



Chain Pickerel

Esox niger

The chain pickerel, “chain-sides” or “jack,” as it is more commonly known in North Carolina, is a member of the pike family. The pike family also contains the muskellunge, the northern pike, and the grass and redbfin pickerel. Pikes are closely related to the mud minnows and more distantly related to the salmonids, although they lack an adipose fin and do not look much like a trout.

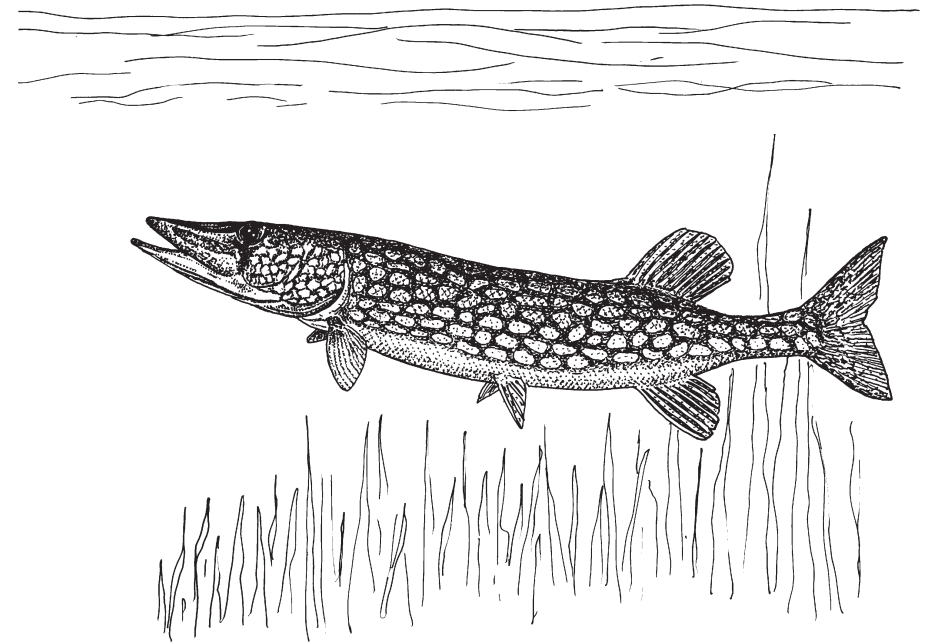
The larger species, the muskellunge, northern pike and chain pickerel, are fine game fish, but the redbfin and grass pickerel are too small to be good sport fish. The chain pickerel is popular in North Carolina and other areas of the eastern and southern United States with those anglers who choose to pursue it, although compared with other game fish such as the largemouth bass, relatively few anglers seek this fish.

History and Status

The chain pickerel is native to North Carolina waters. It is considered a game fish in this state, although there are no size or creel restrictions. Populations are healthy, and the status of the fish is considered good.

Description

The body shape of a chain pickerel is elongate and somewhat compressed. Dorsal and anal profiles are nearly equally curved. The dorsal fin originates far back, midway between the mid-base of the caudal fin and the foot of the pelvic fin. The dorsal fin is highly arched, with



rounded corners. The caudal fin is moderately forked, with bluntly pointed lobes. The body is completely scaled, while on the head only the cheeks and opercles are scaled. The scales are curved. The mouth is large and terminal, with hardly a surface that isn't armed with recurved, needlelike teeth.

The adult color varies from dark green to bronze above, shading to brassy on the flanks, and white on the belly. The back is often marked with irregular bars and mottling. The sides have a reticulated pattern of dark lines suggesting a chain. Juveniles have a distinct pale cream to golden tan mid-dorsal stripe and lack the chain pattern. The adult pattern begins to develop when the fish is about 200 millimeters long.

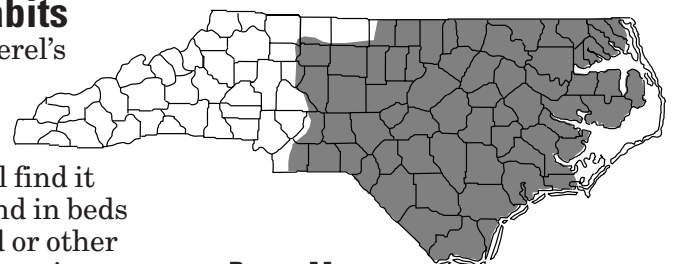
Habitat and Habits

The chain pickerel's habitat overlaps that of the largemouth bass. Ordinarily you will find it around lily pads and in beds of grass, pondweed or other vegetation. Weeds are important to its method of feeding.

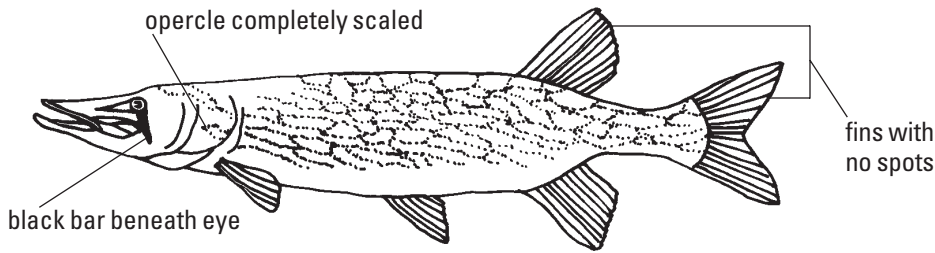
It doesn't often roam about searching for food unless the food is scarce in the immediate vicinity. The pickerel prefers to wait for its meal to swim by instead of going to look for it. This way it expends less energy and uses more of the food for growth.

Chain pickerel eat other fish. They also eat crayfish, insects, frogs, newts and just about every other living creature that invades their sanctuary, including other pickerel.

In heavy vegetation the pickerel orients itself, with its head facing deep water. Where the marginal areas of the shore are free of heavy vegetation, the pickerel will face shoreward. If it has fed recently, a pickerel will rest quietly in the weeds while schools of minnows swim by.



Range Map:
Occupied range



Other times it will feed voraciously and has been known to strike a fishing lure while still having the tails of other fish protruding from its mouth.

The chain pickerel is normally a spring spawner, with spawning taking place when water temperatures reach 47 to 52 degrees Fahrenheit. Several males may accompany one female during spawning. The eggs are sticky and adhere to the vegetation. Hatching takes place seven to 12 days later, depending on water temperatures, and young attach to the vegetation by means of an adhesive gland on their snout. They begin to feed after about a week and may exceed 6 inches in length by the end of the first summer, depending on geographic location. The chain pickerel reaches 14 inches in three years; it takes about six years to attain a stout 20 inches; and if it survives to the probable maximum of 10 years, it should be 36 inches long and weigh approximately 9 pounds. Sexual maturity is reached at age four or five.

Range and Distribution

The natural distribution of chain pickerel is in regions where the larger pikes are rare or absent. The center of the range extends east of the Allegheny Mountains from Nova Scotia to central Florida, along the Gulf Coast, and up the Mississippi Valley to Missouri and southwestern Kentucky. The fish has also been introduced into the Lake Erie system in New York.

In North Carolina the pickerel is found primarily east of Interstate 77, with the heaviest

populations along the Coastal Plain and on the coast.

People Interactions

Chain pickerel provide a year-round fishery. They are taken by ice fishermen on minnow baits, and by anglers in spring, summer and fall using spoons, plugs, bucktails and streamers. Relatively few anglers fish for chain pickerel exclusively. Most are taken by bass and walleye anglers casting around weed beds. Anglers fishing specifically for chain pickerel like to use 4- to 5½-foot ultralight spinning rods and a small reel spooled with 3-pound test line. Another method used is a fly rod with any minnowlike pattern attached to it.

References

McClane, A.J. *McClane's Field Guide to Freshwater Fishes of North America* (New York: Holt, Rinehart and Winston, 1974).

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Credits

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CHAIN PICKEREL

Classification

Class: Osteichthyes

(Bony fishes)

Order: Esocidae (Pikes)

Average Size

Length: 10 to 20 in.

Weight: 1 to 3 lbs. The North Carolina state record is 8 lbs.; the world record is 9 lbs., 6 ozs.

Food

Fish, crayfish, insects, frogs. They prefer to wait and ambush their food rather than expending energy searching for it.

Breeding

Promiscuous males may breed with more than one female. Spawning occurs during the spring in and around vegetation. Eggs are adhesive and stick to vegetation.

Young

Hatch in about a week to 12 days, attach to vegetation by means of an adhesive gland on their snout. They begin to feed about one week later.

Life Expectancy

Up to 10 years