Atlantic Salmon Stocking Program Big Flop So Far

BY TOM OPRE
Free Press Outdoor Writer

BOYNE FALLS — The return here this summer of the Boyne River's Atlantic salmon has been disasterous. But no one is ready to scrap the fledgling program just yet, least of all the Michigan biologist who administers it.

Steve Swan, Department of Natural Resources fisheries expert at Gaylord, recognizes the problem is a big one. Just 42 of some 15,000 Atlantics from the 1973 plant have returned.

All but six of them have died from some mysterious cause.

And these are to be sacrificed this week for study by a fish disease expert from a Toronto University.

"There could be many causes for the dieoffs," Swan believes, "but we're most inclined to think it's some kind of environmental stress."

Pollutants — like PCBs and DDT— could be building in the salmon as they swim and feed in the Great Lakes. If so, it could begin to affect the fish as they undergo the rigors of spawning and development of sexual glands.

"It's the most popular theory, anyway," Swan said, admitting that the DNR had no firm idea what caused the disease, an illness that starts with spotty blemishes turning into red lesions that eventually become bleeding ulcers on the fishes' skin.

SINCE IT'S PREVELANT on the lower jaw — often producing an actual hole in the jaw — biologists think it may be associated with some thyroid problem. "That's hopefully what the Canadian expert will determine," Swan said, "since he's an endrocrine system specialist."

Such lesions are characteristic of a common fish disease, frunculous. But Swan points out that spores of that disease are not common to all the dying Atlantics.

"If it's a single cause — not a combination of environmental damage — it's not a pathogen, no common virus, bacteria or parasite," he said confidentally. "That much we do know."

Michigan experts have not recovered any eggs from the Atlantics bought in Quebec and planted in the Boyne and Au Sable rivers. Only 13 survived from some 180 showing up at the Boyne weir last year, but they were all males.

Yet the high number of returns, plus an angler's creel success of possibly 75 fish, make biologists confident. Some 250 fish actually represented a 2¼ percent survival return on the initial plant of 10,000 smolts in 1972.

That percentage compares favorably with survival rates for chinook.

But this summer's disappointing returns show less than 30 creeled by anglers in addition to the few showing up to die at the weir site.

AT FIRST, BIOLOGISTS thought warmer river water temperatures could be the cause. But an expensive well project (which now slows 800 gallons of 47-degree water per minute) keeps the holding pond cool now, yet the salmon still die.

"Perhaps the '73 plant of fish didn't smolt out of the river within a week or so, as is normal," Swan offered. But he doesn't really believe that himself. Maybe the young fish were stressed when planted and died two or three weeks later. But there's no way to prove that.

Imprinting in 1973 might have failed, too, since biologists released the smolts directly into the Boyne rather than holding them in the weir pond for a week or two.

Or perhaps open lake trollers are getting a sizable share before the Atlantics run the river. Swan doubts it, though. "Most fish have been caught in the streams," he said, pointing out that even the current state record, a 20-pound, one-ounce fish, was taken at the mouth of the Au Sable this past spring.

If, indeed, the cause is environmental and our Atlantics will not prove to be a future eggs source for sustaining the runs, all is not lost, according to Swan.

"We can have hatchery production from a protected brood stock," he pointed out, "just as we do for rainbows and browns and, up until recently, for lake trout."

WAITING IN THE WINGS, too, are the Gullspang strain of Atlantics, imported from Sweden. These fish reportedly reach 70 pounds in their native environment and are entirely landlocked in fresh water, unlike the ones we've been stocking, the Cascapedia strain, which reach adulthood in the open sea.

Some 15,000 more Cascapedia strain fish were stocked in the Boyne this spring, plus 3,500 Gullspangs (some Gullspangs went into Gull Lake, too, to test their feasibility in large inland lakes).

Swan is confident something will work out.

"We need these fish," he said. "They run behind the steelhead and before the cohos, right in the middle of the summer tourist season. And the best fishing occurs at noon, not midnight like the brown trout."..

Atlantics are a close cousin to the brown trout, another fish that's not native to Michigan. Britain's sea trout, for instance, are simply sea-run brown trout.

"Our problem now is to isolate the disease factor, if possible," Swan said, "and to find a remedy, if one exists."

If not, Michigan will likely go to a hatchery brood stock production which would be more limited, naturally.

"Atlantics are a sensitive fish," Swan added, "a good indicator species. I'd like to think we can make our environment good enough once again — in maybe 50 years . . . or 500, who knows? — that fish like Atlantics can survive naturally.

"We'd know for sure then we're on the right track. For if fish like the Atlantics go, can other less sensitive species and eventually mankind be too far behind?"

Outdoor Calendar

Aug. 10-15 — Fifth session, Teachers' Environmental School, Higgins Lake.
Aug. 14 — Huron River Planning Group meets, Hamburg Township Hall.
Aug. 14-15 — Natural Resources Commission meets, Petoskey.
Aug. 15 — Night training of hunting dogs begins, statewide; Archery-spearing season closes on carp, bowfin and pars, non-trout waters.
Aug. 16 — Pigeon River Advisory Committee meets, Pigeon River headquarters.
Aug. 19 — Air Pollution Control Commission meets, Delta Hall, West Saginaw at 1-96.
Aug. 20 — Flat River natural rivers program hearing, 7:30 p.m., City Hall, Greenville.
Aug. 25 — Michigan Environmental Review Board meets.
Aug. 28-29 — Michigan Water Resources Commission meets, Gogebic Community College Academic Bldg., Rm. 314, Ironwood.

The Detroit Free Press
DETROIT, MICH.
D. 616,096 SUN. 714,631

AUG 10 1975

MONS 030908