

On Farm Mortality: Consider Composting

Unwanted Horse Coalition Press Release

WASHINGTON, DC – August 3, 2010 - Many horse owners will eventually face tough decisions regarding animal mortality and disposal. The Unwanted Horse Coalition receives many calls from concerned owners regarding the legalities and options for disposing of horse carcasses. The problem arises with the diminishing disposal options for animals and livestock. Burial is not legal in all areas, many landfills do not accept animals, rendering plants are not accepting as many animals and are now charging larger fees and incineration is expensive. What other legal options do horse owners have, especially in today's economy? Many farms are successfully using composting as a legal, beneficial and inexpensive disposal alternative. The Unwanted Horse Coalition has researched the method of composting in order to assist horse owners during troubled times.

Dr. Shea Porr, the Superintendent of the Middleburg Agricultural and Research Extension Center (MAREC), suggests composting as a disposal method for larger farms and facilities, "Composting works better on larger farms with a higher population of animals, and farms that are isolated and not close to neighbors. I would not suggest this as an option for small farmettes."

Composting can be a relatively inexpensive process for livestock and farm owners, as most of the materials necessary for the process can already be found on farms. To successfully compost an animal a front-end loader is needed as are composting materials such as old hay, manure, grass clippings, chicken litter, rotten corn silage and finished compost. Bobby Clark, an extension agent with the Virginia Cooperative Extension, estimates the cost of composting per head as \$50 - \$75.

Farms can utilize the finished compost material to fertilize crops, re-vegetate barren areas, create forage or compost other animal mortalities. If done successfully, composting can be extremely beneficial to farm owners; not only is it an inexpensive process, but the process is environmentally friendly.

When done correctly, composting can reduce an animal to just bones after 60 - 90 days. So, how is composting achieved?

Materials

In order to compost effectively, you need a porous material as a base layer to allow airflow, such as old hay, straw or woodchips. Next, you need a composting material such as manure, grass clippings, chicken litter, rotten corn silage, or finished compost. Successful compost material will heat to 131 - 161 degrees. The compost material should have a moisture level of about 50-70% and have a carbon to nitrogen ratio of 10:1 to 40:1. Lastly, you will need an insulating layer such as woodchips. To create a cost effective process, contact tree removal companies in your area to ask about the donation of unnecessary woodchips.

Creating the Compost Pile

The base material should be about 18 inches deep in order to process moisture and air effectively. The animal is placed on top of the base, and then completely covered with composting material. The insulating material, preferably 18 inches deep, will be placed last and cover the existing pile. The finished pile should be around 6 feet to 8 feet in height and have a peak or pyramid shape to allow rainfall and snow to shed, and to allow the correct amount of airflow to the compost. The pile should be turned once (with the front-end loader) and temperature should be checked often. The pile should reach 131 degrees or more for at least 3 days. If you happen

to find sections of digging or traces of varmints, cover the sections immediately. A successful compost pile will destroy all soft animal tissues, eliminate odors, destroy pathogens and protect human health and the environment after 60 to 90 days.

The Finished Product

After 60 to 90 days of composting at a successful temperature, moisture rate and carbon to nitrogen ratio, you may sift through the pile to see the remnants of the composted animal. Virginia Cooperative Extension recommends:

- Deep stacking the compost for an additional year to decompose bones.
- Re-use of the finished compost in composting of additional animal mortality. This will facilitate the decomposition of bones.
- Screening or grinding compost to remove the bones.
- Applying finished compost to land or farmland. It is recommended that the compost be incorporated into the ground if bones are not removed or fully destroyed. The compost should be sampled and analyzed to determine the nutrient value to ensure it is applied at agronomic rates. If the mortality was euthanized by barbiturate overdose it is not recommended to land apply finished

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Extension Agent Bobby Clark showing a compost pile with only bones remaining. This pile was restacked for further composting.



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compost until more data is released. Further research is being conducted on the residual amounts of euthanasia solution remaining after the composting process.

Composting Laws

Be sure to research any laws or regulations governing composting in your state and locality. Laws will vary from place to place.

Consider Composting

Contrary to popular belief, composting can be done at any time of the year. Instead of throwing carcasses into the woods for potential scavengers and disease transmission, consider the low labor, low cost method of composting. Not only will you rid yourself of unnecessary materials on your farm, you may gain an environmentally safe material for future use on your land.

For more information on composting, contact the Unwanted Horse Coalition at 202-296-4031.

Special thanks to:

- Bobby Clark, Crop and Soil Extension Agent
- Dr. Shea Porr, Superintendent, MAREC
- Crystal Smith, Animal Science Extension Agent Virginia Tech Cooperative Extension

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Participants viewing compost piles 60 days to 6 months old as Dr. Shea Porr demonstrates that only bones remain within a pile.



Extension Agent Bobby Clark discussing the use of a compost thermometer.



The Unwanted Horse Coalition

The mission of the Unwanted Horse Coalition is to reduce the number of unwanted horses and improve their welfare through education and the efforts of organizations committed to the health, safety and responsible care and disposition of these horses. The UHC grew out of the Unwanted Horse Summit, which was organized by the American Association of Equine Practitioners and held in conjunction with the American Horse Council's annual meeting in Washington, D.C., in April 2005. The summit was held to bring key stakeholders together to start a dialogue on the unwanted horse in America. Its purpose was to develop consensus on the most effective way to work together to address the issue. In June 2006, the UHC was folded into the AHC and now operates under its auspices.