

PO BOX 292, LEXINGTON MA 02420-0003 ADDRESS SERVICE REQUESTED

NONPROFIT ORG. **U.S. POSTAGE PAID LEXINGTON MA** PERMIT NO 3314

Eileen Entin, Chair

September, 2015

Kate Fricker, Editor

IN THIS ISSUE:

Dues Notification	p. 2
Stewards Open House	p. 2
Photo Credits	p. 2
2015 Fall Walks	p. 3
Thank You Walk Leaders	p. 4
Lexington Seed Catalogue	p. 4
ACROSS Lexington	p. 6
Lexington Community Farm	p. 7
Junior Rangers	p. 8
The Great Transition, by Lester Brown	p. 8
Citizen Science	p. 9
Hennessey Field	p. 11
The New Wild, by Fred Pearce	p. 12
Whitman Fund	p. 12
Answers to Photo Quizzes	p. 12



Printed on Recycled Paper

New Dues-Notification System

Citizens for Lexington Conservation is a non-profit 501(c)3 organization that relies on dues paid by members to cover its expenses. Look at your mailing label to check your membership status, as we have a new notification system. If you paid your dues in March 2015, your label will say Dues Paid Through MAR 2016. If it says Dues paid through SEP 2015 (or earlier), then it is time to renew your membership. If it says "Complimentary Copy," you are receiving a complimentary copy of our newsletter because you are a Town Meeting member or other public official in Lexington. We hope that those who receive complimentary copies will find our organization of value and will in time become duespaying members. **To join CLC or renew your membership**, please send \$20.00 to Citizens for Lexington Conservation, P.O. Box 292, Lexington, MA 02420-0003. Dues may also be paid by credit card through PayPal from a link on our web site, http://www.clclex.org.

There is both a paper version and an electronic version of the CLC Newsletter. If you are currently receiving your newsletter by snail mail, but would like to get it by e-mail, (or if you would like to be removed from our mailing list) contact Judy Mello at. imac-mello@comcast.net:

Lexington Conservation Stewards Open Space Open House Saturday, October 24th, 1-3 p.m. Large Meeting Room, Cary Memorial Library

This event will feature a short presentation by Conservation Department staff highlighting this year's conservation projects and thanking the Stewards for their volunteer service. Attendees will then circulate through various display tables that highlight different aspects of the Stewards' work, such as boardwalk/bridge construction, citizen science opportunities, trail clearing and nature walks.

The Conservation Stewards welcome all Lexington residents to the open house to see and learn more about their activities on our conservation lands.



Photo Credits:

Page 1,2,4,5,8,9,11,12, by Kate Fricker Page 6, by Harriet Silverman

CITIZENS FOR LEXINGTON CONSERVATION 2015 FALL WALKS

Saturday, September 19, 8-10 AM Bird Walk at Dunback Meadow

Meet at the Allen Street entrance to Dunback Meadow. During the early fall many migrants return through our fields and woods. Warblers, finches, hawks, and sparrows may be seen. Children with adults and beginners are welcome. Bring binoculars if you have them. Boots are recommended if there has been rain recently. Rain or lightning will cancel the walk.

Walk Leader: Bobbie Hodson (robertahodson@comcast.net; 781-861-9241)

Sunday, September 27, 11 a.m. – 12:30 p.m. Insects at Dunback Meadow

We will start at the Allen Street entrance to Dunback Meadow. Children with adults are welcome. Meet naturalist and nature photographer Tom Whelan on a nature walk at Dunback Meadow. We will explore the Dunback Meadow area for fall insects: dragonflies, butterflies, bees, and other many-legged creatures. People attending are encouraged to bring cameras for insect photography. On the walk, we can discuss techniques and equipment for closeup photography. Severe inclement weather will cancel the walk.

Walk Leader: Tom Whelan (tom@whelanphoto.com; 781-915-9988)

Sunday, October 11, 1:30 – 2:30 p.m. Walk at Cotton Farm – Upper Vine Brook

Meet at the parking area at Cotton Farm (entrance at 121 Marrett Road). Parking is limited, but you can park along Marrett Road. Kids old enough to enjoy the walk are welcome. We will walk by the apple orchard (Macouns--a bumper crop this year—are free for the taking) and then up through the gladed area to the Upper Vine Brook woods, ending at Highland Avenue. After returning to the parking area, for those who have additional time, we will cross over Marrett Road to Dunback Meadow and walk up to "four corners" and back. Highlights of the new Land Management Plan for Cotton Farm will be explained. Rain or lightning will cancel the walk.

Walk Leader: Bob Hausslein (rhausslein@rcn.com; 781-862-9102)

Sunday, October 18, 1 – 3 p.m. West Farm-Liberty Heights-Sutherland Woods

We will meet at the corner of Oak Street and Bruce Road. Best parking is along Massachusetts Avenue on either side of the Oak Street intersection. Walk up Old Shade Street a short block to Bruce Road. Come explore a collection of Lexington's smaller Conservation properties with some rewarding views on a fall afternoon. Come explore a collection of easy with the steepest grades along sidewalks for the most part.

Walk Leader: Keith Ohmart (kohmart@verizon.net; 781-862-6216)

Sunday, October 25 1:30 – 3:00 p.m. Native American Walk at Paint Mine.

Find out about how Native Americans used the natural resources in this area. Find out why this area is called the Paint Mine. This walk will be especially oriented to families with children.

Check the CLC web site: (http://www.clclex.org) for meeting location

Walk Leader: Fran Ludwig (fludwig12@yahoo.com)

.Thank you Walk Leaders

Our thanks to the volunteers who lead our CLC Walks. The walks last spring were led by Tom Whelan, Bobbie Hodson, Harry West, Eileen Entin, Bob Hausslein, John Andrews, and Fran Ludwig.

Lexington's Seed Lending Catalogue

By Nancy Gold

The novel idea of housing a seed lending cabinet within a public library is quickly being embraced and replicated in many communities across the country. The idea at its most basic is that libraries offer small amounts of seeds of openpollinated and heirloom plant varieties to patrons for planting. (Seeds of hybrid varieties are not on offer for the reason that seeds saved from these will not grow true to the parent plant.) At the end of the growing season, patrons who have enjoyed success are asked to save seeds from their best plants to bring back to the library to share with others. The concept



Photo Quiz: What is this?

is spreading so fast that a locator map of existing seed libraries found here, http://www.seedlbrarian.com, shows more than 200 nationwide at last check.

The reasons for hosting a community seed lending program are many, but in most examples, the initial impetus for organizing is derived from a food based organization, such as The Cape Cod Food Hub, hosting a program at Barnstable's Sturgis Public Library, or the Littleton Community Farm's *Seed Library Littleton* program housed at their Reuben Hoar Library. In this sense the trend is tracking closely with the evolving Local Food Movement and efforts to rebuild and strengthen local food systems (and local economies) in order to reduce reliance on national and global food supply chains. After all, the distance from the garden to the table is a short one, indeed.

In addition to reducing pressure on the public food supply by encouraging more members of the community to grow some of their own food -- better flavor and nutritional content notwithstanding -- the trend is about preserving biodiversity. At the same time that farms and food retail outlets have increased in size over the past several decades, the genetic diversity of the crops in cultivation has diminished just as substantially.

http://www.fastcodesign.com/1669753/infographic-in-80-years-we-lost-93-of-variety-in-our-food-seeds

The Lexington Seed Library launched on February 28th and represents collaboration between The Cary Memorial Library, The Lexington Community Farm and The Lexington

Field and Garden Club, with participation by The Lexington Interfaith Garden. It is hoped that many in our community will find inspiration and encouragement through the many seed varieties on offer, and will find support through the library's print and internet resources, speaker events, seed swaps, and organic gardening classes offered at the community farm. The organizations involved share a vision for a reinvigorated community of local gardeners, gathering periodically to share their experience, knowledge, triumphs, challenges, and, of course, locally grown seeds, with one another. Many involved in the creation of community seed libraries are aware that plant varieties adapt and acclimate to the geographic locale in which they are raised, thereby developing a hardier collection of seeds for each region.

The Lexington Seed Library has expanded on the original seed library idea to include a collection of seeds of native plants that help our pollinators at each stage of their lifecycles. These special seeds have been carefully sourced and are available together with specific instructions for preparing a site for their planting. Planting these seeds is a long-term commitment and entails the creation of a mini-meadow in one's yard. The seeds included are not the same as one might plant for purely ornamental reasons. Some require three years to mature and they need to be allowed to remain in place after they have bloomed. In other words, the mini-meadow could appear rangy, messy and wild at times. The beauty of this special project is that it enables those who wish to be proactive



Shaggy Mane Mushroom

and actually do something to help the pollinators, to take real steps to make a difference. Just as we hope to collect seeds back from the varieties in the other seed cabinet drawers, saving seeds from the wildflower mini-meadow project will be especially important, as these seeds are not widely available and, because they are scarce, they tend to be costly. If we are able to increase local production of these seeds and enable more in the community to replicate the mini-meadows, it would be a very timely, environmentally beneficial and valuable outcome for the community.

By the time you read this, more than 300 patrons will have "borrowed" more than 2000 packets of seeds of more than 150 different varieties. Plans are underway to host combination harvest potlucks and seed swaps in the late summer and fall. A crowd funding campaign was launched through the Friends of Cary Library and contributions go toward funding educational speakers and materials for next year's rollout. Contributions can be made here:

http://www.razoo.com/story/Lexington-Seed-Library

Participation is welcome and you do not need to successfully save seeds to attend a potluck. Inquiries may be sent to <u>seedlibrary@lexfarm.org</u>.

ACROSS Lexington News

By Keith Ohmart and Eileen Entin

On June 14, the ACROSS Lexington system was renamed **ACROSS Lexington: The Rick Abrams Memorial Trail Network**, and was dedicated in memory of Rick Abrams. Rick was one of the founding members of the Greenways Corridor Committee (GCC), which has been charged by the Board of Selectmen with developing the ACROSS route system. Rick, who passed away in June of 2014, was instrumental in all phases of the early development of the ACROSS system and energetic in promoting its use widely. He extolled the health benefits of walking and led a number of walks on the early ACROSS route network.

Speakers at the dedication ceremony, which was held on the Green in front of the Depot Building, included Selectman Joe Pato, GCC chairman Keith Ohmart, and Rick's long-time friend, Jack Donahue. Rick's wife, Susan Kenyon, spoke briefly to attest how important development of the ACROSS trails was for Rick and to thank all those who gathered for the dedication.



Rick's wife, Susan, speaking of Rick's dedication to ACROSS and thanking participants for attending the dedication

Following the ceremony, many of the over 60 in attendance participated in a walk on the B-route, a 4.5 mile loop. Starting from the depot, walkers traversed the Lexington recreation fields, a portion of Lincoln Park and the Reservoir. The route then took them to Clarke Middle School, through the forested area behind Clarke, through the meadow area

of Dunback Meadow, over to Cotton Farm where refreshments were available, then through the Upper Vine Brook Conservation area, returning to the starting point via Highland Ave and the Minuteman Bikeway.

This summer the Greenways Corridor Committee has been working on the development of additional routes. Although the four ACROSS routes developed to date are loops, the next two routes that are currently being laid out will link existing trails. One will link the Minuteman Bikeway to the Minuteman National Historical Park trail. Another will provide a link between Route B as it traverses through Lincoln Park to an intersection with the Minuteman Bikeway/Minuteman National Historical Park route. The committee anticipates that the marked routes will be in place sometime this fall.

Lexington Community Farm

By Amanda Maltois

2015 marks Lexington Community Farm's second season. While two seasons is not a lot of time under our belt, when we take a moment to look back we can see how far we have come as a farm and a community resource.

This season many hands have worked countless hours to make important improvements around the farm. Several volunteers took time out of their busy summer schedules to help weed, mulch and make necessary repairs throughout the farm. We hosted several community groups from local businesses to schools. These groups helped our Farm Manager Tim Hines clear rocks and weed and plant in the fields. Lexington Eagle Scouts also put their skills to work on the farm by building fences and picnic tables.

Our Learning Garden had its own share of visitors this season. A Lexington Girl Scout troop as well as several school groups from both Lexington and Arlington joined us in planting, weeding and harvesting. Our educational programs for both adults and children were attended by over 75 families from Lexington, Arlington, Somerville and several other area communities. We look forward to continuing to provide a hands-on learning experience for all those that are interested.

Our farming operation has continued to grow. Farmer Tim is working to improve soil conditions on the land - a practice that farmers all around the world must do. With the use of different types of cover-crops, Tim is bringing much needed nutrients back into the soil. While the farm worked at a smaller production level this year, Tim expects to continue to move toward full production in the coming seasons.

This season we are growing several varieties of vegetables, herbs and flowers for the Pick-Your-Own portion of our CSA program, which serves 180 families. Through partnerships with the Lexington Interfaith Food Pantry and Lovin' Spoonfuls in Boston, we are donating excess CSA produce and field produce to feed community members in need. In cooperation with the Lexington Center Alliance, we also have the privilege of selling our beautiful flowers in Lexington Center through September. We look forward to partnering with more Lexington groups to make locally grown farm goods accessible to everyone.

As we near the end of our second season we can't help but be proud of the work we are doing to conserve this beautiful land and its rich agricultural history. We invite community members of all ages to join us in making Lexington Community Farm a pillar of the local food economy and the Town of Lexington.

Update on Junior Ranger Program

CLC's Junior Ranger Program is up and running. The program includes a free do-it-yourself 9-page booklet for children and their guiding adults to use while they are exploring Lexington's conservation lands. booklet, which can be downloaded from the CLC website http://www.clclex.org/publications, contains activities and games oriented to increase awareness of the plants and animals that can be found in our conservation lands. When a child completes the activi-



ties in the booklet and signs the "Lexington Ranger Pledge" to keep our natural areas intact and safe for everyone, he or she can bring it to the Community Development office in Town Hall and receive an official Junior Ranger Certificate. CLC has developed this program to encourage families to get outside and explore our conservation parcels, and to help make children aware of their responsibility to be stewards of these lands.

The Great Transition: Shifting from Fossil Fuels to Solar and Wind Energy

by Lester Brown with Janet Larsen, Matthew Roney, and Emily Adams.

Book Reviewed by Eileen Entin

Lester Brown and his colleagues are optimistic in their vision of a switch in the upcoming years from fossil fuels to renewable energy sources. In this book, they back their views with data, actions, and societal trends that already show increased use of renewable energy sources. They discuss evidence and reasons for the decreasing use of oil, gas, and nuclear energy. They note that the use of coal, which takes an especially harsh toll on the miners and those who live near coal plants, is declining in many countries, whereas solar and wind capacity are growing. As an example of cultural changes that decrease the need for fossil fuel, they note that in cities there is a shift from car ownership to car and bike sharing, and to walkable communities, as well as an increasing use of electric cars by those who travel by car.

The authors see four key players involved in the transition from fossil to renewable energy sources: environmental groups, leading universities, forward-looking corporations and governments, and "a committed collection of savvy investors." At the government level, about 24 countries as well as 29 states in the U.S. have renewable portfolio standards,

which require that a certain amount of electricity generation be from renewable sources. For example, Germany, which has Europe's largest economy, generated 25 percent of its electricity from renewable sources in 2013, and plans to increase this to 40 percent by 2025 and 80 percent by 2050. Some businesses are turning to renewable sources for economic reasons. The authors quote Walmart's CEO as saying that his company, which has installed over 2050 solar power systems on its U.S. buildings, did this as a business decision. Billionaire Warren Buffet "invested some \$15 billion in the development of solar and wind energy by early 2014."

The authors examine four sources of renewable energy, primarily solar and wind, but also geothermal, and hydropower, and point to evidence for their increasing use. Among the reasons for the increasing use of solar power, they site the decline in the price of photovoltaic panels over the decades (from \$74 per watt in 1972 to less than 70 cents per watt in 2014). They point to the increasing harnessing of wind energy, with the U. S. and China as the "leaders in wind generating capacity." In the U.S., while there is still "not in my back yard" resistance in densely populated areas, wind farms are abundant in certain areas, and in the ranching and farming regions of the country, wind farms are often sought after for economic reasons.

Amidst the multitude of negative or at best skeptical views about the ability of renewable energy sources to support our needs, it is encouraging to have a positive view from one of our country's respected thinkers and his colleagues.



Citizen Science – A World of Opportunity

by Keith Ohmart

Are you a lister of natural phenomena? The first sightings of returning birds in the spring, or the first tulip to open? If so, then Citizen Science may be just the thing for you. The choices are many thanks to the Internet and the power of computational analysis, which makes it possible for amateur citizens to contribute meaningful data that is critical to many modern scientific research projects.

To cite just one example, it is now possible for anyone with an Internet connection to track the movement of migratory birds in real time by individual species on the Cornell Lab of Ornithology's Ebird web site (http://ebird.org/content/ebird/). The thousands upon thousands of individual sightings entered onto the Ebird web site on a daily basis by birders throughout the world make this possible. There simply aren't enough trained ornithologists to accomplish

this task on their own. It is the marriage of amateur participation combined with the management of trained scientists that is making these types of results possible across many fields of science.

Regardless of your interests, be they in astronomy, zoology, botany or just about any other scientific endeavor, there is a citizen science opportunity out there just waiting to engage your interest. A simple Internet search typing in the words, citizen science, yielded a long list of active projects in a wide variety of scientific fields of inquiry ranging from tracking the fall migration of monarch butterflies (https://www.learner.org/jnorth/monarch/), to plant phenology (https://www.farnwr.org/volunteer1.html).

On a personal level, the rewards for participating are many. Chief amongst them in my own case has been the opportunity to use the skills developed over a lifetime of bird watching to contribute to the field of ornithology in a meaningful way. What was once a purely personal pursuit has now taken on new meaning, enriching the time that I spend doing what I have always enjoyed many times over.

What is key is to match your interests, the amount of time that you have available, and the type of participation needed to what each project requires. The time commitment involved can range from once a year in the case of Mass Audubon's annual Christmas Bird Count to many types of seasonal involvements involving topics such as plant phenology or the recording of the migration of birds, insects, or amphibians. Some projects such as the Cornell Lab of Ornithology's annual Feeder Watch program do not even require leaving your house if you have a good window to observe the activity at bird feeders hung in your yard.

A cautionary note from my own experience is to start with modest goals in terms of participation and then add more time if you wish. Many projects can be done in your own backyard if travel or time constraints are a factor in limiting your participation. The plant phenology program offered by the USA National Phenology Network, or several of the bird observation programs offered through the Cornell Lab of Ornithology are good candidates to investigate if this is the case. Or you can use any of these programs as an opportunity to get to know in more detail a particular natural area in your community or the neighboring region.

There are even opportunities to continue your participation in citizen science endeavors when you take a vacation or if you take up a seasonal residence in another locale. A growing number of national parks, regional offices of the National Fish and Wildlife Service, as well as national and regional conservancy organizations of many kinds are operating citizen science programs on a wide range of topics.

So what are you waiting for? Do some investigating on your own and try joining a program that may take your skills and interests in the natural world to the next level. And if you find yourself with a rewarding experience, consider writing about it for publication in a future edition of the CLC newsletter.

Hennessey Field Meadow Restoration Project

By Alex Dohan

Those of you who visit Hennessey Field with any regularity will have noticed some major changes in the views there over the past few weeks. The stone walls that bound the Field are now mostly visible, after years of encroachment by brush and brambles, including many invasive plant species. This summer marked the beginning of a multi-year project undertaken by the Town Conservation Division to restore several meadow areas on Town Conservation Land, with Hennessey Field being the first.

In the middle of August some large machinery arrived at the meadow to remove many of the trees that had grown up along the stone walls and into the former horse pasture. Although the field has been mowed once or twice a summer for many years, there were areas that were too difficult for Town equipment to reach and those places slowly filled in over time with invasive bittersweet, burning bush, buckthorn, and our native pines as well. Visitors to Hennessey Field within the last five to ten years might never have realized that it really is an entire field, and not just a clearing in the surrounding pine-oak forest. Now its former identity has been revealed again.

Heritage Fields, a meadow restoration contractor, was engaged by the Conservation Division to do the heavy work, but Conservation Stewards and Staff assisted as well. Some of the debris was hauled off-site, but some was left to be taken care of by Mother Nature and Father Time - you may see a few large brush piles off to the sides of the meadow in the remaining forested area. These piles will be good winter refuge for small wildlife.



Fungus on a Birch log

The next step in the project at Hen-

nessey Field will be invasive species treatment, which will involve herbicides and future monitoring for further clearing and possibly more herbicide treatment. The herbicides used will be as species-targeted as possible and will be scheduled to avoid conflicts with activities at the Estabrook Elementary School such at the Big Back Yard program walks. This part of the project will be taken care of by Polatin Environmental Services.

In Lexington, most of the meadow areas have either been built on or reverted to forest. With this ambitious project, the Town is making an effort to preserve some of our farming heritage and maintain a varied habitat for wildlife by keeping some meadow areas open for grassland birds such as kestrels, bobolinks, and tree swallows. Over the next couple of years you can expect to see similar projects in other meadow areas of Conservation Land in town. While it can look a little rough in the early stages, we are confident that the end result will be a benefit to all residents of Lexington, both wild and domestic.

The New Wild, by Fred Pearce

Book Reviewed by Cynthia John

This is a fascinating read. Fred Pearce, an environmental journalist, provides ample evidence that we must reevaluate our current beliefs on invasive species. They are not the eco sinners they are often made out to be. Pearce bravely challenges the prevailing "ideology" that invasive are bad, and natives are good. The book is filled with powerful stories of the disastrous results of environmental restorations done by well-meaning conservationists.

The main theme is that there is no going back when change is the norm. Nature is dynamic and conservationists should stop trying to preserve some "pristine state". Humans have changed the planet too much. In an era of climate change and widespread ecological damage it is crucial we find a way to help nature regenerate. Embracing invasive looks like the best way to do this. It turns out only about 1% of invasive are troublesome, the vast majority settle in and become model eco citizens rather quickly and a new equilibrium is reached. Rather than being harmful, invasive are often positive in terms of diversity, habitat and food supply. Natives are not always so "good", and some can be very undesirable. Indeed, distinguishing between native and invasive is not always obvious and is often surprising!

Whether you agree or disagree with Pearce, he makes it clear that it is time for a fresh look at conservation.

Whitman Fund Supports Study of Animal/Plant Relationships

By Karen McCarthy

Thanks to the generous support of the Betsy Whitman Environmental Education Fund, students in the Lexington Public Schools will have the opportunity to observe pollinators in action this fall. New England aster, cone flower, goldenrod and bergamot were purchased and planted last spring at each of the elementary schools. The hope is that the

plants will attract pollinators and allow students to observe and inquire into the important relationship that exists between plants and animals. Over the next 2-3 weeks, grade 2 students will go on their Big Backyard walks to investigate the question, does the schoolyard provide habitat for valuable insects like bees and butterflies? Through questioning, observing, and collecting and recording data, students will draw some conclusions about the habitats located in their own backyard.

Answers to Photo Quizzes:

- p. 4, Queen Anne's Lace seeds
- p. 9. Fertile Frond of Ostrich Fern



Bumblebee on Goldenrod