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## The Canada Goose in Newton



PHOTO: PETE ROBERTS

*Adult Canada Goose seen on a walk in Hammond Pond Woods*

**T**here are geese, and then there are *geese*.  
Let me explain.

Back in the late 1970s when I sailed the Chesapeake Bay with friends on fall “Goosing Expeditions,” we would see huge flocks of Canada Geese, Snow Geese, and even swans migrating down the Eastern flyway in their distinctive V patterns. We would awaken at dawn after mooring in an estuary on the Eastern Shore of Maryland to the soft honking of Canada Geese — it almost sounded like dogs barking. I also recall enjoying watching flocks of birds come in for landing in the late evening — those geese would perform like acrobats with barrel rolls and wing waggles. But fall and spring were the *only* time we saw large numbers of these geese back in the 1970s.

Now there are Canada Geese everywhere there are lawns: at Crystal Lake and the Newton Cemetery, and at all the Newton playing fields and golf courses. The Canada Geese are making headlines, too. They

downed a plane in New York in 2009. They aggressively defend nests in shopping malls. They are blamed for fouling children’s playing fields and swimming holes, as well as public water supplies. *And they don’t seem to migrate anymore.*

### What happened?

To begin to understand the answer, let’s explore some facts about this very large bird.

There are, according to the Cornell Ornithology Lab’s website, “At least 11 subspecies of Canada Goose . . . , although only a couple are distinctive.” Here in Newton we see the most common goose, *Branta canadensis*. This is one of the largest birds you will commonly encounter with a wing span of 4 - 5.5 feet and a length of 2.5 - 3.6 feet, weighing in at 6.6 pounds on the low end to nearly 20 pounds! They compare roughly to a wild turkey but may have a longer wing span. And I’m told they are tasty, too, although I’ve never tried a wild

...The Canada Goose in Newton continued from page 1

goose. You'll need to buy a MA license, a Waterfowl Stamp, and a Federal Duck Stamp before you can start hunting in Massachusetts.



Adult Canada Goose with juveniles

regarding where the head of the goose is looking and hence, in which direction it will move. The breast is white or very light tan, and the back is brown. There are regional differences though. Cornell notes, "Canada Geese tend to be smaller as you move northward; plumage tends to be darker as you move westward."



A family watches geese and ducks on the Charles River in Watertown. Signs remind visitors not to feed the animals.

breeding season. Most Canada geese don't begin mating until they are three years old." When they do mate, the female Canada Goose selects the nest site, usually close to water and on a muskrat mound or other spot slightly above the water line with an unobstructed view and, according to Cornell builds a "large open cup on the ground, made of dry grasses, lichens, mosses, and other plant material, and lined with down and some body feathers." The female does all the incubation (usually 25 to 28 days). The male Canada Goose's job appears to be guarding his mate, their nest, and their fledged goslings.

If you encounter a Canada Goose "head pumping, bill opened with tongue raised, hissing, honking, and vibrating neck feathers" you are witnessing a threat display, according to Cornell. It's best to retreat since the angry bird may attack with beak and wings.

When the birds molt in July, you may be able to find large

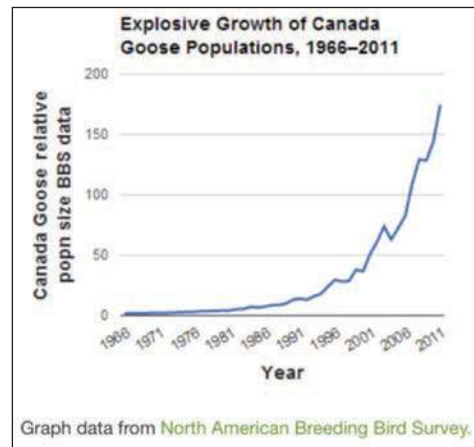
The Canada Goose has a black head and neck with a distinctive white "chin strap" (a patch of white running from their lower jaw over its cheek, behind its eye and nearly to the top of their head). This white patch may confuse predators

According to the Mass.gov website, "Geese form permanent pair bonds, but if one goose dies, the other will seek a new mate in the next

gray brown wing feathers (about 10-11 inches long) on the ground. Canada Geese lose all their flight feathers over a period of 4-5 weeks, and this leaves them flightless for a period in July after babies fledge and before migration.

According to Mass.gov, "...by the time the young are 4-6 weeks old, the broods begin gathering in large flocks. Non-breeders and yearlings form separate flocks. By fall, they all gather into one large flock for the winter."

But here's the problem: Massachusetts has *two different populations of Canada Geese*, one that migrates in the spring and fall and the other that stays put year-round.



Graph data from North American Breeding Bird Survey.

PAT LEONARD, SEPTEMBER 17, 2013; [HTTPS://WWW.ALLABOUT-BIRDS.ORG/CANADA-GOOSE-RESIDENT-VS-MIGRATORY/](https://www.allabout-birds.org/canada-geese-resident-vs-migratory/)

Much of our resident Canada Goose population descends from live decoys called "tollers" used by market hunters for over 200 years. The name comes from the tolling of church bells to call people to church, but in this case the

"tollers" are calling wild geese down to be slaughtered. This method was so effective it decimated the wild Canada Goose population. Egg-collecting and development of wetlands also contributed to the decline. By the early 1900s the market for wild meat collapsed and live decoys were declared illegal — the market hunters turned their "tollers" loose. Generations of these tollers had never learned to migrate.

Hunting regulations limit the number of birds bagged. The proliferation of lawns and a 1930 government-sponsored program re-introducing resident "giant" Canada Geese for hunting has helped the Canada Goose populations to grow. Goose populations recovered nicely, and the population of resident (non-migratory) geese exploded. Cornell's North American Breeding Bird Survey of 2015 estimates there are 4.2 million to over 5.6 million Canada Geese in North America. Cornell adds that each year some "2.6 million Canada Geese are harvested by hunters in North America" without much effect on the species' numbers. Mass. gov notes, "Recent studies indicate that for populations to be controlled, at least 30-35% of the birds need to be harvested annually. Currently, the hunting harvest is about 25%." Needless to say, Canada Geese are not on the list of endangered species.



PHOTO: KEN MALLORY

*Adult Canada Goose*

Another part of the reason for the explosion of local, non-migratory geese in our suburban communities is the lack of predators. Normally skunks, raccoons, coyotes, foxes, bobcats, as well as gulls, eagles, crows, ravens, and magpies eat the eggs of wild geese. Goslings fall prey to the same predators but move to water early enough in their lives to avoid most of them. (Babies hatch with eyes open, covered in fluffy down, and leave the nest in 1 or 2 days). Our urban and suburban communities have eradicated most of these egg predators. This means a very low first-year mortality. Once a Canada Goose is full-grown, humans become its main predator, unless it is molting and cannot fly or access water to escape its larger predators like the coyote.

Wild Canada Geese are grazers in the spring, eating grass and sedges. In the fall, according to the Cornell Lab of Ornithology, these wild geese turn to “berries and seeds, including agricultural grains, and seem especially fond of blueberries. They’re very efficient at removing kernels from dry corn cobs.” However, Cornell also notes, “Two subspecies have adapted to urban environments and graze on domesticated grasses year-round.”

It’s your grass these Canada Geese are eating. Your lawns, golf courses, parks, and playing fields are grazing fields perfectly maintained for geese, and they are virtually free of predators. Mass.gov claims that all this excellent forage causes these resident geese to “nest within a few yards of one another” because “territorial defense breaks down.” And these resident suburban birds can live twice as long as the wild birds. This results in even more geese and also far too much of that odious “poop” they leave everywhere.

A goose cannot afford to be weighed down by what it eats — it has to be able to fly immediately to escape predators. All that grass they eat? It moves through the goose in about 30 minutes and has a good amount of e.coli and other not-so-savory organisms in it. A single goose can produce between a half and a pound and a half of droppings per day.

## Problem Geese

Jim Sterba, author of *Nature Wars*, titles his chapter on the Canada Goose “Lawn Carp” and describes people blaming the geese for fouling playing fields and causing eutrophication of lakes and reservoirs. (The goose droppings are rich in nutrients and combined with fertilizer runoff can cause dense plant /algae growth leading to severe shortage of oxygen and the death of animal life.)

But have goose droppings actually *caused* sickness in humans or their pets? Scott Hygnstrom at University of Wisconsin-Stevens Point quotes research that transmission of disease or parasites from geese to humans has not been well documented, but the potential exists and therefore people should take precautions.

And public health officials seem to agree. Chelmsford Lake Beach was closed for two days in 2017 after public health officials performed their weekly check of the water and found high levels of single cell e. coli from goose feces.



PHOTO: B.L. BATES

*People don't realize that geese stay year round unless they go out and look, shown here at the Newton Cemetery*

Canada Geese can cause problems for humans in other ways as well. Aggressive geese in Ohio forced schools to postpone one track meet and relocate another when a mated pair defending their nest on the grassy area in the center of the track started attacking school officials. According to Cornell, “The Federal Aviation Administration (FAA) estimates there are 240 goose-aircraft collisions each year nationwide, though some of these — like the flock that in 2009 notoriously caused U.S. Airways flight 1549 to go down in the Hudson River — can be traced to migratory birds.” <https://bit.ly/2PxrzyY>

## Goose Control

There are many ways to reduce Canada Geese in public spaces. They include preventing feeding by the public,

*Continued on page 4*



Adult geese graze in the grasses around the Newton cemetery.

altering the habitat to reduce its attractiveness to geese by adding barriers that affect sight lines as well as access and planting vegetation that geese don't like in place of grass. Other measures include using dogs, sound

or moving flags to scare geese away, and using chemical repellents that make the grass unattractive to eat. Finally, hampering reproduction by sterilization or by adding or oiling eggs, and rounding up and killing the geese are yet additional means of control. Only lethal means prevents the problem geese from returning or bothering another community. For an excellent set of instructions on each of the different ways to discourage geese from hanging around, see Managing Canada Geese in Urban Environments (https://bit.ly/2C7IINV), which you may download free from Cornell University's e-commons.

Federal laws prevent lethal means of population control without a permit. Sterba recounts several tales of local authorities gaining their local communities' support, receiving their permits, removing and killing the adult geese, and giving the harvested meat to food pantries only to later receive death threats by phone and email.

It seems there is no single solution that will please everyone in a community.

References

The Cornell Lab of Ornithology, "Canada Goose, All About Birds," https://www.allaboutbirds.org/guide/Canada\_Goose

Hygnstrom, Scott, The Internet Center for Wildlife Damage Management (ICWDM), University of Wisconsin-Stevens Point http://icwdm.org/handbook/birds/CanadaGeese/HumanHealth.aspx.

Mass.gov, "Learn about Canada geese," (https://www.mass.gov/service-details/learn-about-canada-geese)

Meyers, Alyssa, August 23, 2017, "Geese feces force closure of Chelmsford lake," Boston Globe.

Smith, Arthur E.; Craven, Scott R.; Curtis, Paul D., (2009), "Managing Canada Geese in Urban Environments," Cornell University Cooperative Extension download for free from https://ecommons.cornell.edu/handle/1813/66

Sterba, Jim, 2012, Nature Wars: the incredible story of how wildlife comebacks turned backyards into battlegrounds, Crown Publishers, NY.

Wilhelm, Jim and Lecker, Kelly, April 26, 2018, "Aggressive geese force Columbus schools to cancel one track meet, relocate another," The Columbus Dispatch. ♦

Barbara Bates, new board member of the Newton Conservators, retired from a career in high tech, and now a part-time naturalist at Mass Audubon's Habitat Education Center & Wildlife Sanctuary



RENEW YOUR MEMBERSHIP OR JOIN TODAY!

YES, count me in! I want to be a nature steward and help Newton Conservators protect and preserve the natural areas in our community.

Please renew/accept my tax-deductible membership at the level checked below:

- Membership options: \$250 Directors' Circle \*NEW!, \$125 Patron, \$100 Donor, \$75 Sustaining Member, \$50 Family Membership, \$35 Individual Membership, \$15 Student Membership, Additional Contribution \$\_\_\_\_\_

Want to make an even bigger impact? Help us support these conservation areas:

- Support areas: Woodcock Meadow \$\_\_\_\_\_, Ordway Endowment Fund \$\_\_\_\_\_, Land Stewardship Areas (Dexter Rd., Bracebridge Rd.) \$\_\_\_\_\_

\*Contributors at this level receive a copy of the Newton Conservators Almanac. All new members receive Walking Trails in Newton's Parks and Conservation Lands.

NAME \_\_\_\_\_ EMAIL \_\_\_\_\_ ADDRESS \_\_\_\_\_ ZIP \_\_\_\_\_

I would like to volunteer! Please email me.

Please make checks payable to Newton Conservators, Inc. and send to P.O. Box 590011, Newton Centre, MA 02459, or visit NewtonConservators.org/membership.htm to renew/join online. Consider including Newton Conservators in your estate planning. Contact us at president@NewtonConservators.org.



# President's Message

Dear Conservators,

Don't miss the final list of our fall walks at the end of this issue. Debuting this year is Brooks Mathewson's bird photography walk on October 20. (Please note that the time has changed since the preview list from the summer newsletter.) There are perennial favorites, too: Bill and Dottie Hagar's Canoe and Kayak Trip at Nahanton Park will start off the season on September 29. Haynes Miller and Pete Gilmore will lead bird walks in October; Henry Finch will take hikers along the Aqueducts. Chris Hepburn will lead the final event on October 27 with a modified version of his geology walk, which will extend beyond Newton's borders for the first time (see "Introduction to the Bedrock Geology of Newton elsewhere in this newsletter").



Eric Olson examines the leaves of this tree of heaven in Cold Spring Park.

The board of the Conservators is pleased to announce a new member: Barbara Bates, who wrote the cover article on Canada geese. Her skills as a naturalist already have been very helpful.

Throughout the summer, Conservators' volunteers have removed invasive plants in our open spaces, including Cold Spring Park, Woodcock Meadow at Nahanton Park, and Houghton Garden. As fall begins, the work will continue with groups of students and volunteers from the Charles River Watershed Association joining our volunteers.

You can see trees of heaven, black swallow-wort, and Japanese knotweed (and many more invasive plants) growing in most of our conservation areas — and also along highways, parking lots, and small open spaces throughout the city. It is impossible for our relatively small crew of volunteers to control those plants everywhere they grow. We are concentrating on several large areas, and even there, it sometimes feels like a losing battle. Please remove those plants where you find them. You can find more information about them on our website: <https://bit.ly/2C7IINV>

Many people are not aware of the problems posed by trees of heaven (*Ailanthus altissima*). Here is an explanation from the Nature Conservancy:

“Why should we be concerned about the tree of heaven? **It is a prolific seed producer and can thrive in even the most unfavorable conditions with little management.** Its rapid growth also means that it can crowd out nearby native plant species, and its aggressive root system can cause damage to pavement, sewers and building foundations.”

Trees of heaven can be found in Cold Spring Park — and many of Newton's smaller parks. If you want to see large stretches of them, just look as you drive along the Mass Pike into Boston. Once they are established, removing them is not as simple as just cutting them down. Herbicides are required. The best solution is to pull the young seedlings. The Penn State Extension provides a good guide to identifying the tree: <https://extension.psu.edu/tree-of-heaven>

Update on preserving Webster Woods: As I write this, the Webster Woods Advisory Panel is preparing for its September 4 meeting. The Conservation Commission submitted a pre-acquisition proposal to the Community Preservation Committee for funding for expert advice to help the City to obtain permanent protection for 300 Hammond Pond Parkway. The CPC public hearing is scheduled for September 13. This fall, the Advisory Panel will be soliciting public support for this process. More news to come.

Wishing you a fun fall in Newton's open spaces,

Beth Wilkinson

# Introduction to the Bedrock Geology of Newton

**Editor's Note:** This article is based on a field trip Newton Conservators' Vice President Chris Hepburn has led in the past around different sites in Newton. Chris is a geologist and retired professor of geology from Boston College specializing in igneous and metamorphic rocks, geochemistry, and plate tectonics applied to the formation of the Appalachians. The next field trip is scheduled for Saturday, October 27 at 9 am. See page 11 of this newsletter for more information.

“Yet a lump of puddingstone is a thing to look at, to think about, to study over, to dream upon, to go crazy with, to beat one's brains out against.”

— Oliver Wendell Holmes, *The Professor at the Breakfast-table* (after Rehmer and Roy, 1976)

The rocks of the Boston area have been the subject of study and debate for almost as long as geology has been a science, starting in the early 1800s. It is fun to note the evolution of geological ideas as one reads the older literature and to observe the influence these rocks have had on it, given the famous early geologists who lived and worked in the Boston area. However, to adequately reference all the geological work upon which this field trip is based is clearly not possible here.

Newton is underlain by three geological formations with different rock types, the Roxbury Conglomerate, volcanic or intrusive rocks of the Brighton and Mattapan Volcanics, and the Cambridge Argillite or Slate. (In geological literature, rock formations are named for geographical “type” localities where they are first described or well exposed.) We will visit representatives of each of these rocks on our excursion with the goal of trying to assess the environment in which they were deposited.



Chris Hepburn previews a geology walk at Hammond Pond.

The rocks of Newton are part of the Boston basin, a fault bounded sedimentary basin that formed within an ancient volcanic arc in the latest Precambrian geological era, about 600–585 million years ago (Thompson, 2014). The basin formed between volcanic centers to the south, toward Westwood, and to the north in the Lynn area. Intra-arc basins are common in modern volcanic arcs like the Andes. The reason the Boston basin is a lowland, with higher terrain all around, is simply that the rocks within it are softer and were more easily eroded than the harder volcanic and granitic rocks that surround it. (Note, for instance, the view of downtown Boston as you descend the long hill travelling east on Rt. 2 in Belmont from the harder, less-eroded rocks on the west.)

Through paleomagnetic studies we now know that the rocks of Newton were formed as part of a large volcanic arc along the edge of the great southern continent of Gondwana, much like the modern Andes along the western coast of South America. Other fragments of this ancient arc are found today around the North Atlantic Ocean, from Atlantic Canada and Newfoundland to Wales and Morocco.

At the time this arc was active, it was not far from the South Pole, being at least 60 degrees south (Figure 1). Thus, our rocks have travelled a long way in the intervening years. However, within 50 million years after they were deposited, a ribbon continent broke away from Gondwana because of plate tectonic forces. It then moved out into the “paleo-Atlantic” or Iapetus Ocean (named for the father of Atlantis in mythology) in much the same way that Japan has broken away from Asia in the more recent past.

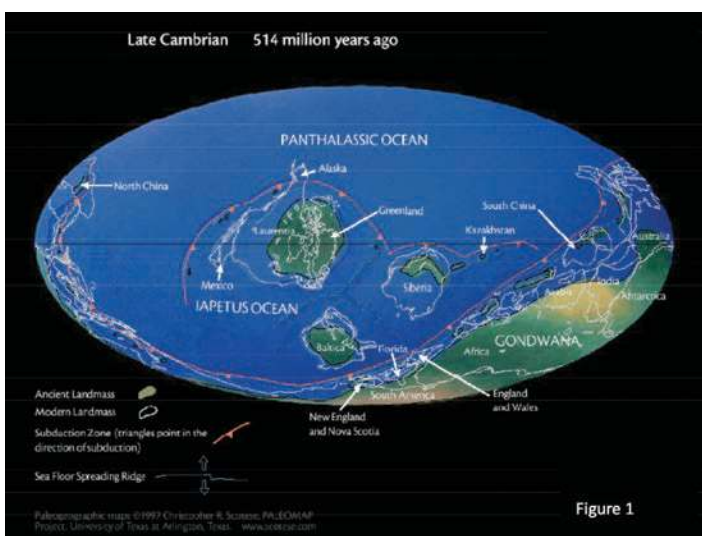


Figure 1. 514 million years ago. Paleogeographic Maps by C. R. Scotese Paleomap Project, Univ. of Texas, Arlington; [www.scotese.com](http://www.scotese.com)

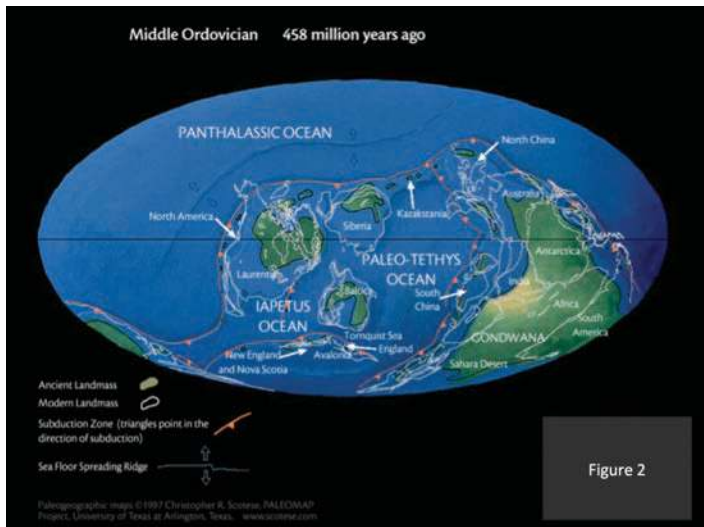


Figure 2. 458 million years ago. Paleogeographic Maps by C. R. Scotese Paleomap Project, Univ. of Texas, Arlington; www.scotese.com

The Iapetus Ocean separated Gondwana to the south from the ancient core of North America, called Laurentia, which was located more or less at the equator. The ribbon continent is named Avalonia for the type area on the Avalon Peninsula of eastern Newfoundland. In eastern Massachusetts, Avalonia extends only a short distance west of Rt. 128/195, but it is more extensive offshore. Through time, Avalonia gradually crossed Iapetus until it collided with the edge of Laurentia beginning about 425 million years ago (Figures 2-4). This collision led to mountain building, folding and metamorphism that formed the northern

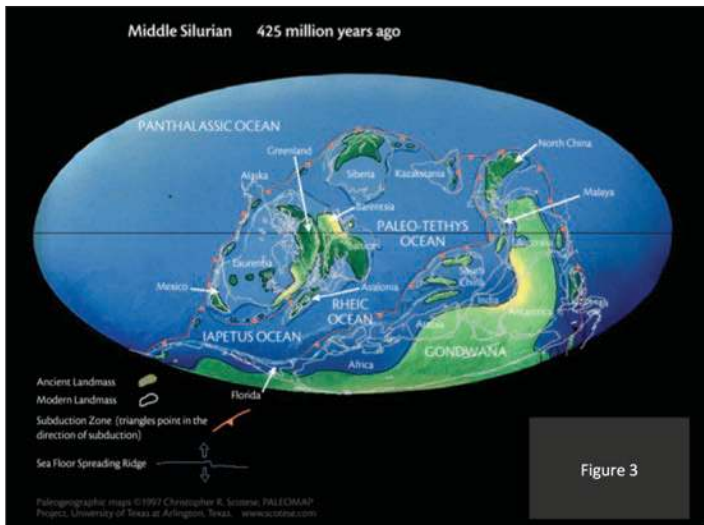


Figure 3. 425 million years ago. Paleogeographic Maps by C. R. Scotese Paleomap Project, Univ. of Texas, Arlington; www.scotese.com

Appalachians. Four hundred million years ago western Massachusetts, New Hampshire and Vermont would have resembled the Alps or Himalayas of today.

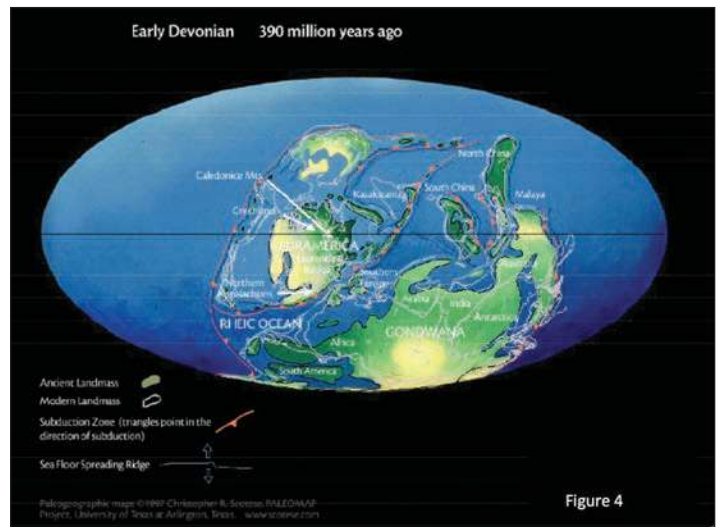


Figure 4. 390 million years ago. Paleogeographic Maps by C. R. Scotese Paleomap Project, Univ. of Texas, Arlington; www.scotese.com

All the exposures we will visit on our tour were formed while Avalonia was still part of the Gondwanan continent in the high southern latitudes on the other side of the Iapetus Ocean. Note that the land was barren of plants and animals then and no life existed on the earth except primitive, non-shelled organisms in the oceans.

**References cited:**

Rehmer, Judith A. and Roy, David C., 1976, "The Boston Bay Group: The Boulder Bed Problem," in Cameron, Barry, *A Guidebook for Field Trips to the Boston Area and Vicinity*, New England Intercollegiate Geological Conference, 68th Ann. Mtg., Science Press, Princeton, N.J., pp. 71-91.

Thompson, Margaret D., 2014, "Conglomerate in and around the Boston Basin, Massachusetts: U-Pb geochronology, stratigraphy and Avalonian tectonic setting," in Thompson, M.D., *A Guidebook to Field Trips in Southeastern New England (MA-NH-RI)*, New England Intercollegiate Geological Conference, 106th Ann. Mtg., Dept. of Geosciences, Wellesley College, Wellesley, MA, pp. B2-1 – B2-16. ♦

Chris Hepburn



PHOTO: KEN MALLORY

Closeup of Roxbury Conglomerate

# Beyond Boundaries: Public Art in the Upper Falls Greenway

An underappreciated benefit of preserving land for community access and enjoyment is its role as a stage for public art, shown most recently in an exhibit called “Beyond Boundaries” at the Greenway in Upper Falls.

In a display of 15 pieces of sculpture along the greenway from the Depot Café on Green Street to National Lumber, the N-Squared Innovation District partnered with the artists collective Studios Without Walls from June to September over the summer.



PHOTO: KEN MALLORY

*A young visitor places flowers in the a cup held by Qwglak of the Upper Falls, a giant mythical monster made of moss, wisteria pods, haliconia flowers, bark, wood, and fungi.*

As described by Newton-Needham Regional Chamber President Greg Reibman (<https://bit.ly/2LJyYsE>): “We want the greenway to be a place where ‘happy accidents’ happen this summer as artists, arts lovers, area employees, shoppers, dog walkers, cyclists and others converge. By joining the arts community with local residents and businesses, the N-Squared Innovation District initiative aims to activate the greenway as a gathering point for everyone.”

The Upper Falls Greenway has long been a focus of Newton Conservators’ interest.

On what was once a railway track from Needham to Boston’s Back Bay to provide fill for swampy areas around Boston Neck, the Upper Falls Greenway is a mile-long path of crushed stone where walkers and bikers can enjoy nature and escape nearby and busy Needham Street.

This summer’s Greenway sculptures ran a gamut of subjects ranging from tree-branch-suspended mobiles and a welded steel sculpture entitled Swan Lake, to an array of multi-colored pom poms called Make Paradise Meet, and

Qwglak of the Upper Falls, a giant mythical monster made of moss, wisteria pods, haliconia flowers, bark, wood, and fungi.

Qwglak drew special interest. Created by artist and educator Anne Eider, the sign that accompanies her sculpture describes her intent. “Monsters are at once foreign and familiar, and they perform a good deal of cultural work reflecting to us our monstrous side as well a representing ‘otherness.’ Protectors or destroyers they elicit reflection on the complexities of our nature. The materials used suggest the role played by the natural world in shaping our core mythologies.”

As to why she does public art, Anne offers the following: “For my entire career I have been concerned with increased access to the arts for everyone because I feel like economic factors exclude a lot of people.”

That view is echoed by the Association for Public Art <https://www.associationforpublicart.org/what-is-public-art/>

“Public art can express community values, enhance our environment, transform a landscape, heighten our awareness, or question our assumptions. Placed in public sites, this art is there for everyone, a form of collective community expression.”



PHOTO: KEN MALLORY

*This sculpture of pom poms by Stacey Piwinski is called “Let’s Make Paradise Meet.” Each puff of yarn represents something positive and uplifting, your paradise.*

Anne fondly recalls the comments she has received about her work. “Responses by the website feature a lot of parents writing on behalf of their kids, telling me stories of their kids’ reactions to my big monsters. Among my favorites was someone who said they walked by it every day, and her father was convinced that when they weren’t around, it got





PHOTO: KEN MALLORY

The sculptures called "Soaring High" by Janet Kawada line the trees of the Upper Falls Greenway.

down and walked around. One day he stole a little moss of his leg because he wanted to grow one of them himself?"

She also noticed how viewers kept putting things in Qwglak's cup such as an acorn or a penny. "I hear from people all the time," she says. "And it is so validating; you don't get that kind of immediacy with gallery shows."

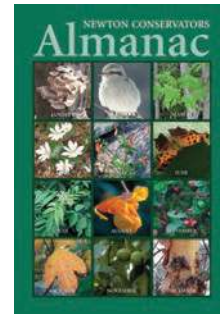
The Upper Falls Greenway exhibit is a happy reminder of a similar display of public art that appeared some time ago in Cold Spring Park. <https://bit.ly/2LKN8d3>. A temporary installation by artists Mags Harries, Ross Miller, and Marty Cain, it was funded by National Endowment for the Arts and was placed in various locations in Cold Spring Park during the summer of 1993. ♦

☞ Ken Mallory

## It's Fall. Enjoy the great outdoors!

Shop online at [www.newtonconservators.org/books.htm](http://www.newtonconservators.org/books.htm) to purchase Newton Conservators' publications. *Almanac* is \$19.95 + shipping, and the *Trail Guide* is \$8.95 + shipping.

- Members receive a discount from these prices when purchasing online.



### MISSION

#### Newton Conservators, Inc.

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 was formed as a not-for-profit organization 57 years ago in June 1961.*

**The Newton Conservators' Newsletter**® is published four times each year by the Newton Conservators, Inc., in June, September, December, and March. Deadlines for these issues are the second Friday of the month before the issue is published.

We welcome material related to our mission from any source. Send proposed articles or letters by email in MS Word or rich text format to [bethwilkinson@mac.com](mailto:bethwilkinson@mac.com). Digitized photographs, maps and diagrams are also welcome.

Editor:	Ken Mallory	617-965-1908
Design/Layout:	Suzette Barbier	617-244-0266
Production:	Bonnie Carter	617-969-0686

Thanks to the following contributors to this edition of the Newsletter: Barbara Bates, Beth Wilkinson, Chris Hepburn, Ken Mallory, Bill Hagar, Katherine Howard.

## Peter Kastner



We are sad to report that Peter Kastner passed away on July 15. He was an inspirational and influential force for preservation and management of open space in Newton for over three decades, during which he served as vice-president before becoming president of the Newton Conservators from 1994 to 1996. For many years he coordinated the Conservators' walk programs, chaired the nominating committee, and served on the annual audit committee.

Peter was also a longtime observer of the Parks and Recreation Commission and helped draft procedures and standards to control the construction of structures on Park and Recreation lands. For several years he was an open space representative on the Zoning and Planning Committee as well as a member of the Mayor's Advisory Committee on Long Range Planning. He advocated expansion of the Commission to include members interested in open space preservation. As a result, he and Conservators' board member Mike Clarke became alternate members of the Commission.

Finally, Peter Kastner was one of a number of active participants in the development of Nahanton Park as he helped raise initial funds for a matching \$400,000 self-help grant to improve the park. Peter helped establish the Friends of Nahanton Park and served as its president for several years.

He will be missed by all of his friends and colleagues as well as others who benefit from his legacy of open-space preservation. We will always remember his warm greeting, including his wry smile when discussing topics of interest.

Peter's wife, Clare, passed away last year. We miss them both.

A memorial service will be held on Sunday, September 16th at 2 PM at the Unitarian Church in West Newton. Donations in Peter's memory can be made to either the Newton Conservators or the Friends of Nahanton Park.

Bill Hagar

## Newton Conservators Invasive Plant Sessions Fall 2018

Newton Conservators fights invasive plant species to preserve and improve the native habitat at our parks and conservation areas. Call the leader or check the website for updates to this schedule.

### Wednesday, Sept. 26, 9:30 am – 11:30 pm

#### Quinobequin Trail Invasives Pull, near 556 Quinobequin Rd., Newton 02468.

Join a group working with Charles River Watershed Association (CRWA) to improve the habitat along the river. The group — employees of a local business who enjoy the river and want to “give back” — will pull and cut buckthorn and bittersweet and other invasive species. Help from Conservators' volunteers will be most welcome. Bring loppers or pruners if you can, and wear long pants and garden gloves. Meet at the Quinobequin trail near 556 Quinobequin Rd, at the intersection with Larkspur Rd (park on Larkspur). Check with the website or with leader to confirm session and times. **Leader is Katherine Howard, 617-527-1796 (home) or 617-721-2571 (cell).**

### Saturday, Sept. 29, 9:30 am – 12:00 noon

#### Hemlock Gorge and Quinobequin Trail Invasives Pull, near 2 Ellis St. Newton MA 02464.

We'll continue our control of black swallow-wort and oriental bittersweet inside and around beautiful Hemlock Gorge and the walking trail along Quinobequin Rd. Wear long pants and garden gloves; bring a digging tool for the swallow-wort and loppers or pruners if you prefer to work on bittersweet. Meet at the parking lot, corner of Quinobequin Rd and Ellis St. at Rt. 9

intersection. **Leader is Katherine Howard, 617-527-1796 (home) or 617-721-2571 (cell).**

### Sunday, Oct. 14, 10:00 am – 1:00 pm

#### Woodcock Meadow (Nahanton Park) Invasives Pull, off Nahanton St.

We are working to restore Woodcock Meadow to the sandy grassland meadow needed by the threatened American Woodcock. We will pull and cut bittersweet, buckthorn, black locust, black swallow-wort, and other invasive species. Meet at Woodcock Meadow near upper parking lot off Nahanton St. **Leaders are Jon Regosin and Katherine Howard, 617-527-1796 (home) or 617-721-2571 (cell).**

### Sunday, Oct. 21, 9:30 am – 12:00 noon

#### Cold Spring Park Buckthorn Demonstration Project, 1200 Beacon St. Newton MA 02459.

We're collaborating with horticulturalist Bruce Wenning and ecology professor Eric Olson to try to save the red maple forest, believed to be one of the oldest forested areas in Newton. The wetland forest is threatened by the takeover of invasive nonnative buckthorn as its understory. We will maintain the buckthorn-free demonstration areas to allow the forest to survive. **Leaders are Bruce Wenning and Katherine Howard, 617-527-1796 (home) or 617-721-2571 (cell).**

# FALL WALKS 2018

www.newtonconservators.org

Please note: Walks meet at different times. Some trips are weather dependent. Please call trip leader if in doubt.

## Saturday, Sept. 29 at 1:00 pm

### CANOE AND KAYAK TRIP AT NAHANTON

This canoe/kayak trip will start in Nahanton Park. We'll paddle upstream on the Charles against the current to the far reaches of Needham, Dedham, and Wellesley. Bring your own canoe or kayak, or rent one at the canoe/kayak rental stand in Nahanton Park. The area up-stream is a region of significant beauty and almost pristine conditions. Fall is a good time to view the many turtles and other wildlife along this stretch of water. We should see numerous fish, including pickerel, bass, and carp. We also will see many birds that make their spring/summer/fall homes in this habitat. We'll pass by Powell's Island, Millennium Park, and the large Dedham Ditch, then stop for lunch on Cow Island. On the return trip, the current will help carry us back. It's an interesting trip for adults and children and usually is completed within three hours.

*Trip Leaders: Bill & Dottie Hagar (617-964-2644)*

## Saturday, Oct. 13 at 8:00 am

### NAHANTON BIRD WALK WITH HAYNES MILLER



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 fall migrants as well as resident species. Bring binoculars if

you have them. Beginners as well as experienced birders are welcome. Walking shoes are recommended. Co-sponsored by Friends of Nahanton Park & Newton Conservators. Meet at the Nahanton Street entrance between the JCC and the Charles. Parking is available inside the park. Cancelled if steady rain. If concerned about the weather, please call.

*Trip Leader: Haynes Miller (617-413-2419)*

## Sunday, Oct. 14 at 8:00 am

### FALL BIRD WALK AT COLD SPRING PARK



Fall is an excellent time to look for birds. We'll explore the various habitats at Cold Spring that are available inside the park. Park at the Beacon Street parking lot and meet at the circle. Bring binoculars if you have them.

Beginners as well as experienced birders are welcome. Boots are recommended. If in doubt about the weather, please call.

*Trip Leader: Pete Gilmore (617-610-2477)*

## Saturday, Oct. 20 at 9:00 am

### COLD SPRING PARK BIRD PHOTOGRAPHY WALK WITH BROOKS MATHEWSON

Birds make outstanding photographic subjects. Each species presents both unique challenges as well as enormous opportunities to create inspirational, visually compelling work.

In this walk Brooks will discuss the basics of bird photography and the elements involved in creating an exceptional avian image. Topics covered include choosing the right lens, understanding light, creating sharp, properly exposed images, important compositional techniques, where and when to find different species of birds in Newton and beyond, and creating ecologically meaningful images.

Park at the Beacon Street parking lot and meet at the circle. Beginners as well as experienced birders and photographers of all levels are welcome. Boots are recommended. If in doubt about the weather, please call.

*Trip Leader: Brooks Mathewson (617-851-3513)*

## Sunday, Oct. 21 at 2:00 pm

### NEWTON AQUEDUCTS HIKE

Join a five-mile hike through woods, meadows, and fields along the Newton sections of the Sudbury and Cochituate aqueducts. This is a steady but not fast hike. Participants should be in sufficiently good shape to keep up with the group (there are cutoffs for those who wish to shorten the hike). Meet in front of the Starbucks coffee shop near the Waban MBTA station.

*Trip Leader: Henry Finch (617-964-4488)*

## Saturday, Oct. 27 at 9:00 am

### BEDROCK GEOLOGY OF NEWTON AND ENVIRONS

The geology of the Newton area tells a fascinating story of a time about 585 million years ago when Newton was part of the great southern continent of Gondwana and not far from the south pole. The rocks record a history of great volcanic eruptions and sedimentary basin deposits (the famous puddingstone!) in areas between the volcanoes. Join us and learn a bit about how the rocks tell us their story.

This trip will not be one of the usual Conservator "walks" since we will need to carpool to different sites in and around Newton to see the different rock types. If there is time and interest, we may choose to go a bit beyond Newton to view rocks within a volcanic caldera from that time.

Meet in the parking lot at the entrance to the Hammond Pond MDC Reservation area-east, at the west end of Hammond Pond off of Hammond Pond Parkway near Rt. 9. This is behind "The Street" complex near the movie theatre (see *Newton Conservators' Walking Trail Guide*, pg. 35). We will visit rocks in the woods near here, then carpool to the other exposures. Trip will about 3 hours. If there is moderate rain or worse, the trip will be cancelled. You can call the leader the evening before if in doubt.

*Trip Leader: Chris Hepburn (617-964-1137)*

PHOTOS IN ORDER OF APPEARANCE: SUZETTE BARBIER, KEN MALLORY



NEWTON CONSERVATORS, INC.  
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# NEWSLETTER

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

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**Northern Waterthrush**  
*photo by Haynes Miller*

**Go Green!** ...and all the other colors of the rainbow. You can view this newsletter at <http://bit.ly/2rXvnit>. To elect not to receive a paper copy of the newsletter, update your membership profile at [www.newtonconservators.org](http://www.newtonconservators.org)