# U.S. Fish & Wildlife Service

# **Welaka** *National Fish Hatchery*



The Welaka National Fish Hatchery and Aquarium is one of more than 66 units in the National Fish Hatchery System administered by the U,S. Fish and Wildlife Service. The Service also manages over 500 national wildlife refuges and major fish and wildlife research laboratories across the country. As the Nation's primary steward of fish and wildlife resources, the Service provides leadership in habitat and wetlands protection; fish and wildlife research and technical assistance; and in the conservation and protection of migratory birds, anadromous fishes, certain marine mammals, and threatened and endangered species. Woodstork

Welaka National Fish **Hatchery** 

Welcome and Enjoy Your Visit Over a century ago, it was recognized that conservation measures were necessary to maintain good fishing in our public waters. Fishing has probably always been America's leading form of outdoor recreation. The Welaka National Fish Hatchery is endeavoring to preserve this tradition for present as well as future generations of Americans.



Largemouth bass

#### What we do

The Welaka National Fish Hatchery was built in 1926 and originally operated by the State of Florida. In 1938 the hatchery was transferred to the U.S. Fish and Wildlife Service. Ponds are operated at two locations. Those ponds at headquarters, near the aquarium, are called the Welaka Unit, and a second group of ponds about three miles south of headquarters is called the Beecher Unit. The Beecher Unit is named for the spring that serves as

the water supply. Beecher Spring has a flow of 4,000 gallons per minute at a constant temperature of 72° Fahrenheit. Water for the Welaka Unit comes from a well 423 feet deep and from the St. Johns River.



Ibis, woodstocks and herons

Warmwater Hatchery

Welaka is a warmwater hatchery. That is, the species of fish raised here do best in summer water temperatures that reach 75° to 85°. In its 41 ponds, the facility raises between 4 1/2 to 5 million fish annually. Species vital to the fishery resources of Florida, Georgia, Alabama, and the coastal United

cover illustration: Duane Raver



Flocks of birds can be seen from Observation Tower.

States are raised here and stocked in cooperation with the various State game and fish agencies.

What can you do?

Please visit our aquarium at the Welaka Unit.

Fish raised at the hatchery as well as other native species of fish, amphibians and reptiles are on display. Information and brochures pertaining to the hatchery and its operation are also available at this

Occasionally you may see personnel feeding the fish or possibly transferring or harvesting a production pond. You are welcome to walk around the pond areas, but please use caution as the ponds are deep, and we want only fish in the water, please.

#### **Observation Tower**

location.

Located at the Beecher Unit for your use and convenience is an observation tower interpretive information and a 0.75 mile nature trail. Many species of birds can be observed in this area.

# **Abundant Wildlife**

Squirrels, raccoons, opossums, rabbits, otter, deer, turkey and an abundant variety of birds can be seen throughout the year around the

Observation tower





Aquarium

hatchery. The scenic St. Johns River offers the sportsman an opportunity to fish in the "Bass Capital of the World", and is a stop on the Great Florida Birding Trail.

## **Group Tours**

Special group tours of the hatchery can be arranged with the Hatchery Manager.

1. Aquarium - Visitor Center

Native species of fish, amphibians and reptiles are presented for the public's viewing pleasure. We invite you to also see the bald eagle display and to read informational signs and brochures pertaining to the operation of the hatchery. Visiting hours are from 8:00 am - 3:00 pm daily. Restrooms are provided for your convenience.

# **2. Hatchery Residences** Authorized personnel only.

# 3. Office - Garage Complex

The headquarters for the hatchery are open from 7:00 am - 3.30 pm Monday through Friday. A staff member is usually available to answer any questions concerning the hatchery. This complex provides sheltered parking for hatchery motor vehicles and equipment.

#### 4. Production Ponds

Fish production takes place in these eastern ponds during the spring and summer months. Ponds are left

# Egg Development





Striped bass broodfish

Egg

empty between crops to allow for drying out. Following the production season. ponds are frequently filled to inhibit the growth of rooted vegetation.

5. Wayside **Exhibit** and Information

# 6. Equipment Storage Building

Hatchery maintenance supplies and equipment are stored in this structure.

# 7A. Pumphouse

This deep well is used to supply domestic water to the aquarium, office and hatchery residences at the Welaka Unit.

# 7B. Pumphouse

This deep well is used as an emergency backup to the primary pump at the river. The eight ponds at the Welaka Unit are filled with water pumped from the St. Johns River.

# Populations Declining!!

Because of a variety of reasons, many species of fish have shown a marked decline in population over



the past 20-30 years. Sport and commercial fishermen alike are experiencing dwindling catches of striped bass along the Atlantic and Gulf Coasts. Annual catches in the 7,000 metric ton range (25-30 million dollars) dropped less than 2,000 metric tons (4-5 million dollars) signaling a major problem within the striped bass fishery. While all the reasons for this decline are not entirely known, it is agreed that a combination including loss of habitat, construction of dams, dredging of rivers, overfishing and various forms of pollution are contributing and interwoven factors.

Along with striped bass, other species such as shad, sturgeon, and red drum are also experiencing dwindling populations. These are anadromous or estuarine species, meaning they spend their lives along our coast in saltwater or in the case of anadromous fish, return once a year to fresh water to spawn.



Gulf Sturgeon



3/4 mile nature trail



Incubating striped bass eggs



Striped bass ready for stocking

Because their ranges transcend local, state, and in some cases, 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. National fish hatcheries such as Welaka are helping to achieve these objectives by enhancing and restoring native populations for all to enjoy.

# **Raising Striped Bass**

To elaborate on one species, the Welaka National Fish Hatchery and Aquarium is part of a major national emphasis on restoring striped bass (also called rockfish).

Adult stripers, captured from our rivers, provide the eggs for the hatchery program. Once the eggs and milt (sperm) are taken, the adults are returned to their native waters. There is an excellent possibility that, in the future, adult stripers can be reared to maturity in hatchery ponds and then maintained as domestic broodstock (parent fish). This would provide a strong backup in tandem with obtaining eggs from captured wild adult stripers.



Striped bass

The fertilized eggs are incubated. and the larval fry that hatch from the eggs are cultured artificially. Newborn fish have their

own food supply in an attached yolk sac. As this source is absorbed, they are fed a diet of brine shrimp.



Welaka wildlife

At this stage, tiny young stripers are particularly vulnerable to pollution, starvation and predators. In the wild, untold numbers of young fish are lost during this period. However, on the ĥatchery, young stripers are protected and experience the best possible conditions for survival.

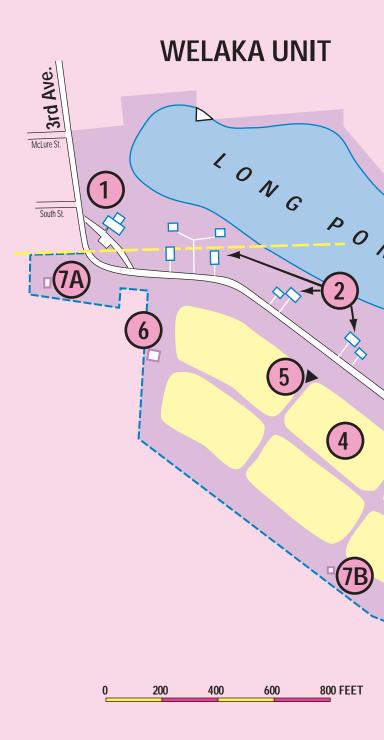
After a period of time the young fish grow, feeding on microscopic organisms, and reach desired stocking sizes.

They are now past the point of greatest vulnerability and can be stocked into our rivers and steams.

After 25 to 40 days, these fish grow

to an average length of 2 inches and some are stocked at this size. Others are held and feed scientifically formulated diets to attain maximum growth. By the fall, these fish have reached a size of 4 to 6 inches and are ready for stocking. These larger fish are stocked in special areas of selected river systems and tributaries from which they originated. Fishery managers expect that these supplemental stockings will help restore depleted striped bass populations. A number of fish are tagged, enabling biologists to evaluate the success of the stocking programs.

We enjoyed having you visit the hatchery and invite you to return often. Your awareness of our resource and its need is the basic foundation for support of healthy fish and wildlife. populations.





Welaka National Fish Hatchery P.O. Box 130 Welaka, Florida 32193-0130 386/467 2374

# U.S. Fish & Wildlife Service 1 800/344 WILD

### October 2001





For Additional Information Contact: Hatchery Manager Welaka National Fish Hatchery P.O. Box 130

Welaka, Florida 32193-0130

386/467 2374

Hatchery Hours: 7:00 am - 3:30 pm daily Aquarium Hours: 8:00 am - 3:00 pm daily

