Mortality Disposal Alternatives

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Considerations Regarding Disposal Methods

• Biosecurity
• Environmental Impact
• Cost

Biosecurity

• Human Traffic
• Vehicles and Equipment
• Animals
• Insects

Environmental Impact

• Water Quality
• Air Quality
• Wildlife
• Nuisance Generation

General Methods of Disposal

• Burial
• Rendering
• Composting
• Cremation
• Sanitary Landfill
• Alligator Pond

Burial

Check With Local Environmental Agencies
• Regional Water Quality Control Board
• Health Department

• Disposal Pit
  • Usually for Daily Mortality
• Trench
  • Catastrophic Losses
Disposal Pit Burial

- Anaerobic System
- Certain Distance Above Ground Water
- Certain Distance From Surface Water
- Air Tight Cover (anaerobic digestion)
- Pit Size for Layers Approx. 55 cu. Ft./1000 in Flock
- Should Have Alternative in Case of Higher than Normal Mortality

Rendering

- Environmentally Friendly
- Recycled Product
- Birds Must Be Held in Fly and Animal Tight Containers
- Cost
- Biosecurity is Major Concern
- Availability?

Composting

- Environmentally Friendly
- Produces a Valuable Product
- Requires Good Management
- Labor Intensive

Composting

- Aerobic System
- Requires Primary and Secondary Bins for Aeration
- Three Heat Cycles (140-160 F)
  - 1st aprox. 20 days
  - 2nd aprox. 13 days
  - 3rd aprox. 13 days

Bird Composting

- 1st Heat-Primary Bin
- 2nd Heat-Secondary Bin
- 3rd Heat- Storage Pile

Composting

- C:N Ratio 15:1-35:1
- Moisture 45-55%
- Materials
  - Birds
  - Manure
  - Carbon Source (straw, wood shavings etc.)
  - Water
Composting

- Daily Layering of Materials Until Bin is Full
  - Carbon Source
  - Dead Birds
  - Manure

Composting

- Bin Capacity Matched to Expected Daily Mortality
  - 2.5 cu. ft./1,000 Hens
  - 2 Bins/65,000 Hens (5’X5’X8’)

Cremation

- Biosecure
- End Product (ash) Environmentally Safe
- Minimal Labor
- Multiple Sources and Capacities Available
- Initial Capital Outlay (>$2,000)
- Energy Cost?
- Air Quality?

Cremation

- Best to Have One per Farm Site
- 1-200 lb Capacity Cremator/100,000 Bird Farm
- Labor Estimated at 20 min./day
- Total Time aprox. 3-4 hours

Sanitary Landfill

- Will They Accept Mortality?
- If So, at What Cost?
- May Be Only Option for Large Numbers

Alligator Ponds

- My Personal Favorite
- Alligators are Indiscriminant Carnivores
  - They Do Like Chicken
  - But They Also Like Fly Inspectors and Terrorists!
Choosing a System

- Availability of Services (Rendering)
- Local Regulations
- Concern for Biosecurity
- Urban Encroachment
- Costs

Summary

- Various Alternatives Available
- Each with Advantages/Disadvantages
- Choice will Depend on Several Factors & their Relative Importance
  - Biosecurity
  - Environmental Impact
  - Cost