Marblehead Conservancy

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MARBLEHEAD CONSERVANCY, INC.

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Annual Meeting

Annual Meeting: Wednesday March 22, 2023 at 6:30 p.m. The Marblehead Conservancy invites all members, friends, and others to its Annual Meeting in the parish hall of the Church of St. Andrew, 135 Lafayette Street in Marblehead. Light refreshments will be provided.

A brief business meeting begins at 7:00 p.m. followed by a presentation, ***New England Native***

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President's Message

The Membership, Treasurer, and Trails Committee reports included in this newsletter show that 2022 was a good year for the Conservancy. Had the prolonged summer drought not damaged or eliminated nearly one fourth of what we planted in the conservation areas to replace removed invasives and trash, it would have been a very good year, but nature has the upper hand. 2023, however, provides an opportunity to recover and improve.

The Conservancy is truly grateful for the financial support of members and donors and for the services of trail crew volunteer help as well as those who report trail and area conditions from walking the paths.

Bob French, President

Marblehead Conservancy Mission Statement

To protect, acquire, and enhance Marblehead's natural resources for the benefit and enjoyment of the community and the generations to follow.

Annual Meeting - from page 1

Plants, by our guest speaker, Master Gardener, Gretel Anspach. She is a Trustee of the Massachusetts Horticultural Society, a Lifetime Master Gardener with the Massachusetts Master Gardener Association, and a retired systems engineer for Raytheon. She won the MMGA Lifetime Achievement Award in 2016. Gretel established and maintains a 20,000 square foot food production garden that has provided fresh produce to the Marlboro and Maynard Food Pantries for the last eleven years. Her primary interest and focus is always in the science behind horticulture.

Ms. Anspach will focus on plants native to the region that are easier to maintain, better able to withstand New England weather, and might offer better resistance to deer and rabbits. The trees, shrubs, and perennials that evolved here will grow here with much less input. She will show how to "go native" and reduce personal workload while creating a paradise for native birds and pollinators.

Dates to Save

Earth Day/Arbor Day: Saturday, April 29, 2023, 9:00 a.m. to noon. Plans are being developed for the continuing expansion of native flower, shrub and tree plantings at Lead Mills. Scout Troops will be helping. Details will be announced later. To receive updates via email, register for our mailing list at www.marbleheadconservancy.org.

Farmers Market opens: Saturday, May 27, 2023. Be sure to visit the booth with Marblehead Conservancy and Town Recycling Committee displays.

Membership Report

It is our members who provide the moral and financial support which enable the Conservancy to pursue its mission. Without such support the Conservancy couldn't exist. Annual membership dues are our primary source of financial support, providing the major share of our annual operating revenue.

Since the onset of the COVID pandemic we have witnessed a marked increase in the public's interest in and usage of the town's conservation areas and other open spaces. Thankfully, this coincided with the Conservancy reaching record membership in 2021. As the pandemic receded into the background during 2022, the number of members declined about 8% to 406, still well above pre-COVID levels. Notably, 2022's membership dues of almost $43,000 were almost equal to 2021's record level.

	2022	2021	2020
Members	406	441	408
Membership dues	$42,908	$43,160	$35,363

Annual membership dues are on a calendar year basis and thus 2023 memberships are now open. To renew your membership or to become a new member, please go online and use the *Join Us!* tab on our website (marbleheadconservancy.org) or use the form enclosed with this newsletter. Early remittance is appreciated - and saves us from asking you again this year.

As always, we sincerely thank Conservancy members for their continued support and generosity.

- *Dick Marcy and Nina Robertson, Membership*

Treasurer's Report

Total operating revenues for 2022 were $53,038. Operating expenses of $42,220 resulted in an operating surplus of $10,817. Revenue from membership dues remained almost identical to 2021 (about $43K - see Membership Report). Sales of books and logo products rose moderately due to renewed interest in the "Discovering Marblehead" book. We printed fifty in the late Fall and they sold almost immediately after years of selling around 15-20 per year. Contributions were up significantly from $5,546 to $8,913.

The Endowment Fund portfolio ended the year at $362,447, down about 15% reflecting the adverse financial market conditions during the year. Ending Operating Funds were $80,666, up $14%.

Marblehead Conservancy, Inc.
Summary Financial Report

Statement of Operations
January 1 - December 31, 2022

Operating Income	
Membership Dues	$42,908
Contributions	8,913
Sales (books, shirts, etc)	1,168
Transfer - Restricted Funds	0
Interest, Dividends, Other	49
Total Operating Revenue	$53,038
Operating Expenses	
Trails Projects (incl. wildflowers)	$22,149
Office and Administration	9,091
Education & Professional	881
Insurance	7,226
Miscellaneous	2,874
Total Operating Expense	$42,221
Operating Surplus(Deficit)	$10,817

Statement of Condition
December 31, 2021

Operating (unrestricted) Assets	
Operating Funds	$ 80,666
Liabilities	0
Net Operating Assets	$ 80,666
Restricted Assets:	
Trails Endowment	$ 362,447
Harbor Glade Grant	7,021
Total Restricted Assets	$ 369,468
Total Net Assets	$ 450,134

The Endowment Fund is primarily (68%) invested in equity index funds and 32% in short-term bonds and money market funds. All of our non-endowment funds are in cash or cash equivalents. The Conservancy continues to be in sound financial condition.

- *Don Morgan, Treasurer*

Trails Committee Report

Trail Crews logged 2,546 hours last year, 366 hours more than last year with Trail Crew attendance holding up after a growth spurt during the most active COVID period. Regular Trail Crew work varied throughout the year, covering eight open space areas with a wide roster of activities. Special projects included supporting three Boy Scout Eagle Projects and the Marblehead High School freshman day of service. Our primary tasks are mowing and trimming five miles of trails through the growing season, planting trees and shrubs in the fall and spring, and removing invasives in the winter.

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Trails Committee Report - from page 3

We are also engaged in a continuing effort to turn a large part of the Lead Mills conservation area into a pollinator-friendly wildflower meadow. Late in 2021 a second (10,000 sq. ft.) portion of the meadow was sown.

In spring of 2022 we planted about 5,000 sq. ft. of a neighboring area with 90 young native shrubs. Preparation of this area featured a long, drawn-out battle to remove forsythia, a task requiring help from a backhoe (thanks, Ken Steadman!). Finally, we moved our portable irrigation system to cover both the new meadow and native shrub areas.

Three supported Eagle Projects were:

- Tyler Arp – removed invasives from the High School garden area.
- Drew Bianculli – raised and rebuilt Seaside Park boardwalk.
- Sam Putnam – rebuilt about 40% of our first (2005) Ware Pond Boardwalk.

Details of other tasks and projects from 2022:

- Led ten sessions Tower School students removing invasives and planting native shrubs.
- Removed 72 bags of trash and about 100 old tires.
- Removed branches and trash from Babbling Brook in Steer Swamp to improve its flow.
- Spread 65 cubic yards of wood chips in nearly all our sites, protecting the trails. This work included greatly appreciated support from the MHS Cross Country Team who chipped the Peggy Curtin Trail in Wyman Woods.
- Cut invasives in all eight of the areas we maintain.
- Trimmed trails (at the ground, along the sides, and overhead) on all five miles of trails.
- Planted 68 additional young native shrubs and trees along with ground cover plants and ferns.
- Shoveled snow from conservation area entrances.
- Rebuilt two boardwalks, put preservative on all of them, and replaced about twenty deck boards at Ware Pond and Hawthorn Pond. We maintain fifteen individual boardwalks and bridges comprising a total of just over 800 feet.
- Kept thirteen trail entrance map display boxes full, thanks to a corps of volunteers. We have distributed over 12,800 free maps this way since 2014.
- Continued a third year of controlling Japanese knotweed at the newly donated Wilson Road property at Ware Pond and laid a 20'x20' black tarp there to prepare for wildflower planting.

We held our annual Earth Day-Arbor Day celebration at the Lead Mills, with a program designed by Mo Ashley. Trail Crews helped assemble the materials and Mo made "Bee Hotel" and birdhouse kits from corks for visitors to assemble and place in their yards. In addition, we handed out Marblehead Conservancy Passports, designed by David Krathwohl in the spirit of National Park Passports. These included one page for each open space and a sticker for that page to be applied when visited. In addition, we spread soil to extend the planted berm along Lafayette St. and picked up trash on the neighboring shoreline.

We look forward to more Trail Crew projects and accomplishments in 2023.

Trails Committee:

Maureen Ashley	David Krathwohl
Kathryn Breslin	Joan McDuff, honorary
Steven Butterworth	Donald Morgan, Chair
Donald Forte	Doug Perkins, Forest Ranger
Bob French	Jiri Rodovsky
Jody Howard	Richard Thibedeau

Richard Marcy, Vice Ch.

- *Don Morgan, Trails Committee Chair*

Nominating Committee Report

The Nominating Committee will present nominees for Conservancy Trustees and Officers to be voted on by Members at the Annual Meeting:

Nominees for the Board of Trustees are Kathryn Breslin and incumbents: Maureen Ashley, James Caplan, Donald Forte, Robert French, Jody Howard, David Krathwohl, Richard Marcy, Donald Morgan, Nina Robertson, and Donald Tritschler. Officer nominees are Robert French for President, Donald Morgan for Treasurer, and Richard Marcy for Secretary.

The maximum number of Trustees for the next year is proposed to be twelve, one more than the list of nominees. This will allow the addition of one Trustee during the year as circumstances may warrant.

Lead Mills Wildflower Project for 2023

Horticulture professionals tell us that, after proper preparation and care, the 3rd season of a newly sown meadow will be when one sees the results – many native wildflowers in bloom. This summer will mark the 3rd year of the Marblehead Conservancy's continuing efforts to convert portions of Lead Mills into native wildflower meadows.

Work on this project began in 2020, when the first 12,000 sq. ft. field to be seeded was scraped of its topsoil and sown with a selection of native wildflower species chosen to be beckoning to native pollinators. So, one might hope to see many plants blossoming this summer.

The second field to be sown, planted with the same mixture of native wildflower seeds, was prepared differently, undergoing several tillings at the end of 2021. We might expect to see some blossoming here as well, in this its 2nd season.

But this blossoming of native wildflowers doesn't happen by magic! Despite much time spent by a small group of dedicated volunteers, thus far mostly weeds seem to have proliferated. The amount of time needed for this project was not well understood and we probably underestimated how tough the weeds would be.

Season 2023 will be a time for reflection, to re-examine the methods used in preparation, and the various maintenance efforts employed. The reduction of the weed seeds in these two fields was not adequately achieved, and those native wildflowers that sprouted have an uphill battle fighting the weeds. Weed control is said to be critical in a newly seeded meadow. We suspect we might not see all the results we hoped for. If that turns out to be the case, we will need to consider other methods.

Among these "other methods" are preparation techniques that many would consider inappropriate for Lead Mills. Research has suggested, for example, the judicious use of herbicides to reduce weeds. Other methods require longer time horizons than hoped for, such as repeated tillings over a couple of years to more successfully get rid of weed seed banks. Regarding long-term management of wildflower meadows, burning has been suggested as the most effective management strategy, an obvious non-starter for Lead Mills.

For 2023 the plan is to take a different approach. Rather than seeding large areas as previously done, we will plant wildflower plugs in much smaller plots, where weeds have been aggressively

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Wildflower Project - from page 5

minimized. With fewer weeds to start with, and continued weeding throughout the growing season, we hope this approach will work. If it is successful, we will have achieved a formula for creating wildflower meadows, a few hundred sq. ft. at a time! The Lead Mills meadow areas chosen for wildflower planting total about forty thousand sq. ft. At +/- 500 sq. ft. per year, the wildflower project would take 80 years!

While establishing native wildflower meadows looks to be more problematic than first thought, the areas around the perimeters, where some native shrubs have been planted, are doing well. Thanks to weeding efforts by knowledgeable volunteers, and scheduled watering during periods of drought, these shrub areas seem to be growing and thriving, providing foraging areas for native pollinators to gorge!

In 2023 we also plan to encourage the establishment of a sumac grove where these wonderful native and pollinator-friendly trees are already growing. While many have considered this plant to be a weed, it is actually a valuable pollinator-friendly native tree.

- *The Wildflower Committee*

Volunteer Caring for Marblehead's Great Outdoors

Maybe it's because I'm a fan of author Nevada Barr's mystery novels featuring National Park Ranger extraordinaire, Anna Pigeon, that I came to volunteer with the Marblehead Conservancy. Over the years I've enjoyed living vicariously through Anna as she explores beautiful parks around the country. So when I learned that the Marblehead Conservancy had a Trails Crew Committee, I decided to give it a try. I was going to be an "amateur ranger" right here in Marblehead, just like Anna! (Minus the mystery and crime fighting, of course.)

Founded in 2001, the mission of the Marblehead Conservancy is to protect, acquire and enhance Marblehead's natural resources for the benefit and enjoyment of the public. With five miles of trails on 165 acres of land, its focus involves maintenance and improvement of trails and keeping areas accessible and safe, both now and in the future.

My first day on the volunteer job I was greeted warmly by Conservancy President Bob French, Trail Committee Chair Don Morgan, and a group of dedicated men and women, all with smiles and a very welcoming attitude. Every Wednesday and Saturday the group meets in front of their work shed in Robinson Farm to discuss what areas need attention, and who would like to volunteer for each task.

Jobs might include planting new shrubs and trees, spreading wood chips, clearing invasive species, cutting back and pulling weeds, mowing lawns, removing trash and debris, building stone steps and sealing and repairing wooden bridges and boardwalks.

Being a member of this group has pushed me outside of my comfort zone in many ways. For example, before joining the trails committee, I had never operated a lawn mower! Knowing a boy when I was young who had an unfortunate accident with his toe and a lawn mower really had made an impression. But I eventually conquered my fear and gained the

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Volunteer Caring - from page 6

confidence to use a mower—and many other tools—with the expert guidance of the group leaders and members. Loppers, hedge trimmers and pitch forks? No problem. I still haven't tackled a Pulaski axe, but maybe someday!

Volunteering in the town's green spaces is enjoyable for many reasons. It's a way to get fresh air and exercise in beautiful locales, to socialize with a group of volunteers with diverse career backgrounds and interests, to meet community members out on the trails, to learn new skills, and to discover a lot about plants and their care. I've also gained confidence as a woman that I can handle many of the tools that I previously found intimidating and dangerous.

Since I never know which nature preserve we will be visiting, or what new job we will be undertaking, each time I volunteer it's new and exciting. I have discovered new trail entrances and visited green spaces in town that I used to just drive by, unaware of the treasures that were in my midst.

For example, though I'd been to the Village School countless times, I had never explored Robinson Farm, which lies directly behind. While we were clearing both litter and invasive bittersweet from Robinson Farm, I learned a great deal about the history of the farm and the land.

It might be surprising to hear that if you're a history buff, this is also a great group for you. The team members are quite knowledgeable about the history of the open spaces in town and are very happy to share what they know. Just visit their web site, marbleheadconservancy.org, and you'll get a sense of what I mean. You'll find a wealth of maps, information, and history about the land and its usage, and much more.

Even though I can't commit to trail work every week, I am greeted enthusiastically each time I can attend. Their motto is to come and work when you can, with no pressure. Being a busy mom with even busier kids, this flexibility has been very welcome.

I am humbled to volunteer with a group who has been dedicated to the green spaces in Marblehead for decades. I consider myself fortunate to learn from them and help preserve natural areas in town for the enjoyment of all. I encourage Marblehead adults young and old, men and women alike, to give it a try. We may not be Anna Pigeon in Yellowstone National Park, but we can certainly make a big contribution right here on our own preserved land.

- *Elaine Leahy, Trail Crew Member*

Christmas Fern

An empty time of winter is with us. Conservation area trails are under snow and layers of leaves, trees along the path are bare, not a color anywhere except the white of snow, brown patches of earth, dead leaves, and the gray bark of trees.

Wyman Woods holds a little surprise for its hikers. Occasionally you can see a flash of dark green growing on the edge of a rock ledge or next to a fallen log. It is a cheery, welcome sight to see something that can weather the cold and dark skies. You've found Christmas ferns, which stay green all year around. How do they do it when everything else has died back?

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Christmas Fern - from page 7

Ferns are wildly different in their growth from other forest plants that we encounter - no bark, no stems, no branches, no showy flowers. Yes, they have roots, and yes, they have fronds, a form of true leaf. Christmas ferns also differ from other types of ferns in that the fronds have a leathery texture and they tend to grow in small clumps of 2 to 3 plants. Another oddity - they stay green all year long, even under a layer of snow.

They can manage that trick because Christmas ferns produce two different types of fronds for different uses. One set of fronds, called fertile fronds, have brown dots named sporangia (basically pockets where spores are held) on their undersides. These

Christmas ferns in Wyman Woods, December 2022

are the fronds that will produce new ferns. The other fronds don't produce spores and are called sterile fronds.

Christmas ferns use the two different types of fronds for different reasons. Both sterile and fertile fronds create food for the fern through photosynthesis during warm weather. As the weather gets colder, fertile fronds with sporangia die back while sterile fronds keep chugging along. The sterile fronds are believed to contribute to the fern's survival by storing plant sugars throughout the winter. Penn State botanists suggest that the sugars can act as a natural antifreeze for the fern, allowing the fronds to stay green in the cold. Sugars can also be transferred through the root to new fronds as an energy jumpstart in the early spring.

The next question that comes to mind is how do they reproduce without flowers? The answer for all you plant-lovers: sometime in June to September, a spore produced in the sporangia drops to the ground and grows to be a small (2 to 5 mm.) flat disk of cells. Both female and male cells are produced on this disk. When mature, the male cells swim on a raindrop or dew (no kidding!) to fertilize the female cells. A new fern plant can grow out of the fertilized cell.

As winter warms into spring, new fertile fronds will poke themselves through the earth and snow. They look like (and are called) fiddleheads, which unroll themselves slowly to become more fronds, continuing the annual cycle of growth and die-back.

So, look for the green of Christmas ferns fronds this winter in Wyman Woods, and look for fiddleheads unfolding in the spring

- *Kathy Krathwohl for Plant Watch*

Visit ***Plant Watch*** under **Resources** on the Marblehead Conservancy website at **www.marbleheadconservancy.org** to learn of other lesser known plant species.