



## Wetlands restoration continues in Caribou Bog Conservation Area

by Charlie Todd

The Orono Land Trust is in its fifth year of promoting the re-establishment of native, aquatic plants and monitoring their distribution at the former Taylor Bait Ponds in Orono. The Trust owns or holds conservation easements that encompass nearly 2,000 acres in the Caribou Bog Conservation Area (CBCA).



Photo by Charlie Todd

Bucky Owen in the Boulder Pond work site.

OLT Board member Bucky Owen, Professor Emeritus in the University of Maine's Wildlife Conservation program (top right), lifts a cluster of pondweed from Boulder Pond for replanting in nearby Black Pond. Both ponds were altered to serve as a commercial bait farm in the early-1970's.



Photo by Chris Reidy

Watershield at CBCA wetlands

Watershield (at right) was also moved from Heron Pond at CBCA on June 17. By canoe, four buckets of each plant were embedded in sparsely vegetated, shallow waters of Black Pond. Grants from Maine's Natural Resource Conservation Program and the North American Wetland Conservation Act support wetland management at CBCA.

(Continued on pg. 2)



Photo by Gail White

## Enjoy the Newman Hill Interpretive Trail!

The Interpretive Trail at Newman Hill is done except for a planned series of kiosk-style signs to educate and guide visitors to this new trail. Trail access starts behind the Caribou Bog Outdoor Center at CBCA. Volunteers cleaned up the sides of the trail and hard stone was put down for the final surface. A bench honoring Dave and Pat Thompson was placed facing Black Pond. Thank you to volunteers Dan, Dave E, Charlie, Gail, Al, Tom, Lynn, Gudrun and Jeff.



## Buckthorn and birds

Buckthorn is an invasive shrub or tree. It colonizes disturbed land and takes advantage of space and resources. Invasives crowd out native plants. Herbicides and hand control are the tools used by OLT and many land managers to keep buckthorn at bay.

See page 7 for more on this topic. At left, Gail White works in the field recently on invasives control. Photo by Ben Hale.

# Wetlands restoration at CBCA

(Continued from pg. 1)

**B**ucky and colleague Jerry Longcore (Emeritus Scientist, U.S. Fish and Wildlife Service) broadcast several thousand seeds of American burr-reed (pictured below) to Black Pond last fall. Owen and Longcore together bring more than 100 years of experience in wetland ecology to OLT.

Wetlands provide many important ecological benefits. The blend of aquatic plants and open water creates ideal habitat for waterfowl, wading birds, marsh birds, spring and fall migrants, muskrat, beaver, amphibians, invertebrates, and many rare plants. Wetlands enhance water quality and buffer the extremes of flooding and drought conditions increasingly common in a world of climate change.



American Burr-reed

Photo by Chris Reidy



Charlie Todd working with aquatic plants at Black Pond, CBCA.

Photo by Sharon Fitzgerald

OLT's wetlands are part of the Caribou Bog complex, one of Maine's most extensive peatlands. Although peatlands occupy less than 3% of Earth's land area, they store more soil carbon than all other types of vegetation combined. Long term storage of carbon is key to reducing the effects of climate change.

**A**ll OLT projects rely on volunteer efforts. Help us maintain a healthy Caribou Bog ecosystem and our other special conservation / outdoor recreation areas.

## Security at CBOC

**S**adly, we have to report a series of thefts at the Caribou Bog Outdoor Center (CBOC). Tools and firewood (cut and split by OLT volunteers) have been stolen, including a pole saw and a trailer. An OLT Security committee has been set up and is working on short term and long term security plans for the storage buildings and outdoor center areas as well as some additional security on some trail areas away from the buildings.

We are dismayed to report it but now we are vigilant to protect the work of conservation at CBCA. More details to come.

## No motorized racing bikes on the Veazie RR Trail!

**R**eminder: The Veazie Railroad Trail is a mixed-use, community treasure. Walkers, hikers, bikers all have use of the trail in both directions. In winter, ski and snowshoe use is a delight. Motorized vehicles, such as trail bikes, are not allowed on the railbed. Witnesses report trail bikers riding between the City Forest and Forest Ave. on the railroad bed heading south. They were going too fast to flag down. Class 1 E-bikes are allowed. Please respect the rules of the road: Safety and enjoyment of the habitat is the focus of our work on the trail system. Thank you.

## Veazie Lands Committee

**O**LT member Marek Skacel has been cleaning up and leaf-blowing trails in Veazie. Bikers and hikers enjoy trails there. If you are interested in volunteering at Veazie, contact Linda Swackhamer at [linswak@gmail.com](mailto:linswak@gmail.com). Veazie Lands Committee could use more volunteers, thanks!

## Orono Bog Boardwalk

**Visit this special place! Check it out online at <https://umaine.edu/oronobogwalk> or <https://www.facebook.com/OronoBog-Boardwalk/>**



# Spring snapshots from CBCA



Photos by Sharon Fitzgerald

At top left, Common Yellowthroat. At top right, two Canada Goose families out on the ponds. At left, Elderberry in flower at Caribou Bog Conservation Area (CBCA).



Photos by Gail White

At left, Painted Trillium, and at right, Star flowers shine on the forest floor.

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# Piney Knoll news

OLT Board member, Treasurer, and Piney Knoll steward Jenn Dann reports: Piney Knoll Conservation Area (PKCA) lost a few mighty trees in Peter's Field during the December wind storm. Clearing these up is important to allow us to mow to keep invasives at bay and to maintain the field for pollinators. Many thanks to chain sawyers Harry, John, and Jake and to the mighty brush haulers Gail, Charlie, Jeff, Lynn, Dan, and Jenn.

OLT Board member Gail White says: On Friday, June 28, Dave E, Jerry, Ron, Peter, Charlie, Dan, Dave T, Jenn and Gail worked at cutting logs left over from the logging project at PKCA. Once the logs were cut, they were loading into a trailer and hauled to the CBCA wood pile. Many walkers asked OLT to clean up the area. Nature will fill in the area around the trail and make the site prettier. Jenn and Gail also took the time to remove 3 bicycle ramps from an area where they are not allowed. Please: do not build unauthorized structures in this preserve.



Photo by Gail White

Volunteers Jerry, Jenn, Dave T., and Gail load logs at Piney Knoll on Friday, June 28.

Next project at PKCA will be to gravel some wet spots on the trails. Thank you volunteers for all your efforts.



Photo by Gail White

On May 21, Bucky Owen and faithful dog, Cricket, head out on Boulder Pond to fix a bird box. The box was straightened and a new cover mounted. Yes, there were eggs inside the box. Hopefully the parents will return to the repaired house



Photo by Sharon Fitzgerald

OLT Board member Sharon Fitzgerald contributes this photo of *Viburnum lantanoides*, or Hobblebush, seen on the Veazie Railroad trail recently. Hobblebush is a shrub of shady, wet wooded areas, and later in the season has red berries.

**Do you enjoy volunteer work that doesn't involve bugs, heat, cold, wind, rain, or rough terrain? If so, reach out to membership @ oronolandtrust.org to find out about indoor volunteer opportunities that don't include the words sunscreen or bug dope!**





Photos by Jim White

Speakers Malcolm Hunter (at left), and Aram Calhoun (at right) discussed the process of creating "Our Maine: Exploring Its Natural Heritage."

## 2024 OLT Annual Membership meets new Board, enjoys "Our Maine"

The OLT membership gathered on Friday, May 10 for the 2024 Annual Meeting. Members heard updates to programs and changes to the Board. We thank Adam Toothaker for serving as President during the last turbulent years. Ben Hale has stepped up as our new President. Lynn Caron has agreed to be Vice President. We will miss John Banks, our Lands Committee chair, and appreciate all of the many volunteers that do the work of conserving and promoting this beautiful territory. Thank you!

The keynote presentation was given by Malcolm Hunter and Aram

Calhoun, authors of the new book, "Our Maine, Exploring its Rich Natural Heritage." Already in its second printing, it explores Maine through essays and photographs. We express our gratitude to the presenters for sharing this wonderful book with our members.

OLT looks forward to a great 39th year of doing good for our communities (plant life, bird life, reptile life, people). The Annual meeting is a chance for all OLT folks to gather and enjoy a potluck together. We hope to see you on the trails!

## Chestnut Project update

by Bucky Owen

A great day in the American Chestnut Project orchard recently. Present were: Mark M., Charlie T., Jake W., Jenn D., Kate L., Glen K., and yours truly. We completed planting a small Winsome Fly pollinator garden, planted six new chestnut seedlings, and pulled all the weed mats from around the base of the larger chestnut trees.



Photos by Jenn Dann

OLT Board member Kate Locke removing weed mats at the Chestnut orchard.

Japanese beetles have been a major problem in the orchard for two years. The Winsome Fly is present in the orchard and parasitizes the beetle. We are providing additional food for the flies, hoping to increase their numbers and help control the beetles. We won't mow the orchard till fall to increase the presence of native flowers. I'll be collecting



OLT volunteers at the American Chestnut orchard (from left), Dave, Jenn, Glen, Kate, Bucky, Jake and Mark.

beetles daily in July, releasing the parasitized ones back into the orchard, and removing the others.

The chestnut seedlings come from a newly discovered tree in Hampden, from Sebec, and from the most northerly tree located in Maine; the first occurring north of the Piscataquis River!

# Nature Clip

by J.R. Longcore

## Biological Diversity— It's Changing, Why Should We Care?

My recent efforts to identify what's to see along the proposed Interpretative Trail at Caribou Bog Conservation Area (CBCA) stimulated thoughts about diversity of organisms that I encountered. Those thoughts elicited memories of my youth in Michigan when an evening drive on a warm summer night resulted in a windshield splattered with insects. Now, a recent 5-mile drive I took just after sunset along the Penobscot

**About 1.7 million species of animals, plants, and fungi have been identified, but likely 100 million more are yet unnamed.**

River north of Old Town on July 4th yielded only 7 tiny blips on the windshield! Forty-six years ago, when we moved to Maine, the American toad was common in our Orono yard, but now is gone. About 10 years ago Savannah sparrows stopped nesting in the adjacent field, two years ago bobolinks left for better nesting habitat as the lot filled with shrubs, especially meadowsweet (*Spiraea alba*, var. *latifolia*). The flipside of losing native species is that of gaining foreign species that compete with native flora and fauna. Purple loosestrife, which can dominate a wetland, is a prime, local example.

But back to the question: "What is Biodiversity?" In a nutshell it is "Every living organism and their relationships with each other", which makes it the most complex feature of our planet Earth— and the most vital. This stark view is that of Damian Carrington, Environmental Editor, the Guardian newspaper (March 12, 2018) who provides the following examples. Diversity starts at the genetic level, then to species, then to communities, and to entire ecosystems. Just think about the magnitude of differences in diversity among rainforests, coral reefs, and deserts, compared to what is in your own backyard.

Here are some numbers at the species level to visualize biodiversity. About 1.7 million species of animals, plants, and fungi have been identified, but likely 100 million more are yet unnamed. In ~ 35 acres in tropical Borneo 700 tree species exist—the same number as in North America. Next consider microscopic bacteria and viruses, which may be in the billions. A spoonful of soil contains 10,000 to 50,000 different types of bacteria. An example of bacteria in action is evident on the



Photos by J. R. Longcore

Fig. 1. Seep on CBCA trail with iron oxide deposits caused by iron bacteria.

CBCA Interpretive Trail (Fig. 1). Iron bacteria (several genera are involved) oxidize ferrous and manganous ions in water that results in the accumulation of rust-colored deposits. The presence of these bacteria, also known as Iron Ochre Bacteria, are commonly found in woodland seeps with a high concentration of iron in the groundwater.

Who then or what is destroying biodiversity? We humans are, by our population growth, destruction of habitats for farmland, housing, industrial sites, by poaching, and by pollution of rivers, lakes and the ocean.

Climate change is bad, but may be somewhat reversible, extinction of a species (e.g., Labrador Duck, Fig. 2.) is forever.



Fig. 2. Specimen of an extinct male Labrador duck in Harvard Museum.



## Buckthorn control at CBCA

In early July, volunteers worked on pulling Buckthorn from the backside of Black Pond in CBCA. This is necessary work to fulfill grant requirements, but also hard work to try to keep ahead of this fast growing plant. Buckthorn grows in every open spot it finds. The plant has lots of pretty berries, which birds eat. The roots travel underground for yards. Buckthorn thickets can take light, water, and nutrients from native plants.

Thank you to OLT volunteers, Bucky, Jake, Charlie, Ben, Gail and Peter. This control involves years of monitoring and labor.



Photos by Gail White

Hand pulling and specific use of herbicides by professionals are tools used to keep invasive species at bay. It is the work of land stewardship to monitor habitat for native plants, and balance natural processes with human intervention when necessary. Volunteers are always welcome to join in!

**NOTICE: Volunteers needed to help us keep the Caribou Bog Outdoor Center open on weekends! Very easy assignments – you either open the building in the morning or lock it up in the afternoon, and you are done – then combine your “work” with a walk or bike ride. We are not “staffing” the building during daytime hours, simply making it open and available to the public. Contact: Bob Bass [rbass@midmaine.com](mailto:rbass@midmaine.com)**



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- Adam Toothaker, *Office, Signs*
- Judy Walker, *Outreach*
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**Orono Land Trust**  
**PO Box 4,**  
**Orono, Maine 04473**

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**Calendar**

**Next Board meeting: Wednesday, Aug. 14, 6:30 pm at  
 Keith Anderson Community House, 19 Bennoch Rd., Orono**

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