



# PEQUEST TROUT HATCHERY TOUR BOOKLET



**Your tour starts right outside the main entrance. Follow the green trout painted on the sidewalk to the right in order to experience the Pequest Trout Hatchery for yourself.**



# Welcome to the NJ Division of Fish and Wildlife's Pequest Trout Hatchery and Natural Resource Education Center!

Pequest includes a center for environmental education as well as the only state owned trout hatchery, which stocks up to 700,000 trout annually in the public waters of New Jersey.

Visitors to the site use the area to learn about trout and how they are raised, as well as to use the 4,800 acres of land that surrounds the hatchery for recreational opportunities such as hiking, hunting and bird watching, while great fishing opportunities abound in the nearby Pequest River.

After spending some time in the Exhibit Hall, you can begin your self-guided tour by following the green trout painted on the sidewalk right outside the main entrance of the center. The tour leads you to the right and your first stop is just steps away by the raceway, or concrete holding tank, located in front of the Natural Resource Education Center.

This raceway differs from the rest of the hatchery for a few reasons. Here, the fish are provided with extra shelter. Can you find two places where our fish may hide? Rocks and bridges provide great shelter for trout both in this setting and in a stream habitat.

Look closely at the fish in this raceway. You can see three species of fish - all in the salmon family. The rest of the hatchery is mainly rainbow trout at this time.

Do you know how to tell these fish apart? Brook trout have white edges on their fins. These are NJ's only native salmonid. Rainbow trout have a pink to reddish colored stripe on their side and spots all the way to the end of their tails. Rainbow trout are native to the western United States. Brown trout are brownish in color with large spots on their sides, but little to no spots on their tails. These fish are native to Europe.

In this picture, you can see the white edges on the fins of the brook trout, near the bottom. Look closely at the fish sneaking in on the left and you can see the start of the pink line that runs down the side of this rainbow trout. The fish heading away from the rest is a brown trout. There are little to no spots on its tail.

The fish in this raceway can be fed by our visitors. Just put a quarter in the fish food machine located by the front desk. Make sure to put your hand under the latch before opening it, so that you can catch the food as it comes out. Other types of food are not good for these fish, so please do not use any food other than the fish pellets to feed them and do not throw anything else in the raceway - such as money.



***It's time to continue the tour, by following the green fish on the sidewalk to the right.***

Continue following the green trout on the sidewalk, keeping the raceway on your right. The sidewalk will split here. Head up the pathway on the right towards the Nursery Building. When you reach the gate opening, pause for a second and listen to the sound of rushing water. This is the water from our wells, entering the aeration building located on the left and up the embankment. You can't enter the well house, but you can hear all that rushing water.

Pequest has 7 wells spread throughout the Pequest Valley. Water is pumped from the aquifer, a large underground body of water, at a rate of up to 7,000 gallons per minute. The well water is sent through the aeration building where it is oxygenated as it flows through plastic rings which are held in the large barrels seen here. From here, the water then enters the upper section of raceways which you will see in a little while. After the hatchery is done "borrowing" the water from the aquifer, it is then released back into the river where it can once again enter the aquifer.



## We recycle all the water that we use!

Continuing down the sidewalk, you will come to the Nursery Building. This building is divided into two sections, the Egg Room and the Nursery. Visitors are not allowed into this building or into any other hatchery areas. This is because trout can get sick very easily. In order to minimize the likelihood of this happening, the hatchery is restricted to personnel only. All staff entering this building must disinfect their shoes before they can access the Egg Room or Nursery.

This building is not in use all year. Eggs are taken from the females in September, through a process called "stripping". The females are taken from the water and gently squeezed along the abdomen, releasing the eggs. The eggs are then mixed with milt (the fluid that contains sperm) from male fish until the eggs are fertilized. The fertilized eggs are placed in trays in the egg room where they will stay until they hatch.



**About 2 million eggs are taken each year!**

After hatching, the young fish (called sac-fry or alevin) are moved from the Egg Room and into the large tanks in the Nursery room. Each tank holds about 14,500 fish. Sac-fry are sensitive to UV light, so the tanks are covered to keep harmful rays away from the fish and a lightbulb is used to provide artificial light. After the yolk sac has been absorbed, the covers will come off. The fry will remain in the nursery building for about 6 months. Then, they move into the large outdoor raceways where they will stay for another year.



**Each tank in the Nursery holds about 14,500 fish.**



Continue back the way you came. Instead of making the left to head back to the building, turn to the right at the end of the sidewalk to reach the Observation Platform overlooking the raceways. You will be walking past the aeration building, this time keeping it on your right. The sidewalk will head up a slight hill to the Observation Platform. Walk through the gates and head up the stairs or the ramp where you will see the fish that are getting ready to be released.

Looking at the raceways, you will see aluminum screens that separate the long the raceway into smaller sections. Each section holds about 12,500 fish. The fish are in the raceways for a year after leaving the Nursery Building. Once they have reached 10.5 inches, they are ready to be released into more than 200 lakes and streams throughout the state of New Jersey. There are three stocking seasons: spring, fall and winter which helps keep the fishing fun throughout the year!

Once outside of the Nursery Building, we employ numerous methods to protect the fish from predators. If you look at the raised concrete walls surrounding the raceways, you will see a thin electric wire that is used to discourage birds like great blue herons and small mammals from getting near the raceways.

Now look at eye height. Do you see those wires with the silver and red streamers hanging from them? There are 5 wires spread across the width of each raceway. These wires prevent the large birds, such as bald eagles and ospreys, from getting down to water level because they can not fit their wings between the wires. The birds can not access the fish across the width of the raceways because they would not have the room to get their fish and get up over the concrete wall.

We also employ noise deterrents to keep the large birds away, such as a propane cannon, which creates a loud noise as well as firecracker shells that whistle and bang like a firecracker, helping to scare the birds.

Birds are not the only predators of the trout. The tall fence you walked through with the wire on top is also used to keep predators away. What kinds of predators does that keep out? If you said raccoon, bear, fox or people you are correct!

The tour has ended. If you would like to spend some time in the Exhibit Hall or seek out employees for questions, we encourage you to do that. You can also head out on one of our three trails to experience what the rest of the Pequest Wildlife Management Area has to offer. The Pequest Wildlife Management Area consists of almost 5,000 acres of land that helps protect the Pequest River and its underlying aquifer. This area was paid for through hunting and fishing license sales, so if you would like to help preserve and maintain the area, please consider purchasing a fishing or hunting license today in the Main Building.



***One of two sorting operations of fingerling trout.***



***This fish pump is used to safely move fish into trucks in preparation for stocking.***

***Thank you for visiting the  
NJ Division of Fish and Wildlife's  
Pequest Trout Hatchery and  
Natural Resource Education Center!***