



Boston Harbor Islands

Volunteer Rocky Intertidal Monitoring

The rocky intertidal communities of Boston Harbor Islands provide an important habitat for marine and terrestrial species. They are also enticing places for park visitors. Learning the condition of these unique communities in order to manage them for “the enjoyment of future generations” requires a long-term monitoring plan. The Northeast Temperate Inventory and Monitoring Network (NETN) will begin monitoring rocky intertidal communities in 2008. This program will rely on a trained volunteer base consisting of high school students, undergraduate students, graduate students, non-student adults, and NPS staff. This citizen science based monitoring program will foster a connection between the community and the park and instill a sense of stewardship that will span generations.

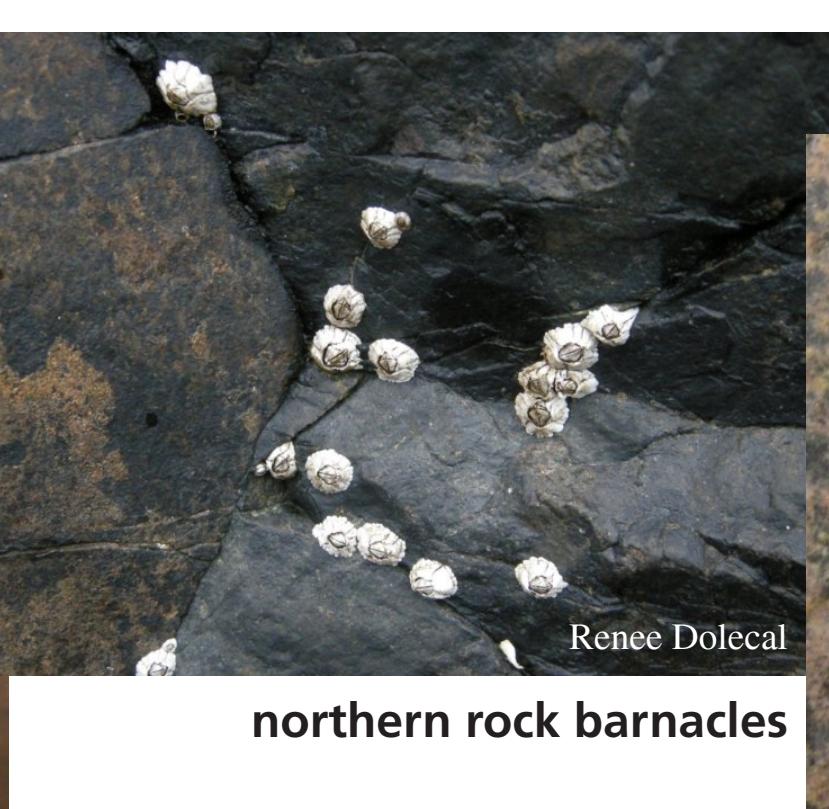
Initial monitoring sites will be located on Calf Island, Grape Island, Green Island, Middle Brewster Island, Outer Brewster Island, Slate Island, and Snake Island. Monitoring surveys will consist of target invertebrate and seaweed species and overall biodiversity. Target species will provide data on ecologically important and abundant species while biodiversity surveys will provide data for rare and newly invasive species that would be missed in target surveys. The long-term sites will be based on areas representing major intertidal ecological communities, areas previously surveyed that can provide historical data, areas of special human interest, and areas with optimum conditions for long-term monitoring.



blue mussel



green urchin



northern rock barnacles



dogwhelk



Renee Dolecal
rock crab



Renee Dolecal
Asian shore crab



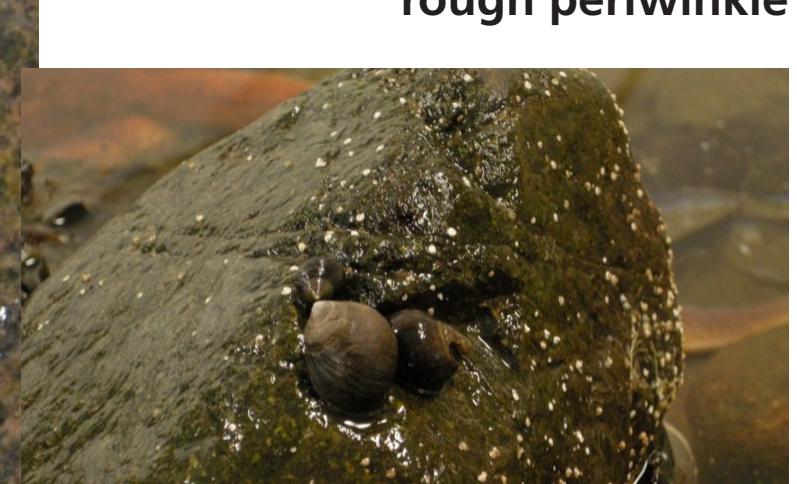
Renee Dolecal
green crab



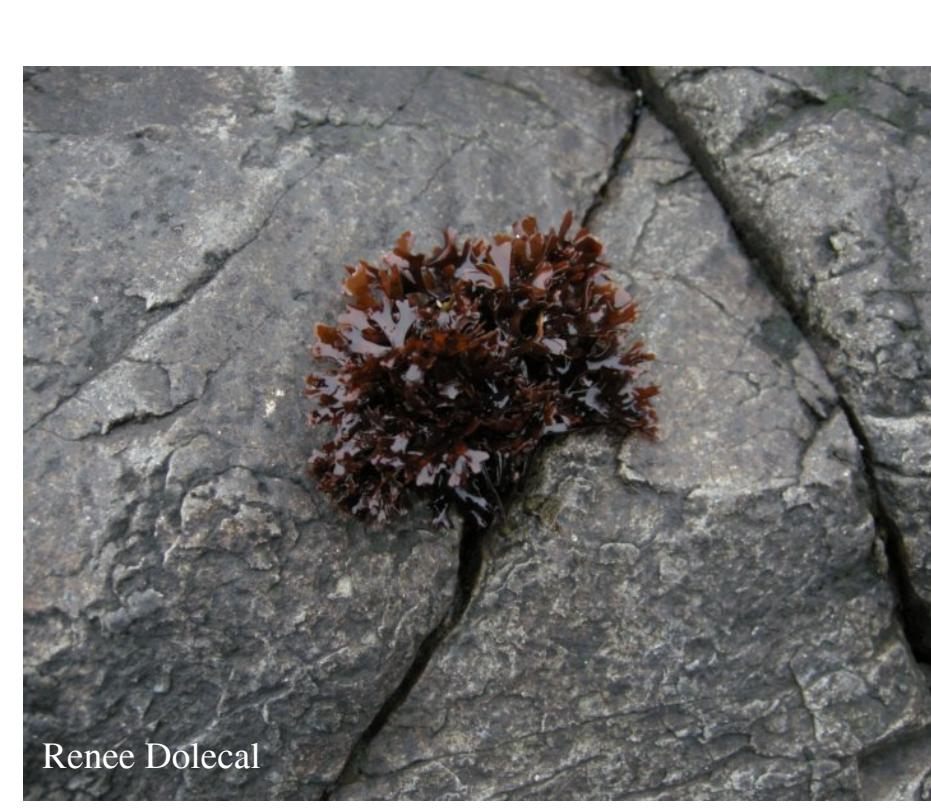
Renee Dolecal
Jonah crab



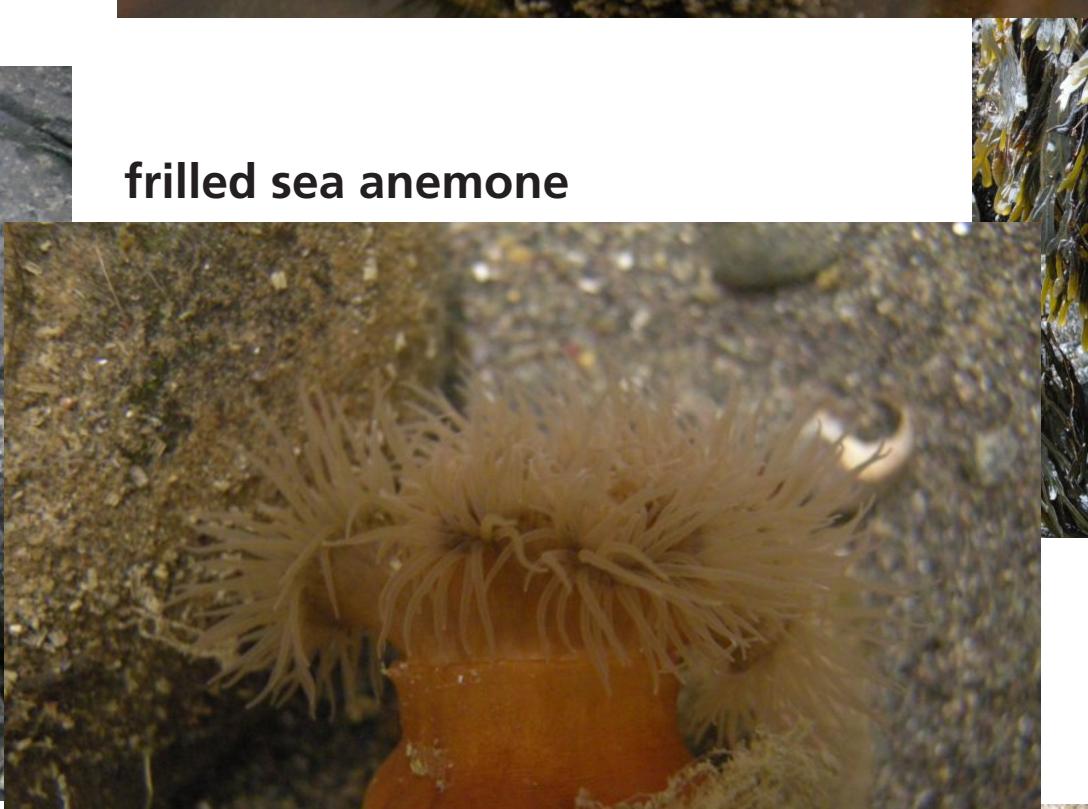
Renee Dolecal
rough periwinkle



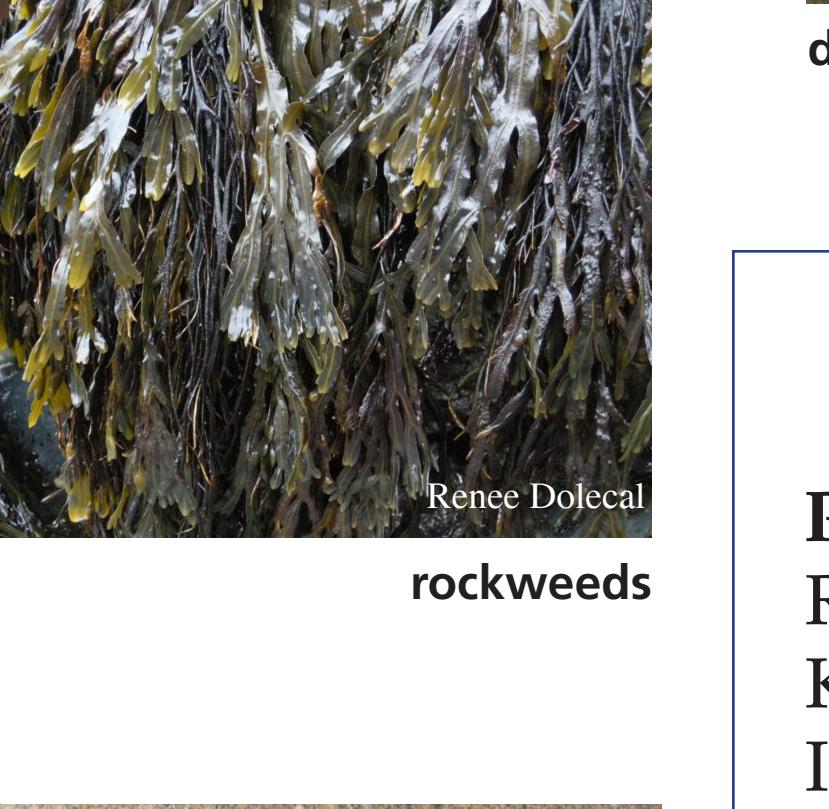
Renee Dolecal
common periwinkle



Renee Dolecal
Irish moss



frilled sea anemone



rockweeds



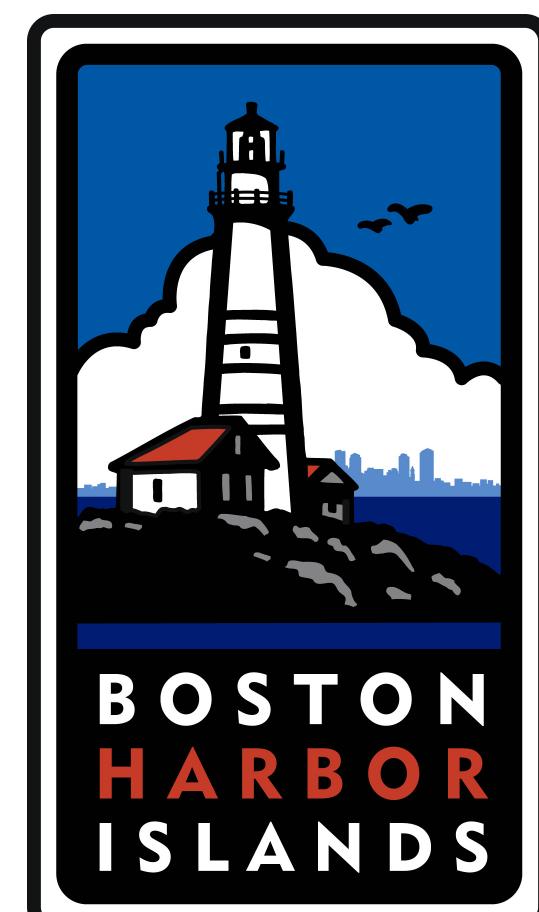
Renee Dolecal
knotted wrack



sea star



from Calf Island looking at Great Brewster



volunteers

Proposed Target Species

Plants

- Rockweed (*Fucus* spp.)
- Knotted wrack (*Ascophyllum nodosum*)
- Irish moss (*Chondrus crispus*)
- Sea lettuce (*Ulva lactuca*)

Invertebrates

- Frilled anemone (*Metridium senile*)
- Blue mussel (*Mytilus edulis*)
- Common periwinkle (*Littorina littorea*)
- Smooth periwinkle (*Littorina obtusata*)
- Rough periwinkle (*Littorina saxatilis*)
- Atlantic dogwhelk (*Nucella lapillus*)
- Plant limpet (*Notoacmea testudinalis*)
- Northern rock barnacle (*Semibalanus balanoides*)
- Jonah/Atlantic rock crab (*Cancer* spp.)
- Green crab (*Carcinus maenus*)
- Asian shore crab (*Hemigrapsus sanguineus*)
- Green urchin (*Strongylocentrotus droebachiensis*)
- Sea star (*Asterias* spp.)

Vertebrates

- Gulls (*Larus* spp.)
- Humans (*Homo sapiens*)