

# Small and Midsize Chicken Production

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- Three Brothers Farm and Orchard



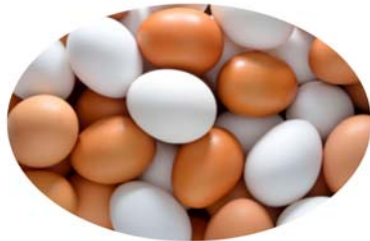
# Talk Overview

- Poultry Rearing Goals
- Housing
- Feed
- Your first Flock
- How/Why we raise chickens



# Poultry Rearing Goals

- Home use or Sale?
- Eggs or Meat?
- Species?
- Local Laws?



# Chicken economics

- \$2 per chick
- \$0.15-\$0.35/lb feed cost
- Meat feed conversion: 2:1, 3:1, 6:1?
- Egg feed conversion 3lbs/dozen eggs
- 400-600 lifetime egg production (2.5 years)

## Chicken economics: Meat

- \$2 Chick
- 4 lb living/3 lb dressed weight
- \$0.20/lb feed and 1:3 conversion
- \$1.00 for housing, electricity, water...
- 4 lb chicken \* 3 lbs feed = 12 lbs feed = \$2.40
- \$2.00 + \$2.40 + \$1.00 = \$5.40 per 4 lb living
- \$5.40/3 lbs dressed = \$1.80/lb production cost

## Chicken economics: Meat

- \$2 Chick
- **DOES NOT INCLUDE LABOR!!**
- **DOES NOT INCLUDE ATTRITION!!**
- 4 lb chicken \* 3 lbs feed = 12 lbs feed = \$2.40
- \$2.00 + \$2.40 + \$1.00 = \$5.40 per 4 lb living
- \$5.40/3 lbs dressed = \$1.80/lb production cost

## Chicken economics: Eggs

- \$2 Chick
- \$0.20/lb feed and 1:6 conversion... 6 lb adult weight
- \$3.00 for housing, electricity, water...
- 6 lb chicken \* 6 lbs feed = 36 lbs feed \* \$0.20/lb = \$7.20
- \$2.00 + \$7.20 + \$3.00 = \$12.20 per bird

## Chicken economics: Eggs

- Egg feed conversion 3lbs/dozen eggs
- 360 eggs = 30 dozen \* 3lbs feed /dozen = 90 lbs feed \* \$0.20/lb= \$18
- \$2.00 + \$7.20 + \$18 = \$27.20
- \$27.20/30 dozen eggs = \$0.91 dozen in production cost

# Chicken economics: Eggs

- Egg feed conversion 3lbs/dozen eggs
- **DOES NOT INCLUDE LABOR!!**
- **DOES NOT INCLUDE ATTRITION!!**
- \$27.20/30 dozen eggs = \$0.91 dozen in production cost

# Chicken Housing



- Permanent or Movable?
- Free range or Enclosed?
- Expensive or Cheap?



# Chicken Living Requirements

- Mid size and large adult breeds 0°-90°F
- Chicks need 90° F for first several weeks!
- Day length >14 hrs to maintain egg laying
- Constant access to food and water
- Good ventilation but protection from moisture
- Protection from predators
- >1.5 ft<sup>2</sup>/adult indoor space
- >4 ft<sup>2</sup>/adult outdoor space

# Permanent Housing

## Pros

- Easier to predator proof
- Provide more insulation
- Opportunity to run power and water
- Often "Prettier"

## Cons

- Can be expensive
- Locks you to one location
- Makes rotational grazing difficult

# Movable Housing

## Pros

- Can be very cheap
- Great ventilation
- Makes rotational grazing easy

## Cons

- Less insulation (winter months)
- Difficult to run power and water
- Typically ugly!

# Feed

- Conventional or Organic?
- Commercial or local?
- Soy free?
- 18-20% protein for mature birds/layers
- 20%-22% protein for chicks and meat birds

# Your First Flock

- Chicks or Pullets?
- Breeds?



# Typical Egg Breeds

- White Leghorn: 300-400 eggs/yr small bodied
- Brown Leghorn: 250-350 eggs/yr small bodied
- Arucana: 200-300 eggs/yr large bodied



# Typical Meat Breeds

- Cornish Cross:  
2:1 feed conversion  
"Chesty" 6-9 wks
- Freedom Ranger: 3:1 feed conversion  
"Leggy" 9-12 wks



# Dual Purpose Birds

- Barred Rock
- Rhode Island Red



# Chickens at Three Brothers Farm

- We raise chickens for eggs and meat
- Mixed breeds for layers
- Cornish Cross for meat
- 100% mobile housing



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# Benefits of Mobility

- Animal Welfare
- Maintenance of fresh pasture
- Pest Management!
- Fun!

# Benefits of Mobility



# Summer vs. Winter Needs

- Protection from the elements
- Protection from predators



# Mobile egg laying designs

- Enclosed roost/laying box + "hoop" enclosure
- Built on skids to allow easy movement
- Conduit is superior to PVC pipe
- Solid structure can be built from wood, siding, etc.



## Mobile meat bird designs

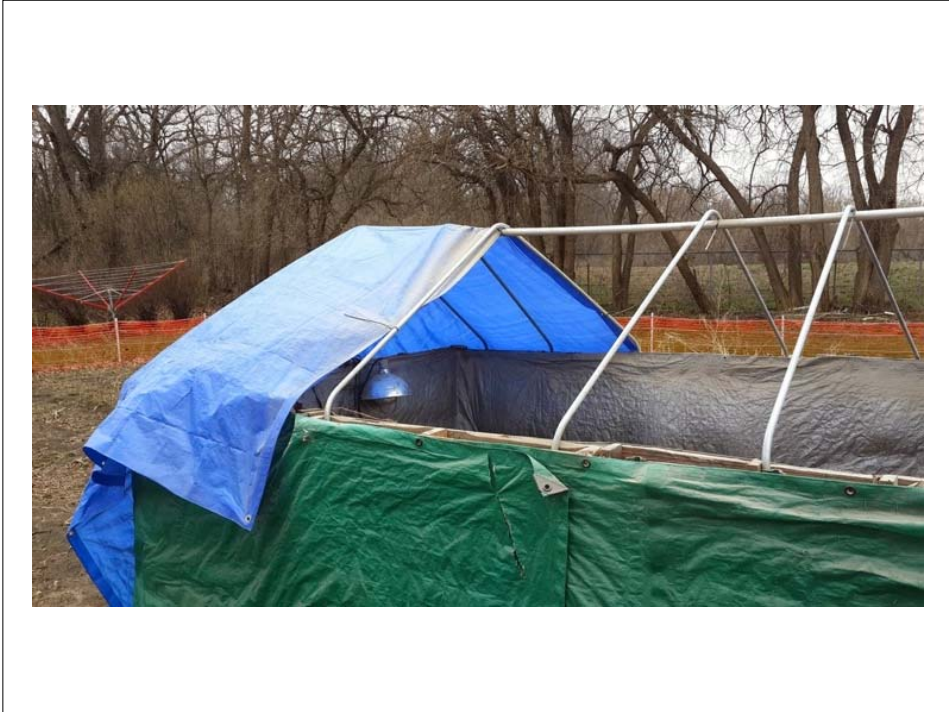
- Lightweight
- Low profile
- No enclosed spaces —use tarp for weather proofing
- Water and feed accessible from outside



## Winter housing

- Built in place
- Insulated walls
- Deep bedding system









# Chicken Behavior

- You can chase chickens
- Or let them chase you....

# Chicken Behavior



# Neighbors....

- Make friends with your neighbors
- Provide them eggs... involve them in the process!