

Fish dinner — by the ton

April 24, 2008 at 5:00 am | JIM MANN/Daily Inter Lake



Rick Hunt, a fisheries technician with Montana Fish, Wildlife and Parks, shows off one of the more than 500 pike trapped on the Flathead River south of Kalispell in 2002 and 2003. The research was aimed at estimating the size of the pike population and its impacts on native bull trout and westslope cutthroat trout. Photo courtesy of Clint Muhlfeld

Voracious pike chow down on 342,000 fish a year

Every year, eight metric tons of fish don't make it through the gauntlet of northern pike that inhabit the slow-moving waters of the Flathead River south of Kalispell.

That translates to about 342,000 fish, including 13,000 westslope cutthroat trout and 3,500 bull trout, according to a newly published study in the North American Journal of Fisheries Management.

"Our results suggest that predation by pike is probably contributing to lower abundance of salmonids in the Flathead system," said Clint Muhlfeld, the study's lead author. "They are a top-end predator. They are really opportunistic and they will basically eat any available food source that's out there."

The numbers in the study were generated by software modeling called Bioenergetics, with the input of 367 pike that were trapped in 2002 and 189 trapped in 2003, along with an analysis of the contents in 284 pike stomachs provided by anglers over the same period.

Other factors such as water temperature are considered for a calorie calculation that allows the modeling program to project how many fish are being eaten annually.

There is an obvious margin of error for any population sampling, said Muhlfeld, an aquatics ecologist with the U.S. Geological Survey's Northern Rockies Science Center in Glacier National Park.

"We have good sample sizes," Muhlfeld said. "And this is the best available information we have to examine the predatory interactions of pike and juvenile salmonids."

Muhlfeld said the sheer tonnage of fish consumed may be surprising to some people, but he considers the numbers to be conservative.

Matt Boyer, a contributing researcher and fisheries biologist with Montana Fish, Wildlife and Parks, has a similar view of the study's results.

"I think they prove the obvious: Pike eat bull trout and westslope cutthroats," he said. "I'd say the next important step would be to quantify what fraction of the available population [of bull trout and cutthroats] does that predation represent."

The pike research concentrated on the braided and oxbowed river channels and sloughs of the Flathead River between the Stillwater River and the head of Flathead Lake. The trapping was aimed at developing a pike population estimate, which came to 1,200 to 1,300 individual fish.

The pike stomachs provided by anglers were forwarded to the University of Idaho for analysis.

"We found that they are eating everything down there," Muhlfeld said. The most common prey was whitefish, suckers and red-sided shiners.

But at certain times of year, the most available menu entrees are migrating cutthroats and bull trout.

The study's results are similar to previous research in other places, including a study that found pike were having a devastating impact on trout in Idaho's Lake Coeur d' Alene.

What's alarming about the Flathead system is the compounded impact of another top-end predator - lake trout - on bull trout and cutthroats in Flathead Lake. A study published in 2006 used Bioenergetics modeling to calculate that lake trout are consuming 13 metric tons of cutthroats and 2 metric tons of bull trout in Flathead Lake annually.

"You've got to look at the system as a whole," Muhlfeld said. "It's not only pike as top-end predators that are impacting our cutthroat and bull trout populations."

Muhlfeld said it is believed that pike were brought from Lake Sherburne on the east side of

Glacier Park to Lone Pine Reservoir southwest of Kalispell in 1953. In the early 1970s pike were illegally planted in the Flathead River.

Since then, they've become a sport fish with an angler constituency.

However, groups such as Trout Unlimited have pressed Montana Fish, Wildlife and Parks to be more aggressive in encouraging angler pressure on the river's pike population.

There has been criticism about state regulations that close the Flathead River to pike angling from Dec. 1 through the third Saturday in May. But the pike season recently was extended - the closure is now from March 1 through the third Saturday in May.

And that closure is in place mainly to reduce the potential "by-catch" of bull trout by pike anglers, Boyer said.

Reporter Jim Mann may be reached at 758-4407 or by e-mail at jmann@dailyinterlake.com