THE WATCH HILL CONSERVANCY NEWSLETTER APRIL 2025 VOL. 14 NO. 1

The Watch Hill Conservator

CELEBRATING 25 YEARS

ACKNOWLEDGEMENTS

Preserving the values of Watch Hill and Little Narragansett Bay would not be possible without the dedication of those who educate the public about the vital stewarding of the Napatree Point Conservation Area and about maintaining the historic and community character of Watch Hill.

We are especially grateful for the support of the membership of the Conservancy, our Community Programming Sponsors, the A.M. Roberts, Jr. Charitable Foundation, the URI Coastal Institute; and our staff, Board of Directors, Science Advisors, and volunteers who give so much of their time and wisdom to achieve our mission.

Cover photo credit:
Stacy Clark @coastaltown_photos

KEEPING THE TRAINS RUNNING ON TIME....

By Peter August

The Watch Hill Conservancy is a complex organization. There are many moving pieces in meeting our mission to protect community character, steward the Napatree Point Conservation Area, and deliver informative and interesting programs to the Watch Hill and Westerly communities. Four years ago, then Chairman & President Deborah Lamm asked if I would be willing to serve as President so she could, as Chairman, focus on the rapidly expanding activities in the Conservancy's community character portfolio. I would focus on working with staff on office operations and programming.

There is a running joke among Conservancy staff and leadership; when someone proposes an interesting idea for a new initiative or important project, the answer is always "that will be exciting to do when things slow down;" this is followed by bellowing laughter. There is no slow period! The Conservancy workload has its seasons, and they are all busy: summer is a blur with Napatree programming, the Celebration of Summer, Lanphear LIVE!, and hosting the myriad of other events that we deliver and participate in.

Whereas Watch Hill Village slows down in the Fall, the Conservancy is a beehive of activity with getting a Conservator out, launching the membership drive, filing IRS forms, and preparing the following year's budget. The winter and spring months are when the Celebration of Summer and Lanphear LIVE! are planned, summer staff are interviewed and hired, and a season-opening Conservator is prepared.

Stewarding Napatree is a year-round activity. For the past few years, intense winter storms have brought challenging new management issues, and in summer and fall, education programs for our visitors are delivered and stewardship projects are done. Protecting community character has its seasons too: zoning and planning matters can fill the winter months, and the summer challenges are predictable – parking, public safety, and accommodating thousands of visitors in the small village.

Other chores know no season - IT issues must be addressed, a web site must be curated, messaging our membership is ongoing, managing our budget, keeping the membership and donor data current, writing grant proposals, and the list goes on.

Dennis Algiere will now serve as Chairman and President so I can focus on working with the Napatree Science Advisors, a role I have had for the past 15 years. It has been a pleasure serving as President, working with Conservancy Leadership and all the great staff we have had over the years. The Watch Hill Conservancy is lucky to have such a strong team to "keep the trains running on time!"

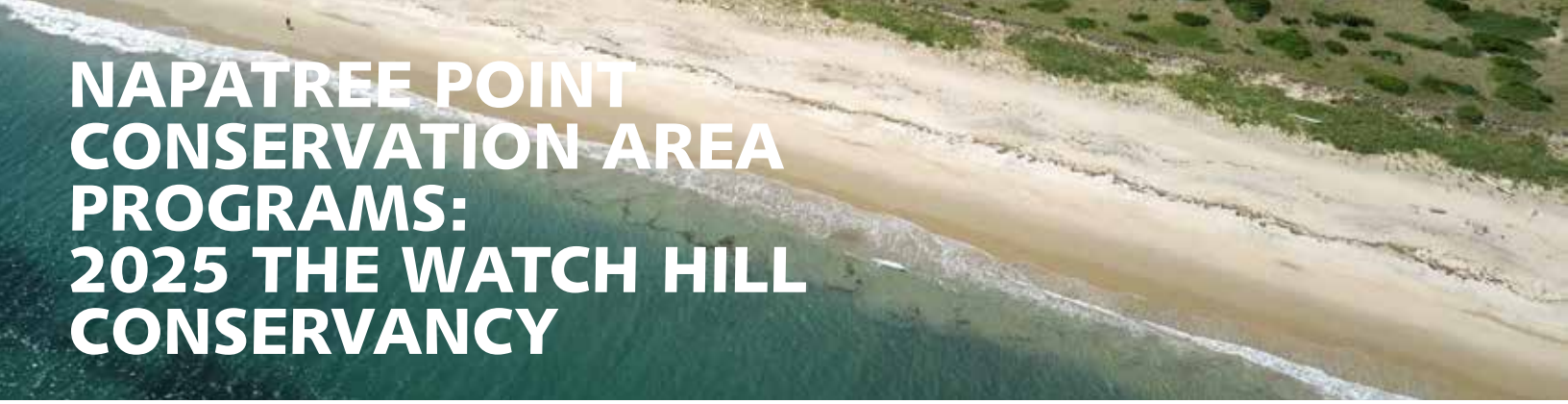
The Conservancy Announces Napatree Point 5-year Work Plan

Over the next year, The Watch Hill Conservancy will collaborate with Impact by Design, a renowned environmental consulting firm, to develop a 5-year work plan for the Napatree Point Conservation Area focusing on Napatree's scientific, monitoring and stewardship programs. The workplan will use the Open Standards for the Practice of Conservation, or Conservation Standards for short. The Conservation Standards are an internationally recognized set of principles and practices that bring together common concepts, approaches, and terminology for conservation project design, management, and monitoring. At the end of the year, a work plan that aligns conservation priorities, research efforts, and management strategies under a consistent and actionable framework will be developed for the Napatree Point Conservation Area. This work planning process is made possible through funding from a URI Coastal Institute grant and a donation from ParsonsKellogg.

IN THE COMMUNITY

Thank you to everyone who joined the Conservancy on Thursday, February 13 at Martin House Books in Westerly for a wonderful evening discussing our most recent publication *Napatree Point: A Decade of Stewardship* with authors Dr. Peter August (Senior Science Advisor), and Daniel T. Cole (Napatree Point Conservation Area Manager).

The Conservancy proudly hosted a sold-out presentation of the compelling documentary *Beneath the Polar Sun* on Sunday, March 30 at The UNITED Theatre. Thanks to our audience and to Diana Kushner, Stephen Smith, and Chris Horvath, for speaking at the event about their harrowing experience in the Arctic Circle, and the dramatic effects of global warming and climate change.



NAPATREE POINT CONSERVATION AREA PROGRAMS: 2025 THE WATCH HILL CONSERVANCY

EDUCATION PROGRAMS

Napatree Investigators Program

Tuesday, Wednesday, Thursday
8:30 AM – 10:30 AM

PROGRAM DATES:

Week 1 – Seining – July 8th, 9th, and 10th

Week 2 – Tidal Pools – July 15th, 16th, and 17th

Week 3 - Crabbing – July 22nd, 23rd, and 24th -

Week 4 - Clamming – July 29th, 30th, and 31st

Week 5 – Lagoon Exploration – August 5th, 6th, and 7th

Week 6th — Beach Combing - August 12th, 13th, and 14th

Foster your child's curiosity for the flora and fauna of the various habitats and ecosystems of the beautiful beach environment of Napatree Point, a premier RI coastal Conservation Area. With a different environmental theme each week, participating Investigators will spend the morning on the beach with Watch Hill Conservancy Naturalists as they learn and explore. Each child will take home a custom t-shirt as a souvenir of this special opportunity to be up close and personal with nature and the beautiful shoreline.

Ages 7-13 (Registration required)

REGISTER FOR ANY OF OUR EDUCATION PROGRAMS HERE

FOR MORE PROGRAM INFORMATION, PLEASE VISIT:
www.thewatchhillconservancy.org

Beach Bums Children's Program

Monday Mornings
9:00 AM – 10:00 AM

PROGRAM DATES:

June 9th, July 14th, August 11th, September 8th

Educational beach time is fun for the little ones. This hour-long program with the Napatree Naturalists will consist of a children's story and an interactive activity/game covering topics such as Horseshoe Crabs, Shorebirds, Hermit Crabs, and Beach Clean-Up. Each participant will take home a small, child-safe souvenir. Parents must accompany their children.

Ages 4-6 (Registration required)

Beach Bums Yoga (NEW)

Monday Mornings
9:30 AM – 10:15 AM

PROGRAM DATES:

June 18th, July 23rd, August 20th

This children's yoga beach class is designed to combine the calming benefits of yoga with the fun and excitement of being at the beach. The class will be engaging, interactive, and educational, aimed at children ages 4-6. It focuses on mindfulness, body awareness, and playful movement while incorporating the natural surroundings of the beach. Parents must accompany their children.

Ages 4-6 (Registration required)

Horseshoe Crab Community Science Program – Project Limulus

SELECT MORNING AND EVENINGS DURING THE MAY AND JUNE FULL AND NEW MOON HIGH TIDES

Ages 12+ (Registration required)

Join us for our 19th year participating in Project Limulus, a scientific survey tracking horseshoe crab populations. Volunteers will walk two miles along the Napatree Point Conservation Area during the May and June full and new moon high tides—prime spawning time for these ancient creatures. The survey takes 2-4 hours, depending on horseshoe crab activity (anywhere from zero to a thousand crabs might be encountered). While all are welcome to participate in this important conservation effort, participants should be prepared for the physical demands of the survey. Experience these "living fossils" up close while contributing valuable data to this long-term research program.

Bird and Learn (NEW)

Sunday Mornings | 8:00 AM – 9:30 AM

PROGRAM DATES: June 1st, July 6th, August 3rd, September 7th

Ages 10+

We welcome both new and experienced bird watchers to join us in exploring the variety of bird species in the Napatree Point Conservation Area, recognized as a "Globally Important Bird Area" by the National Audubon Society. During our 2-mile walk, we'll observe and learn about these beautiful animals, sharing our appreciation and knowledge with each other. This program is open to anyone with a desire to learn about birding or share their expertise. We encourage your curiosity and enthusiasm as we aim to foster lasting connections. A limited number of binoculars will be available for participants.

Horseshoe Crab Family Walks

9:00 AM – 10:00 AM

PROGRAM DATES: Saturday, June 14th, Sunday, July 6th

All ages (Registration required)

Explore the fascinating world of horseshoe crabs. Discover why these remarkable "Living Fossils" have survived for over 300 million years, learn about their significant contributions to medical research, and understand their crucial ecological importance to Napatree Point and Little Narragansett Bay. This informative outdoor experience offers a unique opportunity to appreciate these ancient creatures and their role in our local ecosystem. This walk is perfect for all ages!

Natural History Walks

Saturday Mornings | 9:00 AM – 10:30 AM

PROGRAM DATES: June 21st, July 5th, July 19th, August 2nd, August 16th, August 30th

All ages

Join our Naturalists for a themed walk (plants, birds, marine life) based on participants and enjoy this excellent opportunity to learn about the natural history of Napatree Conservation Area.

RI Audubon Society Horseshoe Crab Expedition

6:30 PM – 8:00 PM

PROGRAM DATE: Tuesday, June 24th

Ages 10+ (Registration required)

Join Audubon and The Watch Hill Conservancy for a unique experience to learn about the fascinating anatomy and life history of horseshoe crabs and their important role in coastal ecosystems. Start with a short introduction and then walk along the beach in search of these captivating critters and the shorebirds that feast on their eggs!

Register Here for Horseshoe Crab Expedition

Seine Net Program

Saturday Mornings | 9:00 AM – 10:30 AM

PROGRAM DATES: June 28th, July 12th, July 26th, August 9th, August 23rd, September 6th

All ages

Cast a wide net! The Seine Net program highlights the importance of the Little Narragansett Bay ecosystem and its connection to the Napatree Point Conservation Area. Join the Naturalists as they literally cast a large net into the water, catching marine life for up-close and personal examination. Grab your own mini dip net and delight in what you can bring to the surface.

What's Going On with the Lagoon?

By Alan Desbonnet

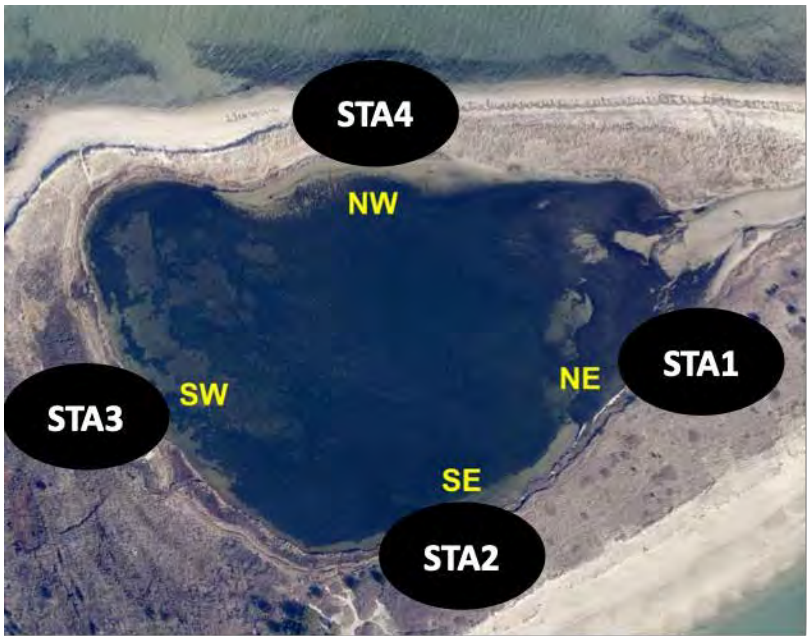
The 10-acre lagoon on the western end of Napatree Point provides habitat for shorebirds, fishes, and other organisms. Over the past decade it has been part of an ecological monitoring program. Early studies mapped lagoon depth and boundaries, then focused on physical and biological oceanographic parameters. These studies established a baseline of environmental and ecological conditions for the Napatree Point lagoon ecosystem.

In 2023 science advisors noticed that the channel to the lagoon was naturally closing off at its mouth, reducing tidal interaction with Little Narragansett Bay. Lagoon ecosystems change constantly over time. They get shallower as sediments accumulate and sometimes their connection to adjoining waters closes off, reopening during some future storm event, or perhaps never again. We monitored four sample stations in the lagoon during the first few years of channel restriction.

We conducted monthly monitoring in the early morning and during low tide. Mornings were chosen because the oxygen was low after a night of consumption by the marine animals. At low tide, no new, oxygenated water came in through the bay via tidal flushing. This would provide a look at the lagoon ecosystem during the most stressful time frame. Here is what we found for 2023 and 2024 as tidal flow to the lagoon became increasingly restricted—sometimes seeing weeks without water exchange in 2024.

In 2024 we found the same species of fishes as 2023, but total number of fish collected was about half as many—1,411 fish collected in 2023, 781 during 2024. A similar result is seen in the number of crabs collected—in 2023 a total of 65 crabs were collected while in 2024 only 10 crabs were found. Interestingly, in 2023 56 of the 65 crabs were Green Crabs (Carcinus maenas), while in 2024 only 1 Green Crab was found—the rest were Blue Crabs (Callinectes sapidus).

Big changes were seen in lagoon environmental conditions, using dissolved oxygen as an indicator of conditions experienced by the aquatic organisms living in lagoon waters. In 2023 dissolved oxygen dropped to levels considered stressful on 2 occasions, once in July and once in August, and



these conditions were short-lived. In 2024 however, dissolved oxygen dropped to levels considered life-threatening during late July and remained stressful through August and into September.

This result is not surprising. When we compare tide level measured in the lagoon and compare it to that measured in Little Narragansett Bay, we see that the lagoon only showed tidal action during the highest of high tide events. On top of that, during mid to late July of 2024, the Watch Hill region underwent a week plus of calm winds, dense fog lasting into the afternoons, and high temperatures. Weather, plus lack of tidal action, created the external conditions to create the low oxygen, high stress conditions measured in the lagoon, and let them persist much longer than if daily tidal flushing in the lagoon occurred.

Should we be concerned? What should we do?

Concerned? No. What we are seeing is the natural process of barrier beach change playing out on Napatree Point. The organisms living in and around and using the lagoon will shift what they do and how they do it in response to lagoon changes.

What should we do? We should enjoy our ability to watch a barrier beach lagoon ecosystem behave. We will continue to monitor the lagoon and report on results, improving our understanding of this unique lagoon ecosystem, and helping to tell a fascinating story about ecological change along Napatree Point barrier beach.

WHC AWARDED STATE WILDLIFE GRANT

The Watch Hill Conservancy is excited to be a recipient of a grant from the US Fish and Wildlife Service State Wildlife Grant in partnership with the State of Rhode Island Department of Environmental Management. The 3-year grant will support the horseshoe crab monitoring program in the Conservation Area. The funding will allow The Conservancy to increase community science volunteer opportunities and collect additional data on the horseshoe crab population in Little Narragansett Bay. This year will be the 19th year of the horseshoe crab monitoring program in the Napatree Point Conservation Area.

2024 BEE SURVEY WORK ON NAPATREE POINT

By Toby Shaya, RIDEM, Division of Fish and Wildlife Pollinator Atlas Entomologist

The Napatree Point Conservation Area is a gem within Rhode Island and southern New England's system of natural areas. It has been the focus of much research and monitoring, with a heavy focus on birds and the nesting and foraging habitat the Point provides. However, the Rhode Island Division of Fish and Wildlife, is bringing light to another aspect of Napatree's biodiversity - bees!

Within the United States there are 4,000 species of native bees, many of which live very different lives from the honeybees most of the public thinks about. These native bees are often small, with great variation in color, hair, and foraging preference and may even be mistaken for flies! In 2017, University of Rhode Island (URI) scientists Aya Rothwell and Howie Ginsberg conducted a bee survey in the Napatree Point Conservation Area where the unique and high-quality maritime herbaceous dunes, shrubland, salt marsh, and sandy bluffs create a valuable coastal site for bees.

From their work, they found 53 bee species, including 5 that were state records, or bees that had never been found before in Rhode Island. To identify most bees to species a physical specimen is needed, as their true identity is determined by the density of microscopic pits on a certain segment, the ratio of length to width of a certain segment, and other traits that can only be seen using a high magnification microscope to ascertain species identification. To acquire this, the sampling was done using nets and also bee bowls - small plastic bowls filled with soapy water that bees think are flowers.

Based on the URI findings from 2017, in 2024 the Rhode Island Division of Fish and Wildlife (RI DFW) also decided to survey for bees in the Conservation Area as part of its statewide Rhode Island Wild Bee Survey. Field work was conducted from June through October and was done at the same sites that URI used in their study. Findings revealed that notable floral hosts Lathyrus japonicus and Solidago sempervirens, were being visited by many types of bees and other pollinators in the early Fall. Furthermore, it was observed that the south-facing sand and clay bluff slopes on the western tip of Napatree provided great nesting habitat for many bee species. Although this type of habitat occurs elsewhere in RI, the ease of access in terms of height and ground stability allows us to understand the importance of and relation between the floral and nesting resources in Napatree's valuable dune habitat.

This summer RIDFW will be processing and identifying the 2024 specimens collected at Napatree, with further surveys planned for the future.

Documenting the Impacts: Winter Storms on Napatree

By Bryan A. Oakley, Science Advisor and Emma E. Bean, Naturalist

As part of the regular on-going geologic monitoring of the Napatree Point Conservation area, Conservancy Science Advisors and Naturalists (Emma Bean, Keith Killingbeck, Emily Watling, and Peter August) documented the impact of three successive storms in December 2023 and January 2024. For context, the return period for storms (typical time between storms) with the water levels observed at NOAA tide gauges in Newport, RI and New London, CT was 5-10 years, so these were not insubstantial storm events. Wave heights measured southeast of Block Island during the 2023 storm approached 30 feet (9 meters), which was just below the maximum wave heights observed during Sandy. Additionally, the close timing of these storms exacerbates the overall impact. Both the 2023 and January 10 storms overtopped the dunes along much of the barrier, particularly where the dunes were less than 15 ft above sea level. While this led to some dune erosion along the front of the barrier, sediment was transported to the interior of the barrier and deposited as washover fans. This is the natural process that allows the barriers to be resilient to storms (and sea level rise). While visitors to NPCA in the days and weeks after the storm may have been horrified to see areas formerly occupied by beach grass to be bare sand, the vegetation recovered rapidly following the storm, and by the end of the summer of 2024 the vegetation (largely American Beachgrass (Ammophila breviligulata) had restored itself. This is well illustrated in a time-lapse video by August and Killingbeck which can be viewed at: https://www.youtube.com/watch?v=Dkhq5vABa4c

Recovery of the dunes themselves, which is measured as the height and volume of the dune sand, will take longer. Following Superstorm Sandy (October 2012) the dunes largely recovered in 5 to 7 years along the barrier. Since much of the vegetation survived the recent storms, the recovery here might be a bit shorter, but will still take years. As a coastal barrier spit, storm events are the primary driver for changing the landform. During these events, storm surge and wave run-up can overtop the dunes in a process known as overwash, transporting sediment across the barrier. Understanding the future dynamics of shorelines in a time of rising sea level coupled with the potential for increased frequency and intensity of both tropical and extra-tropical (nor'easters) storms requires data on existing (and past) rates and processes. As a (largely) undeveloped barrier, we can observe these processes without a threat to property and infrastructure.

Save The Date

CELEBRATION OF SUMMER 2025

MISQUAMICUT BEACH CLUB

FRIDAY, JUNE 27, 2025

NOW IN OUR 8TH SEASON!

LANPHEAR LIVE!

SOCIETY, HISTORY, NATURE, TECHNOLOGY

JULY 14 - MONDAY - 6:00 PM

CONSERVING THE WATCH HILL CAROUSEL

Gary, Beth & Ben Anderson
Anderson Artworks, Stonington, CT

JULY 21 - MONDAY - 6:00 PM

THE WILDLIFE CENTER OF RI

Dr. William Morrissette, Executive Director
Saunderstown, RI

AUGUST 4 - MONDAY - 6:00 PM

THE IMPORTANCE OF SUSTAINABLE AQUACULTURE

Perry Raso, Matunuck Oyster Bar
Matunuck, RI

AUGUST 18 - MONDAY - 6:00 PM

GOING TO EXTREMES: ADVENTURE TRAVEL PRESENTATION

Peter Mandel, Travel Journalist
Providence, RI

AUGUST 25 - MONDAY - 6:00 PM

ANNUAL MEETING of THE WATCH HILL CONSERVANCY
Ceremonial Stonework: The Enduring Native American Presence on the Land

Markham Starr, Photographer
North Stonington, CT

SUMMER 2025

Chaplin B. Barnes Reading Room
Lanphear Livery
One Bay Street, Watch Hill

FREE ADMISSION

THE WATCH HILL CONSERVANCY

www.thewatchhillconservancy.org

NAPATREE *Investigator*

SPRING 2025

HOWDY, INVESTIGATORS!

Remember the fun we had on the beach last **summer**? Do you miss being out there as much as we do? Well fear not, because this issue of the Investigator will bring your mind back to sunny, warm days of sand and water with Napatree Naturalists Steve and Hugh!

DO YOU KNOW THE ANSWERS TO THESE QUESTIONS? YOU WILL WHEN YOU READ ON!

- When you wave at a wave, what are you waving at?
- What is that long line of debris on the beach called?
- Which animal makes its nest right on the open beach?

CRITTER CORNER: PIPING PLOVERS

One of our trips to the shore last summer revolved around a little bird with strange nesting habits: the Piping **Plover**. As you recall, we learned that Piping Plovers nest right out on the open sand. Most of the time, they don't even build a nest! They make a small dent in the sand (sometimes called a divot) and lay their eggs right there. That's why you'll sometimes see **ropes** along the dunes: to keep the **plover** eggs safe!

In most cases, plovers will lay two to four eggs. Those eggs are usually arranged in a neat little square. The mother and father spend almost a month incubating the eggs. During the brief moments when neither of them is on the nest, they rely on the eggs' **camouflage** to keep them out of sight of predators.

While we were learning about plovers, we had a kind of scavenger hunt to see who could find the four "nests" that we had set up in the sand. The ones with colored glass "eggs" were pretty easy to find, but when we had to search for the ones that looked like real eggs, their speckled, sandy appearance made them much tougher to locate.

Finally, we learned that **plover** chicks begin to feed on small insects when they're just an hour old. And in order to get a sense of what that felt like, we practiced running back and forth to the wrack line to get "food" and return to the nest before predators caught us!

WAVING AT THE WAVES

Waves are present almost every day at Napatree: small ones on quiet days that barely make a sound. Big ones that come crashing and make you run for your boogie board to ride them in. But where do waves come from?

If you've played with dominoes, or even watched videos of people playing with them, you're seeing energy in motion. When dominoes are lined up next to each other, they're sitting still, with no energy passing through them. But if you tip one over with your finger, you're creating a flow of energy. That flow moves from one domino to the next, until it reaches the end of the line.

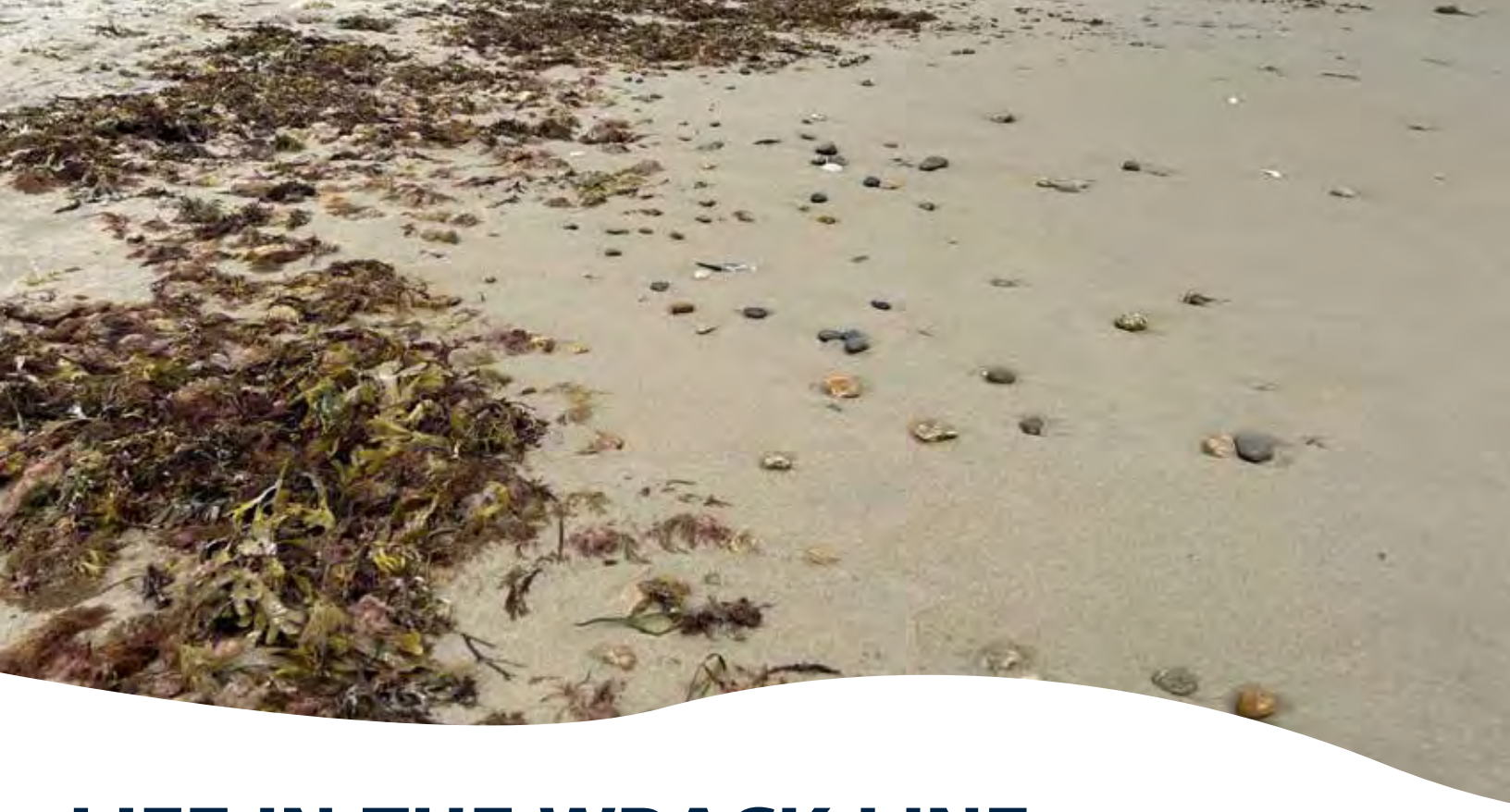
On Napatree, the **wind** takes the place of your finger, and water takes the place of the dominoes. **Wind** comes from the movement of air as it warms and cools in the atmosphere. When there is a lot of air movement, the **wind** pushes the waves. Like dominoes, each section of water doesn't move far. It just bumps into the water next to it, which transfers the energy to the next section of water. That flow continues (and sometimes builds) until the wave finally reaches the shores of Napatree.

So the next time you come to the beach, tell your family that you're watching energy in motion, just like dominoes!

Crossword Puzzle Key

DOWN: 1. Incubating, 3. Plover, 4. Camouflage, 5. Magnifying, 7. Summer

ACROSS: 2. Wrack 6. Investigators, 8. Ropes, 9. Wind



LIFE IN THE WRACK LINE

Napatree Point is a piece of land with water on three sides, called a peninsula. At Napatree, that peninsula is pretty straight, which means that on the ocean side, you can look from one end of the beach to the other. When you do, you'll see one other natural feature that we learned about this summer. It's those stripes of brown that run the entire length of the beach, known as the **wrack** line.

When the wind stirs up the ocean, the water often stirs up plant material and other items. As the tide rises, the waves push farther and farther toward the dunes. Just at the point when the water is at its highest, the waves will drop the plant material on the sand. Most of that will remain on the beach in a fairly straight pattern, forming the **wrack** line. From a distance, the wrack line may look like a single layer of plain old mess. However, looks can be deceiving.

Last summer, Investigators took a close look at the materials found in the wrack line. Armed with **magnifying** glasses, white tubs, and specimen jars, they combed through the materials to see what they could find. Naturalist Steve placed several hula hoops on the ground. That would limit the territory each Investigator group had to cover.

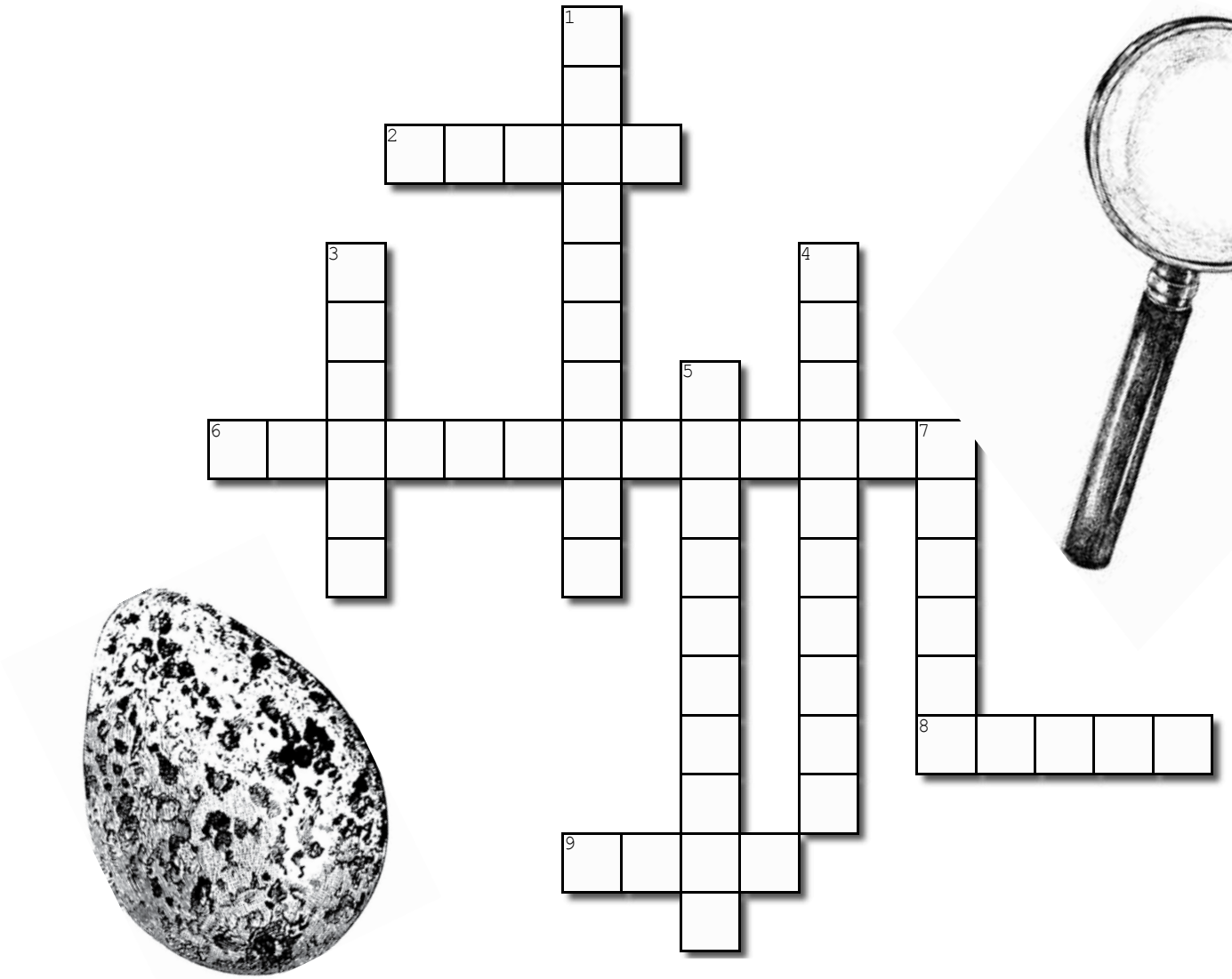
By the time they were through, Investigators had found things such as Irish moss, kelp (sometimes used in toothpaste!), sand fleas (which are important food sources for birds), fish bones, and much more. What they learned was that what seemed to be a simple line of brown "stuff" was actually a pretty important part of the beach ecosystem. So next time you're on the beach, take a few minutes to get down in the sand and take a close look at the wrack line!

That's all for now! Keep a close watch on the natural world when you're not at Napatree, and write down what you find. Meanwhile, naturalists Steve and Hugh look forward to seeing you back on the beach soon!

Wrack photo by *Janine L. Weisman, Rhode Island Current*

Crossword Puzzle Challenge

Time to investigate The Investigator! Each of these words appear in this issue. Sharpen your pencils and have fun!



ACROSS

2. This is the line of seaweed that washes up on our shore.

6. We call ourselves Napatree _____ .

8. We help protect our birds by putting up yellow ____ .

9. Energy in the form of _____ creates waves.

DOWN

1. Plover parents take turns _____ their eggs for about a month.

3. This bird lays its eggs right on the beach – Piping _____ .

4. Our bird relies on _____ to keep their eggs out of sight.

5. We often use _____ glasses to get a closer look at tiny insects.

7. We hope to see you this _____ on the beach!