

Bighead Carp (*Hypophthalmichthys nobilis*)

Historical Presence	Abundance	Life History	Management
Exotic	Not-present	Freshwater	Invasive

General Information

A large powerful filter feeder that exhibits fast growth, high reproduction and tolerance to a wide range of environmental conditions. It has eyes projecting downward, a large mouth with no teeth, and a protruding lower jaw. Not found in NJ, it is considered a potentially harmful invasive species if introduced. Bighead Carp have been recorded as present in 27 states, first introduced for aquaculture, it spread primarily from aquaculture escape or illegal stockings. Bighead Carp may significantly deplete plankton supply in a waterbody, leading to declines in condition and fecundity of native planktivores.



Geographic Range

Native to e. Asia. Introduced to AR, now established in Missouri, Mississippi and Ohio river basins from central KY to SD and south to LA. Documented in Hunterdon County, NJ (2010), currently not found.

Habitat Description

Open water of large rivers, backwaters, floodplain lakes, reservoirs, and ponds. Young occasionally in small creeks. Prefers foraging in shallow (0.5 – 1.5 m) backwaters. Moves to deeper water during fall and winter.

Optimum Habitat Requirements

Dissolved Oxygen	7 – 10 mg/L
Temperature	21 – 30 °C
pH	
Turbidity	Moderate/high
Current	0 – 1.5 m/s

Diet

Fry	Phytoplankton, zooplankton, algae
Juveniles	Phytoplankton, zooplankton, algae
Adults	Phytoplankton, zooplankton, algae
Notes: Lacking a true stomach, must feed almost constantly. Depletes food sources for native planktivores.	

Reproduction

Time of Year	April – June	Age Males Mature	2 – 8
Temperature Range	18 – 30 °C	Age Females Mature	2 – 8
Water Depth	Variable	Nest	None
Substrate		Egg Type	Pelagic (non-adhesive)
Time of Day	Anytime	Parental Care	None
Critical pH	6 – 9.24	Days to Hatching	1.7 – 2.5
Velocity Range	> 0.8 m/s	Oxygen Level	

Notes: Females highly fecund, broadcast spawn. Rising hydrograph (flood event) is a primary spawning cue.

Size and Growth

Maximum length up to 1.5 m. Typically reach ages of 7-9 years. Rapid growth in early years.

References

(Soin 1972; Pflieger 1975; Henderson 1978; Huet et al. 1986; Jennings 1988; Xie and Chen 2001; Schrank and Guy 2002; Kolar et al. 2005, 2007)

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