Beginning Poultry –
Do you have questions about raising a back yard flock?

By

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It’s Cheaper To Buy It From The Store
Expense

- Birds come with expenses
  - Birds
  - Feed
  - Housing
- Also, if you want eggs and you start with chicks, it will be about 6 months before you get any eggs
Expense

- Big companies buy feed by the truck load so it is cheaper
  - Feed costs more when you buy it by the bag
- Big companies control the environment where the birds are housed so they spend less energy on staying warm or cool
Poultry Are An Excellent Choice When Starting a Livestock Project
Cheap to start

- Poultry have several benefits
  - Small
  - Relatively inexpensive
  - Easy to acquire
  - Don’t require a lot of land
You Need To Register Your Small Flock
Rules

- Federal law exemption:
  - Slaughter less than 20,000 poultry per year of own production for intrastate sales. Prohibited from selling adulterated product.
- States have their own requirements
  - You must obey them, so look them up
- Everyone that sells eggs in MD must register with the state
  - A producer/packer who keeps 3,000 or fewer chickens and who sells eggs only from those chickens must register annually, but is exempt from paying the registration and inspection fees
  - All shell eggs sold, donated or delivered in Maryland must be graded
The Rules Maryland

- **Who needs to register?** All individuals involved in keeping or caring for all types of poultry and any number of birds, which would include: Small households, all forms of live poultry production, production facilities/farms, suppliers, dealers, haulers, wholesalers, live bird markets, and participants in MD’s fairs and shows. By definition poultry includes: Chickens, turkeys, ratites, waterfowl, game birds and domestic/captive pigeons.

- **Who is exempt from registration?** Registration is not required if five (5) or less birds are housed for less than 120 days in a 12 month period. Poultry can not be moved from the exempt premises, participate in shows or be sold. Examples of exempt poultry: Easter chicks, school or 4-H broiler projects and certain pets.

More Rules

- While many urban areas are changing laws to allow backyard poultry, there are still restrictions on the number of birds and the gender.
- If you live outside the city limits, then you need to check with the county to see what regulations exist.
- HOAs
Have A Plan Before You Get Your Birds
Have a Plan

- Plan at least six months in advance
- Neighbors
- Time
  - Who will take care of the birds?
  - What about vacations?
- Bird safety/Housing
  - Weather
  - Predators
Have a Plan

• Where will you get your feed?
• What will you do with the manure?
• Do you know basic husbandry for poultry?
• What will you do if there is a disease problem?
• What will you do with the birds that die?
  • Know the rules
Selecting A Breed Can Be Fun
Introduction to Breeds

- Chickens come in two sizes;
  - Standard or Large fowl
    - These are the normal size birds
  - Bantam – A miniature size chicken or duck, usually about 1/4 to 1/5 of the regular size
    - Used mainly as ornamental birds
    - Most are miniature copies of the large breeds
      - Silkies have no large counterpart
    - Some do have good egg production
      - Eggs are small
Breed Preservation – keeping breeds from going extinct
Dual-purpose – both meat and eggs
Meat production
Egg production
Developing your own breed – when you just can’t find a breed that meets your goals
There are over 400 varieties of chickens
Know your market

• If you are producing meat, what do your customers want
  • Yellow or white skin
  • Large plump breast or lots of dark meat
• For egg production consider
  • Size of the eggs
  • Color of the eggs
    • White, green, brown, dark brown, tinted or blue
## Dual Purpose

<table>
<thead>
<tr>
<th>Breed</th>
<th>Egg Production</th>
<th>Egg Size</th>
<th>Egg Color</th>
<th>Disposition</th>
<th>Foraging Ability</th>
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<tbody>
<tr>
<td>Plymouth Rock</td>
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<tr>
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<tr>
<td>Orpington</td>
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<td>Poor-Fair</td>
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# Egg Layers

<table>
<thead>
<tr>
<th>Breed</th>
<th>Egg Production</th>
<th>Egg Size</th>
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<th>Disposition</th>
<th>Foraging Ability</th>
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<tr>
<td>Leghorn</td>
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<td>Large</td>
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<td>Very Active</td>
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<tr>
<td>Minorca</td>
<td>Excellent</td>
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<td>Active</td>
<td>Good</td>
<td>No</td>
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<tr>
<td>Australorp</td>
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<tr>
<td>Ancona</td>
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<tr>
<td>Ameraucana</td>
<td>Good</td>
<td>Large</td>
<td>Blue-green</td>
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<td>Good</td>
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<tr>
<td>Hamburg</td>
<td>Good</td>
<td>Small</td>
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<td>Good</td>
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<tr>
<td>Fayoumi</td>
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<td>Small</td>
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<td>Excellent</td>
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<td>Maran</td>
<td>Good</td>
<td>Large</td>
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# Meat Breeds

<table>
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<tr>
<th>Breed</th>
<th>Growth Rate</th>
<th>Skin Color</th>
<th>Disposition</th>
<th>Foraging Ability</th>
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<td>Yellow</td>
<td>Calm</td>
<td>Poor</td>
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<td>Jersey Giant</td>
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<td>Calm</td>
<td>Poor</td>
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<tr>
<td>New Hampshire</td>
<td>Fast</td>
<td>Yellow</td>
<td>Calm</td>
<td>Poor</td>
</tr>
<tr>
<td>Freedom Rangers</td>
<td>Fast</td>
<td>Yellow</td>
<td>Calm</td>
<td>Fair</td>
</tr>
<tr>
<td>Modern Broilers</td>
<td>Very Fast</td>
<td>Yellow</td>
<td>Calm</td>
<td>Poor</td>
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</table>
Other Things to Consider

- Climate
  - Some chickens do better in cold areas, others do better in hot areas
    - Mediterranean breeds generally do well in hot humid areas
    - Most American breeds do better in cool areas
  - Usually birds with large combs will perform better in hot areas
    - Combs can get frost bite
    - Some breeds have varieties with different combs
      - Use a smaller comb variety in cold areas
There Are A Lot Of Options When It Comes To Coup Design
Housing and Confinement

- Protect birds from extreme weather, predators, injury, and theft
- Consider location on your property
- Keeping poultry totally confined with fence and covered run is the best protection from predators
- May need to bury fencing wire below surface to prevent predators from getting to birds
Housing and Confinement

- Fence wire size - small enough to prevent predators (mink, weasels)
- Consider proximity of your house (neighbors) before construction begins
- Location which drains well
- Run electricity and/or water
- Poultry require a dry, draft free house
- Must be able to clean it without too much difficulty
Housing and Confinement

• There Are Two Main Types of Houses
  • Moveable
    • House are moved to new locations on a regular basis so that birds have access to fresh pasture
  • Fixed
    • Can’t be moved but can allow birds to have access to pasture
    • Some have multiple fixed pasture areas so pasture can be rotated
Moveable Houses
Fixed Housing
## Minimum Space Requirements

<table>
<thead>
<tr>
<th>Type of bird</th>
<th>Sq ft/bird inside</th>
<th>Sq ft/bird outside runs</th>
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<tr>
<td>Bantam Chickens</td>
<td>1</td>
<td>4</td>
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<tr>
<td>Laying Hens</td>
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<td>8</td>
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<tr>
<td>Large Chickens</td>
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<td>10</td>
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<tr>
<td>Quail</td>
<td>1</td>
<td>4</td>
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<tr>
<td>Pheasant</td>
<td>5</td>
<td>25</td>
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<td>Ducks</td>
<td>3</td>
<td>15</td>
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<tr>
<td>Geese</td>
<td>6</td>
<td>18</td>
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Virginia Cooperative Extension, Fact Sheet No. 10 (P. Clauer)
It’s Not Hard To Find Baby Chicks
Getting Chicks

• Most small farms order their chicks by mail from hatcheries
  • This method is very effective and allows for a wide selection of breeds to select from
  • There are lots of different hatcheries and most can be found using a quick web search
    • Make sure that they participate in the NPIP program
• Chicks can be shipped by mail because prior to hatching the yolk is drawn into the body and can be used as a source of energy for up to 3 days
Raising Chickens Is Not As Easy As Some Magazines Claim
Managing small flocks can be divided into three different stages:

- Brooding
- Growing
- Egg production/breeding
What is Brooding?

• Generally considered the time from placement to 14 days
• Chick survival is dependent on how quickly they adjust to the farm
• Time of most rapid development
• Brooding is the same no matter what type of production you are doing (organic, free range, etc.)
6 Basics of Brooding

1. Pre-Placement
2. Feed Management
3. Water Management
4. Temperature Management
5. Light Management
6. Air Quality/Ventilation
A Note on Feed and Water

• For beginners, it is easiest to just purchase feed from a local farm store
  • Starter (20%-24% protein)
  • Grower (18%-20% protein)
  • Layer (~16% protein)
• Water needs to be clean
• Use a source of water that you would drink from
Feed and Water

• To encourage the chicks to eat, place feed in feed trays and then place the chicks on top of the feed.

• Feed trays can be any low-sided object like
  • Egg flats
  • Pie tins
  • Cut the bottom off of a milk jug
  • You can even place the feed on newspaper

• Remove feed trays after the first couple of days
Feed and Water

- Waterers need to be cleaned daily
- If available, start the chicks on a “chick starter” mash or crumbles
- Place your feed pans close to the heat source
  - This allows them to find the feed and still stay warm
Feed and Water

• For the first week, fill the feeders full
  • This will help the chicks find the feed
• For the second week fill feeders ¾ full and no more than half full thereafter
  • This will help to prevent the chicks from wasting feed
• Provide enough feeder space
  • Watch birds to make sure they can all eat
Heating

• Always use a thermometer when setting up for chicks
• Aim for a chick level temperature of 92-95°C for the first week, then drop the temperature by 5°C a week
• Once the chicks begin to feather out, the temperature may be dropped rapidly, saving energy
• Good ventilation is important
  • The area should be light and airy, without drafts
• After placing the chicks, watch them and adjust heat to the right temperature based on their needs
Heating

• Look at the birds
Housing - litter

Primary functions of a litter in poultry houses are:

- Diluting excreta
- Absorbing fecal moisture
- Promoting drying of feces
- Providing a cushion for breast muscle and feet
- Insulating chicks during cold weather
Growing

- Growing covers the time from the end of brooding until birds are harvested or are sexually mature
Growing

- Management is not as intensive
  - Birds can manage their body temperature
    - Still need some supplemental heat until they are fully feathered
      - Once grown they can handle cold weather without problems if they can stay dry and out of the wind
    - It is best to keep them confined indoors until they are 4 weeks old
  - Mortality is lower as the chicks know how to find food and water
Growing

- For rapid growth, birds should not be allowed to run out of feed
  - Feeder height needs to be adjusted periodically as the birds grow
    - If the feeder is too low they will waste feed
Growing

- It is important that water be provided at all times
  - On hot days lack of water can quickly lead to death
  - Water needs to be clean and fresh
  - Birds consume about twice as much water as they do feed
Egg production/breeding

• The amount of time it takes for chickens to sexually mature varies by the breed
  • Usually start laying between 18 and 22 weeks of age
    • Fayoumi hens may start laying as early as 16 weeks
  • Lighter breeds usually mature faster than heavier breeds
Egg production/breeding

• Feed and water need to be provided at all times
• Water is particularly important as it is a major component of the egg
  • If water is restricted or unavailable for long times during the day, egg production will drop
• Layer feed needs to contain adequate calcium and phosphorus
  • Calcium can also be supplied by allowing the hens access to oyster shell free choice
    • Can be used instead of grit in layers
    • Available from most feed stores or online
Egg production/breeding

- Housing is the same as growing with the exception of nest boxes
  - Need one nest box for every 4-6 hens
    - 12x12x12 is a good size for average size hens
    - Make them a little bigger for large size breeds
  - Place in a shaded area to encourage the hens to lay eggs in them
Common behavior issues

• Sometimes birds behave in abnormal ways
  • Egg eating
    • Once learned it can be hard to stop
  • Cannibalism
    • Can be a sign that something is wrong
      • Nutrition imbalance
      • Bored
      • Injured birds
  • Feather picking
    • Same as cannibalism
Records Are Important
Records

• You need to keep records for
  • Taxes
  • To determine if you have problems
  • To determine what works
  • In order to know how much to charge for your products
Pricing your eggs

- $13-16 / 50 pound bag
- 1 bag can feed 20-25 adult hens for 10-14 days
- 1 month = 5 bags of feed (adult birds) = $92.50
- 3.56 lb. feed eaten/dozen eggs
- $13.99/50lb. bag = 35.7₵/lb.x3.56lb.=$1.27/dozen
- Labor & fuel for driving
- Equipment: feeders, cartons, waterers, bedding
- Farmer’s Market booth fees, Vet bills
- Price your eggs accordingly!
  - In MD you need a permit to sell or give away eggs
Biosecurity Is An Important Part Of Raising Birds
What is Biosecurity

“Bio” means life and “security” means protection

“Life protection”

• Any and all practices and protocols for the prevention of disease
• Why is it important?
  • To prevent the spread of disease
  • Maintain healthy flocks
  • Increase income
Elements of Biosecurity

- Isolation
  - Confine your birds within a controlled environment
    - Keeping other birds out
    - Locking doors to prevent others entering
  - Separating birds by age
- Traffic Control
  - Control traffic on and around your farm
- Sanitation
  - Disinfect material, equipment, and people that work or enter the farm
Isolation

• One of the best ways to accomplish this is to prevent people and animals from entering the farm
  
  • Limit access to farm
    • Fences or farm land
    • Gates
      • Place at all access points
      • Lock when no one is present on farm, gate can’t be monitored if seldom used
  
  • Signs
    • Place all access points
Signs

Biosecurity Area

STOP

No Admittance
Without Owner Permission

Telephone:

UNIVERSITY OF MARYLAND EXTENSION
Solutions in your community
http://extension.umd.edu/poultry
Predators Are A Problem
Predators

- Little chicks are very vulnerable to predators
- The list of predators is long but some to consider include:
  - Cats and dogs, they may be pets but they can see chicks as food if not properly supervised
  - Rats
  - Owls and raptors
  - Wild animals
    - Weasels, mink, skunks, opossums, bobcats, foxes, coyotes, and even bears will kill and eat chickens
Predators

• Most predation occurs at night so make sure your chicks are in their house and that it is shut tight to keep them safe
• Cover chicks in boxes or feed tanks with poultry wire to protect them
# Predators

<table>
<thead>
<tr>
<th>Predator</th>
<th>Signs</th>
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<tbody>
<tr>
<td>Coyote</td>
<td>Whole bird missing, with scattered feathers</td>
</tr>
<tr>
<td>Cat</td>
<td>Chicks or young birds missing</td>
</tr>
<tr>
<td>Dog</td>
<td>Birds usually mauled but not eaten</td>
</tr>
<tr>
<td>Fox</td>
<td>Whole bird missing, with scattered feathers</td>
</tr>
<tr>
<td>Hawk</td>
<td>Bird eaten on site, lots of feathers</td>
</tr>
<tr>
<td>Mink/Weasel</td>
<td>Dead birds neatly piled, back of head and neck eaten</td>
</tr>
<tr>
<td>Owl</td>
<td>Head and neck eaten, lots of feathers, sometimes whole birds missing</td>
</tr>
<tr>
<td></td>
<td>Happens at night</td>
</tr>
<tr>
<td>Opossum</td>
<td>Whole birds consumed feathers and all, sometimes leave only the wings or feet</td>
</tr>
<tr>
<td>Rat</td>
<td>Chicks or young birds missing, partially eaten chicks</td>
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<tr>
<td>Raccoon</td>
<td>Breasts and entrails eaten, backs bitten, scattered feathers</td>
</tr>
<tr>
<td>Skunk</td>
<td>Entrails eaten but not muscles or skin, lingering odor</td>
</tr>
</tbody>
</table>
Questions??

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