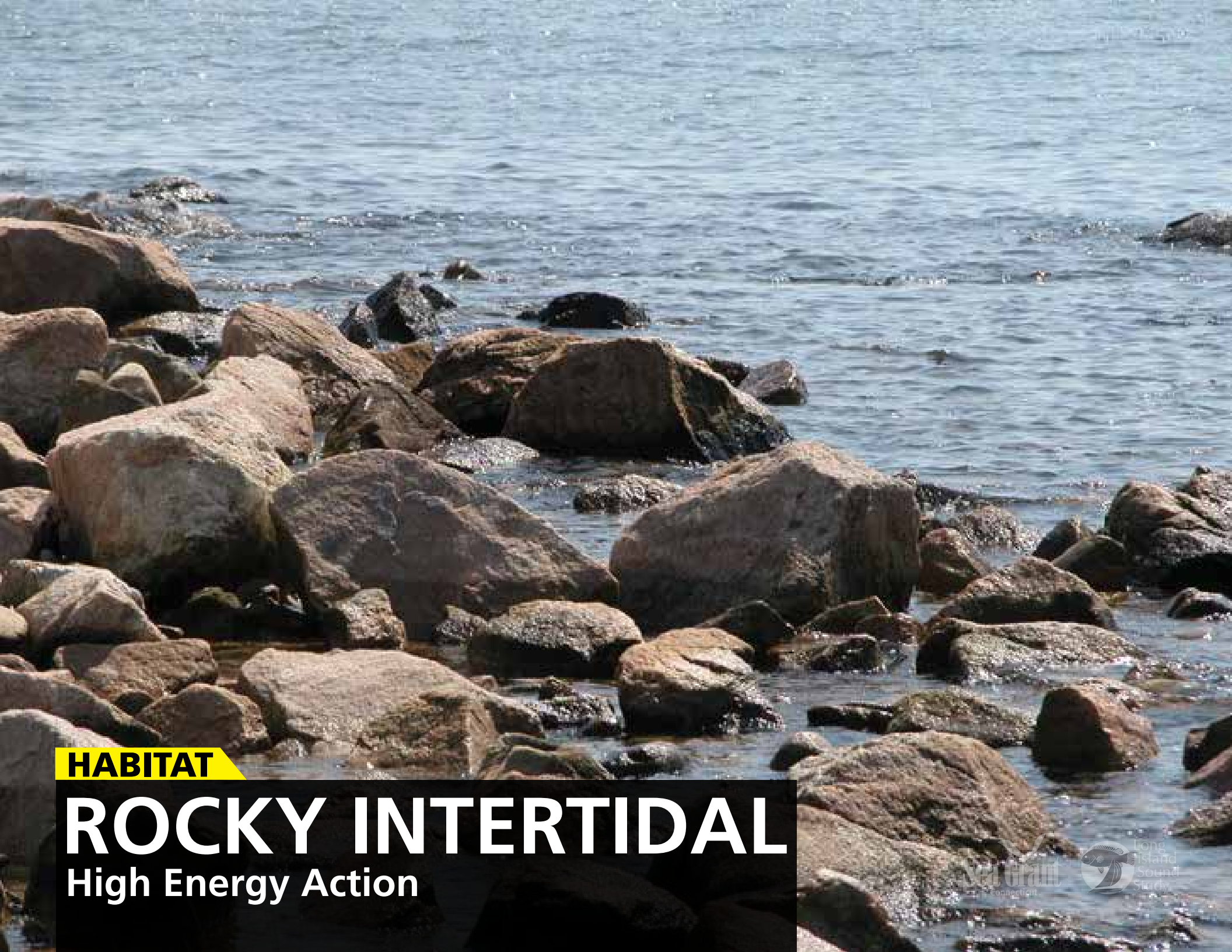

HABITAT

ROCKY INTERTIDAL

High Energy Action

Intense wave action among the rocks, exposure to drying air during daily low tides, freezing winter and extreme summer temperatures, freshwater rainfall, and predation create harsh conditions for organisms living in the **rocky intertidal zone.**

Zonation is evident in the rocky intertidal zone - lighter bands of barnacles higher on the rocks give way to darker bands of periwinkle snails, blue mussels, and various seaweeds lower on the rocks.

Rockweeds are brown seaweeds that inhabit the rocky intertidal zone, attaching to the rocks and providing food and shelter for many organisms.

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Green sea lettuce grows abundantly in nutrient-rich waters, and is grazed upon by snails, crabs, some fish, and waterfowl.

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Deadman's fingers, or **green fleece,** is a spongy, thick green algae (seaweed) that grows subtidally.

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Irish moss is a red algae that grows in dense clumps at the low tide line; it serves as food and habitat for many other species.

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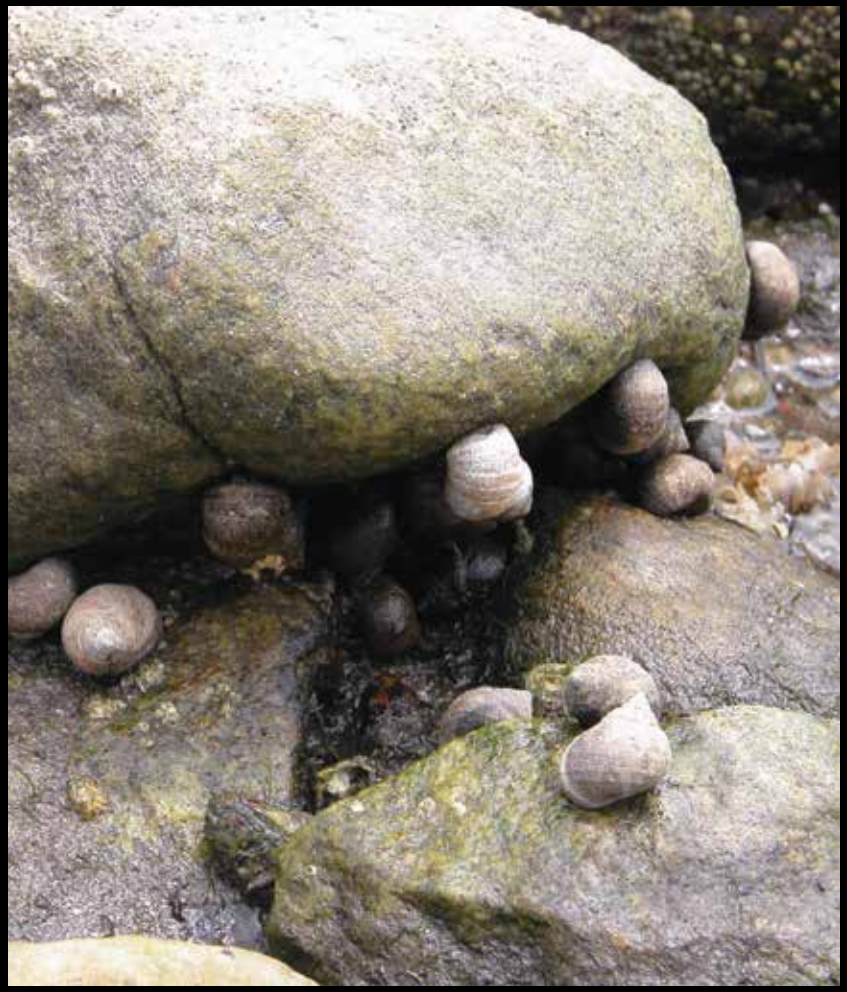
Grateloupia, **another red algae, is a relative newcomer to Long Island Sound, growing in shallow subtidal waters; scientists are studying it to determine its impact on the Sound's ecosystem.**

Barnacles feed during high tide by waving feathery appendages through the water, sweeping plankton into their mouths; as the tide recedes, the valves at the top close up tightly.



Periwinkles are snails that live in huge numbers in the rocky intertidal area, scraping algae off the rocks with their **radula.**

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Atlantic slippersnails (l) are also gastropods; they are often found in "stacks" or clumps attached to rocks or other shells. Unlike a **snail shell** (r), the shell of this gastropod is not coiled.

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Blue mussels grow in large clumps in the intertidal zone, attaching to the rocks and each other with strong, elastic threads called **byssus.**

Translucent white anemones, up to 1.5" tall, attach to hard surfaces such as rocks or shells, or the underside of floating docks; the tentacles capture and direct food particles to the mouth in the center.

Echinoderms are spiny-skinned animals with five-part symmetry, like sea stars and sea urchins. **Sea stars** feed on shellfish, other invertebrates, and even fish, dead or alive.

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These two crustaceans, the **Asian shore crab** (top) and the **green crab** (bottom), are non-native invasive species; the Asian shore crab is the most dominant crab in the intertidal zone, easily found under rocks at low tide.

A number of tunicate species (or sea squirts) inhabit the Sound; some are solitary and others are colonial— made up of many individuals.

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Clusters of **sea grapes** are commonly found on pilings, floats, and docks; solitary tunicates, they have two siphons used to filter water and food and excrete wastes.