

Over a century ago, it was recognized that conservation measures were necessary to maintain good fishing in our public waters. Fishing has always been one of America's leading forms of outdoor recreation. The primary responsibility of the Dale Hollow National Fish Hatchery is to raise rainbow, brown, brook, and lake trout which will help preserve this tradition for present as well as future generations of Americans.

Construction of a dam, regardless of the type, alters the entire environment within a river. The first and most obvious change takes place when the reservoir fills, but many changes may also take place below the dam. Some of them might be subtle, and others, like those in the Dale Hollow tailwaters, might be quite drastic.

Dale Hollow Dam produced a large, deep reservoir in which the water stratifies into temperature layers during the summer and fall months. The water released into the Obey River comes from the deep, cool layer. It caused a loss of the original warm water fish habitat and replaced it with the present cold tailwater. Dale Hollow National Fish Hatchery

# **National Fish Hatchery System**

Since the inception of the U.S. Fish and Wildlife Service (Service) in 1871, fisheries conservation has figured paramount to people and economies. The National Fish Hatchery System (NFHS) is comprised of a network of Service field stations located throughout the nation that work with tribal, local, and state governments, other federal agencies, and foreign

nations to conserve fisheries.



The NFHS has a hand in conserving rare imperiled species and common game fishes: Pacific salmon, native western trout, diminutive darters in the heartland, lake

trout in the deep Great Lakes, striped bass that ring the Gulf and Atlantic Seaboard, and rainbow trout in the Southeast. That's only to name a few fishes. Plants, salamanders, crayfish, insects, and freshwater mussels are also beneficiaries of the work conducted by NFHS personnel.

#### **Dale Hollow National Fish Hatchery**

The Dale Hollow National Fish Hatchery (NFH) was established in 1965. The hatchery is a mitigation hatchery, producing approximately 325,000 pounds of rainbow, brown, brook, and lake trout annually for restocking the cold tailwaters below Dale Hollow and other dams. Reservoirs which will support trout are also stocked. Small numbers of trout are stocked into non-mitigation waters in Tennessee and contiguous states under cooperative agreements with State game and fish agencies.



The hatchery's water supply comes from Dale Hollow Reservoir at a depth of more than 90 feet below the water surface. The temperature at this depth is cold year-round, ranging between 40° and 60°F.

Water is gravity-fed to a strainer unit, located on hatchery grounds, which prevents dead fish and debris from blocking downstream water supply lines. The water is then piped to the outdoor raceways and indoor fingerling rearing tanks. Prior to use, it passes through packed columns where the water is degassed and aerated. Rearing water flows through the hatchery at rates up to 16,000 gallons per minute.

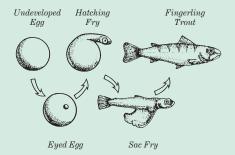
Alteration of habitat by impoundment, drought, pollution, and competition with aquatic invasive species have all played a part in placing a number of the Southeast's aquatic species in peril. In order to address this problem, Dale Hollow National Fish Hatchery is involved in the recovery and restoration of imperiled aquatic species, including freshwater mussels and non-game fish.

#### 1. Visitor Parking

# 2. Hatchery Building: Visitor Center, Offices, Fingerling Production Room, Feed Storage Room

The visitor center provides information pertaining to the U.S. Fish and Wildlife Service, National Fish Hatchery System, and Dale Hollow National Fish Hatchery. A short presentation concerning coldwater fishery mitigation efforts in the Southeast is offered for your viewing pleasure. Species of fish

# Life-Cycle of Rainbow Trout Egg to Fingerling



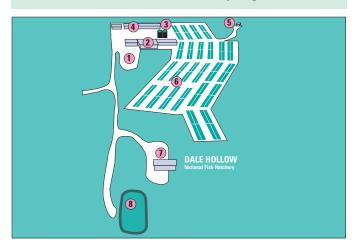
#### **Natural Life**

Trout eggs are deposited in prepared redds, or nests in the gravel of stream beds and hatch in 8 weeks or more. A young fish or fry lives for 3 to 4 weeks on food absorbed from the yolk sac.



About the time the yolk is completely absorbed, the fingerling emerges from the gravel and feeds on microscopic aquatic organisms.

From the many eggs deposited in the gravel, only a very few young fish are produced and survive to adulthood. Most of the eggs and young fish die from natural causes such as floods, silt, drought and predators. Under natural conditions, relatively few trout reach catchable size to be taken by anglers.







which were native to the Obey River before the construction of Dale Hollow Dam are on display in the five aquariums. Accessible restrooms are located in this area.

Visitors can stop by one of the offices if they have questions or need assistance. A staff member is usually available to

help.



Spawning operations are not conducted at this hatchery. Fertilized eggs are received from other federal hatcheries and cooperating state

hatcheries via overnight shipping in special egg-shipping cartons and are placed into hatching jars.

Eggs hatch approximately 10-14 days after they are placed in the hatching jars. Following hatch, the fry are placed into concrete tanks to grow. The fry absorb the yolk sac after another 10-14 days and swim up from the bottom of the tanks to the water surface. At this time, they are fed specially formulated feed hourly. When the fingerlings reach a length of 1-2 inches, they are moved into outdoor raceways to give them room to grow.

Fish are started out on very small feed granules. As the fish grow, they are fed progressively larger size granules until they graduate to pelleted feed. The smaller sized feed is stored in bags at one end of the Hatchery Building. It is



weighed out into buckets, according to a set schedule, and hand-fed to small fish in indoor tanks and outdoor raceways.

3. Bulk Feed Storage Bins Once the fish reach 4-5 inches long, they are fed a pelleted feed. This feed is stored in bulk storage bins located between the Hatchery Building and Garage/Maintenance Building. Pelleted feed is distributed to fish in outdoor raceways,

according to a set schedule, with a special truck fitted with a feed hopper and blower system.

### 4. Paint Storage Building, Garage/ Maintenance Building

Paint and other chemicals are stored in the paint storage building. The mechanical aspects of the hatchery's

maintenance and operation are conducted in the garage and maintenance areas. For safety reasons, these buildings are not open to the public.



#### 5. Duplex Strainer Unit

This structure prevents large debris from entering the water supply system and blocking downstream lines. It is designed so that it can be cleaned periodically without

interrupting the water supply to the hatchery. For safety reasons, access to this structure is not open to the public.

#### 6. Raceway Area

Fish are fed and cared for until they reach the desired stocking size. The raceway area is covered with netting designed to exclude fish-eating birds. It takes approximately 16 months to raise a trout from the egg stage to a 9-inch length at this hatchery.





Feeding frequency ranges from twice a day for the larger fish to 5 to 6 times per day for the smaller size fish. As the fish grow, heavy raceways of fish are split into empty raceways to give the fish room to grow.

Throughout the year, approximately 1.9 million rainbow, brown, brook, and lake trout are harvested from the raceways and distributed by truck to stocking sites in Tennessee, Alabama, and Georgia. State fish and game agencies assist with the fish distribution and manage the various trout fisheries throughout the Southeast.

Dale Hollow National Fish Hatchery is one of 14 Federal hatcheries located in the Southeast Region.

These hatcheries serve a vital role in the management of our fishery resources.

#### 7. Drum Filter Building

The hatchery has an effluent treatment system in place to remove fish waste from cleaning water before the water enters the discharge stream below the hatchery. The system is based on drum filter technology. As the drums spin, they allow most of the incoming water to pass through the sides of the revolving drums and out into the receiving stream.

# 8. Settling Pond

Concentrated fish waste is pumped from the drum filter building to a settling pond where the solids settle out onto the bottom of the pond. The fish waste is broken down by aerobic bacteria in the water. Floating aerators supply the bacteria with oxygen.



# **Enjoy Your Visit**

Visitors are welcome to tour the hatchery. During your visit, please feel free to ask questions you may have concerning the hatchery. The hatchery is open from 7:30 am to 3:30 pm daily. Accessible restrooms, drinking water, and parking are available.

Special group tours can be arranged by calling the hatchery in advance of your visit.

The hatchery sponsors several special events during the year. The annual Kids' Fishing Rodeo is held on Tennessee Free Fishing Day. Participants can fish for rainbow trout in the creek below the hatchery, win prizes, and enjoy free food and drink. The annual Wilderness Day Camp is held every July. Children can take



part in outdoor learning activities and take part in sports such as archery and fly fishing. Both events are free and target children 15 years of age and younger.

Please contact the hatchery for more information.

# Friends of Dale Hollow National Fish Hatchery, Inc.

The Friends Group is a non-profit group dedicated to supporting the hatchery and its mission. Comprised of volunteers, the Friends Group cosponsors special events and conducts educational programs and tours. New membership is always welcome.

#### **For Additional Information Contact**

Hatchery Manager Dale Hollow National Fish Hatchery 145 Fish Hatchery Road Celina, Tennessee 38551 Telephone: 931/243 2443

#### **Fishing and Camping**

Fishing is allowed in the creek below the hatchery, outside of the fenced in area. An accessible fishing pier, paved walk, and picnic tables are located in this area. The creek is stocked with rainbow trout on a weekly basis. Dale Hollow Dam Recreation Park, managed by the U.S. Army Corps of Engineers (USACE), is located between the hatchery grounds and the Obey River. Also managed by the USACE is nearby Pleasant Grove Park, located on the shores of Dale Hollow Reservoir.

Standing Stone State Rustic Park, located just across the Clay and Overton County line, offers camping, fishing, picnicking, hiking and swimming opportunities.

#### Thank you for Visiting!

Your awareness of our resource and its needs is the basic foundation for support of healthy fish and wildlife populations.

We enjoyed having you visit the hatchery and invite you to return often. Remember, this is **your** fish hatchery.

