

PIKE SPEARING

5-Year Recap

By Craig Bihrlé

After five years of open seasons, darkhouse spearfishing in North Dakota has settled into a comfortable pattern that is not much different from other fishing and hunting endeavors: when prospects are good, people participate. When prospects decline, participation falls off.

With darkhouse spearing, however, it's not just northern pike populations that provide the incentives, or lack thereof. While pike are the primary target of spearers, you can't spear them if you can't see them. In recent years, some lakes with a lot of pike provided little opportunity because of murky water clarity.

That's part of the reason that pike harvest via darkhouse spearing reached its lowest mark in five years last winter. The other factor is declining pike populations in many prairie waters. These two factors together are likely responsible for a noticeable shift in where people are setting up their darkhouses since the first spearing season in 2001.

2005-06 Spearfishing Stats

- 1,108 individuals registered, the fewest on record. About 70 percent of those who registered actually went spearfishing.
- About 2,000 pike were taken by spearers.
- About 7 percent of participants said they harvested a pike weighing more than 20 pounds, compared to 4.8 percent and 2.5 percent the previous two winters.
- The top five lakes for harvest were Sakakawea, 815 pike; Devils Lake, 448; Coldwater Lake, McIntosh County, 249; Lake Etta-Alkaline, Kidder County, 168; Spiritwood Lake, Stutsman County, 130.
- As was typical in other years, January and February had more spearfishing activity than December.

From the Beginning

State legislators passed a law in 2001 requiring the Game and Fish Department to establish some type of season that would allow spearfishing of northern pike through the ice. At the time, many North Dakota fishing waters had excellent pike populations and spearfishing was considered a new recreational opportunity.

The spearfishing season was not without its detractors. People raised concerns about potential overharvest of large pike in certain waters, and there were also safety concerns because of large holes left in the ice that vehicle drivers at times might not be able to see.

Game and Fish approached the spearfishing season cautiously, opening up a small number of lakes at first, and also setting up a participant registration system that would allow biologists to keep close tabs on pike harvest. "The legislature did give us a lot of ability to set rules and regulations as we saw fit," said Game and Fish Department fisheries division chief Greg Power. "We did take the conservative approach, and continue to do so."

At first, 24 lakes were opened to spearfishing. These were limited to waters with high pike populations, and were spread out across the state, except south and west of the Missouri River, so many residents could get to a spearfishing water within a 30-40 mile drive.

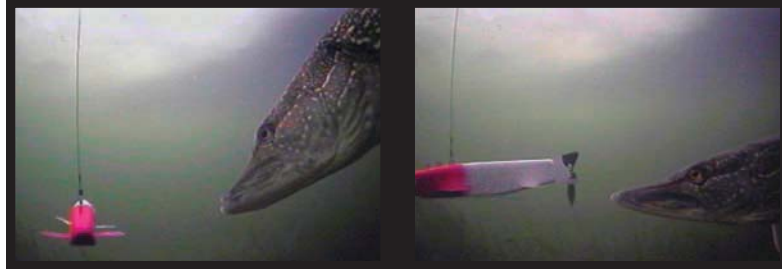
At the start of the 2006-07 season, just under 40 lakes were open to spearfishing. However, if this winter is anything like last winter, about half the lakes will experience an estimated spearfishing harvest of fewer than 10 fish each, and a few of them won't attract much if any spearfishing activity.

That's the nature of prairie pike fisheries, Power said, as many reached peak populations a few years ago. Since then, pike spearfishing and pike angling opportunities have both declined along with water levels. Some waters have lost six to eight feet off the top since 2000, and with water receding away from vegetation instead of flooding it, there has been little natural northern pike reproduction for many years.

The number of people who registered to spearfish peaked in the second year (2002-03) at 1,617, of whom 979 actually went spearfishing. Last winter, the number of active spearers was 638.

Where People Go

It's probably not surprising that Lake Sakakawea and Devils Lake were numbers one and two for pike-spearfishing harvest last winter, as these fisheries are also the top destinations for open water anglers. What may be surprising is that neither of these lakes had previously been in the top two for pike-spearfishing harvest.



Spiritwood Lake in Stutsman County (see sidebar) yielded the most pike the first season, followed by Grass Lake in Richland County the second year. Morrison Lake, part of the Devils Lake chain, had the number one spot for two years before Sakakawea rose to the top last winter.

Notably, Morrison went from *number one* in 2004-05, to registering *only one or two* pike speared last year. The reason: water clarity. During its two years of leading the pack, Morrison's water clarity held at between five and six feet. Last winter it was down to one foot of visibility through the water. In all three years, Power said, the pike population stayed relatively the same.

The Clarity Question

At any time of year that North Dakota's lakes are open, extended periods of high winds rile up the water and scatter bottom sediments throughout the water column. When the wind dies, these sediments typically settle to the bottom.

When such high winds occur at the same time a lake is freezing, however, water clarity may not come back as quickly. Some lakes stay "dirty" all winter, Power said, while other, similar waters gradually clear up.

Biologists aren't certain why some lakes maintain their cloudy water all winter. What is clear, however, is that lakes with high pike populations and low visibility don't get much attention from spearers.

High Harvest Concerns

On the other hand, lakes with tap-clear water may attract spearfishing activity even if the fish population isn't that great. That factor has been the basis for concerns of overharvesting

pike from certain lakes. Generally, that has not yet materialized, Power said, because spearing accounts for such a small percentage of the annual northern pike catch.

For instance, Game and Fish estimated a statewide pike harvest of 235,000 from April 2004 through March 2005. About 3,600 fish from that total, or 1.5 percent, were taken by spearing, Power noted.

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People have also discovered that darkhouse spearfishing can be a lot of work. On the other hand, the appearance of a large northern pike stalking a decoy creates the same type of anxious moment that, like the triggering of a tip-up flag or submersion of a bobber, lures people back again and again.

“It’s a niche fishery,” Power said. “I don’t see



While pike taken by spearing average about a pound larger than pike taken by angling, either summer or winter, the overall number is so small that the potential for taking out too many big fish hasn’t been a major concern for biologists. Particularly, Power said, because spearing season closes at the end of February each year, before larger female pike become more active in their search for food and spawning areas and would become more vulnerable to spearers.

From 1997-2000 most pike lakes in the state supported themselves with natural reproduction, Power said, so Game and Fish no longer needed to stock them. Since then, stocking has again become necessary in many lakes as natural reproduction fell off with receding water levels.

In those lakes that are maintained by stocking, harvest of mature brood fish, either by spearing or angling, is not an issue because these fish are not significantly contributing to reproductive efforts. In lakes with healthy, naturally reproducing pike populations, there’s enough adult brood fish to support considerable fishing and spearing pressure.

“We recognize there is a potential for problems on smaller, clear lakes,” Power said, so fisheries biologists are keeping a close watch. “But we haven’t documented any problems yet on the lakes we have.”

The Next 5 Years

Now that the initial surge is past and participation has leveled off, Power doesn’t anticipate that darkhouse spearfishing participation will change much either way unless overall pike populations change. The same is true for the list of open lakes. “Pike lakes are pike lakes and most of the good ones area already

it ever becoming anything more than that. We’ll continue to monitor its impacts, but it’s nice to know that some people sure enjoy it.”

CRAIG BIHRLE is the Game and Fish Department’s communications supervisor.

Case Study at Spiritwood

During the first North Dakota darkhouse spearfishing season, more northern pike came out of Spiritwood Lake than any other water in the state. The following summer, Game and Fish Department netting surveys indicated a much reduced northern pike population in the Stutsman County fishery.

Spiritwood attracts a lot of spearing pressure because its water clarity is, year-in year-out, the best of all the open lakes. That’s part of the attraction for spearing, the opportunity to observe life underwater, not just pike nosing up to a suspended decoy, but anything else that might swim by as well.

It would be easy to reach the conclusion that spearing harvest on top of regular ice and open-water angling harvest was responsible for the dramatic Spiritwood pike population decline. But other factors were also involved.

Annual surveys indicate Spiritwood’s pike population peaked in 1999, two years before the first spearing season. It was already down to about half of its 1999 level heading into winter 2001. While Spiritwood was the number one lake for pike speared that first winter, Game and Fish did not have an ongoing open water or ice fishing creel survey, so there’s no way of knowing what the angling harvest was for the same time period, Power said.

At the same time, pike populations in many lakes across the state were falling, whether spearing was allowed or not. In Jamestown Reservoir, located within 20 miles of Spiritwood, pike numbers followed a trend similar to that at Spiritwood, though it was not open to spearing.

Maintaining its conservative approach, however, Game and Fish took some of the pressure off Spiritwood by delaying the start of spearing season there until January 1, while all other waters open December 1.