Routine & Emergency Carcass Composting

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Situation

- Lack of Services
- Specified Risk Material (SRM)-Parts Not Accepted
- Cost
- Access

Disposal Options

- Alkaline Digestion
- Rendering
- Mass Burial
- Incineration
- Landfill
- Compost

The archived presentation can be found at:
http://www.extension.org/pages/Livestock_and_Poultry_Mortality_Composting
Risk

Animals exhibiting sign of neurological diseases before death should not be composted and should be reported to the USDA for autopsy and proper disposal.

We have no evidence that Prions such as the ones that cause Mad Cow Disease are killed in the compost process.

Site Selection

Well-drained, at least 200 ft from water courses, sinkholes, seasonal seeps or other landscape features that indicate the area is hydrologically sensitive.

Three-Bin Covered System

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Carbon Sources

- Wood chips, Shavings, Sawdust
- Refused feed
- Spoiled Silage
- Chopped Cornstalk
- Nut Hulls
- Partially Composted Material
- Bedded Pack
- Straw/Hay
- Think about coarse, dry carbon sources in your area.

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For young animals, layer mortalities with a minimum of 2 feet of co-composting material.

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Cover carcass with dry, high-carbon co-composting material, like old silage, sawdust, or dry stall bedding (some semi-solid manure will expedite the process).

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Composting Cow

Cover material
2 ft

COW

Absorptive material (Optional)

Woodchips 18-24"

Diagram by Craig Williams

Temperature 110-160 F

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Cornell Waste Management Institute

In dry climates, add water during pile construction and shape piles for moisture control.

Moisture Management

In dry conditions, wet chunky carbon source while building the pile.
Shape pile to accept or reduce moisture input
1. Peaked piles allow the least input
2. Flat topped windrows accept the moisture that fall on them
3. A pile with a trench can allow moisture to collect and be absorbed
Note: Do a squeeze test. Collect a handful of amendment, squeeze.

Time it Takes

- Well stacked pile should heat up in 12-24 hours.
  - Month 1 - cooked meat
  - Month 2 - meat is digested
  - Month 3 - clean bones
  - Mature compost 6-9 months
- Frozen animals placed in piles - Feb 2004 piles registered 40°F
- Late May - reached temperatures of 130°F

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Process
- Let set for 4-6 months;
- Turn only if desired after 3 months
large livestock, poultry varies;
- Reuse bones as part of next base.

How Silage Is Made

Static Pile Aeration

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Disposal of End Product

- Reuse as base, don’t reuse as top layer
- Remove large bones and land spread
- Use on feed crops harvested above ground
- Spread on forest or non-human food crops

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Cautions

- Regulation/policy
- Securing carbon source
- Reuse carbon source for base
- Size of pile
- Poor coverage
- Odor

You Can Compost Any Size Animal!

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- Natural Rendering: Composting Livestock Mortality and Butcher-12-page fact sheet, posters and DVD.
- Emergency Planning for Avian Influenza and Composting Roadkill

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