

# VERMONT BOTANICAL & BIRD CLUB NEWSLETTER

## MARCH 2005

### 2005 ANNUAL MEETING ANNOUNCEMENT

The 110<sup>th</sup> Annual Meeting of the Vermont Botanical and Bird Club will be held from Thursday at 4:00 PM, June 9 through Sunday at 9:00 AM, June 12 at Quimby Country in Averill, Vermont. The Club last visited the far Northeast Kingdom at Quimby Country in 2000.

Quimby Country offers a variety of habitats to explore including boreal forest, large lake sand beach community, sloping forest with hundreds of pink ladyslippers (including the white form, which occurs in more boreal locations), and sphagnum bog - all within easy walking distances from the lodge and cottages.

Twenty cottages overlook Forest Lake which hosts a pair of common loons on a platform island. Recently, a hiking trail has been constructed that circumnavigates Forest Lake and bald eagles have been regularly spotted. A ten minute walk takes you to Great Averill Lake. We look forward to visiting the varied habitats at Quimby Country and to making short excursions to other nearby interesting destinations.

Quimby Country has a few boats for our use and 3 or 4 more boats will be coming with the Officers. Members might want to bring their own canoe/kayak, paddles, and personal floatation devices, as Forest Lake is very accessible. There may be an optional field trip by boat depending on what the weather brings.

Visit: [www.quimbycountry.com](http://www.quimbycountry.com).

### 2004 MEETING HIGHLIGHTS

The 109<sup>th</sup> Annual Meeting of the Vermont Botanical and Bird Club began at 4:00 PM, Thursday, June 3, 2004 at Dalem's Chalet in West Brattleboro, Vermont and ended at 9:00 AM on Sunday, June 6, 2004.

Located on a hillside with ponds, Dalem's Chalet exhibits an atmosphere of old world charm and grace. Domestic swans floated with arched necks on the man-made ponds while downy young rested in the grasses. Thursday evening, Club members enjoyed a talk by Vice-President of Plants, Dorothy Allard, titled "A New Plant Species from Nepal: *Pedicularis dendrothauma* R. R. Mill and D. J. Allard sp. Nov, which detailed her doctoral thesis work for a PhD at Cambridge University.

Friday morning's bird walk around the ponds and up to a field and woods above the Chalet got the bird list off to a great start, with more than thirty species observed in 1 ½ hours. Bird song permeated this annual meeting, especially warbling vireo and Baltimore oriole.

On Friday, members divided into two groups. The North Trip, led by Debbie Benjamin, visited Herrick's Cove in Rockingham, Allen Brothers Marsh in Westminster, Walpole Seep in Walpole, NH and Black Mountain in Dummerston. The South Trip, led by Peter Hope, visited 5 sites all located in Vernon: the Lily Pond, Fox Hill, Vernon Dam, Fire Station railroad tracks, and Black Gum Swamp.

Friday evening, the Club enjoyed a slide presentation by Roy Pilcher, "Birding Around the States in 80 Slides".

Saturday morning was misty, as morning birders traveled a short distance to the Brattleboro Living Memorial Park and entered the woods above the ball park. The weather quieted the song a bit but conditions were perfect for pine warbler to give its dull trill. Saturday's field trip leaders switched and off everyone went to enjoy more adventure.

Saturday evening, the Annual Business Meeting was held, followed by Slides by Members Show (see more under Annual Business Meeting Minutes and Club Notes). Tree frogs and American toads serenaded us through the opened windows. Sunday morning, as always, came too soon as members made their good-byes after a wonderful time at this special area in Vermont.

#### EVENING PROGRAMS

THURSDAY, JUNE 3:

A NEW PLANT SPECIES FROM NEPAL:  
*PEDICULARIS DENDROTHAUMA* R. R. MILL  
AND D. J. ALLARD SP. NOV.

Dorothy Allard, Vice-President of Plants, presented a slide show and discussion about her doctoral research for her PhD from Cambridge University which covered the time period from 1995 – the present. She set out to study the effects of grazing on the native mountain forests in central Nepal where 3400 – 3500 mm (that's 13 feet!) of rain falls in a year. To get to the study area from the U.S., it is three days travel to Katmandu (11 hours time change) followed by a one-day bus trip to the nearest town; and then a five-day walk to the forest located at an elevation of 2500 meters – 3200 meters. Porters and cooks carried camping supplies and prepared food. The forest consists of tree-sized rhododendrons in the lower elevation, maples and birches, and

Himalayan silver fir, *Abies spectabilis*, toward the upper elevations. The climate is cool-temperate with a monsoon influence.

In the course of her initial investigation, she and a colleague from the Czech Republic, M. Petru, with the help of Tribhuvan University Botany students from Nepal collected specimens of every plant in 20-meter by 20-meter plots. In the process of keying out the species, one plant was easy to place to the genus *Pedicularis* in the Scrophulariaceae (snapdragon) family, but was very difficult to place to species.

After consulting a botanist who specialized in the genus *Pedicularis*, Robert Mill of Edinburgh University, she learned that the plant would have to be in flower to be positively keyed out to species. The initial specimen was in fruit only. During a trip in 1999, the plant was not yet in flower; but in 2001, a successful visit revealed the plant in flower. Still the plant did not key out to any known species. In the wet high elevation forests of Nepal, a new species was discovered, *Pedicularis dendrothauma* (*Pedicularis* = lousewort, from the early European belief that cattle that grazed near lousewort became covered with lice; *dendrothauma* = tree wonder).

The genus *Pedicularis* is large and contains a great deal of variability worldwide with 600 – 800 species. The greatest concentration occurs in China. The plants are hemi-parasitic and have special root structures, called haustoria, which resemble suction cups that allow the plant to attach to the roots of other species for feeding. Many louseworts are pollinated by bumblebees.

*Pedicularis dendrothauma*, is the only lousewort that is epiphytic, growing in the moss covered trees of this wet montane forest in Nepal. Its flower is unusual in structure with a lower lip (labellum) that has twisted and overtopped the upper lip (galea). The research team tried to determine its insect pollinator without success so far.

Watching flowers for 140 hours revealed bumblebees in the area, but none were observed visiting the flowers. The question of how the plant disperses throughout the canopy also was difficult to determine. It remains for future study to unlock the secrets of this species newly introduced to the knowledge of the botany of Nepal.

[*Pedicularis canadensis*, Canadian lousewort, was observed during scouting along the road at the SW base of Black Mountain, VT. We didn't visit that area during the meeting.]

FRIDAY, JUNE 4:

#### BIRDING AROUND THE STATES IN 80 SLIDES

Roy Pilcher, longtime member of the Club and co-President of the Rutland Audubon Society, thanked members for the opportunity to share from his collection of slides images of birds from 17 states and 3 Canadian Provinces. "I just love taking pictures of birds." The first thrill is seeing the bird; the second thrill is seeing the slide; and the third thrill is sharing the experience with others.

From Arizona to Wisconsin and Manitoba, Newfoundland and Ontario, we enjoyed a wide variety of birds typical of very different regions. At Klamath National Wildlife Refuge in California we saw Black-necked Stilt, a wading bird with long legs that feeds by picking insects off the surface of the water. [Technical difficulties prompted the use of lots more duct tape to hang black plastic over the windows and drew the following comment: "As a watcher of slides, you have to exercise patience just like you do when you take the picture."] At Tule Lake NWR, a Cliff Swallow was hawking insects and returning to the same perch, so Roy captures the image by focusing on the perch and capturing the image in the low light of the evening.

In Maine, we saw Bonaparte's Gull with reflections of boats in the water, an image in the style of Peter Hope. In Churchill, Manitoba Pacific Loons nest on platforms in shallow lakes. While Roy focused on the bird, he kept one eye ready to spot the polar bear that was recently seen in the area. This region of Canada is very important to many species of shorebirds. Red-necked Phalarope, a species that has undergone a sex reversal, whereas the female is more brightly colored and the male incubates and feeds the young while the female seeks another mate. Food is brought to the surface by the bird's circular swimming habit on the water which creates a vortex. Short-billed Dowitcher appeared serene in the northern, evening light and unaware of the photographer who patiently and painfully waited for the right moment inside a blind as he slowly sank, cold and cramped, into the water. "It was worth it".

A back road in Montana beckoned – "go down that road" – and there was a Great Gray Owl, which after some time left the edge of the forest and perched in the open. The owl was more concerned with listening for prey than with worrying about the two-legged creature with the black box capturing ever closer shots. In Texas, a Greater Roadrunner paused eyeball to eyeball as the photographer lay on his belly: "It is luck; the right place; the right time; and the right film. It doesn't get any better".

Closer to home in Vermont, the spectacular colors of the male Wood Duck say: "Think of the DNA that goes into making each feather the right color". During a drought in Roy's home town of Proctor, VT, a Green Heron enjoyed an all-you-can-eat fish and frog fest in a pond that was drying up. Shortly, a Virginia Rail and its black, downy chick visited the same pond. From brilliant color to supreme camouflage, the American Woodcock female sits on a nest 2' away and says: "You can't see me, I know you can't see me, so I am not going to move".

Mourning Doves are new to Vermont about 40 years ago. In other states, these birds are game birds; in Vermont they are protected under the Migratory Bird Law and not hunted. Northern Hawk Owls appear some winters and eat mice and rodents during the daylight hours, especially when the photographer tosses a dead mouse to entice the Hawk Owl. Last Winter, Bohemian Waxwings visited the Burlington area in good numbers to feed on ornamental fruit trees.

The show ended with 3 views of Black-backed Gulls at sunset off the Isle of Shoals, New Hampshire.

SATURDAY, JUNE 5, 2004  
ANNUAL BUSINESS MEETING  
VERMONT BOTANICAL AND BIRD CLUB  
DALEM'S CHALET

The Annual Business Meeting convened at 7:50 PM Saturday, June 5, 2004.

1. Secretary's Report. Debbie Benjamin, Secretary, gave some highlights about the 108<sup>th</sup> Annual Meeting of 2003 at Green Mountain College. She presented the table of contents of the last three Bulletins (1995, 2000, and 2002) and a list of the Club's meetings and dates from it's the beginning in 1895. [See items 4. and 6. for more expanded reports about the progress on the Club Brochure and on its next Bulletin.] Members approved the Secretary's Report.

2. Treasurer's Report. Charlotte Bill, Treasurer, gave a detailed Power Point display of the Club's finances to date.

The Treasurer reported that she had carried out instructions, as members had directed at the 2003 annual meeting. Specifically:

1) The Treasurer cashed in the New South Federal Savings Bank certificate of deposit when it matured on 8/2/03 and deposited half of that money in a "no-penalty-for-early-

withdrawal CD" and invested the other half in the Green Century Equity Fund account;

2) The Treasurer withdrew \$4000 from the checking account and deposited half of that money in the same "no-penalty-for-early-withdrawal CD" and the other half in the Green Century Equity Fund account.

These actions resulted in the following status of Club accounts.

CD Closed: The certificate of deposit issued 5/30/00 by the New South Federal Savings Bank was closed at its maturity date on 8/2/03. Over its life, the original \$5000 deposit earned \$825.25 in interest.

CD Opened: A no-penalty-for-early-withdrawal certificate of deposit was opened at the Merchants Bank. The original deposit of \$6415.00 was decreased by withdrawals for the equity fund and checking account. With \$44.69 of interest, the balance on 6/5/04 was \$4957.30.

Checking Account: On 6/5/04, the checking account balance at the Chittenden Bank was \$8,805.45, compared with \$10,253.22 on 6/14/03.

Equity Fund Account: A total of \$4912.64 divided among five separate payments to the Green Century Equity Fund resulted in the Club's owning 622.840 shares valued at \$18.63 per share for a total value of \$11,603.51 on 6/1/04, compared with 2003, when we owned 354.228 shares valued at \$16.31 per share for a total value of \$5777.46.

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With \$610.00 donated in response to the 2004 appeal, the total Current Year/Rollover Scholarship Fund's balance was \$1735.29, with all of it in the checking account. With \$635.00 donated in response to the 2004 appeal, the total

contributions to the Scholarship Endowment Fund stood at \$4782.50, with all of those monies residing in investment accounts (this figure reflects contributions only, not any accrued interest).

The Treasurer reported the results of the 2003 Annual Meeting at Green Mountain College. With \$5211.17 in expenses and \$6125.00 in revenues, the net gain to the treasury was \$913.83.

Members approved unanimously the Treasurer's Report.

Discussion resulted in the following aggregate motion: Bill Arnold moved and Michael St. John seconded that the Treasurer place \$635.00 of Scholarship Endowment Fund contributions through 6/5/04 into a no-penalty CD for one year; and that the rollover to date amount of \$4900 be placed in a no-penalty CD for one year. The motion passed unanimously. Members agreed to take up the subject of how to allocate the Club's total investments and whether to move some of that to the Scholarship Endowment at its meeting next year.

Members thanked the Treasurer for her thorough report and for her artistic view of *Arethusa bulbosa*, Dragon's Mouth orchid, from Franklin Bog at the end of her presentation.

3. Scholarship Report. Dorothy Allard said that personal contacts work well in the recruitment of students to attend the annual meeting. In the past few years, however, it has been challenging to recruit and retain scholarship students to attend the meeting. Although we make an attempt to recruit students as early as March, it is too often the case that a summer job offer or an entry level career-related position might make it impossible for a qualified candidate to attend the meeting at the last minute. We certainly support students of natural sciences in their pursuit of work that is related to their field of study.

Roberta Whitmore suggested that High School students might be good candidates to receive a scholarship to attend the annual meeting and she said that she would like to work with the Vermont Science Teachers Association to recruit talented individuals. Dan Wells said he would canvas University of Vermont undergraduates in the Field Naturalists Program. Ann Burcroff said that she would look out for young people from VINS. Lynne Arnold wondered if a scholarship could be given to a high school age student plus a teacher. [At the Sunday morning meeting following breakfast, Charlotte Bill said that a teacher could receive professional development credits for attending the meeting.]

4. Club Brochure. Debbie Benjamin reported at the Club's Annual Meeting at the Putney School in 1990 that the original brochure was drawn by member Libby Thorne. At last year's meeting, we saw examples of artwork by Betsy Brigham (who is Brett Engstrom's wife). In recent communication with Betsy, the Officers chose as a theme for the cover illustration: a winter wren perched on a yellow birch root with wildflowers on the forest floor. Tom Daley, Sylvan Designs, who has worked with Betsy's illustrations before, will do the graphic design to prepare the brochure for printing. Members approved the sum of \$750.00 (at the 2004 meeting) for producing the Brochure and printing up an initial number of copies.

5. Club Web Site. Fritz Garrison said that the Club Officers and he will meet on Sunday morning following breakfast to discuss the contents of a web site. He will use his computer and software to generate a site. He said that the site could include general information about the Club, its history, past meeting places and dates, lists of plants and birds seen at the annual meeting. The website will be: VTBB.ORG.

6. Joint Bulletin No. 24. Peter Hope said that he will edit the next Bulletin. Members are invited

to submit articles; Peter will contact people working in the field of natural sciences for technical articles.

7. Nominating Committee. Committee Chair, Mike Winslow read the slate of Officers:

Peter Hope, President  
Dorothy Allard, Vice President, Plants  
Connie Youngstrom, Vice President, Birds  
Charlotte Bill, Treasurer  
Deborah Benjamin, Secretary

Lynne Arnold moved and Michael St. John seconded that the slate be approved for one year.

8. Field Trip Highlights – Birds. Vice-President Connie Youngstrom thanked Everett Marshall for his years of giving the birding report. At this time of the year in southern Vermont, the birding was fabulous. Warbling Vireos and Baltimore Orioles were everywhere and singing throughout the days. A total of 92 species were observed during the meeting.

Friday morning, Mallards with young were seen trying not to be seen in the grass at the edge of the lower pond. Cedar Waxwing and Song Sparrow were observed nesting. Many other species were in full song. A Cooper's Hawk was seen at the Lily Pond. At Fox Hill, the most numerous animal species was the chipmunk. A Red-bellied Woodpecker was heard at Vernon Dam (but not seen). At the Black Gum Swamp the following warblers were observed: Blackburnian, Black-throated Green, Ovenbird, and Canada (heard).

Saturday morning at Living Memorial Park a Pine Warbler sang its quiet song in the cool start to the day. At Herrick's Cove, it was warming up nicely and 32 species were observed: Long-billed Marsh Wren, Yellow-throated Vireo, a pair of Belted Kingfishers and a Warbling Vireo nest was located. At Allen Brothers Marsh, several Green Herons were seen along with

Marsh Wren, Red-tailed Hawks (a pair) and a Virginia Rail was heard. "We saw a Ruby-throated Hummingbird driving out." Charlotte noted that "that hummingbird was driving really fast". "No! We saw a Ruby-throated Hummingbird while we were driving out." At Black Mountain, we were delighted to see a Rufous-sided Towhee.

Connie said that on Thursday evening when the black plastic was falling off the windows, she saw an owl glide by.

9. Field Trip Highlights – Plants. Vice-President Dorothy Allard said that this year's field trip locations in southeastern Vermont demonstrated an outstanding diversity of plant species, especially woody species where southern and northern species mix.

Now for the quiz on woody plants:

- 1) What woody plants are named after an animal?
- 2) Which 3 woody plants that we saw have a nice aroma? (Extra credit for others is optional.)
- 3) What Genus has four members in this region that have a color in the name?
- 4) What Genus has three members in this region that have a color in the name?
- 5) What Genus has parts in 2, 3, and 5?

Plant Quiz answers appear elsewhere.

10. Quimby Country. Debbie played a tape of the call of the Common Loon, reminiscent of the Club's visit to Quimby Country in Averill, VT in June, 2000. We are planning to hold the annual meeting at Quimby Country next June, 2005.

## FIELD TRIPS 2004

### NORTH TRIP:

#### 1. Herrick's Cove, Rockingham.

Herrick's Cove is located where the Williams River enters the Connecticut River north of Bellows Falls. A southward extending peninsula separates the cove from the Connecticut River. Vegetative habitats include: Cattail Marsh, Deep Broadleaf Marsh and Silver Maple-Ostrich Fern Riverine Floodplain Forest. The area is designated "Important Bird Area" thanks to the diligence of Don Clark who kept a detailed bird list from 1962 – 1998. 225 species of birds have been observed, many of them breeding birds and many migrating through.

#### 2. Allen Brothers Marsh, Westminster.

Allen Brothers Marsh is an emergent wetland nearly covered by the aquatic watershield, *Brasenia schreberi*, that is bisected by a dirt road affording great viewing opportunities for heron, ducks and many land birds.

#### 3. Walpole Seep, Walpole, New Hampshire.

Located just below Bellows Falls, Walpole Seep is a calcareous riverside Seep of bedrock and talus that is maintained as an open community by annual flooding and ice-scouring. [The group visited Walpole Seep on Friday only.]

#### 4. Black Mountain, Dummerston.

Black Mountain is located on a granite pluton that is surrounded by the Waits River Formation, which is composed of schists, phyllites and limestones. Large areas of bedrock are exposed near the top of the granite mountain. Dry, low diversity woodlands with a southern flavor (pitch pine, scrub oak, red pine and mountain laurel) and forests on the mountain top and sides give way to more diverse forests (mesic hardwood

and hemlock). The walk up from the trailhead on Black Mountain Road is 25 minutes to the top with views south into Massachusetts.

### SOUTH TRIP:

#### 1. Lily Pond, Vernon.

Lily Pond is a small pond in a glacial outwash plain with seasonally fluctuating water levels due to a very porous substrate.

#### 2. Fox Hill (Roaring Brook Wildlife Management Area), Vernon.

Fox Hill includes dry, oak woods with a vernal pool. The forest supports a high diversity of oak species and many woody plants typical of more southern regions.

#### 3. Vernon Dam, Vernon.

The woods below Vernon Dam include tree species typical of floodplain forest and ferns and plants of riverside, floodplain communities, including Large Solomon's Seal.

#### [4. Fire Station, Vernon].

The Fire Station has a patch of dry, sandy soil in a mowed lawn and railroad tracks with hot, dry conditions. Time did not permit visiting this site during the meeting.

#### 5. Black Gum Swamp, Vernon.

The Black Gum Swamp in Vernon is a cluster of red maple-black gum swamps and is unlike any other wetland complex in Vermont. The swamps sit in deep depressions in the bedrock (Littleton Formation slates and phyllites). The peat soils are deep measuring from 200 to 350 cm deep. Black Gum trees are large and some lie on the forest floor and send up sprouts. The surrounding forest is a thin soiled Appalachian Oak Forest with Chestnut sprouts and Mountain Laurel.

## SLIDES BY MEMBERS

Five members showed images of their experiences in the past year and beyond.

1. Dan Wells, a scholarship student from UVM, showed slides of animals and plants from a time period of two months in Vermont. Hairy woodpecker, Black-capped chickadee, and gray squirrel at a bird feeder with several non-native nuts. Turkey tail fungus on a tree; several ferns: marginal wood fern, sensitive fern, ostrich fern and maidenhair fern. Some early Spring flowers: Dutchman's breeches, Jack-in-the-pulpit, partridgeberry, trout lily, snow trillium, including one with 4 petals and 4 leaves and 8 stamens (no doubt it was a quadrillium). A Spring peeper and a red-spotted salamander capped the display.

2. Fritz Garrison documented the Centennial Celebration of Cyrus Pringle's arrival to the University of Vermont that included field trips and a museum reception at the Fleming Museum. Pictures of Dave Barrington, Curator of the Pringle Herbarium, Peter Hope, Cathy Paris, Everett Marshall, and Liz Thompson revealed that they very much enjoyed their trip to the top of Mount Philo. He then captured Peter Hope showing (yesterday) that black gum is related to dogwood in that it has latex in the leaf veins. He displayed *Corydalis* on Black Mountain today at 4:00 PM – "the film is barely dry". Fritz showed a close-up picture of American bittern near his house in its disguised posture with the beak pointed up and the eyes rotated down. Fritz and Peter often room together. In 2003, Fritz saw Peter's boots after a day in the field: one boot had a fern adhered to the toe and the other boot had a plant specimen adhered to the toe. Fritz said "this is the quintessential botanist's boots", and took a picture. Peter came back 5 minutes later and saw the same thing and said "you have to take a picture" [which had already been done].

3. Ann Burcroff showed her slides from a trip to New Zealand in March, 2004. Flax is utilized by the native people of the north island for housing and clothing. Ann said that many plants were unfamiliar. She went to a museum to look up plant names while everybody else went to the Cadbury chocolate factory. The moa was a large bird, 12' – 15', tall that grazed on plants and became extinct 500 years ago. Ann said that the plants today still show signs of developing defenses against tall herbivores. A yellow penguin molting its feathers stands for a month ("and looks embarrassed"). New Zealand was the first land mass to break away from the super-continent Gondwanaland before the appearance of mammals. Reptiles and birds evolved into large animals; and plants developed strategies to avoid herbivory. The Lord of the Rings was filmed in the Pass to the Tasman Sea (and the steep mountains of the Southern Alps). We saw the tuatara, a reptile that is in its own order, lives to be 300 years old and blinks once every ten minutes. Maori used a fern that is silver underneath to walk in moonlight by placing the fronds upside down on the ground.

4. Roger Bradley shared images of several large trees, many of which grow in his home state of Connecticut and some in his away-from-home home at B&B Club meetings in Vermont. A 20" black birch grows at his home; an American Elm 4' in diameter at his Grandpa's in Somers, CT; and the giant hop hornbeam that the Club visited in 1998 at Craftsbury with a 25.5" diameter. The most picturesque white oak is in Granby, CT, while the champion white oak is at University of Connecticut at W. Hartford, CT. The national champion red oak which is presently declining is in Ashford, CT; and the national champion black oak is in E. Granby, CT. Also at his home in Somers, CT we saw a sycamore with very white bark, a beautiful yellow-wood (*Cladrastis lutea*), a giant puffball mushroom measuring 22", a poison sumac with a 12" diameter, a very old Baldwin apple tree, and a witch's broom.



5. Peter Hope showed slides of his trip to Costa Rica with his St. Michael's students to the Rare Avis lodge (for eco-birders) located on the Atlantic side of the country where 4 meters of rain falls in a year. He scouted the area in August during the rainy season. His guide Arnulfo held a poison dart frog for Peter to photograph. As long as the frog's extremely poisonous venom doesn't get into the body through cuts or scratches, it cannot cause damage and death (hence the dart). We saw a bare-throated tiger heron sun-worshipping on the roof; the photographer's back covered with mosquito bites; a Basiliscus lizard (a young one can run upright on the surface of water for 50' and gets the common name, Jesus Christ lizard); and a three-toed sloth (which, along with two other leaf-eaters - the koala and the panda, moves very slowly because of its diet which contains only 42% of the energy producing effect of mammals with a rich diet of sugars and protein). Upon returning to Costa Rica with Valerie Banschback and students in January, it was the dry season. They traveled on rope bridges through cloud forest that carried a huge epiphyte plant population; some tree species regularly exfoliate the bark to reduce the epiphyte load. ["There is no identifying these trees by the bark."] A violet saber-wing visited the feeder with eight other hummingbird species. White capuchin monkeys provided entertainment with very human-like facial expressions: "that guy on the right looks worried". Closer to home, we saw black gum with storm-damaged tops; black gum flowers being visited by flies and wasps; and pitch pine on Black Mountain.

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[ANSWERS TO BOTANY QUIZ]

1. bear oak, sheep laurel, dogwood
  2. sassafras, sweet fern, spicebush, black birch, black locust, bitternut hickory
  3. *Quercus*, oak: red, white, scarlet, black
  4. *Betula*, birch; gray, white, yellow, black
  5. *Pinus*, pine
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**2004 BIRD LIST**

1. Double-crested Cormorant
2. Great Blue Heron
3. Great Egret
4. Green-backed Heron
5. Canada Goose
6. Wood Duck
7. Mallard
8. Turkey Vulture
9. Sharp-shinned Hawk
10. Cooper's Hawk
11. Red-tailed Hawk
12. American Kestrel
13. Virginia Rail
14. Spotted Sandpiper
15. Ring-billed Gull
16. Rock Pigeon
17. Mourning Dove
18. Black-billed Cuckoo
19. Chimney Swift
20. Ruby-throated Hummingbird
21. Belted Kingfisher
22. Yellow-bellied Sapsucker
23. Downy Woodpecker
24. Hairy Woodpecker
25. Northern Flicker
26. Pileated Woodpecker
27. Eastern Wood-Pewee
28. Alder Flycatcher
29. Willow Flycatcher
30. Least Flycatcher
31. Eastern Phoebe
32. Great Crested Flycatcher
33. Eastern Kingbird
34. Tree Swallow
35. Northern Rough-winged Swallow
36. Bank Swallow
37. Barn Swallow
38. Blue Jay
39. American Crow
40. Black-capped Chickadee
41. Tufted Titmouse
42. Red-breasted Nuthatch
43. White-breasted Nuthatch
44. Brown Creeper

45. House Wren
46. Winter Wren
47. Marsh Wren
48. Eastern Bluebird
49. Veery
50. Hermit Thrush
51. Wood Thrush
52. American Robin
53. Gray Catbird
54. Northern Mockingbird
55. Cedar Waxwing
56. European Starling
57. Solitary Vireo
58. Yellow-throated Vireo
59. Warbling Vireo
60. Red-eyed Vireo
61. Nashville Warbler
62. Yellow Warbler
63. Chestnut-sided Warbler
64. Black-throated Blue Warbler
65. Yellow-rumped Warbler
66. Black-throated Green Warbler
67. Blackburnian Warbler
68. Pine Warbler
69. Black-and-white Warbler
70. American Redstart
71. Ovenbird
72. Common Yellowthroat
73. Canada Warbler
74. Scarlet Tanager
75. Northern Cardinal
76. Rose-breasted Grosbeak
77. Indigo Bunting
78. Rufous-sided Towhee
79. Chipping Sparrow
80. Song Sparrow
81. Swamp Sparrow
82. Dark-eyed Junco
83. Bobolink
84. Red-winged Blackbird
85. Common Grackle
86. Brown-headed Cowbird
87. Baltimore Oriole
88. Purple Finch
89. House Finch
90. American Goldfinch

91. House Sparrow
92. Red Bellied Woodpecker

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### 2004 HENRY POTTER SCHOLARSHIP STUDENTS

This year's scholarship students were:

1) Eva Dannenberg, who lives in Huntington, VT. "My principal interests in botany have changed since I last came to a meeting of the Vermont Botanical and Bird Club [in 2002]. I'm now intrigued by ecology, ecosystems, and genetics. I'm also fascinated by the Orchidaceae and Fumariaceae. The genus *Dicentra*, in the latter family, seems especially curious, and I've recently become interested in investigating the relationships between Squirrel-corn, *Dicentra canadensis*, and Dutchman's Breeches, *Dicentra cucullaria*, as a friend of mine and I have discovered a population of a very strange plant. This plant seems to be either a hybrid between Squirrel-corn and Dutchman's Breeches or a very odd form of one of these species."

2) Dan Wells, a student in the Sustainable Forestry Program within the Field Naturalist Program at the University of Vermont described his course of study. He is conducting research to look at how forests age over time. He is looking at how historically cleared lands and former pastures in Vermont at sites that range from 50 to 150 years since agricultural abandonment have changed and how they might look in the future. He is interested in general natural history ("just about anything will fascinate me"). He is also an avid photographer.

[Two other very qualified students were accepted to the Scholarship Program, but unfortunately could not attend due to last minute summer job commitments. For more discussion about the Club's Scholarship efforts, see the Saturday Annual Meeting discussions.]

## 2004 PLANT LIST

Sites: 1=Herrick's Cove  
 2 = Allen Brothers Marsh  
 3 = Walpole Seep and Picnic Area  
 4 = Black Mountain  
 5 = Lily Pond, Vernon  
 6 = Fox Hill  
 7 = Vernon Dam  
 8 = Vernon Black Gum Swamp

Scientific Name	Common Name	Site
<i>Acer pensylvanicum</i>	Moose Maple	4
<i>Acer rubrum</i>	Red Maple	1, 5, 6, 8
<i>Acer saccharinum</i>	Silver Maple	1, 2, 5, 7
<i>Acer saccharum</i>	Sugar Maple	1
<i>Actaea pachypoda</i>	Doll's Eyes	4
<i>Alnus incana</i>	Speckled Alder	1,2
<i>Amelanchier</i> sp.	Shadbush	4, 6
<i>Amphicarpa bracteata</i>	Hog-Peanut	7
<i>Andreaea rupestris</i>	Black Rock Moss	4
<i>Apios americana</i>	Ground Nut	2, 5
<i>Arabis glabra</i>	Tower Mustard	5
<i>Aralia nudicaulis</i>	Wild Sarsaparilla	4
<i>Arisaema triphyllum</i>	Jack-in-the-Pulpit	1, 7
<i>Aronia melanocarpa</i>	Black Chokeberry	4
<i>Atrichum angustatum</i>	Slender Catherinea Moss	5
<i>Aulacomnium palustre</i>	Marsh Thread Moss	8
<i>Bazzania trilobata</i>	Three-Lobed Bazzania (liverwort)	8
<i>Berberis</i> sp.	Barberry	7
<i>Betula lenta</i>	Black Birch	5, 6
<i>Betula papyrifera</i>	Paper Birch	6
<i>Betula populifolia</i>	Grey Birch	1
<i>Brasenia schreberi</i>	Water Shield	2
<i>Calypogeja fissa</i> ssp. <i>neogaea</i>	Tooth Sack Liverwort	4
<i>Carex lurida</i>	Lurid Sedge	3
<i>Carex</i> cf. <i>radiata</i>	a sedge	3
<i>Carex</i> spp.	Sedge	2
<i>Carex sprengelii</i>	Sprengel's Sedge	7
<i>Carya cordiformis</i>	Bitternut Hickory	7
<i>Carya ovata</i>	Shagbark Hickory	5
<i>Castanea dentata</i>	Chestnut	6
<i>Celastrus orbiculatus</i>	Asiatic Bittersweet	7
<i>Chamaedaphne calyculata</i>	Leatherleaf	6
<i>Clintonia borealis</i>	Bluebead Lily	8
<i>Comptonia peregrina</i>	Sweet Fern	3, 6
<i>Coptis trifolia</i>	Goldthread	8

<i>Cornus alternifolia</i>	Alternate-Leaved Dogwood	4
<i>Corylus cornuta</i>	Beaked Hazelnut	6
<i>Cypripedium acaule</i>	Pink Ladyslipper	4
<i>Dactylis glomerata</i>	Orchard Grass	5
<i>Dennstaedtia punctilobula</i>	Hay-Scented Fern	8
<i>Deschampsia flexuosa</i>	Hairgrass	4
<i>Desmodium</i> sp.	Tick-Trefoil	2
<i>Dichelyma capillaceum</i>	Hair Claw Moss	5
<i>Diervilla lonicera</i>	Bush Honeysuckle	4
<i>Diphyscium foliosum</i>	Grain of Wheat Moss	4
<i>Diplophyllum apiculatum</i>	Folded Liverwort	4
<i>Drosera rotundifolia</i>	Round-leaved Sundew	3
<i>Dulichium arundinaceum</i>	Three-Way Sedge	2
<i>Eleocharis</i> sp.	Spike-Rush	2
<i>Epifagus virginiana</i>	Beechdrops	8
<i>Epigaea repens</i>	Trailing Arbutus	4, 8
<i>Equisetum hyemale</i>	Common Scouring Rush	1, 3
<i>Equisetum</i> sp.	Scouring Rush	7
<i>Eupatorium rugosum</i>	White Snakeroot	7
<i>Fagus grandifolia</i>	American Beech	4, 8
<i>Fraxinus americana</i>	White Ash	4, 5
<i>Gaultheria procumbens</i>	Wintergreen	6, 8
<i>Gaylussacia baccata</i>	Black Huckleberry	4, 6
<i>Glechoma hederacea</i>	Ground Ivy	7
<i>Hamamelis virginiana</i>	Witch Hazel	4, 6, 8
<i>Houstonia caerulea</i>	Bluets	3
<i>Ilex verticillata</i>	Winterberry	8
<i>Iris versicolor</i>	Blue Flag	2
<i>Isotria verticillata</i>	Whorled Pogonia	6
<i>Juncus</i> sp.	Rush	2
<i>Kalmia angustifolia</i>	Sheep Laurel	6
<i>Kalmia latifolia</i>	Mountain Laurel	4, 8
<i>Laportea canadensis</i>	Wood Nettle	7
<i>Lemna</i> sp.	Duckweed	2
<i>Leucobrym glaucum</i>	White Cushion Moss	4
<i>Lindera benzoin</i>	Spicebush	5
<i>Lysimachia ciliata</i>	Fringed Loosestrife	7
<i>Maianthemum canadense</i>	Starflower	4
<i>Matteucia struthiopteris</i>	Ostrich Fern	7
<i>Medeola virginiana</i>	Indian Cucumber Root	8
<i>Mitchella repens</i>	Partridge Berry	4, 5, 8
<i>Nemopanthus mucronatus</i>	Mountain Holly	6
<i>Nowellia curvifolia</i>	Nowellia (liverwort)	8
<i>Nymphaea odorata</i>	Water Lily	2
<i>Nyssa sylvatica</i>	Black Gum	3, 5, 8
<i>Onoclea sensibilis</i>	Sensitive Fern	1, 2, 5
<i>Osmunda cinnamomea</i>	Cinnamon Fern	1, 6, 8
<i>Osmunda regalis</i>	Royal Fern	3, 8

<i>Oxalis</i> sp.	Sorrel	7
<i>Parthenocissus quinquefolia</i>	Virginia Creeper	1, 2
<i>Phillinotis fontana</i>	Fountain Apple Moss	3
<i>Pinus rigida</i>	Pitch Pine	4
<i>Pinus strobus</i>	White Pine	1, 4, 6
<i>Pleurozium schreberi</i>	Big Red Stem (moss)	4
<i>Polygonatum biflorum</i> var. <i>commutatum</i>	Giant Solomon's Seal	7
<i>Polygonum cuspidatum</i>	Japanese Knotweed	1
<i>Polygonum sachalinense</i>	Giant Knotweed	1
<i>Polytrichum juniperinum</i>	Juniper Haircap Moss	4
<i>Populus tremuloides</i>	Trembling Aspen	1
<i>Prunus pensylvanica</i>	Pin Cherry	4
<i>Prunus serotina</i>	Black Cherry	5
<i>Pteridium aquilinum</i>	Bracken Fern	4, 8
<i>Ptilidium pulcherrimum</i>	Palmate Liverwort	4
<i>Ptilium crista-castrensis</i>	Knight's Plume Moss	8
<i>Quercus alba</i>	White Oak	4, 6
<i>Quercus coccinea</i>	Scarlet Oak	6
<i>Quercus ilicifolia</i>	Bear Oak	4
<i>Quercus prinus</i>	Chestnut Oak	6
<i>Quercus rubra</i>	Red Oak	1, 4, 6
<i>Quercus velutina</i>	Black Oak	3, 5, 6
<i>Rhamnus</i> cf. <i>frangula</i>	European Alder-Buckthorn	2
<i>Rhus copallina</i>	Winged Sumac	4
<i>Rhus radicans</i>	Poison Ivy	3
<i>Robinia pseudo-acacia</i>	Black Locust	1
<i>Rosa</i> sp.	Rose	2
<i>Salix</i> sp.	Willow	2
<i>Sambucus racemosa</i>	Red-berried Elderberry	2
<i>Sassafras albidum</i>	Sassafras	6
<i>Schizachne purpurascens</i>	Purple Melic Grass	4
<i>Scirpus</i> sp.	Bulrush	3
<i>Senecio pauperculus</i>	Balsam Ragwort	3
<i>Sisymbrium altissimum</i>	Tumble Mustard	7
<i>Smilacina racemosa</i>	False Solomon's Seal	4
<i>Sphagnum girgensohnii</i>	Girgensohn's Peat Moss	8
<i>Sphagnum palustre</i>	Blunt-leaved Peat Moss	8
<i>Thelia asprella</i>	Rough Scale Moss	4, 6
<i>Thelypteris novaeboracensis</i>	New York Fern	8
<i>Thelypteris palustris</i>	Marsh Fern	2,5
<i>Thelypteris simulata</i>	Massachusetts Fern	8
<i>Tofieldia glutinosa</i>	Sticky Tofieldia	3
<i>Trillium erectum</i>	Wake-Robin	8
<i>Tsuga canadensis</i>	Eastern Hemlock	4, 6, 8
<i>Typha latifolia</i>	Cattail	1, 2
<i>Ulmus americana</i>	American Elm	5
<i>Ulmus rubra</i>	Slippery Elm	2, 7
<i>Uvularia sessilifolia</i>	Wild Oats	8

<i>Vaccinium angustifolium</i>	Lowbush Blueberry	1, 4, 6, 8
<i>Vaccinium corymbosum</i>	Highbush Blueberry	6
<i>Vaccinium pallidum</i>	Hillside Blueberry	6
<i>Viburnum acerifolium</i>	Maple-leaved Viburnum	6
<i>Viburnum alnifolium</i>	Hobble-Bush	8
<i>Viburnum dentatum</i>	Southern Arrowwood	2
<i>Vitis</i> sp.	Grape	2, 5
<i>Zizia aurea</i>	Golden Alexanders	7