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# Still Raising after all these Years

## DEC's Rome Fish Hatchery

By Joelle Ernst and Bob Lewthwaite

Staring at the water's surface, it looks like the wind has picked up even though it's a calm, sunny day. But it's not wind that's causing ripples in the water of the long rectangular ponds at the Rome Fish Hatchery, it's thousands of small trout—eating and growing in preparation to make their debut in streams and lakes across New York.

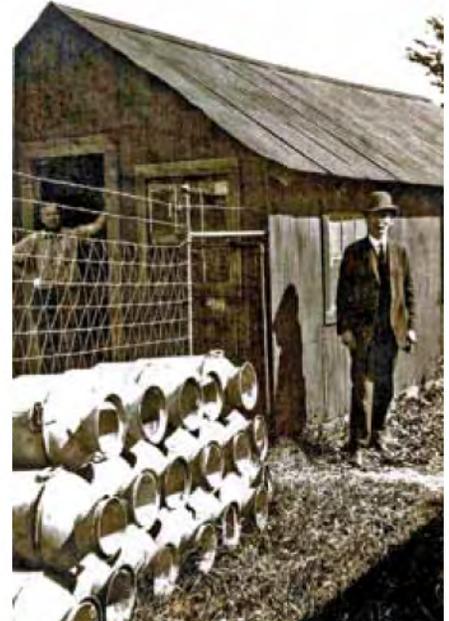
I recently visited the hatchery to get ideas for designing content for the newly built Visitor Center. Having been to many hatcheries during the course of my work, I knew I would enjoy the visit because there are so many interesting things to see. What I wasn't expecting, however, was to be captivated by the rich history of the place. You see, ever since I can remember, math and science have always been my favorite subjects. History on the other hand, left much to be desired...that is, until I got a history lesson on the Rome Fish Hatchery.

Prior to being a hatchery, the property was the site of the first cheese factory in America! Set up in 1851 by a local dairy farmer named Jesse Williams, this innovative factory paved the way for large-scale commercial cheese production in the U.S. What is now the Rome Hatchery's crystal clear, cold spring water supply was used then to cool milk. Years later, the property housed a grist mill where the springs powered a water wheel. The horses on the farm were

used to pull boats on the nearby Black River Canal that ran between Rome and Lyons Falls.

In 1915, the first fish hatchery was established on the property by Harry Ackley. A pioneer in trout production, Ackley successfully raised trout to large sizes for stocking in public waters.

Following the closure of the canal around 1920, a couple of additional small fish farms were built on the grist mill property. One was operated by Dr. George Reid, the other by the Rome Fish and Game Club, which built ponds and troughs for raising fish.



Photos courtesy of Rome Historical Society



When Harry Ackley established the first fish hatchery on the Rome site in 1915, milk cans were used for stocking fish (above right). Though today's staff do the same types of work that Ackley's staff did—like monitoring fishes' health and keeping troughs and ponds clean (bottom right)—the hatchery's water source today is a bit different. Rome Hatchery now gets some of its water supply from nearby Lake Delta (see aerial photo, facing page).

In 1930, the Fish and Game Club sold its parcel of land for \$1.00 to the State of New York to develop a fish hatchery. Local volunteers donated their time to help build more ponds to enlarge the facility and in 1932, the state purchased the Reid holdings, giving them exclusive rights to all springs on the property. This was the beginning of today's Rome Fish Hatchery.

Running a hatchery presents many challenges. For instance, the cold water springs that feed the Rome Hatchery have excellent water quality for growing trout, but water volume can greatly fluctuate over the year. So, when the Black River Canal closed, an abandoned pipeline from nearby Lake Delta was incorporated into the hatchery water supply, greatly increasing the number of fish that could be raised.

Since then, the Rome Fish Hatchery has undergone many other large-scale expansions and improvements. In 1954, earthen ponds were converted to raceways—long, rectangular rearing units like the ones I was observing—to improve water flow and quality. A one-mile long polyethylene pipeline from Lake Delta replaced the leaking, old wood staved pipe in the 1970s. In the 1980s, all the piping from the springs was replaced. Clarification ponds, which remove fish waste, were constructed in 1990. Pole barn enclosures built over the East Ponds in 2008 prevent birds from preying on the fish. The old hatchery, built in 1932, was demolished in fall 2009 and replaced with a more energy-efficient building in 2011. The newly built hatchery boasts everything from an early rearing area, or “hatch house” as the hatchery staff call it, to a visitor center.

Having a functional, efficient hatchery is extremely important when you're talking about millions of fish being produced each year. Yes, you read right. . .millions. . .and that's just from the Rome Fish Hatchery alone!

Running a fish hatchery is a complicated business. A coldwater hatchery, Rome raises brown trout and brook trout. Unlike some other DEC hatcheries which maintain their own sources of eggs, each fall Rome receives its fish eggs from other DEC fish hatcheries as well as other sources. The eggs are then incubated in special screen baskets in the hatch house. About 50 days after spawning, the eggs hatch. The emergents, called sac fry, are born with a yoke sac that nourishes them for ten to fourteen days. After the yoke sac is absorbed, the fry are transferred to rearing units/troughs (also in the hatch house) and hand fed a dry starter diet six to eight times a day. As the fish grow, the amount of space they need increases, so they're moved outside into the raceways. Some fish are fed using a specially equipped truck, or via demand feeders where fish bump into a rod protruding into the water to release food. Troughs and raceways are cleaned by staff each day to remove fish waste. Larger fingerling and yearling fish are

moved to large concrete ponds. Staff also monitor the fishes' health daily, and test them regularly to make sure they are growing properly and staying healthy.

All of the brown trout and most of the brook trout raised at Rome Hatchery are domesticated—bred for disease resistance and adapted to life in a hatchery. But some wild, “heritage strain” brook trout are also raised here. New York's state fish, the brook trout, are native to the state and these heritage strains have been shown to live longer and grow larger than domesticated strains. Heritage populations are important to the adaptive ability and long-term survival of the species, and represent an irreplaceable part of the brook trout resource in New York State. The most common strains raised in DEC's hatchery system include Little Tupper, Windfall and Horn Lake. Rome Fish Hatchery raises “Little Tupper,” as well as a strain that is a cross between a domestic brook trout and a wild Temiscamie (Canadian-strain) brook trout. This hybrid has a better survival

James Clayton



Tours of the property, a new visitor's center with an aquarium, front-row views of staff caring for fish, and much more assure that people of all ages can enjoy Rome Fish Hatchery.



A popular place for school groups to visit, Rome Fish Hatchery offers a glimpse into the world of New York fish culture. Here, a staff member engages students in the history of the Rome Hatchery.

rate in some of the more acidic waters of the Adirondacks. Because the number of heritage strain brook trout produced each year is determined mainly by the number of eggs taken from wild fish, most Adirondack waters are stocked with Temiscamie hybrids.

Rome Fish Hatchery is responsible for stocking more than 350 public waters in 11 counties of the state. They stock as far north as Lake Champlain in Essex County and as far

south as Otselic River in Chenango County. Many remote waters in the Adirondacks cannot be reached by truck so they are stocked by air using helicopters and pontoon/float planes.

The new Visitor Center offers a glimpse into the fascinating world of fish culture. You can read more about the hatchery's history, watch staff through the hatch house window as they care for the eggs and sac fry, learn about the life stages of a trout, and more.

## Keeping Fish Healthy

The Rome Fish Disease Control Unit is also located on the property, and it has its own interesting history. Dr. Louis E. Wolf became the first pathologist for New York State in 1935. During this time, a highly contagious fish disease called furunculosis plagued the nation's trout industry. Dr. Wolf and his successor Neil Ehlinger developed strains of furunculosis-resistant brown and brook trout—a program that took 20 years to complete. Thanks to their efforts, the "Rome lab strain" (as they're called today) is grown throughout the DEC hatchery system and furunculosis has mostly disappeared.

Today, the Fish Disease Control Unit continues to monitor the health of DEC hatchery fish, as well as wild fish throughout the state to reduce the impact of potentially harmful fish diseases.

Sharing the field station with the fish disease unit is the Aquatic Toxicant Research Laboratory where researchers focus on the impacts that pesticides, PCBs, mercury and acid precipitation have on the state's fish, wildlife and their habitat. The valuable information they have obtained has allowed DEC to change regulations, direct policy, and make our environment safer and cleaner.

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Outside, visitors can check out the 13 raceways and 46 ponds, all teeming with various-sized trout. After visiting the hatchery you may be itching to get out on the water...no problem! There is a fishing platform across from the hatchery entrance on a stream that feeds the Mohawk River.

So, if you are looking for something to do with your family this summer, consider visiting the Rome Fish Hatchery, or one of DEC's other 11 hatcheries scattered across the state. With so much to do and see, everyone is sure to have fun!

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The hatchery is open to the public 365 days a year from 9:00 a.m. to 3:30 p.m. for self-guided tours. Tours for organized groups may be arranged by contacting the hatchery at (315) 337-1390.

NYS Archives, circa 1930

