



- ORONO - LAND - TRUST -

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Vol. 136, April 2024

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OLT Annual Meeting presentation: "Our Maine"

Once again, we will gather on May 10 to meet new and current members, hear updates about our busy land trust activities, and get news from the OLT Board. The meeting will be held at the Keith Anderson Community House, 19 Bennoch Road, Orono. All are welcome.

A potluck meal will be shared, and then we will enjoy a keynote presentation from the authors of *"Our Maine-Exploring its rich natural*

heritage." Announcements, Board changes will be featured as we thank retiring officers and greet new folks joining our busy organization. The Annual Meeting is a good time to catch up on projects in our area, and ask questions about OLT's environmental work. Maybe a project will spark your interest to become a volunteer - all skill sets are invited and always welcome. Come out for this year's meeting, all are welcome!
See page 3 for more details.

Who fools who?

This adorable beaver with exceptional engineering skills is so fun to see. They are prolific on the Caribou Bog Conservation Area (CBCA) waterways. Unfortunately, there exists an ongoing battle between the OLT volunteers and the beavers. Beavers flood the trails and volunteers put in "beaver deceivers," which are the wire devices seen along the culverts on the Veazie Railroad Trail. Which party is being deceived?



Text and photo by Gail White

Nesting Season: Trail Closure Notice for Newman Hill Reserve

Most Newman Hill Reserve trails will be closed from April 1st through August 31st, except for a single-track trail that will remain open for access to the top of Newman Hill and beyond. Dogs must be on a leash when using this trail. Other CBCA trails remain open for use.

The Newman Hill Reserve provides protection for birds nesting on or near the forest floor. Ground nesters include Ruffed Grouse, American Woodcock, Common Nighthawk, Winter Wren, Veery, Canada Warbler, Northern Waterthrush, Common Nighthawk, and Hermit Thrush. The Black-Throated Blue Warbler, Yellow Warbler, Chestnut-sided Warbler, Brown Thrasher are examples of those that prefer to nest in shrubs or low branches of trees. Orono Land Trust wants to give these birds every chance to be successful. Orono Land Trust appreciates your cooperation. See oronolandtrust.org for more information. **See also page 9!**



Photo by Charlie Todd

Most ground nests are not as conspicuous as this Hermit Thrush nest in the trail.



This issue's **Nature Clip** highlights the showy Lady's Slipper and the underground network of Mycorrhizal Fungi. Photos and text by OLT Board member J. R. Longcore. **See page 8.**



Photos by Sharon Fitzgerald

Hoods Up for the Ladies

OLT Board member Sharon Fitzgerald writes: "Yesterday morning (March 13) at Caribou Bog Conservation Area (CBCA) I recorded 27 species of birds for ebird.org.

The first Hooded Merganser photo (above left) was near the flowage on the back side of Boulder Pond taken from a distance. Four males were putting on quite a courtship display with their extended "hoods" for the two females on hand.

The second picture (above right) of two males was taken at the small pond (Taylor) close to the Caribou Bog Outdoor Center. No ladies around so hoods are slicked back."

CBCA is a rich area for birding and other wildlife observations. Access is from Forest Avenue at Taylor Road in Orono.

OLT members install nesting boxes at CBCA

In February, OLT Board members Bucky Owen, Charlie Todd, and volunteer Ron Logan installed bird houses at icy CBCA wetland sites. "We had to make eight holes to get two that worked. Note the box (photo left) just above the ice. It is on a 10' pole in 5-6 feet of muck!" said Bucky Owen.



Photo by Charlie Todd

Ron Logan (above left) and Bucky Owen on the ice recently at CBCA.

The final tally for this winter project:

- Heron Pond: 2 duck and 2 swallow boxes
- Beaver Pond: 2 duck and 2 swallow boxes
- Big Pine: 1 duck and 2 swallow boxes
- Intervale (Between Little Pine and Beaver Ponds): 1 duck and 1 swallow box
- Black Pond: 2 swallow boxes
- Boulder Pond: 1 duck and 2 swallow boxes
- Meadow Lands (above Boulder): 1 duck and 1 swallow box



What a view, Dave! (and nice hat!)

Here's OLT Board member Dave Erker rockin' the OLT swag at 5249' above sea level on Mt. Lafayette in the Franconia Range of New Hampshire's White Mountains on Wednesday, March 13. OLT hats will be available at the Annual meeting on May 10, **see page 3**. Photo contributed by Dave Erker.

Orono Land Trust 37th Annual Meeting

Keith Anderson Community House, 19 Bennoch Rd., Orono 04473.

All are welcome!

Friday, May 10, 2024

6 p.m. – Potluck social, refreshments



6:30 p.m. – Program: "Our Maine" with guest speakers Aram Calhoun and Malcolm Hunter.

7:30 p.m. – Annual Corporate Membership Meeting

Officers Annual Reports

New business

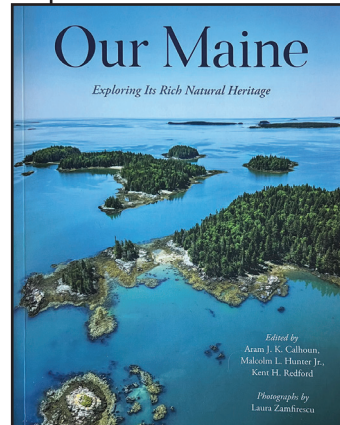
Election of new Board Members

Board Recognitions, retirements, announcements

Adjourn

Immediately after: Short OLT Board meeting

2024 Program Keynote Program: Aram Calhoun & Malcolm Hunter "Our Maine: Exploring Its Rich Natural Heritage"



As part of OLT's annual meeting, come and enjoy an evening with co-editors Aram Calhoun and Mac Hunter as they discuss their new book, **"Our Maine-Exploring its rich natural heritage."** Learn why it should be in everyone's library. Already in its second printing after only a few months, it is truly a masterpiece. There will be time for book signing after the meeting.



OLT President Adam Toothaker shot these photos of a Peregrine Falcon. He and Board member Chris Reidy saw the raptor at University of Maine's Orono gym parking lot in March. And, for those who are Audubon members, a recent **Maine Audubon Habitat** magazine has an article on Peregrine Falcons featuring OLT Board member Charlie Todd!

Orono Land Trust Membership List as March 1, 2024

Annual Members (*Indicates Legacy Member)

Joe and Joanne Alex	Alan Dickey	Mary Hough and Paul Schroeder
Grace Bartlett	Christina Diebold	*Leslie Hudson
Linda Basilicato and Clayton Cole	Jessica Doherty	Patty Huntley
*Robert Bass Jr.	Paul Doucette and Sandra McQuilkin	Christopher Hutchens
Beth Beaulieu	Downeast Outing Club	James Jackson Sanborn
Scott Belanger	Beth and Tom Drummond	Nancy Jacobson and Jeffrey Jones
Liam Berigan	Gerald and Donna Dwyer	Jeffrey Jeter
Warren and Jessica Black	Matthew Dymowski	Sandra Johnson
Erik Blomberg	Mary Ann and Rick Eason	Elliot Johnston
Stanley Borodko	Gregory Edwards	Jeffrey Jones and Nancy Jacobson
Guillaume Bourdin	Ramona and Kelly Edwards	Patricia and Harvey Kail
Conor Broughan	Max and Stefanie Egenhofer	Fran Kelly and Robert J. Kelly
Eric Brown	Patricia Eldershaw	John Kelly
John Burch	Susan Elias	*David and Mary Kenney
Pat Burnes	Shirley Ellis	Linda Koehler and Rissa Moore
Marci Buschner and Leila Doerfler	Jessica & the LaBree Family	Margo Koning-Wells and Mark Wells
Sandra Butler	Matt Farragher	Karl Kreutz
Adrienne and David Carmack	Cecile Ferguson	Sam Kunz
*Lynn Caron	Emily Filiberti	Steve and Mary Lammert
Raymond Caron	Sharon and John Fitzgerald	Kristin Langellier and Eric Peterson
Laurie Carpenter and Doug Johnson	David Flewelling and Gail Tunstead	Karen Littlefield
Cami Carter and Jon Hawley	Isaac Forbes	Nicole and Dan Loranger
*Connie Carter and Ed Brazee	Irja and Stella Frank	Nick Ludwig
Gail and Devon Carter	Brian Frederick	Margaret Lukens
Polly and Bill Ceckler	Brian Galipeau	Stephanie and Greg Lull
Chandler and Jim Clarke	Sadvi Ganesh	Elizabeth Lyman
Jason Clarke	Christopher Gerbi	Kathy Lyons and David Frankel
Jessica Cleary-Reuning	Melissa and James Gerety	Molly MacLean and Eisso Atzema
Sarah Clements	Alan Gray	Andrew Madsen
Mark Cogen	Marion and Mac Gray	Jonathan Malacarne
Ben Collette	John and Carol Gregory	Bruce and Terry Malmer
Zoe Colwell	David Griffin	Richard and Laura May
Kati Corlew	Nils Haentjens	Ben McAlexander
Josh Cottrell	Frances and Terry Haines	Jessica McCutcheon
Wade Cressey	Nancy Hall	Steve McKay and Cathy Anderson
Henry Cunningham and Beth Cuddy	Fiona Hamilton	Bailey McLaughlin
Robert Cunningham	Kenneth and Cathy Hanscom	Sarah Mensinger
William Cunningham	Greg Harkay	Debra Merrill
Rose Marie Curtis	Karen Hartman	Maraina Miles
Erik DaSilva and Laura Leighton	Lynn Hempen	Merrill Milham and Ann Davidoff
Farahad Dastoor and Jean MacRae	Caleb Heuss	Erin and Shane Miller
Leanne Davis	Laurie Hicks and Roger King	Shawn Miller
Ruth Dennis	Barbara Hildreth	Laura Mitchell
Kristie Deschesne	Mary Rose Holland	Mr. and Mrs. Donald Mitchell
Anthony Diba	Janet Horsager	Donald and Paula Moore

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Jack and Sylvia Moose
Cathy Nadeau
Noah Nesin
P. Scott Nichols
Jeffrey Nickels
Victoria Niedzinski
Nancy Noack
Don and Megan Olson
Shawn Owens
Christine Payne
Elizabeth Payne and Richard Brucher
Tim Pearson
Jennifer Perry
Gwethalyn and Bill Phillips
Marisue and John Pickering
Paula Pietrowski and Kim Miller
Susan Pinette
Linda E. Pletka
Glen Porter and Jean Deighan
Annie and Matt Powers
Lucy Quimby and Geoff Gratwick
*Katie Quirk and Tim Waring
Christopher Reidy
David Renedo
Hetty Richardson
Cheryl Robertson and John Banks
Gavin Robinson
Erin Roche

*Jim and Gillian Rose
Amber Roth and Dan Haskell
Karen and Roderick Rublee
Phil Ruck and Deanna Prince
Belle Ryder
Stuart Salom
Mara Scallon
Alex Searce
Rose Scheidt and David Scheidt
Stephanie Shea
Kelly Shultz
Silva Ratio Consulting
Pam Simon and Harlan Onsrud
Marek Skacel
Don and Nancy Smith
Shawn Snyder
Adele and Ronald St. Pierre
Milton Stein
Christine Stevens
*Jeff and Brenda Stevenson
Jennifer Story
Dick and Barbara Sturgeon
*Linda Swackhamer and Ken Croatman
G. Kent Tableman
Amy DiFrancesco
Charles Thompson
Jon Thompson
*Karin Tilberg and Ben Emory

Lenore Tipping and Thomas Spitz
Mike Tipping
Charles Todd
Matthew Tomasko
*Adam and Joanna Toothaker
Olcott Toothaker
Claudia Torres
Deborah Twombly
Emmy van den Ban
Gabrielle Venne
Irene von Hoffmann and John McCormack
Judy and Bill Walker
*Jake Ward
Tom and Jane Warren
Stephanie Welcomer and Mark Haggerty
Beth White and Margaret Clancy
Holly White
Christina, Jeremy, and Payson Wicker
Barbara Wicks
Julian Wiggins and Kate Locke
Scott Wilkerson
Dominic Winski
Eve Wolinsky
Clair and Marian Wood
David Wood and Sharon Campbell
Katrina Wynn
David Yarborough and Nancy Leavitt
Peter Yezukevich

Life Members (*Indicates Legacy Member)

Janet and John Alexander
Travis Baker and Holly Twining
Catherine and Dave Baxter
Emmanuel Boss
*Karen Boucias and George Jacobson
*Melissa Burch and Jim Bulteel
Woody Carville
Dan and Dina Cassidy
*Tom and Lea Cassidy
Mary Cathcart and Jim Dearman
Becky and David Chase
Sarah and William Clark
David Clement and Betsy Weiss

*Jennifer Dann and Chris Apblett
*Ron and Lee Davis
Mary Louis Davitt
Chris Dorion
Sue Erich and Stom Ohno
David and Victoria Erker
Janice and Jeff Graham
Susan and Michael Greenwood
Conrad and Fran Griffin
Michael and Valerie Griffin
*Ben Hale
Brent Halsey
Justin R. Harlan and Sarah M. Haughey

Nancy and Tom Harrigan
*James and Patricia Hinds
Ray Hintz
Steve Keleti
Gudrun Keszocze and Glen Koehler
David Koffman and Michelle Toder
George Kurr
Thela and Roger Leach
*Jessica Leahy and Bob Seymour
David and Valerie Levy
*Meg and Ron Logan
*Jerry and Joyce Longcore
Nancy MacKnight

(Continued on page 6)

Life Members (*Indicates Legacy Member)

(Continued from page 5)

John Manter	*Sue and Bucky Owen	*Dick and Kay Storch
Shane Martin	Susannah and Jeff Owen	*Pat and Dave Thompson
John and Leigh McCarthy	Deta and Bryan Pearce	*Sharon and Paul Tisher
Mary and Hank Metcalf	Tom and Connie Perry	John Tjepkema and Christa Schwintzer
Robert and Jane Miller	*Nancy and George Putman	*Trudy Tremblay
Caroline Morris	Olivier Putzeys and Pauline Kamath	*Patricia Vadas
Paul and Janet Murphy	Glenn Rampe	Donna and Leith Wadleigh
Desiree and Edwin Nagy	David and Pernille Renado	*Emily Wesson and Peter Millard
*Stephen and Natalie Norton	*Judith Rhymer	*Gail and Jim White
*Susan and Paul O'Brien	Kris and Steven Sader	Tim and Debbie White
Oldenburg Family	Kathy and Gary Schilmoeller	*Jean Woodard
*Kathryn Olmstead	*David Sewall	Jane and Joe Zenk
Michael Opitz	Leigh A. Smith and Gretchen Luxenberg	

Complimentary Members (*Indicates Legacy Member)

*Dan Baumert	*Anne Lichtenwalner	Town of Orono
Todd and Denise Burpee	Maine Coast Heritage Trust	Dr. John Tozer
*Walter and Elaine Carpenter	Marsh Island Trail Runners	Peter Triandafillou
Bruce Lackie and Jennie Goldenberg	*Cynthia and Eric Mehnert	Lin White
*Geoff and Suzanne Gordon	*Dawn Pelletier and Lee Martin	
*Nancy and Al Larson	Aislinn Sarnacki	

Business Members

Bangor Savings Bank	Joseph Reinzo Excavating and Recycling	Rudman & Winchell
Black Bear Brewery	Orono-Old Town Kiwanis	Vistra/Casco Bay Energy
Castine Kayak Adventures	Penobscot Valley Ski Club	
Hannaford, Inc.	Rose Bicycle	

Thank you for your support!

Membership levels are posted on the back cover of this newsletter. Life Members have contributed \$1,000 or more to OLT. Legacy Members have agreed to bequeath contributions in their will or estate. For membership information or to contribute to OLT's all-volunteer organization, see the OLT website <https://oronolandtrust.org/get-involved/become-member/>.



Text and photo by Gail White

At a December 14 OLT Board meeting, Dave Thompson (above left) handed Bucky Owen (above right) a stuffed Beaver. This represented the Board's appreciation for all the beaver deceiver work Bucky has done on the Veazie Railroad Trail and The Hyland Tract Trail. Unfortunately, however hard Bucky works, the beavers are a tree branch ahead!

Donating your old car can benefit OLT. This website provides more information. Charitable Adult Rides and Services. If you know someone who wants to donate, let them know!

<https://careasy.org/nonprofit/orono-land-trust>

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 word sunscreen.

OLT Board Member Bucky Owen '59 to Receive 2024 Common Good Award

As reported by Bowdoin News

A lifelong advocate and champion of conservation, Ray "Bucky" Owen, a member of the Class of 1959, has worked to ensure productive management of Maine's inland fisheries and the preservation of the state's natural resources. For his efforts to support ecological preservation across the state, Owen has been selected by the Bowdoin College Board of Trustees to receive the 2024 Common Good Award.

After majoring in biology at Bowdoin, Owen earned a PhD in ecology at the University of Illinois and spent more than thirty years as a professor at the University of Maine's flagship campus in Orono, during which he was chair of the wildlife department for a decade.

Owen served as commissioner of the Maine Department of Inland Fisheries and Wildlife, where he initiated and oversaw the Quality Fishing Initiative, a program that made sweeping changes to how Maine's wild native brook trout were managed. He was chairman of the Maine Atlantic Salmon Commission, a delegate to the North Atlantic Salmon Conservation Organization, and a key player (and philanthropist, along with his wife, Sue) in the Penobscot River Restoration Project to remove dams and restore eleven species of migratory fish to the waters of the Penobscot. Owen worked closely with the Penobscot Nation on this project.

He was awarded the prestigious Lee Wulff Award from the Atlantic Salmon Federation in 2009. Owen also has served as chair of the Maine Chapter of The Nature Conservancy and President of the Orono Land Trust, as well as a volunteer for several other conservation-oriented organizations. (Fun fact: Bucky and Sue are partly responsible for the sign at the summit of Katahdin—helping to carry it up the mountain in the 1970s.)

The Common Good Award and Alumni Council awards will be presented Saturday, June 1, 2024, during Reunion Convocation.

Orono Bog Boardwalk

It's looking good for a May 1 opening of the Boardwalk!

Check online at <https://umaine.edu/oronobogwalk> or <https://www.facebook.com/OronoBogBoardwalk/>

Nature Clip

by J.R. Longcore

Beauty of a Showy Lady's Slipper Obscures an Essential Underground Network of Mycorrhizal Fungi



Photo by J. R. Longcore

Fig. 1. Showy Lady's Slipper

No one can deny the beauty of Maine's largest lady's slipper, the Showy Lady's Slipper (*Cypripedium reginae*), which is a rare inhabitant (Fig. 1) of fens and *Thuja* swamps. In Michigan, years ago, I knew orchids of this genus as "moccasin flowers"—for the footwear they resembled. This clip was inspired by an article (John Mattor, 2019) that explained why thousands of Pink Lady's Slippers disappeared following the harvesting in 2004 of a white pine stand in Lang Twp. Just north of Rangeley, ME. The gist of the explanation was that the trees through photosynthesis produced almost all the nutrients and shared them with the varied array of fungi in the soil, which in turn supported the orchids. The Showy Lady's Slipper, like all orchids, requires orchid mycorrhizal fungi (OMFs) for germination, seedling nutrition (Shefferson et al., 2005) and other essential nutrients.

Next, I was curious about the size of an orchid seed, so I collected a mature capsule from a pink lady's slipper and put

the seeds, which were the size of dust (length = $\sim 1/300$ th of an inch), in a vial (Fig. 2). Further research revealed that these tiny seeds lack an endosperm (Fig. 3) thus, are extremely light, are produced in the thousands to millions, and are mostly disseminated by wind (Arditti and Ghani, 2000). The bottom line is that if the tiny seeds that can float for miles on air currents do not land on sites with an adequate network of OMFs they will



Photo by J. R. Longcore

Fig. 2. Pink Lady's Slipper seed pod, seeds



Photo by Joyce E. Longcore

Fig. 3. Pink Lady's Slipper seeds, magnified

not germinate. Similarly, removing the forest trees responsible for the fungal network cuts off the orchid food supply.

Most of the *Cypripedium* mycorrhizal fungi are in the Tulasnellaceae, a family of fungi in the Order Cantharellales

that is mainly patch-forming. Species are saprotrophs that decompose woody material and many are endomycorrhizal species associated with orchids and other species are thought to form ectomycorrhizal associations with trees and other plants. After researching this intriguing relationship between orchids and fungi my appreciation for them has increased substantially. I now view this Mountain Lady's Slipper (*Cypripedium montanum*) image (Fig. 4) that I obtained in Glacier Natural Park with more awe and respect.

J.R. Longcore

Cited References

Arditti, J. and A.K.A. Ghani. 2000. Tansley Review No. 10. Numerical and physical properties of orchid seeds and their biological implications. *The New Phytologist*, Vol. 145 (3): 367-421.

Mattor, J. 2019. A *Cypripedium acaule* (Lady-Slipper) Mystery—Resolved. *Native Orchid Conference Journal*, Vol. 16 (1): 18-23.

Shefferson, R.P., M. Weiss, T. Kull, and D.L. Taylor. 2005. High specificity generally characterizes mycorrhizal association in rare lady's slipper orchids, genus *Cypripedium*. *Mol. Ecol.*, Vol. 14 (2): 613-628.



Photo by J. R. Longcore

Fig. 4. Mountain Lady's Slipper



Photo by Linda Swackhamer

Correction: OLT at Banff Outdoor Film Festival

I misidentified the OLT board member on duty at the Banff Film Festival: Sharon Fitzgerald spoke to interested patrons of this annual event at Husson College in Bangor on Feb. 7. (Sharing the table with Outreach committee members Sharon, Judy Walker, and Lynn Caron was awesome!) My apologies for this error- Linda Swackhamer, Newsletter editor.



Photo by Ben Hale

Snowy visitor in Orono

This woodcock was spotted on March 24 at Vice President Ben Hale's home in Orono. OLT Board member Charlie Todd saw the picture and commented, "It's birds like this one that will benefit from April 1 trail closures on Newman Hill. It will likely lay eggs by mid-April. American woodcock do start showing up in late-March. This one probably wishes that it came a few days later!"

Board of Directors

- John Banks, *Lands*
- Dan Baumert
- Lynn Caron, *Membership*
- Tom Cassidy
- Jennifer Dann, *Treasurer*
- David Erker, *Equipment Mgr.*
- Sharon Fitzgerald, *Membership*
- Ben Hale, *Vice President*
- Karl Kreutz
- Kate Locke, *Invasives Control*
- Jerry Longcore, *Bog Boardwalk*
- Bucky Owen, *Volunteers/Legacy*
- Chris Reidy
- Linda Swackhamer, *Newsletter*
- David Thompson, *Trails/Stewardship*
- Charlie Todd
- Adam Toothaker, *President*
- Judy Walker, *Outreach*
- Gail White, *Trails/Stewardship*
- Tim White, *Secretary/Tech*



**DATED MATERIAL
DO NOT DELAY**

**Orono Land Trust
PO Box 4,
Orono, Maine 04473**

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REQUESTED**



*Visit us on
Facebook!*

Calendar

**Next Board meeting: Wednesday, May 8, 6:30 pm and
Annual meeting: Friday, May 10, both to be held at the
Keith Anderson Community House, 19 Bennoch Rd., Orono**

Please Note: This newsletter is distributed in 2 versions: A printed hard copy, and a digital emailed format. If you would like to save paper and mail costs, please notify linswak@gmail.com.

**Please check for membership expiration date on your address label above.
Orono Land Trust Membership Application / www.aronolandtrust.org**

Name: _____ Preferred email: _____

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- | | | |
|--|-----------------------------------|----------------------|
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I'd like to make an additional donation to help protect green space in Orono. \$_____

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