

VERMONT BOTANICAL AND BIRD CLUB NEWSLETTER FEBRUARY 2024

2024 Annual Meeting Announcement

The 129th Annual Meeting of the Vermont Botanical and Bird Club will be held on Thursday, June 6 – Sunday, June 9, 2024 at Vermont State University – Johnson in Johnson, Vermont.

We were last in this area in 2016 when the College was called Johnson State College. The campus is situated on a hill and affords excellent views of the Sterling Mountains. We will stay in a

dorm and linens will be included in our reservations; however, people must bring their own pillow. Meals and evening programs will be in the Stearns Performance Space located in Stearns Hall. We will have field trips each day Friday and Saturday to interesting botanizing and birding places. In the past we enjoyed visiting Smuggler's Notch in Stowe and Cambridge, Belvidere Bog in Belvidere, and Babcock Nature Preserve in Eden. This year, we hope to add the recently established Peter A. Krusch Nature Preserve in Cambridge.

128th Annual Meeting at The Craftsbury Outdoor Center in Craftsbury, Vermont, Saturday, May 27, 2023 photo by Peter Hope



Back Row Standing left to right (12): Marvin Elliott, Karen Johnson, Connie Youngstrom, Everett Marshall, Alison Gardner, Deborah Benjamin, Nathan Dansereau, Catherine Sells, Ben Simmons (scholarship), Dru Simmons, William Arnold, Sam Schieren (scholarship); Middle Row Standing left to right (12): Kathleen Guinness, Mary Metcalf, Susan Elliott, Sherry Underwood, Barbara Smith, Anne Hill, Betsy Ziegler, Sue Brown, Lynne Arnold, Charlotte Hanna, Scott Bassage, Peter Hope; Sitting/Kneeling in Front left to right (9): Deb Parrella, Abby Hayford (scholarship), Jacob Crawford (scholarship), Louanne Nielsen, Mary Hill, Elisabeth Rondinone (scholarship), Pam Darrow, Kate Kruesi, Lauren Hwang-Finkleman (scholarship)

**Evening Programs, Activities Facility
Classroom, 7:00 PM.:**

**Thursday, May 25, 2023: Elinor Osborn -
“What Do Owls Say ?; It’s a Lot More Than
Hoot”**

As daylight receded, our thoughts turned to owls and our attention turned to Elinor Osborn, well-known nature photographer who lives about ½ mile north on Lost Nation Road.

“I’ve been photographing for many years and have won some awards and have photos in a couple of galleries. I am having loads of fun still learning, especially with digital and the computer dark room. And in nature, I learn a lot about the outdoors through photography. When I photograph something I figure out what it was through posting on iNaturalist or looking through my field guides. I’m so lucky to live right here in the midst of so many animal and plant neighbors.”

At this time of the evening, most owl species are beginning to wake up. Owls make a living at night; a few species are on day duty.

Barred Owl is Vermont’s most common year-round owl. It has deep chocolate brown eyes and has been known from 11,000 year old fossils. We heard its classic hoot sequence “who cooks for you, who cooks for you all-l-l-l-l”. The young can be seen out of the nest before they can fly as they climb around on thick branches and exercise their wings. We heard a pair of owls hooting it up. A photo in which the owl’s eyes were closed showed the presence of feathered eye-lids.

Great Gray Owl is an irruptive species during Winter months. It is our tallest owl – about 2 feet, with a 5 foot wingspan, yet it weighs in at only 2 pounds. The female utters a ‘galuck” and the young beg for food with an urgent, raspy voice.

Great-horned Owl gives a familiar, rhythmical call that sounds like “Who’s awake ? Me Too”.

This is our strongest owl that can take quite large prey. Its talons can exert 28 pounds of force.

Eastern Screech Owl is found in warmer parts of Vermont and is about 8.3” tall. We heard its territorial whinnying call and a family trill. This call will cause mobbing behavior among small birds, such as chickadees, which is used to drive off the predator.

Northern Hawk Owl, another irruptive species in Winter in Vermont, was famously known to spend a few months in a location in Eden in 2009. It is a perch and pounce hunter. We heard its trill song and alarm screams. Owls necks have 14 vertebrae (compared to humans with 7) which allows the animal to rotate its head up to 270°.

Northern Saw-whet Owl is our smallest owl – standing 8” tall and weighing just 2.5 ounces (the weight of two ping pong balls). Its facial disk is shaped to collect sounds from very small prey; in Winter months the owl will incubate stored frozen food to thaw it. We heard its series of soft toots.

Short-eared Owl utters a bark-like call when it wants to defend its nest. Females will defecate on their eggs if they are startled perhaps to make them unsavory to a potential predator. This owl engages in wing-clapping – a non-vocal sound – during courtship that is accompanied by aerial acrobatic flying.

And last but not least was Snowy Owl a picture from the Winter of 2013 – 2014 when the largest number of owls irrupted from the north into the upper United States. Named Project Snowstorm owls were fitted with GPS equipment to follow their movements. Young male owls are very white; and young females show black markings. They nest on the ground in their northern tundra habitat where they can be heard up to 7 miles away; before an owl takes off, it must crouch in order to open the grip of its talons. See her spectacular photo of a Snowy Owl gliding by on her website: www.elinorosbornphotography.com.

**Friday, May 26, 2023: Michael Snyder –
“Stewardship and Conservation of Vermont’s
Forests in a Time of Change”**

Mike Snyder is a forester, writer, strategist, and energetic advocate for healthy forests, ecological forestry, and sustainable outdoor recreation; and is author of Woods Whys. He is presently with Greenfire Enterprises, LLC; and previously served for 12 years as Commissioner of Vermont Department of Forests, Parks and Recreation until his 60th birthday on December 31, 2022.

“I am a forester. ... I have had a great run in the area of my passion. ... In looking back, I ricocheted from one ecologically-minded boss to another. ... Botany is foundational to forestry. Birding came much later for me, far too late later. ... It’s like a confession. ... It all started with a close encounter with a mist-netted Chestnut-sided Warbler following a talk by Jim Shallow of Vermont Audubon. ... This avian awakening led me to learn identification of birds. ... I have an abiding admiration for botanizing and birding. ... And I have an abiding admiration for botanists and birders. ... I’m passionate about forests above all else and forestry.”

“It is helpful to think of forests as a verb rather than a noun. ... We are utterly dependent on forests and trees. ... Forestry is the peaceful and productive co-existence of people and forests and trees.”

One can think of forestry as a three-legged stool; one leg is ecological, one leg is cultural, and the third leg is economic. Vermont is forest strong. There is a massive public benefit from forest land being in private hands. Those benefits include:

- clean air
- clean water
- carbon storage
- landscape and beauty
- habitat
- biodiversity
- human health – physical and psychological
- community vitality

natural infrastructure for outdoor recreation
forest products

However, there are some unsettling trends that are looming, such as the presence and arrivals of invasive species, die-back and mortality, reduced regrowth, reduced regeneration and climate change to name a few for which our experience is limited. For the first time in 100 years Vermont is losing forest cover; and that loss is largely due to conversion to non-forest habitats.

In order to counter some of the unsettling trends there are positive endeavors happening. One is the 30 By 30 Bill by 2030 that focuses on forest strength from forestry. Vermont is a world leader in forest products, such as cross-laminated timbers for building construction; and new uses for cellulose such as insulation and even processed foods. Vermont supports a renewal of importance of old forest and supports the transition of late adolescent landscape toward old growth. Vermont has also designed and implemented forest operation equipment to lessen the damage to the soils.

With a gradual emergence of incentives for forest management it could become common that people be paid for the public value of holding forest.

Jim Shallow of Vermont Audubon has worked to develop a program called Foresters for the Birds which has prepared a toolkit to study birds and learn what they need in a forested habitat. The program earned a Wings Across the Americas Award and is being replicated in every state.

We who live in Vermont make Vermont what it is. We have a chance to get forest matters right for the future.

“If snow, wind, drought, and black flies conferred a physiological height advantage to trees, ours would be taller for sure.” Wood Whys, p. 61.

Saturday, May 27, 2023: Annual Business Meeting, Activities Facility Classroom, Craftsbury Outdoor Center, Craftsbury, Vermont

The Annual Meeting convened at 7:23 PM. Debbie greeted everyone and said how glad she was to be able to attend this year's meeting. The group said "We are glad you are here".

1. Secretary's Report

Secretary Scott Bassage said "It was a very good year for the Secretary".

2. Treasurer's Report

Treasurer Charlotte Hanna reported that the Club's Green Century Funds lost \$11,711.00 in the Fiscal Year ending December 31, 2022; and that was after a gain about \$19,000.00 in the previous year. The general consensus was to not make any changes to the Equity Fund now. Deb Parrella said that it is a better climate for CD's now. Scholarship Donations from members was \$520.00 in 2022.

The overall financial condition is:

People's/M&T Bank Balance	\$7,489.00
Green Century	<u>\$39,820.00</u>
Total	\$47,309.00

Lynne Arnold moved and Catherine Sells seconded that the Treasurer's Report be accepted. The vote was all in favor.

4. Scholarship Report

Scott Bassage was delighted to report that we were able to accept 6 excellent scholarship students to the meeting this year. See more about them on pages 6 - 8 in this Newsletter.

4. Nominating Committee

Peter Hope read the Slate of Officers:
President Deborah Benjamin

Vice-President Plants Everett Marshall
Co-Vice-Presidents Birds Susan Elliott and
Connie Youngstrom
Treasurer: Charlotte Hanna
Secretary Scott Bassage

Search for Location Committee, Chair
Catherine Sells

Marvin Elliott moved and Kate Kruesi seconded that the Slate be approved. The vote was all in favor.

5. Field Trip Report, Plants

Everett called upon each scholarship student to name their favorite plant encounters.

Abby said that she liked Goldie's Wood Fern at Libby's Fern Glade and Clubmosses, especially Diphasiastrum, at Barr Hill. Elisabeth said she really liked Naked Mitrewort in bloom at Craftsbury Academy Woodlot; and Golden Saxifrage at Porter Brook Natural Area. Sam said he found False Hellebore to be very interesting as well as Solomon's Seal and Rosy Twisted-stalk. Jacob found the ferns to be spectacular including Narrow-leaved Glade Fern, Silvery Glade Fern and Lady Fern at Libby's Fern Glade. Lauren also liked ferns including Lady Fern and Royal Fern, as well as the sedge Carex torta. And Ben liked Pink Lady's-Slipper at Craftsbury Academy Woodlot and back full circle to Goldie's Wood Fern at Libby's Fern Glade.

Everett noted the one common and two rare clubmosses at Barr Hill – the first being Southern Running-pine and the latter two being Savin-leaved Running-pine and Northern Running-pine. Deb Parrella pointed out Stairstep Moss. Sue Elliott liked Mountain Wood Fern that was just opening at Craftsbury Academy Woodlot. And Abby added another – Painted Trillium – to wrap up some the favorites.

5. Field Trip Report, Birds

Sue reported 88 species and the list grew to 98 species by the end of the meeting after breakfast on Sunday. There are 14 checklists on eBird covering the places and the days we visited. Friday morning bird walk was incredible with 44 species seen, 19 of which were warblers. Connie added that Saturday's morning bird to the Post Road wetland on the Black River walk was great with 53 species tallied.

Next the six scholarship students noted their favorites:

Lauren	Northern Parula
Ben	Bay-breasted Warbler
Jacob	Virginia Rail, Merlin
Abby	Solitary Sandpiper
Elisabeth	Scarlet Tanager
Sam	Canada and Yellow Warblers

Several people commented about the pair of Scarlet Tanagers at Libby's Fern Glade. Karen especially liked the Indigo Bunting. Everett appreciated the many younger eyes of the several scholarship students in spotting birds and describing the location to help people locate the bird with binoculars and scopes.

Abby maintained a list of non-bird animals which included chipmunk, dragonfly, snowshoe hare, 3 dogs, a mammal predator expired, snails, river otter, Spring peepers, 2 white-tailed deer, baby painted turtle (deceased), and a bass fish with eggs.

6. 2024 Meeting Suggestions – Catherine suggested that we stay in the same general area so that Debbie could attend the meeting part-time. Thank you Catherine. Possibilities include Quimby Country, NVU-Johnson, Smuggler's Notch area.

7. Other Business

Arthur Gilman will be producing text and photos on interesting topics from time to time and will publish those.

8. Adjourn

Peter Hope moved and Sue Elliott seconded that the meeting adjourn. The vote was cheerfully all in favor. The meeting adjourned at 8:14 PM.

Slides by Members, following the Annual Business Meeting

Mary Metcalf gave a beautiful show of slides of a trip that she and two women (Mary was 21 years old) on August 8 – 30, 1979 to the Brooks Range of Alaska and the North Slope of the Arctic. Her first slide was a bouquet of blooming alpine wildflowers in hand with the mountains in the background. She showed several stunning landscape images including mountain reflections on a lake. They hitchhiked a ride with a bush pilot who was flying a Silver Streak DC 6 airplane from the 1940's – where the landscape and the technology elicited a timeless quality.

Lauren Hwang-Finkleman showed pictures of the Wethersfield Estate and Garden in Amenia, New York where she served as Senior Horticultural Fellow. Built in 1945 by a banker with Bank of America, its grace and beauty comprises 1,000 acres. We enjoyed walking fern and a knot garden as well as the tiny circular window which indicated the room at the estate that she was staying in.

Sue Elliott showed slides of, what else ? , birds. We saw Cape May Warbler at Lake Bomoseen, White-breasted Nuthatch in a "dracula" posture, Prairie Warbler in Tennessee, Summer Tanager, Blue Grosbeak, Reddish Egret eating a huge fish, Yellow-throated Warbler, Long-billed Dowitcher, and a Piping Plover in Texas.

Tig Arnold showed all the point and shoot camera pictures of anything and everything in bloom. It read like a diary of the moment: starflower, bunchberry, downy violet, ostrich fern, bracken fern talons, foamflower, balsam poplar, bluets, mountain maple, northern white violet, marsh marigold,, purple avens, Clintonia, chokecherry,

painted trillium, toothwort, rosy twisted-stalk, pink lady's-slipper, red trillium, pin cherry, velvet blueberry.

Marvin Elliott, like Sue, indulged us with pictures of birds: first he played the call of a Whip-poor-will, then he showed pictures of a Yellow-breasted Chat in Virginia, a Golden Eagle in Rutland City, and a Barred Owl. Then there followed a White-throated Sparrow, Tree Sparrow, Kingfisher, White-tailed Kite, one non-bird species - an alligator, and a beautiful Roseate Spoonbill.

Everett showed a picture of himself and Deb and Lauren and Sam at Belvidere Bog in Winter with 18" of snow. We saw Labrador tea, Sheep Laurel, Bog Laurel and cotton grass sticking out of the snow. He reported that they dug down to try to find pitcher plants.

Peter showed a naked mitrewort in bloom from today's field trip (at Craftsbury Academy Woodlot) and the extra-floral nectaries of red-berried elder. He showed showy orchis at Libby's Fern Glade. We then traveled with Saint Michael's College to Palo Verde, Costa Rica. There we saw purple gallinule, a jicana, tropical kingbird, bare-throated tiger heron, and white-faced capuchin (don't show your teeth). We saw beauty in Lesser Violet-ear, Green Brilliant, Pleurothallus Orchid, Resplendent Quetzal (which dines on the avocado family), Fer de Lance snake, and Eyelash Viper (yellow morph and fastest strike in the world). Back in Burlington, Vermont we saw Bohemian Waxwings at Technology Park with patterned backs. At Wellfleet, Cape Cod we saw Bearberry, in a beautiful pink version. In North Burlington, we enjoyed at the RT 127 Arms Forest a Yellow Lady's-Slipper colony and were able to see how the twirls in the sepals scatter the light. We ended the evening with a series of reflections of color on water.

Henry Potter Scholarship Students – In Their Own Words

We were delighted that three of the six scholarship students joined us for a second year:

1. Abigail Hayford

"I would love to have the chance to go back to the Vermont Botanical and Bird Club this year! I apologize for my late response, I am in my last year of college and I had many senior project due this month that occupied all my time and my brain. I have been doing good since the last meeting, as I was able to work a bit over the summer and start my senior year in the fall and I graduate in a few weeks. I have taken a birding class this semester so I'm hopeful that I will be able to identify more birds this year and plant species as I have taken another tree identification course. I'm looking forward to hearing from you!"

2. Lauren Hwang-Finkelman and

3. Sam Schieren

"Since our last meeting, Sam has taught American literature and creative writing at Champlain College, as well as served as an English tutor at Northern Vermont University. He recently came back from a creative writing residency in Palmer, Alaska, where he worked on finishing his novel.

I have worked at a maple sugaring farm here in Johnson, waited tables in Stowe, and accepted a position at Wethersfield Estate and Garden in Amenia, New York, as their Senior Horticultural Fellow. Sam has also been hired by Wethersfield as an Event Coordinator. We're moving to New York shortly and looking forward to living and working at the Garden!

At this year's B&B meeting, I look forward to becoming more intimately acquainted with some of our Northeastern native plants. Perhaps I can use what I've learned with B&B to inform my selection of plants at Wethersfield, nudging their formal gardens to include more native species. Sam looks forward to learning about the natural communities of the Northeast Kingdom and

continuing to learn his bird calls. We both hope to see some bog-loving carnivorous plants!”

And we welcomed three additional fine students:

4. Jacob Crawford

“My name is Jacob Crawford, and I am highly interested in attending this year’s annual meeting of your club! I found out about this amazing opportunity to receive a scholarship for the meeting from Everett Marshall, who I know from previous encounters while birding and looking for mushrooms. I am currently serving as an AmeriCorps member through the Vermont Housing and Conservation Board AmeriCorps program at Audubon Vermont. Over the past 7 months serving as the Community Science and Chapter Engagement member, I have found myself educating hundreds of students, community scientists, and nature enthusiast both at the Green Mountain Audubon Nature Center in Huntington, VT and at colleges, schools, and events around northern Vermont.

Attending this annual meeting would be a fantastic opportunity for me to network with and learn from expert naturalists that have different expertise than my own in birds and forestry. I have been struggling to find balance between my time spent serving at Audubon and creating the time and space for me to rest and relax. I can’t think of a better way to spend a long weekend than being outside, with fellow naturalists, birding and learning about botany at the end of peak spring migration! “

5. Elisabeth Rondinone

“Nature and the natural world have always been an important aspect of my life. I attended Green Mountain College and then Sterling College after the closure of Green Mountain College. I studied Environmental Science with a Biology concentration. My degree required a wide variety of courses in areas such as Conservation Biology, GIS, Botany, Field Ecology, Vertebrate Natural

History, and Ornithology. I enjoyed the diverse set of topics and learning about the complex ways in which the natural sciences are related.

I was especially drawn toward botany and did a project on ferns during my senior year at Sterling College. I studied fern natural history, learned about the species common to Vermont, and created a small herbarium collection of ferns I had identified. Last summer, I happened upon an uncommon orchid and enjoyed researching the plant and connecting with professionals who were interested in the new population. I am also quite fond of birds and hope to build on the skills I learned in field ornithology. One of my favorite memories during the ornithology course is when the group was observing an American Bittern and a student suddenly noticed an unassuming Least Bittern clinging to a plant several feet behind the American Bittern. The chance encounter made for an excellent photograph and a wonderful memory for those who were fortunate enough to witness it. “

6. Benjamin Simmons

“I am a current senior at the University of Vermont graduating in May 2023 with a B.S. in wildlife biology and a minor in geospatial technologies. I am excited by the possibility of being able to engage with your work. Contributing to efforts to prevent species decline and promote wildlife conservation and management have been my most prominent goals. They are at the root of my desire to work in ecology.

As an undergraduate I have been hungry to gather as much field and research experience to strengthen and add to the skills and knowledge I am gaining in my courses. Thus, I have been involved in an array of projects of diverse ecological foci. My appreciation of the hands-on quality of field work was first developed by my experiences trapping and categorizing moth communities in Puerto Rico’s El Yunque rainforest. This involved intense field work in

variable rainforest weather conditions to collect samples. However, it was at my NSF funded research position at the Sevilleta Field Station in New Mexico where I was able to first experience spending days in the field alone (Chihuahuan desert during monsoon season), gathering data that I knew held importance to conscious wildlife management. It was also at Sevilleta that I first experienced the joys of living and working with/amidst others that held similar passions and interests in conservation and biology. Additionally, during this experience I worked independently and became proficient in the R programming language, stable isotope analysis, and fecal DNA metabarcoding. I also experienced a similar culture at the Northeast section of the Wildlife Society's field course. There I and other aspiring biologists lived in rustic cabins and spent days in the field learning key field techniques such as bird banding, camera trapping, small mammal trapping, radio telemetry, large mammal handling and sample collection, and obtaining a hunter safety certification. “

We all wish these fine students good luck in their pursuit of their interests and passions.

FIELD TRIPS 2023

I. CRAFTSBURY FIELD TRIP: Woods Walk to a Cedar Wetland, Libby's Fern Glade, Craftsbury Academy Woodlot Trip Leader – Peter Hope

1. Woods Walk to a Cedar Wetland for the Birds - Our first stop will be about 1.5 miles up Lost Nation Road to a wide trail that leads us to a wetland complex that sits in the Black River valley as it flows south. An ancient maple called “Grandmother Maple” and the bare remnants of a beloved Hophornbeam are also visible. Birds are abundant here.

2. Libby's Fern Glade - We'll continue north on Lost Nation Road and take a driveway up to the left to a rich woods and Libby's Fern Glade owned by Rob Libby, and Dick Dreissgacker and

Judy Geer, owners of Craftsbury Outdoor Center, who have graciously given us permission to explore this wonderful place. The fern glade is in a rich northern hardwoods with a rich mull humus. A botanist might argue that Vermont is called the Green Mountain State from the verdant mantle of ferns as exhibited here, including maidenhair fern, Goldie's wood fern, silvery-glade fern, and narrow-leaved glade fern; other rich woods plants grow here as well. There is a gentle slope and no path, so we will carefully bushwhack through the ferns. There are some wet soil areas so wear hiking boots or other appropriate footwear.

Lunch will be at the Lakeside Trail Picnic Area on Great Hosmer Pond.

3. Craftsbury Academy Woodlot, 1880 Wylie Hill Rd., Craftsbury Common - This woodlot is 80 acres managed by the Craftsbury Town School District. In 2002 Craftsbury applied for and received a grant for \$15,000 from the Vermont Department of Forests, Parks, and Recreation and the community raised matching funds to build a handicap accessible trail resulting in the 1.5 mile trail through 40 acres of the forest. In June of 2019 the Craftsbury Elementary School and community members conducted a Bioblitz which was combined with information on the soils, hydrology, historical land use, etc. to develop a ten year plan that includes sustainable management plans and educational goals. The forest is meant to provide an example of sustainable land use and provide hands-on educational opportunities for the school and the community. Much of the forest lies on the calcium rich Waits River Formation which coupled with surficial deposits and historical land use has created a mosaic of habitats, including northern hardwood forest in various stages of succession and a cedar swamp, which we will explore venturing off of the boardwalk. Those that don't want to get their feet wet can view the swamp from the boardwalk. This trip is mostly dry and flat easy walking along the 1.5 mile trail.

Craftsbury Field Trip Notes by Peter Hope

Woods walk to a cedar swamp - We saw an assortment of ferns going down the trail including oak fern (*Gymnocarpium dryopteris*), narrow, or northern, beech fern (*Phegopteris connectilis*), lady fern (*Athyrium filix-femina*), ostrich fern (*Matteuccia struthiopteris*). Interrupted fern (*Osmunda claytoniana*), intermediate wood fern (*Dryopteris intermedia*), and sensitive fern (*Onoclea sensibilis*).

Libby's Fern Glade— The fern glade is a rich northern hardwood forest growing on a deep, rich mull humus soil and had an abundance of rich woods ferns including maidenhair fern (*Adiantum pedatum*), silvery glade fern (*Deparia acrostichoides*), Goldie's wood fern (*Dryopteris goldiana*), and narrow-leaved glade fern (*Homalosorus pycnocarpus*). An added treat on this leg of the trip was that a local participant knew where several showy orchis (*Galearis spectabilis*) grew and showed us. We didn't see these on the first day's trip, so some participants got to visit and photograph them on Sunday morning after breakfast.

Craftsbury Field Trip Plant List in Sequential Order by Peter Hope

Woods walk to a cedar wetland

Gymnocarpium dryopteris – oak fern
Phegopteris connectilis – beech fern
Populus balsamifera – balsam poplar
Equisetum variegatum - variegated horsetail
Equisetum hyemale – scouring rush
Equisetum sylvanicum – woodland horstail
Equisetum arvense – field horsetail
Lonicera canadensis – northern fly honeysuckle
Ribes cynobasti – prickly gooseberry
Coptis trifolia – goldthread
Viburnum lantinooides – hobblebush
Amelanchier bartramiana – Bartrums shadbush
Acer spicatum – mountain maple
Viola pensylvanica – yellow violet
Caulophyllum thalicttrum – blue cohosh
Matteuccia struthiopteris – ostrich fern

Lunch at Lakeside Trail Picnic Area on Great Hosmer Pond – We had lunch at a very picturesque spot overlooking the Pond.

Craftsbury Academy Woodlot - This 80-acre woodlot, which is managed by the Craftsbury Town School District, has a variety of habitats including northern hardwoods forest in different stages of succession and a cedar swamp. In the hardwood forest we used hand lenses to examine the glandular hairs on the indusia and underside of intermediate wood ferns (*Dryopteris intermedia*). Clintonia (*Clintonia borealis*) were just beginning to bloom. We saw a large white pine (*Pinus strobus*). One of the great finds in the cedar swamp was a number of naked miterworts (*Mitella nuda*). It's always a treat to see these diminutive five-armed, fringed snowflake-like flowers. A surprise finding back in the hardwood forest was red elderberry plants (*Sambucus racemosa*) which can have extra floral nectaries at some nodes, which suggests a mutualistic ant-elderberry association. We found a robust star flower (now *Lysimachia borealis*) which had four flowers. Finally, we found one pink lady's-slipper flower (*Cypripedium acaule*).

Onoclea sensibilis – sensitive fern
Dryopteris intermedia – intermediate wood fern
Spinulum annotinum – bristly clubmoss
Lycopodium clavatum – wolf’s claw clubmoss
Lysimachia borealis – star flower
Cypripedium acaule – pink lady’s slipper
(In the cedar swamp)
Rubus pubescens – dwarf raspberry
Mitella nuda – naked miterwort
Geum rivale – rough or water avens
Caltha palustris – marsh marigold
Thuja occidentalis - northern white cedar

Libby’s Fern Glade

Adiantum pedatum – maidenhair fern
Deparia acrostichoides – silvery gladefern
Homalosorus pycnocarpos – narrow-leaved glade fern
Dryopteris goldiana – Goldie’s wood fern
Mattueccia struthiopteris – ostich fern
Athyrium filix-femina – lady fern
Laportia canadensis – woodland nettle

Craftsbury Academy Woodlot

Acer spicata – mountain maple
Corylus cornuta – beaked hazelnut
Abies balsamea - balsam fir
Picea glauca – white spruce
Pinus strobus – white pine
Clintonia borealis – clintonia, blue-bead lily
Dryopteris intermedia – intermediate wood fern
Dryopteris campylopteris – mountain wood fern
Dryopteris carthusiana – spinulose wood fern
Ribes cynobasti – prickly gooseberry
Caltha palustris – marsh marigold
Trillium undulatum – painted trillium

Sunday morning trip back to road by Libby’s Fern Glade

Galearis spectabilis – showy orchis

II. GREENSBORO FIELD TRIP: Porter Brook Nature Trail at Highland Lodge, Barr Hill Natural Area Trip Leader – Everett Marshall

From the Craftsbury Outdoor Center we will head south back to Craftsbury Common and south on S. Craftsbury Road to E. Craftsbury Road; then east and south toward Greensboro.

1. Porter Brook Nature Trail at Highland Lodge, Greensboro

Porter Brook Nature Trail is owned by Highland Lodge and open to the public. It offers mixed conifer-hardwood forest with meandering moderate trail that goes along Porter Brook and its wetlands. The birding is excellent. There are boardwalks and bridges so most footwear will do. A spur trail ends at the cedar lined Caspian Lake. We'll keep our eyes open for a special fern.

We will walk down a carefully constructed set of wood and gravel steps to begin our hike.

Lunch at Barr Hill Natural Area

2. Barr Hill Natural Area, Greensboro

Barr Hill Natural Area is 256 acres owned by The Nature Conservancy and managed as a preserve. The Philip Gray family donated this land, which was immortalized in Wallace Stegner's book, Crossing to Safety, in 1972. It is part of the Northern Vermont Piedmont. The bedrock here is Waits River Formation, a dark brown weathering marble that formed from sandy lime-rich sediments that were laid down in a shallow ocean 425 million years ago. The lower slopes offers sweeping views of the valley and distant mountains and were pasture not too long ago. There are scattered lowbush blueberry and common juniper along with some special clubmosses. The upper slopes are dominated by spruce, fir, and pine. Cape-May Warbler nests here.

The road in has water bars that may challenge cars with low clearance. The hike to the top is moderate.

Return to the COC by reversing the directions. From Greensboro, head North on E. Craftsbury Road to S. Craftsbury Road, north to Craftsbury Common and right on Mill Village Road to Lost Nation Road and north to Craftsbury Outdoor Center.

Greensboro Field Trip Notes, Everett Marshall

The Porter Brook Natural Area, Greensboro

The Porter Brook Trail was a lovely one-mile loop that began at Highland Lodge and worked its way down to Caspian Lake offering excellent vantage points for viewing birds along a brief overlap with a private road. The walk down towards the lake offered many woody plants in flower and young fruit, with a nice view of the glands found along the pedicle of skunk current. It was a treat to see white spruce, which is common in the northeast part of Vermont in upland forests with its hairless young twigs. A boardwalk weaved its way along the margin of a Porter Brook wetland offering nice views of wetland plants without wet feed. Some highlights included flowering colonies of bristly buttercup (*Ranunculus hispidus*) along with scattered purple avens (*Geum rivale*), and the diminutive golden saxifrage (*Chrysosplenium americanum*). The remainder of the trail was a rich upland woods. Some herbs in flower included the white form of pink lady's-slipper (*Cypripedium acaule*), the rosy twisted-stalk (*Streptopus lanceolatus*), and a very large colony of wild-oats (*Uvularia sessilifolia*). The botanical highlight of the trip was Braun's holly fern (*Polystichum braunii*) with both last year's rosettes of evergreen leaves and the newly emerged ones.

Barr Hill Natural Area, Greensboro

We were lucky to visit The Nature Conservancy Barr Hill Natural Area on two sunny days as the views are outstanding of the distant mountains and valleys below from one of Greensboro's highest vantage points. What was once a pasture now is carpeted with low shrubs such as low sweet blueberry (*Vaccinium angustifolium*) and common juniper (*Juniperus communis*). The botanical highlight of the trip was to see two rare ground-cedars (clubmosses) and a common one for comparison. We were fortunate to have Art Gilman join us to point out the difference between

northern running-pine (*Diphasiastrum complanatum*), savin-leaved running-pine (*Diphasiastrum sabinifolium*), southern running-pine (*Diphasiastrum digitatum*). The former two are rare in Vermont. Above the open shrubland was a wonderful loop through a mixed hardwood-conifer forest. We saw with interest the three species of spinulose woodferns along a short stretch of the trail, intermediate woodfern (*Dryopteris intermedia*), mountain woodfern (*Dryopteris campyloptera*), and spinulose woodfern (*Dryopteris carthusiana*).

Greensboro Field Trip Plant List by Everett Marshall

Porter Brook Trail, Greensboro

Scientific name	Common name
<i>Abies balsamea</i>	balsam fir
<i>Acer pensylvanicum</i>	striped maple
<i>Acer rubrum</i>	red maple
<i>Acer saccharum</i>	sugar maple
<i>Acer spicatum</i>	mountain maple
<i>Actaea</i> sp.	Baneberry
<i>Adiantum pedatum</i>	northern maidenhair
<i>Ageratina altissima</i>	white snakeroot
<i>Agrimonia</i> sp.	agrimonies
<i>Alnus incana</i>	gray alder
<i>Alnus incana rugosa</i>	swamp alder
<i>Amauropelta noveboracensis</i>	New York fern
<i>Amelanchier laevis</i>	smooth shadbush
<i>Anthoxanthum odoratum</i>	sweet vernal grass
<i>Aquilegia canadensis</i>	Columbine
<i>Aralia nudicaulis</i>	wild sarsaparilla
<i>Arctium lappa</i>	greater burdock
<i>Arctium minus</i>	lesser burdock
<i>Arisaema triphyllum</i> var. <i>tri</i>	Jack-in-the-Pulpit
<i>Athyrium angustum</i>	northern lady fern
<i>Betula alleghaniensis</i>	yellow birch
<i>Betula papyrifera</i>	paper birch
<i>Brachyelytrum aristosum</i>	Northern Shorthusk

<i>Caltha palustris</i>	marsh marigold
<i>Campanula rapunculoides</i>	creeping bellflower
<i>Cardamine diphylla</i>	Two-leaved Toothwort
<i>Carex intumescens</i>	bladder sedge
<i>Carex stricta</i>	tussock sedge
<i>Caulophyllum thalictroides</i>	blue cohosh
<i>Chelone glabra</i>	white turtlehead
<i>Chrysosplenium americanum</i>	American golden saxifrage
<i>Clematis virginiana</i>	virgin's-bower
<i>Clintonia borealis</i>	bluebead lily
<i>Coptis trifolia</i>	Three-leaf goldthread
<i>Cornus alternifolia</i>	alternate-leaved dogwood
<i>Cornus canadensis</i>	Canadian bunchberry
<i>Cornus sericea</i>	red osier dogwood
<i>Corylus cornuta</i>	beaked hazelnut
<i>Cypripedium acaule</i>	pink lady's slipper
<i>Cystopteris bulbifera</i>	bulblet fern
<i>Dendrolycopodium dendroideum</i>	prickly tree-clubmoss
<i>Dendrolycopodium obscurum</i>	flat-branched tree-clubmoss
<i>Dennstaedtia punctilobula</i>	hay-scented fern
<i>Dryopteris intermedia</i>	intermediate wood

	fern
<i>Epilobium ciliatum</i>	fringed willowherb
<i>Epipactis helleborine</i>	Broad-leafed Helleborine
<i>Equisetum arvense</i>	field horsetail
<i>Equisetum sylvaticum</i>	wood horsetail
<i>Erigeron pulchellus</i>	
<i>Erythronium americanum</i>	trout lily
<i>Eurybia divaricata</i>	wood asters
<i>Eutrochium maculatum</i>	spotted Joe-Pye weed
<i>Fagus grandifolia</i>	American beech
<i>Fraxinus americana</i>	white ash
<i>Fraxinus nigra</i>	black ash
<i>Galium sp.</i>	bedstraw
<i>Geranium robertianum</i>	herb robert
<i>Geum macrophyllum</i>	large-leaved avens
<i>Geum rivale</i>	water avens
<i>Glechoma hederacea</i>	gill-over-the-ground
<i>Glyceria melicaria</i>	slender mannagrass
<i>Glyceria striata</i>	fowl mannagrass
<i>Gymnocarpium dryopteris</i>	northern oak fern
<i>Huperzia lucidula</i>	shining firmoss
<i>Hylocomiadelphus triquetrus</i>	rough goose neck moss
<i>Hylocomium splendens</i>	stairstep moss
<i>Ilex mucronata</i>	mountain holly
<i>Ilex verticillata</i>	winterberry holly
<i>Impatiens capensis</i>	common jewelweed
<i>Laportea canadensis</i>	wood nettle
<i>Larix laricina</i>	tamarack
<i>Lysimachia borealis</i>	northern starflower
<i>Maianthemum canadense</i>	Canada mayflower
<i>Maianthemum racemosum</i>	Solomon's plume
<i>Malus domestica</i>	apple
<i>Matteuccia struthiopteris</i>	ostrich fern
<i>Medeola virginiana</i>	cucumber root
<i>Mitchella repens</i>	partridgeberry
<i>Mycelis muralis</i>	wall lettuce

<i>Myosotis scorpioides</i>	water forget-me-not
<i>Nabalus sp.</i>	rattlesnake root
<i>Oclemena acuminata</i>	whorled wood aster
<i>Onoclea sensibilis</i>	sensitive fern
<i>Osmunda claytoniana</i>	interrupted fern
<i>Osmundastrum cinnamomeum</i>	cinnamon fern
<i>Oxalis montana</i>	mountain wood- sorrel
<i>Persicaria sagittata</i>	arrow-leaved tearthumb
<i>Phalaris arundinacea</i>	reed canary grass
<i>Phegopteris connectilis</i>	long beech fern
<i>Picea glauca</i>	white spruce
<i>Pilea pumila</i>	Canada clearweed
<i>Polystichum acrostichoides</i>	Christmas fern
<i>Polystichum braunii</i>	Braun's holly fern
<i>Polytrichum sp.</i>	haircap mosses
<i>Populus tremuloides</i>	trembling aspen
<i>Prunella vulgaris</i>	common selfheal
<i>Prunus serotina</i>	black cherry
<i>Prunus virginiana</i>	chokecherry
<i>Pteridium aquilinum</i>	common bracken
<i>Ptilium crista-castrensis</i>	ostrich-plume moss
<i>Ranunculus acris</i>	meadow buttercup
<i>Ranunculus hispidus</i>	swamp buttercup
<i>Reynoutria japonica</i>	Japanese knotweed
<i>Ribes glandulosum</i>	skunk currant
<i>Rubus occidentalis</i>	black raspberry
<i>Rumex obtusifolius</i>	broad-leaved dock
<i>Sambucus racemosa</i>	red-berried elder
<i>Securigera varia</i>	purple crownvetch
<i>Solanum dulcamara</i>	bittersweet nightshade
<i>Solidago flexicaulis</i>	broad-leaved goldenrod
<i>Solidago gigantea</i>	giant goldenrod
<i>Solidago rugosa</i>	common wrinkle- leaved goldenrod
<i>Sorbus americana</i>	American mountain ash
<i>Spinulum annotinum</i>	interrupted clubmoss

<i>Spiraea alba</i>	white meadowsweet
<i>Streptopus lanceolatus</i>	rose twisted-stalk
<i>Symphotrichum puniceum</i>	swamp aster
<i>Taraxacum officinale</i>	common dandelion
<i>Taxus canadensis</i>	Canada yew
<i>Thalictrum pubescens</i>	tall meadow-rue
<i>Thelypteris palustris</i>	marsh fern
<i>Thuja occidentalis</i>	northern white cedar
<i>Tiarella stolonifera</i>	Creeping Foamflower
<i>Trillium erectum</i>	red trillium
<i>Trillium undulatum</i>	painted trillium
<i>Tussilago farfara</i>	colt's-foot
<i>Typha latifolia</i>	broad-leaved cattail
<i>Ulmus americana</i>	American elm
<i>Uvularia sessilifolia</i>	sessile bellwort
<i>Veratrum viride</i>	green false hellebore
<i>Viburnum cassinoides</i>	northern wild raisin
<i>Viburnum lantanoides</i>	hobblebush
<i>Viola blanda</i>	sweet white violet

	woodfern
<i>Dryopteris marginalis</i>	marginal woodfern
<i>Erigeron pulchellus</i>	Robin's-plantain
<i>Fragaria virginiana</i>	wild strawberry
<i>Juniperus communis</i> var. <i>depressa</i>	common juniper
<i>Lycopodium clavatum</i>	running clubmoss
<i>Maianthemum canadense</i>	Canada mayflower
<i>Picea abies</i>	Norway spruce
<i>Picea rubens</i>	red spruce
<i>Plantago lanceolata</i>	buckhorn plantain
<i>Polytrichum</i> sp.	haircap moss
<i>Populus tremuloides</i>	quaking aspen
<i>Potentilla simplex</i>	old-field cinquefoil
<i>Ranunculus acris</i>	common buttercup
<i>Ribes glandulosum</i>	skunk currant
<i>Sibbaldia tridentata</i>	three-toothed cinquefoil
<i>Solidago</i> sp.	goldenrod
<i>Sorbus americana</i>	American mountain ash
<i>Spiraea alba</i> (var. <i>alba</i> & <i>latifolia</i>)	meadowsweet
<i>Thuja occidentalis</i>	northern white cedar
<i>Vaccinium angustifolium</i>	low sweet blueberry
<i>Vaccinium myrtilloides</i>	velvet-leaved blueberry

Barr Hill Natural Area, Greensboro, VT

Scientific Name	Common Name
<i>Abies balsamea</i>	balsam fir
<i>Acer rubrum</i>	red maple
<i>Acer saccharum</i>	sugar maple
<i>Betula papyrifera</i>	paper birch
<i>Danthonia spicata</i>	poverty-oats
<i>Diphasiastrum complanatum</i>	northern running-pine
<i>Diphasiastrum digitatum</i>	southern running-pine
<i>Diphasiastrum sabinifolium</i>	savin-leaved running-pine
<i>Dryopteris campyloptera</i>	mountain woodfern
<i>Dryopteris carthusiana</i>	spinulose woodfern
<i>Dryopteris intermedia</i>	intermediate

BIRD REPORT by Susan Elliott

Vermont B & B's 128th proved to be one of our birdiest! A combination of perfect weather, keen eyes and ears, and a variety of habitats resulted in a total of 98 species observed.

The morning bird walks produced the most results with the early hour and even the botanically-minded focusing on birds. We experienced a migration wave Friday morning in the area immediately around the Craftsbury Outdoor Center. Many birds were feeding high in the trees so it took some effort to spot them. We did manage spectacular looks at Canada Warbler, Blackburnian Warbler, Northern Parula and Northern Waterthrush among others. Forty-four species were observed on this walk. It was difficult to tear ourselves away for breakfast!

Saturday's morning bird walk was at a nearby wetland on Post Road where we added a good number of species that we would not have found around the Craftsbury Outdoor Center or on our field trips. In little than an hour we tallied 53 species. The area produced one Virginia Rail, three Wilson's Snipe, two Solitary Sandpipers, one Marsh Wren, four Swamp Sparrows along with a flyby of a Green Heron and an American Bittern.

Several folks took a last morning bird walk on Sunday around the center. We ventured a bit further afield on the ski trails and managed to observe 54 species which included 15 warbler species. We added Ruby-crowned Kinglets on this walk along with five Winter Wrens.

The field trips were not without their highlights however. A pair of Scarlet Tanager delighted the Saturday group at Libby's Fern Glade. An Ovenbird flushed off the nest as we walked by at the Craftsbury Academy Woodlot. A Northern Waterthrush sang continuously and seemed to circle us around our lunch spot at Great Hosmer Pond.

Following the conclusion of Saturday's business meeting and member photos, several of us were treated to the sound of a Northern Saw-Whet Owl. Several of us reported hearing it throughout the night along with two Barred Owls.

Several people commented that they felt more confident with their bird song identification skills after the weekend and one scholarship student had five life birds!

BIRD LIST 2023 by Susan Elliott

Canada Goose
Wood Duck
Mallard
Common Merganser
Wild Turkey
Ruffed Grouse
Rock Pigeon
Mourning Dove
Ruby-throated Hummingbird

Virginia
Wilson's Snipe
Spotted Sandpiper
Solitary Sandpiper
Ring-billed Gull
Common Loon
Double-crested Cormorant
American Bittern
Great Blue Heron
Green Heron
Turkey Vulture

Broad-winged Hawk
Barred Owl
Northern Saw-whet Owl
Belted Kingfisher
Yellow-bellied Sapsucker
Red-bellied Woodpecker
Downy Woodpecker
Hairy Woodpecker
Northern Flicker
American Kestrel
Merlin
Eastern Wood-Pewee
Alder Flycatcher
Least Flycatcher
Eastern Phoebe
Great Crested Flycatcher
Eastern Kingbird
Blue-headed Vireo
Warbling Vireo
Red-eyed Vireo
Blue Jay
American Crow
Common Raven
Black-capped Chickadee
Tree Swallow
Barn Swallow
Ruby-crowned Kinglet
Golden-crowned Kinglet
Red-breasted Nuthatch
White-breasted Nuthatch
Brown Creeper
House Wren
Winter Wren
Marsh Wren
European Starling
Gray Catbird
Eastern Bluebird
Veery
Hermit Thrush

Wood Thrush
American Robin
Cedar Waxwing
Evening Grosbeak
Purple Finch
American Goldfinch
Chipping Sparrow
Dark-eyed Junco
White-throated Sparrow
Song Sparrow
Swamp Sparrow
Bobolink
Baltimore Oriole
Red-winged Blackbird
Common Grackle
Ovenbird
Northern Waterthrush
Black-and-white Warbler
Tennessee Warbler
Nashville Warbler
Mourning Warbler
Common Yellowthroat
American Redstart
Northern Parula
Magnolia Warbler
Bay-breasted Warbler
Blackburnian Warbler
Yellow Warbler
Chestnut-sided Warbler
Blackpoll Warbler
Black-throated Blue Warbler
Pine Warbler
Yellow-rumped Warbler
Black-throated Green Warbler
Canada Warbler
Scarlet Tanager
Northern Cardinal
Rose-breasted Grosbeak
Indigo Bunting