



A Quarterly Publication from the Division of Fish and Wildlife, RI Department of Environmental Management

Deer Hunting Opportunities in Rhode Island - Better than Ever! *By Brian Tefft*

The opportunity to hunt for deer and experience the challenge and thrill of harvesting a big game animal in the smallest state of the union is exhilarating. If you're a new deer hunter in Rhode Island then you're about to experience some of the best hunting opportunities any hunter has ever had in the state and if you're a seasoned veteran, then you already know the hunting has been good and improving. Pursuit of the White-tailed deer in Rhode Island is by far the most popular hunting activity in our state. It's no secret that hunting provides many personal and public benefits; including harvesting a healthy meat source, rest, relaxation and rejuvenation that the hunting experience provides, economic contributions that hunting provides towards wildlife conservation and the local economy, and ecological benefits of helping to manage over-abundant wildlife populations.



Photo by USFWS

Each year in Rhode Island, nearly 9,000 deer hunters take to the forests with the hope of bagging a whitetail. In total, hunters in Rhode Island spent 419,000 man-days hunting deer, small game, turkey and waterfowl on public and private lands in the state, an impressive number. What is also impressive is that these same hunters contributed over \$18 million to the economy in 2011 in pursuit of hunting activities. Additionally, hunters are largely responsible for wildlife conservation and deer management through the fees they pay for hunting and hunting equipment.

The 2013-2014 deer season harvest of 2,502 deer represented an 13% increase in harvest from the prior year's hunting season. Four years ago, the deer management strategy in Rhode Island underwent evaluation and several changes were made to improve the management of deer populations by the Division of Fish and Wildlife. In addition to providing

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Galilee's New Boat Ramp *by Andres Aveledo*

On June 27, 2014 a ribbon-cutting ceremony was held for the reconstructed Galilee Boat Ramp in Narragansett. The boat ramp was under construction since January and provides boaters and anglers with improved access to the waters of Point Judith Pond and Rhode Island Sound.

Improvements made at the Great Island Road facility include a new, double-lane, 60-foot wide pre-cast concrete boat ramp with two adjacent rows of floating docks. The project also included the elevation and expansion of an existing fixed pier walkway to provide access to the pier and floats for boaters with disabilities. The new double-lane system with added floats will greatly increase the efficiency and ease of use of the facility, and is expected to reduce wait times for users of this busy boat ramp.



Photo by V. Masson

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THE DIVISION OF FISH AND WILDLIFE MISSION STATEMENT

Our mission is to ensure that the Freshwater, Marine and Wildlife resources of the State of Rhode Island will be conserved and managed for equitable and sustainable use.



Janet Coit, Director
Rhode Island Department of Environmental Management

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Bureau of Natural Resources

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Deer Hunting ... By Brian Tefft

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quality hunting programs for sportsmen, deer management also contends with over-abundant deer, which can impact people and the landscape. The primary management goals for the deer management strategy are to: 1.) Provide a sustainable, quality deer management program that maintains deer populations that are ecologically sound and 2.) Maintain quality hunting programs for the deer resource recognizing the strong tradition of deer hunting in Rhode Island and the important role that hunters play in population management.

The results are encouraging for improved deer management in Rhode Island. The state is divided into four management zones (Figure 1). Two of the zones are located on the mainland and two are island zones. The island zones are Block Island and Prudence Island, where some of the highest deer densities exist.

In the 2013-14 hunting season, RI hunters took 1,482 antlerless deer. This number represents 59% of the total harvest and contributes to management goals that rely on a healthy harvest of antlerless deer in order to maintain ecological sustainability and control the growth of the herd.

One recent change in deer hunting in the state is an increase in the harvest of deer with archery equipment, which includes the crossbow. Two years ago, crossbow was added as a legal method during the statewide archery season that runs September 15 to January 31. Between 2012 and 2013, the archery harvest in the state increased by 33% (Table 2), largely due to the impact of the crossbow hunter. In the 2013-2014 hunting season, the archery harvest represented 32.5% of the total deer take (Table 1), exceeding shotgun (14%) and just under the most popular hunting method of muzzle-loading rifle (39%). The growing popularity of archery as an effective hunting and management tool is due to a variety of factors, but most important is the fact that many areas will not permit firearms discharge and have reduced safety zones (200') that permit archery hunting.

Hunting remains the most effective method of deer population management and fulfills a traditional and sustainable use of our natural resources. Even with this success, some portions of the state include deer herds that exceed desired levels. Public aware-

ness of these problems is increasing and the result is a need for innovative measures to manage deer herds via cooperative hunting programs and more than ever, hunters are helping. Whether you choose to hunt public or private land, or with bow or gun, the hunter in Rhode Island is faced with a myriad of hunting opportunities that will provide almost endless days of outdoor recreation. Safe hunting and enjoy the hunt!

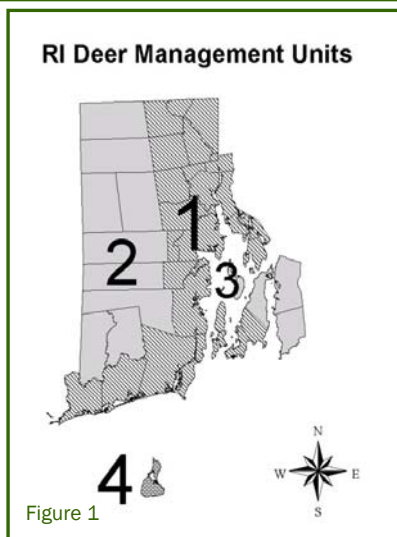


Figure 1

Table 1

| Table 1. R.I. Reported Deer Harvest | | | | | | |
|-------------------------------------|-------------|-------------|------------|-------------------------------|-------------|----------------|
| Season Type | 2013-14 | 2012-13 | %Change | Males | Females | % TotalHarvest |
| Archery (Zone 1 & 2) | 827 | 620 | 33% | 382 | 445 | 33.1 |
| Muzzleloader (Zone 1 & 2) | 965 | 1135 | -15% | 558 | 407 | 38.6 |
| Shotgun (Zone 1 & 2) | 349 | 276 | 26% | 150 | 199 | 13.9 |
| Block Island | 313 | 198 | 58% | 63 | 250 | 12.5 |
| Prudence Patience Island | 48 | 37 | 30% | 19 | 29 | 1.9 |
| TOTALS | 2502 | 2266 | 10% | 1172 | 1330 | 100 |
| | | | | Harvest Males per Female 0.88 | | |

Table 2

| Table 2. Total Harvest Statewide | | | |
|----------------------------------|---------------|---------------|------------|
| Method | Total 2013-14 | Total 2012-13 | % Change |
| Archery | 936 | 715 | 31% |
| Muzzleloader | 982 | 1149 | -15% |
| Shotgun | 584 | 402 | 45% |
| | 2502 | 2266 | 10% |

Restoring Marine Habitats for Recreational Fishing *by Eric Schneider*

Did you know that more than 70% of Rhode Island's recreationally important fish spend part of their lives, usually when they are young, in the shallow water habitats of Narragansett Bay and our coastal salt ponds (Meng and Powell 1999)? Some of these areas, such as salt marshes, contain important habitat for fish, submerged aquatic vegetation (e.g. eelgrass beds), and complex shellfish and oyster reefs which provide excellent foraging areas as well as protection from larger, open-water predators. However, these same areas are particularly vulnerable to habitat alteration from dredging and filling, hardening of shorelines, and nutrient pollution which impacts the form and function of aquatic habitats. In fact, it is hypothesized that alteration and loss of these estuarine areas is one of the most important factors contributing to the decline in marine finfish populations. Simply put, if we expect to have healthy and resilient recreational fisheries, we'll need to ensure adequate stewardship of both our fish stocks and the habitats upon which they depend.

In Rhode Island, complex shellfish reefs formed by oysters (*Crassostrea virginica*) and ribbed mussels (*Geukensia demissa*) are found in intertidal and shallow subtidal waters of Narragansett Bay and the coastal ponds. These molluscan shellfish reefs provide more than just food for people, they also provide critical, high-quality habitat for resident and transient finfish. Specifically, oyster reefs can provide a greater diversity and availability of food or a greater amount of higher quality food items compared to other habitats (Harding and Mann 2001). Not surprisingly, fish with higher quality habitat and higher quality food may actually grow faster and show increased survival relative to fish in lesser quality habitats (e.g. Graboaski et al. 2005).

Despite its importance as fish habitat, it is estimated that oyster reefs along the Atlantic Coast are at less than 10% of their prior abundance and that about 85% of reefs have been lost globally. This decrease has coincided with decreases in water quality, clarity, and ultimately resulted in a loss of important nursery habitat for fish and crustaceans. Some good news, however, is that efforts are being made to construct oyster reefs specifically to enhance habitat for fish.

The question is: can fishery managers increase the pro-



Photo by J. Parente

ductivity of fish communities by enhancing degraded habitat? Well, previous research suggests we can. For example, work conducted in North Carolina by Grabowski et al. (2005) found that oyster reefs constructed in soft sediments increased the growth and survival of juvenile fishes such as the black sea bass (*Centropristis striata*). What remains unclear is whether coastal habitat enhancement practices conducted here in RI would provide benefits similar to those found in the mid-Atlantic.

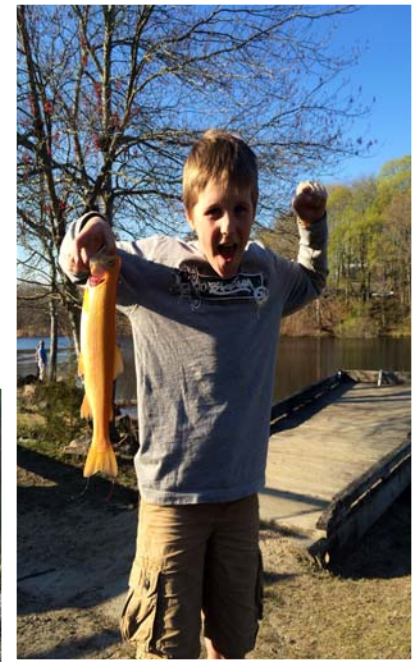
To help answer that question the RI Department of Environmental Management (DEM), in collaboration with The Nature Conservancy (TNC), recently began a five-year fish habitat enhancement project, which is 75% funded through Sportfish Restoration (SFR) funds, and 25% funded by TNC. The long-term aim of this work is to improve recreationally important fisheries by improving degraded marine habitat. That said, the specific goal of the current work is to determine if construction of oyster reefs can be used to improve growth and survival (i.e., productivity) of early-life stages of recreationally important fishes such as black sea bass, tautog (*Tautoga onitis*), scup (*Stenotomus chrysops*), summer flounder (*Paralichthys dentatus*), and winter flounder (*Pseudopleuronectes americanus*) here in RI. To address this goal we envision constructing up to 4 acres of oyster reef habitat, by creating a 1 acre reef per year in 4 of the 5 coastal ponds located along the south shore (i.e. Weekapaug Pond, Quonochontaug Pond, Ninigret Pond, Potter Pond, and Point Judith Pond) starting in 2015. Specifically, this collaborative project consists of four major components: (1) determining the sites to be enhanced; (2) collecting baseline information at these sites; (3) enhancing the habitat at these sites by creating oyster reefs; and (4) monitoring and quantifying changes in the fish and habitat communities at these sites post-enhancement to determine the level of success.

Currently DEM and TNC are working together on Step 1, which entails evaluating potential locations where habitat will be enhanced by establishing oyster reefs. This process involves considering oyster suitability models, present habitat quality and value, connectivity to adjacent fish habitat, as well as current human uses at potential sites.



Photo by J. Parente

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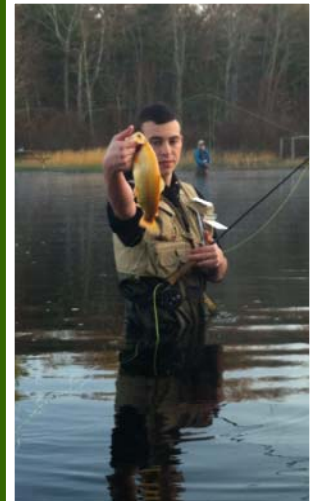


Catch a Golden Trout

On Free Fishing Weekend in May of 2014, RI DEM Division of Fish and Wildlife stocked over 1,500 golden rainbow trout into four ponds throughout the state: Silver Spring in North Kingstown, Browning Mill in Exeter, Peck Pond in Chepachet and Brickyard Pond in Barrington. Anglers from all over Rhode Island caught these brightly colored trout and snapped dozens of pictures, sending them in to receive their exclusive golden trout pin. To date, over 120 pins have been sent to participants young and old. Here are some of our free fishing weekend golden trout pictures. Thank you all for participating!

Didn't catch your golden trout yet? Don't worry. You can fish any one of the aforementioned ponds during the remainder of the fishing season, which runs through February 28, 2015. To receive your pin, catch the golden trout, take a picture and submit it to kimberly.sullivan@dem.ri.gov or RIDEM Division of Fish and Wildlife Education Office, 1B Camp E-Hun-Tee Place, Exeter, RI 02882. Please note, only one pin per person regardless of the number of trout caught. Any questions, please feel free to call 401-539-0037.

Please Note: Photo credits for all pictures are located on page 6



Galilee's New Boat Ramp by *Andreas Aveledo*

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The Galilee boat ramp is quite possibly the most popular ramp in the state. The two boat ramps previously located at this site were demolished in order to make way for one larger new ramp. The original boat ramp was developed as part of the Galilee North Basin Development project in the late 1980s, and a second launching lane was later installed in the early 1990s. The new facility in Galilee is similar in design to the boat ramps at Haines Memorial State Park in East Providence and the Mt. Hope Boat Launch in Bristol.



Photo by A. Aveledo

This wheelchair accessible boat ramp was designed by DEM Planning and Development staff, and the contractor for the \$723,814 project was Narragansett Dock Works of Narragansett. DEM received 75 percent of funding for the project from the U.S. Fish and Wildlife Service Sport Fish Restoration program through a tax on motorboat fuel. State funding includes \$100,000 from Rhode Island's Salt Water Fishing License Receipts.

Restoring Marine Habitats... by *Eric Schneider*

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Photo by J. Parente

Although we'll ultimately select 4 sites for habitat enhancement, we'll start by selecting just one site for 2015 to ensure we keep on schedule. Once we have a list of potential locations for 2015 we'll seek feedback from stake-

holders and begin the process to get the required permits and permissions for establishing the oyster reef habitat.

After a site has been selected for 2015, we'll continue to evaluate potential sites for the other 3 reefs, as well as finalize the specific techniques used in the remaining 3 steps. In short, Step 2 will consist of collecting baseline information about the fish communities and the marine habitat at sites which will be enhanced (i.e. study sites) and at adjacent control sites that will not receive any habitat enhancements. Collecting this baseline data is a critical and necessary component in order to evaluate the extent of enhancement and ultimately, the level of change. The third aspect (Step 3) will be to create and establish oyster reefs in selected coastal lagoons. Then Step 4 will be to conduct post-enhancement monitoring and evaluation of the study and control sites to determine if there are changes in fish productivity, such as changes in growth and survival of early life stages of recreationally important fish.

By the end of this project in 2018, we expect to have determined the efficacy of using oyster reef construction as a tool to enhance degraded marine habitat and thereby improve nursery habitat function and fish productivity. This information will not only help guide future enhancement and restoration projects in Rhode Island, but should be useful to the region as a whole.

Literature Cited:

- Grabowski, JH, Hughes AR, Kimbro DL, and Dolan MA. 2005. How habitat setting influences restored oyster reef communities. *Ecology* 86: 1926-1935.
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- Meng, L., & Powell, J. C. 1999. Linking juvenile fish and their habitats: An example from Narragansett Bay, Rhode Island. *Estuaries*, 22(4), 905-916.

Thank you so much for the great pictures and for granting RIDEM Division of Fish and Wildlife ARE program permission to use them. Photo credits from 'Catch a Golden Trout':

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Page 5, left to right, top to bottom: Cindy Hughes, Paul Tardiff, John Fischer, Damien Deangelis, Chris Heal, Marie Drumm, Ben Yahoo, Jennifer Bowlin, Angelo Disano, Glenn St. Germain, Vinny Deledda, Samuel Abagga

Answers to Kid's Corner on page 7:

1. Sponge, 2. Egg Beater, 3. Nursery, 4. House, 5. Filter, 6. Food

Kid's Corner! Presented by the Aquatic Resource Education Program



Salt Marshes: More than just a bunch of grass

Can you believe that little Rhode Island has over 400 miles of coastline? All along RI's coastline is a special habitat called a salt marsh. Salt marshes are areas along the coastline that flood in and out with the tides. While these salt marshes may look like nothing but grass, they are actually home to many organisms, large and small. Some species that live in RI's salt marshes include quahogs, hermit crabs, fiddler crabs, mussels, young fish, snails, worms, osprey, egrets, and even small mammals take up residence. The salt marsh also provides important functions that help clean the water, prevent flooding, break down waste, and provide shelter for baby fish and clams.

Salt marsh grass, also known as cordgrass, is able to survive saltwater by excreting salt through its leaves. The grass is important since it provides protection for little fish hiding from predators. Help the minnows escape the heron as they swim into the cordgrass.

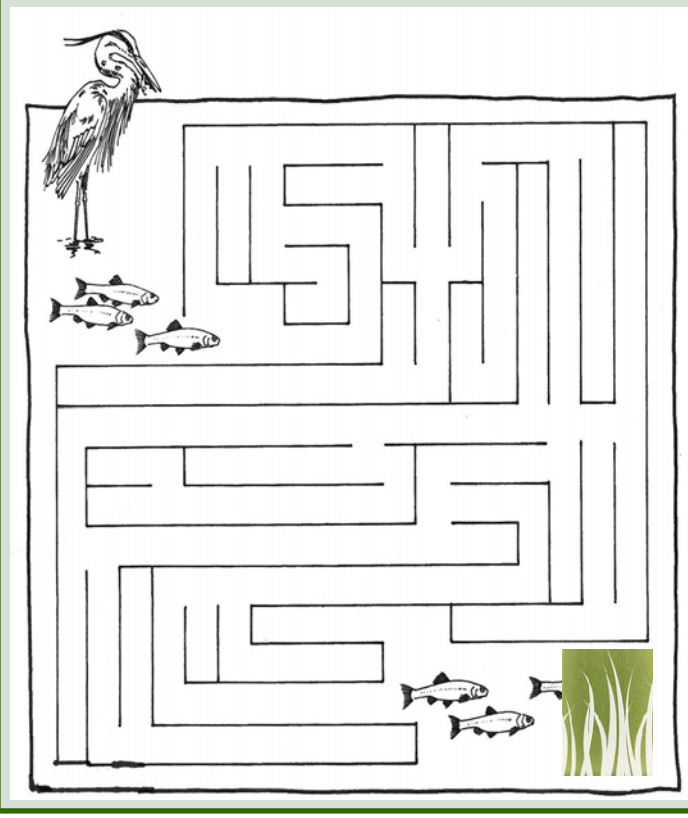


Photo by K. Sullivan

Using the words below, match the word that best fits the statement describing the function of the salt marsh.

Ex: **Pillow:** Wetlands are an important **resting** area for many migratory birds).

- Egg Beater Food Sponge House**
Filter Nursery

- _____ Wetlands help **absorb** excess water during heavy rains and spring run-off.
- _____ Wetland have many plants that help to **mix** nutrients and oxygen into the water.
- _____ Many **young** fish, insects, birds, mammals, and others are **born/hatch** in and around the wetlands.
- _____ Wetlands provide **shelter** for many animals so they can hide from enemies or ambush prey.
- _____ Wetlands provide areas for young clams and mussels to **remove small harmful materials** from the water while they feed making the water clean.
- _____ Wetlands provide **nourishment** for animals because of the many plants and animals that live there.

Answers on page 6

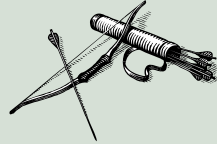
September 2014

September 6, 2014 - Youth Pheasant Hunt Training and Orientation. Great Swamp Range. Registration required. Contact Carolann at 401-539-0019 or carolann.mcgovern@dem.ri.gov.



September 6 & 7, 2014 - Galilee Fishing Tournament and Seafood Festival. For more information visit www.galileetourney.com.

September 30, 2014 – RIDEM Marine Fisheries Public Hearing on Proposed Regulation Changes. 6:00 pm. To be held at Corless Auditorium, University of Rhode Island Bay Campus, Narragansett, RI. For information, call Peter Duhamel at 401-423-1927.



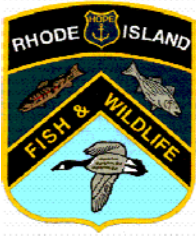
September 15, 2014—Opening Day of Bowhunter Season. For more information, visit www.dem.ri.

Attention! Fluorescent Orange Requirements

All users of state management areas (e.g. hikers, cyclists, horseback riders) are required to wear 500 square inches of daylight fluorescent orange during shotgun deer season (December 6, 2014—December 21, 2014, and December 26, 2014—January 2, 2015). Additionally, all users of State Management Areas are required to wear 200 square inches of solid daylight fluorescent orange (generally, a baseball hat) from the second Saturday in September to the last day of February and the third Saturday in April to the last day in May.

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