

Burbot (*Lota lota*)

Pennsylvania Endangered Fish Species

State Rank: S1S2 (imperiled) Global Rank: G5 (secure)

Identification

The Burbot is our only fresh water representative of the primarily ocean-dwelling species of the Codfish Family. Though reaching a length of 46 inches, it averages half that. The hindmost dorsal fin and the anal fin are quite long and nearly equal in length. Both of these fins are separated from the rounded tail fin. A pair of pelvic fins is situated in the throat region in front of the large pectoral fins. A barbel-like tube extends from each nostril and a single barbel extends from the tip of the lower jaw.

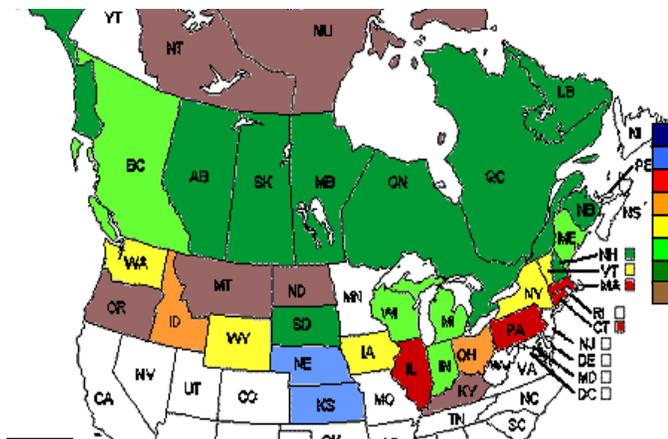


Biology-Natural History

The burbot is one of only a few Pennsylvania freshwater fishes to spawn in midwinter. Spawning may take place at night, over a sand-gravel bottom in the shallow portions of lakes or tributary streams under a covering of ice. Up to a dozen individuals may be involved in a constantly moving group of spawners that broadcast fertilized eggs over a wide area of the bottom. Eggs drift along the bottom and hatch within 30 days. The young grow rapidly for their first four years, feeding mostly at night on a variety of invertebrates. They spend most of this time in lake shallows or stream channels. Adults more than 20 inches feed almost entirely on other fishes during the summer, when in deeper water, and on invertebrates in the winter.

North American State/Province Conservation Status

Map by NatureServe (August 2007)



State/Province Status Ranks

SX – presumed extirpated
SH – possibly extirpated
S1 – critically imperiled
S2 – imperiled
S3 – vulnerable
S4 – apparently secure
S5 – secure
Not ranked/under review

Habitat

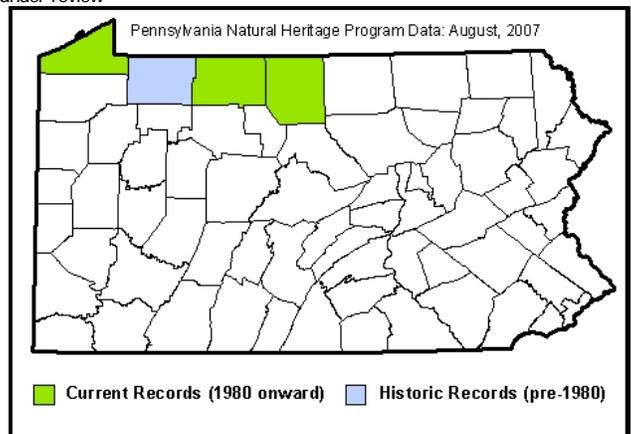
Burbot prefer deep, cold waters of lakes and rivers. During late winter and early spring, after spawning, they often migrate from lakes to tributary rivers. The only Pennsylvania populations occur in Lake Erie and the Allegheny River headwaters.

Reasons for Being Endangered

The Allegheny River population represents a relic/distribution. This small population has persisted, but is more vulnerable to some of the environmental changes (pollution, competition with other species, overfishing) causing a reduction of Great Lakes populations in the past.

Management Practices

Watershed management practices that maintain or enhance the physical and chemical conditions required by this species are necessary to assure its continued existence as a part of our fauna.



References:

- NatureServe. 2007. NatureServe Explorer: An online encyclopedia of life [web application]. Version 6.2. NatureServe, Arlington, Virginia. Available <http://www.natureserve.org/explorer>. (Accessed: August 20, 2007).

