



VIRTUAL GUIDED NATURE WALK

## CAUSEWAY BEACH PRESERVE



Geologically speaking, a tombolo forms when waves approaching a shore refract around an offshore ledge or island, thus closing in behind the island and moving sand into the lee of the island from both directions – like Barred Island. In the case of Causeway Beach, the sand is brought in from the south and southwest only. The spit that extends out toward Carney Island is a tombolo in the making.

The cove here – the water between Deer Isle and Little Deer Isle and surrounding Carney – used to be a superior fishing ground for flounder and other species. Construction of the Causeway interrupted the tidal water flow between the cove and Eggemoggin Reach, changing the ecology of the cove and destroying the fishery.

At low tides the bar here was passable, but in the 1930s this crossing was reinforced with field stone from old walls. After winter storms eroded its edges, rock quarried from nearby Pine Hill was brought in. Highway departments will have to address the condition of the Causeway here again before long. Will ecological impacts be considered?



From May to July you may see eagles and eaglets. Herring Gulls with plumage indicating several age classes, as well as the slightly smaller Ring-billed Gulls are common here. You may also see and hear Laughing Gulls in summer. The flats here are home to several species of sea weeds and associated organisms.

Clamming for steamers is popular here and you can spot these littleneck clams by the holes where the clams have extended their “trunks” with their intake and excurrent siphons. In the photograph below, the hole to the right of the live littleneck steamer clam shell is the siphon hole of another clam.



Razor clams, hen clams, and hermit crabs are interesting creatures that you may find here. Download the [Species Almanac](#) for more about the natural history of our beaches and their plants and animals.

Resident and non-resident and junior recreational clamming licenses may be obtained at town office.

**IMPORTANT NOTICE:** Call the Department of Marine Resources phone number for red tide or post-rainstorm runoff closures at 1-800-232-4733.

Please protect our shellfish resources by using baggies for cleaning up after your dogs.

Please help us protect the fragile dune grasses by driving only in the obvious path. These grasses keep our little beach from eroding.





The seventh grade at Deer Isle-Stonington Elementary School studies ecology, how plants and animals and nonliving things exist together. Under the direction of teacher Mickie Flores and IHT's Martha Bell, the students focused on the beach grass which literally holds together the sand bar at the Causeway Beach. Since driving on the beach had destroyed much of the beach grass, they got permission from Island Heritage Trust to mark the beach grass area with flags. They posted hand lettered signs which read "DISES 7th grade Beach Grass Restoration Project - Please do not drive on the flagged area."

This project began in 2014 as part of an ongoing effort sponsored by the Maine Botanical Gardens with support from the Lunder New Naturalist program.

Each year seventh graders take over this project which has become a prize winner.

IHT stewardship volunteers installed a handsome rope and post fence and the beach grass has thrived. Almost daily and around the year this preserve is now enjoyed by visitors.



Island gardeners are welcome to collect seaweeds here at the Causeway, but please be mindful that in these lines of wrack live the tiny creatures on which migrating birds are depending to fuel them on their way. That should not be a problem for gardeners looking to put their gardens to bed for winter under a seaweed blanket as most of our traveling birds come through in very early spring. Returning south-bound from the Arctic they pass through in late July or early August. On the other side of the highway, however, the seaweed issues are a little different.

Because rockweed harvesting has raised a number of ecological questions of late, a coalition of citizens has formed. This Rockweed Coalition is working to promote conservation of intertidal marine habitat by ending commercial cutting and removal of rockweed, *Ascophyllum nodosum*, until studies demonstrate that such cutting does not harm the ecosystem. If you are troubled by an incident of unwanted harvesting, contact [saveourseaweed@gmail.com](mailto:saveourseaweed@gmail.com).

For many years the owner of this little beach did not welcome visitors. When the property came up for sale a group of citizens banded together and bought the property and gave it to Island Heritage Trust. It is enjoyed year round by residents and visitors alike.



There are some interesting geological features nearby. At the southern end of the Causeway beach note the outcroppings of gray, twisted, plate-like layers of the Ellsworth Schists that make up this end of Deer Isle. The appearance of Ellsworth Schist bedrock gives you an understanding of why the beach pebbles here have the shape and texture that that they do. Each of our Island beaches has its own distinctive character.

At the other end of the Causeway - just as you left Little Deer - you could see a pullout with a sign describing the area as The Bowcat. In 1859 a whaleboat named Bowcat (say Bō cat) went aground here in a storm; hence the name of the basin. On the rocks of the shore there are scratches left by the glaciers. On the other side of the highway, the Reach side, the rocks forming small raised contours along the shore are Castine Volcanics. The material forming these rocks was deposited as volcanic ash and lava on the flanks of volcanoes like those that presently form the Japanese islands. These rust-colored rocks (below), some of the Island's oldest and forming much of Little Deer, were once part of the plate that was Africa. Imagine, Deer Isle Out of Africa.



Just at the tide line there you can see grayish-green marine clay topped with sea grasses (below). These sea bottom deposits from the Pleistocene tell us that the sea level here was once higher.



The tide in the old photograph (below) of the bar at the Causeway site is just low enough for these parties to cross. Look closely to the left of the front horse's head. No, the horse is not wearing that lovely hat; the lady seems to look down at the water level. Is she dubious?



## ISLAND HERITAGE TRUST

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Photo Credits

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