

POULTRY MANAGEMENT

Learning Objectives

The learner will...

- Understand the role livestock (specifically poultry) in farm system
- Learn how to care for chicks
- Learn how to raise chickens for eggs, meat, and other
- Learn about pasture-based production models
- Gain a basic understanding of the legalities of pasture slaughter

Why Raise Chickens

- Entertainment
- Eggs
- Meat
- Fertilizer
- Bug and Weed Control
- Breeding Stock

Chicken Terminology

- Hen — mature female chicken > 1 year
- Pullet — immature female chicken < 1 year
- Cockerel — male chicken < 1 year
- Rooster male — chicken > 1 year
- Straight / hatchery run — unsexed
- Molt — natural process of shedding feathers
- Brood — to care for batch of chicks
- Broody — hen that sets
- Crop — pouch where chicken digests food
- Vent — opening through which hens lay eggs

Brooding

- Equipment
- Feeders
- Waterers
- Temperature
- Litter
- Nutrition
 - Grit critical - use stream sand - usually higher mineral content

- Add hay chaff - seeds of perennials generally higher in nutrition than annuals (grains)
- Fresh green vegetable matter - garden waste, grass clippings (not too much, especially meat birds - bred for hot feeds)

Chicken Breeds

- Layers
- Meat

Egg Production

- Production layers: 250-280 eggs / year
- Average brown egg layer: 150-200 eggs / year
- Hens begin laying at about 5-6 months of age
- Production falls off as hens age - replace every 2-3 years to maintain profit
- Egg color:
 - White (Leghorns)
 - Brown (Barred Rock, Rhode Island Reds, Buff Ophington, Black Australorp, New Hampshire Reds)
 - Colored (Auracana/Americana) 1 egg every 3 days
- Yolk Color - affected by plant pigments beta carotene and xanthophylls (green plant material or yellow corn will turn yolks orange)

Winter Production

- Egg production will decline in the fall and may cease during Nov - Jan
- Can sustain with lighting:
 - 40-60 watt bulb, 16 hours / day on timer
 - 15 watt bulb 24 hours / day

Egg Processing

- Storage:
 - 1 month or more in the fridge
 - 2-3 months < 55 degrees at 75% humidity
 - Egg quality diminishes in storage

Chicken Coop Design

- Stationary vs. Mobile
- Should provide protection from weather, drafts
- Need adequate ventilation
- Feeders - 5-6 inches per bird
- Waterers - 1-2 inches per bird
- Roosts - 8 - 12 inches roost space per adult, 15 inches between roosts (sloping)
- Nest boxes - 12" x 12" spacing, 4" lip across front, 2 feet above floor, 1 box per 5 birds

Disease Prevention

- Sanitation
- Adequate space
- Fresh air / ventilation
- Proper nutrition
- Cull as needed
- Protect from predators

Pastured Poultry Production

- Feed requirements drop 30 - 50%
- Housing:
 - Eggmobile (henabago)
 - Hoop houses
 - Variations on the chicken tractor
- Grass height important (too tall, will be trampled)
- Rotation with other livestock

Pastured Poultry Processing

- Requirements for Federal Inspection
 - FSIS oversees and licenses facilities
 - Inspects birds themselves
- Exemptions from Federal Inspection
 - No more than 1,000 birds per year
 - All poultry must be raised on producer's own farm
 - Producer may not buy or sell offsite birds
 - No poultry is distributed outside state
- State of Oregon
 - Currently Oregon law does not allow open-air slaughter of poultry for sale. Producers wanting to slaughter their own birds, up to 20,000 per year, must build a state-licensed and-approved facility. (Contrary to what you may have heard, our state doesn't recognize USDA's 1,000 bird exemption, only the 20,000 bird exemption).

- This might change. Lauren Gwin is working with the Oregon Department of Agriculture on a proposal to allow poultry producers to slaughter up to 1,000 birds (any poultry) per year on their farm, for on-farm fresh sales only. Exact requirements are still being discussed, but producers would likely be required to keep sales records and a customer list.

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Marketing

- Eggs: Direct vs. Retail
 - Designations: certified organic, free-range, free-nested, cage free
- Meat

Assessment/Review

- What role can chickens play in an agricultural ecosystem?
- What are the benefits of pastured poultry production models?
- List important considerations for care of chicks.
- What are the basic feed requirements of chicks? Chickens?

References

ATTRA (Appropriate Technology Transfer for Rural Areas) Website: <http://attra.ncat.org/>.

The Chicken Health Handbook. Damerow, G. 1994, Storey Books, North Adams, MA. 344 pp.

Pastured Poultry Profits. Salatin, J. 1993, Polyface, Inc, Swoope, VA. 371 pp.

www.sustainablepoultry.org

Diagrams of poultry and incubation charts:

<http://www.ansi.okstate.edu/resource-room/general/poultry/chicken.htm>

<http://www.ansi.okstate.edu/resource-room/general/poultry/turkey.htm>

<http://www.ansi.okstate.edu/resource-room/reprod/poultry/incubation.htm>

Sources for Chicks

Phinney Hatchery, 1331 Dell Ave., Walla Walla, WA

Murray McMurray, Webster City, IA

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