

Shore Lines

Newsletter of the Association to Preserve Cape Cod

Winter 2011



Herring counting program provides important information about an iconic Cape Cod fish species

APCC has calculated the volunteer herring count numbers for 2011 and has determined an estimated run size for the herring runs in the program. The following are three examples of this year's estimates:

- Stony Brook, Brewster: The 2011 estimate is 37,091 fish, compared to 48,099 fish in 2010 and 11,062 in 2009, 25,289 in 2008 and 22,348 in 2007.
- Herring River, Wellfleet: The 2011 estimate is 9,534 fish, compared to 12,052 fish in 2010 and 21,870 in 2009.
- Herring River, Harwich: The 2011 estimate is 10,466 fish, compared to 41,254 fish in 2010 and 19,336 in 2009.

For the 2011 spring counting season, there were 10 herring runs in eight Cape Cod towns where volunteer herring count programs were either started by or volunteers trained by APCC. These runs include the Herring River in Wellfleet, Herring River in Harwich, Pilgrim Lake run in Orleans, Stony Brook in Brewster, Mill Creek and Upper Shawme Pond fish ladder in Sandwich, Red Brook in Bourne, Mashpee River and Quashnet River in Mashpee, and the Cedar Lake run in Falmouth. In addition, the Coonamessett River group in Falmouth joined the APCC program. The Cape now has the largest number of active volunteer count programs in Massachusetts.

Volunteer counts offer one way of estimating the size of the annual spring herring migration, which serves as an indicator of the river herring population. Herring populations throughout the northeast have experienced a dramatic decline in recent years.

Some preliminary conclusions can be drawn from the herring counting data:

- For runs where there are two or more years of data, run sizes in 2011 were smaller than in 2010.
- In some runs, the 2011 estimated run sizes were the lowest ever recorded (e.g., Coonamessett River, Marstons Mills River, Herring River in Harwich, and Herring River in Wellfleet). This is cause for concern, as it indicates these populations have not rebounded despite the state ban on taking herring.
- In 2011, the Stony Brook run size was intermediate compared with other years. Stony Brook was the site of a tidal culvert restoration project in late 2010, and that may have helped the 2011 run.

How are herring count data being used? In the summer of 2011, NOAA's National Marine Fisheries Service received a petition to list river herring as endangered species. NOAA issued a call for scientific information to help them decide whether to list these species. The Cape's herring count data have already been submitted to NOAA to help them make their decision. For information about volunteering as a herring counter, please contact APCC at 508-362-4226 or info@apcc.org.



APCC's yearly herring counts assist in estimating population trends for several of the Cape's herring runs.



APCC
Association to
Preserve Cape Cod

3010 Main Street
P.O. Box 398
Barnstable
MA 02630
www.apcc.org



Ed DeWitt, APCC executive director

Meeting Cape Cod's greatest environmental challenge

APCC's new executive director looks to regional solutions for wastewater

By Ed DeWitt

As the new executive director of APCC, I am reminded every day of the challenges facing Cape Cod. Even more so, each day I am gaining insight into the complexities of these challenges. Our managed ecosystem is way overdue for new management. In our end of year appeal, APCC asked you to tell us where best to spend our limited resources. I hope you will take the time to share your thoughts and perspectives. APCC's chief strength is its members—their wisdom and their generosity. Here is a peek at my thought process heading into 2012.

APCC's 2011 herring counts are up for some streams and down in others, but overall the counts continue to trend down. Eelgrass beds continue to compact and dwindle. Algae blooms are as plentiful as our golden rod blooms. Beach closures are the new normal. The biggest culprit responsible for these sad facts is poor and deteriorating water quality.

Wastewater and stormwater are the two major causes of the Cape's deteriorating water quality. Water is our life stream. For most people, our ponds and our surrounding seas are why we live, work and play on Cape Cod.

The good news is that most towns have begun to either get serious about water quality or have begun to start planning for water quality improvements. Chatham has been digging up the town to install an extensive sewer system with a plan to sewer the entire town. Provincetown will soon begin phase IV of its wastewater plan, which will extend sewers to 43 percent of the town. Falmouth is engaged in comprehensive wastewater planning. Orleans has just gotten Cape Cod Commission approval of its comprehensive wastewater plan. Brewster is embarking on a "total" water quality planning process.

While these efforts are fantastic, praiseworthy and sometimes quite innovative, there is room for pause and serious concern. We have a sole source aquifer underneath us, a giant bay on the north side, another large bay on the west side, two interconnected sounds on the south side and the Atlantic Ocean on the east side. We are surrounded by water. All the water is connected. Our common water is our heritage and is the Cape's core essence. Fifteen planning and construction efforts don't make sense. Fifteen treatment plants make even less sense. Fifteen planning and construction efforts coupled with 15 or more treatment plants are expensive and wasteful. There is obvious duplication of effort. Doing it often and over again doesn't make it better and definitely doesn't make it cheaper. Coupled with each town using different consultants and different local committees, the sharing of knowledge gained is inhibited and impaired. We don't need 15 wastewater treatment plants, 15 committees, 15 consultants and 15 plans to save our one water resource. Watersheds don't respect town boundaries. It is crazy for each town to go it alone. The Cape has unique wastewater challenges, such as seasonal flow, that only have to be solved once, not 15 times.

APCC believes and advocates for comprehensive, regional solutions to wastewater. Regional planning is good business, good for business, great for taxpayers, and it is an environmental imperative.



Workshop examines cutting edge solutions to stormwater management

APCC held a half-day workshop in October on “Managing Stormwater for Low Impact Development.” The workshop was attended by approximately 30 municipal officials, stormwater managers, planners, and the general public.

Low Impact Development, or LID, is a new approach to urban planning which emphasizes the use of techniques that reduce water pollution and protect the natural landscape. Presenters at APCC’s workshop offered practical actions for reducing pollutant loads and installing stormwater retrofits to existing properties to better manage stormwater and reduce the impact of stormwater runoff on our water resources.

Such solutions include the use of vegetated wetlands, vegetated bio-retention basins, porous pavement, and other methods to treat runoff. These methods often involve infiltrating the runoff on or near the site, rather than letting it run downstream to cause problems. Using plants to treat and remove pollutants is also a common feature of LID methods. Plant roots and soil microbes can trap and remove many contaminants from stormwater, and plant transpiration (“breathing”) helps to remove standing water by converting water into vapor.

Stormwater runoff from roads, parking areas, lawns and rooftops frequently contains pollutants such as bacteria, sediment, nutrients, metals, oil and road salt. If the runoff is not properly managed, the runoff stream can also cause increased erosion and flooding in downstream areas. Proper stormwater management and LID approaches can help to improve and protect water quality in Cape Cod’s streams, ponds, bays, and shellfish beds.

The workshop was part of the Massachusetts Statewide Stormwater Management Seminar Series, which provides free seminars on stormwater topics. The series is funded by a Massachusetts DEP grant to the firms of Vanasse Hangen Brustlin, Inc., Horsley Witten Group, Inc., Stacey DePasquale Engineering, and the non-profit Center for Watershed Protection in Maryland. For more information, contact APCC at 508-362-4226 or info@apcc.org.



Cape Cod’s snow birds

As the winter freeze settles over Cape Cod, many of our more colorful summer residents choose to live it up in the warm tropical sun. No, not the people who rent the beach house down the road. Cape Cod’s song birds, which cheer our hearts in the spring and summer with their musical trills, migrate to southern regions in the colder months.

These birds are called neotropical migrants, and include familiar species such as the scarlet tanager, wood thrush, purple martin and numerous warbler species. They depend on a diet of insects, ripe fruit and nectar, all of which are in short supply on Cape Cod in the winter. So, when the winter season approaches, these warmer month visitors head to Central America, South America and the Caribbean.

When warm weather returns in the spring, the birds return from their tropical winter quarters to North America—including Cape Cod—to breed. Many of these bird species need fairly large tracts of unfragmented forests for breeding habitat. Consequently, populations of some species are in decline because of the fragmentation and loss of woodland. That’s why protecting the Cape’s remaining undeveloped woodland habitats is so important. Our birds of summer depend on it.



Easily spotted on Cape Cod in the summer, the common yellowthroat is a neotropical migrant that spends its winters in sunny Central America.

Year End Appeal Reminder

Have you returned your APCC Member Opinion Survey along with your end of year donation yet?

If you've already responded,
THANK YOU!



If you have not done so already, please take a minute to fill out the member survey you recently received from APCC along with the Year End Appeal. Your input lets us know what our members are thinking, and which of Cape Cod's environmental issues are most important to you.

And while you're at it, please include your end of year donation to APCC. Your generous gift will help ensure that APCC continues the important work we do every day—protecting Cape Cod's natural resources, beauty and quality of life. Please use the return form from the appeal, or go to www.apcc.org to make a secure donation. Your support is urgently needed and greatly appreciated!

APCC's ambassador

Membership field coordinator Patrick Frye spreads the word about APCC's mission

Some APCC members have had the privilege of meeting APCC's membership field coordinator, Patrick Frye. Patrick is APCC's man on the street, who is out taking the environmental pulse of Cape Cod. Yes, he finds new members for APCC as he canvases Cape neighborhoods, but more importantly, he engages people in a frank discussion of the environmental issues facing Cape Cod.

For some Cape Codders, Patrick is their first introduction to APCC. In his travels, Patrick has had the opportunity to tell thousands of people about the vital work APCC does in safeguarding and improving the Cape's environment. APCC sees Patrick's role not just as a membership recruiter for the organization, but as someone who helps educate people about the environmental issues that impact their own towns as well as the entire region. Through his one-on-one engagement and outreach, Patrick encourages individuals to become more involved as stewards of Cape Cod's fragile natural resources.

Patrick has been doing environmental grassroots development for over 25 years. He explains his avocation this way: "Why I wanted to help protect the environment is complicated. When I was growing up I didn't hear much of concern for the environment. I was born in 1940 so those years as a teenager were the 50s. It wasn't until I was discharged from the army in 1969 and came home from Europe that I began to notice water and air quality, and what we threw away. It was a very gradual process from observation to advocacy. Ever so slowly I began to look for ways to help. Over time I found people who believed as I did that we could do better for our health and well-being."

If you get a chance to chat with Patrick, enjoy and learn from a true professional. He not only believes that each individual can make a difference, but also that each individual has an obligation to try and make a difference.



From when he first joined APCC's staff in 2000 to the present, Patrick Frye, our membership field coordinator, has walked 4,000 miles and visited 22,000 households across Cape Cod. In the process, Patrick estimates he has gone through over 20 pairs of shoes.



The Perfect Holiday Gift is Just One Phone Call Away!

An APCC membership makes a great gift!
A membership to APCC is a thoughtful holiday gift
for a loved one, friend or colleague,
and also benefits Cape Cod's environment.

Please contact APCC at 508-362-4226 or
info@apcc.org to find out just how easy it is to give
an APCC membership in someone's name.



Visual results from Cape Cod Water Resources Restoration Project demonstrate benefits to wetland resources



Sunken Meadow salt marsh in Eastham is one of the sites benefiting from the USDA Natural Resources Conservation Service's Cape Cod Water Resources Restoration Project. In 2009, APCC successfully advocated for Congressional approval of the federal project, which would restore thousands of acres of salt marsh, fish run and shellfish habitat across Cape Cod.

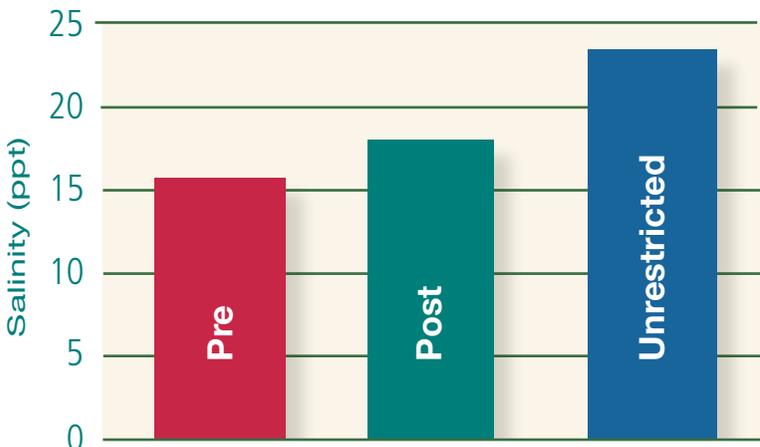
The photo on the top, taken in early spring, shows an earthen berm splitting the marsh in two and severely restricting natural tidal flow.

Thanks to funding provided to the town of Eastham from the Cape watershed project, the berm was completely removed in early 2011, as seen in this photo taken this past summer. It is anticipated the restoration will reduce the amount of invasive vegetation and create a healthier wetland habitat.

Photo on top courtesy Massachusetts Division of Ecological Restoration.



Average Salinity at Sunken Meadow



The graph at left shows how water salinity at the Sunken Meadow salt marsh in Eastham has changed since removal of an earthen berm that restricted normal tidal flow. Salinity is an indicator of salt marsh health, with higher salinity suggesting better tidal flow. The **RED** bar indicates yearly average salinity (parts per thousand) on the restricted side of the marsh taken in 2010 before restoration. The **GREEN** bar shows an increase in salinity after restoration in 2011. As comparison, the **BLUE** bar reflects average salinity on the area of the marsh where no tidal restriction existed. Sunken Meadow salt marsh is one of nine marshes monitored by APCC in our volunteer salt marsh monitoring program.

Environmental initiatives from the state legislature

An update on key environmental bills and where Cape legislators stand on the issues

Throughout 2011, APCC has closely followed the progress of several proposed bills in the Massachusetts legislature that would have a direct bearing on Cape Cod's environment. Most of these bills have received the strong support of APCC, however one would severely impact efforts to protect rare species in our region and across the state.

During the course of the year, APCC reached out to the legislature's leadership and to legislators from the Cape regarding the proposed bills. We have also alerted our members of pending legislative action on these bills, encouraging them to make phone calls, write letters and send emails.

Below are summaries of these legislative priorities. And, for the benefit of our members, APCC has asked Cape Cod legislators to let us know where they stand on these pending bills. (See table.) APCC members are encouraged to contact their legislators to let them know their positions on these important bills. (*There is no need to contact legislators about bills that they support or have co-sponsored.*) Please let the legislators know you received information about their positions on these bills from APCC.

APCC will continue to focus on these and other legislative initiatives as the 2011-2012 legislative session resumes in the upcoming year.



Legislation Summaries

An Act Updating the Bottle Bill - S.1650 / H.890 (currently in Telecommunications, Utilities and Energy Committee) (*co-sponsored by Rep. Turner, Sen. Wolf) **APCC supports**. Over 35 billion carbonated beverage containers have been redeemed and recycled in Massachusetts under the current bottle bill. But, noncarbonated bottled water, juices and sports drinks now account for 30 percent of the total amount of beverages consumed. The updated bottle bill would add a five-cent redeemable deposit on non-carbonated beverage containers. The deposit would provide an incentive to return used beverage containers, encourage conservation of materials and energy through recycling and reuse, and create new jobs in the recycling industry.

Comprehensive Land Use Reform and Partnership Act - S.1019 (currently in Municipalities and Regional Government committee) (*co-sponsored by Rep. Peake, Sen. Wolf) **APCC supports**. A priority for APCC for several years, the state's outdated zoning and land use laws are ineffective, perpetuate bad planning, and contribute to our resource protection

Survey of Cape Legislators' Positions

	An Act Updating the Bottle Bill (S.1650 / H.890)	Comprehensive Land Use Reform and Partnership Act (S.1019)
APCC	Supports	Supports
Senate President Therese Murray	Did not respond	Did not respond
Senator Daniel Wolf	Supports (co-sponsor)	Supports (co-sponsor)
Rep. Demetrius Atsalis	Did not respond	Did not respond
Rep. Susan Williams Gifford	Did not respond	Did not respond
Rep. Randy Hunt	Undecided	Undecided
Rep. Timothy Madden	Supports	Undecided
Rep. Sarah Peake	Did not respond	co-sponsor
Rep. Cleon Turner	Supports (co-sponsor)	Undecided
Rep. David Vieira	Undecided	Undecided

and growth management problems. This zoning reform bill would fix poorly written state zoning law to create an even playing field for towns and developers, enable the use of more effective planning tools, and encourage greater consistency between a town's master plan and its zoning.

An Act Relative to the Effective Enforcement of Municipal Ordinances and Bylaws - S.1018 / H.1447 (currently in Municipalities and Regional Government Committee) **APCC supports**. This legislation, also known as the Local Enforcement Bill, would provide new tools to municipalities for enforcing violations and collecting penalties and fines. In particular, the bill will greatly benefit local conservation commissions in their efforts to effectively administer wetlands bylaws and ordinances.

Plastic Bag Reduction Act - S.353 / H.1990 (currently in Environment, Natural Resources and Agriculture Committee) (*co-sponsored by Rep. Madden, Rep. Peake, Rep. Turner) **APCC supports**. The Plastic Bag Reduction Act would help address the environmental issues associated with the proliferation of plastic checkout bags by reducing their use in Massachusetts. Plastic bags account for a significant percentage of the state's trash in landfills, end up as litter along roadsides, clog storm drains and generally create blight on our landscape.

Public Lands Preservation Act - S.350 (advanced, referred to Ways and Means Committee) **APCC supports**. With continued development pressure placed on an ever-dwindling supply of available acreage, it is increasingly tempting to look to publicly-owned properties set aside for natural resource protection. This bill establishes reasonable requirements for any change of use for public lands protected under Article 97 of the Massachusetts Constitution. It would allow a change of use only if there is no feasible alternative and if replacement land of equal acreage, market value and natural resource value is provided.

An Act Relative to Land Takings Regulations - S.1854 (currently in Environment, Natural Resources and Agriculture Committee) **APCC strongly opposes this legislation**, which would effectively gut the Massachusetts Endangered Species Act (MESA). The bill would prohibit state review of development projects affecting rare species except for areas designated as "Significant Habitat." However, rare species in Massachusetts are protected through designation of Priority Habitat and Estimated Habitat; there is no "Significant Habitat" designation. This language would undermine the very purpose of MESA.

Legislator Contact Information

Senate President Therese Murray
617-722-1550
Therese.Murray@masenate.gov

Sen. Daniel Wolf
617-722-1567
Daniel.Wolf@masenate.gov

Rep. Demetrius Atsalis
617-722-2080
Demetrius.Atsalis@mahouse.gov

Rep. Susan Williams Gifford
617-722-2976
Susan.Gifford@mahouse.gov

Rep. Randy Hunt
617-722-2800
Randy.Hunt@mahouse.gov

Rep. Timothy Madden
617-722-2810
Timothy.Madden@mahouse.gov

Rep. Sarah Peake
617-722-2015
Sarah.Peake@mahouse.gov

Rep. Cleon Turner
617-722-2090
Cleon.Turner@mahouse.gov

Rep. David Vieira
617-722-2810
David.Vieira@mahouse.gov

on Key Environmental Bills

An Act Relative to the Effective Enforcement of Municipal Ordinances and Bylaws (S.1018 / H.1447)

Plastic Bag Reduction Act (S.353 / H.1990)

Public Lands Preservation Act (S.350)

An Act Relative to Land Takings Regulations (S.1854)

Supports

Did not respond
Supports
Did not respond
Did not respond
Undecided
Undecided
Did not respond
Supports
Supports

Supports

Did not respond
Supports
Did not respond
Did not respond
Undecided
Supports (co-sponsor)
co-sponsor
Supports (co-sponsor)
Undecided

Supports

Did not respond
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Did not respond
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Undecided
Generally supports
Did not respond
Undecided
Undecided

Opposes

Did not respond
Opposes
Did not respond
Did not respond
Undecided
Opposes
Did not respond
Opposes
Supports



P.O. Box 398, Barnstable, MA 02630

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Association to Preserve Cape Cod

3010 Main Street, P.O. Box 398
Barnstable, MA 02630
TEL: 508-362-4226
TOLL FREE: 1-877-955-4142
FAX: 508-362-4227
E-MAIL: info@apcc.org
WEB: www.apcc.org

The Association to Preserve Cape Cod is a 501(c)(3) non-profit organization founded in 1968 to foster policies and programs that promote the preservation of natural resources on Cape Cod.

Support comes from 5,000 memberships, and from gifts and grants from individuals, foundations and businesses.

APCC Staff

Ed DeWitt, *Executive Director*
Don Keeran, *Assistant Director*
Tara Nye, *Staff Biologist*

Jo Ann Muramoto, *Senior Scientist / Mass Bays Program Regional Coordinator*

Patrick Frye, *Membership Field Coordinator*
Laura Curry, *Information Services Director*
Lauren Powers, *Grants Administrator*

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Leave a Lasting Legacy

Bequests from our members and friends help make it possible to continue our efforts to speak out for Cape Cod and fight for the protection of our environment, just as we have done since 1968. The sample language shows just how easy it is: I bequeath to the Association to Preserve Cape Cod, Inc. (APCC), a charitable corporation established by law in the Commonwealth of Massachusetts, the sum of _____ dollars (or percentage of estate) to be used for the general purposes of APCC at the direction of its Board of Directors or added to APCC's permanent restricted endowment.

Are you interested in setting up a charitable gift annuity? If so, please contact APCC toll-free at 1-877-955-4142 or info@apcc.org.



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