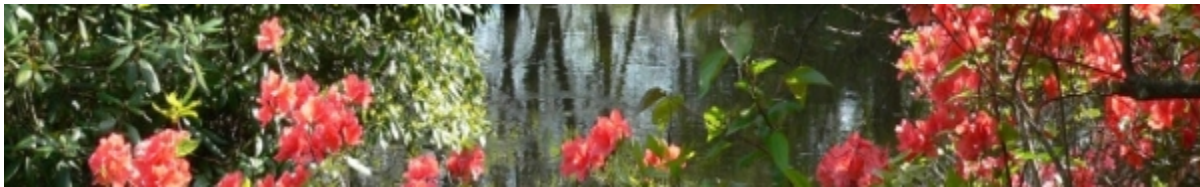




# Newton Conservators E-Bulletin

Saturday, March 30, 2014

... Newton's land trust working to preserve open space since 1961



## Spring Schedule

Spring is finally here although some of you may still not be convinced with some snow and ice still remaining as March makes its exit (not necessarily like a lamb). But the Newton Conservators do have a very full schedule of events - walks of various types and lots of invasive removal efforts including some as part of the annual NewtonSERVES event. In addition, we have our Annual Meeting coming up this year on Wednesday, May 7. **Please note that the first walk event on Vernal Pools originally scheduled for Sunday, March 30 in our early schedules has been postponed to the following Sunday, April 6.** The Spring newsletter is also completed and should be in your mailboxes soon (or you can read it online - see below). And if you subscribe to the Boston Globe and have not yet sent in your Grant check or emailed your choice, there is still time to designate the Newton Conservators as a recipient. Happy Spring!



ILLUSTRATION © SUZETTE BARBIER 2014

## Newton Conservators Invasive Plant Pulls

Newton Conservators, Newton's land trust and open space organization, fights invasive plant species to preserve and to improve the native habitat at our parks and conservation areas. The schedule below includes many events geared to removing invasives in Newton. Here is a little background on two of the invasives that we target.

**Garlic Mustard**, native to Europe, was brought here in the 1800s as a medicinal and garden herb and is now an invader of our backyards, parks, forests, and conservation areas. It quickly covers vast areas, including low light forested areas,



shades out other plants, chemically alters the soil to inhibit germination of competitor seeds, and alters habitat for native insects such as butterflies. In areas where it is just starting, it takes only a small effort to eliminate - it is a biennial easily identified and pulled when the second year plants are lowering in April/May. If not, each plant will scatter hundreds to thousands of seeds that will become first year plants the next year or will remain as viable seeds for several more years. Because the seeds stay so viable, the plants must be disposed of as trash, not as yard waste. Our efforts are effective: Garlic Mustard can be controlled with easy hand pulling, vigilance, and determination. The areas worked are much improved and require only periodic visits to catch stragglers to avoid re-infestation. The areas NOT worked are worse. We need more help to get them under control.

**Japanese Knotweed** is a bamboo-like invader from Asia that can create dense 8' tall single-species stands. It is a tough adversary, not because it's spiny or strong or even particularly hard to pull, but because any small root fragments left behind spring back to life the following year. Scientists seek biological control agents, but until then we must control by hand. Persistence pays with this species, and eradication is possible, but it takes several years to truly finish the job. Our sessions also tackle black swallowwort, multi-flora rose, tree of heaven, and black locust.



## Newton Conservators Events - Spring 2014

The Newton Conservators is Newton's land trust and open space organization and sponsors walks and activities in the spring and fall. Please note that the activities meet at different times. Some are weather dependent; please call leader if in doubt. There is no charge for attending our trips and activities. Included here are both walks and invasive removal events. Check out our website at [www.newtonconservators.org](http://www.newtonconservators.org) for updates to this schedule.

**Sunday, April 6, 1 pm - 3 pm**

**(NOTE: POSTPONED from Sunday, March 30)**

**The Hidden Life of Vernal Pools:**

**Forest and Vernal Pool Exploration at Webster Woods**

**Newton Conservators Walk Series**

Join us in Webster Woods, Newton's largest conservation area, as we walk the woods and explore the large vernal pool found there. Vernal pools, because of periods of drying, do not support breeding populations of fish. Many organisms have evolved to use a temporary wetland, which will dry, but where they are not eaten by fish. These organisms are the "obligate" vernal pool species, so called because they must use a vernal pool for various parts of their life cycle. Join us as we investigate the obligate vernal pool species, including fairy shrimp, mole salamanders and the wood frog. Herps are the stars of the show, but we will also botanize. Sampling equipment will be provided; bring hand lenses if you have them. We will walk even in the rain; dress accordingly.



Meet at the end of Warren Street on the western edge of Webster Conservation Area, or (for those not up to a one mile hike round-trip) meet up with the group at 2 pm in the back parking lot (far back) of Congregation Mishkan Tefila; the vernal pool is right there. Trip leader is

Eric Olson; cell phone on day of outing is 617-872-9928.

**Sunday, April 6, 2 pm**  
**Nahanton Park: What Was Here Before?**  
**Newton Conservators Walk Series**

We will explore evidence of several unique facilities that were located in Nahanton Park. We'll find the foundation of the city poor farm and look at photos and maps, then consider the history of the adjacent parcel of the Charles River Country Club. Next, we'll walk through the Hemlock Grove (conservation restriction land) over to the Working Boy's Home (now the JCC), where we'll read an account by a boy who grew up there in the 1940s. Next, we'll find the site of a 1950s antiaircraft artillery gun site and learn about its cold war function. Meet at the paved circle just off Winchester Street. Rain or shine. Trip leader is Lucy Caldwell-Stair, 617-928-3375.

**Saturday, April 19, 8 am - Noon**  
**Nahanton Park Invasives Pull**  
**Near 507 Winchester Street, Newton, MA 02461**  
**[www.newtonconservators.org/30nahanton.htm](http://www.newtonconservators.org/30nahanton.htm)**  
**Newton Conservators Invasive Plant Pulls**

Many native habitats, including grassland and open woodland habitats, are threatened by invasive plants. They out-compete native plants, reduce biodiversity and negatively impact birdlife. Nahanton Park is one of our open spaces suffering from infestations of invasive plant species, including Black Swallowwort, Multi-flora Rose, Tree of Heaven, Garlic Mustard, and Black Locust. Join us to improve the beauty and diversity of this special park by spending a few hours cutting back/removing these invasive species. Sturdy shoes, long pants, long sleeves and work gloves are recommended. Meet in the large parking lot off Winchester Street. Leaders are Jackie Daoust and Duane Hillis.



**Sunday, Apr 27, 9 am - Noon**  
**Cold Spring Park Garlic Mustard Pull (Newton SERVES Project)**  
**1200 Beacon Street Newton, MA 02461**  
**[www.newtonconservators.org/14coldspring.htm](http://www.newtonconservators.org/14coldspring.htm)**



**Newton Conservators Invasive Plant Pulls**

Cold Spring Park is being invaded by garlic mustard (see notes). We will spend a few hours checking the Cochituate Aqueduct walk, to keep it under control after previous years' pulls, and work on the meadow and parking lot areas. In case of poison ivy, wear long pants and garden gloves. Trash bags will be provided; the plants must be disposed of as trash, not as yard waste. Enter the park at the Beacon Street entrance. Turn left and go to the far end of the parking lot (circle) to meet group. Leader is Katherine Howard, 617-527-1796 (home) or 617-721-2571 (cell). Register online at

<http://www.newtoncommunitypride.org/NewtonSERVES-volunteer.php>.

**Sunday, April 27, 9 am - Noon**  
**Garlic Mustard Pull at Dolan Pond (Newton SERVES Project)**  
**76 Webster Park Newton, MA 02465**  
**[www.newtonconservators.org/5dolan.htm](http://www.newtonconservators.org/5dolan.htm)**  
**Newton Conservators Invasive Plant Pulls**

Meet at the Webster Park (a street off Webster Street)





entrance of the Dolan Pond Conservation Area in West Newton. (Street parking is available there and at the other entrances at Stratford Road and Cumberland Road.) We will tackle Garlic Mustard stands in off-trail corners of the property and a few patches of rosettes in previously worked areas. Come help us eradicate this soil-damaging invasive from this gem of a pocket nature area. Past crews also removed nearly every Knotweed stem from one area, but Knotweed removal takes years to complete, and each time it gets easier. We will mix in some general nature study, so bring binoculars for observing birds and other creatures that make this vernal pool area home. In case of poison ivy, wear long pants and garden gloves. Leader is Ted Kuklinski, 617-332-7753. Register online at <http://www.newtoncommunitypride.org/NewtonSERVES-volunteer.php>.

**Sunday, April 27, 9 am - Noon**  
**Garlic Mustard Pull at Blue Heron Bridge (NewtonSERVES Project)**  
**Near Super Stop & Shop, 700 Pleasant St, Watertown, MA**  
[www.newtonconservators.org/4charlesmoody.htm](http://www.newtonconservators.org/4charlesmoody.htm)  
**Newton Conservators Invasive Plant Pulls**

We continue to work along the Charles River Greenway at this bridge site, helping the Trustees of the Reservations with their stewardship of the floodplain forest, mixing in nature study, so bring binoculars and an insect net and hand lens if you have them. Park at the Watertown Super Stop & Shop (700 Pleasant St) at the corner furthest from the store. There is a path entrance: turn left, and follow path to the Blue Heron Bridge. Or park at Albemarle Rd or Nevada St, a block away from the river. Trip leader is Eric Olson, 617-872-9928. Register online at <http://www.newtoncommunitypride.org/NewtonSERVES-volunteer.php>.

**Saturday, May 3, 8:30 am - Noon**  
**Ordway Park Cleanup**  
**Corner of Gibbs and Everett Street (Newton Center)**  
<http://www.newtonconservators.org/16ordway.htm>



Ordway Park is a small natural woodland garden area. Its extensive array of tree and shrub species include American beech, dogwood, flowering quince, fringe-tree, mock orange, mountain ash, shad bush, viburnum, witch hazel, and yellowwood. The land was willed to the Newton Conservators by Priscilla Ordway in 1971. Please join us for a morning of fun at Ordway park near Newton Center! The goal of the day is to install a woodchip path on the walking trails through park, clean up any trash, and pull out fallen tree limbs and invasives - all to keep the park looking beautiful! All ages welcome! What you can bring: Wheelbarrow, Rakes, Shovels, Pitchforks. Contact Nathan Cenis with any questions 508-314 4414. For more info visit

[http://www.newtonconservators.org/miscbackupfiles/ordway\\_work\\_day\\_20](http://www.newtonconservators.org/miscbackupfiles/ordway_work_day_20)

[14.pdf](#).

**Sunday, May 4, 8 am - Noon**  
**Nahanton Park Invasives Pull #2 (repeat visit)**  
**Near 507 Winchester Street, Newton, MA 02461**  
[www.newtonconservators.org/30nahanton.htm](http://www.newtonconservators.org/30nahanton.htm)  
**Newton Conservators Invasive Plant Pulls**

Many native habitats, including grassland and open woodland habitats, are threatened by invasive plants. They outcompete native plants, reduce biodiversity and negatively impact birdlife. Nahanton Park is one of our open spaces suffering from infestations of invasive plant species, including Black Swallowwort, Multi-flora Rose, Tree of



Heaven, Garlic Mustard, and Black Locust seedlings. Join us to preserve the beauty and diversity of this special park by spending a few hours cutting back / removing these invasive species. Sturdy shoes, long pants, long sleeves and work gloves are recommended. Meet in the large parking lot off Winchester Street. Leaders are Jackie Daoust and Duane Hillis.

**Sunday, May 4, 2 pm - 5 pm**  
**Garlic Mustard Pull at Sawmill Brook Park**  
**Opposite 120 Vine Street, Newton, MA 02467**  
**[www.newtonconservators.org/26sawmill.htm](http://www.newtonconservators.org/26sawmill.htm)**  
**Newton Conservators Invasive Plant Pulls**

Sawmill Brook Park is a lovely long natural trail that connects Newton to West Roxbury. It is starting to have garlic mustard infestations at its entrances and along Lagrange St and Wayne Road borders. We will spend a few hours pulling at each entrance and along Lagrange and Wayne, and patrolling previously worked areas. In case of poison ivy, wear long pants and garden gloves. Trash bags will be provided; the plants must be disposed of as trash, not as yard waste. Meet at the Vine Street entrance. Leaders are Katherine Howard, 617-527-1796 (home) or 617-721-2571 (cell), and Eric Olson, 617-872-9928.



**Wednesday, May 7, 6 pm - 9 pm**  
**Newton Conservators Annual Meeting**  
**Guest Speaker: Julie McIntosh Shapiro (Harvard University Herbaria)**  
**Seeds: Up Close and Amazing**  
**American Legion Post 440, 295 California Street**

The annual meeting of the Newton Conservators is a jam packed event beginning with a social gathering and hors d'oeuvres at 6 pm, dinner at 7 pm, and formal program, awards, and special guest speaker.



Our speaker will be Julie McIntosh Shapiro, who is a seed photographer and curatorial assistant at the Harvard University Herbaria and a Group Leader of the Global Plant Initiative— and a captivating speaker. Julie's field seems very esoteric, but it is fascinating, and you will have the opportunity to learn about it—and to see her beautiful photographs. Julie also is a plant researcher and garden designer and has gone on botanizing expeditions throughout North and Central America and Europe. Visit <http://www.newtonconservators.org/events/dinner2014invite.htm> for more information or to sign up for the dinner online.

**Sunday, May 11, 8 am**  
**Mothers Day Bird Walk - Nahanton Park**  
**Newton Conservators Walk Series**

Nahanton Park offers a mix of woodlands, wetlands, edge habitat and meadows along the Charles River, making it one of the best birding spots in Newton for both migratory and resident songbirds. Likely finds include brightly colored warblers, vireos, and orioles, with bluebirds, scarlet tanagers, and swallows also expected. Enter the park at the Nahanton Street entrance next to the river. Parking is available inside the park. Bring binoculars if you have them. Beginners as well as experienced birders are welcome. Boots are recommended. Walk will be cancelled in steady rain. Co-sponsored with Friends of Nahanton Park. Trip leaders are Alison Leary, 617-821-5619, and Haynes Miller.



**Sunday, May 11, 9 am - Noon**  
**Cold Spring Park Invasives Pull #2 (repeat visit)**  
1200 Beacon Street, Newton, MA 02461  
[www.newtonconservators.org/14coldspring.htm](http://www.newtonconservators.org/14coldspring.htm)  
**Newton Conservators Invasive Plant Pulls**

Cold Spring Park is being invaded by Garlic Mustard. We will spend a few hours checking the Cochituate Aqueduct walk to keep it under control after previous years' pulls and working on the meadow and parking lot areas. In case of poison ivy, wear long pants and garden gloves. Trash bags will be provided; the plants must be disposed of as trash, not as yard waste. Enter the park at the Beacon Street entrance. Turn left, and go to the far end of the parking lot (circle) to meet group. Leader is Katherine Howard, 617-527-1796 (home) or 617-721-2571 (cell).

**Sunday, May 11, 2 pm**  
**Take a real hike in Newton: Discover the Newton Aqueducts**  
**Newton Conservators Walk Series**

We will start from the Newton Centre Playground at the intersection of Centre Street and Tyler Terrace. This popular 5.7 mile hike follows the Newton sections of the Cochituate and Sudbury Aqueducts. It is a mostly flat route on trails through woods and parks with about a mile of connecting roads. It passes through Waban at about 2.4 miles and through the Eliot MBTA Station at 3.9 miles for those who want to shorten the route with a streetcar ride back to Newton Centre. This is a steady but not fast hike. Participants should be in sufficiently good shape to keep up with the group. Rain does not cancel; lightning does cancel. Trip leader: Henry Finch, [617-964-4488](tel:617-964-4488).



**Saturday, May 17, 8 am (Rain date: Sunday, May 18)**  
**Cold Spring Park Bird Walk**  
**Newton Conservators Walk Series**

This 67 acre parcel has ample wooded areas, open fields, a brook and wetlands. It is one of the places in Newton where you may hear the call of the great-horned owl and observe spectacular songbirds like the rose-breasted grosbeak and the indigo bunting. Also frequently found at the park are many favorite migrants like the red eyed vireo, the wood thrush, and a variety of wood warblers. Bring binoculars if you have them. Beginners as well as experienced birders are welcome. Enter the park at the Beacon Street entrance. Turn left, and go to the far end of the parking lot to meet the group. Trip leader is Pete Gilmore, 617-969-1513.



**Saturday, May 17, 8 am**  
**Boston Greenbelt Walk - a One Day Walk Along the Greater Boston Trails**

The Boston Greenbelt Walk is a one-day, 30-mile walk from Oak Grove Station in Malden to Riverside Station, Newton, scheduled for May 17, 2014. The walk begins and ends at T station terminal points for convenient access from Boston. This is a coordinated effort organized by, many local and regional trail organizations. For those attempting the entire walk, the start will be Oak Grove T station in Malden, MA and the end point will be the Riverside T station. The walkers are expected to arrive in the Newton portion of the walk around 5 pm and folks are welcome to join the walk in Newton, Waltham, or even Lexington for a shorter walk. Details and times for this will be firmed up. Find more detailed info at [www.bostongreenbeltwalk.org](http://www.bostongreenbeltwalk.org) or



contact [bostongreenbeltwalk@gmail.com](mailto:bostongreenbeltwalk@gmail.com).

**Sunday, May 18, 9 am - Noon**  
**Houghton Garden / Webster Garlic Mustard Pull**  
**Opposite 210 Suffolk Rd, Newton, MA 02467**  
**[www.newtonconservators.org/19houghton.htm](http://www.newtonconservators.org/19houghton.htm)**  
**Newton Conservators Invasive Plant Pulls**

Last year, we began to tackle a new infestation near the entrance of Houghton Garden where it borders the MBTA D Line Track crossing to Webster Woods and near the deer park. Help us keep garlic mustard out of Houghton Garden! In case of poison ivy, wear long pants and garden gloves. Trash bags will be provided; the plants must be disposed of as trash, not as yard waste. Meet opposite 162-210 Suffolk Rd (off of Hammond Street) at the entrance to Houghton Garden. Leader is Katherine Howard, 617-527-1796 (home) or 617-721-2571 (cell).

**Saturday, May 24, 10 am**  
**Upper Falls Greenway: Tour Newton's Newest Park Land**  
**Newton Conservators Walk Series**

The 3-mile walk will include the Upper Falls Greenway trail itself, as well as some possible future extensions and connections to existing parklands, including the spur line to Christina Street and the Charles River Pathway. More info at [http:// UpperFallsGreenway.org](http://UpperFallsGreenway.org). Trip leader is Jerry Reilly, [617-999-5300](tel:617-999-5300).

**Sunday, May 25, 1 pm**  
**Riverside Pathway Tour**  
**Newton Conservators Walk Series**

Tour this proposed walking trail that could link Lower Falls to the Lasell Boat House in Auburndale. This mile and a half walk is mostly along the banks of the Charles River and will include crossing an unused railroad bridge that spans Route 129 into Lower Falls. The existing trail is a bit rough in places so wear suitable footwear. More info at <http://village14.com/newton-ma/2014/01/riverside-path-open-up-34-mile-of-newton-waterfront>. Trip leader is Jerry Reilly, [617-999-5300](tel:617-999-5300).

**Wednesday, May 28, 6 pm - 8 pm**  
**The Landscape Legacy of Chestnut Hill Reservoir**  
**Newton Conservators Walk Series**

In addition to its significant role in early Boston's water supply, the Chestnut Hill Reservoir was a popular public park since its inception. Designed landscapes of formal grassed banks, picturesque rock outcroppings, and woodlands attracted city dwellers for leisurely walks and carriage rides. Discover the fascinating design history of the Chestnut Hill Reservoir, constructed at the height of Boston's "Golden Age." In celebration of Massachusetts Preservation Month, join the Waterworks Museum and the Department of Conservation and Recreation for a one-hour lecture in the museum's Overlook Gallery, followed by a leisurely stroll along the banks of the reservoir. For info call 617-277-0065 or email [info@waterworksmuseum.org](mailto:info@waterworksmuseum.org) or visit <http://www.waterworksmuseum.org/calendar/view/258/date/2014-05-28>.

**Saturday, June 7, 9 am - Noon**  
**Japanese Knotweed Pull at Hammond Pond**  
**Near 309 Hammond Pond Parkway, Newton, MA 02467**  
**[www.newtonconservators.org/18webster.htm](http://www.newtonconservators.org/18webster.htm)**  
**Newton Conservators Invasive Plant Pulls**



Japanese Knotweed is a bamboo-like invader from Asia that can create dense 8' tall single-species stands. It is a tough adversary, not because it's spiny or strong or even particularly hard to pull, but any small root fragments left behind spring back to life the following year. Scientists seek biological control agents, but until they find some, we are stuck controlling the plant by hand. Persistence pays with this species, and eradication is possible, but it takes several years to truly finish the job. Bring pitchforks, garden spades, and hand pruners if you have them. Meet at small parking lot off Hammond Pond Parkway at Route 9 adjacent to pond at "the Street" mall. Leader is Eric Olson, 617-872-9928.

**Saturday, June 7, Noon - 2 pm (Rain Date: Sunday, June 8)**  
**Fern Walk at Cold Spring Park**  
**Newton Conservators Walk Series**

This large green space south of Beacon St. is a good compromise between an accessible park with developed trails and a wild conservation area with interesting native plants. We will see nearly a dozen different ferns and one horsetail and discuss how to identify each one. Wear long pants, and bring a hand lens if you have one. And bring a frond of any fern you would like to have identified. The walk will be led by Don Lubin, who leads field trips for the New England Wild Flower Society. Visit his website at <http://nefern.info>. Meet at Plymouth Rd. near the aqueduct, between Kingston Rd. and Endicott St., at the south end of the park. Trip leader is Don Lubin, [617-254-8464](tel:617-254-8464).



**Sunday, June 8, 9 am - Noon**  
**Cold Spring Park Invasives Pull #3 (repeat visit)**  
**1200 Beacon Street, Newton, MA 02461**  
**[www.newtonconservators.org/14coldspring.htm](http://www.newtonconservators.org/14coldspring.htm)**  
**Newton Conservators Invasive Plant Pulls**

Cold Spring Park is being invaded by Garlic Mustard (see notes above). We will spend a few hours checking the Cochituate Aqueduct walk to keep it under control after previous years' pulls and working on the meadow and parking lot areas. In case of poison ivy, wear long pants and garden gloves. Trash bags will be provided; the plants must be disposed of as trash, not as yard waste. Enter the park at the Beacon Street entrance. Turn left, and go to the far end of the parking lot (circle) to meet group. Leader is Katherine Howard, 617-527-1796 (home) or 617-721-2571 (cell).



**Thursday, June 12, 7 pm - 9 pm**  
**Lecture: Brooks Mathewson**  
**Newton Free Library - Druker Auditorium**

Join Newton's resident ecologist Brooks Mathewson for a talk that will focus on his research and photography. To see more of Brooks' stunning photographs visit <http://www.avianartimages.com/>. This lecture is free and cosponsored by the Newton Conservators and the Newton Free Library.

**Sunday, June 15, 9 am - Noon**  
**Charles River Quinobequin / Hemlock Gorge Garlic Mustard Pull**  
**Near 2 Ellis Street, Newton, MA 02464**  
**[www.newtonconservators.org/21hemlock.htm](http://www.newtonconservators.org/21hemlock.htm)**  
**Newton Conservators Invasive Plant Pulls**




We have expanded our efforts to control beginnings of infestations inside



beautiful Hemlock Gorge Park and also in the adjoining lovely walking trail along the Charles River at Quinobequin Rd. Help us keep the Garlic Mustard out of these beautiful parks! In case of poison ivy, wear long pants and garden gloves. Trash bags will be provided; the plants must be disposed of as trash, not as yard waste. Meet at the parking lot at corner of Quinobequin Rd and Ellis St at the Route 9 intersection. Leaders are Jerry Reilly and Katherine Howard, 617-527-1796 (home) or 617-721-2571 (cell).

## Newton Conservators Spring 2014 Newsletter

Our spring newsletter was sent out recently and is available online as well at <http://www.newtonconservators.org/newsletters/apr14.pdf>.



**NEWTON  
CONSERVATORS**  
SPRING ISSUE

# NEWSLETTER

*Newton's land trust working to preserve open space since 1961*

WWW.NEWTONCONSERVATORS.ORG • SPRING 2014

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### US Agriculture and the Coming Water Crisis

*by Greg Adams, Farm Manager, Newton Community Farm*

*From Irrigation*                      *Lack of water can affect the taste of vegetables*

**I** recently heard a term used that grew the predicament of agriculture, and indeed our entire civilization, into rock light peak water. Pretty much everyone has heard of peak oil, but peak water? What's that? The book in which I read it used that something of a throw away phrase, but as I reflected on it, the appropriateness of the term grew.

The acid and semi-arid western United States has already found sugar, but peak water. Farmers and municipalities are in bidding wars over limited water supplies:


one to provide water to homes, one to provide food to those same homes. There are battles between up-stream and down-stream communities over access to water, and international disputes occur because rivers like the Colorado no longer reach their historic outflows in the Gulf of Mexico. Living in New England, we can feel the trend from the water wars of the west, but it is not only a lot of label checking—when did that fill in your fruit or vegetable bin) come from?—so make how much everyone in the United States can or will be affected by peak water in the west.

Water is what is referred to in agriculture as a "limiting" factor. It's not just that without enough water a plant dies, that's true, but an extreme. Without enough water (not just enough to live), a plant will grow more slowly, may not grow to full size/weight, or might start out of its vegetative stage (during which it's actively growing) into its reproductive stage (when it tries to reproduce) prematurely. The latter is a common response to all kinds of environmental stressors—organisms put all their energy into reproducing when they sense that they might not survive. For farmers, none of these outcomes are good.

Some farms don't really have a choice. They don't have water to irrigate, so they don't irrigate. These are the dry-land farms. Their fields get watered when it rains (or snows), but otherwise the crops are left to glean what moisture they can from the soil. There are dry-land farms in the acid west as well.

**Farmers and municipalities are in bidding wars over limited water supplies**

*Continued on page 2*

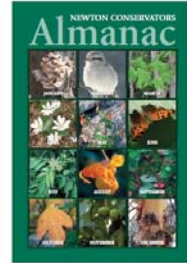


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This e-Bulletin is a service of the Newton Conservators, Newton's open space advocates since 1961. If you wish to subscribe, just send a note with your request to subscribe to the Newton Conservators e-Bulletin to [dolanpond@aol.com](mailto:dolanpond@aol.com) or [emaillist@newtonconservators.org](mailto:emaillist@newtonconservators.org). The current edition of our paper newsletter (for those who don't receive it in the mail) can be easily downloaded in PDF form at <http://www.newtonconservators.org/newsletters/>. Event listings for our e-Bulletin can be sent to [dolanpond@aol.com](mailto:dolanpond@aol.com).



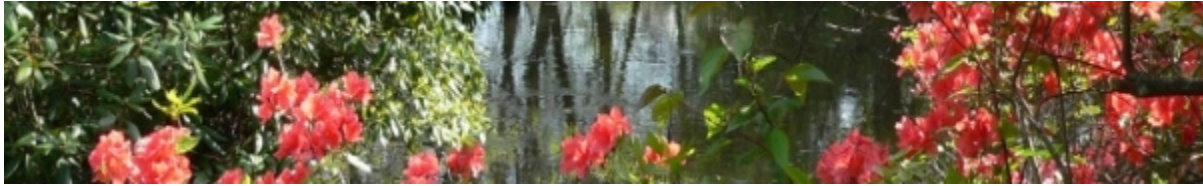
Did you know that you can Join the Newton Conservators online. And consider a gift membership for a conservation-minded friend (new members get a trail guide as well)! Visit <http://www.newtonconservators.org/membership.htm> for details on membership options. Did you know that you can register and pay for membership, events, buy a copy of our Almanac or newly revised Trail Guide, or make a donation to the Newton Conservators online?



*Mission: The Newton Conservators promotes the protection and preservation of natural areas, including parks, playgrounds, forests and streams, which are open or may be converted to open space for the enjoyment and benefit of the people of Newton. It further aims to disseminate information about these and other environmental matters. A primary goal is to foster the acquisition of land, buildings and other facilities to be used for the encouragement of scientific, educational, recreational, literary and other public pursuits that will promote good citizenship and the general welfare of the people of our community.*

The Newton Conservators organization was formed as a not-for-profit over 50 years ago (June 1961).

- E-Bulletin Editor Ted Kuklinski, Newton Conservators ([dolanpond@aol.com](mailto:dolanpond@aol.com))



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