



Paul Bailey (left), Game and Fish Department fisheries biologist, and Justen Barstad, Department fisheries technician, measure and record the length of young-of-the-year walleye netted from Lake Oahe in fall.

A young-of-the-year walleye from Lake Oahe.

Fish Reproduction Hit-and-Miss

By Greg Freeman

Devils Lake and the Missouri River from Garrison Dam to Lake Oahe had exceptional natural walleye reproduction this year.

Based on the annual fall reproduction survey, the catch of young-of-the-year walleye in Devils Lake was the third highest on record. "This is a significant finding because in all of Devils Lake, we only had a small number of fish stocked into East Bay," said Scott Gangl, fisheries management section leader for the North Dakota Game and Fish Department. "We've seen good natural reproduction on Devils Lake in the past, and when conditions are right, stocking doesn't contribute as much as Mother Nature to the walleye population.

"And the stretch from Garrison to the headwaters of Lake Oahe was just as significant," Gangl continued, "because the walleye production in the river is all natural as it is not stocked."

Fall reproduction sampling provides biologists with an index that measures natural reproduction and stocking success. It allows biologists to see if fish did spawn, and how fingerlings survived the summer. All large and mid-sized reservoirs are sampled every year, and many small lakes are targeted as well. Survey nets are designed for small fish, which allows biologists to assess reproduction and status of both game and forage fish species.

On a statewide basis, Gangl said natural reproduction and stocking success for walleye and yellow perch wasn't very good, but that was not surprising given the conditions of the cool, late summer. "Growing fish is a lot like growing crops," he said. "Warm conditions, early in the season, really boost growth and survival of young fish. But cool conditions can do the opposite."

However, Gangl did note that Lake Darling actually showed good numbers of young-of-the-year walleye and perch, but he is concerned about the fishery because of the low water level. "This one might have some stress through the winter," he added.

While natural reproduction of game fish was hit-and-miss, there wasn't a whole lot of good news for forage fish. "In the large water bodies of southwest North Dakota and in Lake Oahe, we saw fairly decent gizzard shad production," Gangl said, "and in Lake Audubon anglers have seen dramatic improvements to the walleye size structure, which is directly attributed to cisco. This year's cisco reproduction looks pretty good, so Lake Audubon has a good forage source right now."

Reproduction of forage and primary game fish like walleye, pike and yellow perch wasn't very good in Lake Sakakawea. But biologists did see fair numbers of crappies, and smallmouth and white bass, which means they will provide forage for a lot of fish, he said.

On the bright side, paddlefish reproduction was very good and sauger seemed to do well. "Both can be tied to flows in the Yellowstone," Gangl said. "We had a good pulse of water that came at just the right time."

While Lake Sakakawea did rise nearly 20 feet, it provided little benefit for spawning this year. "Spawning was over for most species by time the water came," Gangl said. "However, if the water level remains stable through next year, we should see some really good reproduction next spring and we're hopeful the rainbow smelt population can begin to turnaround."

Gangl said it is important for anglers to understand that fall reproduction sampling doesn't predict how good the catch will be for years to come. "Good reproduction or stocking success is certainly the first step to good fishing, but those little fish have to survive their first couple of winters before they get to a size that anglers can catch," he said.

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