

ROOM FOR INTERPRETATION



CRAIG BHRLE

Understanding Fish Stocking Reports

By Greg Freeman

Jerry Weigel, Game and Fish Department production and development section leader, releases walleye fingerlings into Sweet Briar Dam in Morton County.

Anglers looking for guidance on where to go fishing often refer to the fishing waters list in the back of the North Dakota Fishing Guide.

"That is where I would suggest anglers look first," said Scott Gangl, North Dakota Game and Fish Department fisheries management section leader. "The most common species for each lake are listed. We try to keep fishing waters as current as possible. They are active, viable fisheries."

However, others looking for that hideaway hot spot may also seek out a Game and Fish Department stocking report. While a valuable tool for those who know what to look for,

stocking reports do leave room for interpretation.

For instance, this year's report, or even last year's, won't tell you where to catch a wall-hanger. Jerry Weigel, Department fish production and development section leader, said Game and Fish stocks fish simply for the future. "You aren't going to immediately catch the fingerlings that are currently being stocked," he said.

Most fish, including walleye, northern pike and perch, are stocked at only a month or two of age, at a size of 2 inches in length or less.

Trout are stocked at a larger size, with some held in the hatchery for more than a year, allowing them to reach a length of up to 11



MANDY THOMAS

Chinook salmon fingerlings exit a Game and Fish Department stocking tank.

inches. “We want them to be a catchable-size right off the truck,” Weigel said.

Despite their size difference, both 11-inch trout and 2-inch walleye are called fingerlings because these fish haven’t reached sexual maturity. Once they have reached the age where they can reproduce, they are no longer considered a fingerling, but rather an adult.

So basically, the stocking report in the March-April issue of *North Dakota OUTDOORS* won’t be useful to the angler until 2011? “That’s right. A stocking report is something you stick in the file and bring out two, three or even four years later,” Weigel said.

By understanding average growth rates of certain species – pike grow faster than walleye, for instance – you get an idea when certain year-classes of fish are catchable-size. For example, walleye stocked as fingerlings take 2-4 years before they hit the 14-inch mark. “With the faster-growing pike, you are probably looking at two years for a keeper,” Gangl said.

As a general rule, the quantity of fingerlings a lake receives is determined by the size of the water. Over time, Gangl said biologists will see if a lake can be fine-tuned to determine what is necessary to be effective. “After several years of stocking, biologists can tell what’s working and what isn’t,” he said. “For instance, when fish are able to reproduce in some lakes, we have found that we don’t have to stock fish.”

Fisheries biologist test net some waters in fall to determine survival of stocked fish. “This is done specifically to assess reproduction for that year,” Gangl said. “We have been marking walleye fingerlings each year since 1999. By test netting, we are able to see the return on those fish by checking survival rates and being able to see the percentage between natural reproduction (fish that aren’t marked) and those that were stocked. If a lake shows the majority of fish are from natural reproduction, and this lake has been consistent over the years, then it may not

Sakakawea Stocking on Hold

Missing again from the 2007 stocking report included in the March-April magazine was the number of walleyes stocked in Lake Sakakawea. The big lake hasn’t been planted with hatchery-raised fish since 2005.

“Management of the lake has to be different than it was 10 years ago, current conditions dictate this,” said Scott Gangl, North Dakota Game and Fish Department fisheries management section leader. “The worst thing you can do is stock fish in the situation it is now in. The adult fish are skinny, and there is not a lot of forage. We don’t want to compound the problem by stocking and adding stress if there is not enough forage to sustain it. Fingerlings would have to feed on plankton, and there is not a lot of plankton out there.”

The walleye population from three years ago was built on a full lake. “It was foreseeable that this was going to happen due to the drop in water levels,” Gangl said of the current population. “The lake is not full, and you can’t force the lake to produce more fish if it can’t handle it.”

Gangl points to what biologists learned from the drought in the late 1980s. “At that time, fingerlings were stocked every year, and survival wasn’t good every year,” he said. “That drought only lasted about four years. The current drought is well past that.”

Lake Sakakawea is evaluated every year, and decisions on whether to stock fish are made annually. As soon as a winter looks like it will produce good runoff, biologists are poised to stock. However, Gangl said it will take a lot of water to get it back to what it was before.

“There is a little bit of natural reproduction out there now, so Mother Nature is taking care of it at a maintenance level, about as much as we would be,” he said. “If these conditions become the norm, I expect the population to stabilize and for fish conditions to stabilize as well.”

Below: A rearing pond at Garrison Dam National Fish Hatchery where different fish species are held before their release. Right: This fish likely started as a released fingerling and later bent the rod of a happy angler.



CRAIG BHRLE



CRAIG BHRLE

have to be stocked with fingerlings.”

Biologists occasionally move adult fish from one lake to another. “We move adults before they spawn,” Gangl said. “This is effective with bluegills and especially yellow perch. If they spawn after they are stocked, they may enhance the population tremendously.”

Something else to keep in mind, Gangl said, is that just because a stocking report says 100,000 walleye fingerlings were stocked in a lake doesn't mean three or four years later there will be 100,000 14-inch walleye swimming around.

“Fingerlings have to get through the first winter to actually contribute to the population, and there are going to be some problems,” Gangl said. “I'm talking about mortality. There could be predators in the lake so they are going to have to dodge some mouths. In addition, there is natural

mortality, whether it is disease or other factors.”

The best situation, Gangl said, is stocking fingerlings in a new lake with no predators and lots of food. “This obviously will give them the best chance for survival,” he added. “New fisheries have better survival rates

because there aren't other factors to limit their survival.”

This takes us to the importance of forage. You'll notice in some stocking reports that fathead minnows are planted in certain waters. This was done not to feed game fish, but to establish a forage population.

“During field work, biologists make notes where lakes are deficient in forage,” Gangl said. “Then, when we find lakes with an abundance of fathead minnows, we'll move them to other lakes that are lacking.”

Stocking has been successful in North Dakota, Weigel said, because the state is blessed to have access to a large hatchery production that most other states don't have. “We have a substantial production capability available because the

Department and anglers have invested a lot of money at Garrison Dam National Fish Hatchery,” he said. “Production is generally not limiting, so we always have enough fish to meet demand. It is nice to not have to be so frugal.”

So, if you want to use a stocking report to decide where to go fishing this summer, find one from three or four years ago. Then again, just because a lake near you isn't on the stocking report, that doesn't mean it's fishless. Mother Nature does provide opportunities, and sometimes natural reproduction in some lakes is incredible.

“But just about the time you think you have things all figured out, the opposite happens,” Weigel said. “That is why I tell everyone if the fish are biting, go fish.”

GREG FREEMAN is the Game and Fish Department's news editor.