Understanding Your Community’s Agriculture
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When you live in the country, a basic understanding of agriculture is useful. Farming has played an important role in Pennsylvania’s history and continues to contribute to your community today. Many of the qualities people enjoy about country living result directly from farming, including open space, aesthetic and pastoral views, and the rural way of life. Agriculture’s contributions to your community include environmental, economic, and cultural benefits.

However, certain farm activities can be an inconvenience to nonfarm neighbors, especially if they are unfamiliar with agricultural production practices. Along with the benefits farms bring to their communities, occasionally they also produce noise, odors, or other things people find objectionable.

Knowing about agriculture can give you an idea of what you can expect living near farms. It can increase your appreciation of farming activities going on around you. It also can help you understand the positive contributions of agriculture, as well as why farms sometimes produce odors or noise.
When many people think about farms, picture-postcard images found in children’s books come to mind: a red barn, cows and sheep grazing in a green field, chickens running loose in the barnyard, a few pigs out back, and a farmer wearing overalls. Few modern farms match those images. Farms have changed—and will continue to change—as new technologies, marketing conditions, and economic factors affect which agricultural activities are profitable in a specific region.

Farms can vary widely in appearance and size, depending upon their type of agricultural production. Most farms specialize in producing one or two commodities so they can take advantage of technological and marketing economies of scale. Some, such as dairy and beef farms, often have large acreage to produce animal feed. Farms that specialize in field crops, such as corn, soybeans, and hay, may have extensive fields but no animals. Others, such as mushroom, horticulture (flowers and trees), poultry, and modern swine farms, purchase much of the agricultural materials or feed they need and use modern buildings that provide the environmental control required for optimal production. Farms may look different, but all produce food, plants, or fiber. All farms also play a variety of roles in the local community.

1. Environmental Role

Farms play a vital environmental role in most Pennsylvania communities. Much of the open space and woodland that community residents enjoy is owned by farmers, and is kept open and pleasant to view because it is being farmed. Agricultural scenes, such as dairy cows grazing in pasture, further contribute to the rural aesthetic that makes people want to live in the country.
Farmland also provides important water benefits to the community. Farm fields provide the land area necessary for rainwater to percolate slowly through the soil, recharging groundwater. Farmland reduces storm water and flood damage because less rainwater runs off into streams and other waterways.

In addition, farms help sustain the local ecosystem by providing important habitat for wildlife. The mix of fields, hedgerows, woodlots, and wetlands on farms is particularly important for many species of animals and birds, including white-tailed deer, turkeys, grouse, pheasants, and some songbirds.

2. Economic Role

Farming plays an important economic role in many Pennsylvania communities. Farms provide a livelihood for people who farm full-time. They also supplement the household income of people who farm part-time while working full-time at nonagricultural jobs. They help sustain jobs in other parts of the agribusiness system as well. These include jobs at farm supply companies, which provide items such as equipment, machinery, seed, and fertilizer; and at processing and distribution businesses, which take the raw materials from farmers and transport, process, package, and market them to consumers.

Farmland also provides a tax benefit to communities. Studies by Penn State and the American Farmland Trust consistently find that agricultural land provides more revenue to local governments and school districts than it requires back in services. Residential land, in contrast, tends to require more in services than it returns in revenues. Farmland helps keep residents’ property taxes lower than they would be otherwise.
3. Cultural Role

Farming plays a strong historical and cultural role in Pennsylvania, a state predominantly settled by farmers. Many communities owe their founding and existence to farmers and others who settled there to provide services to farms. Agriculture and farming continue to play an important role in many communities’ self-image.
Laws that Protect Agriculture

Agriculture’s important roles are recognized by state and local statutes that attempt to protect farming and preserve its community benefits. Several state programs help preserve farmland by protecting it from development and by helping farms remain profitable. These include the Clean and Green program, which provides preferential tax assessments to agricultural land; the conservation easement program, which purchases the development rights of agricultural land, ensuring that it will never be developed; and agricultural security areas, which offer enrolled farms some protection from eminent domain actions.

Pennsylvania also has a Right to Farm law intended to protect farms from frivolous nuisance lawsuits. The law states that no nuisance action can be brought against a farm which has lawfully been in operation for a year or more before it was claimed to be a nuisance. The farm must be a “normal agricultural operation” and must have remained substantially unchanged for a year preceding the nuisance claim. The Right to Farm law also prohibits municipalities from passing nuisance ordinances that apply to farm operations that use “normal agricultural practices.” Protection from nuisance suits and ordinances exists as long as the activity in question does not pose a threat to public health, safety, or welfare.
1. Timeliness and Seasonality of Farming Practices

Because farming depends upon biological processes, farm work is subject to biological needs and constraints. Certain types of farm work, such as plowing, harvesting, and spraying, must be done within brief time periods or the entire year’s harvest may be lost. When the weather does not cooperate, such as when the spring or fall are unusually rainy, it is even more important for farmers to perform certain tasks quickly and completely as soon as conditions allow. Timeliness is particularly important when harmful insects are discovered in an orchard or field. Such time constraints are why farmers sometimes work at night or on weekends, and may have to drive machinery on roads during rush hour.

The biological nature of agriculture also means that farming generally follows seasonal patterns. Many work activities occur only for a week or two during each year, so any activity that might inconvenience neighbors through noise, odors, or other effects may be temporary.

2. Manure Management

Farms that raise animals produce quantities of manure that must be utilized without disrupting the farm operation, the environment, or public health. Spreading manure on fields helps fertilize the soil and, if properly managed, is a traditional method of recycling nutrients (spreading manure is a major component of organic farming).

There are several ways to manage manure. Some farmers clean their barns daily and spread the manure on their fields. Others store manure in manure storage tanks or lagoons and empty these a few times each year. During these brief clean-out periods, odors can occur as the manure is spread.
Manure management on farms with a high density of animals is subject to Pennsylvania’s Nutrient Management Act as of October 1997. This act is designed to control pollution from livestock facilities, reducing the amount of manure runoff entering streams and ultimately the Chesapeake Bay. Farms with a high density of animals are required to have and implement an approved plan for nutrient management. The plans must be developed by a certified nutrient management specialist and be approved by a public specialist in the local conservation district or State Conservation Commission staff.

3. Odors and Noise

Certain seasonal farming activities, such as cleaning out a manure storage tank or harvesting corn, can temporarily cause noticeable odors or noise. On some farms, normal activities may generate odors and noises throughout the year. These smells can come from manure, silage (which produces a sweet yet somewhat pickled odor), or compost. Large poultry and hog farms may have some manure odors year round. Silage odors can occur around dairy farms. Compost odors can occur around mushroom farms because compost is an essential ingredient in mushroom production.

Whether you will be able to smell odors or hear noises from nearby farms depends, in part, on the weather and your distance from the farm. Humidity, temperature, local topography, and wind direction have a major influence on how far odors travel and how strong they are at a specific location. Odor perception can vary from person to person. At this point, there are no standards or rules regulating odors.
4. Use of Roads

Few farmers have all their fields adjacent to their main buildings, so they must use public roads to move farm equipment between fields. Farmers do not enjoy driving their equipment on busy roads any more than motorists enjoy being behind them, but moving their equipment is a necessary part of farming. During some times of year, the timeliness of production means they cannot wait until after rush hour.

In general, farmers most frequently need to move equipment on public roads during spring and fall. This equipment includes plows, disks, harrows, and planters during spring planting; and combines, wagons, and other harvesting machinery during the fall harvest. Some farms also take daily manure loads out to their fields throughout the year to keep their barns clean.

Be cautious when passing farm machinery on the road. Always watch carefully to make sure the machinery is not about to turn left before you pass. If the farm machinery is starting to edge over the center line, it is probably about to turn. Also watch for oncoming vehicles when passing farm machinery on the highway.

5. Use of Pesticides

Many agricultural crops are subject to weed, insect, and disease pests which can only be controlled cost-effectively with pesticides. This is particularly true for certain fruits and vegetables that are easily blemished by fungi and insect pests. Some farmers have adopted a pest control method called Integrated Pest Management, or IPM, which concentrates on nonchemical controls. The farmer frequently checks a crop to see how it is doing and only sprays chemicals
when necessary. Because pesticides are used only when needed, IPM is more environmentally friendly than routine applications. In addition, farmers can save money with IPM because they use fewer chemicals. Pesticides are very expensive, so farmers do not want to use them needlessly.

When spraying is needed, farmers are required by federal and state law to follow stringent application rules. Many pesticides can be used legally only by pesticide applicators who have attended pesticide safety classes, passed a test, and are certified in their use. Applicator licenses must be updated every three years, and applicators must show proof of having attended pesticide training classes when they renew their licenses. In addition, applicators are required to maintain records of pesticide applications. All pesticides sold in Pennsylvania are approved by the U.S. Environmental Protection Agency and the Pennsylvania Department of Agriculture, and have restrictions on when, where, and on what crops they can be sprayed.

6. Animals in Pastures

Depending upon the location of a farmer’s fields and buildings, pastured animals may need to cross public roads, temporarily blocking traffic, possibly tracking mud or dirt onto the road, and always putting the farmers and animals at risk of being hit by cars. Pastured animals also occasionally get out of fencing, and may visit neighbors’ yards and gardens or graze alongside the road. If you see an animal outside its fence close to a road or a neighbor’s property, do not assume that the farmer knows that the animal is out. A simple telephone call to the farmer can help avoid damage to your garden, a traffic accident, or injury to the animal. If your farm neighbors let you walk, run, or hunt on their land, make sure you close gates behind you to keep animals from getting out.
7. Farming Is Changing

Like other sectors of the U.S. economy, farms are being affected by the globalization of markets. Technological changes are forcing farmers to get larger or to change their type of production to survive. This is particularly true for poultry and hog producers, because intense national competition and increasing “vertical integration” between food processors, farmers, and feed suppliers have changed the way these commodities are produced. As a result, farming is more complex and competitive, and farmers must keep up with a wider range of information and influences to stay in business.

Farms with a higher concentration of animals or poultry have a greater potential for problems with odors, noises, and other aspects of agriculture which neighbors may not appreciate. The appropriate balance between letting farms expand and change to survive and minimizing the effect of those changes on neighbors and the community is difficult to find. Some residents even argue that these newer, larger agricultural operations are more “factory” than “farm,” and should not receive agriculture’s special protections in state and local statutes.

As farming changes, the rural landscape also will change. New agricultural buildings may be built as existing farms expand or change their type of operation. The seasonality of farm activities and associated noises and odors also may change for the same reason. New residential, industrial, or commercial development may occur as farms are sold or subdivided.
Living Next to Farmers

One of the best ways to appreciate agriculture is to make friends with your farming neighbors. Get to know the workings of their farm and the purpose of their different agricultural activities. Remember that the farmer is not there to annoy you—everything done on the farm has a specific purpose.

You also can help maintain neighborly relations with the farmers around you by respecting their property rights as much as you expect them to respect yours. Farms are private property and you should not be on farmland unless the owner specifically has given you the right to use it. Riding motorcycles or all-terrain vehicles (ATV’s), walking, or skiing through fields can damage soil and crops.

You also should keep in mind that the country landscape is constantly changing. Agriculture has become big business, and its methods of operation have changed. Be prepared for change and attempt to understand it. Not only may new houses go up around you, but new businesses or larger farms could locate near your house as well.
If You Have a Complaint About a Farm

Smells, noises, and other things related to farms and agriculture are part of living in the country. Some smells and noises are temporary, resulting from normal seasonal activities on farms. Others can be expected throughout the year.

For some practices that may harm the environment, such as pesticide application or manure disposal, there are accepted “best management practices” and relevant federal and state laws that help reduce risk. When it comes to odors, noises, and other aspects of farming that may aggravate neighbors, what is unreasonable is not always clear. Whether a problem is unreasonable enough to require private or public action depends upon many factors and usually must be determined on a case-by-case basis. Sometimes, blatant problems that cannot be excused do occur on farms, and neighbors demand corrective action.

Approach your farm neighbors directly if you have a complaint about odors, noise, or mud on the roads. Most farmers do not want to inconvenience or cause problems for their neighbors. They may be unaware that a problem exists. Talking with them may help them understand the problem and find a way to avoid it in the future. It also will help you understand why the problem is occurring and how long the inconvenience may last.
In Summary

Agriculture is an important element of rural Pennsylvania. Its environmental, economic, and cultural roles provide benefits to community members, and in many residents’ minds help define “rural.” The aesthetic views and community character provided by farms is a major reason many people want to live in the country. At the same time, however, some agricultural practices can be seen as an inconvenience by neighbors unfamiliar with agriculture.

Understanding farm practices can increase your enjoyment of living in the country and help you enjoy the seasonal flow of agricultural activities around you. If you want more information about farming, talk with your farming neighbors or call the Penn State Cooperative Extension office in your county.


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