Fish species of the

Wells National Estuarine Research Reserve

Background

This brochure lists the 55 fish species found during surveys done between 1989 and 2001 in the Merriland River, Branch Brook, the Little River, the Webhannet River, and Wells Bay. Biologists used fish weirs, fyke nets, seine nets, minnow traps, and electrofishing to sample adults and juveniles, and ichthyoplankton nets to sample larvae.

Checklist Explanation

Family and species names follow those given in *Fishes of the Gulf of Maine* by H.B. Bigelow and W.C. Schroeder (1953), *Atlantic Fishes of Canada* by W.B. Scott and M.G. Scott (1988), and *The Inland Fishes of New York State* by C.L. Smith (1985).

Larvae — Y = Larvae found in addition to adults and/or juveniles. O = Only larvae found. *Note:* No larvae surveys were done in fresh water.

Fresh water — Species found in a fresh water environment (Merriland River, Branch Brook).

Channel — Species found in an estuarine channel of the Little River, or larvae found in an estuarine channel of the Webhannet River.

Vegetated marsh — Species found along vegetated creek banks or on the flooded marsh surface of the Webhannet estuary.

Marsh panne — Species found in isolated pools of water on the marsh surface, known as pannes.

Abundance — A general indication of relative population size: Rare, Common, or Abundant.

Acknowledgments

This checklist was compiled from unpublished reports available for review at the Wells Reserve. Research staff, interns, visiting scientists, and volunteers participated in surveys. Key contributors included M. Cartwright, M. Dionne, Ph.D., R. MacKenzie, Ph.D., R.J. Mere, S.C. Murphy, S. Orringer, J. Peterson, S. Reed, T. Smith, and N. Sullivan.

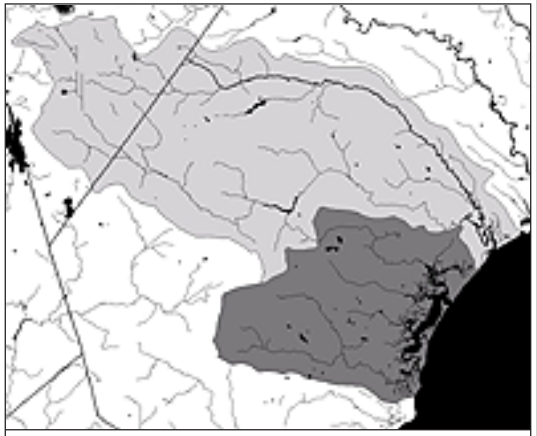
FAMILY and SPECIES	Larvae	Fresh water	Channel	Vegetated marsh	Marsh panne	Abundance
Petromyzontidae — Lampreys						
Sea Lamprey – *Petromyzon marinus*	–	■	■	–	–	R
Anguillidae — Freshwater Eels						
American Eel – *Anguilla rostrata*	–	■	■	■	■	A
Clupeidae — Herrings						
Blueback Herring – *Alosa aestivalis*	–	–	■	–	–	C
Alewife – *Alosa pseudoharengus*	–	–	■	–	–	A
American Shad – *Alosa sapidissima*	–	–	■	■	–	R
Atlantic Menhaden (Pogy) – *Brevoortia tyrannus*	–	–	■	–	–	R
Atlantic Herring – *Clupea harengus*	Y	–	■	–	–	C
Salmonidae — Trouts						
Atlantic Salmon – *Salmo salar*	–	–	■	–	–	R
Brown Trout – *Salmo trutta*	–	■	■	–	–	C
Brook Trout – *Salvelinus fontinalis*	–	■	■	–	–	C
Osmeridae — Smelts						
Rainbow Smelt – *Osmerus mordax*	Y	■	■	–	–	C
Gadidae — Codfishes						
Atlantic Cod – *Gadus morhua*	–	–	■	–	–	R
Fourbeard Rockling – *Enchelyopus cimbrius*	O	–	■	–	–	R
Atlantic Tomcod – *Microgadus tomcod*	–	–	■	–	–	C
White Hake – *Urophycis tenuis*	–	■	■	–	–	R
Red Hake – *Urophycis chuss*	–	–	■	–	–	R
Pollock – *Pollachius virens*	–	■	■	–	–	C
Cyprinodontidae — Killifishes						
Common Mummichog – *Fundulus heteroclitus*	–	–	■	■	■	A
Banded Killifish – *Fundulus diaphanus*	–	–	■	■	–	C
Striped Killifish – *Fundulus majalis*	–	–	■	–	–	R
Atherinidae — Silversides						
Atlantic Silverside – *Menidia menidia*	–	–	■	■	■	A
Inland Silverside – *Menidia beryllina*	–	–	■	–	–	R
Gasterosteidae — Sticklebacks						
Fourspine Stickleback – *Apeltes quadracus*	–	–	■	■	■	A
Threespine Stickleback – *Gasterosteus aculeatus*	–	–	■	■	■	A
Blackspotted Stickleback – *Gasterosteus wheatlandi*	–	–	■	■	–	C
Ninespine Stickleback – *Pungitius pungitius*	–	■	■	–	■	A
Syngnathidae — Pipefishes						
Northern Pipefish – *Syngnathus fuscus*	Y	–	■	–	–	C
Percichthyidae — Perches						
Striped Bass – *Morone saxatilis*	–	–	■	–	–	C
White Perch – *Morone americana*	–	–	■	–	–	R
Pomatomidae — Bluefishes						
Bluefish – *Pomatomus saltatrix*	–	–	■	–	–	R

FAMILY and SPECIES	Larvae	Fresh water	Channel	Vegetated marsh	Marsh panne	Abundance
Chaetodontidae — Butterflyfishes						
Spotfin Butterflyfish – *Chaetodon ocellatus*	–	–	■	–	–	R
Labridae — Wrasses						
Cunner – *Tautogolabrus adspersus*	Y	–	■	–	–	R
Mugilidae — Mullets						
Striped Mullet – *Mugil cephalus*	–	–	■	–	–	R
Sphyraenidae — Barracudas						
Northern Sennet – *Sphyraena borealis*	–	–	■	–	–	R
Stichaeidae — Pricklebacks						
Snake Blenny – *Lumpenus lumpretaeformis*	O	–	■	–	–	C
Radiated Shanny – *Ulvaria subbifurcata*	O	–	■	–	–	C
Pholidae — Gunnels						
Rock Gunnel – *Pholis gunnellus*	Y	–	■	–	–	C
Ammodytidae — Sand Lances						
Sand Lance – *Ammodytes americanus*	Y	–	■	–	–	C
Scombridae — Mackerels						
Atlantic Mackerel – *Scomber scombrus*	Y	–	■	–	–	R
Stromateidae — Butterfishes						
Butterfish – *Peprilus tricanthus*	–	–	■	–	–	R
Cottidae — Sculpins						
Grubby Sculpin – *Myoxocephalus aeneus*	Y	–	■	–	–	C
Longhorn Sculpin – *Myoxocephalus octodecimspinosus*	Y	–	■	–	–	R
Slimy Sculpin – *Cottus cognatus*	–	–	■	–	–	R
Cyclopteridae — Snailfishes						
Lumpfish – *Cyclopterus lumpus*	Y	–	■	–	–	R
Seasnail – *Liparis atlanticus*	Y	–	■	–	–	R
Bothidae — Lefteye Flounders						
Windowpane – *Scopthalmus aquosus*	Y	–	■	–	–	R
Pleuronectidae — Righteye Flounders						
Winter Flounder – *Pseudopleuronectes americanus*	Y	■	■	–	–	C
Esocidae — Pikes						
Chain Pickerel – *Esox niger*	–	■	–	–	–	C
Cyprinidae — Minnows						
Golden Shiner – *Notemigonus crysoleucas*	–	■	■	–	–	C
Creek Chub – *Semotilus atromaculatus*	–	■	–	–	–	C
Catostomidae — Suckers						
White Sucker – *Catostomus commersoni*	–	■	■	–	–	C
Centrarchidae — Sunfishes						
Pumpkinseed – *Lepomis gibbosus*	–	■	■	–	–	C
Bluegill – *Lepomis macrochirus*	–	■	■	–	–	C
Largemouth Bass – *Micropterus salmoides*	–	■	–	–	–	C
Ictaluridae — Bullhead Catfishes						
Brown Bullhead – *Ictalurus nebulosus*	–	■	–	–	–	C

The Wells National Estuarine Research Reserve is part of a network of protected areas established to improve the health of the nation's estuaries and coastal habitats by developing and providing information that promotes informed resource management.

The Wells Reserve produces science-based information needed to sustain or restore Gulf of Maine coastal habitats and resources, especially those found in salt marsh estuaries and watersheds.

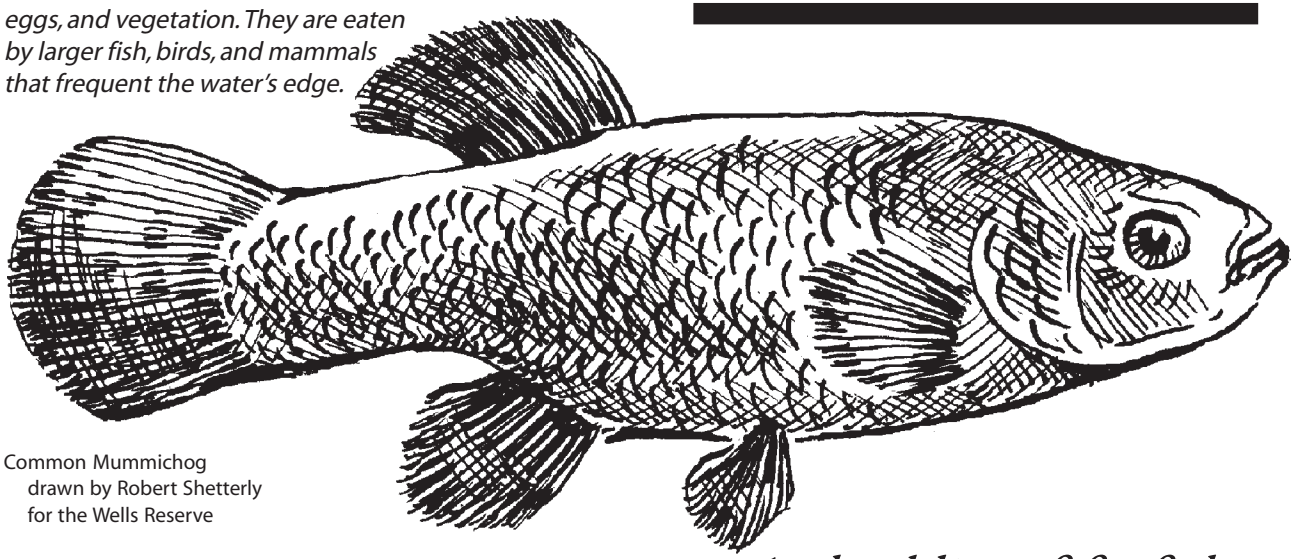
The Wells Reserve assists communities in southern Maine by surveying watershed resources and developing strategies to protect and manage them. To learn about watershed planning in your area, contact your local conservation commission or land trust, or call the Wells Reserve at 207 646-1555.



WATERS OF THE WELLS RESERVE

. . . include portions of two watersheds. The Webhannet River watershed (dark shading) is entirely within the Town of Wells. The Little River-Branch Brook-Merriland River watershed (light shading), extends to the Town of Sanford and straddles the border between Wells and Kennebunk. Both watersheds drain to the Gulf of Maine via Wells Bay (black). Watersheds are ideal realms for fish conservation, because fish habitat management requires cooperation across municipal boundaries.

Common mummichogs live their whole lives in estuaries. They are hardy fish, able to tolerate low dissolved oxygen levels, high temperatures, and high salinity. Mummichogs spawn from April to August and overwinter in mud. They grow to a maximum length of about 7.5 cm. Their diet includes insect larvae, small crustaceans, fish, fish eggs, and vegetation. They are eaten by larger fish, birds, and mammals that frequent the water's edge.



Common Mummichog
drawn by Robert Shetterly
for the Wells Reserve

For more information, call 207 646-1555.
To learn about fish research, dial ext 136.
To become involved with surveys, dial ext 118.
For general information, visit wellsreserve.org.

FISH SPECIES of the

Wells Reserve at Laudholm Farm

A checklist of finfish found in the Little River, Webhannet River, Branch Brook, Merriland River, and Wells Bay, Maine

Wells National Estuarine Research Reserve
342 Laudholm Farm Rd, Wells ME 04090
207 646-1555 • http://www.wellsreserve.org