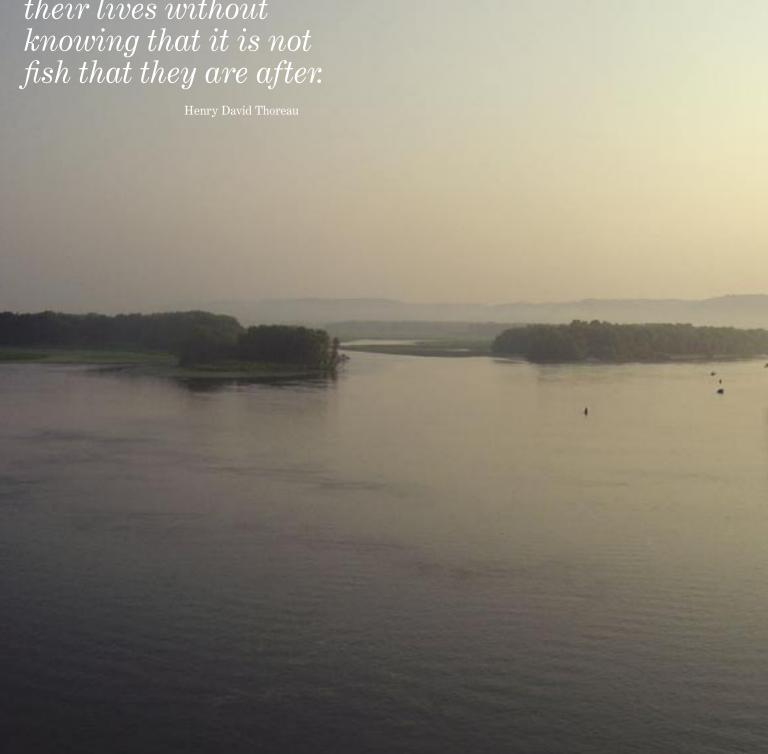


Many go fishing all their lives without





Aerial view of Genoa NFH. B. Lubinsky, USFWS

Establishment of the Hatchery

Genoa National Fish Hatchery was created by the Upper Mississippi River Wildlife and Fish Act of 1931. It is one of 69 federal hatcheries managed by the U.S. Fish & Wildlife Service. The location was selected because of its proximity to the Mississippi River and its reliable source of broodfish and artesian well water, both of which are used to raise fish and fill ponds. Hatchery construction was completed by Franklin Delano Roosevelt's Works Progress Administration during the Great Depression.



Fish eggs with developing eye visible, USFWS

Each year, Genoa provides millions of eggs, fry and fingerlings of many different species to state fishery stations, federal hatcheries, National Wildlife Refuges, Department of Army installations and seven Native American Tribes to support ongoing fish management and restoration programs.

Genoa- An All-Purpose Hatchery!

Genoa's location and its ability to create different rearing environments and water temperatures, makes it one of the most diverse hatcheries in the nation. Nineteen ponds ranging in size from one-tenth of one acre to 33 acres, six raceways, and seven intensive rearing buildings make it capable of collecting, culturing, and rearing cold, cool and warm water fish species. Genoa raises, holds and rears more species of fish (15) and freshwater mussels (15) than almost any other federal fish hatchery!

Genoa's Mission-Meeting the Needs of Fishery Conservation

Genoa's mission has changed and evolved over the years. Initially its purpose was to raise bass and panfish for area waters. In the 1950s it evolved to sportfish restoration, predominantly northern pike and walleye. Today eggs and fry are still provided to state conservation agencies to assist them in their fishery management programs. But, as science developed and needs for fishery conservation in the country changed, so did the hatchery's mission.



Butterfly mussel (Ellipsaria lineolata). Illinois Natural History Survey

In the 1990s, the value of hatcheries as important tools for recovering and restoring threatened and endangered fish and aquatic species was recognized and Genoa expanded its traditional missions to include recovering and restoring endangered mussels, lake sturgeon and coaster brook trout.

Today, Genoa's mission is to;

- recover threatened and endangered aquatic species,
- restore threatened fish populations,
- provide fishery resources support to National Wildlife Refuges, Native American tribes, and to
- provide sport fish to increase recreational opportunities on public lands.





Biologist checking viability of mussel larvae. USFWS

Endangered Mussel Recovery

Genoa is home to the largest mussel culture recovery project in North America. The Higgins-Eve Pearly mussel (Lampsilis higginsi), has been listed under the Federal Endangered Species Act since 1976. The hatchery produces over 500,000 Higgins Eye mussel juveniles for stocking into four river systems in the Upper Mississippi River watershed. Genoa also propagates blue catfish, channel catfish and juvenile mussels for work related to the Winged Mapleleaf mussel recovery program. This very rare species of mussel is one of the most endangered freshwater mussels in North America.

Native mussels. USFWS





Lake sturgeon fingerling just prior to stocking. USFWS

Lake Sturgeon Restoration

Low lake sturgeon populations concern state and federal cooperators throughout the continental United States. Wisconsin and the international border waters in northern Minnesota and Michigan presently produce the only stable populations of these fish. Genoa has grown into one of the largest culture operations for restoration of this species in the United States. A sturgeon production building allows the station to raise over 30,000 eight-inch sturgeon per year to support five ongoing restoration programs. These sturgeon fingerlings are then stocked in Missouri. Minnesota and Wisconsin waters. Sturgeon eggs and fry are also shipped to other federal stations for stocking and research needs.



Hatchery biologists spawning adult coaster brook trout.
USFWS

Coaster Brook Trout

Coasters are native brook trout that live a portion of their lives in the Great Lakes or in the ocean along the Atlantic coast of North America. They migrate up tributaries to spawn, where the young fry will grow in streams until they are about three to six inches long. Then they migrate back to the oceans or lakes to feed and grow. When mature, adult coasters return to their birth streams, usually in about three to five years.



Adult male (top) and female (bottom) coaster brook trout, USFWS

Coasters differ from other types, or "strains," of brook trout generally by the habitats they live in and the great size that they attain. Although 10-pound coasters have been documented, an average coaster weighs from one to four pounds.

The coaster strain of the brook trout (Salvelinus fontinalis) became a high priority for restoration during the past decade. Genoa has been involved with all aspects of the captive propagation of this species, including brood stock collection and creation of isolation facilities which allow wild fish eggs to be quarantined and tested for dangerous diseases before transfer to Service hatcheries. Genoa raises 50,000 coasters each year to support restoration programs in Michigan and Minnesota. The station serves as a backup facility to safeguard strains of coasters that have been collected on Isle Royale National Park.



Lake Trout Restoration

The U.S. Fish & Wildlife Service restores native fish species in the Great Lakes and has been involved in lake trout restoration since the 1950s, when fishery populations in the Great Lakes declined from overharvest, pollution, habitat destruction and the parasitic sea lamprey.

Genoa contributes to these restoration efforts by quarantining lake trout eggs and fish for 18 months until disease-free clearance is established. These strains are used to develop captive broodstocks to be used as an egg source to plant fish in the upper Great Lakes.

Work conducted on lake trout centers primarily on the isolation and quarantine of specific strains collected in the upper Great Lakes, or Finger Lakes Region of New York. Strains are selected based on restoration goals, post stocking survival and the strain's ability to avoid sea lamprey predation.

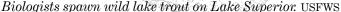


Biologist collecting smallmouth fry. USFWS

Recreational Fishing and Sport Fish Restoration

Genoa raises over 10 species of fish to contribute to sport fish restorations in tribal, federal and state waters. Species include walleye, northern pike, largemouth bass, smallmouth bass, brook trout, rainbow trout, yellow perch, sauger, black crappie and bluegill.

Genoa is one of the few federal hatcheries that still collect wild spawning fish in spring netting operations. During March and April, hatchery crews set between 40 and 50 hoop nets and fyke nets to collect ripe and spawning females and males. The nets are checked daily until spring spawning runs end in early May. The eggs are removed from ripe fish, called spawning, and the fish are released unharmed to the river. Then the eggs are taken back to the station to begin their rearing process. In an average year, 10-20 million eggs will be taken for ongoing management activities and stocking programs across the Midwest.











Students assist in propagation. USFWS

Public Use at Genoa

The office is open Monday-Friday, from $8:00~\mathrm{a.m.}$ to $3:30~\mathrm{p.m.}$



Participant holds up catch at Kids' Fishing Day. USFWS

Group tours are conducted throughout the year for local school and civic groups. These tours are available upon request. A favorite time of the year is springtime, during our river broodstock collection of northern pike and walleye. This runs from late-March through early May. The end of May through September is a good time to see our lake sturgeon program.



Biologist discusses fish behavior at Kids' Fishing Day. USFWS



Conducting zooplankton study. USFWS

January-March



 $Releasing\ trout\ at\ stocking\ site.$ USFWS

Hatchery Calendar of Events

- Largemouth bass and walleye culture for endangered mussel recovery
- Coaster brook trout fry and yearling production
- Rainbow trout yearling production

April-May

■ Northern pile and walleye broodstock collection and egg take from river

May-June

- Lake sturgeon spawning and early fry rearing
- Endangered Higgins Eye mussel infestation and host fish distribution
- Kids' Fishing Day

July-August

■ Lake sturgeon culture and pond management for warmwater fish

September-October

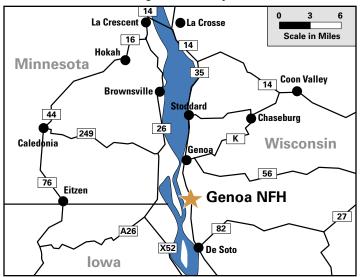
- Pond harvesting of walleye and bass fingerlings for stocking
- Lake sturgeon fingerling distribution to restoration sites
- Fathead minnow pond harvest and distribution
- Endangered Winged Mapleleaf mussel infestation and host fish culture

November-December

- Coaster brook trout spawning and egg arrival and care
- Lake trout eggs arrive for isolation program
- Rainbow trout egg and yearling culture



Finding the Hatchery



Genoa is located 20 miles south of La Crosse, Wisconsin, on both sides of State Highway 35 (the Great River Road). It is roughly 35 miles north of Prairie du Chien, Wisconsin.

