THE FRIENDS OF LAKE WARNER AND THE MILL RIVER

2020 SPRING / SUMMER NEWSLETTER

Note from FoLW director

What a strange time we are living through! While the COVID-19 virus has turned everyone's life upside down, it is encouraging to see how our community has risen to the challenge. Food delivery programs, home mask-making projects and people creating local support systems to help those most in need all have left me inspired about how much we can accomplish together. The Friends of Lake Warner want to remind you what a fantastic place Lake Warner is, and encourage everyone to get outdoors, exercise and explore. Recreation on the lake can be done while maintaining safe social distancing. The wildlife is all getting active now that the weather is warming up; springtime is a great time to be out on the lake. Enjoy the lake! Stay safe! Be healthy!

Jason Johnson, Executive Director FoLW

Pollinators in Peril – Let's Help by David Moskin

If you are a Friend of Lake Warner you are undoubtably a friend of the environment. You are undoubtably a supporter of local sustainable agriculture...and....undoubtably, you have some understanding of the delicate balance between insects, plants, and mankind.

You probably have heard about the troubles facing bees and other important pollinators. Threats from viruses and habitat loss lead the list of factors stressing these little friends. And, we suspect, there is little doubt in your mind that humans should do what we can to support pollinator populations. It's not just about bees and honey. It's about the long-game regarding food supply and protecting nature's balances.

Some folks may still have doubts.



A Pollinator Protection Resolution has been presented to the Select Board in Hadley. Created by the nonprofit organization Western Massachusetts Pollinator Networks the non-binding resolution asks that the town encourages policies and practices that support pollinator populations.

The Select Board may have their doubts about the threats to pollinators. They did not approve the resolution. They asked that feedback be gathered from the community. Fair enough.

The two primary goals of the resolution are to eliminate the use of neonics (neonicotinoids) and other systemic pesticides that cause illness and death in populations of bees, butterflies, and other pollinators -and- to encourage habitats that support pollinator foraging and nesting.

Practices might include mowing less often, planting flowers and other plants that have not been treated with systemic insecticides and adopting organic or chemical free lawn and landscaping practices.

Long-time Friend of Lake Warner member David Moskin is the point person in Hadley for the pollinator protection initiative. He can be reached at 413.627.6672 (cell) or

IN THIS ISSUE

Note from the director1
Pollinators 1
Second Foodbank farm 2
Meet new conservation planner 2-3
General warning for lake users 3
Cleaning products effects on
the environment 4-5
Transferring invasives to and from lake;
keeping your watercraft clean 6
Boating safety7
Membership renewal7
Upcoming events7
Lake survey8
Membership form 8

FoLW meetings will be held by Zoom at this time, please, email friendsoflakewarner.org.



PLEASE MAKE DONATIONS TO:

The Friends of Lake Warner P.O. Box 11 Hadley, MA 01035 Or go to our website: http://friendsoflakewarner.org/donate/ at dsmoskin@gmail.com. The Hadley Select Board is looking for feedback from Hadley residents on this resolution. Please call the Town Administrator David Nixon's Office at Hadley Town Hall 413.586.0221 to voice your support for pollinators – or email him at admin@hadleyma.org. Please let David Moskin know if you are calling Town Hall or cc him if you are emailing Town Hall.

The peril to pollinators is very real. Let's do something to help.

Second Foodbank Farm in North Hadley a local success story by Jason Johnson

Kestrel Land Trust has preserved a 142-acre parcel of land that will provide 59 tillable acres at the new home of the Foodbank's second farm. The farm is located off Shattuck Road in North Hadley. The goals of the farm are to provide organic produce to area households at risk of hunger, and to children in high poverty school districts. The Foodbank is partnering with two commercial farmers, Joe Czajkowski of Lakeside Organics in Hadley and Gideon Porth of Atlas Farms in Deerfield. Both farmers will be growing organic vegetables, some of which will go to the Food Bank, with more than half of the crops going directly to help feed area students.



The project is part of a larger preservation of 193 acres in both Hadley and North Amherst. Kestrel coordinated the project assisted by the state's Department of Agricultural Resources and money from both communities' Community Preservation Act accounts. A 3-acre section of the farm will become a model farm where volunteers and school groups will work together to grow and harvest crops while learning about sustainable agriculture, environmental stewardship and food access for all. The farm will demonstrate low-till or no-till farming techniques that promote soil health, reduce soil loss and retain nutrients on the landscape. Kestrel will retain a trail easement over the farm for walking on designated farm roads that will provide links to conservation lands and wetlands on the Amherst side. Located off the Route 116 bypass, the new Szala Family Conservation Area will connect to the existing Cole and Podick Conservation Areas, conserved through a partnership with Kestrel in the 1970's. Kestrel will hold the conservation restriction and work with Amherst to create an entrance with improved parking and trail access that will connect trails to ones on the new Food Bank Farm property.

Another portion of the project is putting 26 acres off Comins Road into the Agricultural Preservation Restriction Program. The land includes a farmhouse and several barns, along with 15 acres of active agricultural fields in conservation restriction held by the Hadley Conservation Commission.

The co-owner of Mapleline Farms, Jessica Dizek, told the Daily Hampshire Gazette that her operation would be stronger as a result of this protected land. Dizek said "As longtime farmers in this agricultural area of Hadley, we have been really worried that the increasing number of housing developments in this part of town would soon overtake the land. "Agricultural land has less of an impact on the environment than developed land, and the sustainable farming practices that are going to be used there are excellent at minimizing soil and nutrient loss that impact the aquatic environment. Projects like this are good for the community and good for the tributaries that supply Lake Warner.

Meet Diana Laurenitis-Conservation Planner with Hampshire Hampden Conservation District

I hope this newsletter finds you healthy and safe during these historic times. I really wanted to introduce myself in person to farmers and the community before now, but can't due to current events. However, this is a good opportunity to tell you all more about myself and my position.

My name is Diana Laurenitis and I was hired this past January to work as a Conservation Planner with the Hampden Hampshire Conservation District (HHCD), currently focusing on the Mill River watershed. Conservation Districts were established all over the country as a response to the terrifying degradation of Midwest soils that led to the Dust Bowl of the 1930s. The Soil Conservation Act of April 27th in 1935 created districts to work directly with farmers to come up with solutions for damaging farming practices. The partner organization of the Conservation Districts was once called the Soil Conservation Service, which is now known as the Natural Resources Conservation Service (NRCS). Conservation Planners help farmers assess their property and identify concerns they may have, and then Planners help come up with solutions that the farmer may choose to implement or not. The training process is very extensive and can take a few years to become certified, so you can be assured the certified Conservation Planner you are working with knows the process well!

Some of you may recognize my last name- my family operates a farm in Sunderland. I grew up in NH, and started farming back in 2004 on a small farm there. I have since worked at or helped

manage other smaller farms in Canton, MA, rural Utah, Maine and New Hampshire, as well as the family farm. I've taken some time away from farming to see the world, but my love of farming is always there. I find nothing more relaxing than sticking my hands in some soil and nothing more rewarding than eating something I grew from seed to harvest.

I returned to grad school at UMass Amherst and created my own program in the Geography Department, looking at agroecology, food security, and regenerative agriculture. I initially focused more on the foundation of agriculture, which is soil health. This ties in nicely with the current focus of our parent organization, NRCS, which is also soil health. No-till is the basis of the soil health model, as well as cover crops and crop rotations.

No-till has many benefits:

- It lets the incredibly complex soil biome build up and function optimally without the disruption of tillage
- Better nutrient retention
- Reduces runoff and erosion by creating more soil aggregation (when the soil particles stick together)
- Provides better water holding capacity (how much water the soil can hold)
- Reduces the amount of fuel used on the farm
- Less soil compaction, which is created by tillage and heavy machinery
- Less time on the tractor, which means more time for other tasks
- Holds more carbon in the soil
- Increases the health of the crop being grown, which translates to the human eating it

NRCS has many programs to help farmers and landowners, but I want to highlight a program specifically focused on soil health called Adaptive Management. It helps farmers (or landowners) trial no-till plots on their farm through funding and technical assistance. Ideally, the same plot of land is used for three years, and different measurements are taken to compare the no-till with conventional till. The plots may vary in size, depending on how much land the farmer wants to trial and has available. The farmer or landowner decides what crops to plant and what cover crops to use --- Adaptive Management is usually used in conjunction with cover crops but again, this depends on the farmer and their desires. There are already a few farms in the area who have signed up for this program, and hopefully more will in the future.

The NRCS works cooperatively and without regulatory authority with farmers. Every farmer is the ultimate decision maker on what practices to implement and how things should be done. The Hampden-Hampshire Conservation District, made up of volunteers from the community, works with the NRCS, but is a separate non-governmental organization meant to be a bridge between farmers and the NRCS. HHCD volunteers are farmers and those interested in protecting agriculture and natural resources, and serve on the HHCD Board of Supervisors. We also hold workshops on different topics such as one held in January on windbreaks. HHCD's main purpose is to help farmers and land-owners in our two counties with whatever they may need. I know it may be especially hard right now, so please feel free to reach out to me. I am happy to help. My email is DianaL. HHCD@gmail.com. Take care and be well!

General warning to recreational users regarding E. coli bacteria and cyanobacteria in the lake

Testing of lake waters is going to be delayed and disrupted this year due to the COVID-19 pandemic as well as budgetary issues we are having. We are providing a preliminary advanced warning regarding health and safety for recreational use of the lake.

E. coli bacteria Elevated levels of E. coli bacteria have been recorded in this water body, especially following rain storms, therefore, if there has been a rain event in the 48 hours prior to your use of the lake, presume that the bacteria count is going to be elevated and take precautions. Don't get the water in your mouth, eyes, or nose. Wash your hands thoroughly after leaving the water body and before you eat anything.

Cyanobacteria In August of 2019 a cyanobacteria advisory was issued for Lake Warner. No testing was ever completed to determine if the advisory should be lifted. Cyanobacteria are present in most water bodies, and are most likely to become abundant in late summer and early fall, the toxicity of a cyanobacteria bloom is variable and can be hard to capture through sampling. Therefore, you should presume that cyanobacteria is present in the lake and take precautions to prevent exposure. These precautions include; not drinking the water, not touching the water, plants or algae in the water, keep your hands away from your eyes, nose and mouth. Wash up thoroughly with soap and water after you have left the waterbody and before you eat anything.

Sound familiar? Take precautions to protect your health while recreating at this waterbody. We want everyone to have a safe and enjoyable experience. You are responsible for your own health and safety!

Garbage is no friend to rivers and lakes

Below is garbage that was picked up by a Friends of Lake Warner board member this spring along the South shore of the Mill River.



With the COVID 19 virus pandemic affecting all of us, everyone has been doing extra cleaning and disinfecting.

We wanted to take this opportunity to talk about water pollution that can be caused by the use of cleaning products.

Water pollution is caused when materials and/or energy are released into water beyond the water's natural capacity to break it down, thus degrading the quality of the water for other users. When we think of urban water pollution, we think of cars leaking oil or fluids or discharges from pipes into our rivers or the lake. But water pollution also comes from personal use of everyday products, such as household cleaning products; when we use cleaners with dangerous ingredients, a large part of those will go down the drain, into the sewer system, wastewater treatment facilities and possibly into rivers, the lake, causing great harm. Sometimes we are advised not to even flush cleaning agents down the drain! Here are some of the dangers associated with using regular cleaning and disinfecting products on the environment, as well as some non-toxic alternatives.

Most ingredients in cleaning products break down quickly in or soon after they reach wastewater treatment facilities, but unfortunately, our facilities are not equipped to filter out all the chemicals in the wastewater, so that many chemicals end up in our freshwater ecosystems where they are extremely dangerous to animals, plants and ultimately, to our drinking, irrigation or recreational water and health. If you are using a septic tank, certain ingredients of regular cleaning products can kill the bacteria in your septic tank, stop the water separation and ultimately poison the surrounding waterways with untreated wastewater, chemicals and toxins. Septic systems require a lot of forethought, consideration and maintenance, so be sure to educate yourself on septic safe products and which ingredients to avoid putting into your system.

A 2002 study conducted by the United States Geological Survey found persistent detergent traces in 69% of streams sampled across the United States, and disinfectants in 66%. It's easy to think that when each of us use cleaning products that we are using a small amount of toxic ingredients every day. But it's the volume of everyone in a watershed doing this that can cumulatively harm our environment. Most cleaning jobs can be done using a dilution of hydrogen peroxide or 70-90% rubbing alcohol. Since many chemicals get through our wastewater treatment plants and end up in our fresh water, groundwater and soil, we want to take a look at the chemicals which survive waste water treatment and how they affect the flora and fauna around us.

Active Ingredients like Triclosan

- Found in most cleaning products labelled as "antibacterial"
- Kills bacteria, fungi and mildew, but also algae, which are a cornerstone in aquatic ecosystems and the food chain
- Lab studies link triclosan to cancer, developmental defects, hormone disruptions and liver toxicity

1,4-Dioxane

- In the cleaning industry, 1,4 Dioxane is used to manufacture surfactants such as ethoxylated alcohol and sodium laureth sulfate (SLES). It can be released into the environment as a biproduct of this process
- Though it does not bioaccumulate in the food chain, it does not readily biodegrade in water or soil which means it can persist in the environment
- The US Environmental Protection Agency (EPA) fact sheet on 1,4-Dioxane notes that it readily leaches through the soil and into the groundwater
- The Environmental Working Group's "Guide to Healthy Cleaning" reports 1,4 Dioxane as a confirmed animal carcinogen

Nonylphenol ethoxylates (NPEs)

- Found as a surfactant in cleaning products
- Used to loosen the dirt and grease from surfaces
- Have been detected in water, sediment, mussel, fish and even cormorant egg samples. They are highly toxic to aquatic life, causing heavy damage to fishes' gills and destroying the mucus layer on their skins which protects them from bacteria, parasites and toxins in the surrounding water
- In the environment and through bacteria in the wastewater treatment facilities, NPE degrades to Nonylphenol (NP), which is known to mimic the hormone estrogen64 and impact the production of testosterone, with reproductive and developmental effects on rodents

Phosphates

- Found as a detergent in floor cleaners and other household cleaning products
- Wastewater treatment facilities can only filter out about 30% of phosphates from wastewater, so that the majority of the chemical enters our waterways
- In a recent study, goldfish exposed to phosphates in water exhibited an unusually inactive state with increased breathing as well as a secretion of mucus. In higher levels of phosphates, the fish died, suggesting that they are highly toxic and lethal to fish

Phthalates

- Most common in air fresheners, but also in cleaning and laundry products of all kinds
- Usually not disclosed in the list of ingredients because they are part of fragrances which are protected by trade secret law. Most fragrances contain phthalates
- Have been detected in air, drinking water, rivers and soil, and can even be found in rainwater due to their ability to migrate or leach from manufactured goods
- Some phthalates have shown to cause severe reproductive and developmental disruption, others are acutely toxic to

aquatic organisms such as bacteria, algae, crustaceans, insects and even fish. Phthalates can cause infertility and reproductive problems in female fish as well as feminization of male fish, frogs and other animals

Quaternary Ammonium Compounds Cleaning Products (QUATs or QACs)

- Used as disinfectants, surfactants and fabric softeners in cleaning and laundry products
- Toxic to a lot of aquatic organisms such as fish, daphnids, algae, rotifer and microorganisms. This also includes the bacteria in wastewater treatment facilities, so that QUATs can impair their efficacy and degrade the quality of our drinking water
- Also, QUATs don't easily degrade in the environment, so that they will build-up and cause long-lasting harm to ecosystems
- Volatile Organic Compounds Cleaning Products (VOCs) such as phosphorus, nitrogen and ammonia compounds
- Found in many cleaning products of all kinds
- In waterways, VOCs cause excess growth of algae, which results in the spread of bacteria, loss of daylight vital to aquatic ecosystems, as well as a depletion of oxygen levels, killing fish and other animals
- VOCs can even lead to algal blooms, which can poison drinking waters or lakes for swimming. For example in case of the blue-green algae. The water turns green, slimy, smells bad, can't sustain aquatic life and is not safe for recreation anymore

Methylisothiazolinone (MI) Dangers

- Found in many cleaning products including 'healthier' or 'greener' alternatives
- The Environmental Protection Agency (EPA) states that Methylisothiazolinone is highly toxic to freshwater and marine organisms
- What is worse is that only one of the two compounds that make up Methylisothiazolinone is susceptible to degradation in water - and only in specific conditions
- Methylisothiazolinone has the potential to persist in our natural environment, the effect of which is yet to be assessed.

What can we do, especially now when we are all especially concerned about viruses like COVID 19?

As a first step we should assess what cleaning products are really necessary. Rather than relying on chemicals to do the cleaning, be aware that sometimes some mild scouring powder and old-fashioned elbow grease will do the same job. We tend to turn to chemicals to simplify life, but in some cases, we have to ask ourselves if the cost is worth it. For example, the use of antibacterial cleaning products, wipes or lotion might seem useful, but the truth is, in most cases we don't need them. Unless we need sterile hands, for example for giving an insulin shot or in case of an immune system deficiency, the excess use of antibacterial products causes bacteria to develop a resistance, and our immune systems to "unlearn" how to deal with bacteria so that we get sick more badly and more often. In effect, we should only use cleaning products at the strengths that we really need to.

When we do need them, we have to make sure they leave as little environmental impact as possible. In order to know if a cleaning product is dangerous to us or the environment, we should have a look at the label. Avoid products marked "Danger" or "Poison" completely, and try to reduce your use of products marked "Caution" or "Warning" as much as possible, since exposure to these products can still lead to skin and eye irritation.

Recommendations for cleaning during COVID-19

Washing with any soap or detergent is the best remedy, because the soap foam cuts through the fat layer that protects the virus. Wash for 20 seconds or more to make a lot of foam. Wash with hot water, above 25° C/77° F for washing hands, clothes, and everything else. Alcohol, or any mixture with alcohol over 65% dissolves any fat, especially the lipid layer of the virus. Any mix with 5 Tablespoons bleach per quart of water directly dissolves the protein, breaking it down from the inside. Hydrogen peroxide is more effective than soap, alcohol, and chlorine, because peroxide dissolves the virus protein, but you have to use it pure and it can damage your skin.

On the label, we should also check the list of ingredients. Unfortunately, there are no laws in Canada or the U.S. for companies to publish all ingredients on the labels of cleaning products. Therefore it's important to get informed before the purchase: go to EWG's Guide to Healthy Cleaning and look for greener cleaners without harmful ingredients.

Make sure the ingredients of the cleaner are easily biodegradable and break down quickly in the wastewater treatment facilities or thereafter. For this, it's best to look for products that are 100% natural or all-natural, and certified by an independent institution, such as EcoCert. EcoCert is an internationally recognized certification that guarantees the genuine practice of environmental respect throughout the formulation and manufacturing of a product. EcoCert has very strict requirements for the products, more stringent than other "green" labels found in North America like Ecologo and GreenSeal, which allow many ingredients that are suspected toxins, carcinogens or hormone disruptors.

Last but not least, we assume that by using more of a cleaning product they will clean better. By doing this we use more of the cleaning and laundry products than necessary. We should stick to the directions of use on the label and thereby minimize the amount of cleaning products ending up in our wastewater, because the effect of cleaning will not be greater by using more cleaning liquid or laundry detergent.

Information provided by the *Environmental Working Group*, a non-profit, non-partisan organization dedicated to protecting human health and the environment. For more information go to their website <u>https://www.ewg.org/</u>

In order to prevent the introduction or spread of invasive species to the lake, please remember to thoroughly wash and dry your boat before and after leaving Lake Warner. Boats, trailers, waders and other fishing and boating equipment can spread aquatic invasive species from waterbody to waterbody unless properly cleaned, dried or disinfected after use. Although some invasive species such as water milfoil are readily visible to the human eye, many others are too small to be readily noticed. As far as we know, water chestnut (*Trapa natans*) and curly-leafed pondweed (*Potamogeton crispus*) are the only invasive plants we currently have in the lake . Fanwort (*Cabomba caroliniana*) was identified in a plant survey from 2003 but has not been identified recently. We want to keep it that way!

To avoid spreading invasive species please follow the guidelines in the following steps:

- 1. Check your boating and fishing equipment for invasive species.
- 2. Clean any visible mud, plants, fish or animals before transporting equipment. Discard items in an upland area or in one of the invasive species disposal stations that have been installed at many boat launch sites for your convenience. Zebra mussels can be difficult to remove from a boat hull. They first need to be killed by exposure to water or steam at least 140 degrees F and then removed by brush or pressure washer.
- 3. Drain-all water holding compartments including live wells, bait wells and bilge areas.
- 4. Dry boats, trailers and all equipment before use in another waterbody. The most effective method to ensure that no invasive species or fish diseases are transported to a new body of water is to completely dry your boating and fishing equipment. The key is to make certain that equipment is COMPLETELY dry before using it in a new water body. Drying times vary significantly depending upon the type of equipment, air temperature and relative humidity. While the outside of a boat will dry relatively rapidly, bilge, live wells and other areas of a boat not reached by the sun or lacking good air circulation will take additional time to dry completely. A minimum of 5-7 days drying time in dry, warm conditions is recommended.
- 5. Disinfect anything that came into contact with water, if it cannot be dried before reuse. If your boating and fishing equipment cannot be dried before its use in another body of water, it must be disinfected. Disinfection recommendations vary depending on the type of equipment and disease of concern. Be particularly aware of bilge areas, live wells and bait wells in boats. These areas are difficult to dry and can harbor invasive species. A summary of recommended cleaning materials and techniques are provided below.

Effective disinfection techniques include:

Hot Water: Hot water is an effective disinfection agent for all aquatic invasive species and fish diseases. Many of the invasive clam and mussel species can detect other disinfection agents and avoid them by tightly closing their shells. However, they cannot protect themselves from the effects of high temperature. Soak all equipment in water at least 140°F for 30 seconds. Most tap water is 120° - 130° F, so this will require some additional heating. An inexpensive candy thermometer can be used to determine when you have reached the correct temperature. Note that hot water can delaminate Gore-Tex® fabric and damage other sensitive clothing items. Household steamers may also be used for disinfection by exposing equipment to steam for 30 seconds. Some commercial hot-water car washes can be effective for disinfecting boats and vehicles, but many do not heat water hot enough for proper disinfection.

Bleach: Bleach is also a very effective disinfectant agent. However, it is a caustic substance that can be corrosive to aluminum and other sensitive fishing and boating equipment. Soak or spray equipment for at least one minute with a 2% bleach solution (3 ounces of household bleach mixed with 1 gallon of water). If whirling disease is suspected, a 10% solution should be used (13 ounces of household bleach mixed with 1 gallon of water).

Potassium Chloride: It is commonly used as a substitute for calcium chloride in table salt and home water softeners. Potassium chloride (KCL) is a very effective cleanser for boats and equipment used in waters containing zebra or quagga mussels. It also does not have the corrosive side effects of some other cleaning agents. A 200 ppm solution is recommended (one teaspoon of dry KCL salt crystals in 2 gallons of water). KCL salt substitutes can be found in most supermarkets. KCL salt crystals can be special ordered at home improvement or hardware stores selling water conditioning products. Given the non-corrosive attributes of KCL, it is particularly useful in cleaning engine cooling systems and other corrosion-prone areas.

Flushing: If it is impossible for you to disinfect your boat prior to use, thoroughly flush the bilge and all water holding compartments with water prior to launching. Be sure that this water does not drain into the water body you will be launching your boat into. While a pressurized source of water is preferred, buckets of water may be used if this is not available.

Special Note to Wading Anglers: Felt-soled waders and wading shoes have been identified as an important means by which whirling disease spores and didymo can be transported. They are difficult to disinfect. Rubber or studded soles are now readily available that provide similar traction. They are much less likely to transport these invasive species to other water bodies.



Above left: Bob Hahn and Will Bab on Lake Warner in 1937.

Boating safety, remembering to wear your life jackets

During this upcoming recreational boating season please remember to wear your lifejacket. In Massachusetts, life preservers are required to be worn by:

- Youth less than 12 years of age
- Personal watercraft users
- Water-skiers
- Canoeists/kayakers from September 15 - May 15

A boat owner or a boat's operator is responsible to ensure that passengers on-board wear life preservers as required.

Membership Renewal

It's time to renew your membership to the Friends of Lake Warner! Our organization is dependent on membership support to exist. Without your financial support we cannot continue to advocate for the health of the lake or the safety of recreational users. Please send in your membership renewal today!

Upcoming Events

Due to the COVID-19 virus we have had to postpone all events and activities until social distancing measures are lifted and it's safe to resume meeting in groups again.

- FoLW meetings will be held by Zoom at this time instead of at the North Hadley Congregational Church. To request an invite, please, email friendsoflakewarner.org.
- As of this printing we are tentatively planning a water chestnut pull for June 6th.
- The benefit concert with Karrin Allison
 has been rescheduled to September 6th at the North Hadley
 Congregational Church 243 River Drive, Hadley, MA





These two photos of the 1936 Flood show the backing up of the Connecticut River completely submerging Warner Dam

KARRIN ALLYSON



We want to hear from YOU! We are in the process of evaluating our programs and management of the lake and need input from lake users like YOU. Please take this short survey and send it back to us so we can include your input in our decisions.

 Name Where do you live? Are you a member of the Friends? Yes No Why or why not? 	 Bo you feel well informed about what's going with the lake? Yes No Activities and Events? Yes No Volunteer opportunities? Yes No Scientific or Environmental? Yes No Health and Safety? Yes No 	
4. What do you use the lake for?	Historical Importance? Yes No	
 Fishing Boating Birding Other 5. What do you love most about the lake? 	9. What would you like to hear more about from the Friends of Lake Warner?	
6. What do you love least about the lake?	10. Would you be willing to participate more?	
7. What do you think could be improved about the lake?	11. What would you like to the Friends of Lake Warner to focus their time, effort and financial resources on over the next 12 months?	
Please Join The Friends of Lake Wa	arner and The Mill River. We Need You!	

Members are invited to participate in our activities, workdays and social events. • Your taxdeductible dues support our efforts to preserve, clean and maintain our lake. • Your dues also support the printing cost of our brochures and newsletters.

l want to join	Individual membership - \$25	Family membership - \$35	Sustaining membership - \$100	
Name		Phone		
Street Address		City		
State	Zip	Email		

Please make checks payable to: Friends of Lake Warner (FOLW) Checks should be mailed to: Friends of Lake Warner, PO Box 11, Hadley, MA 01035