



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

Rhode Island on a Fly by Sara Low, Volunteer Fly-Tying Instructor

Rhode Islanders looking to try their hand at fly-fishing do not have to travel far. With a body of water minutes from every house in the state, anglers have ample opportunity to cast a fly close to home.

The Wood River in Exeter is a fly fisher's favorite, a trout stream full of brook, rainbow and brown trout that provides challenging and rewarding fishing in a beautiful series of pools, gentle riffles and runs.

Several years ago I traveled to the Wood with my brother-in-law, Dickson, to enjoy a common hobby: fly-fishing. My fly-fishing experience came mainly from the wild rivers of Montana and Wyoming and the famous waters in New York and Pennsylvania. Dickson assured me that fishing the Wood River during its *Hexagenia* hatch would rival those rivers.

The *Hexagenia* hatch, or "Hex hatch," refers to the



Photo: S. Low

emergence from the water of large, white mayflies when they mature from nymphs to flying insects. The hatch typically occurs at dusk beginning in late June.

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Sea Ducks and Satellites by Jason Osenkowski

Rhode Island's extensive coastline provides habitat for tens of thousands of sea ducks and seabirds. These species depend on coastal and offshore habitats particularly during wintering and migration periods. Threats to the wintering habitats of sea ducks may be responsible for the decline of several species (North American Bird Conservation Initiative 2009). Black Scoters (*Melanitta americana*), Surf Scoters (*Melanitta perspicillata*), White-winged Scoters (*Melanitta fusca*) and Common Eiders (*Somateria mollissima*) utilize Rhode Island's marine habitats to maintain their energy supplies during the winter and migration.



Photo: J. Beuth

Wind power is being increasingly viewed as an alternative to traditional energy resources. Proponents believe that wind energy projects can stimulate local and regional economies. Rhode Island's coastline and

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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

Larry Mouradjian,
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Bureau of Natural Resources

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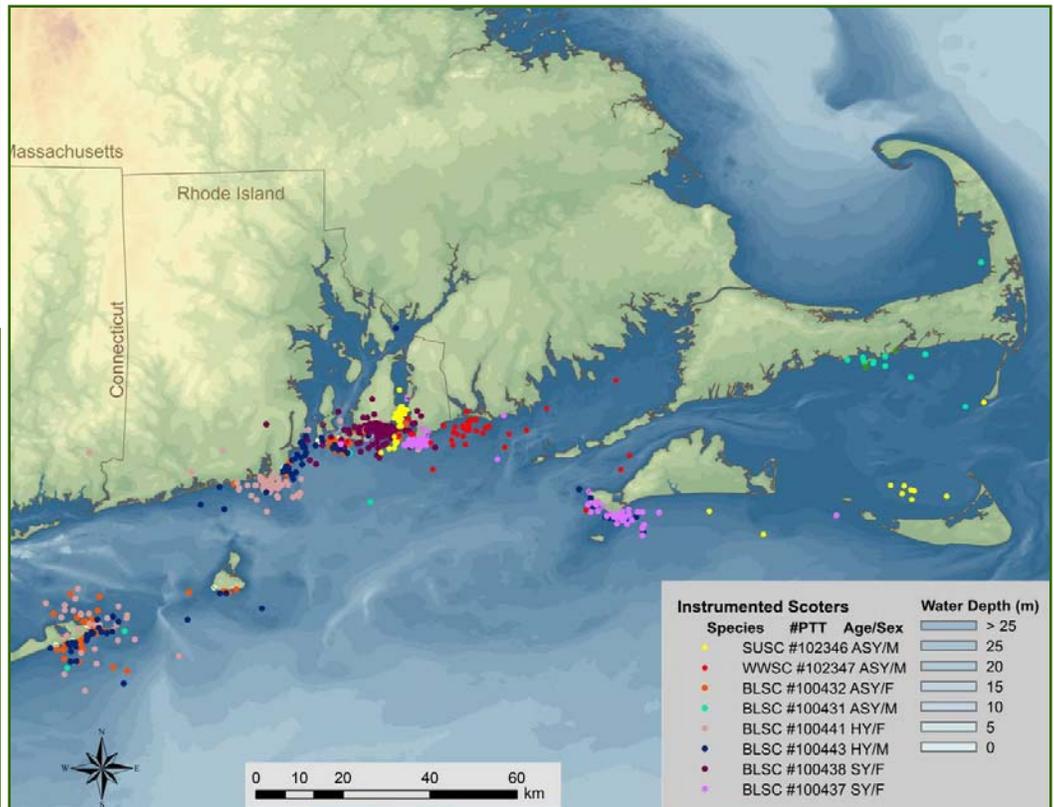
Editor: Veronica Masson,
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Sea Ducks and Satellites by J. Osenkowski cont. from page 1



Map by P. Loring

offshore waters are particularly appealing to the wind industry for placement of extensive wind farms.

Bird mortality is one of the potential impacts resulting from the placement of wind turbines in coastal environments. Many seabirds are diurnal migrants, which may allow them to avoid wind towers (Hüppop et al. 2006). However, if birds are forced to avoid key feeding habitats, such as shoals and shellfish beds, their fitness may be compromised.

There is very little information on habitat use, daily movement patterns, and population connectivity of sea ducks in southern New England. Therefore, basic information on movement patterns of sea ducks is not available for the pre-assessment of potential wind farm locations. To address this need, the Division of Fish and Wildlife initiated a partnership with the University of Rhode Island, Sea Duck Joint Venture, United States Fish and Wildlife Service, and the United States Geological Survey. This combined project is designed to study the current distribution and movement patterns of sea ducks utilizing Rhode Island's coastal and offshore waters during the wintering and staging periods. This study may reveal whether sea ducks are faithful to feeding areas or whether they are flexible enough to utilize a variety of habitats.

In December 2010, crews of the various partners and volunteers used floating mist nets in attempts to capture sea ducks. After many frigid hours on the water, often hampered by poor weather conditions, the crews were successful in capturing 18 Black Scoters, one White-winged Scoter and one Surf Scoter. Each bird that qualified for the study was surgically implanted with a satellite transmitter with the only external element being an antenna (see image on page 1). These birds were released shortly thereafter and the data began to download from the satellites.

To date we have received very good winter home range data that are being analyzed by URI graduate student Pam Loring. We have also been able to access **Continued on page 3**

Sea Ducks and Satellites by Jason Osenkowski

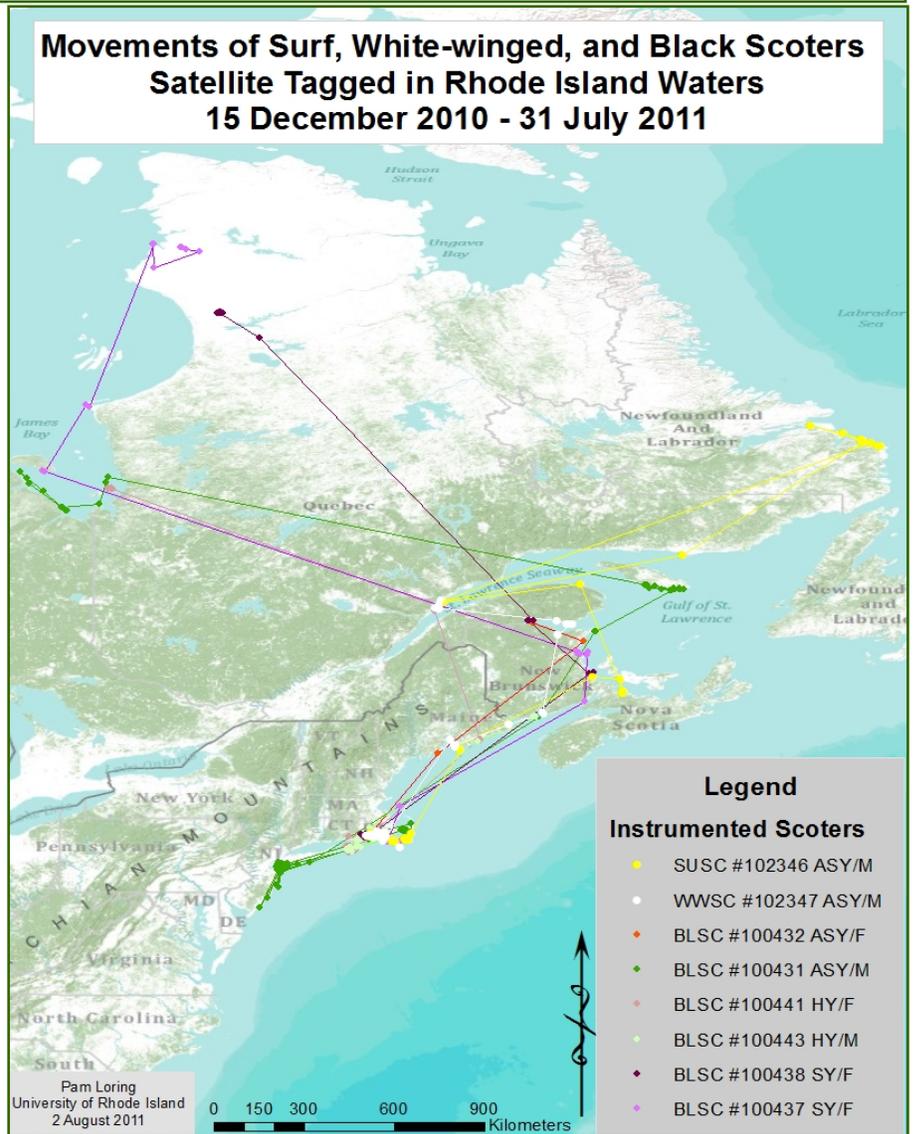
continued from page 2

Canadian Wildlife Service data for scoters that spent significant time in Rhode Island waters. The map on the opposite page shows point locations of tagged birds, with each color representing an individual bird. The map at right depicts the observed routes by which these birds reached their Arctic breeding grounds. The data obtained from this study will be used to identify important areas along coastal Rhode Island for sea duck species as well as their patterns of movement. This study may serve to aid in the placement of offshore wind turbines to minimize impacts to sea ducks and the key habitats they occupy. In addition, this study may identify important staging and breeding areas of scoters, which could be used to guide population survey efforts in and allow for improved species management and conservation.

References:

Hüppop, O, J. Dierschke, K-M Exo, E. Fredrich, and R. Gill. 2006. Bird migration studies and potential collision risk with offshore wind turbines. *Ibis* 148 (s1):90-109.

North American Bird Conservation Initiative, U.S. Committee, 2009. *The State of the Birds, United States of America, 2009*. U.S. Department of Interior. Washington, D.C. 36 pages.



Releasing an Eider

The surgical implantations of satellite telemeters were conducted at the Ft. Wetherill Marine Laboratory in Jamestown. In the photo at right, a drake Common Eider is released after recovery from surgery.



Activity 1: Striped Bass; Activity 2: Bluefish

Kids Corner Answers:

Rhode Island on a Fly by Sara Low, Volunteer Fly-Fishing Instructor cont. from page 1

These big, fluttering insects will draw a chase from even the wildest of trout.

Even though there is easy access to the Wood River from the Arcadia Management Area, we drove to a road Dickson made me promise never to reveal. We bumped along the dirt road to a clearing, parked, put on our waders, and readied our fly rods. Thick summer foliage narrowed the path leading to the river and stilled all distant noise, turning our short walk to a trek in deep wilderness.

The Wood River, upon first view, was a 20-foot wide stream dark from the shade of overhanging branches, but dappled where the sun broke through. There were no signs of fish rising or insect activity on the surface of the water. We were early for the Hex hatch. After watching the river for a few minutes, I chose my fishing spot and eased into the water. A narrow river with deep pools, it looked like a promising place to fish, with undercut banks and close brush providing trout with ideal protection from predators above.

I stood waist-deep in the water and dug into my vest pocket for a box of flies. Flies are actually feathers or fur tied with silk thread onto a fishing hook in designs that imitate insects, small fish, crawdads or nothing at all. These little bits of fluff range in size from a speck of dust for use on clear freshwater streams to a hand's length for salt water. There are thousands of fly patterns, which can resemble different stages of an insect's life cycle. The fly I was looking for was a *Hexagenia* Spinner. This long, white fly, an inch and a half in length, is tied to replicate the insect at the adult stage when it drops to the water, spent of energy after laying eggs. A spent spinner is fished by being drifted downstream at the speed of the current without any movement. I found my fly, tied it on, and waited for darkness and the hatch.

My brother-in-law was going through the same preparations, the ritual dance known to all fly fishers: studying the water, noting its currents and eddies, marking rocks and overhanging banks which shelter trout, watching for fish or insect activity, getting into position, tying on a fly.

Sixty feet upstream of where I stood, Dickson stepped into the river and stumbled on a submerged rock. Losing his balance, he thrashed the water to right himself. On two feet again, he stood

Continued on page 5

WOOD-PAWCATUCK WATERSHED



Map courtesy of The Wood-Pawcatuck Watershed Association.

Sara Low's Fishing Bio:

A native Rhode Islander, and long-time volunteer for the ARE Program, Sara Low is a NY State licensed fishing guide and fly-fishing instructor with more than 14 years experience organizing and leading fishing trips and teaching fly-fishing. She is an owner of High Spirits Unlimited, which organizes fly-fishing events and trips around the country. Her off-water ventures include curating an award-winning museum exhibit, "The History of Women in Fly-Fishing." She has published articles and lectured on fly-fishing and has been featured in print articles and television programs. Sara was honored by the Catskill Fly-Fishing Center & Museum as a 2010 Fly fisher of Distinction. A former executive in entertainment advertising, Sara marketed all the great shows.

Rhode Island on a Fly *by Sara Low, Volunteer Fly-Fishing Instructor cont. from page 4*



Photo: Jessica Lawrence, Eurofins Agrosience Services, Bugwood.org



<http://www.michigandryflies.net/fly-patterns>

up and patted his vest pockets to make sure all was in place. But all was not in place...a treasured fly box, an old English Wheatley that had belonged to his father, had fallen and was floating downstream. Dickson struggled through the water and retrieved the box when it became trapped against a log.

The sun dropped, dusk crept in and soon we were in a dark so black I could see only the gleaming white fly in my hand. Suddenly the still of the evening was shattered by the splashes of fish zooming to the surface to chase insects emerging from the water.

I positioned my rod for a roll cast, to throw my fly without snagging it on the surrounding brush. The fly landed on the water about 20 feet upstream and began to drift towards me with the current. I could barely see the patch of white fur on the water. I heard the water rip and lost sight of the fly. I pinched the fly line to set the hook. The resistance was strong; line zinged off the reel as the monster with my fly rushed upstream. I played the fish, in the dark, hoping not to lose it by giving the line slack or letting it wrap the line around a submerged log or rock. When the fish swam toward me, I reeled in line. When it surged away, I let it run. At the end I netted a dark-spotted brown trout, 15 inches in length and heavy as a whale.

We still talk about our evening fly-fishing the Wood, my brother-in-law and I. It was an evening of fishing that made good on his promise. Fly-fishing is about connecting to nature as one stands in a river, feeling the current, studying fish and insect behavior, but it's also about the successes and stumbles which color each outing. And it's about sharing the joy with other fly fishers.

And in Rhode Island it's about fishing on a home river that is as exciting as any other.

RI Fishing License Information

A RI freshwater fishing license and a trout stamp are required for anglers age 15 and older to fish for trout. Licenses can be purchased in person at bait and tackle shops and online on the Dept. of Environmental Management website.

To purchase a RI freshwater fishing license online, visit www.ri.gov/DEM/fishinglicense/

Deer Hair Spent Hex

Tying recipe:

Hook: Standard dry fly

Thread: Tan 6/0

Tail: Moose mane, tied in with body

Abdomen: Bleached deer hair

Wing: Bleached deer hair

Thorax: Blended yellow and brown fur

Wingcase: Wild turkey shoulder feather

From *Hatch Guide for New England Streams* by Thomas Ames, Jr., Frank Amato Publications Inc., 2000.

Flies Used to Imitate the Hex

(*Ephemeridae Hexagenia*)

Nymphs (sizes 4-10): Burk's *Hexagenia*, Kennebago Emerger, Wiggle Nymph

Dries (sizes 4-8): White Wulff, Coffin Fly, Cream Variant, Deerhair Spent Hex

The Coastal Pond Survey by John Lake



Above: Setting the seine net. Inset: Juvenile Scud. Photos: J. Lake.

The Coastal Pond Survey has been collecting data on juvenile finfish in the coastal ponds of southwestern Rhode Island since 1993. The survey takes place between the months of May and October annually. The primary objective of the coastal pond survey is to collect and analyze beach seine data from Rhode Island's coastal ponds and estuaries. The data is used to forecast recruitment in relation to the spawning stock biomass of winter flounder and other recreationally important species.

The map above shows the location of the stations in the ponds along the south coast. The survey uses a 16-foot Lund aluminum boat with a 25 hp motor and deploys a seine 130 ft. long, 5.5 ft deep with 1/4" mesh to collect fish at each station. The beach seine is set in a semi-circle along the shoreline and hauled toward the beach by hand. All animals collected are identified to species, measured, counted, and subsamples are taken when appropriate. Water quality parameters, including temperature, salinity and dissolved oxygen are measured at each station using a YSI electronic sampling device.

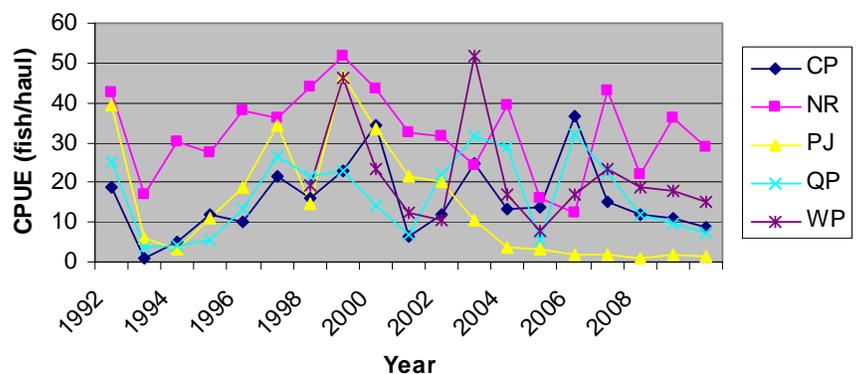
The survey catches a wide variety of fish and invertebrate species. Baitfish species such as killifishes, mummichogs, herrings, and silversides are prey items for other species of fish. Juvenile resource species such as tautog, scup, black sea bass, blue crabs, bluefish and winter flounder use the coastal ponds as nursery grounds for protection from predation. Sub-tropical juvenile fish, such as permit, pompano, puffers, snappers, groupers, and scud can also be found in the ponds during the late summer. These fish are brought to Rhode Island waters by the Atlantic Gulf Stream, which flows northward along the Eastern US coastline.

The data collected on the coastal pond survey is used to create indices of abundance

for the juvenile finfish living in the coastal ponds. The index uses catch per unit effort (CPUE), in this case fish per seine haul, as a measure of relative abundance. These indices are useful for stock assessment as well as determining the strength of any given year class of a fish species. The winter flounder young-of-the-year index broken down by coastal pond is displayed in the chart below. The graph shows that fish abundance, in this case winter flounder, can vary from pond to pond each year.

Long-term data sets that document annual and seasonal variations in finfish recruitment are important tools for resource management. This comprehensive data on species assemblages, diversity and their associated habitats in the coastal ponds is used in the management decision process. These data are used to evaluate proposed projects, such as dredging and aquaculture proposals, at specific locations on the ponds. These data will also be useful to assist with the creation of a state-wide climate change plan. Long-term monitoring surveys are useful to the management of fisheries resources.

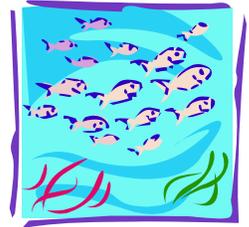
CPUE of Juvenile Winter Flounder from Coastal Pond Survey



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

It's School Time!

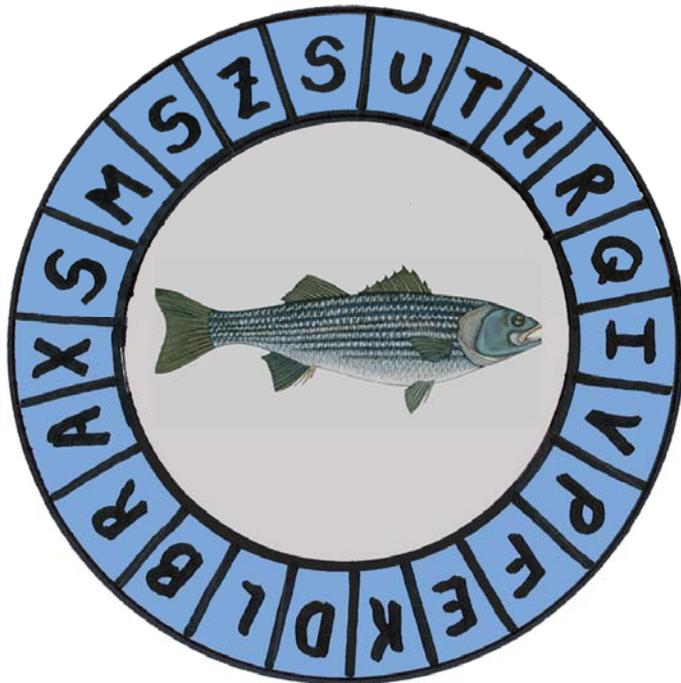
It's September and, believe it or not, you are not the only animal who will be going to school this fall! Many of the saltwater fish who entered Rhode Island's Narragansett and Mount Hope Bays this summer will be forming schools and heading into the southern Atlantic Ocean for the winter. The yearly migration makes fall an excellent time for surf fishing! Below are two activities that will tell you which popular schooling species will be heading out of our Bays during September and October. Answers on page 3.



Activity 1:

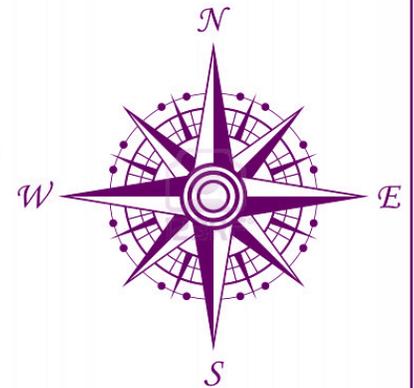
To find out one of the species who will be traveling in a school this fall, right down EVERY OTHER letter as you go clockwise around the circle located below. The letters will spell out the answer.

Start Here ↓



Activity 2:

Migrate with this schooling fish by using the directions North, South, East and West to find out who they are. Start with the highlighted letter and follow the directions. Use the compass provided to help you. Then read DOWN to find out the name of the fish.



- Start at the highlighted letter: B
- Move 1 space EAST
- Move 1 space NORTH & 2 spaces WEST
- Move 2 spaces SOUTH
- Move 2 spaces NORTH & 2 spaces EAST
- Move 1 space WEST
- Move 2 spaces SOUTH & 1 space EAST
- Move 1 space WEST

U	I	F
K	B	L
E	H	S

Fly-Fishing Events October – December 2011

October 8, 2011, 9 AM - 3 PM

INTRO TO FRESHWATER FLY-FISHING

Learn the art and science of Fly-Fishing. Bring your waders and join RIDEM for its annual 'Introduction to Freshwater Fly-Fishing program.' Whether you are a beginner or just need a refresher, this all day workshop will present the ins and outs of fly-fishing including lessons on the necessary equipment, fly-tying, knot-tying, and the art of fly-casting. Participants will get to put their new skills to work on the water. All equipment and materials are included for the day so pack your lunch and join us at the Addieville East Farm in Mapleville, RI. Families with children 10 and up are encouraged to participate. **Space is limited and registration is required. Fee: \$35.00/ person.** For more information please contact Kimberly Sullivan at (401) 539-7333 or kimberly.sullivan@dem.ri.gov.

October 15, 2011, 9AM – 3PM

THE FLY-FISHING EXPRESS

Back by popular demand, the Fly-Fishing Express is a fly-fishing safari designed for advanced beginner, intermediate, and advanced fly-fishing anglers. Aboard the Old Colony Train in Middletown, RI, instructors take participants to various remote public access areas around Aquidneck Island. It is perfect for those who have already participated in the 'Introduction to Saltwater Fly-Fishing' workshop and would like a chance to work with more instructors to hone their fly-fishing skills while fishing. Just pack a lunch and your chest waders and join us for this fishing adventure. All other equipment, including flies, will be provided. **Space is limited and registration is required. Fee: \$35.00/ person.** For more information please contact Kimberly Sullivan at (401) 539-7333 or kimberly.sullivan@dem.ri.gov.

October 27 – December 8, 2011, 7PM-9PM
Thursday Evenings, (except Thanksgiving)

FALL FLY-TYING 2011

As the fall fishing season draws to a close and we begin to brace ourselves for the winter weather, the RIDEM Aquatic Resource Education program will be offering its annual fall fly-tying classes. With plenty of instructors available, these workshops welcome beginning and intermediate levels. Families with children 10 and over are welcome. Come to one or come to all, enjoy the company of some of Rhode Island's fly-tying and fishing instructors. **Pre-register now and receive one class free of charge! Walk-ins are admitted. Fee: \$6.00/ person per class or pre-register for 6 classes at the special rate of \$30.00.** For more information please contact Kimberly Sullivan at (401) 539-7333 or kimberly.sullivan@dem.ri.gov.

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Wild Rhode Island

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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 (12/3/2011 through 1/2/2012, with additional dates on Block Island in 2011 and 2012). 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 third Saturday in October to the last day of February and the last Thursday in April to the last day in May.

TO:



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