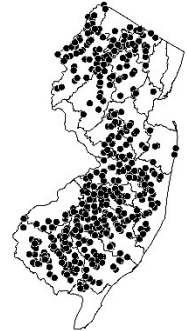


## Chain Pickerel (*Esox niger*)

Historical Presence	Abundance	Life History	Management
Native	Common	Freshwater	Sportfish

### General Information

A long and slender popular sportfish, especially for ice-fisherman, it is distinguished from other fishes in the esocid family by the presence of fully scaled cheeks and gill covers. One of the few predatory fish's native to NJ, Chain Pickerel are commonly found throughout the State. They are tolerant of low pH waters.



### Geographic Range

Atlantic Slope from NS to s. FL; Gulf Coast west to Red R. drainage, OK, and Sabine R. drainage, TX; Mississippi R. basin north to KY and MO. Lake Ontario and Erie drainages, and other scattered localities as far west as CO.

### Habitat Description

Vegetated lakes, swamps, and backwaters of quiet pools of creeks and small to medium rivers. Typically seek cover in dense vegetation.

### Optimum Habitat Requirements

Dissolved Oxygen	> 4 mg/L
Temperature	21 – 25 °C
pH	6.5 – 8.5
Turbidity	Clear/low
Current	Calm/slow

### Diet

<b>Fry</b>	Zooplankton, crustaceans, insects
<b>Juveniles</b>	Aquatic insects, small fishes, crayfish
<b>Adults</b>	Fish, crayfish, frogs
<b>Notes:</b> Peek feeding activity at dawn and dusk, solitary feeder, stalks its prey. Prey size proportional to predator size.	

### Reproduction

<b>Time of Year</b>	February – May	<b>Age Males Mature</b>	3 – 5
<b>Temperature Range</b>	8 – 11 °C	<b>Age Females Mature</b>	3 – 5
<b>Water Depth</b>	Shallows to 3 m	<b>Nest</b>	None
<b>Substrate</b>	Vegetation	<b>Egg Type</b>	Demersal (adhesive)
<b>Time of Day</b>	Daytime	<b>Parental Care</b>	None
<b>Critical pH</b>	3.9 – 7.9	<b>Days to Hatching</b>	11 – 12
<b>Velocity Range</b>	Slow	<b>Oxygen Level</b>	

**Notes:** Broadcast spawner, newly hatched young attach to vegetation for a short period following hatching.

### Size and Growth

Age	I	II	III	IV	V	VI	VII
<b>Length (mm)</b>	157	256	372	423	513	638	

**Notes:** Year-round growth, females appear to grow faster and live longer, growth masked by local habitat conditions. Growth data from a summary of NJ lake inventories (1990 – 1995). Adults typically 350-500 mm up to a maximum 990 mm. Maximum longevity is 9 years of age.

## References

(Armbruster 1959; Reynolds and Casterlin 1977; Duplinsky 1982; Dove and Nyman 1995)

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