

Horse Manure Management

Most horses today live close to those who care for them, but also often near people who may not like horses. There are an increasing number of horses kept in suburban areas. Some breeding operations, boarding facilities and training establishments were built in rural locations, but urban sprawl has put them in larger populated areas.

Manure is a by-product of horses and how we handle it can influence our relationships with our neighbors and anybody else coming in contact with many aspects of the horse industry. Many horse owners don't have enough land for crop production to use the manure their horses produce. As a result, this valuable byproduct is often considered a waste or a disposable nuisance. This manure could be used advantageously if it was made available in a useful form. Properly planned horse housing and manure management is necessary to maintain a good relationship with neighbors and health officials. Review local zoning and health regulations for keeping horses in your area. Flies and odors are common complaints.

Basic management requires cleaning the stalls and putting the manure in a fly-tight container or storage facility, or for field spreading.

A 1,000 pound horse will annually produce eight to ten tons of manure; volumes of about two cubic feet per day, including bedding. Composition will vary, depending on the type of bedding, kind of feed, and how the manure is stored. A ton of fresh manure may have a nutrient composition of 13 pounds of nitrogen, 5 pounds of phosphorous, and 13 pounds of potassium. These nutrients would be available for crop production. The manure improves soil texture & soil moisture holding capacity with the organic matter.

Exercise areas or paddocks need to have manure removed to prevent surface water contamination, assist in controlling fly breeding and reduce internal parasite infestation.

In pasture situations where manure removal is not practical, it is helpful to harrow, or drag, the pasture to spread the manure. This distribution of the manure will expose manure particles to the sun and the air. The exposure will destroy internal parasite eggs.

Storage of manure should be on a dry and preferably level surface so water cannot run through it. Ideally it should be spread daily, although this is not always possible. Commonly it is allowed to accumulate, then disposed of or composted.

Adequate storage area allows for greater flexibility in timing of manure use. Therefore, have a large enough storage area to accommodate the manure produced. Over time, the manure shrinks from decomposition and moisture loss.

Create a positive image by handling and storing the manure as inoffensively as possible.

The following are recommendations when planning a manure storage and handling system for horses.

- Dispose of manure daily if possible.

- Provide temporary storage for manure if daily spreading is not possible. Provide about 12 square foot of fenced or enclosed space per horse.

- Locate the storage in an approved area for convenient loading and unloading. Make certain that storage and access areas are of adequate size for power equipment.

- Locate the storage away from water sources and natural drainage ways, and divert any surface water away from the storage.

- Do not apply manure to land that is highly susceptible to erosion, frozen, or saturated. To protect water sources from manure run off do not spread manure within at least 150 feet of a water source.

- Incorporate manure into the soil as soon as possible. Mixing the manure with the soil immediately reduces losses of manure nutrients to runoff.

and volatilization, and reduces odor problems associated with manure left on the soil surface.

Horse operations producing large amounts of manure might want to consider alternative uses of manure. In addition to varying aspects of composting; nurseries, mushroom farms, and home gardeners may be possibilities.