



## Raising Pastured Poultry

Revised 10/7/05

### Introduction

Raising pastured poultry, birds with access to vegetative land, has been growing among small scale farms. Meat is supplied to the family with surplus chicken sold at local markets or right off the farm. In New York, each family member can raise up to 1,000 birds and process them on farm.

Most producers buy chicks at a day of age and raise them for 3 weeks in a brooder before setting them out on the land. From 3 weeks to harvest weight, grazing areas should be rotated daily to avoid destroying the sod and build up of manure and bacteria in one place. Successions of flocks can be raised each year during warm weather. (spring to fall).

Broilers or fryers are slaughtered at 8-14 weeks of age when they weigh 6 to 10 pounds and dress at 70-75 percent. (ready-to-cook weight) Meat-type chicks are usually purchased on a straight-run (males and females mixed) basis.

### Breeds

Commercial meat strains have been developed from breeds such as the Cornish, Plymouth Rock and New Hampshire. Many pasture poultry producers are using crossbred chickens like the Cornish Cross (Cornish x Rock). Kosher King is a breed popular with small producers who prefer the flavor and hardiness of this breed. The Kosher King meat bird will grow slower than the Cornish cross, requiring 10 to 12 weeks to reach market weight. Other breeds such as White or Barred Plymouth Rocks and Rhode Island Reds are more often used for farm flock meat and egg production. These are considered less efficient meat birds, but good dual purpose breeds.



**Barred Rock**



**Cornish Cross**

### Feed Requirements

While on pasture, chickens will need a concentrate ration to meet their nutritional needs. Commercial mixes can be purchased from feed stores or custom mixes can be made from corn, soybeans and mineral/vitamin mix. Check the ingredient list if you are raising “natural” birds because commercial mixes often include medications to prevent coccidiosis.

It will take an average of 10 pounds of feed for a chick to reach market weight.

### Facilities

Chickens can be contained in floorless pens, one example, 10' x 12' x 2' pen will contain 75 to 90 broilers each. Smaller pens may be easier to move but in turn will hold fewer birds. These pens are constructed to be light-weight to

allow them to be moved daily by one person. The birds have access to forage and insects as well as a grain supplement and water in the pen.

Another option is to have birds on free range during the day, kept contained and safe by poultry netting. Shelter will be required to provide shade and protection from prey. At night the birds may be moved to a closed house to protect them from predators if adequate shelter is not available within the fenced area.

When the broilers reach harvest weight, finding a processor can be a challenge. With the financial help of grants, a Mobile Processing Unit (MPU) has been developed by the South-Central NY RC&D to help producers' process birds on farm. The unit can be towed by truck and is available for a small fee. For more information, contact: SoCNY RC&D, 99 North Broad Street, Norwich, NY 13815, 607-334-3231 ext. 4.

Cornell Cooperative Extension of Allegany/Cattaraugus County received a SARE grant to build a MPU. This unit can be borrowed by contacting: CCE, 5435A County Rd 48 Belmont NY 14813 1-585-268-7644 ext. 18.

Other mobile processing units have been made servicing local communities in western NY. For more information contact: Bill Henning, Extension Educator, 315-536-5123.

## **Handling and Labor Requirements**

### **I. Health**

The temperature where the baby chicks are raised should be 90 to 95 degrees F for the first week. Reduce the temperature 5 degrees per week until you get to 70 degrees. At this time they shouldn't need any additional heat. Try to provide ½ square foot per bird at the start.

Common bedding materials (litter) include wood shavings, rice hulls or ground cobs. Do not use sawdust or cedar chips as the birds may consume it instead of their feed.

The most common causes of sickness or mortality in pasture poultry are Ascites (Water Belly), respiratory problems, excessive heat, coccidiosis, necrotic enteritis, heart attacks and mineral deficiencies.

Poor air quality and temperature control contribute to birds either being too warm, showing signs of cannibalism, or too cold and stressed from temperature swings and showing signs of sinusitis or pulmonary hypertension. Chicks require a minimum 100% air exchange 6 times in a 24 hour period, meaning that steady continuous air movement is required for good health.

Coccidiosis and necrotic enteritis are both very easily controlled by keeping brooders clean and dry. Birds should be protected from wet, soiled surfaces by addition of bedding 2-3 times per day during the brooder stage. This is particularly important for natural or organic raised birds. Symptoms of these diseases including diarrhea, lifelessness, excess water consumption and pasty rear ends.

Heart attacks also known as sudden death syndrome (SDS), shows up as dead chickens on their backs with their feet straight up in the air. Although it is not known precisely what causes SDS, many experts believe it is heat and stress related. Be vigilant that birds have consistently good air quality where it is needed most: at "beak" level.

Mineral deficiencies show up in poultry as feet and leg problems. If your birds are showing signs of curly toe and/or spraddle leg, they may have riboflavin or manganese deficiencies in their feed source. A vitamin/mineral

supplementation to the water source will help to prevent these problems from occurring.

## II. Management

When buying chicks make sure to:

- Choose a hatchery nearby
- Arrange overnight deliveries (chicks in transit more than 1 day will have a much higher death loss) If receiving chicks by mail be sure to contact your post office to inform them in advance. If you are in a small rural town, you may want to have birds shipped to larger post office. It is worth the travel to assure birds are only in transit overnight.
- Make arrangements with supplier to replace chicks that are dead or weakened on arrival
- Research the parent stock to find hardiness for pasture raising

Newly arrived chicks will need to be raised in a brooder where adequate warmth, feed, air flow and water can be provided. Be sure each chick drinks upon arrival, water is more important than feed at this point in time. Weather permitting; birds can range outside on warm sunny days at 3 weeks of age. If wet or cold conditions prevent you from putting the birds outside, they can be introduced to pasture by placing clipped forage in the brooders.

### Pen designs:



Pasture Poultry Shelter

Design pen structure to allow for 2 square ft of ground space per 6 pound broiler. Proper space

allowances are needed to provide adequate ventilation on hot summer days.

Joel Salatin's pen has been the focus for pasture poultry enthusiasts. There are many modifications in construction of these movable pens to allow for lighter frames and ease of moving on steep terrain or rough pastures. Pen designs can be viewed in the newsletter "Grit!" published by the American Pasture Poultry Producers Association.

Poultry Net is an electrified netting material designed to keep poultry in, predators out and be easily moved. Examples can be viewed at: [www.premier1supplies.com](http://www.premier1supplies.com)

### Cornell Poultry Specialist

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### Level of Skill

#### Pros:

- Low capital investment
- Can start small and grow the operation
- Can be run by one person
- Kids can help
- Chickens can supplement other products available for on farm sales

#### Cons:

- Susceptible to predators
- Susceptible to weather
- Requires daily labor and intensive labor for processing
- Finding processing facility
- Seasonal (only during the grazing season)

### Animal Source

The following list is not complete. No endorsement is intended or implied for one company over another.

To purchase baby chicks:

Northeast Pasture Poultry Association  
 Ken & Jill Gies  
 680 Fordsbush Rd  
 Fort Plain, NY 13339  
 Tele: (518) 568-5322

Reich Poultry Farms  
 1625 River Road  
 Marietta, PA 17547  
 Tele: (717) 526-3411

Clearview Stock Farm and Hatchery  
 Box 399  
 Gratz, PA 17030  
 Tele: (717) 365-3234

Hoover's Hatchery, Inc.  
 PO Box 200  
 Rudd, Iowa 50471  
 800-247-7014

Murray McMurray Hatchery, Inc  
 Box 458  
 Webster City, Iowa 50595-0458  
 (515)832-3280  
 www.mcmurrayhatchery.com

**Market Availability**

Processed chickens can be marketed right off the farm directly to consumers, through established farmers markets or through local natural food stores. Each market has pros and cons. Talk with other pasture poultry producers to find the best markets for your area.

**Budget I**

<u>Income</u>	<u>amount/1000 birds</u>	<u>General estimate</u>	<u>Your estimate</u>
<b>Processed Broilers Kosher King</b>			
❖	950 birds@ 4.5 lbs x \$2.00/lb (Initial 1000 minus death loss)	\$8550	_____
	<b>Gross income/1000 birds</b>	<b>\$8550</b>	_____
<b><u>Expenses</u></b>			
❖	Grain (10000 lbs x \$380/ton)	\$1900	_____
❖	Mobile pens (need 4 pens, lifespan 4 years)	\$200	_____
❖	Processing \$2.00/bird	\$1900	_____
❖	Purchasing chicks (\$.80/chick)	\$800	_____
❖	Brooder & electricity	\$150	_____
❖	Vitamin/mineral supplement, misc	\$100	_____
	<b>Operating cost/1000 birds</b>	<b>\$5050</b>	_____
	<b>Net receipts/1000 birds</b>	<b>\$3500</b>	_____

## Budget II

<u>Income amount/1000 birds</u>	<u>General estimate</u>	<u>Your estimate</u>
<b>Processed Broilers Cornish Cross</b>		
❖ 950 birds@ 5.5 lbs x \$2.00/lb (Initial 1000 minus death loss)	\$10450	_____
<b>Gross income/1000 birds</b>	<b>\$10450</b>	_____
<b>Expenses</b>		
❖ Grain (10000 lbs x \$380/ton)	\$1900	_____
❖ Mobile pens (need 4 pens, lifespan 4 years)	\$200	_____
❖ Processing \$2.00/bird	\$1900	_____
❖ Purchasing chicks (\$1.05/chick)	\$1050	_____
❖ Brooder & electricity	\$150	_____
❖ Mineral/vitamin supplements, misc	\$100	_____
<b>Operating cost/1000 birds</b>	<b>\$5300</b>	_____
<b>Net receipts/1000 birds</b>	<b>\$5150</b>	_____

### For More Information

Small Farms Program  
135c Plant Science Building  
Cornell University, Ithaca, NY 14853  
[www.smallfarms.cornell.edu](http://www.smallfarms.cornell.edu)

### ATTRA

Appropriate Technology Transfer for Rural Areas, P.O.  
Box 3657, Fayetteville, AR 72702  
<http://www.attra.org/livestock.html>

American Pastured Poultry Producers Association  
<http://www.apppa.org/>

THE COOP - Resource on Raising, Breeding, and  
Showing Poultry  
<http://www.the-coop.org/index.html>

“Chicken Tractor,” by Andy Lee and Patricia Foreman  
Good Earth Publications, 540-261-8874  
[www.GoodEarthPub.com](http://www.GoodEarthPub.com)

“Pasture Poultry Profits: Net \$25,000 in 6 Months,” by  
Joel Salatin, 800-355-5313, [www.acresusa.com/books](http://www.acresusa.com/books)

“Range Poultry Housing”  
<http://attra.ncat.org/attra-pub/PDF/poulthous.pdf>

Maryland Small Ruminant Page  
[www.sheepandgoat.com](http://www.sheepandgoat.com)

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