

AFTER GOODBYE

What Happens When Your Horse Dies?

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Table of Contents

1. Introduction	Page 1
2. Legalities	Page 1-2
3. Burial	Page 2
4. Rendering	Page 3
5. Composting	Page 4
6. Landfill	Page 4
7. Necropsy	Page 4-5
8. Take Home Message	Page 5

1. Introduction.

Sorting through the various methods of carcass disposal, however, can be a daunting process. The laws that govern it vary significantly across the country, and although many options exist, they are not always available or even legal.

While it used to be quite common in many areas to simply leave your deceased horse in the woods to decompose naturally, many farms are now surrounded by housing developments filled with neighbors who will not appreciate the smell of a decaying animal or the vermin that it attracts. Moreover, leaving a carcass in such close proximity to people's homes could potentially contaminate the water supply or contribute to the spread of disease.

"There's less disposal on property now than there was years ago," says William Jeter, DVM, Diagnostic Veterinary Manager for Equine Programs in the Florida Division of Animal Industry. "A lot of this is because people are more environmentally conscious."

2. Legalities.

In order to decrease the pollution of groundwater resources, reduce the impact of odors, and decrease the spread of disease, the Natural Resources Conservation Service (NRCS) has established a national conservation practice standard for mortality management. While this standard provides helpful guidelines, carcass disposal is primarily regulated at a local level because the laws depend heavily on your area's water table and topography.

"Florida has a statute specifying acceptable methods of disposal so that it's illegal to just leave the animal out in the pasture to decay," says Jeter, "but the rules vary significantly here at a county level." In addition to outlining adequate methods of disposal, many state statutes govern factors such as how long you have to dispose of the carcass or how deeply you must bury it.

After researching your state regulations, Jeter suggests you call the Department of Environmental Protection in your district. "Even though a method is authorized by the state statute, it might be prohibited in your particular county because of water tables or other issues," he says.

According to Jeter, a violation of the state statute is considered a misdemeanor and is punishable by fines and/or jail time. Because regulations vary so much from one area to another, it is imperative that you check with the appropriate authorities lest you inadvertently break the law.

3. Burial.

Burial is probably the most tightly regulated method of carcass disposal. However, because it's viewed culturally as a dignified and respectful way of dealing with death, it is often the most desirable choice.

"Burial is largely a sentimental issue where people have a horse that has been their friend for years and they don't want to send it to rendering," says Kentucky State Veterinarian Robert Stout, DVM.

Many horse owners would ideally like to bury their horse at home--in his former pasture or at the side of the trail you used to ride. Unfortunately, burying a horse on your own property is now strictly controlled by law and, in many states, is illegal. The reasons for this primarily stem from concerns over groundwater contamination and odor.

According to Stout, "In Kentucky, a large part of the state is built over caverns, and also we have areas where the ground rock is very close to the surface. So depending on how deep an animal is buried, any drainage from that land goes directly into those caves and runs into the river, which in turn affects the quality of the water that people drink."

To help people bury their animals in the safest way possible, many local and county regulations specify a minimum burial depth as well as a minimum distance from streams, water wells, and dwellings. Although the national standard set by the NRCS does not specify a minimum depth, it states that there should be at least two feet of cover over the mortality.

"In situations where a farmer has a backhoe or digging equipment on the farm," says Stout, "it may be very convenient for them to bury the horse instead of having to worry about getting someone to pick it up."

However, because most horse owners do not own that type of machinery, attaining proper burial depth at home can be difficult. Therefore, in addition to the labor involved, one of the biggest disadvantages of burying your horse on your own land is that it can be expensive to rent the equipment required to dig a hole and lift the carcass into it.

For those interested in burying their horses but can't do it at home, another option is to take the animal to a pet cemetery. Pet cemeteries can provide a range of burial choices--different headstones are available, and burial is often available with or without a concrete vault. Some cemeteries will even arrange a funeral or graveside service. Because there are so many variables, the price ranges from a few hundred dollars up into the thousands.

Stephen Drown, executive director of the International Association of Pet Cemeteries (IAPC), suggests that when you are choosing a cemetery, you ask if the land is deeded appropriately.

"You want to make sure that the cemetery is dedicated properly so that it is perpetuated (maintained and protected as a cemetery)," he cautions. If it isn't, Drown warns that the cemetery could one day be disturbed by land development.

Drown estimates that approximately 150 pet cemeteries nationally accept horses. He believes, however, that that number will grow rapidly as burial at home becomes more difficult. "My own personal opinion is that it's probably the fastest growing segment of the pet death care business," he says, "but of course the investment for the business is fairly high because of the machinery involved."

For a directory of pet cemeteries, visit the IAPC web site at www.iaopc.com.

4. Rendering.

Like cremation, rendering also provides a biosecure method of carcass disposal. According to Tom Cook, president of the National Renderer's Association, rendering is essentially a cooking process that separates animal fats and proteins, thereby recycling them into usable products. When a carcass is brought to a rendering facility, it is heated at a temperature between 250-300°F (121-149°C) for an extended period of time. Then, using a press or centrifuge, the renderer separates the material into fats and oils that can be used either industrially or in animal feed. The high temperatures kill pathogens, making rendering a viable option for disposing of sick or diseased horses.

Because it's such a clean and waste-free solution, rendering has historically been the preferred technique for removing large animal carcasses. According to a December 1997 survey, 72% of the California members of the American Association of Equine Practitioners recommended rendering to their clientele as the best method of carcass disposal.

During that same year, however, the Food and Drug Administration placed restrictions on the use of meat and bone meal in cattle feed. As a result, the demand for rendered products began to decrease, and some facilities were forced to close or consolidate. Although rendering remains popular in some areas, it's not an option in others. Cook estimates that only 75 facilities across the nation are currently willing to pick up dead livestock.

If there is a renderer in your area that accepts horse carcasses, the company will generally provide on-farm pickup. Depending on the distance, the cost can start at \$25 and go up into the hundreds of dollars per animal. While rendering is a good method of disposal from an environmental and economic standpoint, it might not be the easiest choice emotionally.

According to Cook, "Horse owners often have a problem trying to figure out how to dispose of their dead animals because they feel very closely attached to them. Rendering is a business, and it's the best way of disposing of dead livestock for a number of reasons, but it all depends on the frame of mind of the person who has the horse."

For a directory of renderers and more information on the rendering process, you can access the web site of the National Renderer's Association at www.renderers.org.

5. Composting.

While it is not legal in all states because of the time it takes to complete, composting is rapidly gaining popularity as an inexpensive and environmentally sound method of carcass disposal. Its biggest advantage is that much like rendering, it results in a usable end product--in four to six months. Composting will generate material that can be used as a fertilizer or soil additive.

Jean Bonhotal, MS, of the Cornell Waste Management Institute, explains that composting consists of layering animal remains with carbon-rich organic material (such as wood chips) in bins or windrows. When done correctly, the pile will reach 130-160°F (54-71°C) within three to four days, as heat and microorganisms consume the dead horse.

Bonhotal emphasizes the fact that simply covering a carcass with manure is not considered composting. According to the NRCS standard, successful decomposition requires a high carbon to nitrogen ratio, 40-65% moisture, and proper aeration. In addition, it might be difficult to get the pile to generate enough heat to compost the animal.

While many composters turn the pile and mechanically aerate it, recent studies at both Texas A&M University and Cornell University have shown that static-pile, in-bin composting of large animals can be carried out successfully. While this technique significantly decreases the labor involved, management is still required to make sure that the necessary temperatures are reached--the NRCS recommends that the compost attain a temperature greater than 130°F for at least five days in order to reduce pathogens.

Although the researchers at Cornell approximate that composting only costs \$37.60 per carcass because material can be reused over time, the initial set up can be expensive and labor-intensive.

However, in some instances this method of disposal could attract many animals you don't want to your farm.

If you are interested in composting, see the USDA Natural Resources Conservation Service website in the Further Reading section below for more information and guidelines.

6. Landfill.

Despite the fact that some government agencies recommend that dead animals be buried in a sanitary landfill, it's usually difficult to arrange because many landfills do not accept them. According to a survey by the Oregon Department of Environmental Quality, 90% of the landfills in California refuse deceased large animals, and only nine of Oregon's 33 municipal solid waste facilities will handle them. If you're searching for an inexpensive method of disposal, however, it is probably worth checking the policy of your local landfill. Most who responded favorably to the survey only charge between \$5-\$75 for drop-off, and a few even provide pickup for under \$150.

7. Necropsy.

If your horse is insured, you will most likely need to have a complete necropsy (an animal autopsy) performed in order to place your claim. Even when an animal is not insured, many

horse owners request a necropsy to understand more about why their horses died.

While the fees for necropsy vary depending on what tests are needed, a complete workup generally costs at least \$300. After the necropsy is completed, most facilities dispose of the body by rendering or by incineration. Some are willing to arrange a private cremation.

If your horse dies of unnatural causes, yet another possibility is to donate him to a local veterinary school for research. "We do get donations," says Christopher DeMaula, DVM, PhD, of Cornell University's College of Veterinary Medicine. "Usually it's an animal that has a peculiar disease, but the owners decline to work it up and instead donate it to us for educational purposes or for scientific investigation."

To determine if donation is an option for you, contact the pathology department at your nearest veterinary school or equine research institute.

8. Take Home Message.

When you are choosing a way to dispose of your horse after he dies, make sure that in addition to considering your emotional needs and financial requirements, you carefully research your local legal regulations. By weighing all aspects of the various options in advance, you will be able to reach a decision that is both responsible and reflective of your personal ethics and beliefs at a time before you are involved in an emotional situation.

Further Reading

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