Meet the Burbot (*Lota lota*)

By Randy Jackson

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The only species of strictly freshwater cod, the burbot has many names—none of them particularly flattering. But whether you know it as eelpout, dogfish or lawyer, the burbot is a unique fish that should be admired, and one that could serve as an indicator of how global environmental changes could impact New York's fishes.

The burbot is unusual looking, with a head like a catfish, a body like an eel, and very small scales that make it smooth and slimy to the touch. It is a true coldwater fish and generally avoids waters warmer than 55º F.

Burbot inhabit a number of northern waters around the globe. In New York, they are at their southernmost range (in eastern North America) and occur sporadically across the state. They can be found in the cooler waters of some of the state's deeper lakes, such as Canandaigua, Otsego and Champlain, as well as Oneida Lake. In addition, they also occur in the upper reaches of the Susquehanna and Allegheny Rivers, and tributaries of the St. Lawrence.

Burbot are the only freshwater fish in the state to spawn in midwinter. Spawning takes place when water temperatures are between 32º and 40º F, often under ice cover. Because of this need for colder water temperatures, the recent temperature increases in many New York waters could negatively impact burbot numbers, and could reduce their distribution in the state. If so, burbot would be among some of the first species impacted if our climate warms.

Historically, burbot have gained a bad reputation among anglers. This is because burbot are aggressive predators whose preferred foods are crayfish and other fish species, including several popular gamefish. Prior generations of biologists and anglers viewed the burbot as a threat to the production of these sportfish and therefore a nuisance that

Burbot Facts

Looks like a cross between a bullhead and an eel.

Has a prominent, single chin barbel (whisker).

Usually lives in lakes, but is also found in some streams where there is cool water and plenty of hiding places. Sporadic distribution in New York.

Only freshwater fish that spawns in midwinter in NY. Forms spawning "fish balls" of 10 to 12 fish.

Frequently caught by anglers (especially when ice-fishing at dusk & dawn), but few anglers eat them.

USFWS/Robin West

needed to be removed. Early stories from Oneida Lake tell of ice fishermen building wind breaks out of burbot they caught, believing that removing them would help the more favorable walleye and yellow perch populations.

While many people still believe that removing burbot from a water will benefit other fish species, biologists now know that burbot are an important part of healthy, native fish communities, and contribute to the balance between predators and prolific forage fish.

Another misconception by the public is that burbot are inedible. However,

DEC photo

The state record burbot, caught in 1991.

like its marine cousin the Atlantic cod, burbot provide flaky, white meat fillets that have a delicate flavor. Captured from cold waters, and with a little attention to remove the darker meat from fillets, burbot can be among the tastiest of freshwater fish—they are excellent fried, baked or broiled, and in many regions where burbot are held in regard, the meat is boiled, dipped in butter and called poor man's lobster.

Because burbot are active during the winter, they can provide great fishing opportunities for winter anglers. Burbot are readily caught through the ice using many of the same techniques used for walleye, such as jigging with a jig "tipped" with baitfish or using a tip-up with a baitfish. Fishing can be particularly productive when burbot move from deep waters to shoal areas to spawn in late winter. Caught on light tackle, burbot can be excellent fighters, and they can reach sizes many of New York's other sport fish do not. The New York State angling record for burbot is a 16-pound, 12-ounce fish from Black River Bay.

The burbot is one of New York's unique fishes, and an important part of the state's natural heritage. If you're lucky enough to catch one, consider keeping and serving it for dinner. You may just be pleasantly surprised!

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