

Walleyes for Tomorrow – Indianhead Chapter

Frequently Asked Questions

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Why does WFT operate fish hatcheries?

Our basic goal is to increase the recruitment of walleyes in lakes that can sustain the increased levels of fish. This is done by:

- Increasing the probability that a females egg will survive to the fry stage of development and
- Releasing the fry into optimal locations

What do you mean; you place them in an optimal location in the lake?

Early life stages of walleye are unique. After the fry hatch they basically float with the prevailing wind direction, after a few days they are able to start swimming on their own. Through the first months of life young walleye are “pelagic”. This means they are swimming out in the middle of the lake in the water wherever zooplankton may be. Releasing walleye mid-lake mimics this natural cycle as best as possible.

In addition, the natural predators to the fry are less likely to be found mid-lake versus the shallows.

Can you bring the walleyes from this hatchery to another lake?

No, we are only authorized to use eggs and sperm from fish in this lake and we must return the fry back to the same lake.

What is your expected success rate (Eggs to fry, fry to fingerlings and fingerlings to adult fish)?

In general, there are so many variables that accurate estimates cannot be made with confidence.

However, there is some information we can estimate with some accuracy.

If we use Silver Lake as an example, we collected about 1 million eggs and fertilized them. Of these 1 million eggs, about 800,000 hatched into healthy fry which were marked and returned to the lake.

How many of these fry will survive to the fingerling or adult stage remains to be seen. We will be working in cooperation with the DNR this fall to determine how many of those fry survived to the fingerling stage.

How long does it take for the eggs to hatch into fry? In general, the eggs will hatch when the water reaches temperature -- about the mid-fifties.

How does WFT success rates compare to natural reproduction?

We can only impact the percentage of eggs that mature to fry and place them in optimum locations in the lake. We estimate that in the wild; only approximately 5% of eggs spawned will mature to the fry stage and those fry will evolve in the hostile waters filled with predators. Remember, this compares with the hatchery's success rate of about 80%.

Why is clay added to fertilized eggs and what is it?

Benenite clay is added to prevent the eggs from clumping together during the fertilization process. It attempts to closely simulate the ideal natural process that would take place in the lake.

Why are the fry marked and how is it done?

When the fry are about three days old, they will be put in a large container that contains oxytetracycline. The process is conducted by DNR and the oxytetracycline stains a bone (otolith) in the back of the fish's skull. During the DNR's fall survey of fingerlings, they will know which fingerlings have come from the hatchery compared to those from natural reproduction and will be able to determine the effectiveness of the hatchery.

Will the hatchery be operated every year?

Each year the DNR needs to approve the use of the hatchery. Their approval will depend on several factors including:

- Our ability to operate an effective and safe hatchery.
- The walleye population in the lake.
- The ability of the lake to sustain a larger walleye population.
- The lake being conducive to fry stocking (versus other methods of positively impacting walleye populations).
- Current DNR policies and regulations.

How fast do walleyes grow?

The fry will grow to fingerlings by this fall and will grow about three to four inches every year thereafter. So a fish hatched in the spring of 2005 will be about a fourteen inch fish in the spring of 2009.

Why was the DNR doing a lake survey? What is being done?

Through statistical sampling, the DNR is determining the type, population, age and health of the fish in Silver Lake.

In the process, they mark the fish by cutting off a portion of the lower left dorsal fin. In addition they record the weight and length of the fish so they can compare it to other fish the same age. This determines their state of health. The age is determined by taking a spine off the top dorsal fin and analyzing a cross section of it with a microscope (much like counting the rings on an oak tree).

The shocking is done to statistically determine the overall population of fish in the lake by comparing the numbers of shocked fish that have been marked during the netting process. None of these steps cause harm to the fish or impair its ability to survive. Finally, a small sample of fish is taken back to the lab to determine mercury levels in the fish.

The results of their survey will be available to the public in 2010.