Raising Poultry In Small Flocks

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OSU

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Our Direction Today

Discuss poultry production

Small Scale

Hobby and/or Commercial Poultry Production

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Getting Started

What do you want to produce?

Eggs, Meat, Feathers, Pelts, Breeding Stock, Fancy birds, …

Identify Hobby or Market

Select the birds to satisfy

Standard Breeds or Crosses

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What breed should I raise?

Exhibition	>400 breeds and varieties
Recreation	Standard breeds and crosses
Meat	Few breeds and crosses
Eggs	All breeds

Economic meat production

Cornish Cross

Economic egg production

White Eggs SCWL

Brown Eggs Production Red

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Urban Poultry Considerations

City Ordinances

Each jurisdiction is different

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Poultry in Eugene

If the property is less than 20,000 square feet in area, any two of the following four categories of animals are allowed:

1. **Chickens and Domestic Fowl (quails, pheasants, ducks, pigeons, and doves). Up to 6 over six months of age and 6 under six months of age. No roosters, geese, peacocks, or turkeys allowed.**
2. **Rabbits. Up to 6 over six months of age and 6 under six months of age.**
3. **Miniature Goats (pygmy, dwarf, and miniature goats). Up to 3 provided that males are neutered.**
4. **Miniature Pig. One up to 150 pounds.**

If the property is 20,000 square feet or greater in area, please contact Land Use staff at 541-682-8336 or landuseinfo@ci.eugene.or.us for additional animal allowances, honey beehive allowances, and setback requirements.

Eugene

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Poultry in Springfield

(1)The keeping of fowl and poultry shall be limited to the following:

# of Adult Animals	Minimum Lot Size
1-4	None
5	10,000 square feet
6 or more	+1,000 square feet/each animal

The number of permitted young shall be limited to three times the number of permitted adult animals.

(2)Roosters over the age of six months are not permitted.

(3) The offenses specified in subsections (1), (2) and (3) are also punishable as a violation and may include a fine not exceeding $720.00 pursuant to SMC section 1.205. [Section 5.408 amended by Ordinance No. 6169, enacted May 15, 2006.]

Springfield OREGON
PROUD HISTORY, BRIGHT FUTURE

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Urban Poultry Considerations

Regulations vary:

- No livestock (including poultry)
- Specific number of chickens (3 to 6)
  - Number may vary based on lot size
- No Roosters
- Etc.

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Urban Poultry Considerations

Space Requirements:

1 sq. foot per pound of body weight
for permanent indoor confinement areas

3 cubic feet of air (total enclosed space) per pound of body weight for permanent indoor confinement quarters.

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Urban Poultry Considerations

Set Backs

Check your city regulations

Property line setbacks vary

No matter what:

Be a good neighbor.

.

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Urban Poultry Considerations

Be careful when allowing chickens to roam free. Check ordinances.

Keep them on your property

Store feed in rodent proof containers.

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Urban Poultry Considerations

Clean litter and animal waste on a regular basis and dispose of promptly and properly.

Appearance and Property Values

Noise, Flies and Odors

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Urban Poultry Considerations

Finally,

Problems are complaint driven:

Strong fences
make good neighbors

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The Birds

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What kinds of chickens should I get?

Egg layers

Cross Breds

Pure Breds
(Fancy Chickens)

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Standard Breeds

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Best Production Breeds

Eggs

Meat

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Large Fowl vs. Bantams

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Genetic Mutations

Commercial or Heritage?

Abbreviated Definition: A ***Heritage Egg*** can only be produced by an American Poultry Association Standard breed. A Heritage Chicken is hatched from a heritage egg sired by an American Poultry Association Standard breed established prior to the mid-20th century, is slow growing, naturally mated with a long productive outdoor life.

The American Livestock Breeds Conservancy, 2013

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Breed Crosses

“Sex-Links”

Cross between two American Heavy Breeds

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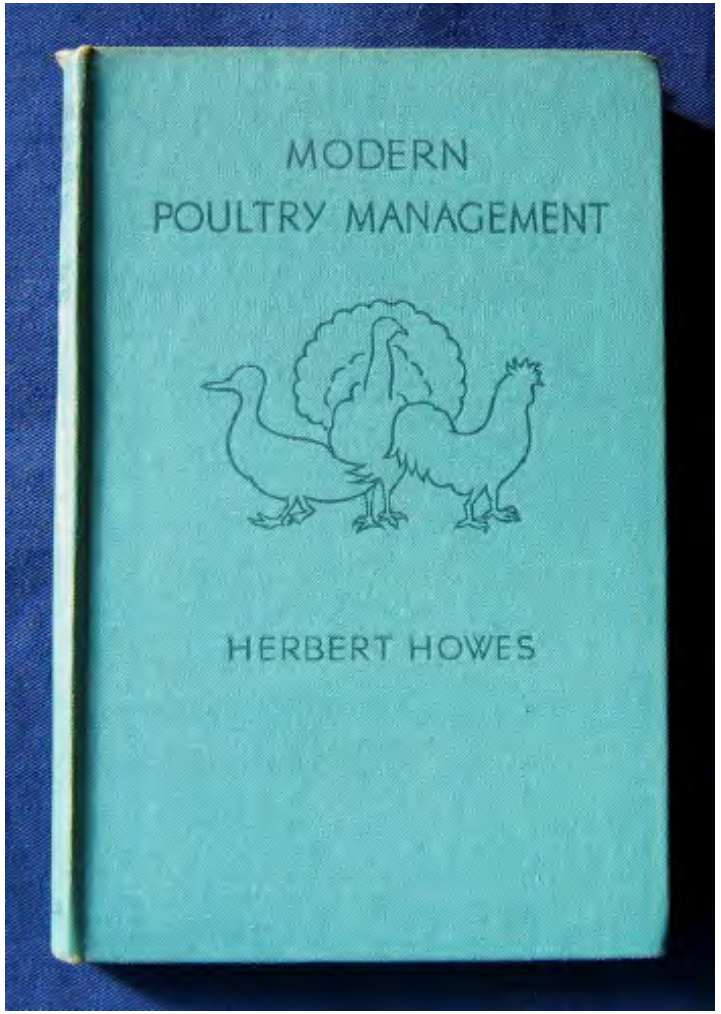
Poultry Management

Standard
Free Range
Pastured
Organic…



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Important Note:

Free Range or Pastured ≠ Organic

- Organic means
  - No synthetic feeds or additives
    - Trace minerals and vitamins OK
  - No or limited pharmaceuticals
    - Vaccines OK
  - Certain management conditions
    - Accommodate natural behaviors
    - Density
    - Outside

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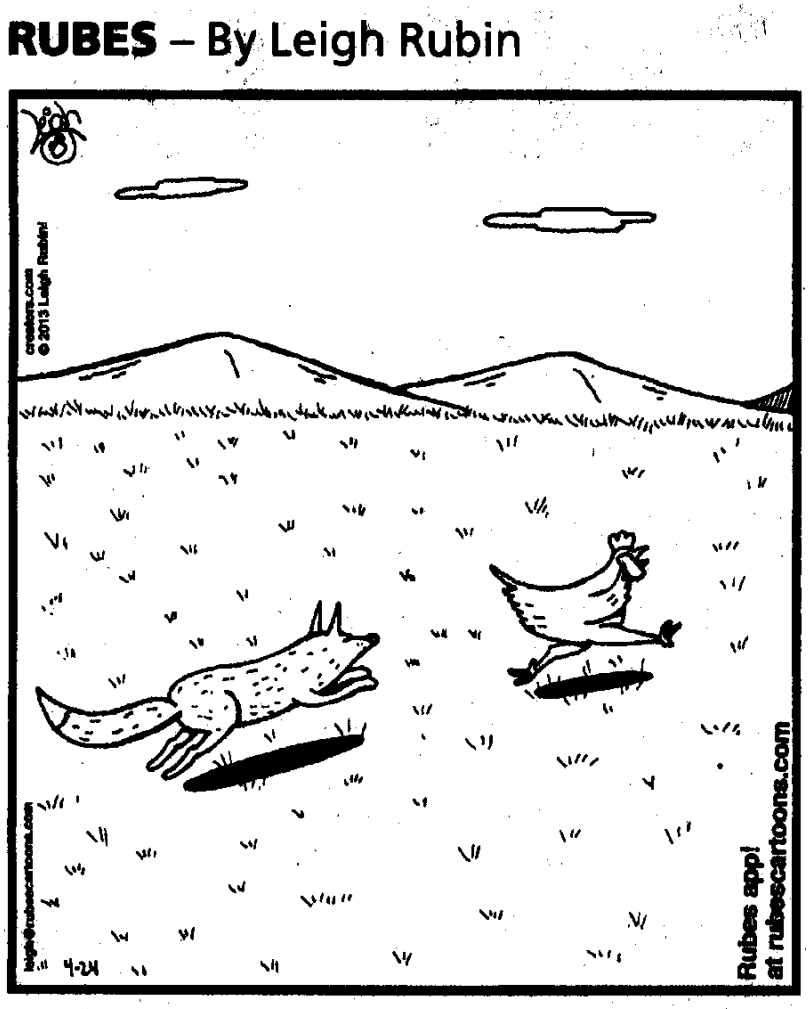
Management

What do birds need?

Feed
Water
Protection
- *Environment*
- *Predators*
- *Disease Causing Organisms*



"Oh, not much, just re-evaluating the health benefits of living cage-free."

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Obtaining Chicks

Feed store (mid March – mid May)

- Ask for source

Mail order

- Ask for Vaccinated Stock
- NPIP
- Pullets only

Hatch your own

- Broody Hen or incubator

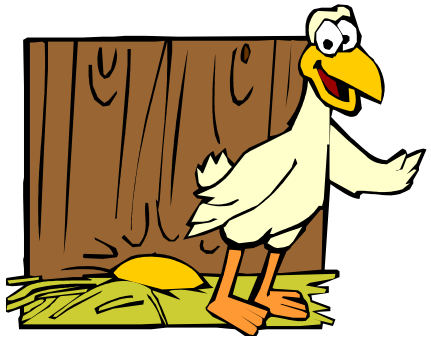
Male

Female

Requirements of brooding

Before placing birds

Bedding (litter)



Agricultural waste products

Characteristics of a good bedding.

2-4 inches on floor

Soft
Absorbent
Insulator
Doesn't Pack
Non-Toxic
Inexpensive
Available

Shavings (soft wood)
Sawdust from sawmill
Chopped grass straw

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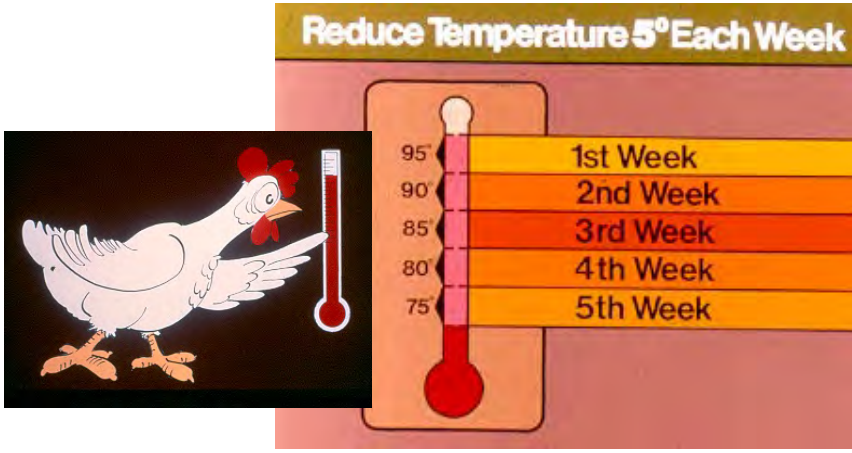
Placing Chicks – Brooding



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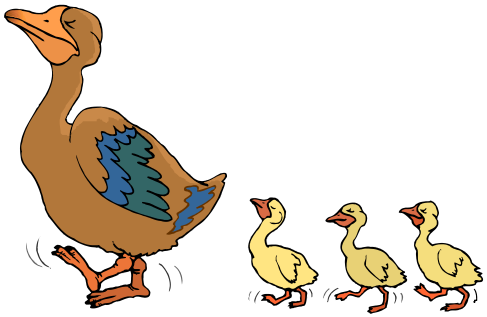
Heat

Warm-blooded (endothermic or homeothermic)

At hatch –

Incomplete homeotherms

Chicks require supplemental heat



3-8 weeks (depending on conditions)

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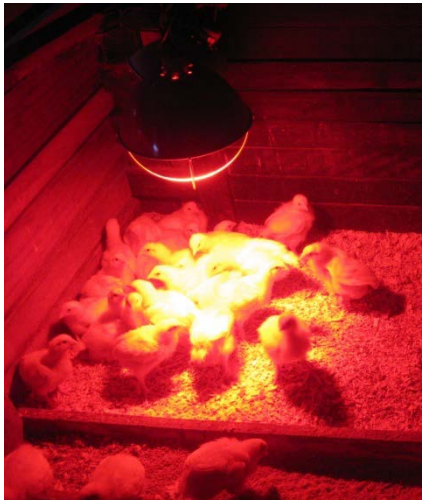
Source of Heat

Most common

- Heat lamps (high cost per bird)
- Non-coated bulbs only
- White vs. Red lights



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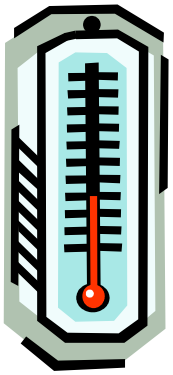
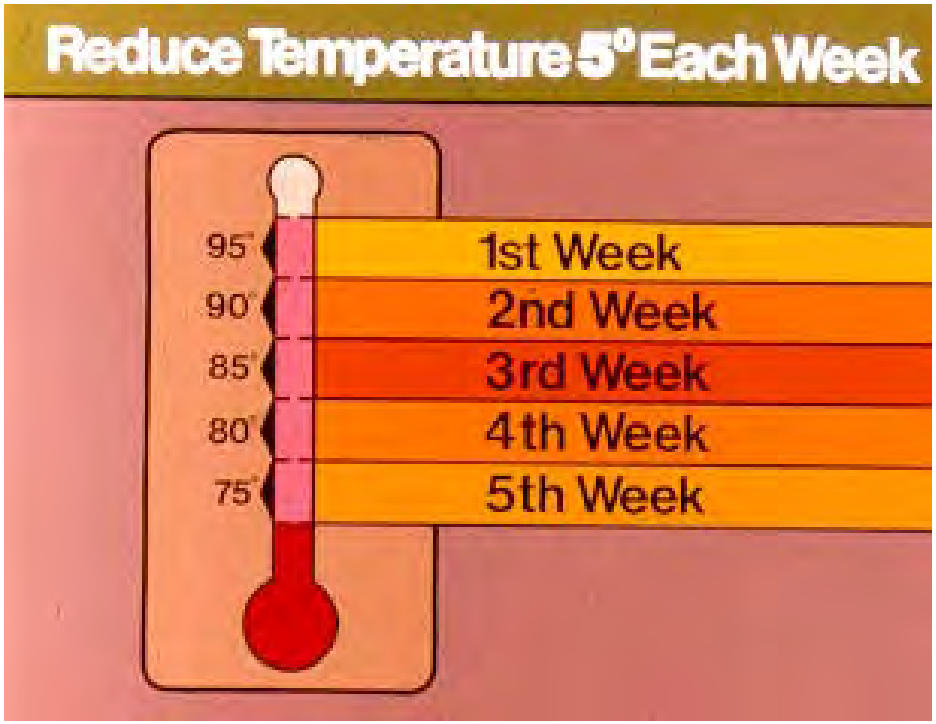
Brooding Temperature Rule of Thumb





95 degrees start

lower 5 degrees per week

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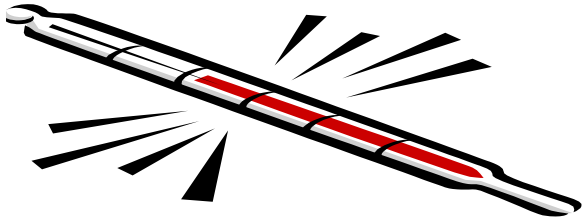
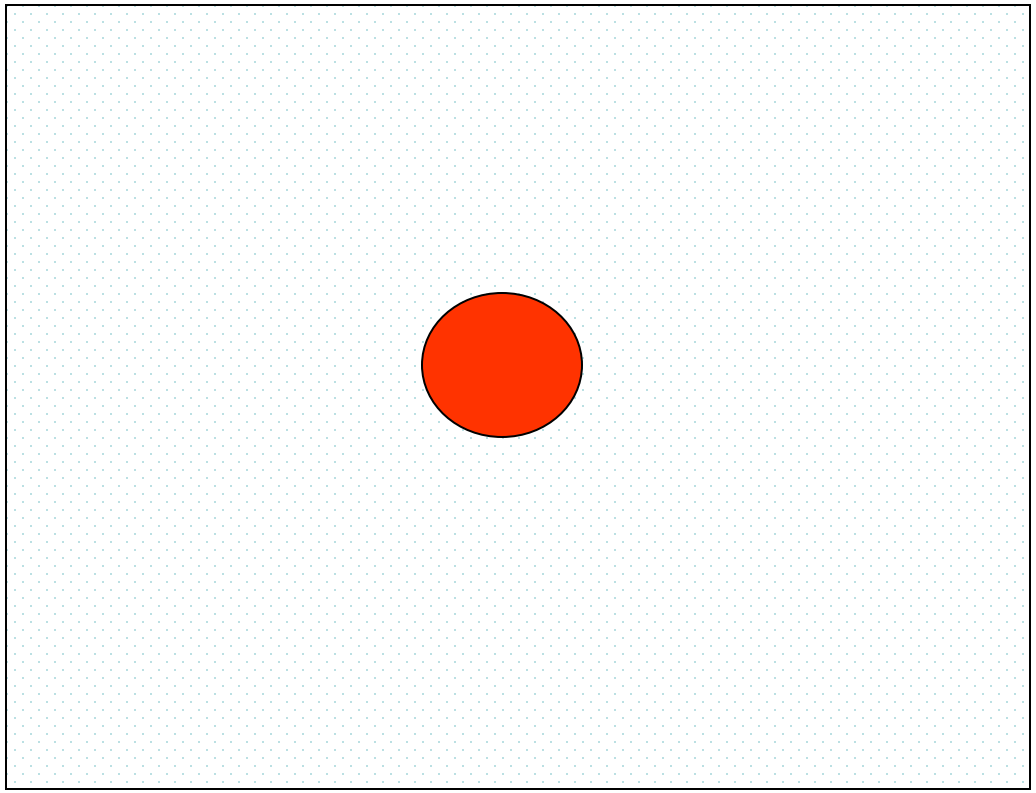
Heat Placement



Warm and Cooler areas



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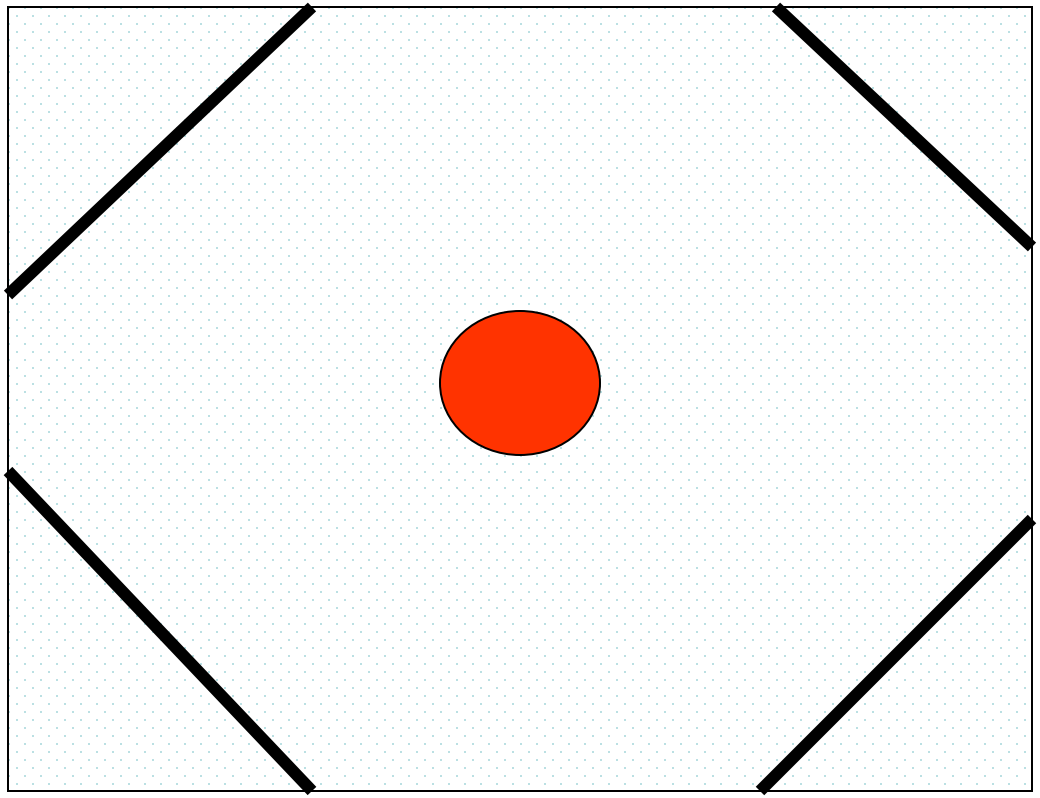
Containment

Chicks sometimes get lost

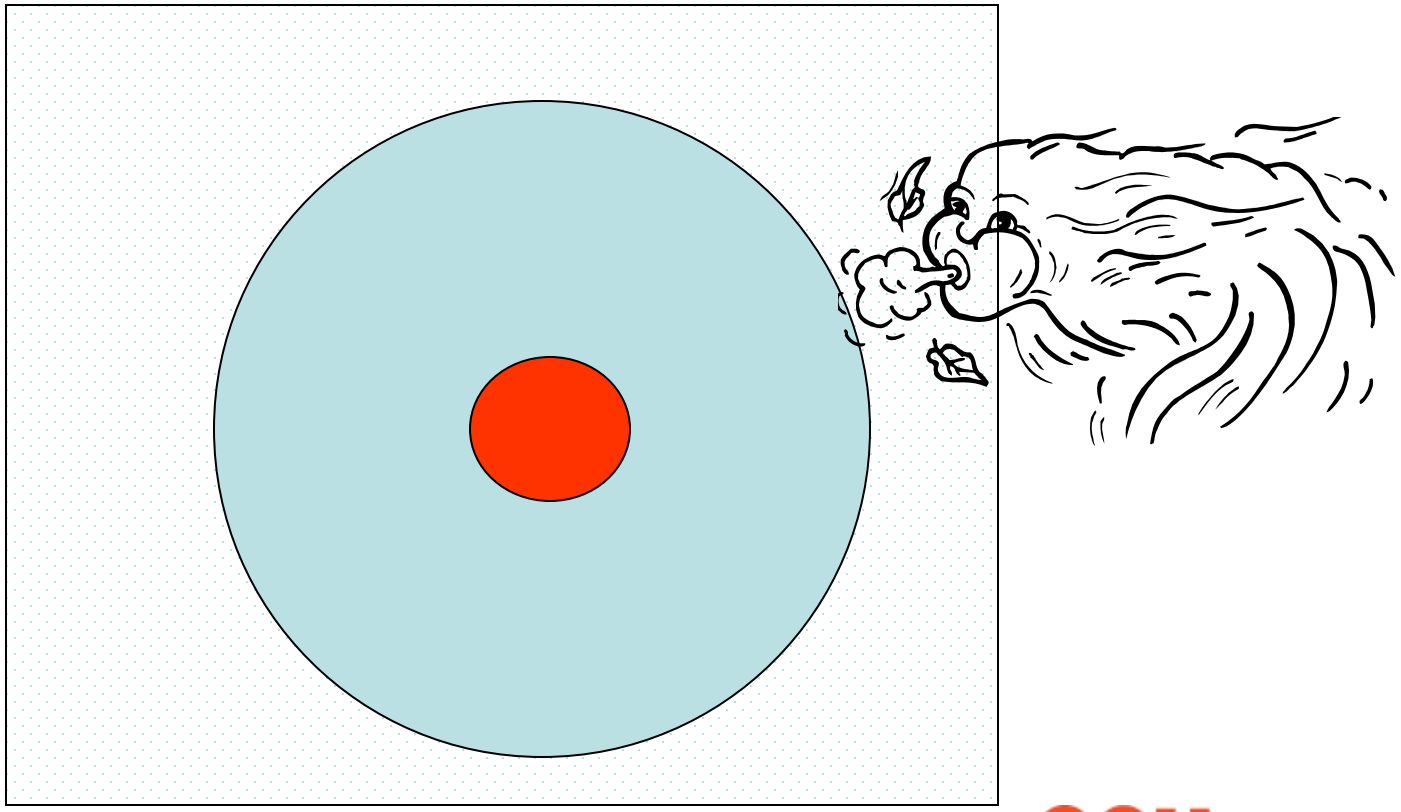
Corner Guards may be sufficient



Containment

Chicks sometimes get lost

Draft Shield (brooder guard)



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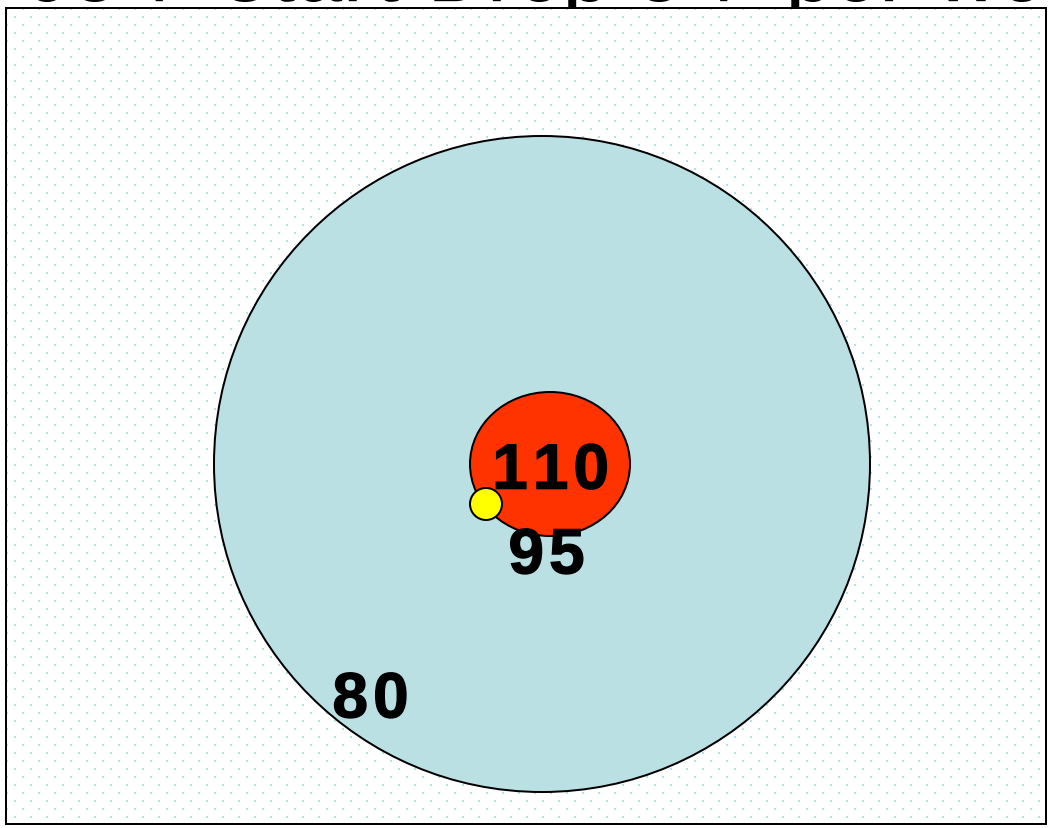
How much heat?

Rule of thumb

95ºF Start Drop 5ºF per week



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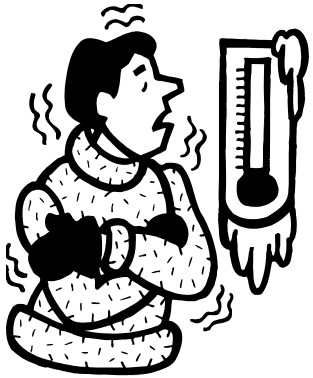
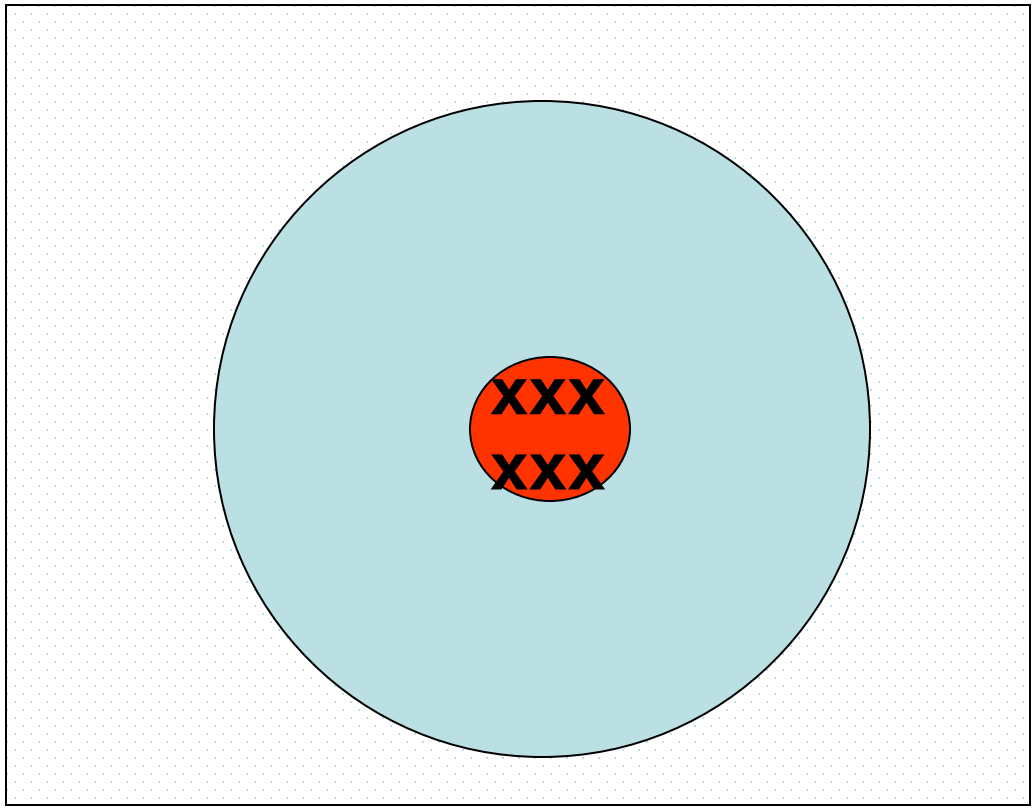
How much heat?

Chick Behavior

Too Cold





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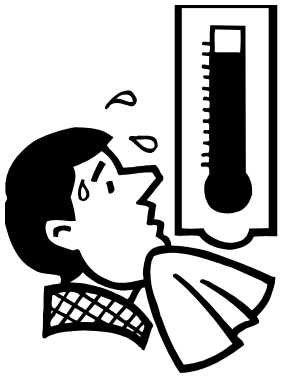
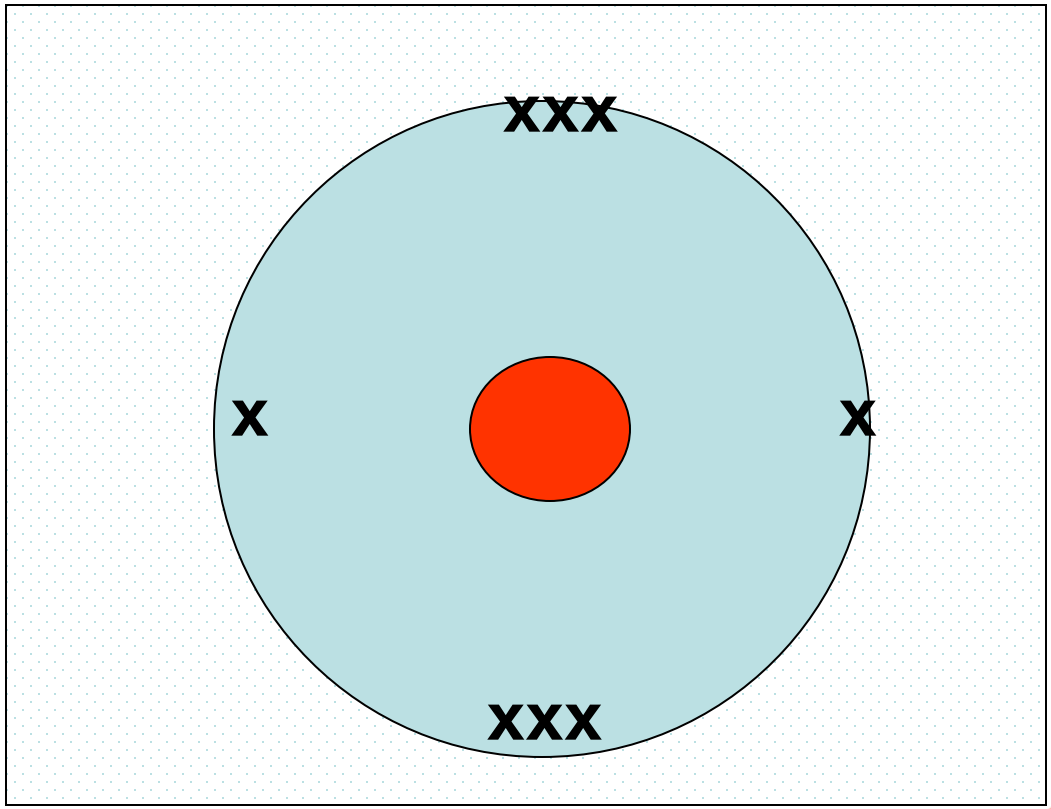
How much heat?

Chick Behavior

Too Hot





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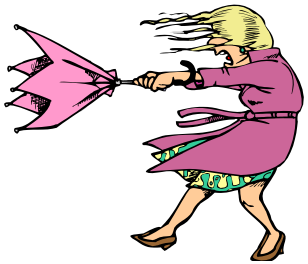
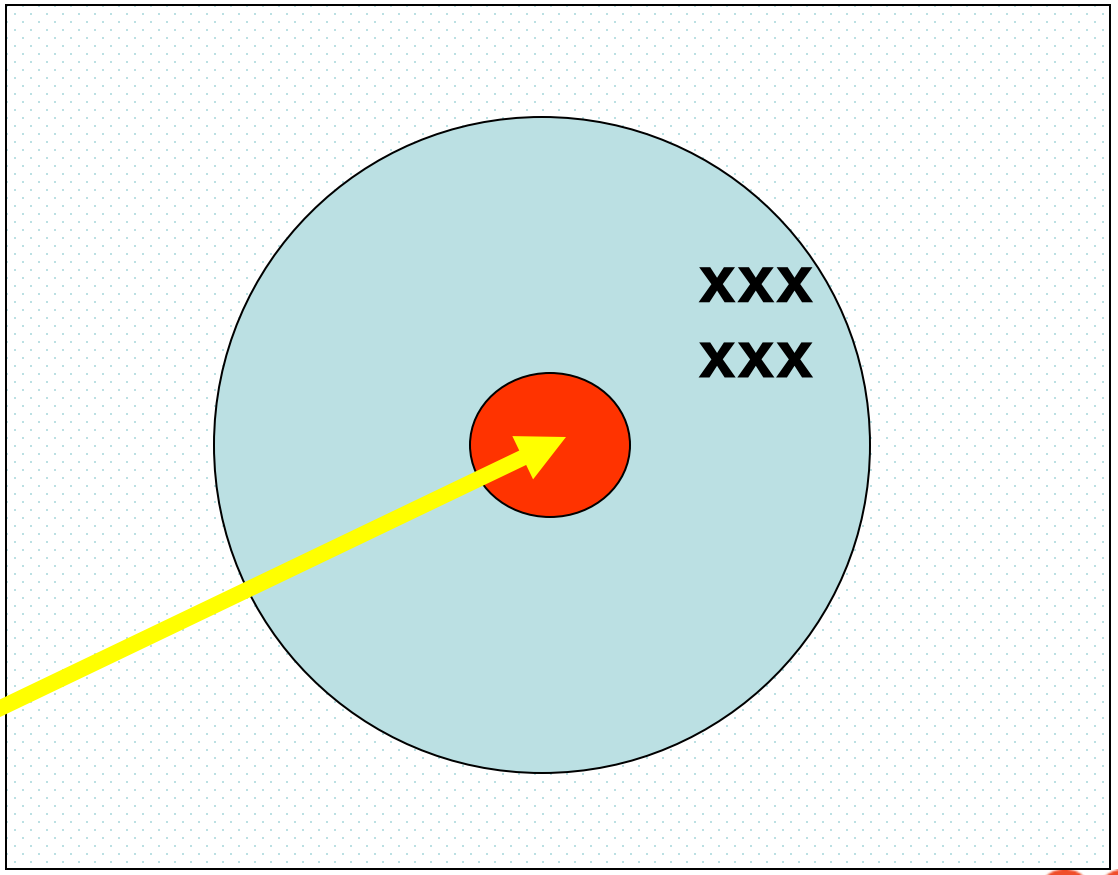
How much heat?

Chick Behavior

Too Drafty





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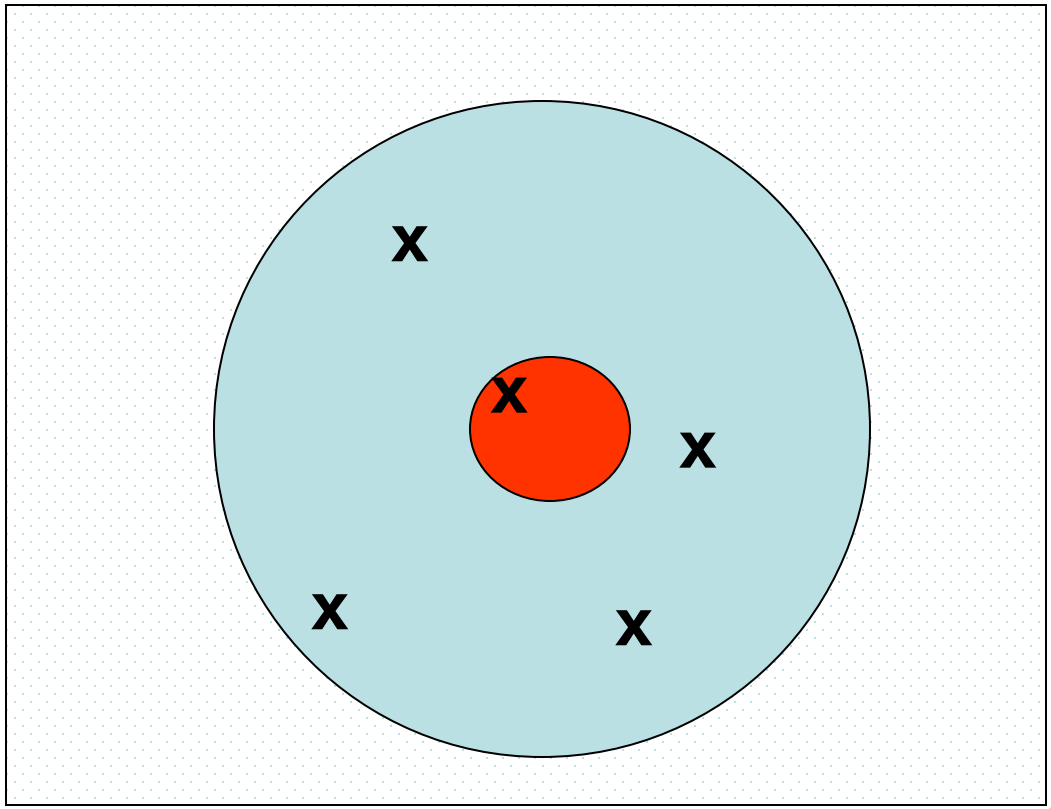
How much heat?

Chick Behavior

Just Right



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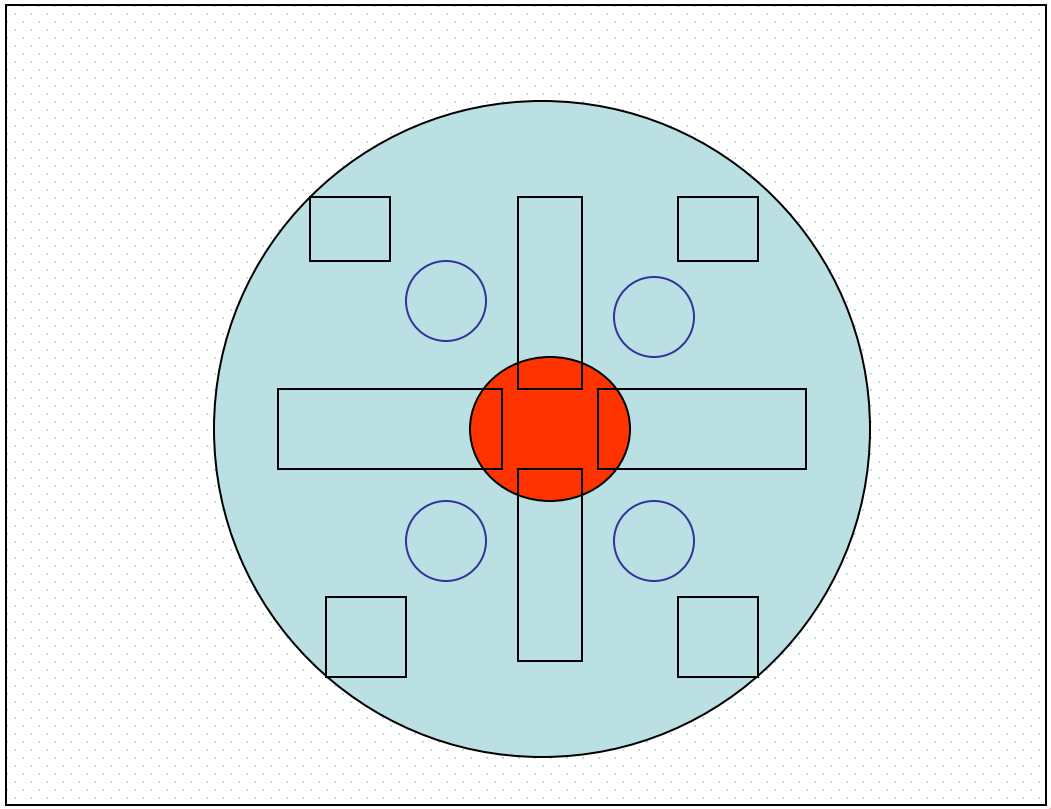
Brooder Setup
Feed and Water

Troughs

“Box Lids”



Quart and/or Gallon Jugs

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How Much Feed and Water Space

So all can eat and drink at same time

Increase space with age and Bird size

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Ventilation Exchanging air

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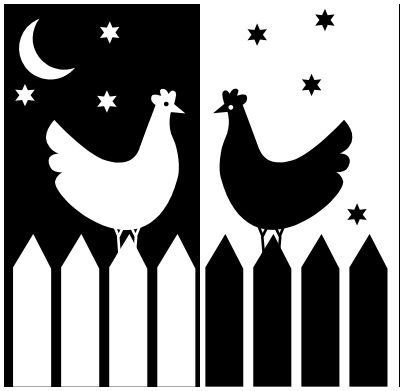
Light

Color

Intensity

Photoperiod



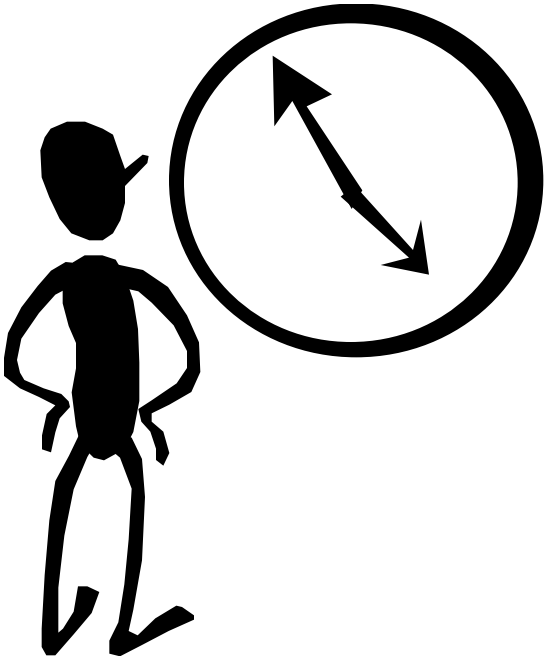
Daylength or Day vs. Night

Hours of Light in 24 hours

Circadian Rhythms

Long days = Egg Production
Short days = No Egg Production

12 Hours



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Light for Layers

Photoperiod most important for Layers

Keep them natural daylength until 17 to 18 weeks

Keep them on long daylength (> 12 hrs/day) for egg production

- Low intensity white light

Allow birds to pause/molt during 2nd winter

- Natural light mid Nov to late Dec (short days)
- Long days after

Natural Day Lengths
Grants Pass, OR

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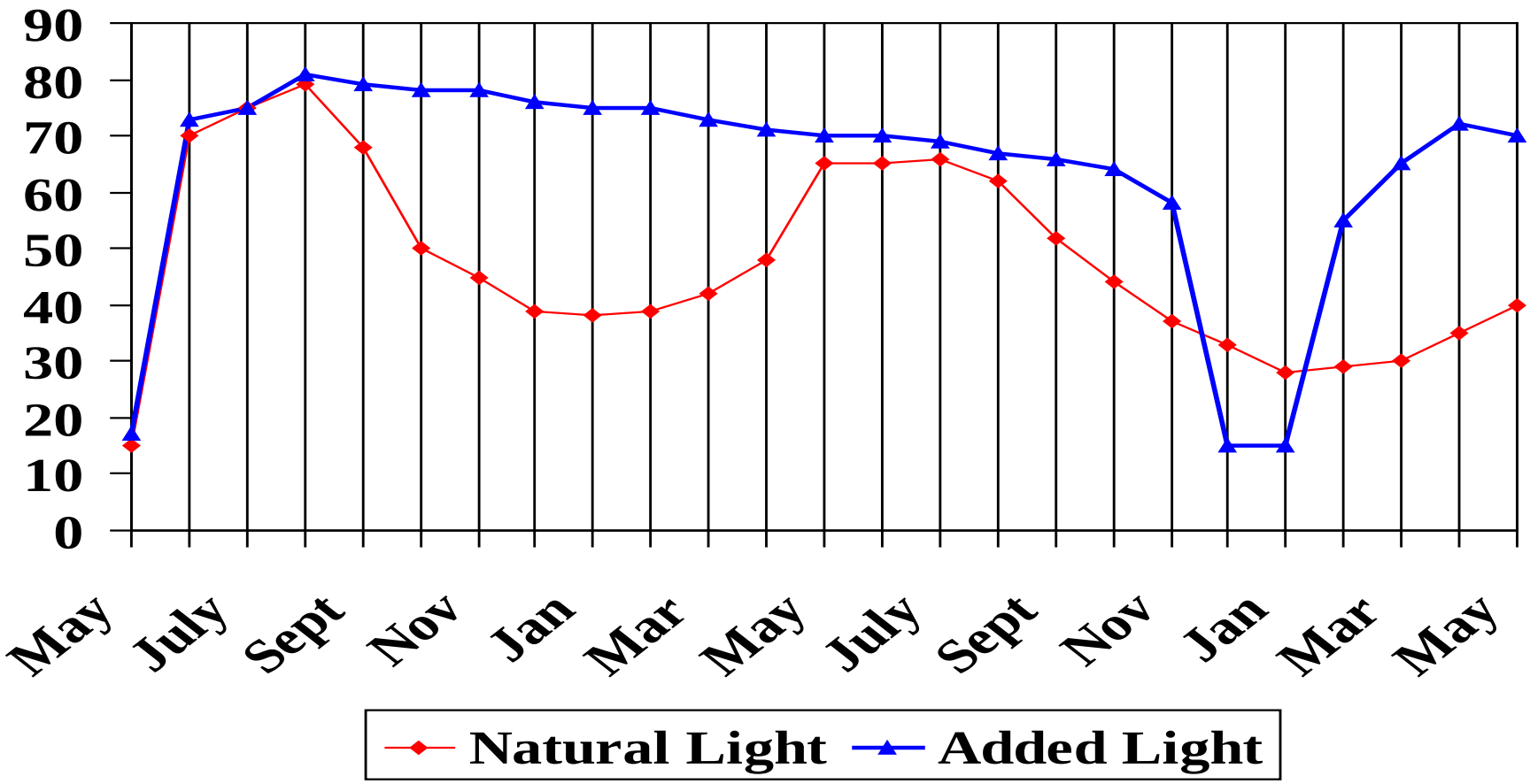
Production cycles – natural light



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Other Management Items

- Housing
- Nests
- Roosts
- Picking Control
- Coccidiosis
- Parasites
  - Internal *Worms*
  - External Mites and Lice

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Nests

Concentrates eggs for collection
Keeps eggs cleaner

1 nest (1'x1') for every 4 hens

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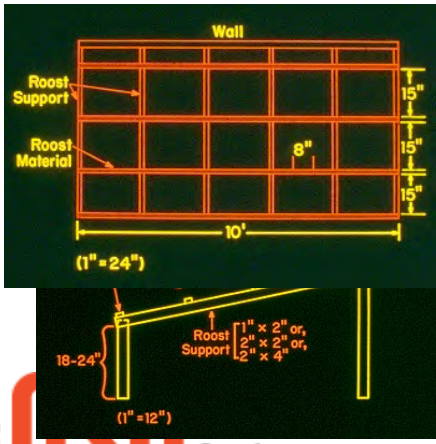
Roosts

Concentrates night time droppings

Less stressful place for birds to sleep

18” – 36” off the ground

Enough space for all birds



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Picking

Aggressive Behavior

Localized feather loss

Nearly always picking

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Cold Weather can result in -

Frostbite

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Coccidiosis

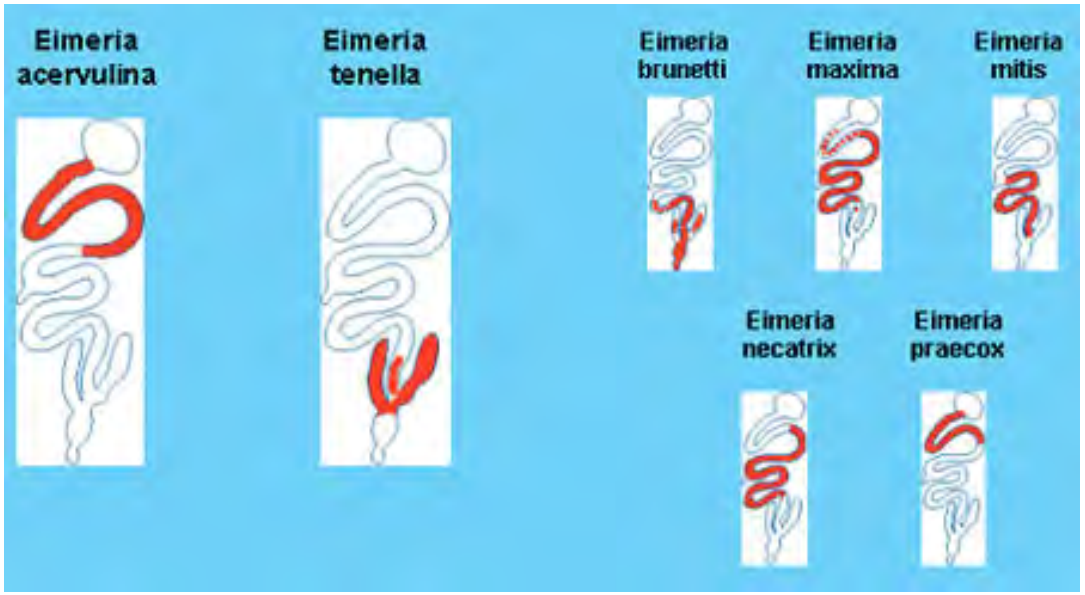
Protozoal Disease – Emeria sp.
7 species of concern.

Treatment – Feed medicated feeds to young chicks.

Older birds – Drugs available – usually no necessary in older birds.

Prevention:

Management
Immunity



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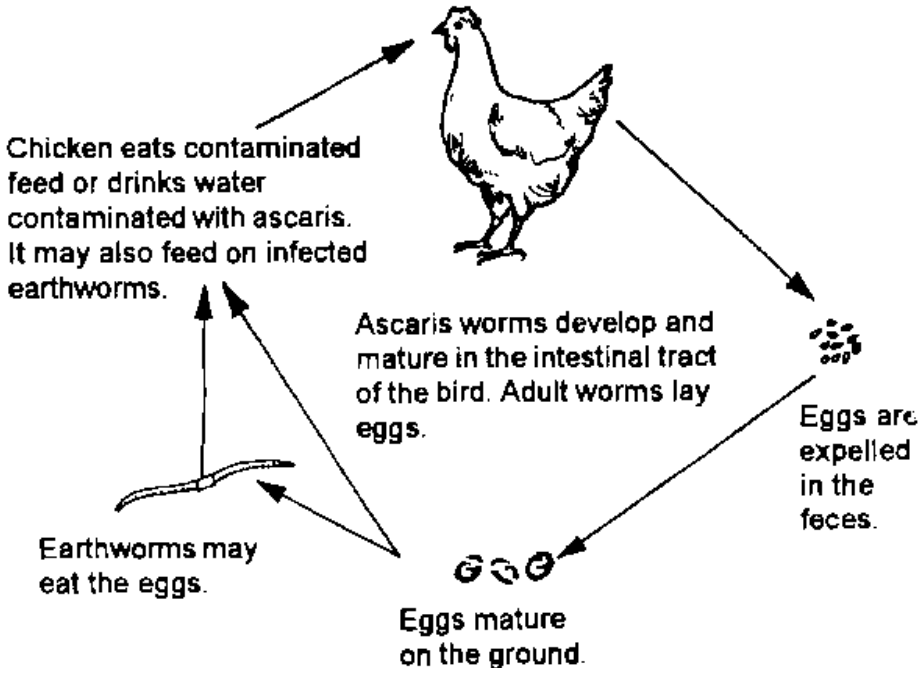
Worms and Worming

Round Worms

Tape Worms



Diagnosis:

- Apparently healthy
- Big appetite
- Thin birds

Treatment:

- Dibutyl dilaurate
- Piperazine

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External Parasites
Mites

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External Parasites
Lice

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External Parasites Control

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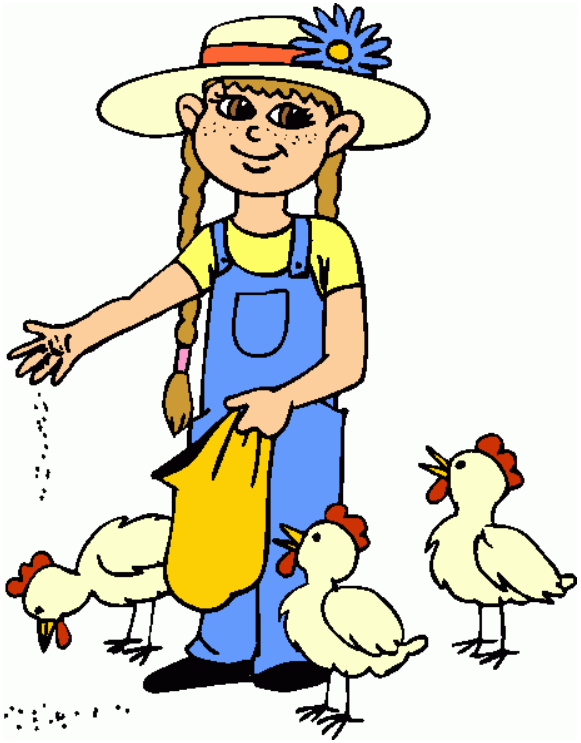

Feeding

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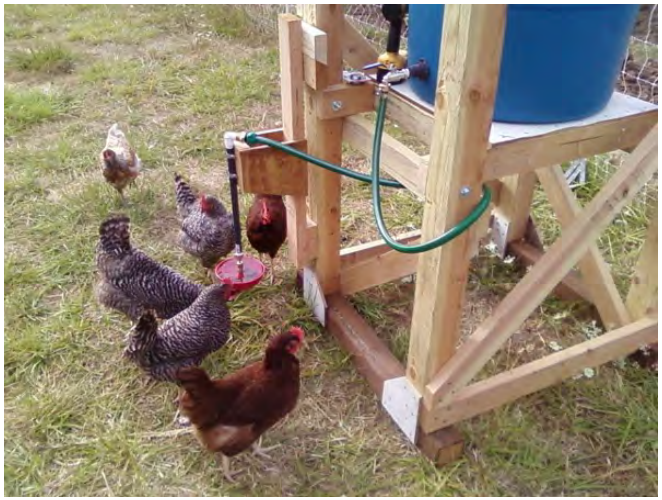

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Available Prepared Diets

Starter	**Chick diet**
Grower / Developer	**Juvenile diet**
Layer	**Birds in production**

Nutrient levels based on Species/Breed
Layers, Broilers, Turkeys, Gamebirds…

Scratch*	**Corn / Wheat**
Oyster Shell	**Layer – shell quality**
Grit	**"Teeth"**
Balanced diet	**All needs at proper levels**

***Not a balanced diet**

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Form of Feed

Mash Crumble Pellet

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Supplementing Prepared Diets

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Water

Rule of Thumb

2:1 water to feed

Increases and decreases with ambient temperature

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Typical Pastured Diets

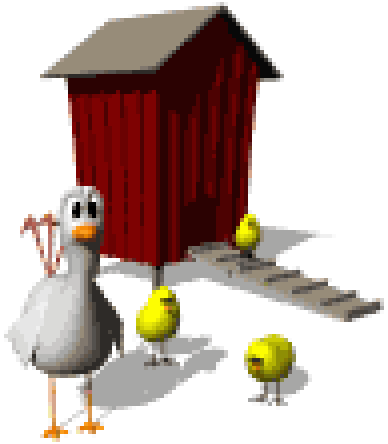
(Salatin)

Corn Meal	60.5%
Peanut Meal	11.5
SBOM	6.6
Roasted Soy	5.6
Meat and Bone	6.9
Fish Meal	3.9
Alfalfa Meal	2.6
Kelp Meal	1.5
Brewer's Yeast	0.67
Probiotic	0.26

(Wieck)

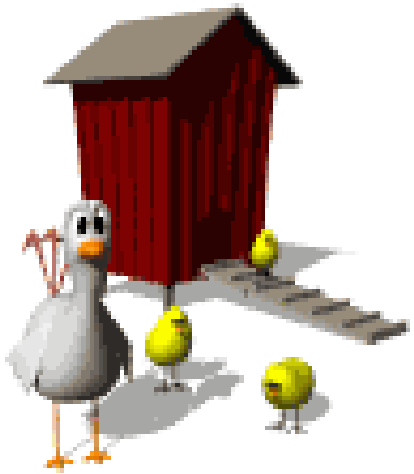
Triticale	69.8%
SBOM	24.9
Alfalfa	4.7
Calcium	0.3
Vit Pak	0.1
XP4 Phosphorus	0.2


Pastured Poultry ?
Most small flocks
would be considered pastured!



What is Pastured Poultry?

Production of poultry so that they have ready access to pasture during their growth and production phase of life.



Further than “Free Range”

FREE RANGE or **FREE ROAMING:**

Producers must demonstrate to the Agency that the poultry has been allowed access to the outside

USDA (FSIS) Web site 2011

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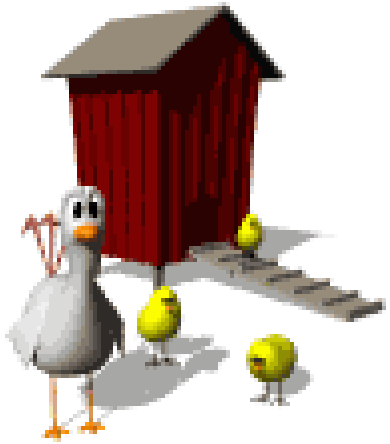

Pastured Poultry ≠ Organic

Some growers produce“Organic” Poultry

Others do not

USDA Organic Standard

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What is the real difference?

Birds have more space

Fresh air and sunshine (rain)

After 3 weeks of age

- Clean bedding daily
- Grass, seeds, insects

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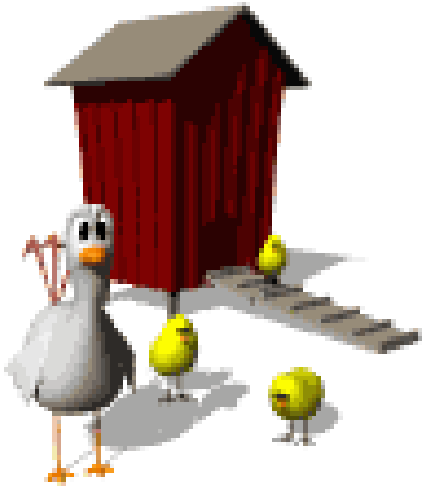
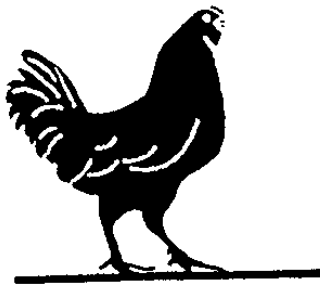


Organic Production must be Certified

Oregon Department of Ag

Oregon Tilth



Stellar Certification Services Inc.

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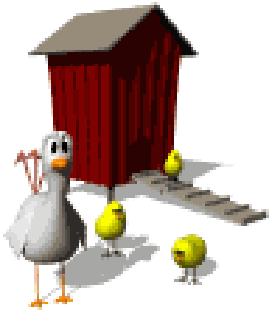

Basic Process of Certification

Application

Inspection

Review by committee

Resolution

Certification

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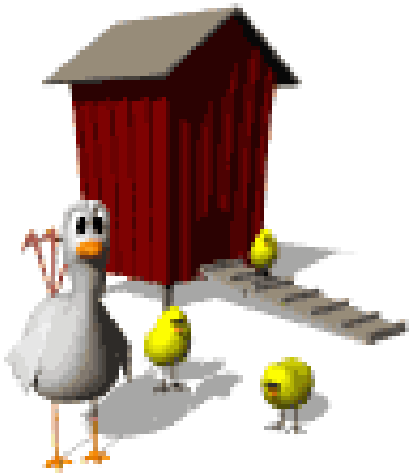
Fees

Variable

Several Hundred to Thousands



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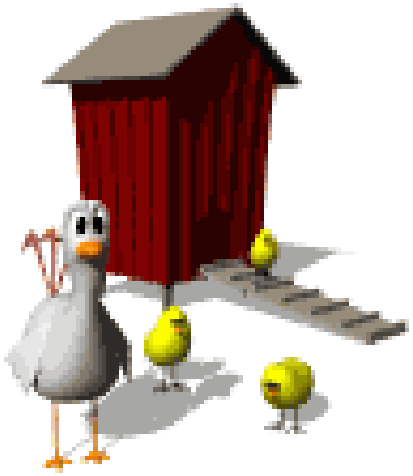

Organic Requirements

National Organic Standards

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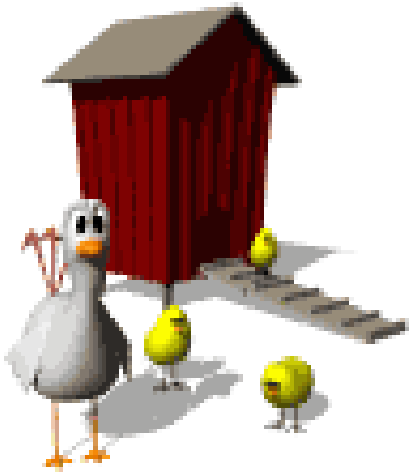

Basic Requirements

Origin of the birds

Poultry must be under continuous organic management beginning no later than the second day of life.

National Organic Program

USDA ORGANIC

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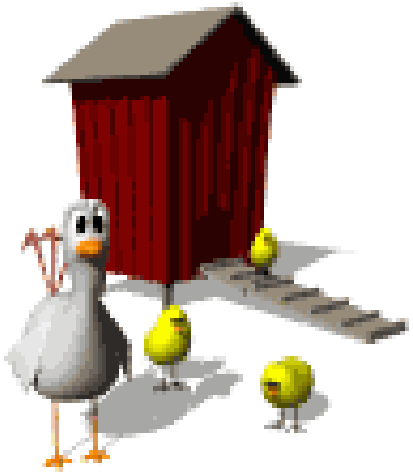

Basic Requirements

Feed

Organic livestock must be fed a total feed ration composed of certified organic feed, including pasture and forage.

Non-synthetic and synthetic substances allowed under § 205.603 may be used as feed additives and supplements.

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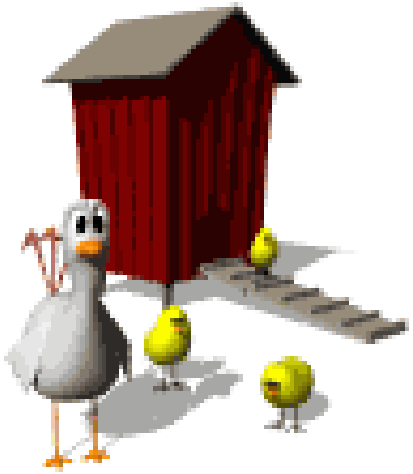

Basic Requirements

Feed

Vitamins OK
Amino Acids Not OK

National Organic Program
USDA ORGANIC

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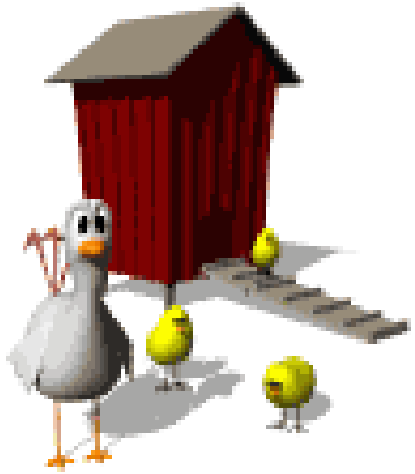

Basic Requirements

Health care practices
Preventative practices must be the primary practice, Parasiticides may not be used on organic slaughter animals.

Antibiotics and hormones are prohibited. Health treatments must be nonsynthetic materials, or synthetic substances as provided for on the National List under §205.603

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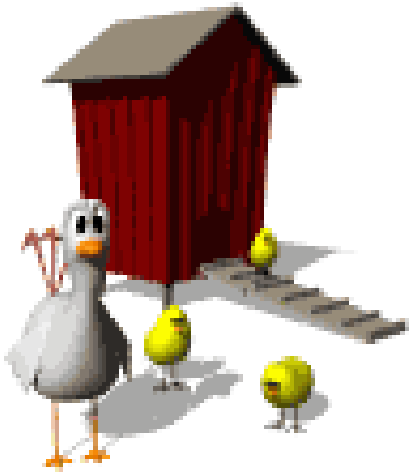

Basic Requirements

Livestock living conditions —Organic livestock must have access to the outdoors, shade, shelter, exercise areas, fresh air, and direct sunlight suitable to the species, its stage of production, the climate, and the environment, including access to pasture for ruminants.

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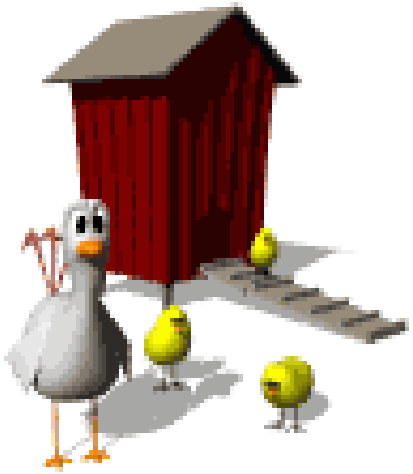

Results of Organic Production

Reduced Productivity
Increases Morbidity
Increased Mortality

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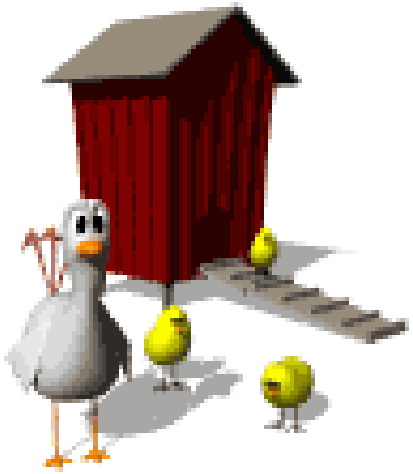
Results of Organic Production



Grass Fed Traditions

National Organic Program

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$99.00 on sale for $79.00
4lb carcasses = $6.58/lb
$14.94 shipping

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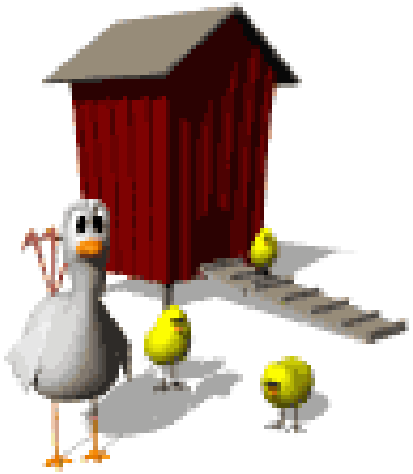

Results of Organic Production

Reduced Productivity
Increases Morbidity
Increased Mortality

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Processing

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Processing

Necessary in both Egg and Meat Production

Prepares the product for sale to consumers

Considerations

Consumer

Legal Requirements

State Requirements for Egg Producers

Oregon

- Sell from home or delivery
- Nest run (not graded)
  - No regulations

Washington

- less than 3000 hens
- no license

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New Federal Regulations

Testing of facilities for S. e.

All flocks over 3000 hens

Consumer

Important Issues

Appearance

High quality

Safe

Food Borne Disease

(Salmonella, Listera, Campylobacter)

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Eggs

Nest Clean Eggs are best

Provide one nest for each four hens.

Begin training the pullets to the nest before they start to lay.

Clean nests once a week.

Gather eggs twice in the morning and once in the afternoon.

Separate dirty and clean eggs at the time of gathering.

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Eggs

Wash dirty eggs in water that is 110° to 120°F.

Do not soak eggs before or during washing.

Change the wash water after each 3 to 4 dozen eggs cleaned.

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Eggs

Rinse each egg in clean water, dip in a sanitizer and air dry.

Keep eggs in a closed container in the refrigerator.

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Meat Processing State Requirements

Oregon

- Federal Exemptions Apply
  - 20,000 chickens per calendar year (5,000 turkeys)
    - Processors own production
    - Sanitary Facility
    - Label properly
    - Sell in state

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Meat Processing

Killing

Feather Removal

Eviscerating

Cleaning

Chilling

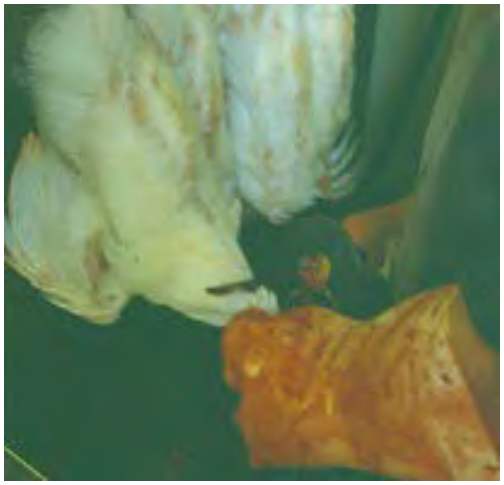
Packaging

Killing

Modified Kosher

Stunning

Electric or other



Stunning

Exsanguination

Cut the jugular vein and carotid artery

Killing

Death from loss of blood (~50%)

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Feather Removal

Dry or Wet Picking

Dry – difficult; not suggested

Wet Picking

Scalding

Temp. 125 (sub scald)

145 (semi scald)

160 (scald)

Time

30 to 60 seconds

(till large feathers pull easily

Agitate carcass in water to wet to the skin

Add detergent to increase wetting power

Pull feathers

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Evisceration

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Evisceration

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Giblets, Chilling, Packaging

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Mobil Processing

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