is often too expensive due to the cost of natural gas and the significant amount of labor needed, especially for equine operations. This disposal method is more appropriate for small animals.

Furthermore, open-air burning of deceased animals is not recommended because of the odor and potential air pollutants. Maryland has a ban on open-air burning from June 1 to September 1 of each year for most counties.

Cremation is the same as incineration; but, the ashes of the animal are returned to the equine owner. This disposal option allows for the owner to retain a physical part of their animal and can be expensive.

If a necropsy has been performed at a Maryland Animal Health Lab, cremation is usually available. Some laboratories will cremate a deceased equine for a fee levied on a per-weight basis.

There are also a variety of private pet crematories that provide services for equines, many of which offer pick-up services. Fees will vary depending on location within the state and services requested.

## Burial

Burial regulations differ throughout the State due to varying soil types. An equine cannot be buried in a wetland, floodplain, shoreline, high water table area or near a well. Check with local ordinances that may restrict or limit burial.

Due to the strict guidelines and regulations surrounding equine burial, it may be easiest to utilize the services of a private company to bury a deceased equine. Private companies that provide off-site burial services are relatively limited in the Maryland area, however.

If you wish to bury on your own property and doing so is allowed, bury the equine at a minimum depth of six feet, liming over the carcass (for pathogen reduction) before backfilling with three feet of soil. An equine must be buried so that it will not contaminate or allow leachable discharge into waterways. It is important that domestic animals and wildlife not be able to access the carcass.

It may be necessary to hire a service or rent equipment to dig a hole large and deep enough for equine burial. The cost of burial will depend on the location and availability of equipment and operators.

# **Necropsy and Disposal**

Equine owners in Maryland can send equine carcasses to a Maryland Department of Agriculture Animal Health Lab to have a necropsy conducted. The lab will arrange for the disposal of the body.

Animal carcasses cannot be returned following a necropsy. For an additional charge however, an equine can be cremated and the ashes returned to the owner from the Frederick Animal Health Lab.

# **Composting:** An Environmentally-Friendly Method of **Deceased Equine Disposal** By Olivia Wood, Equiery intern

When dealing with the loss of a beloved horse, it can be difficult to think about the logistics of properly disposing of a horse carcass. Figuring out the right option can be stressful and time consuming, especially if you live in an area with limited access to transport or cremation services. The less traditional method of composting an equine carcass may be an option for you depending on your county's regulations and how much space you have on your property. Some larger farms in Maryland are beginning to offer composting options for horse owners who do not want to compost on their own properties.

While composting might not be the most conventional method of carcass disposal, when done properly, it can serve as an environmentally-friendly and low-cost option, making it a worthy method to consider. By composting, you are helping to facilitate an environmentally-sound method of breaking down the horse carcass while simultaneously creating a compost that can eventually be repurposed.

## Breaking it Down: How to Compost

#### MATERIALS

At first thought, the notion of composting an entire horse carcass may seem daunting. After all, composting is somewhat of a science. But, like any proper science project, it all starts with obtaining the right materials.

There are four key materials needed for proper composting: coarse carbon material; clean, dry wood shavings; manure mixture and, perhaps most importantly, a horse carcass.

The coarse carbon material serves as the base of the compost pile. Such a material could be playground wood chips or chopped corn stalks. This material will provide the ideal amount of airflow to the microbes that break down the horse carcass.

The wood shavings simply soak up fluid from the carcass as it is composted.

The manure mixture serves several key purposes: increasing biological activity, maintaining moisture, keeping curious wildlife away from the compost, and, ironically, controlling odor. An ideal manure mixture for composting purposes is two parts horse stall waste to one part cattle manure. Take care to ensure that the moisture level in the manure mixture is ideal. It should be just moist enough that it can be molded into a ball, but not so wet that excess liquid drips from it.

The horse carcass itself provides the nitrogen that is vital to the composting process. Make sure you remove any non-compostable objects from the horse carcass before composting such as horse shoes.

Once you have these four key components,

you're ready to begin composting.

#### METHODS

Before starting, choose a proper site for constructing the compost pile. This site should be in a high, dry area that will not collect water and at least 200 feet from wells or any other sources of water. The area on which the compost pile will be constructed should be easily accessible and solid enough to allow for the maneuvering of equipment. Also consider general wind direction in your area and take care to place the pile out of the line of sight of neighbors and motorists.

With a proper location chosen, you are ready to begin composting. Essentially, this process is simply combining different materials with specific properties in the correct proportions.

The first step is constructing the carbon base. Using your selected coarse carbon material to create a thick base layer, about 18 to 24 inches deep. The overall size of the layer depends on the size of the carcass, but it might be anywhere from 14 to 18 feet long and 12 to 15 feet wide. Regardless, on all sides of the carcass, there should be 18 to 24 inches between the edges of the carcass and the edges of the carbon base.

Next, spread clean, dry wood shavings over the carbon base, three to four inches deep. Keep the shavings toward the center of the pile; this is where you will later lay the carcass.

Following the dry wood shavings, add a little bit of the manure mixture–just one to two inches to help aid the breakdown process from below the carcass.

With the base fully constructed, it is time to gently lay the carcass out flat on top. As long as there are 18 to 24 inches of space around all sides of the carcass, it does not matter what direction the carcass is facing.

Finally, complete the composting pile by covering the carcass with 18 to 24 inches of manure mixture. Try to create a domed peak, as this shape will help the compost pile shed rainwater. Use a probe and measuring tool to ensure the manure layer is deep enough. Once finished, the compost pile should be between five and seven feet tall.

#### MANAGEMENT

Once the compost pile is constructed, the hard work is done. Now, you just have to make sure the compost pile does its job. Doing so means filling cracks and depressions in the pile, monitoring the pile temperature, and turning the compost pile.

Within one week of construction, depressions and cracks will form in the peak of the pile as the carcass collapses. To avoid letting