



SELT everlasting

NEWS FOR OWNERS OF LAND PROTECTED BY A CONSERVATION EASEMENT

SPRING 2023

The Lands We Love

As landowners, we know the critical importance of land management and stewardship tactics, especially in times like these, which see many different challenges and opportunities surrounding climate resilience, invasive mitigation, and overall ecological health.

You'll see in this edition of SELT Everlasting several stories that spotlight some of these challenges, including an ongoing threat to our bat population. I want to encourage you to continue thinking about land management best practices that will contribute to keeping the New Hampshire character as healthy and thriving as possible.

As always, please know you can reach out to SELT at any time if you have questions about your land and, especially, if you are planning any activities on your property so that we can ensure that they fit your easement; as we say, it's always best to give us a call first to save you time and unforeseen headaches!

Thank you for being partners in conservation and responsible stewardship!

Best,

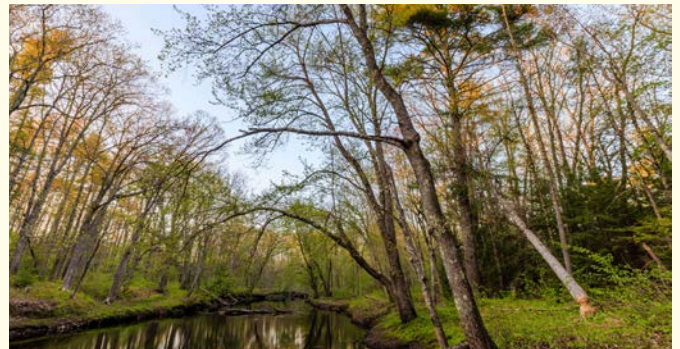
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SELT Conservation Updates

As the seasons shift, SELT remains active in the world of land protection with multiple easements and acquisitions added to our conservation portfolio in 2022.

These include the conservation of Meadow's Mirth Farm in Brentwood, Rix Family Forest in Deerfield (a donated land that SELT now owns), the Killam property (a key wildlife habitat in Atkinson), and the Mathes Property, which adds over 137 acres to ownership, adjacent Burley Farms here in Epping.



The Mathes Property, now owned by SELT and added to Burley Farms, provides valuable acreage along the Lamprey River. In addition to water and wildlife protection, this property also offers great potential for nature-based programming.

PHOTO: JERRY MONKMAN - ECOPHOTOGRAPHY

The Case of the Vanishing Bats

Sometimes bats get a bad rap – but they are hugely important to the natural world. According to the US Fish and Wildlife Service, bats are critical to healthy, functioning natural areas and contribute at least \$3 billion annually to the U.S. agriculture economy through pest control and pollination.

Here in NH, we have eight native bat species including the eastern red bat, silver-haired bat, northern long-eared bat, tricolored bat, hoary bat, eastern small-footed bat, little brown bat and the big brown bat.

All of these bat species are listed as “of conservation concern,” though several species have suffered from especially significant population decline.

What is responsible for the decline in the bat population? A disease called white-nose syndrome (WNS), which is caused by a fungus that was unknown to science until it started killing bats.

The fungus can only grow in the same cold damp conditions that bats hibernate in and grows on the muzzle, ears, wings, and tails of bats while they are hibernating. The fungus penetrates the wing membrane, disrupting cells including blood vessels, connecting tissue, and nerves. Bats with WNS wake up from hibernation much more frequently than they normally would and use up their stored fat before winter ends.

With bats’ stored fat used up, they cannot then survive the entire winter. Some bats, in a desperate attempt to live, fly out of their hibernacula (caves and mines where bats hibernate during winter) in search of food, water and shelter. This means they are flying in the winter, when there is no food and the temperatures are much colder than bats can stand. Many die soon thereafter.

In 2008-2009, WNS began its spread into New Hampshire. Of the seven New Hampshire hibernacula surveyed in 2009, five had WNS. By 2011, the disease had killed most of New Hampshire’s hibernating bats.

Over a dozen research labs, many state and federal agencies, and nongovernmental organization partners are currently studying WNS and trying to learn more about what it is, how it is transmitted, and how to prevent it. Here’s what we do know: the fungus is likely transmitted from bat to bat and between caves and mines by humans. The fungus attaches to clothing and gear, and thus can be carried to other caves or mines in any season. Many caves and mines have been closed as a result.

The problem is so alarming, the U.S. Fish and Wildlife Service announced last November that the northern long-eared bat will be re-classified from threatened to endangered under the Endangered Species Act. This reclassification took effect on March 31 of this year. The US Fish and Wildlife Service has developed a suite of tools to give landowners guidance and streamline processes for land management under the Endangered Species Act. (See the weblink on the next page.)



The little brown bat is a state-endangered species of bat, and roosts in the summer in buildings (barns, attics, outbuildings) and hibernate in mines in NH during the winter. (NHFG)

How You Can Go to Bat for Bats

Bats are in a tough spot these days, but there are concrete steps we as landowners can take to support them. See some tips and resource below.

- If you are planning upcoming management, work with your forester or contact NH Fish and Game to find out if you need to adapt your plans based on this new listing.
- If you have bats roosting in your barn or shed leave them there if you can so they can breed. You can put up a ceiling (even just tacking up a plastic tarp) between your roof and your equipment if you are having problems with the guano in your barn. Bat guano is known as a great fertilizer.
- Participate in the statewide summer colony survey. If you would allow a researcher to come study the bats in your barn or shed, please contact the NH Wildlife Division at wildlife@wildlife.nh.gov.
- Try to stay out of caves and mines, especially in winter as your presence will disturb the bats, causing them to wake up and use more precious stored energy.

Resources

USFWS advisories and decontamination protocols
whitenosesyndrome.org/resources/cavers

Tools and Guidance Documents for Stakeholders
www.fws.gov/species/northern-long-eared-bat-myotis-septentrionalis

USDA National Invasive Species Information Center – White Nose Syndrome
www.invasivespeciesinfo.gov/terrestrial/pathogens-and-diseases/white-nose-syndrome

Know Your Invasives: Beech Leaf Disease

American Beech is a native New Hampshire tree and plays an important role in forest health, providing important shelter, habitat, and food for many species of wildlife. Beech, along with sugar maple and hemlock, are the trees that would dominate old New England forests (i.e., late successional trees). The beechnut is an important food source for many species of wildlife, from chipmunks to bears. With its smooth, gray bark and spreading crown, a mature beech is a scenic - and welcome sight - in New Hampshire forests.



Symptoms: dark strip, leaves near branch tip, shriveled leaves from below. *Ohio State University*

An emerging invasive threat to New Hampshire forests is Beech Leaf Disease, which was first discovered in Ohio in 2012. Since then, the disease has spread east, affecting beech trees in New England. Beech Leaf Disease was first detected in New Hampshire in 2022.

Research indicates it is caused by the Asian nematode *Litylenchus crenatae*, which feeds on the bud. Visual cues of infestation include a dark banding between the veins of tender foliage. As the nematode continues to feed and the damage becomes more severe, the tree's leaves become leathery in texture and the dark banding can turn yellow.

Once infected, the life expectancy for beech trees appears to be between three and six years. Currently, there is no recommended treatment and research continues to focus on determining the method of spread. Transportation of live beech plant material should be severely limited. This information comes from nhbugs.org. If you see any potential symptoms of Beech Leaf Disease at your property, please report them here: www.nhbugs.org/reporting-form.



247 North River Road
Epping, NH 03042

SELT

SELT Everlasting • Spring 2023



Managing Your Land for Turtle Habitat

May 4 • 9:00 am - 12:00 pm
The Mathey Center
247 North River Road, Epping

Join Josh Megyesy, Wildlife Biologist from NH Fish and Game's Nongame and Endangered Wildlife Program, to learn more about how you can manage your land for turtle habitat.

Registration required at
seltnh.org/events

To contact the Southeast Land Trust of New Hampshire, please call 603-778-6088 or email info@seltnh.org.

SELT is a 501(c)(3) non-profit organization.
Contributions are tax-deductible.

SELT Everlasting is published semi-annually and is the Easement Stewardship newsletter of SELT. Written and edited by Deborah Goard and Dave Johnson.

Your Feedback Welcome!

SELT is pleased to announce it is applying for its third consecutive term of accreditation with the Land Trust Accreditation Commission. The Commission invites public input and accepts signed, written comments on pending applications. Comments must relate to how SELT complies with national quality standards. These standards address the ethical and technical operation of a land trust. For the full list of standards see: www.landtrustaccreditation.org/helpand-resources/indicator-practices.

To learn more about accreditation and to submit a comment, visit landtrustaccreditation.org, or email comments to info@landtrustaccreditation.org. Comments may also be mailed to:

Land Trust Accreditation Commission
Attn: Public Comments
36 Phila Street, Suite 2
Saratoga Springs, NY 12866

Comments on SELT's application will be most useful by May 20, 2023. Thank you!