

# Fish hatchery tips the scales

By ALEX NEWMAN

For a glimpse of some fishy goings-on, the Ringwood hatchery is open to the public.

The fish culture station, part of a restocking program of the Ministry of Natural Resources, is on Hwy 48 north of Markham in Ringwood. Three quarters of a million fish are produced here every year. John Taylor, operational hatchery deputy, oversees growth from the egg stage until the fish are six to eight months old and ready to be released into Ontario waterways.

Visitors to the centre are treated to a colourful visual display educating them about the whys and ways of fish production. The first step in production is procuring the eggs, which do not arrive magically in cartons from some egg depot. Hatchery people must don rubber suits and gloves and hit the streams and rivers where the 'mother lode' swims. With electro backpacks, and two long wires carrying positive and negative electrical currents, the water is zapped and the fish swimming close by are temporarily stunned. When a female floats to the surface, she is picked up in a net and carried to the bank. A long needle is injected into the belly and eggs are vacuumed out into a container. When enough eggs have been gathered, they are shipped to the Ringwood Station.

At Ringwood, eggs are placed in trays made of a screen material and stacked one on top of the other. Water is constantly circulated through the trays, says Mr. Taylor, to keep the eggs wet.

Once the eggs are hatched, the fish are transferred to holding tanks, which take up most of the station's floor space. 'Skirts' or corrugated plastic rim the edge of most tanks, because as Mr. Taylor says, some of the fish get overly rambunctious in their jumping and could land on the cement floor.

It is these tanks which require most of the staff's attention. Employees must make sure proper amounts of fish food are being administered and that water is changed regularly.

Water temperature monitors are placed throughout the station, but Mr. Taylor says that because the station uses artesian well water, the temperature is already a consistent 8 degrees Celsius and there is no need for temperature controls.

Junior Rangers volunteer time to work at the fish station. At present, they are involved in fin clipping — a process in which fish are anaesthetized and their right ventral (underside) fin is clipped. "This is for assessment purposes," says Mr. Taylor, so the ministry can determine where the fish were produced, stocked and eventually caught, or if they continue to spawn.

Originally, fish stock in Ontario waterways became depleted but in the past decade with better controls over sewage, phosphate effluent, commercial fishing, and sea lampreys, the quality of lake water has greatly improved.

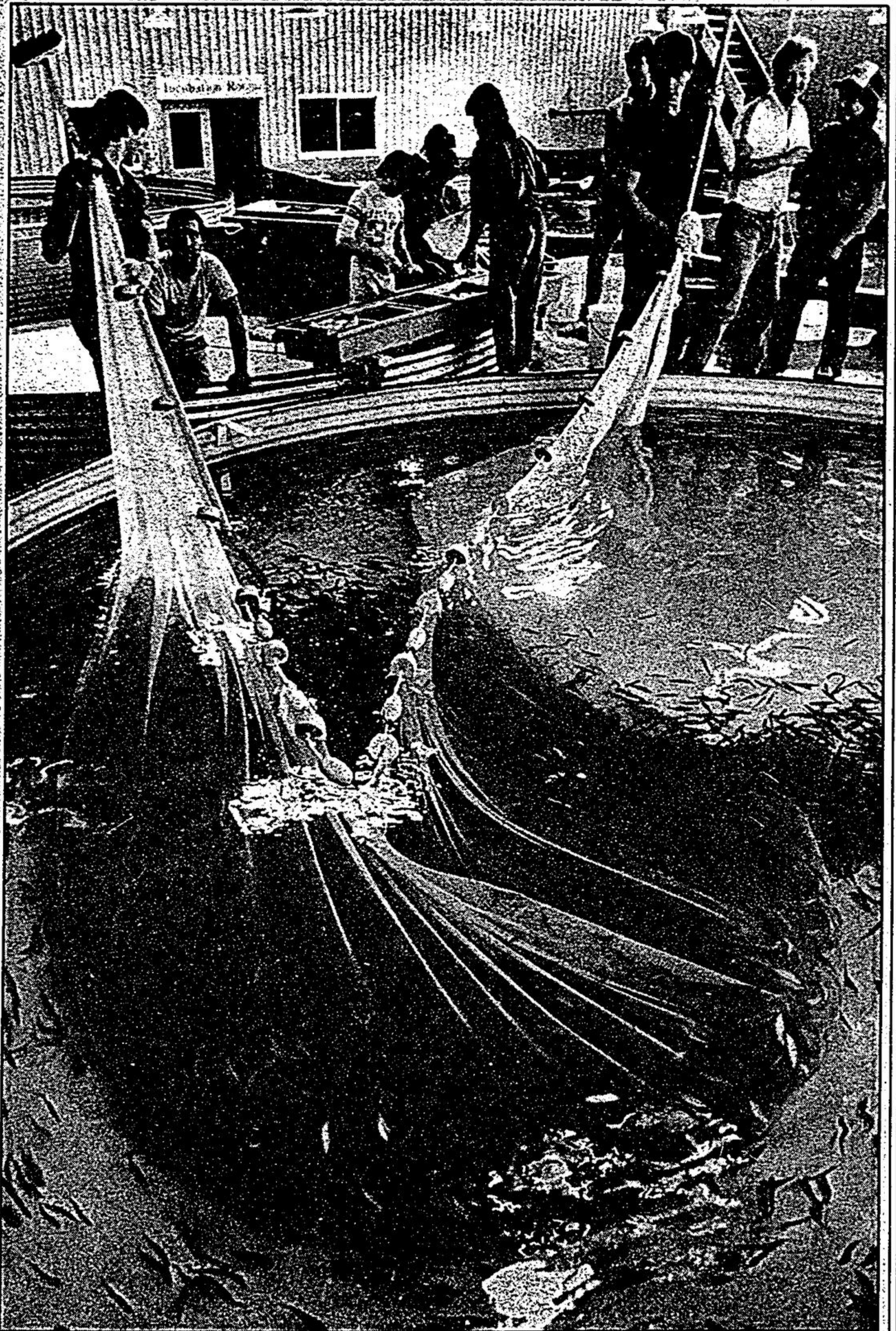
Ringwood produces two kinds of Pacific Salmon, Coho and Chinook. Both species, says Mr. Taylor, were introduced initially into Lake Ontario in the late '60s, but progress was slow because of water pollution. Provincial programs experimenting with Pacific salmon production started again in the late '70s, but weren't fully operational until 1980 when the Ringwood station opened, Mr. Taylor says.

Several fish culture stations are in operation throughout the province, but Ringwood is the only hatchery that produces Pacific salmon. The rest, says Mr. Taylor, culture various types of trout, lake, brown, brook, rainbow, lake whitefish, yellow pickerel, Atlantic salmon, and maskinong (muskelunge).

Mr. Taylor estimates about \$200,000 of provincial money is spent annually on the Ringwood station alone, but that the station enables a \$10 million fishing industry to flourish. With Lake Ontario full of stock, the sale of boats, fishing tackle and accessories, and the chartering of fishing tours have increased over the past few years, claims Mr. Taylor.

When they are of smolting age (when they get the instinct to migrate), the salmon are released into the Credit River, Bronte Creek, and Port Dalhousie near St. Catharines. The number of fish for each destination varies, according to food supplies and capacity of the individual waterway.

Ringwood Fish Culture Station is open daily from 9 a.m. to noon and 1 to 4 p.m.



Junior Rangers of the Vivian Forest camp cast the net into a tank containing approximately 35,000 Coho salmon. The rangers, who come

from northern Ontario to work for the summer, are catching the fish and cutting off a fin to mark the fish for future identification.

*Photos by Sjoerd Witteveen*



Operation Hatchery Deputy John Taylor distributes fishfeed to 'fingerlings' in the large holding tanks. Fish remain at the hatchery until they are between six and eight months old.



Nimble hands cut off the ventral (underside) fin for identification purposes before the fish are released into open waters. The fish shown here is a Coho salmon.