## Warmouth (Lepomis gulosus)

<b>Historical Presence</b>	Abundance	Life History	Management
Non-Native	Rare	Freshwater	Invasive
Non-NativeRareGeneral InformationA moderate sized sunfish, they are considered invasive in NJ. They are locally common in select waters but are not widely found throughout the State. Warmouth appear to look like a hybrid between multiple sunfish species. Most similar in appearance to Green Sunfish, Warmouth can be distinguished by the presence of dark bars on its cheek radiating from its eye. It can also be confused with Rock Bass, from which Warmouth differ in having 3 rather than 5-6 anal spines. The Warmouth's large mouth allows it to feed on a wide variety of prey items.			NDEW

Geographic Range Native to Great Lakes and Mississippi R. basins from ON and PA to MN, and south to Gulf; Atlantic and Gulf drainages from James R., VA, to Rio Grande, TX. Introduced to Pacific drainages in w. U.S.

## **Habitat Description**

Pools and backwaters of low gradient creeks, streams, and rivers; as well as swamps, lakes and ponds. They frequently associate with dense aquatic vegetation and other cover, usually over soft substrate. Known to inhabit highly acidic waters.

Optimum Habitat Requirements			Diet		
Dissolved Oxygen	> 3.6 mg/L	Fry	Plankton, small insects		
Temperature	25 – 30 °C	Juveniles	Cravitish fish insects spails		
рН	4 – 9.5	Adults	<ul> <li>Crayfish, fish, insects, snails</li> </ul>		
Turbidity	Variable	Netee	Nataa		
Current	Calm/slow	Notes:	Notes:		

Reproduction						
Time of Year	April – August		Age Males Mature	1 – 2		
Temperature Range	21 – 27 °C		Age Females Mature	1 – 2		
Water Depth	0.05 – 1.5 m	1	Nest	Oval-depressions		
Substrate	Sand/gravel/silt/mud		Egg Type	Demersal (adhesive)		
Time of Day			Parental Care	Male guards		
Critical pH			Days to Hatching	~ 1.5		
Velocity Range	Calm/slow		Oxygen Level	> 6 mg/L		
<b>Notes:</b> Nests are built near cover in shallow, protected areas over a variety of substrates. Potential to hybridize with other sunfishes. Nests may or may not be in close proximity to others.						

## Size and Growth

Adults typically 85-200 mm up to a maximum 310 mm. Maximum longevity is ~ 8 years of age.

References

(Larimore 1957; Carlander 1977; McMahon et al. 1984; Ross and Brenneman 2001)

- Carlander, K. D. 1977. Handbook of Freshwater Fishery Biology, Volume Two; Life History Data on Centrarchid Fishes of the United States and Canada. Wiley-Blackwell.
- Larimore, R. W. 1957. Ecological life history of the warmouth (Centrarchidae). Illinois Natural History Survey Bulletin 27(1).
- McMahon, T. E., G. Gebhart, O. E. Maughan, and P. C. Nelson. 1984. Habitat suitability index models and instream flow suitability curves: Warmouth. Pages 0–21. U.S. Fish Wildl. Serv., FWS/OBS 82/10.67.
- Ross, S. T., and W. M. Brenneman. 2001. The Inland Fishes of Mississippi. Univ. Press of Mississippi.