Common Name: Striped killifish SPCN

Scientific Name: Fundulus majalis
Taxon: Marine Fish

Federal Status: Not Listed Natural Heritage Program Rank:

New York Status: Not Listed Global: G5

New York: SNRN Tracked: No

## **Synopsis:**

Striped killifish is a small, abundant forage fish that forms large schools along shorelines. This species serves an important role in the food chain, by providing forage for a wide range of predators including shorebirds, ducks and larger fish species (Peterson and Peterson 1979). Striped killifish is abundant along the Atlantic Coast, ranging from New Hampshire to northeastern Florida and the northern Gulf of Mexico. This species is commonly found in saltwater, occasionally in brackish waters, and rarely in freshwater (Hardy 1978, Robins and Ray 1986). In New York, striped killifish have been collected in salt marshes, tidal creeks and intertidal pools (D. Carlson, personal communication). The population trend of this species is unknown in New York.

<b>Distribution</b> (% of NY where species occurs)		Abundance (within NY distribution)		NY Distribution Trend	NY Abundance Trend
0% to 5%		Abundant			
6% to 10%		Common	X		
11% to 25%		Fairly common		Unknown	Unknown
26% to 50%	X	Uncommon			
> 50%		Rare			

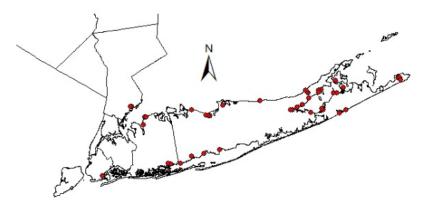
## **Habitat Discussion:**

Striped killifish rarely travel more than 100 yards from shore (Massie 1998). Striped killifish are found in shallow estuarine and front of beach habitats. They tend to prefer sandier sediments and higher salinity water (Lipcius et al. 1985). Striped killifish are not as well adapted to foraging in upper salt marsh areas and are found in greater numbers in tidal creeks, ditches and shallow bays (Butler and Weis 2009).

Primary Habitat Type		
High Marsh		
Rocky Intertidal		
Tidal Creek		

## **Distribution:**

The striped killifish historically inhabited several bays and estuaries on Long Island (Smith 1985). There are records of striped killifish collected at near the mouths of various creeks and rivers in Suffolk, Nassau and King counties from 1938–1977. In 2007, 6 striped killifish were collected near the mouth of Gerritsen Creek, Kings County. In 2010, 4 striped killifish were collected in the tidewater of the Peconic River, Suffolk County (D. Carlson, personal communication).



Striped killifish collection sites, 1936-2010 (D. Carlson, personal communication)

Threats to NY Populations						
Threat Category	Threat	Scope	Severity	Irreversibility		
1. Biological Resource Use	Fishing & Harvesting Aquatic Resources (commercial and recreational harvest for bait)	W	М	L		
2. Natural System Modifications	Dams & Water Management/Use (entrainment and impingement in power plants)	N	L	Н		
3. Pollution	Household Sewage & Urban Waste Water (poor water quality)	N	L	Н		
4. Pollution	Agricultural & Forestry Effluents (runoff and siltation)	N	L	Н		
5. Natural System Modification	Other Ecosystem Modifications (shoreline modification: docks, jetties, etc)	N	L	Н		
6. Natural System Modifications	Other Ecosystem Modifications (loss of marsh due to ditching/continued effects of ditching)	W	L	Н		
7. Climate Change & Severe Weather	Habitat Shifting & Alteration (loss of marshes from sea level rise)	Р	М	V		

8. Natural System Modifications	Dams & Water Management/Use (loss of connectivity: culverts, dams)	N	L	Н
9. Pollution	Air-Borne Pollutants (mosquito control)	N	L	M

## **References Cited:**

Butler, J.S. and C.A. Weis. 2009. Salt marshes: A natural and unnatural history. Rutgers University Press, Piscataway, New Jersey. 254 pp.

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Lipcius, R.N., R. Horlick and C.R. Fleenor. 1985. Field experiments on species-specific spatial abundance patterns of sympatric killifish. Estuaries 8:20-21.

Massie, F.D. 1998. The uncommon guide to common life of Narragansett Bay. Save The Bay Inc., Providence, Rhode Island. 254 pp.

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Smith, C.L. 1985. The inland fishes of New York State, New York State Department of Environmental Conservation. Albany, New York. xi + 522 pp.