



Just How Smart Are Muskies?

By Art Barlow

I was indoctrinated years ago that fish are really stupid. I can remember one prominent guide standing up at a seminar and telling us that he could “catch muskies with a gasoline-soaked piece of nylon rope. They’ll grab on and get their teeth tangled in the rope. They can’t taste and they can’t think.”

We have been programmed to believe that muskies and other fish are totally driven by instinct with their pea-sized brain. All they have is “strike impulse.” But what if they are a lot smarter than we give them credit for?

I started thinking about this last fall after a day of guiding. My client brought up a huge musky, which followed to within 15 feet of the boat. Then, its eyeballs moved so it was looking straight at me, and it had the look of recognition. It seemed to dismiss me and the lure, then swam away in that exaggerated, leisurely motion that irritates me when I see it.

Can a musky actually be recognizing a human and know the situation is not good? This led me to do some research, and I’m not sure I like the results.

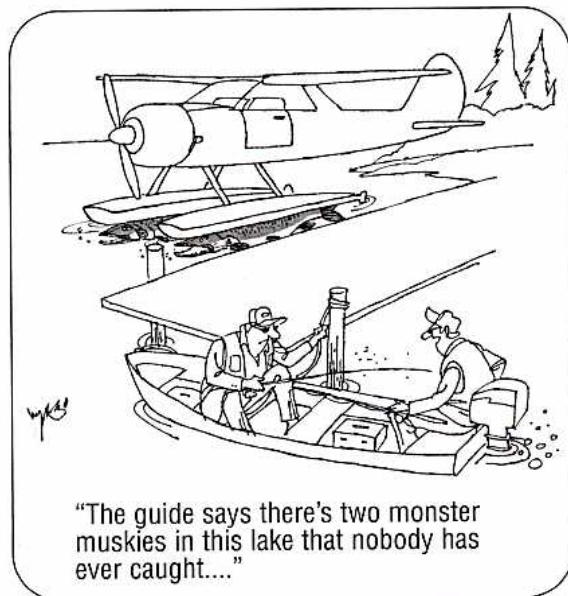
A group of scientists from England has discovered evidence that fish learn from others on paths to feeding sites and what to avoid by watching others and following their behavior. They have observed some fish exhibiting long-term memories. They further added that fish are the most ancient of the vertebrates and we should not pre-judge them simply by the basis of brain volume. In some cognitive areas they compared fish to the non-human primates.

Interesting? Yes, but the best is coming.

Dr. Keith Jones, Berkley’s Pure Fishing research director, states that fish show signs of intelligence. He states in a recent

article: “although certainly not as advanced as humans, different fish species are definitely capable of associative reasoning.”

Associative reasoning is the ability to learn relationships between objects or events and then applying those relation-



ships to novel situations. Could this mean that by catching a musky on my favorite bucktail and releasing it, that the musky could then remember the experience?

Well, Dr. Jones did a study with largemouth bass at the Pure Fishing Fish Research Center that is quite impressive. In order to do it justice, I’ll quote the study, with permission: “In these tests wherein a group of six bass were free to strike an artificial minnow for as long as they pleased, we could show that after several fruitless attempts to eat the artificial minnow the bass would soon abandon their attacks. In other words, through failure to get a food reward, the bass quickly learned to ignore what normally looked like a scrumptious appetizer. But here comes the interesting part. Two weeks later we showed the same bass a second artificial minnow similar in

shape but easily distinguishable from the first. To our surprise the bass hardly touched the second minnowbait, although, if we showed it to another group of naive bass they would pound away at it just like the first group did on the original minnow. Clearly, the experienced bass remembered their wasted efforts from the first time around and transferred that knowledge to an object they had never seen before. We had created bass impervious to minnowbaits. So how long did the bass retain their memory? For at least three months thereafter, which was the longest time period we tried. I personally have little doubt that they bear the memory of their experience to this day and will probably do so for the rest of their lives.”

I know there are a lot of variables, but if muskies have the ability to learn like the bass did in the Pure Fishing study, are we educating muskies through catch and release? Years ago — before catch and release — there were always some 40-pound muskies caught and lots of 30s, but if a 30-incher was caught, it was kept. With catch and release, we should have more muskies than ever growing into the supertanker size, but I don’t think we are catching near the numbers we should. Does a giant musky have a lifetime of memories on what to avoid? I contacted Dr. Jones to bounce my assumptions off him. He said: “You are correct that muskies can learn and that catch and release practices make for a more educated musky population. Over time, an increasingly educated musky population will, on average, become more and more difficult to catch.”

Am I advocating no catch and release for muskies? Of course not. But I firmly believe they are smarter than we give them credit.