

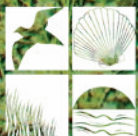


Shore Lines

Newsletter of the Association to Preserve Cape Cod Spring 2020

WHAT'S THE VALUE OF NATURAL LANDSCAPING?

See story on page 4



APCC
Association to
Preserve Cape Cod

Native gardens at APCC's headquarters. Photo by Gerald Beetham



Our work continues

By Andrew Gottlieb, Executive Director

I write this on March 25, hoping that by the time you read this, the course of the pandemic will be clearer.

There has been no experience in my life like this one, and yet, these last several weeks remind me of how it feels to anticipate a storm. You know just so much about its course and strength; you know the predictions about places likely to receive the most damage. You make your preparations according to the best information you have.

There is always the fear with storms that there will be irreversible damage—lost lives, habitat destroyed, homes swept away. You don't know what you will have to deal with afterward, but you do know the storm will pass. And that's all I'm sure of today, that the pandemic will pass and we will face changes.

APCC has taken its preparations seriously, and we are doing our civic duty to protect our own and other's health by working from home. What has not changed, however, is our commitment to protect and preserve the environment of Cape Cod.

Our work continues. Cape Cod's environmental challenges, from climate change to water pollution, will not be mitigated by the pandemic; rather, they will be affected by it, and we must anticipate, and prepare to be nimble in our response. For example, the seasonal increase in Cape Cod's population has come early this year, and that will have an impact on groundwater, at least in the short term. Will the pandemic change where people want to live? Will the population on the Cape increase? We don't know, but we are paying attention.

There is a reality I first experienced while working in state government: The response

to a crisis brings opportunity for changes in procedures and policies that would be near impossible in normal times. Social Security came out of the Depression; imagine what our world might be like today had we responded to the oil crisis in the 1970s by lessening our dependence on fossil fuels.

As our government responds to the pandemic, APCC's responsibility is to ensure that short-term efforts to fortify the economy don't create long-term, and expensive, environmental destruction. And we must be alert to opportunities for improving outcomes, too. As the country stays home, decreases in air pollution from traffic reduction are being noticed. What seemed impossible to change has changed and quickly. When this public health crisis is over, we will have a teaching moment like no other because we as a nation will have been given the chance to see our impact on the environment and nature's ability to recover from us.

The human cost of the coronavirus will not be known for some time; economic disruption is upon us, but we don't know its size or how long it will last. We know the dangers and opportunities of this crisis demand that we keep our focus, especially as our federal government's impulse so far has been to dismantle basic environmental protections. As always, our ability to continue to lead the fight—during these current challenging times and beyond—rests with our members, whose support makes our vigilance possible.

Be safe, be well, and let us hear from you.

APCC supports the climate emergency initiative

APCC is a member of the Cape Cod Climate Emergency Initiative, a region-wide coalition of environmental and activist groups created in support of local grassroots efforts to declare a climate emergency in every town on Cape Cod. The movement calls for towns to commit to reducing greenhouse gas emissions to net zero at the earliest time feasible.

Earlier this year, local activists in Cape towns filed citizen petitions for the climate emergency resolutions to be voted on at spring town meetings. But with the normal schedule for town meetings an uncertainty at the time of this *Shore Lines* publication due to the COVID-19 pandemic, the timing for when the resolutions will come before the voters is currently up in the air. Stay tuned for announcements from APCC.



Additional information can also be found at capecodclimate.org.

There's more to learn at [APCC.org](https://apecc.org)



Left: E2 Solar installs APCC's battery backup system.

Installers mount solar panels on the roof of APCC's office.

APCC goes solar thanks to Tern Foundation grant

Thanks to a grant from the Tern Foundation and generous contributions by APCC members, our headquarters are now powered by clean solar energy. The installation includes photovoltaic panels on a portion of our office building and a detached utility building, accompanied by a backup battery storage system. The panels will provide enough clean energy to supply the organization's full electricity demand. The battery system will cover essential energy needs during power outages.

The installation is part of efforts by APCC to take positive action in addressing the global climate crisis by moving toward a carbon-neutral operation.

APCC was awarded a \$60,000 TernSOLAR challenge grant last year from the Tern Foundation to install the solar panels. Through donations provided by APCC members, the required matching grant funds were met and the installation was completed in February.

The Tern Foundation's TernSOLAR challenge grant program is designed to expand renewable energy use in Massachusetts communities, making solar technology more accessible to nonprofit organizations. Grants are offered to nonprofits that engage creatively with their communities, and that also consider future generations and the natural environment in their strategic priorities and sustainability planning.

The matching funds raised by APCC will support the development of an educational program that demonstrates the value of clean solar technology and promotes its adoption by Cape residents and businesses. APCC hopes to offer tours of the office's solar and battery installation in the future.



Completed solar installation on APCC's office and utility building.



Celebrating the conversion to solar. Left to right, Marianne Lampke, Tern Foundation; Andrew Gottlieb, APCC executive director; Jason Stoots, E2 Solar; Lisa Linnehan, Tern Foundation.



To encourage more conversions to solar energy use, APCC has partnered on a renewable energy incentive program with SunPower by E2 Solar, the Cape Cod-based business that installed solar at APCC's office. For every new customer who purchases and installs a solar array from E2 Solar and names APCC as the referring organization, the company will donate \$500 to APCC. For more information, contact E2 Solar at 508-694-7889 or visit e2solarcapecod.com.



CONVERTING HOME GARDENS

to Cape Cod habitat is great for the environment

When APCC moved into its permanent home in 2016, the property hosted a typical landscape with a chemically treated lawn and nonnative ornamental plantings. APCC has been working to renovate the grounds to celebrate native species, support pollinators, birds and other wildlife, and to provide an example of an ecologically friendly Cape Cod landscape. Such landscapes can be valued habitat for important species.

Worldwide bird and insect populations have suffered drastic losses. A 2017 study reported 80 percent of flying insects had been lost over the last 30 years. There was a time when it was thought humans would never have a measurable impact on insects. But, apparently, the effectiveness of pesticides and land use changes

on insect populations was greatly underestimated.

Another study revealed a grim loss in the number of North American birds. It estimated that since 1970, close to three billion birds, or about 30 percent, have disappeared. The causes are habitat loss, habitat fragmentation and pesticide use. It is feared the loss of abundance can result in collapse of ecosystems and the function and services they provide. The news is dire, yet there is hope. We understand the steps that need to be taken to reverse these ominous trends.

In his books *Bringing Nature Home* and *Nature's Best Hope*, entomologist and author Doug Tallamy makes a case for planting native species in landscapes to support birds and the insects they depend upon. This is done through reducing lawn area, planting native species and avoiding pesticides. In doing so, important plant and pollinator sanctuaries are created that, collectively, go a long way in supporting

local food webs.

Researcher Desiree Narango conducted a study of nesting Carolina chickadees in a Washington, DC neighborhood. In areas with less than 70 percent native plants by biomass, the chickadees could not produce enough young to sustain their populations. Conversely, if native plants made up more than 70 percent of the landscaped area, the birds thrived. Why? Chickadees, like 96 percent of terrestrial birds, depend on caterpillars to feed their babies. Native plants support the greatest diversity and abundance of caterpillars. One nest of chickadees requires upwards of 9,000 caterpillars to fledge and even more to grow to maturity—that's just one nest of one bird species. It's clear: Native plants support caterpillars that support birds. This is one small food web that can be supported in a backyard by planting native plants and avoiding pesticides.



Native landscaping provides habitat for all kinds of wildlife.

Photo: Gerald Beetham

There's more to learn at APCC.org

How about a CATERPILLAR GARDEN?



Monarch caterpillar.

Photo: Gerald Beetham

Butterfly gardens have been in vogue and for good reason. These delicate insects are full of diversity and color. For some gardeners, the first instinct is to plant the non-native butterfly bush, a nectar-producing butterfly magnet. But it does not support the life cycle of any native butterflies or moths. In order to have butterflies, caterpillars are needed. And caterpillars need to eat plants.

Butterflies and moths must find the proper plant species on which to lay eggs. Not any plant will do. Some plants use a chemical defense to deter being eaten, which can be distasteful or toxic. To overcome these tactics, insects adapted their own strategies for survival, resulting in complex biological interactions between butterflies/caterpillars and the plants they evolved with. By understanding these relationships, gardeners can help support butterfly and moth populations and their interrelated food webs.

In addition to native flowering perennials (see sidebar), native grasses, shrubs and trees are also important host plants. Little bluestem, tufted hairgrass and switchgrass support a variety of skippers. In wild areas of native black huckleberry, look for the huckleberry sphinx moth or the brown elfin. The eastern tiger swallowtail, imperial moth and the spicebush swallowtail need spicebush. The shrub New Jersey tea invites the spring azure and the summer azure. Native trees are keystone species for hundreds of different lepidoptera species, with oaks, chokecherry and willow topping the list.

Some native plants and the butterflies and moths that utilize them:

Violets	fritillary butterflies
New England aster	clouded sulfurs, checkered whites and pearl crescents
Joe Pye weed	ruby tiger moth
Golden Alexanders	black swallowtails
Black-eyed Susans	checkerspot
Evening primrose	primrose moth and the white-lined sphinx moth
Wild bergamot	hermit sphinx, the orange mint moth and the raspberry pyrausta
Milkweeds	monarch butterfly, milkweed tussock moth



FOR OVER FIVE DECADES APCC HAS BEEN THE STRONG VOICE OF ENVIRONMENTAL PROTECTION ON CAPE COD.

We remain fully committed to continue to lead the fight to protect the Cape's natural resources, but our ability to do so depends on you. Your ongoing support is what makes APCC's important work possible. Please use the attached envelope to send in your donation, or go to www.APCC.org to make a secure online contribution.



The joint APCC/HAC project will identify Cape Cod locations where housing production should be targeted, and locations, such as the habitat examples pictured here, where natural resource protection is a priority. Photos: Gerald Beetham

APCC/HAC project to identify priority lands for resource protection and for housing

Barnstable License Plate Grant Program funds two-year study

APCC and the Housing Assistance Corporation are the joint recipients of a \$150,000 grant for a project to identify geographic areas on Cape Cod where natural resource protection should be a priority and areas where housing production should be a priority. Funding for the two-year project is provided by Barnstable County and its Economic Development Council License Plate Grant Program through the Cape Cod Commission.

The APCC/HAC partnership will result in a set of recommendations that will assist towns in focusing housing production away from sensitive natural resources areas and to locations where new development and redevelopment can be supported by infrastructure for wastewater and transportation, and where a mix of uses and other community benefits are available. The initiative will help maximize housing production opportunities while reducing development pressure in locations that support important natural resources such as drinking water supply areas, sensitive watersheds, wildlife habitat and contiguous open lands.

One major objective of the project is to create local strategies for housing and natural resource protection that are consistent with the Cape Cod Commission's regional growth policy. In doing so, it is hoped the effort will reduce unnecessary competition over the Cape's remaining

undeveloped and unprotected land by identifying locations to meet the Cape's urgent housing needs that will have the greatest positive impact on the region's environment, community and economy.

The Barnstable County License Plate Grant Program, funded by proceeds from the sale of Cape Cod and Islands specialty license plates, supports regional priorities for economic development and achievement of long-term economic diversity and sustainability. Specific regional priority projects and initiatives to advance the region's economy are identified in the Comprehensive Economic Development Strategy, a plan developed with Cape Cod Commission staff support under the guidance of the Economic Development Council.

A message to our members...

Since APCC staff are working remotely for the foreseeable future, look for emails from us that thank you for your donation and membership renewal.

As soon as we are back in the office, we will follow up with a printed letter. If you have any questions, please reach out to Membership@APCC.org and we'll respond.



Kevin Johnson joins APCC staff

APCC is happy to report that Kevin Johnson has joined APCC's staff in the position of ecologist. He will coordinate APCC's expanding freshwater cyanobacteria monitoring program and will also contribute his talents to many other projects for the organization.

Kevin is already a seasoned member of the APCC family, having spent the past two summers as an APCC intern, where he assisted with the cyanobacteria program and played a key role in the development of the State of the Waters: Cape Cod project. Kevin will complete his bachelor's degree in environmental science and economics from Holy Cross this spring.



RAINWATER IS FREE

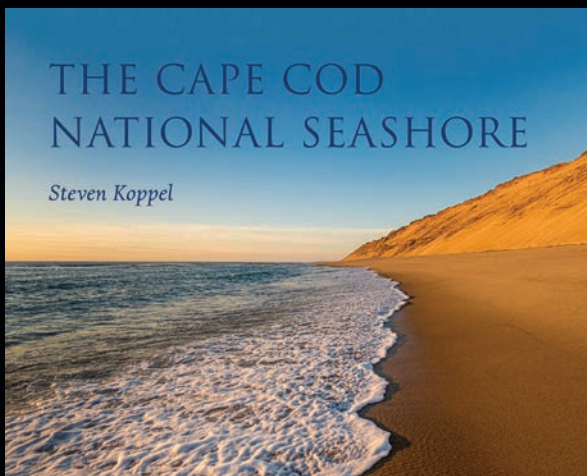


APCC is offering 55 gallon rain barrels made from repurposed food barrels. They come fully assembled and delivered to your door by FedEx. Choose from terracotta, black, gray, blue or green. Note: If you live in a historic district, black or gray is appropriate.

\$79 and shipping is free! For more information and to order online, go to www.APCC.org/events/rainbarrels. A portion of the proceeds supports APCC's work.

APCC is pleased to announce the upcoming release of fine art photographer Steven Koppel's new book,

THE CAPE COD NATIONAL SEASHORE



Steven Koppel frequents the beaches of the Cape Cod National Seashore in solitude throughout the year, often arriving in pre-dawn darkness and remaining until well after daybreak. The images in this book are expressions of his experiences in this idyllic landscape during moments when it goes largely unseen.

Copies of Steven's previous book, **The Brewster Flats**, are also available for order. To learn more about Steven and his work, and to order a copy of **The Cape Cod National Seashore** beginning in June, go to www.stevenkoppel.com.



**Available
in June
2020**

All profits from the sale of Steven Koppel's books are donated to the charitable work of APCC and the EDI Institute.



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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 thousands of members, and from gifts and grants from individuals, foundations and businesses.

APCC Staff

Andrew Gottlieb, *Executive Director*

Don Keeran, *Assistant Director*

Jo Ann Muramoto, Ph.D., *Director of Science Programs / Mass Bays Program Regional Coordinator*

Kristin Andres, *Associate Director for Education and Informational Services*

April Wobst, *Restoration Ecologist*

Kevin Johnson, *Ecologist*

Lauren Powers, *Grants Administrator*

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LEAVING THE WORLD A BETTER PLACE

APCC has benefited greatly over the years from bequests. Making one is as easy as adding the following language to your will:

"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)."

You can direct how you want your legacy gift to be used by choosing "the general purposes of APCC at the direction of its Board of Directors," or if you'd prefer to have your legacy live on in an endowment, you can direct it "to be added to APCC's permanent endowment."

A TAX DEDUCTION

Among the provisions Congress passed to help Americans weather the pandemic, is a small, but important, one to provide a tax deduction for charitable gifts for those of us who don't itemize deductions. The CARES Act allows a \$300 above-the-line deduction for certain qualified charitable contributions made after December 31st 2019. Gifts made to APCC would qualify.

APCC, no less than other nonprofits, is feeling the strain of economic uncertainty; we know your resources may be strained now, too. But if you are able, we hope you will remember us in your charitable giving and we are glad this tax deduction might reward you, too. May you and your family be safe.

To learn more please contact Andrew Gottlieb at 508-619-3185 or agottlieb@apcc.org.

PLEASE NOTE: THIS INFORMATION SHOULD NOT BE CONSIDERED AS LEGAL, TAX OR FINANCIAL ADVICE.
CONSULT YOUR PROFESSIONAL ADVISOR FOR FURTHER INFORMATION AND GUIDANCE.

Learn more at **APCC.org**

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