



## Educational Excellence

## Salmon in the Classroom

In nearly 200 classrooms across the state, students rear Chinook salmon in partnership with the Michigan DNR. Beginning with salmon eggs in October, students care for the fish through the complicated early stages of their lives, until they release the fish into a Great Lakes tributary in May.

## By JERRY NUNN editor

ROGERS CITY – By the time teacher Holly Wirgau's middle school students raise 200 Chinook salmon by hand, the budding fisheries biologists will understand all there is to know about the complex early life cycle of one of the Great Lake's most popular sports fish.

Starting with hatchery-fresh eggs in late October, they'll hatch the salmon right in the classroom, in a cold-water tank, then watch them grow from tiny alevin stage, with their yolk sack at their side, through the fry stage, to the smolt stage the salmon reach in May when students here trek to the nearby Trout River to release the three to five inch salmon.

But the students will learn a lot more than just fish biology.

Established in the Great Lakes in the 1960s, bolstered by a strong alewife population, Chinook salmon quickly became a popular sport fish, becoming an important element in Michigan's outdoor culture, as well as an integral part of the economy in lakeside towns such as Rogers City.

The Salmon in the Classroom

program comes complete with age appropriate lesson plans to fit a customized curriculum, according to Wirgau, a science and language arts teacher. Before the students are done learning they'll expand their handson Great Lakes fisheries study to include culture, history, economics, art, math and more.

In many ways the Salmon in the Classroom program sells itself, both to students and teachers, says DNR Forester Craig Kasmer, the Salmon in the Classroom Coordinator for Northern Michigan.

"Teachers talk," Kasmer said, "One teacher will say 'I raise salmon in the classroom.' Then another teacher says 'What? I want to raise salmon too."

"In some schools they keep the tanks right in the hallway so that all students can be a part of it. And in most cases the entire school is aware of it, so kids are like, 'Oh, next year we get to raise salmon in our classroom.' The students look forward to it."

Teachers wishing to participate apply between January 1 and April 15 to join the program the following fall. Accepted applicants are notified prior to summer break and then



Josh Colorite, Drew Flewelling and Jacob Pomranke, all sixth graders at Rogers City Middle School observe the salmon they are raising for release in May. The program lasts nearly the entire year and curriculum supplied by the DNR ties the studies to biology, science as well as civics, history, culture, economics, art and more.

must file for the permits to legally rear the salmon, as well as attend a one day workshop that teaches how to raise the fish and more.

The autumn-spawning salmon's life cycle fits the school year just about perfectly, according to Wirgau. Teachers receive eggs in October or November which will hatch in December. The newly hatched fish, in their alevin stage still have a yolk sack attached that will maintain the fish until students return from Christmas vacation. After that students begin feeding the fish by hand with rations supplied by the DNR. Through it all they monitor tank temperatures, water acidity and cleanliness, ammonia levels and more until the fish are ready for release in May.

Cost of a fish tank measuring 55-gallons-or-larger, the necessary chiller to keep the water 50-degrees or colder, and other supplies costs about \$1,200. Fortunately, DNR partner organizations such as Trout Unlimited as well as local groups, corporations and individuals can usually be found to funds that cost.

In Wirgau's classroom that educational partner is Hammond Bay Anglers Association. The group not only underwrites the cost of the classroom supplies they also help

fund and lead the required field trips to hatchery and river. Further corporate support comes from La Farge Presque Isle as well, and Wirgau says it is only through the help of these outside groups that the program is possible.

But the program proves popular with anglers and resources groups throughout

the state and Kasmer credits those partnerships with the program's success.

More central to the state, the Midland-based Leon P. Martuch Chapter of Trout Unlimited sponsors Salmon in the Classroom in five schools in Gladwin, Midland and Saginaw Counties, with plans to pick up three more schools in the near future, according to Steve Wilkowski, chapter president. Beyond funding, Trout Unlimited members often serve as volunteers, give presentations, assist with tank set up, and provide support for stream-side activities, Wilkowski said.

Rationale for the investment is straight forward according to Wilkowski says.

"We reach well over 1,500 students because nearly all the classrooms involve their whole school in some aspect of the program," he said. "By creating excitement and educating students and their families about fish and our cold-water resources we will increase the number of people supporting our fisheries and natural habitat today and into the future."