





## The Watch Hill Conservancy's Permanent Home

We are happy to announce that we are the new owners of the Chaplin B. Barnes Reading Room and our office space in the Lanphear Livery at One Bay Street in Watch Hill. The Reading Room has been the venue for Lanphear *LIVE*! presentations, lectures, and many public events.

We look forward to hosting a rich assortment of educational and community-based programs once the pandemic passes and we can safely gather. Our purchase of the Reading Room was made possible, in part, by a generous grant from the Lattner Family Foundation.

#### **Directors and Officers**

Frederick B. Whittemore *Chairman Emeritus* Deborah Lamm *President and Chairman* Peter Gummeson *Treasurer* Jane B. O'Connell *Secretary* Grant G. Simmons III *Vice President* Laurence F. Whittemore III *Vice President* Peter V. August, Ph.D. *Vice President* 

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#### Staff

Jocelyn C. Lahey *Executive Director* Janice M. Sassi *Napatree Point Conservation Area Manager* 

#### **Science Advisors**

Peter V. August, Ph.D. University of Rhode Island Bryan Oakley, Ph.D. Eastern Connecticut State University Peter Paton, Ph.D. University of Rhode Island Hope Leeson, M.S. Rhode Island Natural History Survey Alan Desbonnet, M.S. Rhode Island Sea Grant

## **From the Executive Director**

Looking out upon a quiet Bay Street from *our* office in the Lanphear Livery, I am reflecting on the changes that have occurred in the Conservancy the last twenty months. Change can be challenging, but it can be a catalyst for revitalization.

In our Resilient Watch Hill initiative, we have learned that being creative and nimble are important in developing solutions to complex problems, such as adapting to rising seas. Even in the face of unexpected challenges, our stewardship of Napatree, our preservation of community character, and our educational programming have been strong and successful.

This would not be possible without the support and encouragement of our members. When we decided to offer our Lanphear *LIVE*! programs virtually rather than "going dark" for this year, you showed up! We had nearly the same attendance for the online presentations as our in-person programming. When we cancelled our 2020 Celebration of Summer and ran the Annual Appeal via mail, you responded with generosity and kind notes of encouragement.

The Conservancy's mission is inspiring to me, but *you* are also inspiring. Every member, every donor, every participant in our programs help make the Conservancy an organization we can be proud of.

With our new five-year Strategic Plan in place, I look forward to working with you to serve the Watch Hill community by protecting its natural and historical resources.

Warmest wishes to you and yours, Jocelyn Lahey

Jocelim

## **Guiding Our Future**

For the past year, we have been working to develop a five-year strategic plan. To facilitate the process we hired Mark Amaral, with Lighthouse Consulting Group. Mark conducted interviews with the Conservancy Board members and members of the community to better understand how the Conservancy's programs are perceived and valued. After many iterations, discussions, and a full Board retreat to finalize the Plan, we have a focused mission and specific goals to achieve over the next few years. We are grateful to the Strategic Planning Committee for spearheading this important effort – Jane O'Connell, Deborah Lamm, Bob Murray, Laurence Whittemore, and Brian Thompson. To read our Strategic Plan, please visit: https://thewatchhillconservancy.org/about-us/mission/

## **Protecting Community Character**



Most people know The Watch Hill Conservancy for its programming and its stewardship of the Napatree Point Conservation Area, however, our mission is much broader. The Conservancy is also dedicated to the preservation of historic Watch Hill's *built* environment. Monitoring local development activity and Town land use regulations is one method we use to protect the special character of Watch Hill. 2020 has been a very busy year for us in this aspect of our mission -- *Protecting Community Character*.

After years of hard work, and per State mandate, the Westerly Planning Board completed its Draft 2020-2040 Comprehensive Plan. This Plan is the Town's "intention" statement and is to be consulted by its decision makers (elected, appointed, and employed) as the Town moves forward with its many initiatives; their actions must be consistent with, or in furtherance of, its Comprehensive Plan.

The Conservancy, working through a committee comprised of staff and Board members, community members, local professionals, and Watch Hill Fire District (WHFD) officials, reviewed the 300-plus page document and submitted a 15-page comment letter to the Planning Department and Planning Board. In it we offered a variety of suggestions from spelling corrections and fact checking to advocating policy direction. The Planning Board was responsive to our suggestions. They then referred the document to the Town Council who held a series of workshops and public hearings on the draft Plan. The Conservancy appeared at numerous public hearings before the Planning Board and the Town Council to raise questions and offer suggestions.

These hearings were well attended and quite spirited! Hot topics included: public access to the shore, especially with respect to Town and State designated Rights-of-Way; and Town-proposed changes to broaden the parameters of the Commercial Recreation zoning designation from "open space and recreation" to "recreation and mixed use." As we understand, these are the final issues in need of resolution before the Town Council will approve the new Plan, which we expect will be enacted in 2020 or early in 2021. We applaud the Town for accomplishing this important task.

Concurrently, the Town has been pursuing a sweeping amendment to the Zoning Ordinance. Many of these changes are proposed to bring conformity with State statutes. The proposed revisions, circulated midyear in a 90-page document, are extensive. They include:

- A shorter public notice period for discretionary permits such as variances;
- Extensive changes to the procedures the Planning Board will use when considering Development Plan Review and Land Development Projects;
- Accessory family dwelling units allowed in all residential districts;
- Modification of the calculation of Building Height to respond to updated FEMA and CRMC base flood elevation projections; and
- A modification in the Shore Commercial-Watch Hill District to allow for an enclosed stair or elevator providing access to a rooftop deck to exceed the 25' height limitation.

The Conservancy again engaged a committee comprised of staff and Board members, community members, WHFD officials, and local professionals to analyze the impact of the proposed text. The Planning Board and the Town Council held several long and well-attended public hearings throughout the summer and fall. The community came out in force to object to a number of proposed changes.

The Conservancy expressed its objection to several sections of the amendment but the Town was not compelled by our arguments. The Town Council passed most of the revised Zoning Ordinance into law in October. However, a section concerning changes to the language governing Golf Courses, which brought out forceful community opposition, was deemed in need of further consideration.

The Watch Hill Conservancy is committed to continue our work to keep tabs on the many proposed and future changes in furtherance of our mission to *Protect the Community Character* of Watch Hill.

# **Our Underwater Meadows:**





Seagrasses are often called the "lungs of the sea" – 1 square meter of seagrass can produce 10 liters of oxygen each day.

They clean our waters by absorbing excessive nutrients and provide habitat to a host of organisms. Juvenile fish of many species that are important to our commercial and recreational fisheries safely hide from predators in the dense eelgrass vegetation. Invertebrates live on the grass blades and are food for larger animals.

The seagrass beds off Napatree are important for our wildlife too. Terns feed on the small fish, Osprey feed on the larger fish, and the Brant Geese that are so abundant off Napatree in the winter are vegetarians and graze on the eelgrass itself. In terms of ecosystem services, seagrass beds are the third most productive ecosystem on the planet (after estuaries, like Little Narragansett Bay, and wetlands). The largest area of seagrass in Rhode Island is a beautiful 80-acre underwater meadow between Napatree and Sandy Point. Just like grasses that grow in terrestrial environments, seagrasses have roots that extend into the submerged soils and sediments, green leaves that photosynthesize, and reproduce by sending new stems from roots or sexually reproducing with pollen that is moved from plant to plant by ocean currents.

Because of the size and high quality of the Napatree eelgrass (*Zostera marina*) meadow, it is a perfect location to develop methods to map these submerged habitats.

We monitor eelgrass by mapping the beds at regular intervals (usually 5 or so years) and measure whether they increase in size or get smaller. This is done by flying the coast in an aircraft in the early summer when water is clear and eelgrass is bright green. From the aerial photography, experts can delineate where eelgrass appears to occur. Field teams then go to the field to confirm the accuracy of the maps. This is done by sending divers to inspect areas or towing an underwater video camera over the site. The field validation can be slow and expensive.

Next year, in the summer of 2021, an ambitious seagrass monitoring mission will map all the seagrass beds from the Massachusetts/ Rhode Island border to Little Narragansett Bay. This is a collaborative effort by a number of state agencies, federal agencies, and non-profit environmental organizations.

The area to be mapped is huge. Field verification will be an extensive and complex part of the mapping project. This summer, The Watch Hill Conservancy and partners developed a rapid, safe, inexpensive, and accurate method of verifying seagrass maps using the Napatree meadow to develop the protocol. With grants from the Rhode Island Sea Grant

# Seagrasses of Napatree





program and the URI Coastal Institute, we purchased a small, underwater drone – called a Trident – that takes high quality videos of the sea floor. Controlled by operators on a boat, the tethered Trident can be used to image the bottom within 10 m (30 feet) of the boat to record video of what is present – eelgrass, sand, or algae.

We sampled 11 different locations on the Napatree eelgrass bed last summer. Back in the lab, we could estimate the percent cover of eelgrass from the video recordings. At each site, we also sent divers equipped with GoPro cameras into the water to photograph the habitat around the boat. We could estimate eelgrass cover from the GoPro images.

Our results indicate that the Trident drone and divers yielded identical estimates of eelgrass abundance at sampling locations. This suggests that Trident drone surveys can be used to perform the quality control assessment of the initial mapping results. Since the field verification part of the 2021 mission will be done in the fall months, it will be safer and faster to use the drone rather than divers.

If you are interested in seeing what an eelgrass bed looks like through the lens of the Trident, visit:

https://youtu.be/osFrEecNZrA

Given the importance of the Napatree eelgrass bed, The Watch Hill Conservancy will continue to monitor the extent and condition of this important part of Little Narragansett Bay and the Napatree ecosystem.

[PVA]

The eelgrass mapping team that worked on this project:

The Watch Hill Conservancy: Grant Simmons Janice Sassi Braden Fleming Peter August

Eastern Connecticut State University: Bryan Oakley

University of Rhode Island: Mike Bradley Chuck LaBash Beck LaBash Christopher Damon

## Napatree Notes



Sightings of three bird species, rare to Rhode Island, made Napatree Point Conservation Area the destination for birders intent on expanding their "life lists." The first sighting was of a Terek Sandpiper, a Eurasian shorebird only reported four times in the lower 48 states, with the last sighting reported 30 years ago in Massachusetts. Armed with scopes and binoculars, birders came from all over the eastern US including Florida, New Jersey, and Virginia. One person remarked that they had driven overnight from Ohio. Another Eurasian rarity was reported just days later: a Red-necked Stint in breeding plumage. Two weeks later an Artic Tern, never before reported in RI, was sighted.

For the first time in years, 2020 saw the addition of two chicks of endangered species on Napatree. A Piping Plover and Least Tern chick successfully fledged (learned to fly and presumably migrate) this summer!

National Audubon has recognized Napatree to be a *Globally Important Bird Area.* Over 300 species have been recorded and much of the credit for those reports is due to Dr. Reynold T. Larsen who has been keeping track of his bird sightings since **1963**! Twice a month, Rey methodically surveys Napatree: recording the time, tide, species of bird observed and their numbers. The Rhode Island Natural History Survey (RINHS.org) has recognized Rey's four decades of monitoring Rhode Island's birdlife by naming him the 2020 recipient of the Distinguished Naturalist Award. Dr. Larsen has filed over 6,000 reports of bird observations to Cornell University's eBird database. Few birders post 1000 lists in their lifetime. In addition, Rey has documented 470 records of damselflies and dragonflies for RI's *Odonata Atlas*.

Napatree is not only an important bird habitat – several endangered/ threatened plant and insect species have also been recorded. This season, thanks to a grant from the Rhode Island Natural History Survey, Mark Mello, Director of Research for the Lloyd Center for the Environment in Dartmouth, MA, conducted an inventory of moths found on Napatree and Goosewing Beach in Little Compton. Moths in this region have been understudied in dune habitats. For each survey, "Moth Man" Mello deployed a "trap" consisting of an ultra-violet light and a bucket in the evening at various Napatree locations. These were retrieved the next morning. The result was exciting: **161 moth** species were identified and **6** new records of RI moth species have been recorded.





For information, pictures and videos of our stewardship monitoring, watch for our 2020 *State of Napatree* report this winter and check the "Napatree" section of The Watch Hill Conservancy's website. [JS]

# Napatree INVESTIGATORS

Hello out there Investigators past, present, and future! Seen anything cool on Napatree lately? As you know, we were forced to cancel last summer's Investigator program. Although we were sorry to do so, we felt it was the best way to keep everyone safe.

But that doesn't mean nothing happened on the beach! Fellow Investigator leader Steve Brown and I hope you still had a chance to spend lots of time outdoors, especially on Napatree.

### Investigate this article to find answers to these questions:

I. Which turtle wears leather?

- 2. What are those round things floating in the water during the winter?
- 3. Is it a dog or a shark?

### LEATHERBACK TURTLE ON NAPATREE

Napatree visitors had a real surprise this season, as we had a Leatherback Turtle wash up on our beach!

It was HUGE (about four feet long and three feet wide; bigger than three of you Investigators put together!), and amazing to see! Although it was no longer alive, it gave many people a chance to learn about this animal and its habits.



Leatherbacks are the largest turtle in the world, and the only kind with a shell that feels like hard rubber or – you guessed it – leather. They are also endangered, due to people stealing eggs from their nests and from being trapped in large fishing nets. They spend most of their lives in deep water, with females coming out to lay their eggs. According to the National Oceanographic and Atmospheric Administration (NOAA), leatherbacks can dive to 4,000 feet and weigh up to 2200 pounds! They mostly eat jellyfish.



And what else looks like a jellyfish other than a jellyfish? A balloon. Sometimes leatherbacks will mistake a balloon for a jellyfish and eat it. That can cause sickness and even death, which is why we discourage people from buying balloons for outdoor events. If you find a balloon on the beach, you can bring it to "Neptune of Napatree" at the entrance to Napatree to protect marine animals. Don't let that balloon go!

We don't know what killed the Napatree leatherback, but it was still an exciting find to investigate.

### WHAT'S THAT FLOATING IN THE WATER?

The temperatures are cold, and the wind is whipping up the sand along Napatree. Bathing suits are out, and winter coats are in for a stroll along the beach. All the animals have gone south – or have they? Look out over the water in winter, and you may see something the size of a soccer ball floating around. Lift a pair of binoculars to your eyes and wait: those aren't soccer balls. They're seals! Seals such as the harp, (cont...)

gray, and the harbor seal begin to pop up around Rhode Island salt waters in fall and winter. Their dense fur and thick layers of blubber keep them warm and cozy, even on the coldest days. If you're lucky, you may see some of them sunning themselves on rocks or a beach. That's called "hauling out," and it gives them a chance to rest.



If you see a seal on the beach at Napatree or another shore, give it plenty of room! It's illegal to bother seals, even the ones we think may be injured. It's not unusual for a seal to stay out on the shore for days. If you see one on the beach, take a look, take a picture, and then please move on.

### SHARKS ON NAPATREE

One question Steve and I are asked often is, "Are there any sharks around here?" The simple answer is "Yes." While most sharks off Napatree swim in the deeper waters of the Atlantic, two members of the shark family you may see wash up on the shore are called the spiny and the smooth dogfish.

Dogfish are roughly three to four feet long. Like most sharks, their skin is rough to the touch, feeling much more like sandpaper than anything slimy. The scales that give the shark that feel look a bit like teeth when magnified and are called "denticles" for that reason.

Spiny dogfish are the most common shark in Rhode Island waters. They're called "spiny" because of two spikes they have just behind the dorsal (back) fins. If they're attacked, spiny dogfish will curl themselves up and spring their backs toward an enemy in an attempt to fight them off. They have rows of small teeth that they use to capture their food, including fish and comb jellies.

Smooth dogfish are similar in size but have some differences. The first is that it lacks the spike behind the dorsal fin. That gives the smooth dogfish its name. The second is that its teeth are more like flat bits of slate, used more for grinding food it finds on the bottom than for grabbing fish.

Both sharks are known for feeding aggressively and in schools. Fishermen long ago compared their habits with packs of dogs, and the name "dogfish" was born.

It's important to know that shark attacks in Rhode Island waters are incredibly rare. You're much more likely to be struck by lightening than attacked by a shark! So the next time you see a dogfish washed up on Napatree's beach, give it a look, and then go in the water for a swim!

That's all for now, Investigators! We hope to see you on the beach next summer. In the meanwhile, keep your eyes open for amazing things that nature brings us all the time on Napatree! ~ Hugh and Steve

## Visit us Online: www.thewatchhillconservancy.org