# Chapter 8 Mortality Management

Thomas M. Bass, Biological & Agricultural Engineering Dept., University of Georgia.

# Introduction

In Georgia, very simple and straightforward rules on mortality disposal and management apply to all livestock and poultry operations, regardless of the size or permit status. These laws also extend to include most hobby farms, horse operations, exotic animal breeders and even kennels. Proper management of mortalities on the farm has implications in nutrient management, flock and herd health, and farm family and public health. For this reason it is imperative to be familiar with the law and best management practices for dealing with dead animals

# **Incineration**

This is a very safe method of compost management from a bio-security standpoint. This practice is limited to small carcasses, primarily poultry. Incineration must be done in an approved device with air quality and emissions controls. This method is energy intense and the cost of fuel often makes it not economically feasible.

## Burial

This is probably the most common method dead animal disposal currently employed in Georgia today. If done correctly, this method can be safe; however mortalities can persist for years in an anaerobic environment. Poultry burial pits have been discovered with whole birds during construction projects on old farms. In many parts of our state high water tables and sandy soils do not allow proper cover or depth of burial without threatening ground water. All burial sites must be approved by the Georgia Department of Agriculture (GDA).

## Rendering

Rendering is a low maintenance method of mortality management for the farmer and it leaves no lasting legacy on the farm. Most farmers in the state do not have good access to rendering facilities. There can often be fees and charges associated with a rendering service. However, if a farmer has access to a rendering service and it is affordable, then it is a highly recommended practice. The cost should also be weighed against the time of management or input cost to other available methods.

# Composting

For many species composting is an environmentally preferable method to deal with mortalities. When managed correctly, completely composted mortality may be incorporated into existing land application of manures. Much information is available on poultry composting and it is not an uncommon practice. It is also possible to compost larger carcasses. The UGA Swine Research Farm successfully composts larger stock including sows. Policy regarding composting of cattle is in transition, although this looks to

become a viable option for the future. Most composting requires storm water protection and covering. Compost can be beneficially used on forest and crop land; however certain guidelines should be followed. Contact your local Extension Office or USDA Service Center for information on composting facilities and best management practices.

# **Alternative Methods**

These are not specifically defined. They may include homogenization, digestion or chemical processes and technologies to recover products from mortalities. These must be approved on a case by case basis by GDA.

No matter how one plans to deal with mortalities, the Georgia Department of Agriculture must be contacted for approval. Likewise the state veterinarian (part of GDA) should be the first person contacted regarding any suspected disease related death or a catastrophic loss of livestock or poultry. The current rules on mortality management are summarized below. Contact information for GDA Livestock and Poultry Field Forces are listed at the end of the regulation summary.

## **State Authorities**

- Georgia Dead Animal Disposal Act (O.C.G.A. 4-5) passed 1969, Amended 2002.
- Georgia Department Of Agriculture Rules (Chapter 40-13-5) adopted April 1970, amended May 1984, October 1985, and February 2003.

## Purpose

"..... To prevent the spread of infectious, contagious and communicable diseases from dead animals....."

#### **Definitions**

Dead Animals: carcasses, parts of carcasses, fetuses, embryos, effluent, or blood of cattle, swine, sheep, goats, poultry, ratites, equine, and alternative livestock; animals associated with animal shelters, pet dealers, kennels, stables, and bird dealers licensed by the Georgia Department of Agriculture; animals processed by commercial facilities which process animals for human consumption and animals associated with wildlife exhibitions.

## Violations

- To abandon dead animals on personal, private or public land.
- To dispose of dead animals on another person's property WITHOUT PERMISSION.
- To dispose of dead animals in a city or county landfill without making arrangements with the city or county officials for proper disposal.
- To abandon dead animals in wells or open pits on personal, private or public land

#### Time Requirements

All dead animals must be disposed of within 24 hours of death or discovery!

## Methods of Disposal

- Incineration
  - Within 24 hours of death or discovery.
  - Entire carcass reduced to ashes.
  - Under conditions approved by U. S. Environmental Protection Agency and Georgia Environmental Protection Division.

## • Burial or Pits

- Within 24 hours of death or discovery.
- o At least 3 feet below ground level.
- o No more than 8 feet deep.
- o Covered with at least 3 feet of earth on top.
- o 100 feet from wells, streams, sink holes or wetlands and 15 feet from an embankment slope of moderate grade.
- Soils must be of slow to moderate permeability.
- o Poultry pits must have site approved prior to construction.

# Rendering

- o Within 24 hours of death or discovery.
- Longer than 24 hours if refrigerated or frozen.

## Composting

- o Approved by State Veterinarian;
- o According to U. S. Natural Resources Conservation Service standards or equivalent.

#### Other Methods

- o Approved by State Veterinarian on a case by case basis.
- Risk assessment for disease spread conducted by Georgia Department of Agriculture personnel.

# Transportation

- o Must be in covered, leak-proof vehicles.
- May be required to transport directly to rendering or destroyed on site if death due to infectious, contagious, or communicable disease.

# **Penalty for Violations**

- Administrative Hearing
- Fine up to \$1000 per violation
- Consent Order by the Commissioner
- Guilty of a misdemeanor

# Summary

The purpose for mortality disposal is "to prevent the spread of infectious, contagious and communicable diseases." Disposal or management must take place within 24 hours of death or discovery. Approved methods (still requires individual registration) include: burial or pits, incineration, rendering, composting, or any method approved by the State Veterinarian.

# For more information on the rules and regulations contact:

Georgia Department of Agriculture Livestock and Poultry Field Forces 19 MLK, Jr. Drive, Room 112 Atlanta, GA 30334

Tele: (404) 656-3665 Fax: (404) 656-9383