

# FACT SHEET 7.10 NEIGHBOR RELATIONS: ODOR, DUST AND NOISE CONTROL

Hobby farms are located in all sizes and types of communities and neighborhoods. As a result, neighbor considerations should always become part of your farm management plan. A common but often challenging issue is odor, dust and noise control.

# **ODOR CONTROL**

A common complaint from non-farming neighbors can be odor. Complaints associated with odor typically occur in the spring and summer when work on a hobby farm is at its peak and neighbors begin spending more time outdoors. Hobby farms with animals tend to have more complaints due to the accumulation of manure. When manure breaks down, hydrogen sulfide, ammonia and methane are released into the air and together cause an unpleasant odor. Hobby farms growing crops can also receive odor complaints if they have compost piles or apply manure to gardens and crops.



There are three basic strategies to control agricultural related odor:

- 1. Prevent the creation of odors.
- 2. Reduce existing odors.
- 3. Disperse odor before it leaves your hobby farm boundaries.

For more information on the above steps, visit: <u>https://ag.umass.edu/crops-dairy-livestock-equine/fact-sheets/odor-control</u>.

# **Consider the following odor control tips:**

- Determine the direction of prevailing winds and locate animal yards, manure storage and compost areas downwind of neighbors to minimize odors and dust blowing in the direction of neighbors.
- Evaluate your available space to support healthy animals. Determine your 'stocking rate' or amount of space each animal requires to be properly cared for. Uncontrollable odor may be an indication that you have exceeded the number of animals you have room for or that you need to readjust your animal management practices such as your manure management plan.

#### **REGULATORY CHECK**

Many communities have local air pollution or nuisance regulations that address noise, odor and dust issues. Ranging from specific standards such as limiting noise decibel ranges during daytime hours to determining if odor or dust is a nuisance that is causing harm or impeding one's use of property, these issues are most often addressed on a local level. Contact your city or town hall for more information.

## WINDBREAKS

Vegetated buffers, filters and strips can serve as windbreaks if placed around the perimeter of the area causing odor, dust and noise. Planting a variety of native shrub and tree species can disrupt these nuisance conditions and help control impacts to neighbors.

- Reduce application rates of surface-applied manure or switch to composted or aged manure.
- Avoid applying manure, fertilizers or other soil amendments on weekends, holidays, or when social events are taking place.
- Follow good housekeeping practices for routine care of barns, animal yards and other animal enclosures. Employ proper stormwater management practices and good ventilation and air distribution near these animal areas to keep them dry.
- Follow proper composting procedures and consider adding a layer of wood chips on top of compost or manure piles to help reduce odor.

## **DUST CONTROL**

Dust control can be a problem for hobby farmers and quickly become a neighbor complaint, particularly during drier times of year. The most effective means of dust control is prevention.

Consider the following dust control tips:

- Do not plant or disturb soil during high winds.
- Plant soon after soil is turned or plowed to quickly stabilize the ground.
- Cover compost, manure piles and any other earthen piles.
- Stabilize unvegetated areas and locations susceptible to erosion.
- Use cover crops to minimize wind erosion.
- Seed bare or sparsely vegetated pasture areas.
- Promote water retention in garden soils by maintaining a high organic content through the use of compost and other organic soil amendments.
- Apply gravel to locations where frequent dust problems occur such as on unpaved roads, pathways and in animal yards.

### AIRBORNE DUST PARTICLES CAN CAUSE RESPIRATORY PROBLEMS FOR HUMANS AND ANIMALS RESULTING IN BOTH SHORT AND LONG-TERM HEALTH EFFECTS. DUST IS NOT ONLY A NUISANCE, BUT CAN BE A HEALTH HAZARD.



#### **CAUTION!**

Check the weather and avoid activities during high winds that can stir up dust and other particulates and create excessive odor.

## **NOISE CONTROL**

Many sounds are generated on a farm. You may love the sounds of farm animals and the tractor running in a nearby field, but the noise may be annoying to some neighbors. Sound generated by animals and farm equipment may be perceived as noisy and intrusive if the sound levels are higher than typical background levels. Many communities have a noise ordinance in place to limit the allowable noise levels at different times of the day. Maximum allowable noise levels are typically higher during daytime hours and lower during nighttime hours.

Noise generated from hobby farms will vary, based on the number and types of animals being raised, the range of farming activities, types of equipment, landscape, and location relative to adjacent properties.

Animal noises become more noticeable when large numbers of animals are present. Sheep, goats and roosters will typically generate more noise than other farm animals which should be a consideration when choosing which animals to raise on your farm. Farm animals and farming activities should be located as far as possible from neighbors to minimize noise intrusion.



Hobby farmers should be aware that the time of day farm equipment is used will generate a noticeable difference in the noise level. Operating equipment in the late evening and early morning may be perceived as noisier and more intrusive than daytime operation.

HOBBY FARM NOISE CAN BE SIGNIFICANTLY REDUCED WITH THE USE OF SCREENING SUCH AS EARTHEN BERMS, FENCES, VEGETATION AND STRUCTURES. WHEN TRYING TO REDUCE NOISE LEVELS IT IS BETTER TO INCLUDE MULTIPLE TECHNIQUES TO ABSORB, DEFLECT, AND MUFFLE INTRUSIVE SOUND. LOCATING A SCREEN AS CLOSE TO THE SOURCE AS POSSIBLE WILL BE MOST EFFECTIVE AT REDUCING NOISE.

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#### WATER QUALITY BENEFIT

Controlling the drift of materials offsite can help prevent windborne particles from reaching nearby waterbodies and impacting water quality.

#### **HELPFUL LINKS**

www.nrcs.usda.gov/Internet/FSE\_DOCUMENTS/stelprdb1167383.pdf www.nrcs.usda.gov/Internet/FSE\_DOCUMENTS/stelprdb1049502.pdf www.nrcs.usda.gov/Internet/FSE\_PLANTMATERIALS/publications/mdpmctn7166.pdf