

PEEP Talk

The Newsletter of the Peconic Estuary Program

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Helping Fish Over the Hurdles

Each spring, distant travelers enter the Peconic Estuary. They come not for the festivities of summer in the Hamptons but for the prime spawning and feeding habitat of the Peconic River and other tributaries. For thousands of years, diadromous fish (*i.e.*, fish that migrate between fresh and salt waters during different life stages) have journeyed into the upper reaches of East End rivers. In the 1800s, dams were built for grist mills, cranberry bogs, and other industrial uses, cutting off historic migratory routes of these fish and access to hundreds of acres of habitat.



Grangebels Fishway. Photo by Miller Environmental

Locally, the two species of greatest concern are the alewife (*Alosa pseudoharengus*) and the American eel (*Anguilla rostrata*). Both are critical parts of the estuarine

food web as important prey species of predatory fish (*e.g.*, striped bass, bluefish) and waterbirds (*e.g.*, heron, osprey).

Alewives are river herring that spend most of the year feeding within 60 miles offshore, returning to rivers each spring to spawn. All American eels found in the Peconic Estuary are born in the Sargasso Sea, a two-million square mile area in the western North Atlantic. Some migrate to rivers in the Peconics to feed and mature. After up to 30 years in freshwater, American eels leave the Peconics and return to the Sargasso Sea where they spawn for the first and last time. Like Pacific salmon, eels die after reproducing.

Alewife and American eel populations have shown alarming declines in recent years. Indeed, *See DAMS on Page 3*

Estuary-Friendly Boating A How-To Guide

This spring, when you get your boat ready for the boating season, a little planning can go a long way toward protecting our marine environment. The goal is to enjoy our waterways today and preserve them in good condition for future generations by improving water quality and protecting marine inhabitants – both plant and animal.

Wear your life jacket and be safe.

~Ted Sadleir, Senior Bay Constable
Town of Southampton

See Page 2 for the Bay Constable's How-To Guide to Estuary-Friendly Boating.



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A How-To Guide for Becoming an Estuary-Friendly Boater

1. Use the most environmentally friendly bottom paint that you can find. Read the label, and apply only as directed. More is definitely not better. Avoid all paints that contain TBT. Don't use paints that have been stored for a long period of time – newer paints have a more environmentally friendly formulation.
2. When possible, perform maintenance and repairs in drydock. Collect paint chips/drops and dispose of properly to avoid contaminating water.
3. Get an engine tune-up. Smooth-running, efficient engines pollute less (& use less fuel!). If your boat has a 2-stroke outboard, consider switching to a 4-cycle the next time you re-power. Cleaner burning 4-stroke engines discharge 90-99% less pollution than carbureted 2-stroke engines.
4. Have a “disposal plan” for all sewage and gray water. Remember the entire Peconic Estuary is a Vessel Waste No Discharge Zone (NDZ). Use pump-out stations or pump-out boats.



Town of Southampton Pump-Out Boat, Photo by Shana Miller

5. Have an “action plan” in case of accidental fluid discharges or leaks. Do not pump fluids like oil, fuel or antifreeze overboard with your bilge pump. This is illegal and environmentally irresponsible. Your plan should include absorption pads, a “bailer,” and a re-sealable five-gallon bucket. These items should be onboard in the spring before your first trip. Dispose of used pads and any recovered fluids in the proper manner. Check with your Town’s transfer stations.
6. Use cleaning products specifically designed for marine applications. These tend to be more environmentally friendly than most household cleaners. Avoid products containing chlorine.
7. Consider where and how you operate your boat. Excessive wakes erode the shoreline and, in the spring, interrupt nesting waterfowl and shorebirds and spawning fish and horseshoe crabs.
8. Protect the benthic (*i.e.*, bay bottom) community. Purchase a chart for your boating area, and carry it onboard so you can avoid shoals and mud flats. Prop dredging is detrimental to plants and animals that live in the shallows (including eelgrass), and it certainly will result in increased maintenance costs for you.
9. Learn where eelgrass grows in your area to avoid boating and anchoring in this sensitive habitat.
10. For more stewardship tips, see *Preserving Fish Habitat in the Peconic Estuary: A Guide for Anglers & Boaters*, available from the PEP Program Office.




PEP Talk is published by the Peconic Estuary Program (PEP), a partnership of governments, environmental groups, businesses, industries, academic institutions, and citizens. The PEP’s mission is to protect and restore the Peconic Estuary system. Learn more at www.peconicestuary.org.



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State of the Bays Science Conference

The State of the Bays Science Conference on April 29th at the Riverhead Campus of the Suffolk County Community College promises to be an event to remember! The latest research findings in the Peconics will be presented. The Conference is designed to be an information-sharing forum for scientists and environmental managers, as well as an educational outreach event to policy makers and the interested public. Each presentation will give a glimpse into the environmental state of the estuary and will highlight related management recommendations and initiatives. Among others, presentations will include the latest research with respect to:

- ★ Eelgrass
- ★ Invasive species
- ★ Shellfish & Finfish
- ★ Wetlands
- ★ Bay bottom communities
- ★ Brown Tide, Harmful algal blooms
- ★ Water quality
- ★ Atmospheric deposition

The event is free and open to the public. Please check www.peconicestuary.org for more information about the conference, including an agenda, in the near future.

~Laura Bavaro, Suffolk County Department of Health Services

DAMS from Page 1

American eels were recently proposed for listing under the U.S. Endangered Species Act.

Habitat reduction and degradation, including blockage to upriver migrations by man-made dams, are cited as significant factors in the declining numbers of alewives and eels. Fortunately, with a little engineering and a lot of dedication by local citizens and governmental partners, it is possible to mitigate the presence of the dams and help these fish over the hurdles.

In 1996, a group of concerned citizens led by Bob Conklin, a Riverhead resident, got together to discuss strategies for restoring upstream fish passage on the Peconic River. Soon the Peconic River Fish Restoration Commission (PRFRC) was born. Members researched emerging “fishway” technology and traveled throughout New England to see various structures already in operation.

Their efforts were rewarded in 2000 as Miller Environmental installed a steep pass fish ladder at one of the dams in Grangebel Park,

Riverhead. As soon as the ladder was in place, alewives started up the structure. That spring, alewives successfully migrated upriver of the dam for the first time in 100 years.

Now 76 members strong, the PRFRC is working to expand on their success in Grangebel Park by restoring fish passage at the other dams further up the river. The Peconic Estuary Program and other governmental partners, including the U.S. Fish & Wildlife Service, New York State Department of Environmental Conservation, and the Town of Riverhead, are working with the PRFRC to examine alternatives for the next three dams on the Peconic River. In concert with fishway plans, the Peconic team is also discussing options for “eelways,” much simpler structures designed specifically for eels. Over 300 acres of critical fish habitat will be restored once the entire Peconic River is re-opened to fish migration.

Another season is underway in the Peconics – the fish ladder was installed March 7th. Take a stroll through Grangebel Park, and check it out!

~Shana Miller, NY Sea Grant

The final ***Peconic Estuary Program Environmental Indicators Report*** is now available on www.peconicestuary.org! It details the status & trends of 18 environmental indicators.

Is the Grass Really Greener?

Nitrogen & Lawn Care: Do Your Part...

Restoring and preserving the health of the Peconic Estuary is a big job, but it is also everyone's job. Too much nitrogen getting into the estuary is a problem because it can lead to harmful algal blooms, low dissolved oxygen conditions, and probably even change (in a bad way) the numbers and kinds of plants and animals in the water. Nitrogen gets into the estuary from many sources, including lawn care, farms, septic systems, and sewage treatment plants; it is even deposited from the atmosphere.

It's easy to point fingers and say who should do what first, but in the spirit of

doing your part, the Peconic Estuary Program invites you to take a look at the plot of land that surrounds your home, business, or place of worship. Below are some things that you can do to reduce pollution from lawn areas.



Waterfront homes on the North Fork, Photo by Rick Balla

The view from your window or windshield may change a little, but the change may make all the difference.

Ask yourself and your family, friends, and neighbors: **Is the grass really greener if it causes problems in the estuary?** Do your part...adopt the following preferences and practices. And encourage others to do their part too!

General Landscaping Tips for Healthy Bays

- Preserve all existing native landscapes and natural ground covers.
- Minimize lawn areas, replacing turf with native or non-invasive and low-input plantings.
- Appreciate a mixture of grasses and non-grasses in lawns.
- Value a less green lawn.
- Make sure lawns are on a suitable soil.
- Use appropriate grass varieties (*e.g.*, sun tolerant vs. shade tolerant).
- Take steps to improve soil structure (annual or periodic soil aeration, additions of organic matter, pH, etc.).
- Leave grass clippings on the lawn as mulch.
- Cut lawn no shorter than 3" to encourage deep roots.
- Don't overwater lawns (excess irrigation causes soil nutrients to be lost).

If you choose to fertilize...

- Test your soil annually before any application of fertilizer.
- Read and understand all product labeling.
- Keep equipment properly calibrated to avoid over-application.
- Apply fertilizers only during the growing season.
- Don't apply fertilizers within 100 feet of surface waters or wetlands.
- Don't apply fertilizers when the ground is frozen.
- Don't apply fertilizers when it is raining or when rain is imminent.
- Keep application records to avoid unnecessary applications.
- Store any excess product safely, and do not apply just to "use it up".
- Apply a maximum of 1 lb. of nitrogen per 1000 ft² in any one application, with a cumulative application of no more than 2 lbs. per 1000 ft² per year.
- Choose fertilizers where the water-soluble nitrogen is no more than 20% of the total nitrogen in the mixture.
- Choose organic fertilizers, whereby all nitrogen in the mixture is non-synthetic.

Estuarine Explorers

“A true conservationist is a man who knows that the world is not given by his fathers but borrowed from his children.”

~John James Audubon

Peconic Must-Sees

Indian Island County Park (Riverhead) boasts 275 acres of woodlands at the point where the Peconic River meets the peaceful Flanders Bay. One of the most spectacular picnic areas in Suffolk County, tables afford sweeping views of the Peconic Estuary. This park offers fishing, bicycling, hiking, and a playground. Camping is also available, complete with sanitary facilities and showers. Open year-round. For more information, call (631) 852-3232.

CALLING ALL RUNNERS!

Join us for the 1st
5K Race for the Peconics:
Healthy Bodies, Healthy Bays!



Where: Long Beach, Sag Harbor

When: April 24, 2005, 10 a.m.

Who: Ages 12 & up

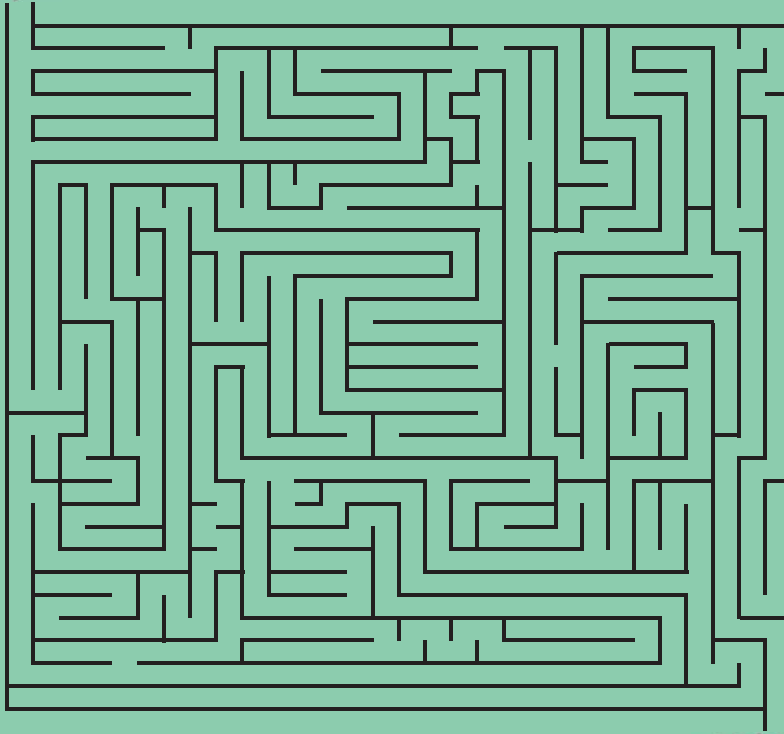
Come from 9-noon for food, educational activities, kids' races, vendors, & *much* more!

Sponsored by Southampton College & the PEP.

For more information & to register, see www.peconicestuary.org/RaceforthePeconic.html.

Peconic Pals

Help Annie the Alewife navigate the maze of dams to get upriver to spawn!



Go to www.peconicestuary.org/Kids.html for the puzzle solution.

Species Snapshot

Mink (*Mustela vison*)

You're driving down Rt 105 south of Riverhead just before dawn. You pass a cattail marsh and see a flash of brown on the side of the road. You turn your head just in time to see a hunched-back critter with a bushy tail skitter off into the reeds. You likely have just spotted a mink.



Photo by Paul Barry

The mink, perhaps the most renowned of the weasel-like animals within the Family Mustelidae, has a long, thin body, short legs, and a 6" to 8" bushy tail. The soft, silky fur that makes the mink so well known is dark brown, with a distinguishing small white patch on the chin. The dense underfur is protected by oily guard hairs that waterproof the coat; this is important as mink are usually found in wetland habitats, including fresh and salt water marshes, streams, rivers and lakes. Mammals such as muskrats, rabbits and small rodents are the most important food for mink, though they also eat fish, birds and amphibians. The booming Long Island duck farms of the mid-1900s provided dependable additional food sources to local mink. Red fox and great horned owls are the most common predators of Long Island mink.

Mink are primarily nocturnal. In general, they are solitary, with adults associating only during the late winter breeding season. Females establish dens in cavities of tree roots, brushpiles and stream bank burrows of muskrats.

There are probably fewer mink on Long Island today than there were historically. Development has resulted in the loss of much of the upland habitat adjacent to waterways frequented by mink. Mink are susceptible to poisoning from environmental pollutants, such as mercury, pesticides (DDT, DDE and dieldrin), and PCBs. They can also be poisoned by eating contaminated prey (e.g., rats and mice that have been exposed to rat poisons).

Mink are very active and curious creatures. Their presence is seen easily along streams and creeks the day after a light snow. Just look for the double print tracks left by their loping gait. Even if you never get to see that loping gait, the careful eye can still catch a glimpse of where mink have been!

~Dan Rosenblatt & Mike Putnam, NYS Department of Environmental Conservation

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ADDRESS CORRECTION REQUESTED