

## American Fisheries Society (AFS)

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## Ohio Sea Grant College Program

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# Wetlands and fisheries



What is the Ohio chapter of American Fisheries Society? The American Fisheries Society (AFS) is a professional organization composed of educators, scientists, biologists, and managers trained in fisheries-related disciplines.

## Mission Statement

AFS increases public awareness of the importance of wetlands in supporting diverse fish communities. This fact sheet provides additional sources of information with a wide range of perspectives regarding the value of wetlands.

## Importance of Wetlands to Fish

Many species of fish are dependent upon wetlands during all or part of their lives. Wetlands provide many valuable functions important to fish:

### Ecosystem Diversity and Stability

Wetlands play a significant role in maintaining a high level of biological diversity. The variety of habitats provided by wetlands increases species diversity, richness, and numbers. Community diversity leads to community stability.

### Spawning Habitat

Shallow, dense stands of aquatic vegetation are ecologically important as spawning substrate for fish.

### Nursery Habitat

Aquatic plants protect young fish from predators.

### Food Production

Nutrients, shallow water, and plants provide the necessary mix for the production of algae, zooplankton, and invertebrates, which are utilized by young fish.

### Water Quality

Wetlands serve as a natural buffer zone between upland drainage areas and open water. They improve water quality by removing heavy metals and pesticides from the water column; these pollutants are bound to particles that settle out and become part of the sediment. Wetlands remove nutrients, such as phosphorous and nitrogen compounds, by incorporating them into plant tissue.

## Types of Wetlands Used by Fish

### Bogs

Bogs are isolated wetlands that receive little runoff water, and are acidic and generally unproductive. They provide habitat for several of Ohio's endangered and nongame species.

### Diked Wetlands

Dikes are constructed to allow for the mechanical control of water levels, which maximizes production of emergent vegetation.

### Fens

Fens are isolated wetlands that receive somewhat greater inputs than bogs, and are less acidic and more productive. They support several of Ohio's endangered species.

### Floodplains

Floodplains are temporary habitats created by excessive rainfall or meltwater. They provide refuge from strong river currents during high water periods.

### Freshwater Estuaries

Estuaries are drowned river mouths characterized by a zone of mixing lake and stream water. Fish have free access to the system at all times. They provide nursery areas and are important to resident and transient species of fish.

### Littoral Areas

Littoral areas are at the margins of lakes extending to a depth of 2 meters (6.6 ft). Emergent, submerged, and floating vegetation are common.

### Marshes

Marshes are dominated by emergent vegetation, such as reeds, sedges, and grasses, and are located along lake and river margins. Marshes can also be isolated. Fish communities here can become diverse with numbers becoming abundant.

### Swamps

Swamps are dominated by flooded timbers, are rich in nutrients, and provide exceptional wildlife habitat.

## Ohio Sea Grant Extension Program

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Buffalo, NY 14207  
716-879-4209  
[www.lrb.usace.army.mil/](http://www.lrb.usace.army.mil/)

**Ducks Unlimited**  
One Waterfowl Way  
Memphis, TN 38120  
901-758-3825  
[www.ducks.org/](http://www.ducks.org/)

**Fish and Wildlife Service**  
National Wetland Inventory  
Center  
9720 Executive Center Dr.  
Monroe Building, Suite 101  
St. Petersburg, FL 33702-2400  
727-570-5400  
<http://wetlands.fws.gov/>

**Fish and Wildlife Service**  
Central Ohio Office  
6950 Americana Pkwy.  
Reynoldsburg, OH 43068  
614-469-6923  
<http://midwest.fws.gov/Reynoldsburg/>

**Izaak Walton League of America**  
Central Ohio Chapter  
26 Garden Rd.  
Columbus, OH 43213  
614-447-0933

**League of Ohio Sportsmen**  
3953 Indianola Ave.  
Columbus, OH 43214  
614-268-9924  
[www.leagueofohiosportsmen.org/](http://www.leagueofohiosportsmen.org/)

**Natural Resources  
Conservation Service**  
P.O. Box 2890  
Washington, DC 20013  
202-720-3210  
[www.nrcs.usda.gov/](http://www.nrcs.usda.gov/)

**Natural Resources  
Conservation Service**  
Central Ohio Office  
200 N. High St.  
Room 522  
Columbus, OH 43215  
614-255-2500

**The Nature Conservancy**  
Ohio Chapter  
6375 Riverside Dr., Suite 50  
Dublin, Ohio 43017  
614-717-2770  
<http://nature.org/wherewework/northamerica/states/ohio/>

**Ohio Department of Natural  
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WILDLIFE  
[www.dnr.state.oh.us/wildlife/](http://www.dnr.state.oh.us/wildlife/)

**Ohio Department of Natural  
Resources Division of Soil  
and Water Conservation**  
4383 Fountain Square Dr.  
Building B-3  
Columbus, OH 43224  
614-265-6610  
[www.dnr.state.oh.us/soilandwater/](http://www.dnr.state.oh.us/soilandwater/)

**Ohio Environmental  
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Public Information Center  
122 South Front St.  
Columbus, OH 43215  
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**Pheasants Forever**  
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**Society of Wetland Scientists**  
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**Waterfowl U.S.A.**  
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**Wetlands for Wildlife**  
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**U.S. Geological Survey**  
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