



### **Farm Ponds Work for Wildlife**

Farm ponds are used to water livestock, raise fish, prevent soil erosion, and provide recreation, but their value to amphibians and other wildlife is often overlooked. Although they are constructed, not natural wetlands, farm ponds provide a wide range of conservation and wildlife habitat values. This brochure is intended to advise landowners of the multiple values of small farm ponds and provide useful tips on management for wildlife. Landowners interested in building or maintaining farm ponds should contact their local USDA Service Center.



### **Farm Ponds Recycle Nutrients and Prevent Erosion**

Farm ponds trap nutrients, such as nitrogen and phosphorus, and sediment before they reach rivers, streams, and lakes as pollutants. A vegetated buffer strip of fallow land between the pond and adjacent cropland supports wildlife and helps filter out sediment and nutrients before they reach the pond. Emergent plants growing in ponds also help recycle nitrogen and phosphorus and improve water quality. Also, in hilly areas, farm ponds help prevent gully development.



### **Farm Ponds Provide Water for Livestock**

Landowners often use farm ponds as a water source for livestock. Livestock pollute the water with manure, disturb aquatic vegetation, and break down the banks, sometimes leading to failure of the dike or embankment supporting the pond. Water quality is better and the pond ecosystem healthier if livestock are fenced out of the pond and water from ponds is pumped to a nearby stock tank. Contact your local USDA Service Center for more information.

### **Farm Ponds Provide Habitat for Wildlife**

A chorus of frogs is one of the many pleasures of rural life in the spring and summer. Farm ponds, especially shallow ponds without fish, provide important breeding habitat for amphibians (frogs and salamanders). Unfortunately, ponds managed for fish production do not make good habitat for most amphibian species. Fish eat tadpoles and bullfrogs eat other frogs, so ponds lacking these species provide the best habitat for most amphibians. Farm ponds also provide habitat for other species of wildlife, including deer, fox, raccoons, turkeys, wood ducks, tree swallows, shorebirds, and turtles.



### **Farm Pond Design**

Your local USDA Service Center is available to help design a pond appropriate for your watershed and meeting your management goals. Avoid construction that will affect natural wetlands or flowing streams, which are protected under state and federal laws. Ponds should have some shallow water providing breeding habitat for amphibians, mudflats for migrating shorebirds, and access to water for many wildlife species. Landowners must make choices



about how to vegetate dikes and buffer strips. Plants native to the local area best provide for the needs of native wildlife and are less likely to be invasive. Maintaining the integrity of dikes or embankments will increase the longevity of the pond. Dikes can be undermined by animal burrows and tree and shrub roots. Trees and shrubs, however, are important wildlife habitats and may be planted in the buffer strip.

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## Selected Resources:

- Deal, C., J. L. Edwards, N. Pellmann, R. Tuttle, and D. Woodward. 1997. Ponds - Planning, Design, Construction. Agriculture Handbook No. 590. M. Mattinson, L. Glasscock, J. Massey, and W. Pierce, Editors. USDA Natural Resources Conservation Service, Washington DC.
- Kingsbury, B., and J. Gibson, Editors. 2002. Habitat management guidelines for amphibians and reptiles of the Midwest. Partners in Amphibian and Reptile Conservation, Midwest Working Group, Fort Wayne, Indiana.
- USDA Wildlife Habitat Management Institute: <http://www.ms.nrcs.usda.gov/whmi/>

Technical assistance on constructing and maintaining farm ponds is available at your local USDA Service Center. ....NRCS website: <http://www.nrcs.usda.gov/>

Federal and state agencies are equal opportunity employers.

- Gently sloping shorelines support more wildlife diversity;
- Plant native grasses and flowers in a wide buffer strip.
- Brush piles, logs, trees, and shrubs in adjacent buffer strips provide habitat for wildlife.
- Keep dikes and embankments clear of woody vegetation and animal burrows.
- Install nest boxes to attract cavity-nesting birds.
- Fence out cattle and don't introduce fish.
- Install low-cost water pump and use a stock tank to water livestock.

## Managing Farm Ponds for Biodiversity

