

Bridle Shiner (*Notropis bifrenatus*)

Freshwater Fish Pennsylvania Endangered

Global Rank: G3 (vulnerable)

State Rank: S1 (critically imperiled)

Description

28-40 mm in length, the bridle shiner is a small minnow. It has large eyes. It is slim, sometimes deep-bodied. The dorsal fin origin is above the front half of the pelvic fin base. Its snout is somewhat rounded or pointed and it has a slightly subterminal mouth. There is a black side stripe that circles the snout and extends onto the tail fin base. Its back and lower side and belly is a straw color with silver flecks (cnr.vt.edu).



Photo: Scarola, John F. Fishbase.org

Behavior

In New Hampshire the bridle shiner spawns from May to July, the males turn a bright yellow-gold color with a pronounced black stripe. There is no spawning migration or any nest building or care of eggs. Pairs of adults select cleared areas and scatter their semi-adhesive eggs over submerged vegetation (Cooper 1983).

Diet

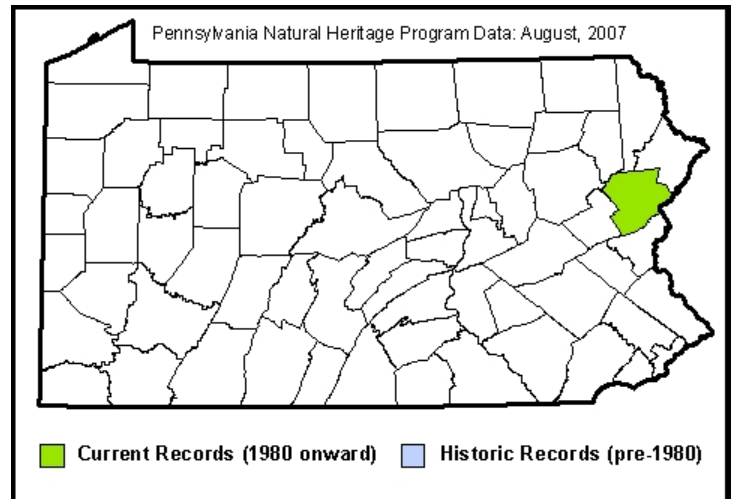
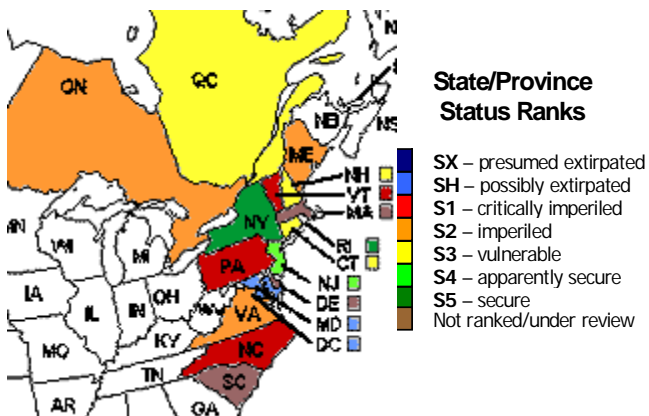
This shiner feeds mostly on zooplankton and aquatic insects, searching along the bottom among vegetation (Cooper 1983).

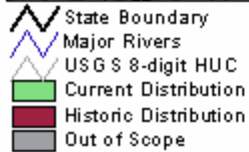
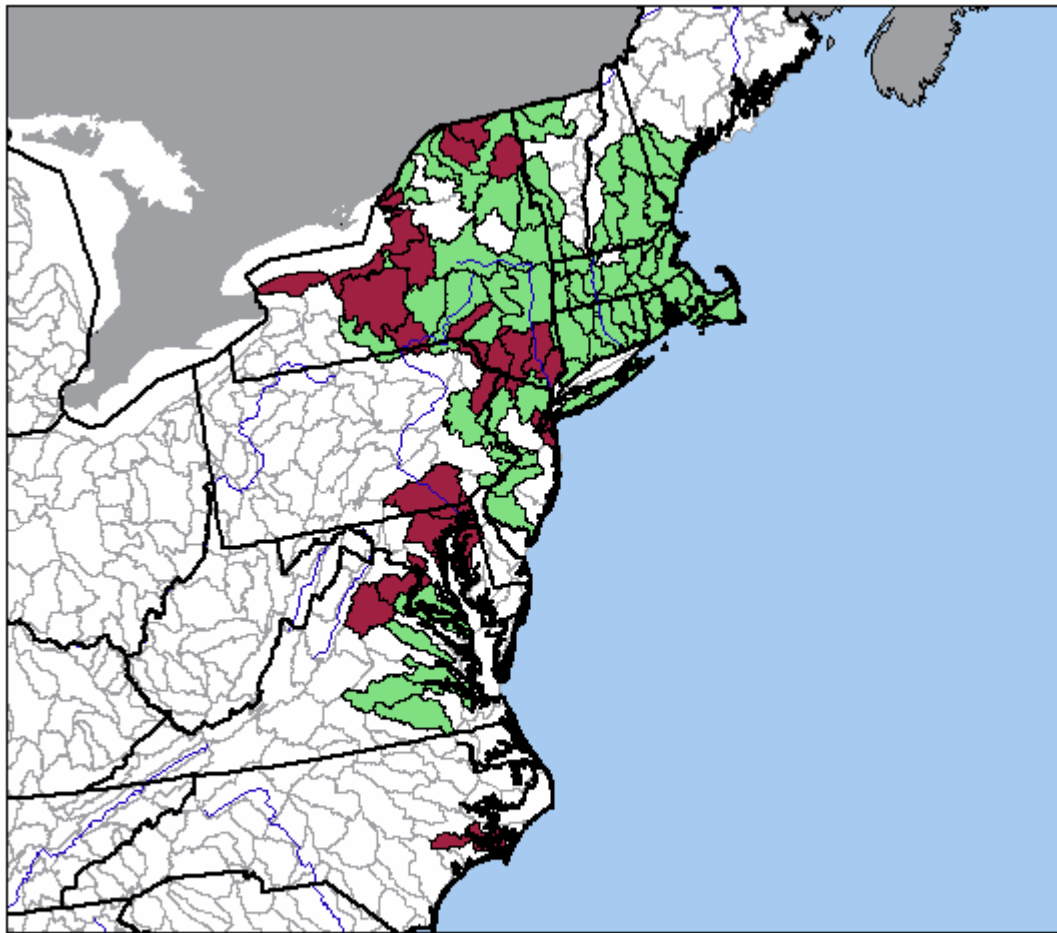
Threats and Protection Needs

The bridle shiner is globally vulnerable and critically imperiled and listed as Endangered in Pennsylvania (naturalheritage.state.pa.us). This shiner has undergone a range-wide decline in abundance and area of occupancy. Out of 31 historical locations in Pennsylvania it has only recently been found in one. This is similarly true in states like Massachusetts. According to natureserve.org populations in New York and New Jersey, which are listed as secure and apparently secure, are likely to be changed to either imperiled or vulnerable as status reviews are concluded. The major threats to the bridle shiner include any factors that degrade or destroy the required vegetated waters it needs like agricultural pollution (natureserve.org). The bridle shiner is now found rarely in the Delaware River drainage in Pennsylvania and was once abundant in eastern Pennsylvania.

North American State/Province Conservation Status

Map by NatureServe (September 2007)





Notropis bifrenatus
Bridle Shiner

Map created June 2003



Habitat

Found in small, warm-water creeks and ponds to large lakes and rivers with clear to moderately turbid waters. It is usually over mud, silt, or detritus in sluggish pools, or in backwaters in moderate to abundant vegetation. IN the south it occurs in tidal and slightly brackish waters (natureserve.org). It is an east coast species, ranging from Maine to North Carolina, but also found in the St. Lawrence drainage and the Finger Lakes in New York (Cooper 1983).

References

- Cooper, Edwin L. Fishes of Pennsylvania and the Northeastern United States. The Pennsylvania State University Press and University Park and London. 1983
- NatureServe. 2007. NatureServe Explorer: An online encyclopedia of life [web application]. Version 6.2. NatureServe, Arlington, Virginia. Available <http://www.natureserve.org/explorer>. (Accessed: September 4, 2007).
- Pennsylvania National Heritage Program: information on conservation of biodiversity [web application]. Version 1.0.6.2. Website: <http://www.naturalheritage.state.pa.us/>. Accessed: 9/13/2005.



Pennsylvania Natural Heritage Program