

# SPAWN

## A Day at Work at the Birthplace of Colorado's Fish

Article & Photos By DAWN Y. WILSON

Each spring, the Poudre River State Fish Hatchery staff helps their scaled residents spawn more than 7 million trout eggs.

It isn't an easy task nor is it one that only keeps them busy in the spring as they have a busy schedule throughout the year. They also had to work through the coronavirus pandemic because they care for the fish 365 days a year, 24 hours a day, no matter what is happening in the world. But these guys love their job.

"I have never wanted to be anywhere else," said James Ingram, Hatchery Manager at the Poudre River State Fish Hatchery. "I love being here, living and working in the outdoors, and the ownership of what I do."

So what exactly do the three full-time and one seasonal staff members do at the hatchery in a typical day?

"The best way to describe a typical day is you never know what you will run into each day," Ingram said. "We always have routine chores like feeding, cleaning, checking fish and testing water, but we might have an emergency repair on a pump or give a tour to a group of first graders."

One of 19 hatcheries run by Colorado Parks and Wildlife (CPW), the Poudre River State Fish Hatchery is located approximately 50 miles northwest of Fort Collins in the Poudre Canyon of northern Colorado.

CPW (called Colorado Department of Game and Fish at the time) began operation at the facility in 1948. Prior to that it was part of John Zimmerman's property. In addition to a reservoir and trout ponds,

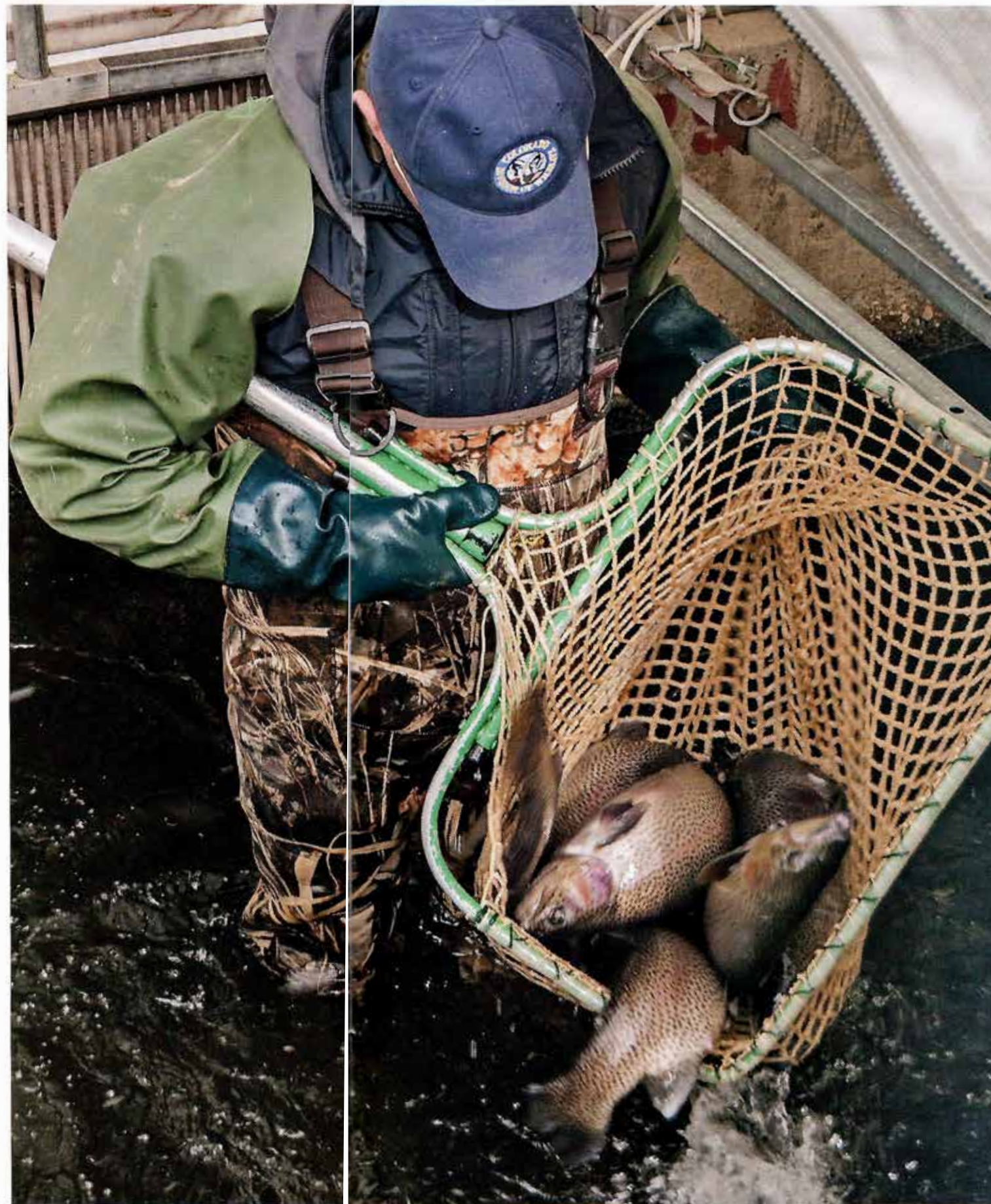
the property also included the Keystone Hotel.

This mountain retreat, which was completed in 1897, was considered to be the premier resort in the area for guests looking to enjoy the picturesque views and wild lands.

Zimmerman built the hatchery on the property to raise fish to keep his guests entertained with fishing and immersed in the outdoor ambiance of the resort along the Cache la Poudre River.

Although the hotel was razed in 1946, the area still remains pristine and rugged, with a variety of animal neighbors, such as bighorn sheep, moose, mule deer, bald eagles and the occasional river otter.

Today, the hatchery is the second largest egg-producing unit in Colorado, responsible for raising and maintaining 65,000 brood stock for producing 7 to 7 and a half million eggs. These eggs will



then go to all of the other CPW hatcheries, (except the warm-water facilities), where the eggs hatch and grow into catchable and sub-catchable fish for release.

"We specialize in working with rainbow trout species that are resistant to whirling disease," Ingram said. "These resistant fish are crossed with strains that survive well in the natural environment. Additionally, we play a big role in producing recreational greenback cutthroat trout for stocking."

And because of the work the facility has done with whirling disease, trout populations across the state are seeing the benefits.

Spread by a parasite, this disease causes skeletal deformities, tail chasing and death in salmon and trout. The particular strains of rainbow trout reared at the facility are more resistant to whirling disease. This has helped recovery efforts of these species across Colorado.

Ingram summarized the process he and his staff go through during the year for their part in Colorado's process to maintain and improve fish populations across the state.

Each February, the crew will start by breaking the ice from the raceways, which is where the brood fish are kept in the fresh water sourced from the Cache la Poudre River. The trout spend the winter in the cold water below the frozen surface in a reduced metabolic state, waiting for the water to warm and food sources to return.

With the water surface free of ice, the staff sorts the males and females.

By March 1, the spawning process will start, with the peak occurring the first two weeks of April. After the eggs are collected, they are incubated for 30 days within the two isolation buildings on the property. At that point the eggs reach the eyed stage and are packaged and shipped to other Colorado cold-water hatcheries to finish their growth cycle.

By May, all of the rainbow egg production is complete, and the staff transitions to spawning the recreational greenbacks stocked at the hatchery. This is the only trout native to Colorado.

Recreational greenback cutthroat trout make up the majority of fish stocked in Colorado's high-water-quality alpine lakes, a process completed by one of CPW's four Cessna 185 planes. There are 460 lakes throughout Colorado that receive fish drops by plane.





### The Spawning Process at Poudre River State Fish Hatchery

1. The fish in the raceways are evaluated and separated by male and female.
2. Fish that are ready to spawn from sections of raceways are collected.
3. CPW staff assists the females with egg release.
4. CPW staff then assists the males with fertilization.
5. The fertilized eggs are rinsed, and poor or dead eggs are removed.
6. Eggs are placed in a disinfecting water/iodine solution so they can be handled.
7. Eggs are rinsed again.
8. Egg volume is calculated.
9. Eggs are separated into portions.
10. Eggs are then moved to incubation trays, where they will sit for 30 days until they reach the eyed stage.

The fish in these photos represent the fertilization process between the female Hofer Harrison rainbow and male Snake River cutthroat to produce a Hofer Harrison cross.

If you ever see a plane dropping fish into a lake, these are the species being added to these backcountry waters.

As a result of the clean water, the eggs go into isolation for testing prior to transfer to ensure they do not carry any disease that could be passed into the environment. There are only two hatcheries — Bellevue Watson northwest of Fort Collins and Mt. Shavano in Salida — that receive these greenback eggs and hatch them to supply the planes for stocking alpine lakes.

After the greenback season, the staff then helps with wild spawning for graylings at Joe Wright Reservoir near Walden, Colo. This process goes into summer.

Next, the Poudre River State Fish Hatchery staff assists with the wild brown trout spawning season at Delaney Buttes, also near Walden, in October. Although the eggs are collected in the wild, they are brought back to the Poudre River hatchery for a 30-day incubation period. At the eyed stage, the eggs are released to other hatcheries for the hatching and growth process.

At this point in the year, signs of winter start to appear in the Poudre Canyon, and the staff needs to prepare the facility for the coming cold months. Property maintenance projects are completed, vehicles are serviced, and equipment is repaired.

"This is very much like ranch life," Ingram said. "We have to fix most things ourselves because if a piece of equipment goes down, like the generator that supplies backup power to our well pumps that we rely on to keep the fish alive, it can take days to get a repair guy up to the hatchery."

As the cold sets in on the narrow valley and the snow starts to fall, the hatchery becomes quiet and the staff works on catching up on the projects they couldn't complete during the spawning season.

February arrives again and the staff heads out to the raceways to break away the ice from winter's grip. ☁

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*Dawn Y. Wilson is a frequent contributor to Colorado Outdoors. This article is copyrighted by the author.  
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To learn more about the Poudre River State Fish Hatchery or to schedule a tour of it or any Colorado Parks and Wildlife hatchery, visit [cpw.state.co.us/hatcheries](http://cpw.state.co.us/hatcheries)