



**Map 20A**  
**Long Island Sound**

**BIOLOGICAL RESOURCES**

Note: An asterisk (\*) indicates that life stage occurs in this range but not in all months included

DISPLAYED ON MAP

**BIRDS**

Map ID	Subelement	Species	Mapping Qualifier	CT/NY		Concentration	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt	
				S	F		J	F	M	A	M	J	J	A	S	O	N	D					
158	Waterfowl	American black duck	Wintering			Present													Apr-May	Mar-Apr	Sep-Nov	-	-
	Waterfowl	Canada goose	Wintering			Present													Mar-Aug	Jan-Dec	-	-	-
	Waterfowl	Canvasback	Wintering			Present													-	-	-	-	-
	Waterfowl	Common goldeneye	Wintering			Present													-	Nov-Apr	-	-	-
	Waterfowl	Greater scaup	Wintering			Present													-	-	-	-	-
	Waterfowl	Lesser scaup	Wintering			Present													-	-	-	-	-
	Waterfowl	Waterfowl	Wintering			Present													-	Jan-Dec	-	-	-
159	Gull/Tern	Least tern	Concentration Area	T/T		Present													Apr-Aug	-	-	-	-
	Waterfowl	American black duck	Wintering			Present													Apr-May	Mar-Apr	Sep-Nov	-	-
	Waterfowl	Canada goose	Wintering			Present													Mar-Aug	Jan-Dec	-	-	-
	Waterfowl	Canvasback	Wintering			Present													-	-	-	-	-
	Waterfowl	Common goldeneye	Wintering			Present													-	Nov-Apr	-	-	-
	Waterfowl	Greater scaup	Wintering			Present													-	-	-	-	-
	Waterfowl	Lesser scaup	Wintering			Present													-	-	-	-	-
160	Waterfowl	Waterfowl	Wintering			Present													-	Jan-Dec	-	-	-
	Gull/Tern	Common tern	General Distribution	E/T		Present													May-Aug	-	-	-	-
	Gull/Tern	Least tern	General Distribution	T/T		100S													Apr-Aug	-	-	-	-
	Raptor	Osprey	General Distribution	-/C		10S													Mar-Aug	Mar-Jun	Jul-Nov	-	-
	Shorebird	American oystercatcher	General Distribution	T/-		2													Mar-Aug	-	-	-	-
	Wading	Great egret	General Distribution	T/-		4													Mar-Aug	-	-	-	-
	Wading	Snowy egret	General Distribution	T/-		Present													Mar-Aug	-	-	-	-
161	Gull/Tern	Common tern	General Distribution	E/T		10S													May-Aug	-	-	-	-
	Gull/Tern	Least tern	General Distribution	T/T		2													Apr-Aug	-	-	-	-
	Raptor	Osprey	General Distribution	-/C		10S													Mar-Aug	Mar-Jun	Jul-Nov	-	-
	Wading	Great egret	General Distribution	T/-		9													Mar-Aug	-	-	-	-
	Wading	Snowy egret	General Distribution	T/-		2													Mar-Aug	-	-	-	-
162	Raptor	Bald eagle	Nesting	T/T		Present													Feb-Aug	-	-	-	-
	Raptor	Osprey	Nesting	-/C		Present													Mar-Aug	Mar-Jun	Jul-Nov	-	-
163	Gull/Tern	Least tern	General Distribution	T/T		10S													Apr-Aug	-	-	-	-
	Raptor	Northern harrier	General Distribution	E/T		Present													Mar-Aug	-	-	-	-
	Raptor	Osprey	General Distribution	-/C		2													Mar-Aug	Mar-Jun	Jul-Nov	-	-
	Shorebird	American oystercatcher	General Distribution	T/-		2													Mar-Aug	-	-	-	-
	Shorebird	Piping plover	General Distribution	T/E	T	7													Mar-Aug	-	-	-	-
	Wading	Great egret	General Distribution	T/-		5													Mar-Aug	-	-	-	-
164	Gull/Tern	Least tern	Concentration Area	T/T		Present													Apr-Aug	-	-	-	-
	Raptor	Bald eagle	General Distribution	T/T		Present													Feb-Aug	-	-	-	-
165	Raptor	Osprey	General Distribution	-/C		Present													Mar-Aug	Mar-Jun	Jul-Nov	-	-

**BIRDS (continued)**

Map ID	Subelement	Species	Mapping Qualifier	CT/NY		Concentration	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt	
				S	F		J	F	M	A	M	J	J	A	S	O	N	D					
166	Raptor	Osprey	General Distribution	-/C		2													Mar-Aug	Mar-Jun	Jul-Nov	-	-
	Wading	Great egret	General Distribution	T/-		10S													Mar-Aug	-	-	-	-
	Wading	Snowy egret	General Distribution	T/-		10S													Mar-Aug	-	-	-	-
167	Shorebird	Piping plover	General Distribution	T/E	T	4													Mar-Aug	-	-	-	-
168	Gull/Tern	Least tern	General Distribution	T/T		10S													Apr-Aug	-	-	-	-

**FISH**

Map ID	Subelement	Species	Mapping Qualifier	CT/NY		Concentration	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
				S	F		J	F	M	A	M	J	J	A	S	O	N	D					
429	Diadromous	American eel	Nursery Area			Common													-	-	Apr-Aug	Jan-Dec	Sep-Nov
581	Freshwater	Brook trout	Nursery Area			Common													Sep-Dec	Sep-Apr	Feb-May	Jan-Dec	Jan-Dec
637	Estuarine Nursery	Scup	Nursery Area			Common													May-Aug	May-Aug	May-Aug	May-Nov	May-Nov
	Marine Benthic	Tautog	Nursery Area			Common													Apr-Sep	Apr-Sep	May-Sep	Apr-Nov	Apr-Nov
650	Diadromous	Blueback herring	Nursery Area	C/-		Common													May-Sep	May-Sep	May-Oct	Apr-Nov	Apr-Nov
	Diadromous	Striped bass	Nursery Area			Common													-	-	-	Apr-Nov	Apr-Nov
	Estuarine Nursery	Atlantic menhaden	Nursery Area			Common													May-Oct	May-Oct	May-Nov	Apr-Nov	Apr-Nov
	Estuarine Nursery	Bay anchovy	Nursery Area			Abundant													May-Sep	May-Sep	May-Nov	Jan-Dec	Jan-Dec
	Estuarine Nursery	Bluefish	Nursery Area			Abundant													Jun-Sep	Jun-Sep	Jun-Sep	Jun-Nov	Apr-Nov
	Estuarine Nursery	Northern kingfish	Nursery Area			Common													Jun-Sep	Jun-Sep	Jun-Sep	Apr-Nov	Apr-Nov
	Estuarine Nursery	Scup	Nursery Area			Common													May-Aug	May-Aug	May-Aug	May-Nov	May-Nov
	Estuarine Nursery	Winter flounder	Nursery Area			Abundant													Feb-May	Feb-May	Mar-Jun	Jan-Dec	Jan-Dec
	Estuarine Resident	Grubby	Nursery Area			Common													Dec-Apr	Dec-Apr	Jan-May	Jan-Dec	Jan-Dec
	Estuarine Resident	Mummichog	Nursery Area			Abundant													May-Aug	May-Aug	May-Sep	Jan-Dec	Jan-Dec
	Estuarine Resident	Northern pipefish	Nursery Area			Common													Apr-Aug	-	May-Sep	Jan-Dec	Jan-Dec
	Estuarine Resident	Striped killifish	Nursery Area			Abundant													May-Aug	May-Aug	May-Sep	Jan-Dec	Jan-Dec
	Marine Benthic	American sand lance	Nursery Area			Common													Nov-Mar	Nov-Mar	Dec-Jun	Jan-Dec	Jan-Dec
	Marine Benthic	Atlantic tomcod	Nursery Area			Common													Nov-Feb	Nov-Mar	Dec-May	Sep-May	Sep-May
	Marine Benthic	Tautog	Nursery Area			Common													Apr-Sep	Apr-Sep	May-Sep	Apr-Nov	Apr-Nov
651	Diadromous	Striped bass	Nursery Area			Common													-	-	-	Apr-Nov	Apr-Nov
	Estuarine Nursery	Bay anchovy	Nursery Area			Abundant													May-Sep	May-Sep	May-Nov	Jan-Dec	Jan-Dec
	Estuarine Nursery	Bluefish	Nursery Area			Abundant													Jun-Sep	Jun-Sep	Jun-Sep	Jun-Nov	Apr-Nov
	Estuarine Nursery	Northern puffer	Nursery Area			Common													May-Aug	May-Aug	May-Aug	Jan-Dec	Jan-Dec
	Estuarine Nursery	Winter flounder	Nursery Area			Abundant													Feb-May	Feb-May	Mar-Jun	Jan-Dec	Jan-Dec
	Estuarine Resident	Atlantic silverside	Nursery Area			Abundant													May-Aug	May-Aug	May-Aug	Jan-Dec	Jan-Dec
	Estuarine Resident	Mummichog	Nursery Area			Abundant													May-Aug	May-Aug	May-Sep	Jan-Dec	Jan-Dec
	Estuarine Resident	Northern pipefish	Nursery Area			Common													Apr-Aug	-	May-Sep	Jan-Dec	Jan-Dec
	Estuarine Resident	Sheepshead minnow	Nursery Area			Common													Jun-Sep	Jun-Sep	Jun-Oct	Jan-Dec	Jan-Dec
	Estuarine Resident	Striped killifish	Nursery Area			Abundant													May-Aug	May-Aug	May-Sep	Jan-Dec	Jan-Dec
	Freshwater	Rainbow smelt	Nursery Area	E/-		Uncommon													Feb-May	Feb-May	Feb-May	Feb-May	Feb-May
	Marine Benthic	Pollock	Nursery Area			Common													-	-	Mar-Apr	Jan-Apr	Jan-Apr
652	Diadromous	American eel	Nursery Area			Common													-	-	Apr-Aug	Jan-Dec	Sep-Nov
	Estuarine Resident	Mummichog	Nursery Area			Common													May-Aug	May-Aug	May-Sep	Jan-Dec	Jan-Dec
653	Diadromous	Alewife	Migration			Uncommon													Mar-Jun	Mar-Jun	Mar-Jun	Mar-Oct	Mar-Oct
	Diadromous	Brown trout (sea run)	Migration			Uncommon													Oct-Nov	Oct-Apr	Feb-May	Jan-Dec	Sep-Jan

## FISH (continued)

Map ID	Subelement	Species	Mapping Qualifier	CT/NY		Concentration	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
				S	F		J	F	M	A	M	J	J	A	S	O	N	D					
654	Estuarine Nursery	Atlantic menhaden	Nursery Area			Common													May-Oct	May-Oct	May-Nov	Apr-Nov	Apr-Nov
	Diadromous	Alewife	Spawning Area			Uncommon													Mar-Jun	Mar-Jun	Mar-Jun	Mar-Oct	Mar-Oct
	Freshwater	Brook trout	Nursery Area			Common													Sep-Dec	Sep-Apr	Feb-May	Jan-Dec	Jan-Dec

## HABITATS & RARE PLANTS

Map ID	Subelement	Species	Mapping Qualifier	CT/NY		Concentration	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
				S	F		J	F	M	A	M	J	J	A	S	O	N	D					
847	Plant	Mitchell's sedge	Vulnerable Occurrence	-E		Present													-	-	-	-	-
	Plant	Sweetbay	Vulnerable Occurrence	-E		25													-	-	-	-	-
	Plant	White edge sedge	Vulnerable Occurrence	-T		20 - 40													-	-	-	-	-
848	Plant	Sweetbay	Vulnerable Occurrence	-E		25													-	-	-	-	-

## INVERTEBRATES




Map ID	Subelement	Species	Mapping Qualifier	CT/NY		Concentration	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
				S	F		J	F	M	A	M	J	J	A	S	O	N	D					
999	Bivalve	Eastern oyster	Harvest Area			Low													Jun-Oct	Jun-Oct	Jun-Nov	Jan-Dec	Jan-Dec
	Bivalve	Northern quahog	Harvest Area			Moderate													Jun-Oct	Jun-Oct	Jun-Nov	Jan-Dec	Jan-Dec

## TERRESTRIAL MAMMALS



Map ID	Subelement	Species	Mapping Qualifier	CT/NY		Concentration	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
				S	F		J	F	M	A	M	J	J	A	S	O	N	D					
1054	Small Mammal	Northern river otter	Vulnerable Occurrence			Present													-	-	-	-	-

WIDESPREAD IN MAPPED AREA ( > 10 SQUARE KILOMETERS )



## BIRDS

	Subelement	Species	Mapping Qualifier	CT/NY		Concentration	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
				S	F		J	F	M	A	M	J	J	A	S	O	N	D				
	Diving	Common loon	General Distribution	C/C		10S													-	-	-	-
		Pied-billed grebe	General Distribution	E/T		Present													-	-	-	-
	Gull/Tern	Least tern	General Distribution	T/T		Present													Apr-Aug	-	-	-
	Shorebird	American oystercatcher	General Distribution	T/-		Present													Mar-Aug	-	-	-
		Piping plover	General Distribution	T/E	T	Present													Mar-Aug	-	-	-


## FISH

	Subelement	Species	Mapping Qualifier	CT/NY		Concentration	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
				S	F		J	F	M	A	M	J	J	A	S	O	N	D					
	Diadromous	Alewife	Nursery Area			Common													Mar-Jun	Mar-Jun	Mar-Jun	Mar-Oct	Mar-Oct
		American eel	Migration			Common													-	-	Apr-Aug	Jan-Dec	Sep-Nov
		American shad	Nursery Area			Common													May-Jul	May-Jul	May-Aug	Jun-Nov	Apr-Jul
		Blueback herring	Migration	C/-		Common													May-Sep	May-Sep	May-Oct	Apr-Nov	Apr-Nov
		Striped bass	Nursery Area			Common													-	-	-	Jan-Dec	Jan-Dec
	Estuarine Nursery	Atlantic menhaden	Nursery Area			Abundant													May-Oct	May-Oct	May-Nov	Apr-Nov	Apr-Nov
		Bay anchovy	Nursery Area			Common													May-Sep	May-Sep	May-Nov	Jan-Dec	Jan-Dec





**FISH (continued)**

Subelement	Species	Mapping Qualifier	CT/NY		Concentration	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
			S	F		J	F	M	A	M	J	J	A	S	O	N	D					
	Bluefish	Nursery Area			Common													Jun-Sep	Jun-Sep	Jun-Sep	Jun-Nov	Apr-Nov
	Scup	Nursery Area			Abundant													May-Aug	May-Aug	May-Aug	May-Nov	May-Nov
	Summer flounder	Nursery Area			Common													-	-	-	Mar-Nov	Mar-Nov
	Weakfish	Nursery Area			Common													May-Sep	May-Sep	May-Sep	Jul-Nov	May-Nov
	Windowpane	Nursery Area			Common													Apr-Oct	Apr-Oct	May-Nov	Jan-Dec	Jan-Dec
	Winter flounder	Nursery Area			Common													Feb-May	Feb-May	Mar-Jun	Jan-Dec	Jan-Dec
	Estuarine Resident Atlantic silverside	Nursery Area			Common													May-Aug	May-Aug	May-Aug	Jan-Dec	Jan-Dec
	Marine Benthic Atlantic tomcod	Nursery Area			Common													Nov-Feb	Nov-Mar	Dec-May	Jan-Dec	Jan-Dec
	Cunner	Nursery Area			Common													May-Aug	May-Aug	May-Aug	Jan-Dec	Jan-Dec
	Northern searobin	Nursery Area			Common													May-Sep	May-Sep	May-Sep	Apr-Nov	Apr-Nov
	Red hake	Nursery Area			Common													-	-	-	Mar-Nov	Mar-Nov
	Smooth dogfish	Nursery Area			Common													-	-	-	May-Oct	May-Oct
	Striped searobin	Nursery Area			Common													May-Sep	May-Sep	May-Sep	Apr-Nov	Apr-Nov
	Tautog	Nursery Area			Common													Apr-Sep	Apr-Sep	May-Sep	Jan-Dec	Jan-Dec


**REPTILES & AMPHIBIANS**

Subelement	Species	Mapping Qualifier	CT/NY		Concentration	Monthly Presence												Nest	Hatch	Internest	Juveniles	Adults
			S	F		J	F	M	A	M	J	J	A	S	O	N	D					
	Turtle Green sea turtle	General Distribution	T/T	T	Present													-	-	-	Jun-Nov	-
	K. ridley sea turtle	General Distribution	E/E	E	Present													-	-	-	Jun-Nov	-
	Loggerhead sea turtle	General Distribution	T/T	E	Present													-	-	-	Jun-Nov	-

**INVERTEBRATES**




Subelement	Species	Mapping Qualifier	CT/NY		Concentration	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
			S	F		J	F	M	A	M	J	J	A	S	O	N	D					
	Bivalve Eastern oyster	Harvest Area			High													Jun-Oct	Jun-Oct	Jun-Nov	Jan-Dec	Jan-Dec
	Northern quahog	Harvest Area			High													Jun-Oct	Jun-Oct	Jun-Nov	Jan-Dec	Jan-Dec
	Softshell clam	Harvest Area			Low													Apr-Sep	Apr-Sep	Apr-Sep	Jan-Dec	Jan-Dec
	Crab Horseshoe crab	Nursery Area			Common													May-Jun	Jun-Jul	-	Jan-Dec	Jan-Dec
	Gastropod Channeled whelk	Harvest Area			Low													Sep-Nov	Sep-Nov	-	Jan-Dec	Jan-Dec
	Lobster American lobster	Nursery Area			Common													Jun-Nov	Jan-Dec	May-Aug	Jan-Dec	Jan-Dec

**MARINE MAMMALS**





Subelement	Species	Mapping Qualifier	CT/NY		Concentration	Monthly Presence												Mating	Calving	Pupping	Molt
			S	F		J	F	M	A	M	J	J	A	S	O	N	D				
	Dolphin Harbor porpoise	General Distribution	C/C		Present													-	-	-	-

ALSO PRESENT IN MAPPED AREA (GENERAL DISTRIBUTION)




BIRDS

Subelement	Species	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
		J	F	M	A	M	J	J	A	S	O	N	D				
	D. crested cormorant													Mar-Aug	-	-	-
	Great cormorant													-	-	-	-
	Horned grebe													-	-	-	-
	Red-throated loon													-	-	-	-
	G. black-backed gull													Mar-Aug	-	-	-
	Herring gull													Mar-Aug	-	-	-
	Laughing gull													Apr-Aug	-	-	-
	Ring-billed gull													-	-	-	-
	Acadian flycatcher													Jun-Jul	May-Jun	Aug-Sep	-
	American crow													Mar-Aug	-	-	-
	American goldfinch													Mar-Aug	-	-	-
	American robin													Mar-Aug	-	-	-
	Baltimore oriole													Apr-Aug	-	-	-
	Bank swallow													Apr-Aug	-	-	-
	Barn Swallow													Apr-Aug	-	-	-
	Blue jay													Apr-Aug	Mar-May	Sep-Oct	-
	Boat-tailed grackle													Apr-Jun	-	-	-
	Carolina wren													Apr-Jul	-	-	-
	Cedar waxwing													Mar-Aug	-	-	-
	Chipping sparrow													Mar-Aug	-	-	-
	Common grackle													Mar-Aug	-	-	-
	Common yellowthroat													Apr-Aug	-	-	-
	Eastern kingbird													Apr-Aug	-	-	-
	Eastern phoebe													May-Jul	Apr-May	Sep-Nov	-
	European starling													Mar-Aug	-	-	-
	GC flycatcher													Apr-Aug	-	-	-
	Gray catbird													Mar-Aug	-	-	-
	House sparrow													Mar-Aug	-	-	-
	Kentucky warbler													-	May	-	-
	Marsh wren													Apr-Aug	-	-	-
	Mourning dove													Mar-Aug	-	-	-
	N. r.-winged swallow													Apr-Aug	-	-	-
	Northern cardinal													Mar-Aug	-	-	-
	Northern flicker													Mar-Aug	-	-	-
	Northern mockingbird													Mar-Aug	-	-	-
	Red-bellied woodpecker													Jun-Jul	Apr-May	Aug-Nov	-
	Red-winged blackbird													Mar-Aug	-	-	-
	Saltmarsh sparrow													May-Aug	-	-	-
	Song sparrow													Mar-Aug	-	-	-
	Tree swallow													Mar-Aug	-	-	-
	Willow flycatcher													May-Aug	-	-	-
	Yellow warbler													Apr-Aug	-	-	-




**BIRDS (continued)**

	<b>Subelement</b>	<b>Species</b>	<b>Monthly Presence</b>												<b>Nest</b>	<b>Mig.(S)</b>	<b>Mig.(F)</b>	<b>Molt</b>
			<b>J</b>	<b>F</b>	<b>M</b>	<b>A</b>	<b>M</b>	<b>J</b>	<b>J</b>	<b>A</b>	<b>S</b>	<b>O</b>	<b>N</b>	<b>D</b>				
	Pelagic	Northern gannet													-	-	-	-
	Shorebird	Black-bellied plover													-	Aug-May	-	-
		Dunlin													-	Apr-May	Oct-Nov	-
		Greater yellowlegs													-	May-Jun	Sep-Oct	-
		Killdeer													Mar-Aug	-	-	-
		Least sandpiper													-	Apr-Jun	Aug-Oct	-
		Ruddy turnstone													-	Mar-May	Aug-Nov	-
		Sanderling													-	Sep-Jun	-	-
		Semipalmated plover													-	Apr-Jun	Sep-Nov	-
		Semipalmated sandpiper													-	-	Jul-Oct	-
		Willet													Apr-Aug	-	-	-
	Wading	BC night-heron													Mar-Aug	-	-	-
		Clapper rail													Mar-Aug	-	-	-
		Green heron													Apr-Aug	-	-	-
	Waterfowl	American black duck													Apr-May	Mar-Apr	Sep-Nov	-
		American wigeon													-	-	-	-
		Barrow's goldeneye													-	-	-	-
		Black brant													-	May	Oct	-
		Black scoter													-	-	-	-
		Bufflehead													-	Oct-Jun	-	-
		Canada goose													Mar-Aug	Jan-Dec	-	-
		Canvasback													-	-	-	-
		Common goldeneye													-	Nov-Apr	-	-
		Common merganser													-	-	-	-
		Eurasian wigeon													-	-	-	-
		Gadwall													Jan-Dec	-	-	-
		Greater scaup													-	-	-	-
		Green-winged teal													-	Mar-Apr	Sep-Oct	-
		Hooded merganser													-	-	-	-
		King eider													-	-	-	-
		Lesser scaup													-	-	-	-
		Long-tailed duck													-	-	-	-
		Mallard													Mar-Aug	-	-	-
		Mute swan													Mar-Sep	-	-	-
		Northern pintail													-	-	-	-
		Northern shoveler													-	-	-	-
		Red-breasted merganser													-	-	-	-
		Redhead													-	Nov-Mar	-	-
		Ring-necked duck													-	-	-	-
		Ruddy duck													-	-	-	-
		Scaup													-	Mar-Apr	Oct-Nov	-
		Scoters													-	Apr-May	Sep-Nov	-
		Surf scoter													-	-	-	-
		White-winged scoter													-	Sep-May	-	-

## FISH

	<i>Subelement</i>	<i>Species</i>	<i>Monthly Presence</i>												<i>Spawn</i>	<i>Eggs</i>	<i>Larvae</i>	<i>Juveniles</i>	<i>Adults</i>
			<i>J</i>	<i>F</i>	<i>M</i>	<i>A</i>	<i>M</i>	<i>J</i>	<i>J</i>	<i>A</i>	<i>S</i>	<i>O</i>	<i>N</i>	<i>D</i>					
	Diadromous	Brown trout													Oct-Nov	Oct-Apr	Feb-May	Jan-Dec	Jan-Dec
		Rainbow trout													-	-	-	Jan-Dec	Jan-Dec
	Estuarine Nursery	Northern puffer													May-Aug	May-Aug	May-Aug	Jan-Dec	Jan-Dec
	Freshwater	Brown bullhead													May-Jul	May-Jul	Jun-Aug	Jan-Dec	Jan-Dec
		Common carp													May-Jun	May-Jun	May-Jul	Jan-Dec	Jan-Dec
		Largemouth bass													May-Jul	May-Jul	May-Jul	Jan-Dec	Jan-Dec

## INVERTEBRATES

	<i>Subelement</i>	<i>Species</i>	<i>Monthly Presence</i>												<i>Spawn</i>	<i>Eggs</i>	<i>Larvae</i>	<i>Juveniles</i>	<i>Adults</i>
			<i>J</i>	<i>F</i>	<i>M</i>	<i>A</i>	<i>M</i>	<i>J</i>	<i>J</i>	<i>A</i>	<i>S</i>	<i>O</i>	<i>N</i>	<i>D</i>					
	Bivalve	Blue mussel													Apr-Oct	Apr-Oct	Apr-Oct	Jan-Dec	Jan-Dec
		Ribbed mussel													Jun-Sep	Jun-Sep	Jun-Sep	Jan-Dec	Jan-Dec
	Cephalopod	Longfin squid													May-Aug	May-Aug	May-Aug	Jan-Dec	Jan-Dec
	Crab	Blue crab													May-Sep	May-Sep	May-Sep	Jan-Dec	Jan-Dec
		Fiddler crab													Jun-Sep	Jun-Sep	Jun-Sep	Jan-Dec	Jan-Dec
		Green crab													Mar-Sep	Mar-Sep	May-Oct	Jan-Dec	Jan-Dec
		Lady crab													Jun-Sep	Jun-Sep	Jun-Sep	Jan-Dec	Jan-Dec
	Shrimp	Spider crabs													May-Sep	May-Sep	May-Sep	Jan-Dec	Jan-Dec
		Grass shrimp													May-Oct	May-Oct	May-Oct	May-Oct	Jan-Dec

## MARINE MAMMALS







	<i>Subelement</i>	<i>Species</i>	<i>Monthly Presence</i>												<i>Mating</i>	<i>Calving</i>	<i>Pupping</i>	<i>Molt</i>
			<i>J</i>	<i>F</i>	<i>M</i>	<i>A</i>	<i>M</i>	<i>J</i>	<i>J</i>	<i>A</i>	<i>S</i>	<i>O</i>	<i>N</i>	<i>D</i>				
	Dolphin	Bottlenose dolphin													-	-	-	-
	Pinniped	Gray seal													-	-	-	-
		Harbor seal													-	-	-	-

For additional information about species locations and extent, reference the underlying GIS data available from [response.restoration.noaa.gov](https://response.restoration.noaa.gov)
















## SHORELINE RESOURCES

### ESI POLYGON HABITAT TYPES

	<i>ESI Rank</i>	<i>Habitat Classification</i>	<i>Area (Acres)</i>	<i>Area (Sq. Miles)</i>
	10A	Salt and Brackish Water Marshes	99.70	0.16
	10B	Freshwater Marshes	3.91	0.01
	10C	Swamps	132.79	0.21
	10D	Scrub and Shrub Wetlands	43.70	0.07
	9A	Sheltered Tidal Flats	120.73	0.19
	7	Exposed Tidal Flats	28.89	0.05

### ESI SHORELINE HABITAT TYPES

	<i>ESI Rank</i>	<i>Shoreline Habitat Classification</i>	<i>Length (Meters)</i>	<i>Length (Miles)</i>	<i>% of ESI Shoreline</i>
	10A	Salt and Brackish Water Marshes	16,927.73	10.52	17%
	10C	Swamps	871.29	0.54	1%
	10D	Scrub and Shrub Wetlands	726.71	0.45	1%
	9A	Sheltered Tidal Flats	10,776.33	6.70	11%
	9B	Vegetated Low Banks	25,995.81	16.15	27%
	8A	Sheltered, Impermeable, Rocky Shores	114.57	0.07	< 1%
	8B	Sheltered, Solid Man-Made Structures	3,507.24	2.18	4%
	8C	Sheltered Riprap	647.21	0.40	1%
	7	Exposed Tidal Flats	3,939.20	2.45	4%
	6B	Riprap	3,580.35	2.22	4%
	5	Mixed Sand and Gravel Beaches	15,243.49	9.47	16%
	4	Coarse Grained Sand Beaches	7,914.04	4.92	8%
	1B	Exposed, Solid Man-Made Structures	6,561.81	4.08	7%

Total ESI Shoreline:	96,805.79	Total ESI Shoreline:	60.15
Total Shoreline:	53,213.99	Total Shoreline:	33.07

Note: A shoreline segment may include multiple shoreline habitats. If any segments include multiple habitats, the combined length of all habitats may exceed the length of the mapped shoreline, and the percent of ESI shoreline values will sum to greater than 100%

All underlying GIS data can be obtained from [response.restoration.noaa.gov](https://response.restoration.noaa.gov)

