



FACT SHEET 5.4

MANURE MANAGEMENT

All animals produce manure, so manure management is a large part of caring for animals on a hobby farm. Animal manure contains pathogens and nutrients that, if mixed with stormwater runoff, can pollute nearby surface waters.

Poor manure management not only puts waterways and drinking water at risk but exposes animals and humans to harmful pathogens. Pathogens include bacteria, viruses and parasites, all of which can cause significant short and long-term health impacts.

CLEAN UP

Manure should be removed about every 1-3 days from all animal areas to minimize health risks depending on weather and accumulation rates. Frequent manure removal helps to prevent mud and breeding grounds for pests while reducing pollutants that can mix with stormwater runoff. Animal areas free of manure make for a sanitary and healthy environment for everyone.



REDUCTION

Although it's unlikely you'll reduce the total amount of manure your hobby farm produces without reducing the number of animals, you can reduce your overall stall waste by using less bedding or a more absorbent bedding.

STORAGE

Manure storage areas should be located carefully to prevent material from washing into nearby waterways or storm drain systems.

- **Find a dry, level spot** – manure storage should be located away from floodways, slopes, and waterbodies to reduce runoff and potential contact with surface water. A dry, level spot on an impermeable surface such as poured concrete or a liner can work well.



WATER QUALITY BENEFIT

Timely cleanup of animal manure, suitable storage, and proper disposal are three effective ways to help prevent manure from mixing with precipitation and runoff that can contaminate nearby surface waters.

- **Slope** – locate storage areas downslope of drinking water wells, catch basins, storm drains, animal watering areas, edible plants or gardens, and waterbodies (if possible), making it less likely for stormwater to wash manure into nearby surface waters.
- **Cover it up** – manure should be covered to prevent mixing with precipitation. A roof, weighted tarp or even a covered dumpster can achieve this.
- **Divert water** – help keep water from mixing with your manure storage by diverting roof and surface runoff to areas that can help infiltrate the water back into the ground. Redirecting runoff to well vegetated or crushed stone areas can help slow and infiltrate this excess water.
- **Buffer** – creating a vegetated buffer around your manure storage area will help infiltrate drainage and reduce stormwater runoff entering and exiting your storage area.
- **Maintain access** – if you plan on eventually disposing of manure using equipment such as a small front loader, bobcat, or similar vehicle, then make sure your storage area is easily accessible by the size of equipment you plan on using. Also, select a material such as crushed stone to place in heavily traveled areas leading up to your storage area. This along with a suitable cover can help prevent erosion and reduce mud.

DISPOSAL

A reliable manure disposal system can help eliminate overflow and keep it from becoming a threat to you, your animals and nearby surface waters. Depending on the amount of manure your hobby farm produces, disposal generally involves one or more of the following methods:

- Compost it
- Apply it to pastures
- Give it away
- Hire a manure hauler/disposer to remove it
- Find an off-site disposal or compost facility to bring it to

Since each of the above disposal methods has its advantages and disadvantages with varying financial costs, you may want to consider implementing several at various levels.

Remember that a successful manure management plan includes manure clean-up, reduction, storage and disposal and a plan lacking one of these individual elements can lead to failure. Although keeping up with manure management can be tedious at times, the cost of not implementing a proper program can put the long-term health of your animals and viability of your hobby farm at risk.

PLAN AHEAD

Manure can pile up quickly! A 1,000-pound animal can produce well over 50 lbs. of manure per day, exceeding 18,000 lbs. of manure each year. Plan ahead and create an area large enough to store manure, bedding and feed waste for a year or more. This pile may be bigger than you think!



REGULATORY CHECK

According to the MA Watershed Protection Act (313 CMR 11.00), uncovered outdoor storage of manure is not allowed if your hobby farm is located within certain areas of the Quabbin, Ware River or Wachusett watersheds. To determine if you are located in this area or for more information on specific restrictions see the following link: www.mass.gov/eea/agencies/dcr/water-res-protection/watershed-mgmt/the-watershed-protection-act.html#ForFurtherInformation

