## Penn State Extension

# **Vegetative Buffers**

Trees and shrubs planted following a conservation plan can help improve the environment for you, your birds, and your neighbors.

#### **Benefits**

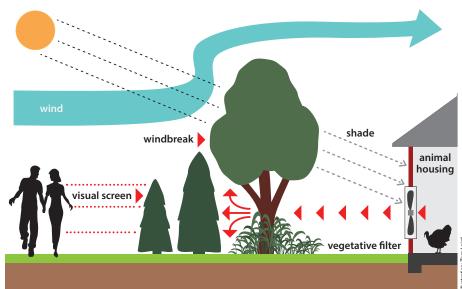
- Vegetative buffers filter and trap dust, odor, and ammonia from poultry house exhaust fans.
- Riparian species slow and buffer roof water and road and barnyard runoff, and filter nutrients and sediments.
- Shelter belts around the farm protect birds from winter winds ("windbreaks") and buildings, feed bins, access roads, and doors from drifting snow ("living snow fence").
- During hot weather, shade trees block the solar heat load on barns, reducing energy expenditures.

• Biomass buffers can be used to grow

- bedding, and pine shavings can be replaced with miscanthus or switchgrass straw, chopped willow, or poplar shavings. Spent litter can be utilized as a renewable, carbon-neutral fuel to replace fossil fuels like propane.
- Screen poultry management activities using buffers composed of attractive trees and shrubs that can also land-scape and beautify the barns and farm.

#### **Conservation Practices That Work for Your Farm**

- Strategically select and place plants around buildings to divert energy-robbing winds and snow and modify the temperature in the surrounding area.
- Locate vegetative buffers near the ventilation exhaust system to filter ammonia and particulate matter, which carries odor and microorganisms.
- Plant riparian species near barnyards, roof runoff, and drainageways to control runoff and absorb excess nutrients that can pollute the water.
- Grow bedding materials on the farm for bedding and fuel sources, reducing costs and your carbon footprint.



### **For More Information**

Contact the Penn State Extension office in your county, county Conservation District, or USDA Natural Resources Conservation Service (NRCS) office for technical and financial assistance with the installation of vegetative buffers.

Prepared by Paul Patterson, professor of poultry science.

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