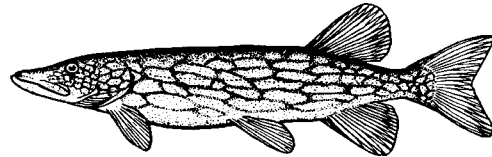


Chain Pickerel (*Esox niger*)

General Information

One of the few species native to New Jersey chain pickerel are found throughout the state. Pickerel can tolerate the low pH waters found in the southern portion of the state. They are an important part of New Jersey's ice fishery.



Native Range

Eastern seaboard from the St. Lawrence River through Florida, in Gulf of Mexico drainage, north to southern Missouri and west to eastern Oklahoma. (Carlander 1969)

Habitat Description

Lake: sluggish, heavily vegetated lakes & ponds, usually no deeper than 10 feet. Solitary, remain in thick beds of vegetation. Can tolerate pH values as low as 3.8. (Carlander 1969; Scott and Crossman 1973)

River: sluggish streams, can tolerate salinities up to 15 % (Scott and Crossman 1973)

Optimum Habitat Requirements

Dissolved Oxygen	
Temperature	21° - 30° C
pH	6.5 - 8.5
Turbidity	
Current	

Diet

Fry	plankters & invertebrates
Juveniles	mostly fish but will take crayfish
Adults	fish
Notes: food selection is size related than species orientated	

Growth (mm)

Age	I	II	III	IV	V	VI	VII
	157	256	372	423	513	638	

Notes: year round growth, females appear to grow faster & live longer. Growth data is taken from a summary of lake inventories performed 1990 - 1995.

Reproduction

Time of Year	April - May (ice out)	Age Males Mature	II - IV
Temperature Range	8.3° - 11.1° C	Age Females Mature	III-IV
Water Depth		Nest	none
Substrate	vegetation	Egg Type	adhesive
Time of Day	daytime	Parental Care	none
Critical pH		Days to Hatching	6-12
Vegetation	critical	Stable Water Level	critical

Notes: Spawning areas are flooded benches of streams, lakes & ponds, hatchlings sink to bottom & attach to vegetation by adhesive spot on snout & remain until able to begin active feeding (app. 1 week). Can hybridize with redbfin pickerel and northern pike. (Scott and Crossman 1973)