



# North Mississippi Fish Hatchery

## Visitor Education Center

### Educator's Planning Packet





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# North Mississippi Fish Hatchery Visitor Education Center



The North Mississippi Fish Hatchery Visitor Education Center in Enid provides an educational and entertaining experience that promotes freshwater sport fishing, encourages conservation and stewardship of aquatic resources and offers information about the Mississippi Department of Wildlife, Fisheries, and Parks (MDWFP). The complex is located on 58 acres and is less than a quarter mile from Interstate 55. The facility is operated by the MDWFP and is easily accessible to Mississippi residents and out-of-state visitors.



The North Mississippi Fish Hatchery is one of two state hatcheries managed by the MDWFP. The hatchery produces and stocks a variety of sport fishes into Mississippi's public waters. The Visitor Education Center (VEC) at the North Mississippi Fish Hatchery is the first and only facility of its kind in Mississippi. The VEC features a native habitat area, 10,000 gallon aquarium, interactive exhibits, displays, artifacts, fishing rodeo pond, art gallery, and the world record white crappie. All of these elements serve as entertaining and engaging learning experiences for all visitors.

**The facility is located below Enid Dam in  
Yalobusha County, Exit 233 East off I-55.**

# Educational Groups – Guided Tours



## Educators have many opportunities at the North Mississippi Fish Hatchery and Visitor Education Center (VEC).

For teachers bringing classes for a guided tour, the facility offers inclusive, appropriate activities and tours for all ages, abilities, and learning styles. The goal of the VEC is to connect youth to Mississippi's natural resources and foster an interest in those same resources.

Students explore the museum and 10,000-gallon aquarium. Areas covered include:

Carnivore, Herbivore,  
and Omnivore:  
What's the difference?

Food Web:  
Predator vs. Prey

"What makes a  
fish a fish?"

What All Fish Need  
to Live and Grow

These same students learn about a hatchery, the hatchery's role in the **water cycle**, and about the **life cycles of fish**.

Material covered in the tours coincides with the following 2018 Mississippi state standards: Life Science K.1, L.K.2, L.K.3, L.2.1, L.2.3, L.3.1, L.3.2, L.3.4, L.4.2., and L.5.3.

Tours for high school and college classes are geared to the following subject areas:  
Biology, Environmental Science, and Aquatic Science.  
(See the "Hatchery" page for more details.)

*Experienced staff include certified interpreters and retired educators. Staff are members of the following organizations:*

- Aquatic Resource Education Alliance
- Mississippi Environmental Education Alliance (NAAEE)
  - National Association for Interpretation
  - Association of Zoos and Aquariums
  - Association for Conservation Information

# F.I.S.H. Programs



Educators planning a tour can also choose to add a special program. These programs are Fun, Interesting, Surprising, and Hands-on (F.I.S.H.).



**Fish Transformers** – Students are “transformed” into “schools of fish.” They become specific species and learn about what they need to live and grow (diets, habitat). These “fish” identify themselves and some of the predators they would face in the wild. Students also discover whether or not they are raised at the North Mississippi Fish Hatchery.



**Fish Predators** – Students learn about fish and other animals higher in the food chain that prey on fish lower in the food chain. This program identifies common reptiles, amphibians, and birds whose diets consist primarily of fish. Participants will see skulls, replica eggs, claws, and teeth of some of these predators.



**Fish I.D.** – Youth of all ages learn to identify common Mississippi freshwater fish species. Knowledge from the program is tested at the 10,000-gallon aquarium.



**Hatchery Fish** – Created for high school classes, this program provides an overview of fish species raised at the North Mississippi Fish Hatchery. The program explains why the hatchery raises particular fish species, discusses diploid and triploid fish, and identifies a hatchery’s role in conservation.



**Aquarium Feeding** – Students observe the fish in the aquarium. The aquarium feeding includes time for a “question and answer” session with students.



**Virtual Fishing** – Students have the opportunity to land a trophy bass on a virtual fishing simulator. *Recommended for groups of 10 or less.*



**Scavenger Hunts** – This activity requires students to test their knowledge. Students become fishing detectives or “time travelers” as they try to solve scavenger hunts that take them traveling through the exhibits from fishing past to fishing present. *Recommended for groups of 30 or less. 4<sup>th</sup> – 9<sup>th</sup> grade.*



**Flower Girls** – Created for girl scouts, this program identifies native plants and flowers in the VEC habitat and discusses “interesting insects” and “beautiful birds” they attract. This program also identifies aquatic plants that serve as habitat for wildlife and fish species.



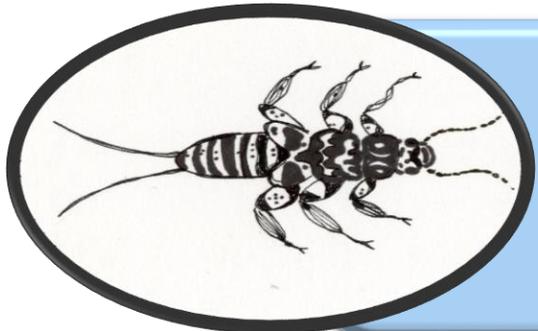
**Fishing through the Pages** – This reading program allows preschoolers to discover what animals live around a cattail, near a log, or under a rock. Coupled with a tour, this program allows children to use their senses of sight, hearing, smell, and touch.



**Water Safety** – The Mississippi Department of Wildlife, Fisheries, and Parks and the US Army Corps of Engineers are dedicated to teaching students about water safety. Students will benefit from talks and the Corps of Engineers' Water Safety Exhibit on display at the Visitor Education Center.



**Be the Biologist** – Designed for scouts, middle, and high school students, youth learn more about what Fisheries biologists do and identify equipment they use. Learn some interesting facts about biologists' jobs and how they help to conserve Mississippi's natural resources.



**Alien or Aquatic Animal?** – Fish are prey for many types of predators, BUT they are also predators for many types of prey. In this program, students identify various macroinvertebrates lower in the food chain.



**Annual Art Contest** – Youth across Mississippi are able to participate in an annual contest, portraying a Mississippi native, wildlife species. The Foundation for Mississippi Wildlife, Fisheries, and Parks sponsors this event. To learn more visit: [MDWFP - Youth Art Contests](#).

*Please check the website as new information/programs are added.*

# The Hatchery's Role in Conservation . . . .



**Biology, environmental science, and aquatic science classes gain knowledge of hatchery operations and the MDWFP Fisheries Bureau's role in enhancing Mississippi's fish populations.**

The North Mississippi Fish Hatchery is equipped to produce multiple cool and warm-water species. These species include northern largemouth bass, southern walleye, paddlefish, alligator gar, white crappie, black crappie, Magnolia crappie (triploid-hybrid crappie), grass carp, bluegill, and redear sunfish.

Students learn about the developmental stages of fish and about the hatchery's work with species that may become threatened in the near future.

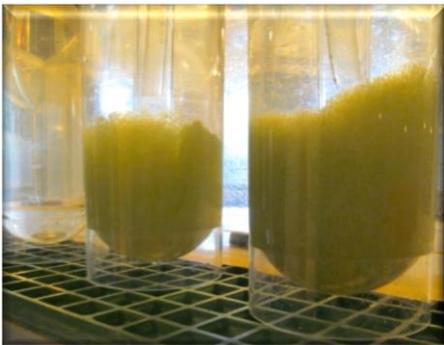
Areas covered include:

What changes in a water body would necessitate stocking?

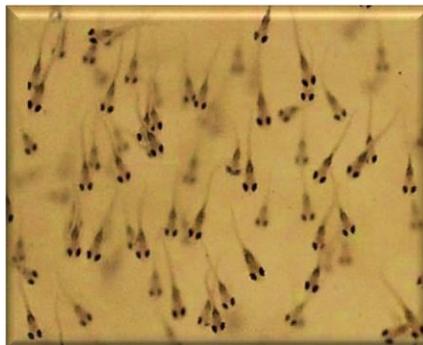
Life Cycles of Fish

Fish Found in Freshwater

Fisheries' Biologists' Role in Conservation Efforts



Eggs



Fry



Fingerlings

Students will also have the opportunity to "Become a Hatchery Manager." Students learn about fish production in the hatchery's two 80-foot raceways and learn more about managing fish spawning, harvests, and stocking.



To learn more about tours, call the VEC at (662) 563-8688 or email [Emily-Jo.Wiggins@wfp.ms.gov](mailto:Emily-Jo.Wiggins@wfp.ms.gov).

# After a Tour – Enid Lake



**Although created for Flood Risk Management, the Enid Lake Project offers many recreational and educational opportunities for visitors.**

Enid Lake is operated by the U.S. Army Corps of Engineers. The construction of the Enid Lake Project began in 1947. It was completed in 1952.



This Project encompasses over 44,000 acres of both wetlands and forests. Today it is recognized as one of the top fishing spots in the country.



Water is supplied to the hatchery by two ground wells and a pipeline from Enid Lake. Water leaving the hatchery is drained into the Yocona River.

Recreation areas are numerous, including the historic Ford's Well interpretive site and trail.

**Groups enjoy fishing spots, nature trails, picnic areas, and playgrounds after a tour at the Hatchery and Education Center.**

# VEC General Information



## Address:

North Mississippi Fish Hatchery and Visitor Education Center  
P.O. Box 100  
457 CR 36  
Enid, Mississippi 38927

***Please note: GPS will not locate our facility.***

**Phone:** (662) 563-8688 OR (662) 563-8068

**Email:** [Emily-Jo.Wiggins@wfp.ms.gov](mailto:Emily-Jo.Wiggins@wfp.ms.gov)

## Hours of Operation:

### March - October

Open Tuesday thru Saturday - 8:30 a.m. until 4:30 p.m.  
Closed Sunday & Monday

### November - February

Open Monday thru Friday - 7:30 a.m. until 3:30 p.m.  
Closed Saturday & Sunday

### Closed Holidays

## Admission:

Adults (age 18-59) - \$2.50

Adults (age 60+) - \$2.00

School Groups (per student) - \$2.00

Children ages 3-17 - \$2.00

Children under 3 - No charge

School Teachers with classes, bus driver - No charge

Active Military - No charge



2<sup>nd</sup> Grade



Scavenger Hunt



YMDLB

To schedule a guided tour, call the Visitor Education Center, or schedule a group online at <https://xnet2.mdwfp.com/applications/nmfh/groupregistration.aspx>.

# FAQs



## **Question #1:**

What if parents want to accompany a group?

### **Answer:**

Parents/Guardians/Grandparents are welcome to tour with a group. Admission price does not increase but remains \$2.50 per adult and \$2.00 for seniors.



## **Question #2:**

How long is the tour?

### **Answer:**

Length of tour varies from 45 min. to 1 ½ hrs. Please call the VEC for details.

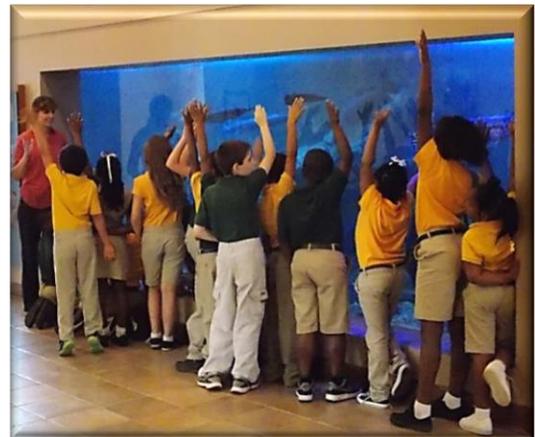


## **Question #3:**

My students are not familiar with fish or fishing. Is this a good field trip for them?

### **Answer:**

Yes! Whether your students are avid anglers or learning about fish for the first time, the VEC is a great opportunity to introduce youth to Mississippi's freshwater, fish species!



## **Question #4:**

Can I bring more than one class?

### **Answer:**

Yes. Individual classes are grouped together for organization. This allows more opportunities for questions and participation in hands-on activities.



**Question #5:**

Do you have educational events throughout the year?

**Answer:**

Yes. Please visit

<https://www.mdwfp.com/calendar/> for a list of upcoming events, art contests, and special programs/events.

**Question #6:**

I want to bring a scout group. Will the activities and tour help with merit badge requirements?

**Answer:**

Yes. Activities and tours meet some of the requirements, particularly “Fish and Wildlife Management,” “Fishing,” and “Nature” badges. Please call the VEC for more information.



**Question #7:**

What if my class wants to have a picnic lunch?

**Answer:**

The VEC is located adjacent to Enid Lake, which has many picnic areas near playgrounds and hiking trails.

**Question #8:**

What if I am bringing a group of various ages?

**Answer:**

The tours and programs are structured to provide information and activities for all ages in a group.



**Question #9:**

What about tours for children with special needs?

**Answer:**

Tours are structured for youth with physical or cognitive challenges. The VEC is ADA compliant and is completely accessible to wheelchairs/motorized chairs. **The facility also has designated “quiet spaces.”** Please call for an itinerary or for questions.



**Question #10:**

How does the school pay for a field trip?

**Answer:**

The VEC takes checks, cash, or credit cards. We can also provide an invoice to the school for payment.

**Question #11:**

Do you provide different types of hands-on activities?

**Answer:**

Yes. The VEC does provide activities in a safe environment, allowing for students' ages and abilities. Our activities are structured with equivalent outcomes.



**Question #12:**

Do you offer fishing events for children?

**Answer:**

This facility does host an annual youth fishing rodeo. Please check the calendar of events on the website for more information.

**Curious to learn more?**

Visit the "Dive Deeper" page on the website!

# Fish Vocabulary: Pre-Trip Fun!



Increase your knowledge before a trip to the North Mississippi Fish Hatchery!

## Vocabulary:

**Fish** – an animal with a skeleton, fins, and gills

**Gills** – organs that allow a fish to get oxygen from the water (**Remember!** Fish do not have lungs like humans. They cannot breathe out of the water.)

**Aquatic Habitat** – an environment where animals live (Aquatic describes things living in water or places having water. Examples of aquatic habitats are ponds, rivers, streams, lakes, and swamps. Fish live in aquatic habitats.)

**Fisheries Biologist** – a scientist who studies fish

**Angler** – a person who fishes with a hook and line

**Hatchery** – a place where fish eggs are collected and kept until they hatch

## Advanced Vocabulary:

**Fisheries Conservation** – the efforts by Fisheries biologists to manage and protect fish populations and their habitats in public waters of Mississippi

**Species of Concern** – animal populations that, if not managed properly, will decrease and become threatened (A threatened status can lead to endangerment, and endangerment can lead to extinction.)

**Triploid** – describes cells with an extra set of chromosomes for a total of 69 chromosomes (Cells with the normal 23 sets of chromosomes, or 46 in all, are **diploid**. The hatchery raises a triploid, hybrid crappie, which cannot reproduce.)

*Please check the website for more “fishing terminology.”*

# Downloadable and Virtual Resources!



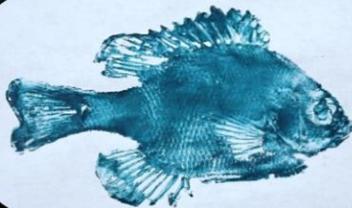
## Kahoot!

**Online Games** – Kahoot games are designed with the student in mind. Learn more about “Fish Identification,” discover some interesting nicknames for fish in the “Fish Name Game,” or uncover some “Fun Fish Facts!”



## Flipgrid

**Online Lesson Plans** – Created with help from the California PORTS program, educators can use these lessons for in-classroom activities and off-site virtual learning. Educators can also use these activities before or after a field trip for a blended learning experience. Simply login and share privately with students and/or other educators. **All videos offer Closed Captioning for student members of the deaf community.**



**Gyotaku “How To”** – Gyotaku is the traditional Japanese method of printing fish. Learn how to incorporate art into your science class or vice versa. This is a fun way to **turn S.T.E.M. into S.T.E.A.M. !**



**Posters & Activity Books** – Explore the hatchery fish development posters, download activity books, and more! These resources cover various ages, languages, and state standards!



**Aprende Mas** – Hay muchos recursos en español para los estudiantes y los maestros. Aprenda sobre los peces, el criadero, y más.

**S.T.E.M.**

**Additional “Downloadables”** – Other activities combine science with math in the “Become a Hatchery Manager” lesson plan or provide activities across grades and ages with the “Fish Food Web.” Find out about these lesson plans and more!



**Virtual Geocaching** – Groups and visitors can play the virtual geocaching adventure using their cell phones. Answers are located throughout the facility!



**A Closer Look (Microscopy Pictures)** – Based off a Smithsonian exhibit, these images provide a unique “eggs-pert” look inside the eggs of native fish species!



## What Teachers are Saying –

Thank you once again for the tour & the interaction with the students. We all really enjoyed it – even our bus driver thought it was very interesting! Keep up the good work!

M.C., Environmental Science Class

Thank you so much for teaching our girls and coordinating our visit to the hatchery and our nature walk.

A.S., Troop 13232

Our kids (including the chaperones) had a wonderful time on their field trip to the Fish Hatchery. It was so informative as well as interesting! You handled our group beautifully, and the playground and hike was a great climax to a fabulous day!

C.L., SES

A BIG thanks to you and your staff for a very educational and well-organized experience for our second graders. We had a blast . . . .

J.S., BIS

Thanks again for an educational and fun day! Hope to see you again next year!

D.D., Biology Class

Thank you for hosting our school. Our kids had a great time, and enjoyed learning all about the fish. We've been talking about it all week! We hope to visit again.

Crenshaw ES Team

Thank you for making our field trip to the North MS Fish Hatchery such a fun and educational day!

D.E.S. Challenge Class



NORTH MISSISSIPPI FISH HATCHERY