



SGCN and Threats Associated with Habitats

Macrogroup: Subtidal Coarse Gravel Bottom

Habitat Systems:

Coarse Gravel

Coarse Gravel Bottom Macrogroup - Unknown Habitat System (i.e. Macrogroup)

Erect Epifauna

Kelp Bed

This Subtidal Macrogroup includes sediment textures/ size classes ranging from pebbles to boulders and their associated biological communities, submerged during the entire tidal cycle. Adopted from CMECS Substrate Components. This category is equivalent to CMECS Substrate Class-Unconsolidated shore, Substrate-Gravel. This includes particle size gravel, granule, pebble, cobble, and boulder.

SGCN Associated With This Habitat		SGCN Priority Level P1 = 4 / P2 = 33 / P3 = 11		
Class	Ray-finned Fishes (<i>Actinopterygii</i>)			
	American Sand Lance (<i>Ammodytes americanus</i>)			3
	Atlantic Cod (<i>Gadus morhua</i>)			2
	Atlantic Wolffish (<i>Anarhichas lupus</i>)			2
	Blueback Herring (<i>Alosa aestivalis</i>)			1
	Cusk (<i>Brosme brosme</i>)			2
	Haddock (<i>Melanogrammus aeglefinus</i>)			3
	Spotted Wolffish (<i>Anarhichas minor</i>)			2
	Winter Flounder (<i>Pseudopleuronectes americanus</i>)			2
Class	Sea Stars (<i>Asteroidea</i>)			
	Common Sea Star (<i>Asterias rubens</i>)			2
	Common Sun Star (<i>Crossaster papposus</i>)			2
	Forbes's Starfish (<i>Asterias forbesi</i>)			2
	Purple Sunstar (<i>Solaster endeca</i>)			2
	White Sea Star (<i>Stephanasterias albula</i>)			2
Class	Birds (<i>Aves</i>)			
	Barrow's Goldeneye (<i>Bucephala islandica</i>)			1
	Great Blue Heron (<i>Ardea herodias</i>)			2
Class	Marine And Freshwater Molluscs (<i>Bivalvia</i>)			
	Atlantic Sea Scallop (<i>Placopecten magellanicus</i>)			2
	Blue Mussel (<i>Mytilus edulis</i>)			3
	Icelandic Scallop (<i>Chlamys islandica</i>)			3
	Quahog, Hard Clam (<i>Mercenaria mercenaria</i>)			3
Class	Sharks, Rays, And Skates (<i>Chondrichthyes</i>)			
	Barndoor Skate (<i>Dipturus laevis</i>)			3
	Smooth Skate (<i>Malacoraja senta</i>)			2
	Thorny Skate (<i>Amblyraja radiata</i>)			2
	Winter Skate (<i>Leucoraja ocellata</i>)			1
Class	Sea Urchins (<i>Echinoidea</i>)			
	Green Sea Urchin (<i>Strongylocentrotus droebachiensis</i>)			2



SGCN and Threats Associated with Habitats

Macrogroup: Subtidal Coarse Gravel Bottom

Class	Aquatic And Terrestrial Snails (<i>Gastropoda</i>)	
	American Pelican Foot (<i>Arrhoges occidentalis</i>)	2
	Clathrate Trophon (<i>Boreotrophon clathratus</i>)	2
	Murex (<i>Boreotrophon truncatus</i>)	2
	Spindle Shell (<i>Ptychatractus ligatus</i>)	2
	Wavy Lamellaria (<i>Limneria undata</i>)	3
Class	Sea Cucumbers (<i>Holothuroidea</i>)	
	Orange-footed Sea Cucumber (<i>Cucumaria frondosa</i>)	2
	Psolus (<i>Psolus fabricii</i>)	2
	Psolus (<i>Psolus phantapus</i>)	2
	Sea Cucumber (<i>Thyonidium drummondii</i>)	2
Class	Crustaceans (<i>Malacostraca</i>)	
	Polar Lebbeid Shrimp (<i>Lebbeus polaris</i>)	2
	Spiny Lebbeid Shrimp (<i>Lebbeus groenlandicus</i>)	2
Class	Horseshoe Crabs And Sea Scorpions (<i>Merostomata</i>)	
	Horseshoe Crab (<i>Limulus polyphemus</i>)	1
Class	Corals, Sea Pens, Sea Fans, Sea Anemones (<i>Octocorallia</i>)	
	Dead Man's Fingers (<i>Alcyonium siderium</i>)	3
	Sea Strawberry (<i>Gersemia rubiformis</i>)	2
Class	Brittle Stars (<i>Ophiuroidea</i>)	
	Northern Basket Starfish (<i>Gorgonocephalus arcticus</i>)	2
Class	Brachiopods (<i>Rhynchonellata</i>)	
	Lamp Shell (<i>Terebratulina septentrionalis</i>)	2

Threats Associated With This Macrogroup

Agricultural and Forestry Effluents

Though this threat has been drastically reduced with the implementation of best management practices, in coastal watersheds, excess runoff of nutrients, fertilizer, sedimentation, and pesticides can lead to poor water quality in tidal areas and lead to exc

Changes in Temperature Regimes

Sea surface temperature increases may change the community structure; exacerbate disease, etc. This is an interactive threat with ocean acidification.

Domestic and Urban Waste Water

Though this threat can be reduced with the implementation of best management practices, in coastal watersheds, runoff can lead to non-point source pollution of nutrients, fertilizer, sediments, pesticides, vehicle contaminants, etc., which can lead to poor

Fishing and Harvesting of Aquatic Resources

Fishing for demersal fish species, scallops, etc; dragging may alter benthic habitat; overfishing is also an issue in some cases; trap fishing may introduce artificial structural habitat and promote the establishment or spread of invasive species tha

Garbage and Solid Waste

Lost fishing gear, discarded plastics, boat mechanic fluid containers (oil, antifreeze). Sometimes can be retrieved (ghost gear programs), but is generally lost especially if offshore.



SGCN and Threats Associated with Habitats

Macrogroup: Subtidal Coarse Gravel Bottom

Habitat Shifting or Alteration

Chemical changes in water chemistry (e.g. ocean acidification) can affect biological communities and natural processes

Habitat Shifting or Alteration

Chemical changes in water chemistry (e.g. Ocean acidification) can affect biological communities and natural processes

Industrial and Military Effluents

Release of effluents may contain high concentrations of toxic contaminants, etc. largely effects nearshore habitat, where impact can be long term. Oil spills can effect nearshore or offshore environments and can be either localized (if contained or small)

Invasive Non-native-Alien Species-Diseases

Dasyatis japonica, green crabs, and lobster shell disease are all pervasive threats in the Gulf of Maine.

Lack of knowledge

Data on the location, size, and species assemblages of these habitats is extremely limited, and changes in their biotic and abiotic characteristics are poorly understood.

Mining and Quarrying

Sand/gravel extraction for beach nourishment

Recreational Activities

Fishing for demersal fish species, scallops, etc; overfishing is also an issue in some cases

Renewable Energy

Mounting equipment and transmission cables for floating offshore wind turbines

Shipping Lanes

Dredging associated with harbors

Habitat Conservation Actions:

Relevant conservation actions for this habitat are assigned within broader habitat groupings in Maine's Wildlife Action Plan: Element 4. Click on the Habitat Grouping of interest to launch a habitat based report summarizing relevant conservation actions and associated SGCN.

Species Conservation Actions:

Conservation actions that may benefit species associated with this habitat can be found in Maine's Wildlife Action Plan: Element 1. Click on the species of interest to launch a species based report summarizing relevant conservation actions and associated habitats.

The Wildlife Action Plan was developed through a lengthy participatory process with state agencies, targeted conservation partners, and the general public. The Plan is non-regulatory. The species, threats, and voluntary conservation actions identified in the Plan complement, but do not replace, existing work programs and priorities by state agencies and partners.