



BOARD OF DIRECTORS 2019-2020

Bob Zimmermann, *President*
Dave Herships, *Vice President*
Alan Marvelli, *Treasurer*
Brad Timm, *Secretary*
Bob Adams
Dave Pritchard
Tina White
Bill Williams
Dick Wynne

About Us

Broad Brook Coalition (BBC) is a nonprofit, all-volunteer organization incorporated in 1988 with the mission of preserving open space and promoting affordable housing. Under a memorandum of understanding with the Northampton Conservation Commission, BBC is responsible for the day-to-day management of the 850-acre Fitzgerald Lake Conservation Area. BBC's goals are to maintain and enhance the diversity and integrity of wildlife species and habitat at FLCA, promote outreach and education and provide public access for passive recreation that is compatible with habitat protection.

Our work in trail maintenance, stewardship, education and land preservation to expand FLCA is funded by the generous support of our members and occasional grants.

President's Message Begins on Page 2

Broad Brook Coalition Annual Meeting Sunday, Nov. 8 — via Zoom — 5:00 to 7:00 PM

Members and friends are cordially invited to attend the Broad Brook Coalition's annual meeting on Sunday, November 8. Owing to the coronavirus pandemic, this year's meeting will be virtual. Members will receive information about how to access the meeting by email prior to the date, along with instructions for the election of three members of the Board of Directors.

This year's speaker is UMass professor Paul Barten. His presentation "Adding Two Terms to the IPAT Equation: Effective Individual and Community Efforts to Mitigate Climate Change," will use a conceptual model developed in 1971 by Paul Ehrlich (author of *The Population Bomb*) and John Holdren (later President Obama's science advisor) to review the genesis of climate change from 1820 to the present – then describe what could slow, stop, and ultimately repair damage to the Earth.



Pictured: Paul Barten

The restoration process that began with the conservation movement in the early 1900s must be strengthened with renewed commitments and sustained actions at individual, household, community, and regional scales. "Perfect" actions (e.g., plant-based diet, electric car, net-zero home) achievable by a very small fraction of the U.S. population need to be augmented with "good" analogs (e.g., reduced meat consumption, >25-mpg vehicle, energy audit and LED bulbs, etc.) willingly embraced by a large majority of our fellow citizens to tip the balance in favor of the Earth, better health, sustainability, and a positive legacy for future generations. Please bring your ideas to share on Zoom.

Paul is a Professor in the Department of Environmental Conservation at UMass Amherst. His research, teaching, and service in forest hydrology and watershed management focuses on the links between environmental history, land use, streamflow, and water quality. His most recent work as Chair of the NASEM Committee (with 18 colleagues) to Review the New York City Watershed Protection Program will be published later this year by the National Academic Press.

President's Message: Trump administration attacks the environment

We're lucky to live in a part of the country where protection of the environment enjoys a high priority. Not so long ago, our national government shared many of the same values but, in recent years, we have seen many of the safeguards essential for maintaining a thriving natural environment chipped away. Over the past four years, the Trump administration has moved aggressively to weaken our fundamental environmental laws and moved to roll back over 100 regulations that protect wildlife and their habitat, ensure clean air and water, and seek to mitigate the effects of climate change. A few examples:

- The Trump administration recently opened the virtually untouched coastal plain of the 19-million-acre Arctic National Wildlife Refuge in Alaska, home to polar bears, caribou, moose, lynx, and innumerable migratory birds, for oil and gas development, with sales of drilling leases anticipated by the end of 2020.
- The 1972 Clean Water Act mandates protection of all water bodies in the United States from pollution and destruction. A rule proposed by the administration would cut large numbers of water bodies from these protections. Dubbed by many the "Dirty Water Rule," the new directive would negatively affect nearly one in every five streams, more than half of all wetlands, and many lakes and ponds.
- The administration has reduced or eliminated many key protections of the hard-won Sage Grouse Planning Strategy in which ranchers, conservationists, and federal and state governments agreed to the management of tens of million acres in eleven western states for the benefit of declining greater sage grouse populations.

But the most egregious of the administration's assault on the environment is reflected in its efforts to undermine three major acts that underpin national environmental law.

The broad purpose of the **National Environmental Policy Act (NEPA)**, enacted by an almost unanimous vote of Congress 50 years ago, is to promote the protection, preservation, and enhancement of the environment. Specifically, it obligates federal agencies to evaluate the environmental effects of actions they plan to pursue prior to implementation, including increased pollution, impacts on climate change, and harm to endangered species and unique habitats. The most significant part of this process



Greater sage grouse

is the preparation of a detailed assessment of potential environmental consequences – an Environmental Impact Statement (EIS) – on which the public, as an interested party, has an opportunity to comment on and help shape. This has led to the cancellation or major alteration of projects such as the Keystone XL pipeline in the Midwest, a major coal terminal in Washington state, and the leasing of public land for oil drilling in Wyoming.

After nibbling away at NEPA through several executive orders, the Trump administration has tried to substantially weaken the act by promulgating a rule that sets a short time limit on environmental reviews, limits the types of projects that fall under its jurisdiction, restricts public participation, and frees federal agencies from having to consider the impacts of their projects on climate change, all in the name of speeding up the construction of freeways, power plants, and oil pipelines. Implementation of the new rule is currently awaiting the resolution of challenges in the federal courts.

The Endangered Species Act (ESA), enacted in 1973 with overwhelming support from both House and Senate, was designed to protect imperiled plants and animals from extinction without regard to cost. It also directs that they be allowed to recover to a level where protection is no longer necessary by restoring critical habitats and mitigating the effects of land development, invasion by non-native species, and climate change. Species may be proposed for listing as endangered (in danger of extinction) or threatened (at risk of

In a series of recent rulings and reinterpretations of the Endangered Species Act, the Trump administration has weakened key provisions of this important conservation law under the guise of "easing the burdens" and "increasing the transparency" of decisions on protection and recovery.

becoming endangered) either by the Fish and Wildlife Service or National Marine Fisheries Service or by petition from an individual or organization. At present there are nearly 1,600 listed species, and further additions can take as long as 3-4 years. In its almost 50 years, the ESA is credited with saving 95% of the species listed under the act from extinction and many are on the path to recovery, including the bald eagle, American alligator, whooping crane, California condor, Florida manatee, humpback whale, and numerous others.

In a series of recent rulings and reinterpretations of the ESA, the Trump administration has weakened key provisions of this important conservation law under the guise of “easing the burdens” and “increasing the transparency” of decisions on protection and recovery. Changes made in 2019 undercut the intention of the ESA by removing language that explicitly prohibits consideration of the economic impacts of listing a species, clearing the way for exploitation of protected habitat for commercial purposes. In addition, these revisions reduce the extent to which climate change can be factored into decisions about listing. More recently, legislation has been introduced to amend the ESA to make individual states, as opposed to federal authorities, responsible for listing, protection, and recovery of imperiled species, a political move that would lengthen the time required for listing and further open the floodgates for new mining, oil and gas drilling, timber harvesting, and development in areas inhabited by protected species.

The Migratory Bird Treaty Act (MBTA), enacted in 1918, “protects birds from people” as the National Audubon Society succinctly puts it. Under this law, hunting, killing, or even possessing any migratory bird or their nests or their eggs, is prohibited throughout North America. Exceptions can be granted by the federal Fish and Wildlife Service for scientific research and captive breeding, but such exceptions are relatively rare. Game birds comprise a separate category whose hunting is usually regulated at the state level. The movement to protect birds traces its antecedents to the founding of the Massachusetts Audubon Society in 1896 by Harriet Hemenway and Minna Hall, whose goal was to end the mass killing of birds such as snowy egrets for feathers to decorate ladies’ headgear. Besides saving the snowy egret, the MBTA has been instrumental in protecting many other species from depredation, including wood ducks, sandhill cranes, peregrine falcons, and shorebirds such as curlews and plovers.

In 2017, the Trump administration proposed a permanent regulation specifying that the protections of the MBTA applied only to activities that purposely killed birds, exempting industries from penalties in cases of “incidental kills,” a euphemistic reference to bird deaths that result



Whooping Cranes (Bob Zimmermann)

from industrial hazards such as collisions with power lines, cell towers, and windmills, and entanglement in oil spills and oil waste pits. In response to the action, many leading environmental organizations and eight states (including Massachusetts) challenged the Department of the Interior in court. This past summer, a federal district court ruled that the administration’s reinterpretation is “contrary to the plain meaning of the MBTA” and its purpose “to protect migratory bird populations.” A victory, at least for now, though Congress must still pass legislation to make sure it remains that way.

But hold on! There’s some reason to take heart. A rare piece of good news is the **Great American Outdoors Act (GAOA)**, passed overwhelmingly last summer by both houses of Congress and signed into law by the president two months ago. This act provides permanent funding of \$900 million each year to the Land and Water Conservation Fund which is used to preserve forests, wildlife habitat, and parks throughout the U.S. (and which in the past has benefited the FLCA). It also establishes the Legacy Restoration Fund which will provide \$1.9 billion per year for five years to reduce the backlog of deferred maintenance projects in national parks, wildlife refuges and other public lands.

—Bob Zimmermann

Late Summer and Fall Wildflowers at FLCA



Canada lily (Lilium canadense)
– wet meadows, wetland edges, stream floodplains



Grass-leaved Goldenrod (Euthemia graminifolia)
– fields, meadows, edges of wetlands



Jewelweed (Impatiens capensis)
– shores of streams or lakes, swamps

Among the various resources available on the BBC website are Bob Zimmermann's "Layman's Guides" to the wildflowers of the Fitzgerald Lake Conservation Area. The three guides – Spring, Summer, and Late Summer and Fall – feature photos that Bob has taken as well as detailed information about each species, including common and scientific names, descriptions of leaves, flowers, and fruits, and notes on the habitats where they can be found. The pictures on these pages are from Bob's Late Summer and Fall guide. The guides can be found on the BBC website under the Fitzgerald Lake tab; clicking on Plants and Animals will take you to the three wildflower guides along with other resources about the natural history of FLCA. The quote on the opposite page is from Bob's introduction to the Late Summer and Fall guide.



New England American-Aster (Symphyotrichum novae-angliae)
– meadows, fields



Nodding Beggar-Ticks (Bidens cernua)
– shores of ponds and streams, wetland edges



Purple-stemmed American-Aster (Symphyotrichum puniceum)
– marshes, swamps, wet meadows



Red Baneberry (Actaea rubra)
– open woodlands

“Over the past several years, I’ve become ever more intrigued by the succession of wildflowers that appear in the spring, summer and even fall. The Fitzgerald Lake Conservation Area affords an abundance of these wonderful plants and I started taking my camera along on hikes to try to capture their fleeting beauty. This in turn inspired me to share my photos with others in a context that relates some basic information about the flowers, their growth, their habitat and their reproduction. I’ve become particularly interested in the folklore associated with these plants and their use for food or medicinal purposes. I hope that this brief guide will help you to identify a sampling of the late summer and fall wildflowers that grow along the paths and in the woods and pastures of the FLCA.”



Virginia Virgin's Bower (Clematis virginiana)
– stream banks, wetland edges



White Turtlehead (Chelone glabra)
– stream banks, wetland margins



White water-lily (Nymphaea odorata)
– lakes, ponds, slow-moving streams

DIY Nature Walks in a Time of Covid-19

Like other conservation and nature groups in the Valley, BBC had to cancel this year's Walks and Talks programs beginning in March. While we did get one walk in before the pandemic hit – Molly Hale's Winter Woods Walk in late February – we had to cancel Connie Parks's Spring Understory walk, Laura Beltran's Mid-Spring Bird walk, Randy Stone's Learn Your Ferns walk, and Brad Timm's program on red-backed salamanders. We hope to reschedule all these walks for next year, once the all-clear has sounded.

In the meantime, what's a curious nature lover to do? The answer might be as near as your favorite hand-held device, in the form of a free app known as iNaturalist. Like eBird, iNaturalist is a citizen science tool that is versatile enough to appeal to budding nature lovers and serious naturalists alike. Using the camera on your phone or tablet, you can take a picture of pretty much anything in nature that catches your eye or piques your curiosity, quickly get a suggested identification, then share the image and ID with the iNaturalist community. In most cases, a reviewer will later look at your image and either confirm the ID or suggest a different one, based on details visible in the image.

iNaturalist was created in 2008 by three graduate students at UC Berkeley and was later taken up as a joint initiative by the California Academy of Sciences and the National Geographic Society. It currently has more than three million participants who together have made some fifty-two million observations of nearly three hundred thousand species worldwide. As with eBird, iNaturalist is both a convenient personal app and a powerful research tool for scientists and wildlife managers. Unlike eBird, however, iNaturalist is designed to connect the user with a community of naturalists who can confirm your observation or, if they disagree with the identification you've made, suggest an alternate one. To quote from its website, it is a "crowdsource species identification system," which works by matching your image to other images in its database and making the result available for review by knowledgeable participants.

Three of my own recent observations can give an idea of how iNaturalist works. The first was a flower I knew must be a goldenrod, but I had never noticed this particular species before. Unlike the familiar sprays or umbels, it had numerous small yellow flowers clustered tightly in the leaf axils. I snapped its picture; clicking on "Suggest ID" gave me the message "We're pretty sure this is in the genus *Solidago*" – i.e., as I had guessed, a goldenrod – along with a list of ten suggestions, most of them marked "Visually similar, seen nearby." The top suggestion was bluestem goldenrod, *Solidago caesia*, which was a better match than any of the others, so I chose that and clicked on "Share," which uploaded the image to the iNaturalist website. A week or



Blue-stemmed goldenrod

so later I got a message that a reviewer had agreed with my ID; this confirmation qualified the observation to be labeled Research Grade.

A second case was the little brown snake I was lucky enough to photograph in Cooke's Pasture on top of one of the rain barrels. The suggestion said "We're pretty sure this is in the genus *Storeria*," but since I couldn't decide on which of the suggested species looked most similar, I clicked on "Share" without specifying an ID. Several weeks later I got a notice saying that a reviewer had identified my critter as a red-bellied snake, *Storeria occipitomaculata*; shortly thereafter a second reviewer agreed, and again my image was labeled Research Grade.



Red-bellied snake

And then there was the little yellow flower I photographed at the end of May in a patch of wet woods. I got a good clean image, and when prompted clicked on the suggestion for bluebead lily, *Clintonia borealis*. But back home, after checking a few wildflower guides, I had my doubts, which I added to the Comment section under my ID. Bluebead lily has several nodding flowers on the same stalk, whereas the flower I photographed had a single, more upward-facing flower. A reviewer agreed that bluebead usually has multiple flowers but suggested that this plant might have been injured; however, they were more concerned about the upward orientation of the usually drooping flower. After another round of comments,



Bluebead lily?

I got this message from the reviewer: "A typical [bluebead] flower droops downward and the petals are not spreading. This flower fails on both counts, it seems. So I'm stumped." And that's where, so far, this particular observation rests – no Research Grade for this one.



Wood turtle

It should be noted that you don't have to use iNaturalist purely as an identification tool. In June, while walking on a local trail, I came across a wood turtle in the middle of a sandy path. I didn't need the app to identify it, but by photographing it and sharing the image with the iNaturalist community I knew that I was adding a valuable observation to their database; wood turtles are a species of special concern in Massachusetts, and documenting its presence gave me that little glow of a citizen scientist.

I've only been using iNaturalist for a few months, and still have a lot to learn about its many features, but in a time of social distancing and canceled nature walks, I can attest that it's a great little companion to have along when you're out looking to see what you can see.

—Dave Pritchard

Be Prepared

(A deep dive in the newsletter archives on the BBC website can uncover interesting items such as the following, which appeared in the Fall 2006 issue. With climate change, perhaps waterspouts will become more common on Fitzgerald Lake, but as of now this is the only known report of one. —DP)

Our late spring fishing trip on the afternoon of May 24, 2006, ended with a canoe flip and dip courtesy of a small waterspout on Fitzgerald Lake in Florence. We were privileged to witness – and survive – an incredible natural phenomenon.

It was a short-sleeve day with dense, flat-bottomed clouds, indicating an unstable atmosphere, typical of late spring. Brian wanted to try one more spot near the northeast side of the lake, where we normally don't fish. After we finished our worms and caught our last panfish and bass, we were about to pull the anchor line when a stiff breeze came up suddenly from the southwest. A stiff breeze indeed, as whitecaps formed quickly and we were dragging the anchor facing into the wind.

All of a sudden movement behind us caught our attention and we looked over our shoulders to see – "Look out, a tornado!" Brian exclaimed.

Before we knew it, a turbulent eddy of air rushed from the forest, from the northeast, and traveled along the surface of the lake, directly toward the canoe. A circle of six-foot-tall jets of water, perhaps twelve to fifteen feet in diameter, approached and overtook our canoe. In an instant the starboard side of the canoe was lifted, the port side depressed, and we were in the drink.

We've canoed from Florida to Maine, from lakes and rivers to the Chesapeake Bay and Atlantic Ocean, in millpond stillness to two-foot waves, and never capsized. Not once since we bought our 17-foot fiberglass Mohawk canoe at the factory in Longwood, Florida, in 1985. Never capsized until that afternoon at Fitzgerald Lake.

It just goes to show that you never know what might happen, so be prepared.

—Connie Parks and Brian Rose

Two Long-time Board Members Step Down

With thirty-two years of service between them, Alan Marvelli and Bill Williams will be retiring from the BBC board of directors at the end of their current terms this November. We would like to take this opportunity to acknowledge their long service, their cheerful presence, and the talents they have contributed to BBC's work.

Alan joined the board in 1999 and has served under six presidents. The year after he joined, he was asked if he would assume the treasurer's duties for a two-year term that somehow ended up stretching into twenty. "I had no experience in that kind of role except for my household budget," Alan said recently, but he soon learned the ins and outs of nonprofit financial management and leaves a tidy set of spreadsheets to his successor, Tina White. While the treasurer's tasks took an increasing amount of his time, Alan has also put in many hours on trail work, work days, and other stewardship activities. Asked what gave him the greatest satisfaction during his board service, he mentioned "assisting in the growth and fundraising of the FLCA as it grew into the city's largest conservation area." Alan has been particularly impressed over the years with the ongoing support of local citizens who have helped BBC provide the city with a steady stream of funding for land acquisition and stewardship.

Bill joined the board in 2009, several years after moving to Northampton from Connecticut, where he had been active in volunteering for conservation groups. "I wanted to continue doing that type of volunteer work after moving here, and joining the BBC board was a logical way to do this," Bill said. His board service has focused primarily on stewardship issues, with a particular interest in invasive plant control and maintaining the ecological integrity of FLCA, which he calls "one of Northampton's greatest assets." Bill has been a familiar presence on BBC workdays throughout his tenure, whether pulling water chestnut, monitoring water quality, working on bridge and dock repairs, or removing invasive species. In 2012, following an aquatic plant survey of Fitzgerald Lake by botanist Matt Hickler, Bill compiled the results into an illustrated list available on the BBC website, with information regarding common and scientific names, range, habitat, and other information.



Alan Marvelli



Bill Williams

Thank you, Alan and Bill, for your many years of service. We'll miss you both!

CONSERVATION NEWS IN BRIEF

Invasive Plant Removal Proceeds Despite Covid-19

One of the most refreshing activities we can pursue during the Covid-19 pandemic is to spend time outdoors, whether walking, running or....removing invasive plants. With respect to the last, we found that masks and distancing posed no impediment to invasive plant control. This summer, crews sallied forth on Fitzgerald Lake in kayaks, canoes, and rowboats to remove water chestnut, a persistent aquatic invasive that at one time threatened to spread over the entire lake. Getting out in June to remove early germinators and at several times throughout the rest of the summer, we harvested 180 pounds of water chestnut, down from almost 1100 pounds four years ago. By the end of the season, it was hard to find any plants left in the lake but, since the seeds can still germinate after seven or eight years on the lake bottom, we'll be continuing this work for several years to come. In October, a group of volunteers continued the removal of invasive plants along Boggy Meadow Road, cutting, pulling, or digging multiflora rose, Japanese barberry, winged euonymous, and bittersweet. After three hours, it took a pickup truck to carry all of the harvested material to an appropriate dump site.



Dick Wynne, Dave Pritchard, Bob Zimmermann, and Bill Williams fill Dick's pickup with invasive plants from Boggy Meadow Rd.

Species Spotlight

(This is the fourth in a series of articles featuring species of animals and plants that are readily found in the Fitzgerald Lake Conservation Area. A fuller version of this article will be placed on the BBC website, broadbrookcoalition.org.)

Common Name: Largemouth Bass

Scientific Name: *Micropterus salmoides*

Physical Description: Largemouth bass are one of the largest freshwater fish species found in many ponds, lakes, rivers, and freshwater marshes in Massachusetts. Adults commonly range between 10-16 inches in length in Massachusetts, though can grow much larger given adequate food and longevity. The current state record is a 15 lb. 8 oz. individual caught in Carver, MA in 1975. In the southern U.S. they typically grow much larger, with the U.S. record currently being a 22 lb. 4 oz. individual caught in southern Georgia in 1932. They are predominantly olive-green in color throughout much of their body, with some black mixed in along their back, a prominent black mottled "line" running down the middle of both sides of their body, and a lighter tan/white belly and undersides. They are named for their impressively large mouth which enables them to engulf prey that can be upwards of 25%-35% of their own size.

Longevity: In the absence of fishing, largemouth bass typically can live to ~16 years, though individuals have been documented living greater than 20 years.

Distribution: Their native range in the United States was from much of the Great Lakes southward throughout much of the central and southeastern U.S. However, due to their popularity as a sport fish, they have been introduced throughout much of the western U.S. and almost the entirety of the eastern U.S. east of the Appalachians and northward throughout New England, with the exception of some areas of northern Maine. They have also been introduced as a sport fish to many other areas of the world.

Habitat: They are found in a wide variety of freshwater wetlands ranging from lakes, ponds, marshes, rivers, and even streams and creeks.

Reproduction: Largemouth bass typically spawn in mid-spring to early summer here in Massachusetts, when water temperatures have warmed sufficiently. Males will create a nest at the bottom of a freshwater wetland using their tail to clear off any debris or vegetation, and then the male will swim near the nest to find a female to mate with. The female will deposit between 2,000-40,000 eggs which the male will fertilize. The male will then stay to guard the nest until the eggs have hatched and the young have grown large enough to leave and fend for themselves, typically a period of several weeks. Largemouth bass commonly spawn twice in a year, and sometimes, though rarely, more than that.



Largemouth Bass

Prey: Largemouth bass are voracious predators and will eat almost any aquatic organism that is smaller than they are, ranging from a wide variety of fish species, frogs, crayfish, aquatic insects, muskrats, and even small birds such as ducklings at times.

Conservation and Management: Largemouth bass, especially where they have been introduced outside their native range, can have significant negative impacts on aquatic ecosystems. Because of their voracious appetites and wide diversity of food items, they can completely change the community structure and food web dynamics of such ecosystems, sometimes causing the complete eradication of individual species and/or reduction in population size and health of native species. Thus, care should be taken not to introduce largemouth bass into any aquatic ecosystem that they currently do not exist in.

Interesting Facts:

- Largemouth bass are not native to Massachusetts ("smallmouth bass" are the native bass species here in MA); they were introduced sometime in the 19th century and have become widespread since that time.
- They are actually a member of the sunfish family and are the largest member of that family.
- Largemouth bass fishing is a multi-billion dollar industry.

— Brad Timm

North Farms Road Gets a Do-over

As you may have noticed, North Farms Road is being repaved....at last. The entire two-mile stretch from Bridge Road to the Williamsburg border will have a brand new asphalt surface by the time you read this. As part of the project, the FLCA parking lot will be repaved and portions of the paved path where tree roots have caused heaves will be repaved with a porous, flexible mixture of recycled rubber and crushed rock that is resistant to freezing and will allow tree roots to expand without damaging the path. A new culvert has also been put in place close to the entrance to carry rainwater from North Farms Road and Country Way into the Broad Brook. All of the work should be completed by mid to late November – fingers crossed.

Broad Brook Coalition
P.O. Box 60566
Florence, MA 01062

www.broadbrookcoalition.org

NONPROFIT ORG.
U.S. POSTAGE
PAID
NORTHAMPTON, MA
PERMIT NO. 13

Current Resident or:

Volume 32, Issue Number 2, Fall 2020

Visit Us Online at:
www.broadbrookcoalition.org

Already a member? Consider passing this page on to a friend!

Join Us!

Please complete this form and return it with a check to:

Broad Brook Coalition, P.O. Box 60566, Florence, MA 01062

\$25 for Individual membership \$35 for Family membership. *All contributions are tax deductible.*

Name _____

Address _____

City _____ State _____ Zip _____

Phone _____ Email _____

Sign me up for a paperless newsletter (email address required).

I prefer to receive a printed newsletter by mail.

I've included an additional tax-deductible contribution to the Land Preservation/Stewardship Fund.

Donate Online! Renew your membership or join BBC on our website (click on Membership)

The Broad Brook Coalition needs your help, too. We are very grateful for membership dues, but want you to know that you can contribute in other ways. Members and friends are needed to help carry out our goals.

Please consider one or more of the following volunteer opportunities:

Board Member Trails Committee (maintenance and repair) Clerical

Stewardship Committee (includes invasive species removal) Land Preservation/Acquisition Committee

Occasional Work Days Education Outreach Newsletter writer Other (please specify) _____