



New England Rocky Intertidal

Learn about the Boston Harbor Rocky Intertidal habitat of New England through this 13 species deck. The intertidal habitat is located in the area between high and low tide, and are very dynamic, productive and biodiverse habitats that provide an important link between marine and terrestrial systems.

Find this card deck and more at:
education.eol.org/species_cards

Title Image Credit:
Susannah Clary CC-BY-NC

Project Description

Common Name

Scientific Name

Taxon Group

Food Web Roles

DECO	Decomposer: Energy from dead material
AUTO	Autotroph: Energy from sun, water, CO ₂
HERB	Herbivore: Energy from plants
OMNI	Omnivore: Energy from plants, animals
CARN	Carnivore: Energy from animals
APEX	Apex Predator: Top predator
DETR	Detritivore: Energy from dead vegetation
SANG	Sanguinivore: Energy from blood
MULT	Multiple: Energy from multiple sources



Habitat (where species is found)
+ (indicates species is also found in other habitats)

Species Conservation Status

IUCN Redlist™

International Union for
Conservation of Nature

LC	Least Concern
DD	Data Deficient
NT	Near Threatened
EN	Endangered

NE Not Evaluated

VU	Vulnerable
CR	Critically Endangered
EW	Extinct in Wild
EX	Extinct

Asian Shore Crab *Hemigrapsus sanguineus*



Malacostraca



Habitat

+ Rocky Intertidal Zone

OMNI
Foodweb Role

Carapace Size	3-4 cm
Color	Spots; brown, black
Life Span	8 yrs
Clutch / Broods	50,000 eggs; 3-4/yr
Zonation	Subtidal to intertidal

IUCN
Redlist™

Geographic Range
Native: western Pacific Ocean in Russia, Korea, China, Hong Kong, and Japan
Invasive: Atlantic intertidal coastline of US from ME to NC
Image: Ken-ichi Ueda CC-BY-NC

Mummichog *Fundulus heteroclitus*



Ray-finned Fishes

Habitat

+ Rocky Intertidal Zone

OMNI
Foodweb Role

Body Length	13-18 cm
Adult Weight	Not available
Lifespan	4 yrs (max)
Number of Eggs	460; 8 times/yr (max)
Nest Type	Variety; out of water

IUCN
Redlist™

Geographic Range
Native along the Atlantic Coast of North America, Gulf of St. Lawrence to TX
Image: Wikimedia Commons

Atlantic Rock Crab *Cancer irroratus*



Malacostraca



Habitat

+ Rocky Intertidal Zone

OMNI
Foodweb Role

Carapace Size	6-15 cm
Color	Reddish-brown
Life Span	8 yrs
Clutch/Broods	500,000 (max); 1/yr
Zonation	Low inter- to subtidal

IUCN
Redlist™

Geographic Range
Native from Labrador, Canada to SC, US
Image: Mike Dillon CC-BY



Bladder Wrack

Fucus vesiculosus

eol Phaeophyceae



Habitat + Rocky Intertidal Zone **Foodweb Role** AUTO

Size	1.8 m (max)
Color	Olive green
Life Span	4-5 yrs
Reproduction	Broadcast spawner
Zonation	Mid-intertidal

IUCN Redlist™ NE

Geographic Range
Native to the Eastern and Western shores of the North Atlantic ocean

Image: test CC-BY-NC

Rock Gunnell

Pholis gunnellus

eol Ray-finned Fishes



Habitat + Rocky Intertidal Zone **Foodweb Role** CARN

Body Length	15-20 cm
Adult Weight	15 g (max)
Lifespan	5 yrs (max)
Number of Eggs	80-200
Nest Type	Under stone or shell

IUCN Redlist™ NE

Geographic Range
Eastern and Western shores of the North Atlantic ocean

Image: National Museums Northern Ireland and its licensors CC-BY-NC-SA

Common Seastar

Asterias forbesi

eol Asteroidea



Habitat + Rocky Intertidal Zone **Foodweb Role** CARN

Size	7-15 cm
Color	Tan, orange, pink
Life Span	5-10 yrs
Reproduction	2.5 million eggs (max)
Zonation	Mid-to-low intertidal

IUCN Redlist™ NE

Geographic Range
Native in the North Atlantic ocean from ME to the Gulf of Mexico

Image: Ken-ichi Ueda CC-BY-NC

Dog Whelk

Nucella lapillus

eol Gastropoda



Habitat + Rocky Intertidal Zone **Foodweb Role** CARN

Size	3-6 cm
Color	White, yellow/brown
Life Span	Mature at 2 yrs
Reproduction	Egg capsules
Zonation	Mid-to-low intertidal

IUCN Redlist™ NE

Geographic Range
Native from Long Island north to Greenland and from southern Portugal north to Iceland, Greenland, Scandinavia and into the Siberian arctic

Image: test CC-BY-NC

Green Crab

Carcinus maenas

eol Malacostraca



Habitat + Rocky Intertidal Zone **Foodweb Role** CARN

Carapace Size	9 cm (max)
Color	Greens; orange/red
Life Span	3-6 yrs
Clutch/Broods	200,000; 1/yr
Zonation	Throughout intertidal

IUCN Redlist™ NE

Geographic Range
Native: European shores in North Atlantic ocean
Invasive: US East/West coasts

Image: Ondřej Zicha CC-BY-NC

Sea Lettuce

Ulva lactuca

eol Ulvophyceae



Habitat Rocky Intertidal Zone **Foodweb Role** AUTO

Size	15-60 cm
Color	Bright green
Life Span	0-3 mo
Reproduction	Broadcast spawner
Zonation	Intertidal / subtidal

IUCN Redlist™ NE

Geographic Range
Native worldwide

Image: test CC-BY



Herring Gull *Larus argentatus*

 eol Birds

	+ Rocky Intertidal Zone	
Wingspan	137-146 cm	
Adult Weight	800-1250 g	
Lifespan	30 yrs (avg)	
Clutch/Broods	1-3; 1/yr	
Nest Type	Cup on ground/cliff	
Geographic Range Native throughout Eurasia and North America		
Image: test CC-BY-SA		

Humans *Homo sapiens*

 eol Mammals

	+ Urban Habitats	
Body Length	147-181 cm	
Adult Weight	Variable	
Lifespan	32-84 yrs	
Offspring/Litters	1 or more; variable	
Female Maturity	8-17 yrs	
Geographic Range Worldwide		
Image: Steve Evans CC-BY-NC		

Carrageen *Chondrus crispus*

 eol Florideophyceae

	+ Rocky Intertidal Zone	
Size	22 cm (max)	
Color	Dark red, purple	
Life Span	6-10 yrs	
Reproduction	Alteration generation	
Zonation	Low intertidal/subtidal	
Geographic Range Native to the Eastern and Western shores of the North Atlantic ocean		
Image: Valter Jacinto CC-BY-NC-SA		

Long-clawed Hermit Crab *Pagurus longicarpus*

 eol Malacostraca

	+ Rocky Intertidal Zone	
Size	2.5 cm (max)	
Color	Whitish to green	
Life Span	Not available	
Clutch/Broods	1,500 (max); 1+ yr	
Zonation	Throughout intertidal	
Geographic Range Native from Nova Scotia to FL; from FL in the Gulf of Mexicocoast to Galveston, TX		
Image: test CC-BY-SA		

Mussel *Mytilus edulis*

 eol Bivalvia

	+ Rocky Intertidal Zone	
Size	5-10 cm	
Color	Blue, black, brown	
Life Span	18-24 yrs	
Reproduction	5-40 million eggs	
Zonation	Throughout intertidal	
Geographic Range Native in the Eastern and Western shores of the North Atlantic oceans		
Image: test CC-BY-NC		

Common Slipper Shell *Crepidula fornicata*

 eol Gastropoda

	+ Rocky Intertidal Zone	
Size	5 cm (max)	
Color	White, pink, yellow	
Life Span	6 yrs (max)	
Reproduction	11,000 eggs	
Zonation	Low intertidal/subtidal	
Geographic Range Native to the Atlantic Coast, the Pacific Coast of the Gulf of Mexico; introduced to Netherlands, France, Italy, UK, Denmark, Norway, Sweden and Spain		
Image: test CC-BY-NC-SA		



Common Periwinkle

Littorina littorea

Gastropoda

Habitat + Rocky Intertidal Zone **HERB** Foodweb Role

Size	2-5 cm
Color	Black, grey, striped
Life Span	5-10 yrs
Reproduction	Floating egg masses
Zonation	Intertidal/subtidal

IUCN Redlist™

Geographic Range
Native: from northern Spain to Great Britain, Scandinavia and the White Sea in Russia
Invasive: Western North Atlantic ocean

Image: test CC-BY-NC

Rockweed

Ascophyllum nodosum

Phaeophyceae

Habitat + Rocky Intertidal Zone **AUTO** Foodweb Role

Size	0.6-1.8 m
Color	Olive green
Life Span	15-20 yrs
Reproduction	Broadcast spawners
Zonation	Mid-intertidal

IUCN Redlist™

Geographic Range
Native to the Eastern and Western shores of the North Atlantic ocean

Image: Jaroslav Pištěcký

Phytoplankton

Thalaisiosira

Centric diatom

Habitat + Rocky Intertidal Zone **AUTO** Foodweb Role

Size	2-186 µm
Color	Yellow-brown
Lifespan	6 days (max)
Reproduction	Division; auxospores
Zonation	Tidepools/subtidal

IUCN Redlist™

Geographic Range
Northern cold to temperate waters; abundant during spring and fall bloom

Image: micro*scope CC-BY-NC

Northern Yellow Periwinkle

Littorina obtusata

Gastropoda

Habitat + Rocky Intertidal Zone **HERB** Foodweb Role

Size	1.5 cm (max)
Color	Yellow, brown, green
Life Span	3 yrs
Reproduction	Clear egg masses
Zonation	Mid/low-intertidal

IUCN Redlist™

Geographic Range
Native to the Eastern and Western shores of the North Atlantic ocean

Image: foto fitis, sytske dijksen CC-BY-NC

eol species cards

Adaptation: A physical characteristic or behavior that helps an organism survive in its environment

Brood/Litter: Group of young produced at one time

Carapace: Shell of a turtle or head and thorax of arthropods

Clutch Size: Number of eggs laid in a nest at one time

Complete Metamorphosis: Some insects have a four stage life cycle: egg, larva, pupa, adult

Crepuscular: Active at dawn and dusk

Diurnal: Active during the day

Vocabulary

eol species cards

Habitat: The area an organism lives and can find its resources

Growth Form: Classification of plants as trees, shrubs, herbaceous, and grasses

Incomplete Metamorphosis: Some insects have a three stage life cycle: eggs, nymph, adult

Molt: The act of shedding exoskeleton, skin or feathers as an animal grows

Snout-vent Length: In amphibians and reptiles, the length from tip of nose to tail base (cloaca)

Standard Length: In fishes, length from tip of snout to end of last vertebra

Vocabulary

