FS-063

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American Fisheries Society (AFS)

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Ohio Sea Grant College Program

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Sea Grant forms a unique partnership with public and private sectors to combine research, education, and technology transfer for service to the public. Sea Grant provides a national network for universities to meet changing environmental and economic needs in our coastal, oceans and Great Lakes regions.

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OHIO STATE Sea Grant

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.

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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 intertebrates, 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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For Further Information Contact:

Army Corps of Engineers

Buffalo District 1776 Niagara St. Buffalo, NY 14207 716-879-4209 www.lrb.usace.army.mil/

Ducks Unlimited

One Waterfowl Way Memphis, TN 38120 901-758-3825 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/

Natural Resources Conservation Service

P.O. Box 2890 Washington, DC 20013 202-720-3210 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 Resources Division of Wildlife

1840 Belcher Dr. Columbus, OH 43224 614-265-6565 or 1-800-WILDLIFE 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/

Ohio Environmental Protection Agency

Public Information Center 122 South Front St. Columbus, OH 43215 614-644-3020 www.epa.state.oh.us

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Olentangy River Wetland Research Park

The Ohio State University School of Natural Resources 2021 Coffey Road Columbus, OH 43210 614-292-9774 http://swamp.ag.ohio-state.edu

Pheasants Forever

1783 Buerkle Circle St. Paul, Minnesota 55110 651-773-2000 www.pheasantsforever.org/

Society of Wetland Scientists

1313 Dolley Madison Boulevard Suite 402 McLean, VA 22101 703-790-1745 www.sws.org

Waterfowl U.S.A.

P.O. Box 50 Edgefield, SC 29824 803-637-5767 www.waterfowlusa.org/

Wetlands for Wildlife

P.O. Box 344 West Bend, WI 53095 414/628-1060

U.S. Geological Survey

National Wetlands Research Center 700 Cajundome Boulevard Lafayette, Louisiana 70506 337-266-8500 www.nwrc.usgs.gov