



**THE WATCH HILL CONSERVATOR**  
222 Watch Hill Road  
Watch Hill, Rhode Island 02891

Return Service Requested

NONPROFIT ORG.  
U.S. POSTAGE **PAID**  
WESTERLY, RI  
PERMIT NO. 26



THE WATCH HILL CONSERVANCY NEWSLETTER

MARCH 2012 VOL. 5 NO. 1 WATCH HILL, R.I.

## Why Bay Street? Why Now?

Bay Street is now under construction from Larkin Square to Wauwinnet and Sunset Avenues. Trenches are being dug for new storm drainage and water lines. The Conservancy has taken the necessary initial steps to eventually bury the electrical and communication wires and remove the utility poles by providing the Town with technical and financial support to install an underground utilities duct bank while the street is dug up. Underground utility wires can be routed through the duct bank and the poles removed at any time after the street work is finished.

It is time to replace Bay Street's crumbling 100-year-old infrastructure and to upgrade Bay Street with underground utilities. As simple and straightforward as it seems, there are questions about why, mainly driven by the expense of the project. Does the benefit out-weigh the expense? And why Bay Street?

Recently, the Conservancy has answered these questions for a federal grant proposal to help fund the project. In support of the application, a benefit/cost analysis shows that indeed the projected economic development benefits of the entire project – drainage, water lines, and utility upgrading – do out-weigh the costs. There are considerable additional cost savings in undertaking all of the infrastructure work at one time while the street is under construction. Significantly upgrading the infrastructure will have a beneficial effect upon the desirability of Bay Street for re-investment with attendant job stabilization and growth. This adds to Westerly's economic development and helps stabilize employment and the local tax base.

Projected growth includes the potential of as much as \$46 million in private investment, 1500 spin-off jobs within the region, and a 24% increase in the local work force, in addition to stabilizing the existing 500-600 jobs on the street. Bay Street is Watch Hill's principal commercial street. It packs over 50 retail stores, restaurants, and cafes. It has hotels and inns as anchors, and a number of second-story residential units. It is a focus of entertainment on the harbor and an area of great scenic and historic value. These are assets that commercial centers and main streets throughout the country would value highly. Often called one of the jewels of Rhode Island's coastal communities, Bay Street is a significant asset of the entire region.

Increasingly, Rhode Island's ocean-front communities are seeing extended seasons. With several key hotel anchors, and with a storm-proof infrastructure, can Bay Street extend its commercial season into the Thanksgiving-to-Christmas holiday period, and open for the warmer seasons as early as April or May? These are the so-called shoulder seasons, when



Photos Richard C. Youngken

many Watch Hill residents return for weekends and holidays. More importantly, they are times when local residents can enjoy Watch Hill's attractions without the congestion of summer traffic. Throughout Rhode Island, it is the shoulder seasons that provide unfettered access to the region's most beautiful places.

The Town of Westerly has supported the Bay Street infrastructure project as an economic development stimulus project. The Town sees a connection between key economic venues in Westerly – downtown Westerly, Watch Hill, Misquamicut, and Weekapaug – as furthering a positive visitor experience. When the project is completed, Bay Street will be less vulnerable to storms, ensuring less disruption to the business community, residents, and visitors alike, swifter recovery, and, as an aesthetic by-product, a more attractive streetscape. The Conservancy will continue its active role in moving the project forward for the benefit of Watch Hill and the entire town.

RCY

*Next: Bay Street Progress Report ...*

**THE WATCH HILL CONSERVANCY**  
222 Watch Hill Road  
Watch Hill, Rhode Island 02891  
(401) 348-6540

### *Directors and Officers*

Frederick B. Whittemore,  
*President and Chairman*  
Richard H. Sayre,  
*Vice President, Vice Chairman,  
and Treasurer*  
Chaplin B. Barnes,  
*Vice President and Secretary*  
Peter B. Griffin,  
*Vice President*  
Jane B. O'Connell,  
*Vice President*  
James R. Barnes  
Elizabeth W. Bean  
Marian C. Burke  
Harvey C. DeMovick III  
T. Wilson Eglin, Jr.  
Donald R. Kelly  
Susan Kozel  
Deborah Lamm  
Joan A. Lemp  
Charles E. Long  
George W. Markham  
Thomas F. McWilliams

Robert Severud  
Grant G. Simmons III  
H. Brian Thompson  
Henry Toolan  
Richard G. Unruh, Jr.  
Charles S. Whitman III

### **Advisory Council**

Charles M. Royce  
Thomas P. Sculco  
Thomas R. Wall IV

### **Staff**

Chaplin B. Barnes, *Executive Director*  
Judith H. Kelley, *Office Manager*  
Lyn Traver, *Administrative Assistant*

### **The Watch Hill Conservator**

Joan Youngken, *Contributing Editor*  
Design, Puffin Enterprises

For information about community events, lectures, concerts, nature walks, educational programs for children, and others, see the Conservancy's website below.

[www.thewatchhillconservancy.org](http://www.thewatchhillconservancy.org)

### *Town of Westerly Appoints Architectural Review Board*

In October 2008 the Westerly Town Council enacted an ordinance providing for the establishment of a Westerly Architectural Review Board, to provide guidance to the Planning and Zoning Boards in the form of advisory opinions with regard to the design of buildings, structures, landscaping, and site layout, with the objective of promoting development in harmony with Westerly's architectural heritage. At the Council's meeting, January 9, 2012, a five-person Board was elected including Chaplin B. Barnes, Executive Director of the Conservancy. Chap has served on the Town Comprehensive Plan Committee and was a collaborator with author Richard Youngken of the Conservancy's 2009 history of the architecture of Watch Hill, *Watch Hill Style*. The Bay Street Shore Commercial District of Watch Hill remains the only part of the Town which is protected by architectural design standards, which were promoted by the Conservancy and enacted into ordinance in 2006.



Photo Richard C. Youngken



## BAY STREET PROGRESS REPORT

*At the early January bi-monthly construction meeting for the Bay Street project, Steve Trembl of Boyle and Fogarty, the project contractors, reported vividly what he found in Sunset Avenue as the backhoe dug into the street, lifting out the macadam and substrate: huge boulders and bedrock. In fact, the ancient water lines exposed by the excavation in this location were bent around and over the boulders. A lively discussion followed among the project engineers, utility representatives, Town personnel, and Fire District and Conservancy staff present about what more could be expected as the project unfolds.*

*Already, Boyle and Fogarty have dealt swiftly with obstacles, including tidal flooding, while they excavated and installed the storm water holding tanks under the Fire District's north and south parking lots on the harbor. So far, the much-needed installation of new infrastructure, in particular the new storm water drainage system, is ahead of schedule.*

The unusually warm and dry winter weather has been beneficial. In January, excavation of portions of Wauwinnet and Sunset Avenues, and the northern end of Bay Street, in the vicinity of the Holdredge Garage, proceeded. This section of drainage will connect with the north parking lot subsurface detention system. Once the storm water system is in place, trenching will continue for the new water lines and the underground duct bank for the utilities.

Project meetings uncover logistical needs and promote coordination with the objective of anticipating snags and delivery of the project on time and on budget. This spring, weather permitting, the contractors hope to complete the project north of Plimpton Avenue before work is halted for the summer season. This would include roadway repaving and sidewalk repair. For the remaining stretch of Bay Street and Lower Larkin Road, the roadway will be temporarily repaved for commercial activity, with the sidewalks fully functional. After Columbus Day construction work will continue south of Plimpton Road with project completion scheduled for December 2012. This stage of construction will bring the underground duct bank to the Merry-Go-Round and lower Larkin Road.

As work proceeds, additional public and private funds are being sought to complete this multi-phased project, including the duct bank installation, running the wires through the duct bank, removing the utility poles and highway lamps, and installation of appropriate pedestrian-scaled lighting. Once the underground utilities duct bank is installed this year, actual removal of the wires and poles can be accomplished when funds allow next year or the following year without disturbing the street. Needless to say, burying utilities on a historic commercial street is not an inexpensive task. Completion of the project is dependent on funding availability and may take sev□



Photo Richard C. Youngken

## Coastal Fellows

The Watch Hill Conservancy and Fire District had the pleasure of hosting two more University of Rhode Island students as Coastal Fellow interns at Napatree Point Conservation Area (NPCA) during the 2011 summer and fall field seasons.

Adriane Gorski, now a senior majoring in Pre-Veterinary Animal Science, set traps designed to secure the tracks of mammals using only bait such as tuna and peanut butter. She determined the site locations and methods and kept a detailed log of results and success as well as GPS points of all traps and tracks and accompanying photographs. She found that striped skunk, Virginia opossum, and red squirrel will stay within their habitat and range while meadow vole and white-footed mice are lured by bait type. White-tailed deer and American mink tracks were also sighted and recorded.

Adriane further outlined future opportunities to identify larger species using alternate tracking techniques. As summarized in her presentation to University and affiliate colleagues, "keeping an accurate mammal inventory of NPCA is crucial for environmental management. Comprehensive knowledge of the

predators and prey that inhabit this barrier beach will ... better manage populations of endangered and vulnerable species such as piping plovers and Atlantic horseshoe crabs and maintain the ecosystem equilibrium."

Timothy Lima, also a senior but majoring in Wildlife Conservation Biology, expanded a project initiated in 2010 by another Napatree Coastal Fellow. He utilized GPS and exhaustive and exhausting ground exploration to survey invasive plant species in the densely-vegetated western end, fort, marsh, and lagoon spit, followed up with identification of new flora not already catalogued, and took note of damage and successive regeneration after Hurricane Irene. His findings included widespread Asiatic bittersweet and invasive phragmites, and isolated stands of porcelain berry, purple loosestrife, and an aggressive thistle. The invasive plants totaled approximate 27% of his survey area. Tim researched the most appropriate next steps to take to manage these species, noting in his presentation that "coming up with an invasive species management plan for the Napatree Point Conservation Area is unique due to its relatively narrow landscape and virtually unlimited public access ... [but] maintaining native plant species is important to a healthy, well balanced ecosystem."



We look forward to two more Fellows in this upcoming 2012 season, expecting that the plant survey will conclude and shorebird/human interaction will be studied. Water quality monitoring and Atlantic horseshoe crab surveys will continue and lagoon conditions and changes will be analyzed, among other exciting projects. JB

## News & Notes

### Save the Dates

The date of the Conservancy's annual *Celebration of Summer* has been moved! In the past, this festive event (and the principal fund-raiser for the Conservancy) has been held the last weekend in June. This year it's moving to Saturday, July 14. As always, it will be held at the Misquamicut Club Beach Club, and will include fantastic food, a bounty of beverages, and a super live auction. Early donations of auction items are very exciting, and more are on the way. Check the Conservancy website this spring and the June newsletter for details. For now: save the date!

The Watch Hill Fire District Annual Meeting will be held on Saturday, July 14 at 9:30 a.m. at the Firehouse, 222 Watch Hill Road, Watch Hill.

The annual meeting of the Watch Hill Conservancy will be held on Saturday, August 11 at 10 a.m. at the Misquamicut Club Golf Club on Ocean View Highway in Watch Hill. Watch for details in the June issue of the *Conservator*.



Photo Richard C. Youngken

### Events of Interest

#### 2012 Rhode Island and Water Conservation Summit

Saturday, March 10 at the URI Memorial Union, Kingston

Keynote Speaker: Lisa Wong, Mayor of Fitchburg, Massachusetts will speak on the topic of urban conservation as a revitalization strategy.

A full day of workshops for Watershed Council, Land Trust, and Conservation Commission board members, staff, volunteers, Municipal Commission members and others interested in land and watershed conservation. Choose from more than two dozen sessions covering topics from invasive plants to rights of access to fresh water and much more. Details at [Landandwaterpartnership.org](http://Landandwaterpartnership.org).

#### Rhode Island Natural History Survey Conference 2012

*The Ecology of Rhode Island: Trends in Human-Wildlife Conflict*

Thursday, March 29, 2012

Quonset O Club, North Kingston

This year's theme is human-wildlife conflict, focused on problems in southern New England. Recent research, management directions, and public outreach initiatives about animal impacts on human activities (wildlife damage management) and human impacts on animals (conservation biology) will be presented through both oral papers and poster displays. For details: [RINHS.org](http://RINHS.org)

#### The 27<sup>th</sup> Annual RI Statewide Historic Preservation Conference:

*Heritage in America's Great Outdoors*

Saturday, April 21, 2012

Woonsocket, R. I.

See [Preservation.ri.gov/conference](http://Preservation.ri.gov/conference) for details.

### Watch Hill Vision 2012: a five-year strategic plan revisited

In September, 2007, the Watch Hill Conservancy and the Watch Hill Fire District Council adopted the planning document designed to direct their efforts and resources for the subsequent five years. As the end of the period approaches, they can look back at their goals with satisfaction. While it's understood that many of the activities are on-going, progress has been made in the following key areas and others: modest steps to address improvement and enhancement of traffic safety, parking, and alternative means of transportation; management of Watch Hill beaches to ensure their ecological health while encouraging appropriate use by residents and visitors; exploring architectural design and site plan review; production and distribution of an architectural design guidebook; providing improved services and facilities. Space limitation prohibits a detailed review here, but the participants can point with satisfaction to progress to date as they move forward.

As the planning period draws to a close, the Conservancy and Fire District will review the original plan, evaluate its progress, and revise and update the plan accordingly. The *Conservator* will keep readers informed as the process moves forward.

## MEMBERSHIP FORM

*The Watch Hill Conservancy is a non-profit organization. Your membership supports the protection of the natural and cultural resources of Watch Hill, a variety of programs, and educational publications, including this newsletter.*

Member name: \_\_\_\_\_

Preferred mailing address: \_\_\_\_\_

City: \_\_\_\_\_

State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone: \_\_\_\_\_

Email: \_\_\_\_\_

INDIVIDUAL: \$25

No: \_\_\_\_ Total: \$ \_\_\_\_\_

BUSINESS: \$100

No: \_\_\_\_ Total: \$ \_\_\_\_\_

FAMILY: \$100

No: \_\_\_\_ Total: \$ \_\_\_\_\_

SUPPORTER: \$250 - \$499

No: \_\_\_\_ Total: \$ \_\_\_\_\_

SPONSOR: \$500 - \$999

No: \_\_\_\_ Total: \$ \_\_\_\_\_

PATRON: \$1,000 - \$2,499

No: \_\_\_\_ Total: \$ \_\_\_\_\_

BENEFACTOR: \$2,500 - \$5,000 or more

No: \_\_\_\_ Total: \$ \_\_\_\_\_

OTHER CONTRIBUTION Total: \$ \_\_\_\_\_

Mail to:

THE WATCH HILL CONSERVANCY  
222 Watch Hill Road  
Watch Hill, R.I. 02891

Please include names of family members 18 and under. If you are making gifts of memberships, please include the names and addresses of those to receive these gifts.





to rocks, such as the ones at our usual first stop-off on the bay side of Napatree. Once they die, some of the empty shells are carried up to the beach, allowing Investigators to discover new treasure!

We placed as many different varieties as we could into our collection boxes. The compartments of the boxes made collecting a challenge, too, since the spaces would only allow very small shells to be included. This turned out to be a favorite adventure for Investigators, and one that we'll be taking again this summer!

### CRITTER CORNER: COMMON PERIWINKLE

They're all over the place at low tide: little snails, often looking like little black marbles. They're on rocks, in the mud, on docks. They're the common periwinkle!

Although they're everywhere now, there was a time when they weren't anywhere! Well, not anywhere around here, at least. Scientists say that periwinkles probably came to the shores of North America in the mid-1800's, clinging to sailing ships from England. I guess they liked it here, because today it's the most common snail found along our shores!

If you're patient, you can watch a periwinkle as it goes about its very slow business. When you watch it move along, you will see the shallow trail it leaves in the sea bottom, as if someone dragged a finger along in the mud. Periwinkles feed using something called a radula, which looks a little like a tongue. The radula has tiny teeth that scrape algae off rocks for food. At low tide, the periwinkle secretes special mucus that acts like glue. This mucus allows it to stick to rocks, and seals in needed water so it can survive the hours when the tide is low and it's exposed to air. Once the tide returns and covers the periwinkle with water, it will begin moving around again, in search of its next meal. Then the cycle begins all over again!



Photo Puffin Enterprises

*That's it for another edition of the Investigator! We sure hope you'll join us this summer as we continue learning, laughing, and investigating the amazing environment of Napatree Point!*

Editor—Hugh Markey  
The Watch Hill Conservancy and the Watch Hill Fire District operate summer educational programs at the Napatree Point Conservation Area in Watch Hill. The *Napatree Investigator* is a publication of the Watch Hill Conservancy.

### CRAB-TACULAR!

Each season, another favorite Investigator activity is crab catching, and last season was no exception. One of the many great things about crab catching is that it can be done pretty easily. Using hot dogs placed on a simple wire crab rig, Investigators gathered on the rocks to begin collecting. Using string to lower the rigs, Investigators helped each other in many different steps: some liked being in charge of the “fishing”; others stood by with nets at the ready.

When a crab crept out of the rocks to begin pulling apart the tasty treat, the “fisherman” carefully brought up the unsuspecting crab and dropped it into the waiting net. That Investigator then took the catch to a pan on the beach, where yet another member of the gang would use our field guides to figure out what we had caught. We had a terrific time, and everyone had a hand in the fun!



Photos Hugh Markey

Find out more about us by going to [www.thewatchhillconservancy.org](http://www.thewatchhillconservancy.org)

Stephen Brown: *Naturalist and director of our Napatree Investigators program*  
Hugh Markey: *Naturalist*  
Tom Pappadia: *Greeter*  
Donnie Cornell: *Warden*  
Juliana Berry: *Environmental Project Coordinator*  
Janice Sassi: *Napatree Point Conservation Area Manager*

The Watch Hill Conservancy  
222 Watch Hill Road  
Watch Hill, Rhode Island 02891  
Email: [thewatchhillconservancy@yahoo.com](mailto:thewatchhillconservancy@yahoo.com)  
Website: [www.thewatchhillconservancy.org](http://www.thewatchhillconservancy.org)

### NAPATREE NOTES

With the arrival of winter, it's not just people who have left for warmer climes. Our summer bird residents have been replaced with several bird species that come from as far away as the Arctic.

Recently, I was excited to see my first Purple Sandpiper poking around the rocks at the western end of Napatree. This plump bird is actually more gray than purple but is described as having a “purplish gloss” and has the northernmost range of any shorebird.

Our common Double-crested Cormorants are joined this time of year by the larger Great Cormorants which are frequently observed on pilings, wings outstretched allowing them to dry.

The beautiful Snow Bunting, a high Arctic breeder, can survive temperatures of -50° and is the only songbird to breed so far north. During that season, the bird is white with a black back. Its winter plumage, seen here in a picture I took in November, is much better suited to this area.

Another winter resident is the Brant, a small goose from the high Arctic tundra. This handsome bird is similar to our Canada Goose but with a black head and neck, dark grey back, and light underside.

Common Eider, the largest duck in the northern hemisphere, winter in our area. The males can be identified by their black cap and sides and white back; the females are dull brown. Once hunted almost to extinction, they are still heavily harvested today.

Information concerning sea duck numbers and distribution is scarce but scientists have determined that their population has declined over the past twenty to thirty years. Some factors thought to be related to their decline are the effect of oil and natural gas development in Arctic breeding grounds, the accumulation of chemical contaminants, and the impact of climate change on marine habitat.

A steady increase in wind farms has also prompted research to identify areas critical to sea ducks as turbines are typically placed in shallow areas, potentially threatening important habitat. While there are no immediate plans for wind turbines near Napatree, the results of these studies will tell us more about migrating birds that visit here.

Tracking sea duck movements can lead to the identification of coastal habitats essential to the birds especially during periods of breeding, molting (when the birds lose feathers rendering them incapable of sustained flight) and migration.

Because of the difficulty in tracking sea ducks that breed in remote northern areas, a preferred (but expensive) method is satellite telemetry. Such projects allow for a longer “observation” period of telemetry-equipped individuals and requires significantly fewer man

hours than traditional banding methods which yield less information due to the study being based on resightings or recapture.

One common method for capturing candidates is the use of a mist net in which flying birds are trapped in a fine net stretched across an area. Young birds are released and select adult birds have transmitters surgically implanted in their abdominal cavity. The transmitters, which typically do not exceed 2-3% of the bird's weight, are wrapped in a mesh to encourage adhesion. After a short recovery, the ducks are released at their capture site. Upon activation, the signal is transmitted to satellites for a short time and the unit will shut off to ensure battery longevity. Ideally, the battery will last one to two years. Location data is downloaded about every three days, then uploaded to a program that allows researchers to observe the movements of the birds.

While I was birding with Reynold Larsen in January, he spotted a pair of Common Eider and noted an antenna protruding from the female's lower back area and a band on her right leg. I was able to take a picture of her and proceeded to report the sighting to several agencies that keep records of banded bird sightings. The Rhode Island Department of Environmental Management and the University of Rhode Island are among the organizations collaborating in the study of Eider migration.

- Looking to spring, we will hold our annual beach cleanup on March 31<sup>st</sup> at 9:00 a.m. until noon with a rain date of April 7<sup>th</sup>. We are looking for volunteers of all ages who can participate for even a short time. Bags, plastic gloves, and snacks will be provided. We will meet at the entrance to Napatree by the Misquamicut Club Beach Club.

- On March 17<sup>th</sup>, US Fish and Wildlife Service will hold their Piping Plover Monitor training at 10:00-11:30 a.m. at the Kettle Pond Visitor Center in Charlestown, R.I. Come learn about this beautiful little bird and how you can help!

- Beginning on June 9<sup>th</sup> and continuing through September 8<sup>th</sup>, the Conservancy and the Fire District will sponsor Saturday morning Napatree walks with our Naturalists. These free two-hour walks are “tailor-made” to the interests of the participants and families are welcome. We will meet at 9:00 a.m. at the entrance to Napatree by the Misquamicut Club Beach Club.

- Once again the Watch Hill Conservancy and the Watch Hill Fire District will be sponsoring our free children's Investigator series starting on July 10<sup>th</sup> and running Tuesday, Wednesday, and Thursday mornings until August 23<sup>rd</sup>. This extremely popular series is open to children ages



Purple Sandpiper



Eider with telemetry



Snow Bunting



Brant Goose

Photos Janice Sassi

seven to fourteen who will explore Napatree's beach, sea, and dune treasures. Children may attend once, twice or even three times a week; registration is required.

Check the June issue of the *Conservator* or our website for additional information.

REMINDER: According to the Westerly Town Ordinance, dogs are not allowed on Napatree unless they are leashed. From May 2<sup>nd</sup> until Labor Day they are allowed only between the hours of 6:00 p.m. and 8:00 a.m. JS



## Road Safety in Watch Hill After a Tragic Death

In the wake of the tragic Thanksgiving Day pedestrian fatality on Watch Hill Road, a number of Watch Hill residents met together in early December under the aegis of the Watch Hill Memorial Library and Improvement Society to discuss various approaches to enhancing safety on that and other major Watch Hill roads. The Conservancy, which has been studying safety issues on Ocean View Highway over several years, lent its project leader and consultant, Richard Youngken, to participate and to share insights from that study. Watch Hill Fire District Moderator Charles S. Whitman III wrote state Senator Dennis L. Algiere to ask that the state Department of Transportation conduct a safety study of Watch Hill Road. That request has now been approved and a study, focusing on the area between Avondale Road and

Foster Cove Road (the portion of the road where the accident occurred) is currently being implemented. It was noted that an earlier pedestrian fatality had occurred in this same area in 2010. The Improvement Society, the Fire District, and the Conservancy will continue to collaborate and to review and assess options. These may include possible new configurations of the road, new speed limits, signage, increasing public safety awareness, and other possible security measures. (A report of the December meeting has been circulated to voters in the Watch Hill Fire District and is on the District's website, [www.watchhillfiredistrict.org](http://www.watchhillfiredistrict.org) under the heading Public Spaces/Road Safety.)

CBB

## Napatree Advisors

On October 29<sup>th</sup>, a group of scientists, who have agreed to serve as Napatree Scientific Advisors, volunteered their time to meet with the Napatree team to assist us in understanding the scientific needs of this pristine area and offer their guidance for effective stewardship. Many of these contributors, all affiliated with the University of Rhode Island, were part of the Rhode Island Natural History Survey assessment conducted in July 2010:

Peter August, Ph.D., *Dept. of Natural Sciences*

Jon Boothroyd, Ph.D., *Dept. of Geosciences*

Howard Ginsberg, Ph.D., *USGS Patuxent*

*Wildlife Research Center*

Keith Killingbeck, Ph.D., *Dept. of Biology*

Hope D. Leeson, *Botanist, R.I. Natural History Survey*

Peter Paton, Ph.D., *Dept. of Natural Resources*

A major discussion centered around the fact that the mouth of the lagoon has completely closed and the possible implications for the species that rely on that habitat. A breach has opened through the spit of sand forming the outer edge of the lagoon. Of immediate concern is the impact on the shorebirds that feed in the mudflats (which are drying up) and the hundreds of horseshoe crabs that make their way into the lagoon to lay their eggs. Without salt water feeding the lagoon, it's possible that the salinity level will change and affect the various organisms in the food chain.

It was decided that we will now take water samples in the lagoon and measure changes in the water level, taking tidal influence into account. In connection with our participation in Project *Limulus*, we will monitor any changes in the numbers or behavior of horseshoe crabs during our surveys.

The group was extremely surprised to learn that the Westerly town ordinance allows dogs on the beach at all during the summer season. They cited the fact that dogs are prohibited from all Rhode Island state beaches from April 1<sup>st</sup> to September 30<sup>th</sup> and the science behind that regulation. It was urged that efforts be made to encourage regulations more in accordance with state law.

Napatree has become home to several invasive plant species, most notably beach rose and Asiatic bittersweet. Additionally, the group discussed the potential conflicts of maintaining trails over the dunes and the need to protect the dune grass and threatened bird species that nest in the sand. They suggested that marking open trails will encourage easy access to visitors' destinations and prevent native plant species from being trampled, which invites the growth of invasives in their place. It was also suggested that the addition of bayberry, a native plant, may help slow the growth of other species and benefit birds besides.

With the guidance of the Scientific Advisors, we will continue to preserve and protect this precious

Photo Janice Sassi



NAPATREE INVESTIGATOR NEWSLETTER

MARCH 2012 VOL. 5 NO. 1 WATCH HILL, R.I.

## SUMMER INVESTIGATORS 2012: OLD FRIENDS, NEW ADVENTURES

By Hugh Markey

Welcome to the winter issue! Tell the truth: you missed Napatree, didn't you? Of course you did! So did we!

Is it possible that the plans are already in the works for Investigators 2012? Absolutely! After all, this winter hasn't exactly been much of a winter here in Rhode Island, so beach weather is never far from our minds. In this issue, we'll look back on some of our adventures from last summer and learn a few things about several little critters we often encounter in the water. Read on!



Photos Hugh Markey and Puffin Enterprises

## SUMMER IN THE SAND WITH NAPATREE NATURALISTS

Last summer, Naturalists Steve, Hugh, and Kathy were joined by Caroline, Cole, and Will, three student helpers who worked with Investigators during our beach walk program. Together, we guided dozens of kids through lots of beach adventures. We learned about water-based critters, but we also did some research on what holds our beach together and how mud dwellers like mussels and quahogs filter the water through their bodies.

One theme that we introduced last year had us sitting in the sand looking for the tiniest of treasures. We learned about little shells that often wash up in the wrack line (the line of seaweed and shells that is created by the waves on the beach). These are tiny shells, often as small as your thumbnail, that we often overlook as we walk along. Get very close to the sand (or better yet, sit right down!), and a whole new world appears.

We collected beautiful shells with names like Channeled Whelk, Oyster Drill, and Nutmeg. Using our guides, we identified the shells we found and learned a little about how they live. For example, the Oyster Drill uses a tooth-like part of its body to – you guessed it – drill through the shell of an oyster to eat. When they're alive, they can be found clinging