National Fish Hatcheries are dedicated to the conservation, protection and enhancement of the Nation’s aquatic resources for the continuing benefit of the American people.

Mammoth Spring NFH stocks walleye and smallmouth bass in the White River Basin for restoration purposes.
Introduction

Mammoth Spring National Fish Hatchery (NFH), operated by the U.S. Fish & Wildlife Service, has been producing fish for public use and restoration for over a century. Established in 1903, the hatchery is one of the oldest in the nation. It was built in the Ozark foothills in northeast Arkansas because of the availability of reliable, high quality, gravity-flow water from the world's tenth largest spring. Also importantly, the hatchery was located with easy access to the railroad. With its unique pond and raceway rearing system, the hatchery has the capability to produce a wide variety of fish and other aquatic species.

What We Do

This is a National Fish Hatchery which is supported by your Federal tax dollars. Fish raised on Federal hatcheries are stocked in public waters to support Federal fishery responsibilities mandated by law. These include fish for restoration where, for example, man-made dams have altered a stream’s natural reproductive capability; or to restore threatened or endangered populations. Fish are also used to support recreational fishing programs in Federal and state waters.

cover illustrations:
Duane Raver
Current programs at Mammoth Spring NFH

Restoration of interjurisdictional fishes including paddlefish and lake sturgeon

Biologists here are developing spawning and rearing techniques for these unusual fishes. Because their ranges transcend local, state, and sometimes national boundaries, concern for their well-being is a major activity for the U.S. Fish and Wildlife Service. Conservation measures are necessary in order to maintain healthy populations of these fish in our public waters. Mammoth Spring NFH produces 40,000 paddlefish and 2,500 sturgeon each year.

Recovery of endangered and threatened species

This hatchery is developing spawning and rearing techniques for the endangered pallid sturgeon, Ozark hellbender salamander, and the alligator snapping turtle. In cooperation with Arkansas State University, the hatchery also assists in nationwide efforts to protect and restore both endangered and non-endangered mussel populations. They accomplish this by developing culture techniques, investigating life histories, and providing a refuge for imperiled populations. Around 5,000 freshwater mussels are produced for research and supplemental stocking by this hatchery each year.
Restoration of Gulf Coast striped bass populations
Mammoth Spring NFH maintains the only captive spawning population of Gulf Coast striped bass in the world. Populations of Gulf Coast striped bass (also known as stripers or rockfish) began to decline around fifty years ago for reasons such as habitat loss, water pollution and over-fishing. Two million Gulf Coast striped bass are produced by this hatchery to insure greater numbers of the fish in native habitats.

Restoration stocking in the White River drainage
This hatchery produces walleye and smallmouth bass for restoration stocking in the White River Basin, which has been impacted by flooding of spawning habitat due to Federal water development projects (dams) on the White River and tributaries. 400,000 walleye and 100,000 smallmouth bass are produced by Mammoth Spring NFH every year.

Fishery management and stocking recreational fish on National Wildlife Refuges
Mammoth Spring NFH provides fish for recreational fishing programs on National Wildlife Refuges, including approximately 100,000 largemouth bass and/or bluegill as needed for Refuge programs.

How We Do It
This hatchery is fortunate to have excellent water supplied by Mammoth Spring. Water from the spring is a constant 58 degrees with a naturally high dissolved oxygen content and a pH of about 7, making it ideal for fish culture. The hatchery uses only a small fraction of the spring’s flow, eventually returning the water to Spring River.
In a pond fish hatchery like Mammoth Spring NFH, adult broodfish such as bass and bluegill are allowed to spawn naturally in specially prepared ponds. Other fish, such as striped bass, are spawned in tanks after being given a hormone. The eggs are then transferred to incubator jars.

*Mammoth Spring NFH develops culture techniques and provides a refuge for imperiled mussel species*
Eggs of other fish such as walleye and paddlefish are collected from adult fish netted in the wild (which are then released) and brought back to the hatchery for hatching and rearing. The hatching of most species occurs in the early spring. After hatching, the fry are collected using a small seine and moved to rearing ponds or raceways for grow-out.

The rearing ponds are fertilized to encourage the growth of tiny microorganisms on which the young fry feed until they reach fingerling size of about one to three inches. The fish may be stocked at this point or held for rearing to a larger size. Some of the larger fish are fed specially prepared diets made on station and supplemented with forage fish such as minnows or goldfish.

The ponds where the fish are reared are specially constructed with a concrete catch basin or “kettle” in front of the drain. When the fish are ready to be transferred, various size screens can be inserted in the kettle to allow the water, but not the fish, to drain out. The fish collect here and can be removed with nets when the pond is nearly empty. Fish are weighed and counted and then loaded onto specially designed distribution trucks with oxygen for transport to stocking sites.
Hatchery Key

1. Aquarium
   Mammoth Spring NFH maintains an award-winning aquarium which is open daily to the public. Displays include fish raised at this hatchery and a variety of other interesting species.

2. Public Restrooms

3. Hatchery Office
   This is the headquarters for hatchery activity, and someone is generally available at this location. Assorted hatchery information and brochures may be obtained here.

4. Raceway Area
   Fish are held here for various production purposes. Packed-column aerators are used to add oxygen and help eliminate nitrogen from the water.
   *Lookers are welcome, but please*
do not put anything, including your hands, in the water.

5. Culture Building
Fish are held here for various production purposes. The building is used for hatching fish such as striped bass and paddlefish, and for formulating specialized feeds for fish on artificial diets. The building is also home to the freshwater mussel lab, where a living stream tank provides habitat for the mussels, and an array of small tanks house host fish involved in the mussel research. *Due to the sensitive nature of some operations, there are times certain areas may not be open to the public.*

6. Rearing Ponds
Ponds are used for fish production during the summer growing season, and may be dry between harvests. During the winter most ponds are drained which helps eliminate harmful disease organisms and undesirable vegetation. All of the ponds that have water in them usually contain fish; however, many are small fry or fingerlings that are hard to see. Likewise, larger fish generally stay in deeper water and may not be visible. *Please exercise caution when walking around the ponds, and children must be supervised at all times—we want only fish in the water!*
7. **Private Residence**
   Hatchery personnel only.

8. **Spring River and Warm Fork River**
   You may enjoy excellent fishing opportunities in Spring River adjacent to the hatchery (please follow state fishing regulations).

**For More Information**
Visiting hours are 7:00 am to 3:30 pm daily, open all year including most holidays. Special group tours of the hatchery can be arranged by contacting the hatchery office, and we offer a variety of exciting volunteer opportunities.
Mammoth Spring National Fish Hatchery is one of fourteen hatcheries managed by the U.S. Fish and Wildlife Service in the Southeast Region. These hatcheries serve a vital role in the management of our fishery resources.

Visitors are welcome to explore the hatchery and visit the kiosk for more information.

A hatchery biologist checks the nitrogen level in a rearing pond.

Aerial photo of Mammoth Spring National Fish Hatchery.