

Let's meet at Lake Mansfield

The newsletter of Lake Mansfield Alliance (LMA)

Spring 2014



Lake Mansfield Alliance
is a project of the
Great Barrington
Land Conservancy

2014 LAKE MANSFIELD EVENTS

Sunday April 27th 10:30am-3pm

Lake Mansfield Celebration and Clean-Up Day

Sunday June 8th

Annual Fishing Derby hosted by
Berkshire South Regional Community Center call: 528-2810

Summer Lifeguards 11:30AM-5:30PM

Beginning on Memorial Day Weekend
Provided every day during school vacation

Children's Swim Lessons

Session 1: July 7-23
Session 2: July 28-August 13.
(Tuesday & Thursday)
Free to Great Barrington residents
Provided by GB Parks and Recreation
To register call Berkshire South: 528-2810.

Summer Yoga

Weds & Friday July 2nd – August 1st, 8-9 am
\$10 per class, a portion of proceeds to go to LMA

SEE INSIDE

LM Road Repair	2
Boats & Zebra Mussels	3
Bring On the Young	4
Citizen Science	5
Cleaner Water	6
Controlling Phragmites	7
Summer Yoga	8
Wild Parsnip Warning	8
Park Improvements	9
Clean-Up	9

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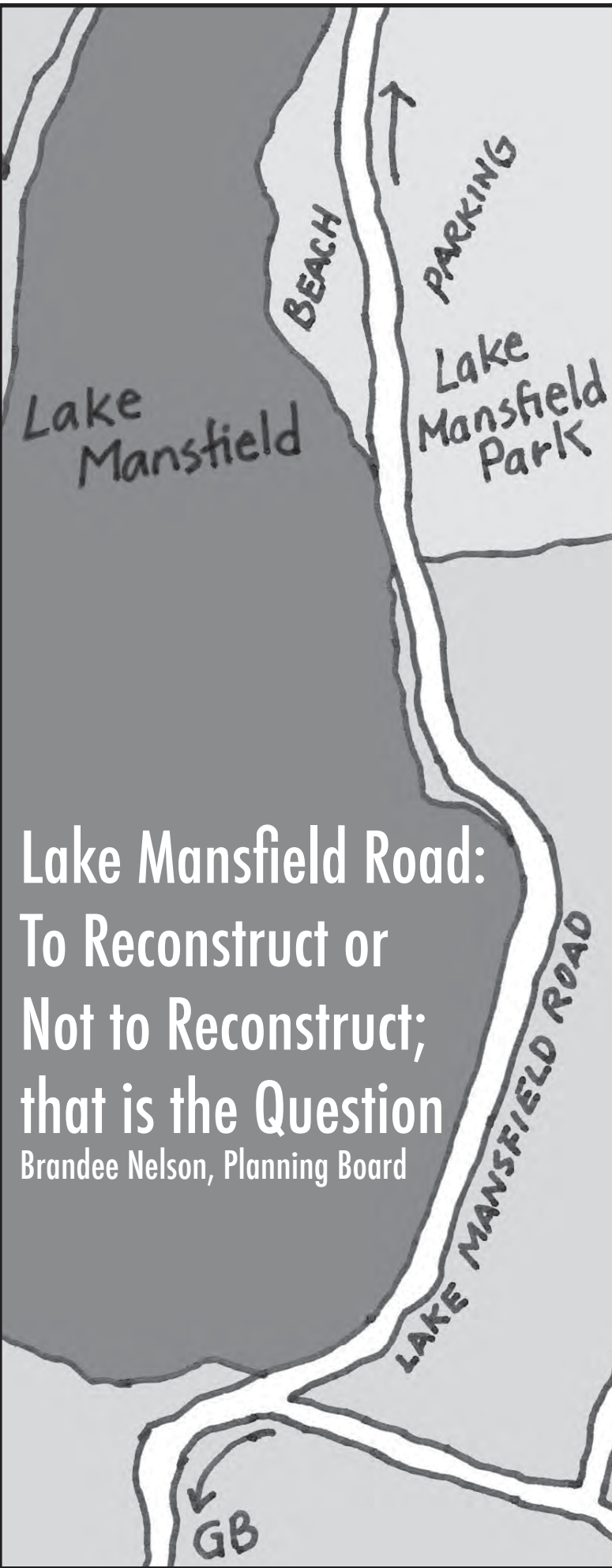


All Ages Working Together

Another year has zoomed by and LMA is striving to connect with youthful stewards who will someday be the ones charged with the ongoing care of our precious lake and forest. This is not to say that folks of all ages are not vital and vibrant in our efforts. This year's newsletter is chockfull of information, much of it written by Lake Mansfield Improvement Task Force members who serve as representatives from other town committees. Our stewardship efforts continue to depend on seasoned LMA volunteers who persevere in diverse stewardship efforts.

Help us – Your donations and volunteer hours are essential to our successful stewardship efforts.

Christine Ward, LMA Coordinator



Lake Mansfield Road: To Reconstruct or Not to Reconstruct; that is the Question

Brandee Nelson, Planning Board

Walking and driving along Lake Mansfield Road, it is apparent that the road needs repair. Although the road was paved only in the last thirty to forty years, it has provided pedestrian, vehicular and emergency service access between Christian Hill Road and Hollenbeck Avenue since 1945. During that time, users of the roadway have come to rely on its convenience, thus maintaining the road is necessary. Four road components have been identified as needing repair. The bank, eroded by ice scour, wind driven waves, and other forces, needs stabilization. Culvert pipes, in poor condition and damaged by traffic loads, need replacement. The outlet culvert needs improvement to prevent road flooding during storm events. The road pavement, currently in poor condition with numerous cracks and potholes, needs to be upgraded.

A report by Tighe & Bond (the Town's consulting engineer) provided an opinion of estimated costs and outlined repair alternatives to address the issues identified above. This report, presented to the Town and the Lake Mansfield Improvement Task Force for review and discussion, focused on three things:

- How water flows into and out of Lake Mansfield
- How much traffic exists on Lake Mansfield Road
- Options to repair the road.

The report found that in winter and spring, water and ice acting against and under the road are the primary reasons causing the road to deteriorate and erode into the lake. Culverts and drainage need to be fixed and the bank stabilized if the road is to be long-lasting. In addition, the volume of stormwater from large storms cannot safely pass through the 12 inch diameter pipe at the lake outlet, and could result in Lake Mansfield Road being overtopped. Recommendations from the report identify the need to install a new outlet structure that would allow both normal discharge of water from the lake as well as discharge of larger volumes from storms in order to prevent road flooding.

To determine the average number of vehicles that use the roadway, tube counters, a device used to count vehicles, were placed on the road in June 2013. The counters reported 550 to 575 daily trips along Lake Mansfield Road for the 2 days of the study, and found there were slightly more northbound trips (53%) than southbound trips (47%). It should be noted that the traffic counts are meant to represent an average day.

The Tighe & Bond report stated: "it is evident that the road is in extreme disrepair, and poses some unique concerns". Four alternatives for improvement were provided:

- Alternative 1: Rehabilitate the road, install a formal drainage system, and stabilize the road embankment to maintain 2 way traffic.
- Alternative 2: Re-classify the road to one-way traffic in order to reduce its level of use, in addition to rehabilitating it with drainage and bank stabilization.
- Alternative 3: Re-classify the road to a park access road which is closed to through traffic, and perform more limited rehabilitation.
- Alternative 4: Provide bank stabilization, culvert replacement and basic resurfacing to moderately improve existing conditions.

In conjunction with Joe Sokul, Department of Public Works Superintendent, and Chris Rembold, Town Planner, the Task Force met several times to discuss the findings of the report and debate the alternatives for roadway improvements. A number of variations on each of the alternatives above were also discussed. All alternatives require extensive permitting to comply with the various regulatory authorities including the Massachusetts Wetland Protection Act, Great Barrington Wetland Protection Bylaw, Massachusetts Natural Resources and Endangered Species Program, and federal Clean Water Act.

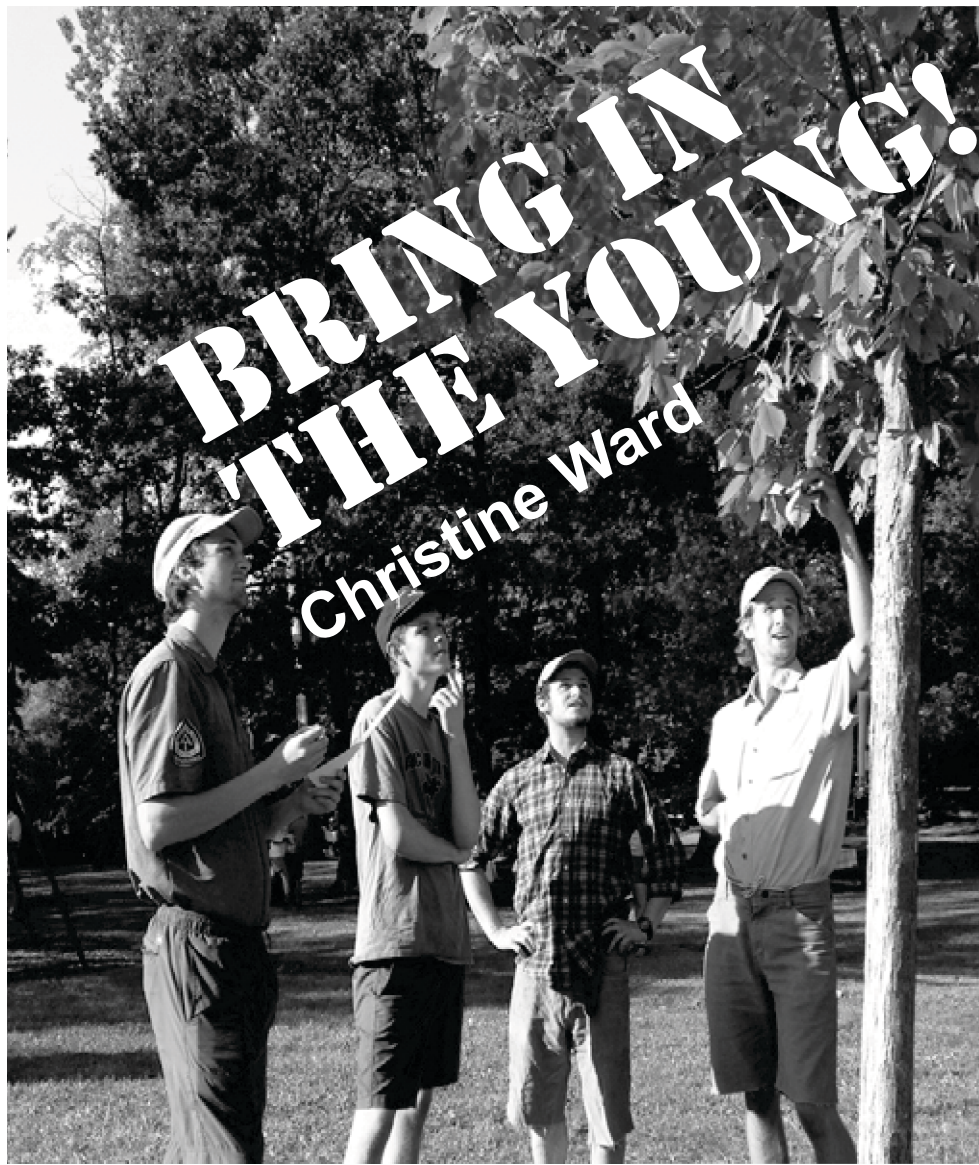
Although the discussion is only just beginning, the Task Force and the Town are concerned with striking the right balance of maintaining the road to provide access into and through the recreation area, protecting the natural resources in and around the lake, and minimizing the costs to local taxpayers. Providing safe access to all users, including pedestrians, bikers, and fisherfolks, is a top priority. With the exception of Alternative 4, which is estimated to cost approximately \$370,000, each of the alternatives to repair Lake Mansfield Road are estimated to cost between \$600,000 and \$1.2 million.

In the coming months, the Task Force will be working to identify possible funding sources and further evaluate the plan for roadway improvements to determine if the improvements can be prioritized into multiple small projects to lessen the financial burden of maintaining this important resource. The Task Force will present its recommendations to the Board of Selectmen, who will ultimately determine which, if any, of the improvement alternatives is implemented.

BOATS & ZEBRA MUSSELS

Protect Lake Mansfield: Wash your boat if you have been in zebra mussel infested waters. Zebra mussels can hitchhike on your boat and take hold in uninfested waters. Lake Mansfield is not immune to the invasion of Zebra Mussels. In fact, many of the lakes natural qualities make good conditions for this invader to not only live but thrive. Zebra Mussels are small freshwater mollusks, typically one inch or less in size, that grow in clusters and attach to solid objects. They are a non-native aquatic invasive species that were introduced to the US in the 1980s and can spread rapidly and significantly alter a water body. They are established in the bordering states of VT, NY, and CT and were confirmed in Massachusetts in 2009. It is imperative that boaters are conscientious when launching their vessel into any water way by completing the Clean Boat Certification Form before launching. These forms are located at both launching sites on Lake Mansfield. To find out more and the local bodies of water current listed as infested with zebra mussels go to www.lakemansfield.org and click on Healthy Habitat.





Citizen Science in Great Barrington

Collin Adkins,
MassLIFT-AmeriCorps member

Have you ever noticed how during one day in May it seems as if all the leaves have suddenly just appeared? Soon the view out of our windows will change but how closely do we notice those changes? As spring returns to New England, I for one, am going to be paying close attention to the return of the Red-Winged Blackbirds as they are usually some of the first to arrive and stake out a territory. The males will be singing and displaying as soon as they settle on a spot. These birds are common and widespread but are none-the-less vulnerable to climate change, which could cause changes in food availability and in turn may result in changes in nesting or mating. These changes are exactly what the USA National Phenology Network (USA-NPN) is trying to track.



Soon, Lake Mansfield will be home to a phenology site where you will have the chance to intimately connect with the plants or animals you see all the time in a brand new way. As an observer, you might notice things you never saw before and as a citizen scientist you'll be providing valuable information to researchers, resource managers and educators. The Lake Mansfield site will be part of a larger collaboration in Great Barrington with phenology sites all over the GB Trails network including Housatonic River Walk, and the Threemile Hill Trail.

The USA-NPN has tracked over 1 million records of phenology data. Phenology refers to key seasonal changes in plants and animals from year to year—such as flowering, emergence of insects and migration of birds—especially their timing and relationship with weather and climate. As we record these changes year after year it's like taking the pulse of our planet. But these observations aren't collected by Ph.D. scholars with high-tech equipment; they are submitted by members of the public. Nature's Notebook is the name of the citizen science project launched by the USA-NPN. Citizen Science is exactly what its name implies: members of the public, lending their observations to contribute to large-scale scientific data inquiries. This may sound like a new concept but citizen science has existed for over a century. In fact, the Audubon Society's Christmas Bird Count began in 1900. Over the years volunteerism and public support has contributed to a growing pool of knowledge that can be used by researchers and policy makers.

The Great Barrington Phenology Trail is a proud collaborative project by MassLIFT-AmeriCorps, Greenagers, Appalachian Mountain Club, Berkshire Natural Resources Council, Massachusetts Department of Conservation and Recreation, Berkshire South Regional Community Center, Great Barrington Land Conservancy and the Lake Mansfield Alliance.

Find out more about Nature's Notebook: www.usanpn.org



4 When things need doing, youthful energy can make a huge difference. At Lake Mansfield we strive to combine volunteer efforts with hands-on learning. Why do we do this? Connecting our younger volunteers with a stronger understanding and appreciation of the natural world can help them develop the spirit needed to care for our natural resources. These are the stewards of tomorrow. And in a world grave with complex environmental issues, the hopeful and joyful work we share in our special places can banish discouragement and strengthen a willingness to work hard for the air, water, plants and creatures we cherish. This is how we help our young people invest in a healthy planet for the future.

We worked diligently and learned a lot in the Lake Mansfield Conservation Forest in 2013. Simon's Rock and Berkshire School Students battled invasives and learned about the delightful native plants that can flourish in the invasive-free spaces we create. The Greenager Teen Trail Crew members cleaned and cleared our trails. Then they were guided by Shawn Garred, Resource Management Technician of the Appalachian Trail Conservancy, to learn about phenology and the importance of citizen science in monitoring specific plants and animals.

These observations are used to generate data compiled in a national study of climate change. (See next article) In August, Greenager Trail Crews and Volunteers got together with Appalachian Mountain Club Volunteers to meet, share their accomplishments, enjoy a picnic, and focus on trees through a tree ID challenge. Each volunteer event allows for mentors to share their enthusiasm and skill and for younger stewards to develop their abilities, confidence, and sense of commitment. Lake Mansfield Conservation Forest provides the place, LMA provides for the opportunities.

Clockwise L to R: Teen Trailbuilders identify trees, Greenagers work at cleaning trails, Berkshire School students plant native bushes.

Cleaner Waters for Lake Mansfield

Chris Rembold,
Great Barrington Town Planner

A portion of upper Castle Hill Avenue is now smoother than ever, having been repaved in the summer of 2013. But the best part of this project is what's under the road—a brand new stormwater system, complete with new pipe, deep catch basins, and a massive structure to catch and hold pollutants and sediment. It might not sound exciting to some people, but those of you who swim, boat, and fish in Lake Mansfield should be jumping for joy!

This crucial infrastructure will greatly reduce the amount of untreated stormwater runoff, called nonpoint source pollution, that enters Lake Mansfield and feeds the growth and spread of invasive weeds. For decades, storms have poured sediment into the lake, slowly filling shallow areas near the shorelines, and creating pockets of warm water that are perfect nurseries for the weeds. However these new deep catch basins and the stormwater treatment unit hold the runoff, allowing sed-

iment and pollutants to settle out and stay behind. So the stormwater leaving the new system and entering Lake Mansfield will be 90% cleaner than before. Cleaner water and fewer weeds means a healthier lake for future generations.

The work was partially funded with a section 319 Clean Water Act grant through the Massachusetts Department of Environmental Protection (DEP), as well as with Town road funds, and matched with the many hours of effort of volunteers and town staff. This success is a direct result of years of advocacy and planning, on the part of Lake Mansfield Alliance (LMA), the Town's Lake Mansfield Improvement Task Force (LMITF) and Department of Public Works. Thank you all.

We all hope this success leads to future lake improvement projects, like improving the boat launch area and reducing runoff there, along the road, and from the beach parking lot. And, to ensure success continues for the long term, the Town, LMA, Monument Valley

Middle School, and Flying Cloud Institute are developing a program to teach students about the causes and effects of stormwater and non-point source pollution. These sixth graders are the future stewards of the lake.

Finally, on another exciting note, a partnership of the Town, LMA and the Berkshire Environmental Resource Center (a nonprofit of Bard College at Simon's Rock), has been invited by the Massachusetts Environmental Trust to submit a proposal for a two-year water quality monitoring program in the lake. (This program would be paid for by the money raised when you buy the conservation-themed license plates.) Wish us luck; we hope to hear in the early summer that we will be funded.

Each year we make more progress correcting long standing problems, and we get closer to our goal of ensuring Lake Mansfield remains a healthy ecosystem and resource for all of us for decades to come. Keep up the good work everyone.



One of the newly installed catch basins on Castle Hill Avenue.



Controlling Phragmites

Jessica Dezieck
Conservation Commission

Massachusetts is home to two different species of Phragmites; Phragmites communis Trin.(native) and Phragmites australis. Phragmites communis was first documented in the 1800s in Stockbridge where a small stand exists today. However, it is the non-native and highly invasive species of Phragmites that is most commonly known as a nuisance and is invading our water ways. Phragmites australis (Common Reed) is a tall, perennial grass that can grow more than 15 feet in height often forming tall dense stands that crowd out our native plants. Additional Phragmites consequences include changing hydrology, altering of wildlife habitat, and an increase fire potential.

A long existing stand of Phragmites at Lake Mansfield is currently being targeted. This past fall JMP Environmental Consulting Inc. began its eradication efforts in controlling / preventing the spread of Phragmites at the lake. A site plan was presented to the Conservation Commission in September of 2013. Following review of the plan the Conservation Commission and its Agent met on site with the senior project manager, and after completing the proper permitting process the eradication efforts were underway. In October 2013, Phragmites within the treatment area were cut and injected with 2 milliliters of a blue-tinted glyphosate-based herbicide. All work was completed by licensed pesticide applicators. The seed heads were removed from cut stalks and double bagged for disposal, also stalks were composted off-site at a large agricultural composting facility. In addition a trash bag full of bottles and cans was also removed from the site. This area will receive a follow up treatment which is estimated to take place early summer 2014 to treat any re-growth. Further treatments may be necessary to control the Phragmites in this area due to the significant seed bank that exists. This file and all its records is public information and can be viewed in the Conservation Commission office at Town Hall.

Jess Dezieck & Family: In addition to Conservation Commission work, Jess is a Forest Steward.

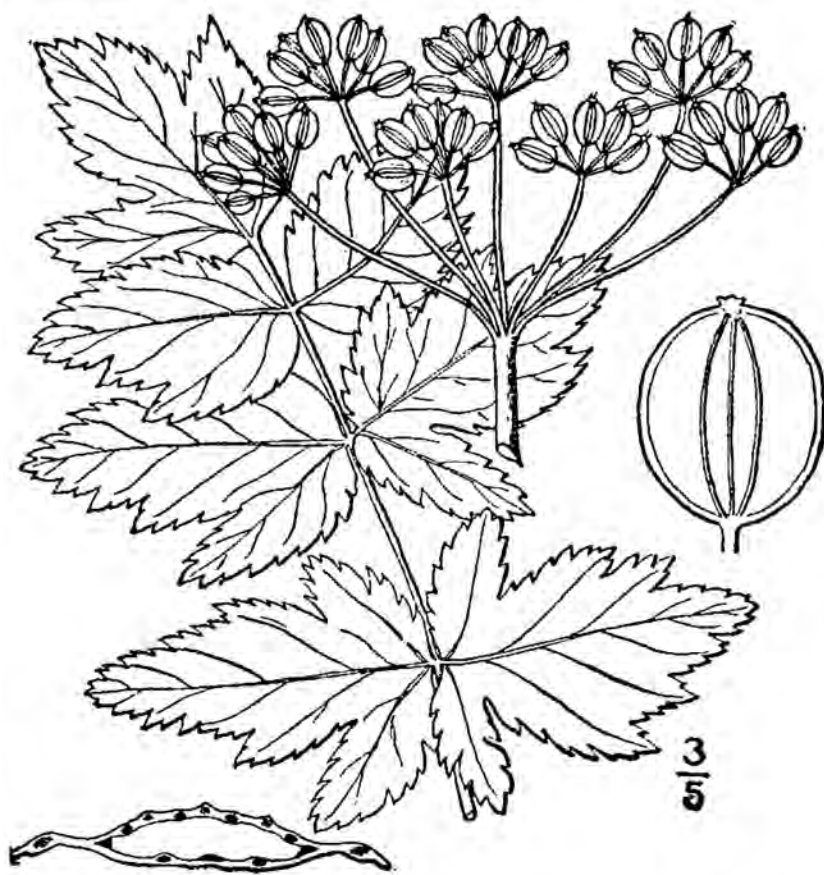


Summer YOGA Sublime

Join certified Yoga instructor Senta Reis for quiet morning yoga. Come breathe, stretch and strengthen as the sun rises from behind the forest to warm the sand and evaporate the dew. There is no better way to enrich a summer day. Classes will be offered on Wednesdays & Fridays, July 2nd – August 1st, 8-9am. All levels and abilities are welcome. \$10 suggested donation to cover the cost of the instructor with a portion of proceeds going to Lake Mansfield Alliance. Bring your mat, strap & blanket or towel. Info@lakemansfield.org

Wild Parsnips! Avoid contact!

Wild Parsnip has been noted along the edges of Lake Mansfield Road. This plant is an introduced weed that has aggressively spread causing concern due to its toxicity; it is most noticeable growing along roadsides but also can be found in abandoned fields, un-mowed pastures, and at the edges of woods. The weed can grow up to 5' tall and its yellow flowers are flat-topped umbrella-like clusters at the top of the plant. The sap of wild parsnip contains a toxin that when absorbed by the skin and exposed to ultra-violet light causes "phyto-photo-dermatitis". Symptoms usually develop within 24-48 hours of contact; the affected area will first redden and in most cases blister, moisture from perspiration speeds absorption. Burning is inevitable if skin comes in contact with juice from a cut or broken stalks, leaves or flowers. The juices are most potent while in flower, usually midsummer (July) and unlike poison ivy it seems no one is exempt. Mild exposure is similar to sunburn. Severe exposure causes skin to blister. Please avoid contact.



Become a Member of Lake Mansfield Alliance 2014

Name _____ Address _____

City/State/Zip _____

Phone _____ Email _____

Suggested annual dues I wish to remain an anonymous donor.

\$20 Individual \$35 Family \$50 Supporter \$100 Conservationist

\$250 Guardian \$500 Steward \$___ Trail Project Dedicated Donation \$___ other

Make tax deductible donations to: GBLC Lake Mansfield Fund, LMA, PO Box 944, Great Barrington, MA 01230

Park Improved

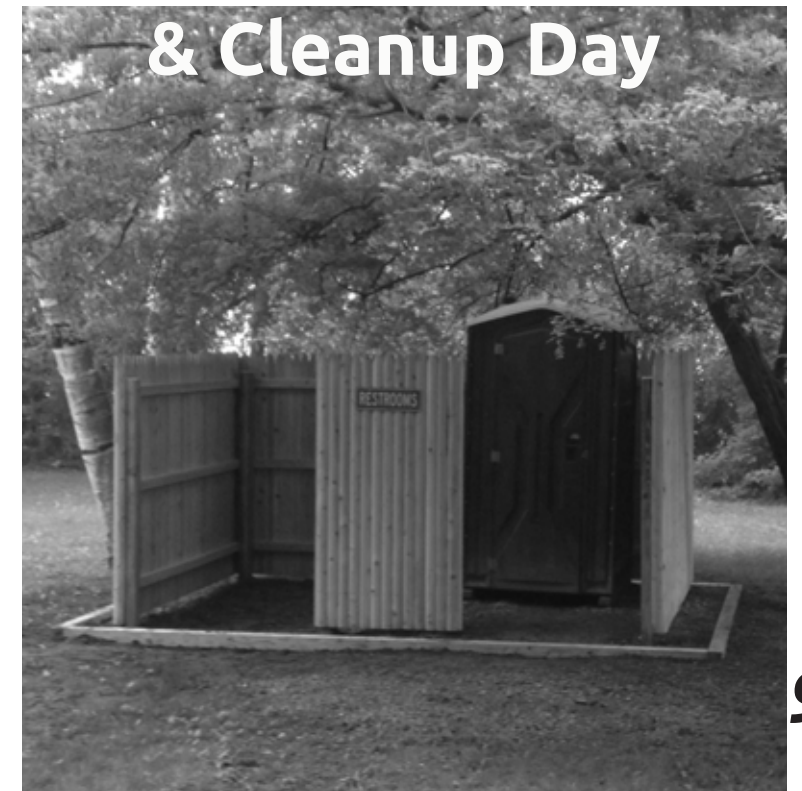
Kathy Plungis, Parks Commission

For now, the coo of a morning dove, the lapping of water upon the shore, a faint splash as a fish disappears back into the water can be heard by a visitor to our beloved lake. Fast forward to Memorial Day and the sounds will turn to tires crunching on gravel, robins singing and the splashing of children's feet as they run into the water. As our memories of this past New England winter begin to fade, the reopening of Lake Mansfield's beach on Memorial Day is "just around the corner"!

Last year's improvements and additions by the town's Department of and the Parks Commission will increase the Lake's enjoyment for all. From the much improved "restroom area" with the two porta-potties and the added privacy of the stockade fencing, the repainting of the speed humps and crosswalk for the safety of all, and the replacement of the swing set, our town residents and visitors can expect another enjoyable swim and picnic season in 2014!

Visit Lakemansfield.org for lake information, maps and events. If you have suggestions on how to improve our park and trails, please let us know at info@gbtrails.org

2014 Lake Celebration & Cleanup Day



This year our big volunteer day is on Sunday, April 27th. Bring your friends and your tools and come join us. This is a wonderful family day of stewardship and community. We work side by side, talk about our lake and the work to be done, and enjoy a potluck picnic. Each year we gather litter, pull garlic mussel, put out the swim ropes and weed barriers, and make any needed repairs. It's a great way to give back to the space we all hold dear. Need more info? info@lakemansfield.org



Lake Mansfield Alliance
P O Box 944
Great Barrington, MA 01230

A project of the Great Barrington Land Conservancy

Working to preserve, protect and enhance Lake Mansfield
as a vital natural habitat and community resource

Lake Mansfield

Spring Celebration & Clean-Up Day

Sunday April 27, 2014
10:30-3:00

Rain date: Sunday May 4
10:30-1:00 Lake & Forest Clean-up:

Meet at the beach, gloves recommended.
Bring tools: rakes, wheelbarrows, wagons...
and enthusiasm!

1:00-3:00 Potluck Lunch & Activities
Community Meeting

Guided Trail Walk: Lake Mansfield Conservation Forest Trails
Thank You Berkshire South Regional Community center for supporting
Lake Mansfield Spring Celebration & Clean-Up Day

Join your friends and neighbors
for a fun day of community action!

