how to evaluate the economics of egg production for each flock.	123	1 2 3
Be able to keep and use financial records effectively.	123	1 2 3
Know how to develop and use an enterprise budget for your operation.	123	1 2 3
Be able to determine the break-even point for your enterprise.	123	123
Be able to identify and implement money-saving or labor-saving practices.	123	1 2 3
Know how to transfer financial records to income tax Schedule F, "Profit or Loss From Farming."	123	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, dianes@mofga.org www.mofga.org

Maine Department of Agriculture

National Poultry Improvement Plan contacts: Beth McAvoy; Donald E. Hoenig, state veterinarian, Maine Department of Agriculture (207) 287-3701, donald.e.hoenig@maine.gov Elizabeth McEvoy, assistant state veterinarian (207) 287-7610, elizabeth.o.mcevoy@maine.gov

American Egg Board www.aeb.org

University of Maine Animal Disease Diagnostic Laboratory Anne Lichtenwalner, Extension veterinarian (207) 581-2789, alicht@umext.maine.edu www.umaine.edu/vetlab

University of Maine Cooperative Extension (county office contacts; books and publications) extension.umaine.edu



Information in this publication is provided purely for educational purposes. No responsibility is assumed for any problems associated with the use of products or services mentioned. No endorsement of products or companies is intended, nor is criticism of unnamed products or companies implied.

© 2009

Call 800.287.0274 (in Maine), or 207.581.3188, for information on publications and program offerings from University of Maine Cooperative Extension, or visit <u>extension.umaine.edu</u>

The University of Maine does not discriminate on the grounds of race, color, religion, sex, sexual orientation, including transgender status and gender expression, national origin, citizenship status, age, disability, genetic information or veteran status in employment, education, and all other programs and activities. The following person has been designated to handle inquiries regarding nondiscrimination policies: Director, Office of Equal Opportunity, 101 North Stevens Hall, Orono, ME 04469, 207.581.1226. eoinfo@umit.maine.edu