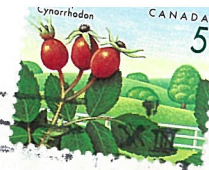


HALIFAX FIELD NATURALISTS' NEWSLETTER

September to November 1992

No. 68



29 Showy Lady's-slipper, Moccasin-flower (*Cypripedium reginae*). East Midwest.



Return address:
Halifax Field Naturalists
c/o Nova Scotia Museum
1747 Summer Street
Halifax, NS B3H 3A6

HALIFAX • FIELD • NATURALISTS

Objectives To encourage a greater appreciation and understanding of Nova Scotia's natural history, both within the membership of HFN and in the public at large. To represent the interests of naturalists by encouraging the conservation of Nova Scotia's natural resources.

Meetings On the first Thursday of every month at 8:00 pm in the auditorium of the Nova Scotia Museum, 1747 Summer Street, Halifax.

Field Trips Are held at least once a month, **and it is appreciated if those travelling in someone else's car share the cost of the gas.**

Membership Is open to anyone interested in the natural history of Nova Scotia. Memberships are available at any meeting of the society, or by writing to: Membership Chairman, Halifax Field Naturalists, c/o NS Museum. New memberships starting from September 1 will be valid until the end of the following membership year. The regular membership year is from January 1 to December 31. Members receive the HFN Newsletter and notices of all meetings, field trips, and special programmes. The fees are as follows:

Individual	\$10.00 per year
Family	\$15.00 per year
Supporting	\$20.00 per year
FNSN (opt.)	\$5.00 per year

Executive 1991

President	Colin Stewart	466-7168
Treasurer	Shirley van Nostrand	445-2776
Secretary	Steven Saunders	445-4943
Past President	Michael Downing	823-2081

Directors Lesley Butters, Tony Lock, Bob McDonald, Bernice Moores, Mary Primrose, Steven Saunders, Clarence Stevens II, Stephen Ward

Mailing Address Halifax Field Naturalists
c/o Nova Scotia Museum
1747 Summer St., Halifax
Nova Scotia B3H 3A6

Committees

Newsletter		
Editor	Ursula Grigg	455-8160
Conservation Issues	Colin Stewart	466-7168
	Clarence Stevens II	835-0098
Publicity/Membership	Steven Saunders	1-624-9361

HFN is incorporated under the Nova Scotia Societies Act and is a member organization of the Canadian Nature Federation. It is registered for federal income tax purposes. Official receipts will be issued for individual and corporate gifts. The HFN Newsletter is printed with the assistance of the Nova Scotia Museum.

Illustrations This Issue (No. 68): — tide table courtesy Dept. of Transport; some insects from Richard Pimentel's "Invertebrate Identification"; all other illustrations from copyright-free sources.

HFN NEWS AND ANNOUNCEMENTS

EDITORIAL

This is the Field edition, with all the expeditions of the year in exhilarating detail; the manuscripts have been rolling in - thank you, all writers of field trips and notes! It is wonderful to have so many entries that some of them had to be held for next time! These contributions focus the Society's activities on to the enjoyment of natural history; obviously many people had a banner year in the field.

Congratulations to Janet Weeks, who has accomplished a rite of passage required of all chilly northern naturalists, and who did it on a winter Sewer Stroll!

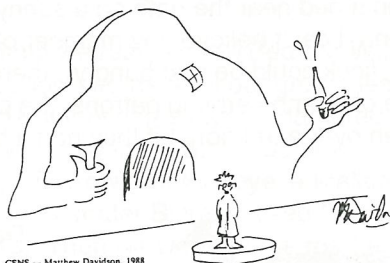
It's been a good summer, with an increase in songbirds, and plenty of insects. Mosquitoes were blessedly few in the city, perhaps because of cold spring and fall weather. The trees were leafier than for the last couple of years, showed magnificent fall colour, and held on well into November. Some householders did not appreciate their extended bounty.

This really is the last of the late and lazy Newsletters; expect them in future at the solstices and equinoxes, and with the Almanac of natural and human events restored. And thanks to the Directors, for their help with production over the past year.

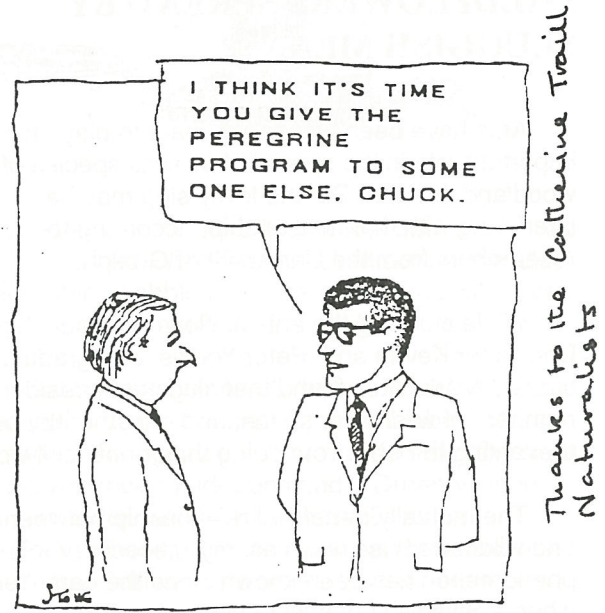
The programme committee, which collects ideas for speakers and field trips, arranges the details, and introduces guests, needs members; it's fun to do, just needs a methodical mind! And, while we're asking, is there anyone who uses PageMaker, preferably on the Mac, who could act as back-up layout editor for the Newsletter?

Ursula Grigg

Another perspective.....



CSNS - Matthew Davidson, 1988
Bacterium culturing a scientist
 (Canadian Science News)



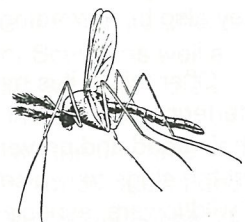
!TIME TO RENEW!

HFN memberships expire at the end of the year except for new memberships dating from September 1st 1992) Please send renewals to the Treasurer, Shirley van Nostrand, at the Museum, or hand them to her at a meeting.



NEW AND RETURNING MEMBERS

- Brian and Andromeda Lax
- Cathy Strugnell
- Jane Carlisle
- David Harley
- Elizabeth Learmouth
- Anne Mills



CONTENTS

Special Articles p. 4
 Natural History p. 10
 Tide Table: July, August, September p. 11



Barred owl

KEJIMKUJIK WINTER NATURAL HISTORY WALK

DATE: SUNDAY, FEBRUARY 2, 1992
PLACE: KEJIMKUJIK NATIONAL PARK
LEADER: PETER HOPE, PARK
NATURALIST
WEATHER: COLD AND WINDY, WITH
SNOW
PARTICIPANTS: 2

It was the worst winter storm of the season and only two HFN members participated on the Kejimkujik National Park winter field trip. 35 cm of snow and high winds kept most naturalists at home. While bad weather keeps humans home it opens up opportunities to see wildlife. On the way to the park we had seen a mink jumping up and down snowbanks on the side of highway 325 in Lunenburg County near Queens County.

Park Naturalist Peter Hope took us to one of the Pine Martins caged for planned re-introduction to the park. The Pine Martin, also known as the Sable, is highly valued in the fur trade and a very easy animal to trap. The fur is fox red with dark feet, different from the closely related and similar sized mink. Mink are slightly larger and slinkier animal with coats that are dark all over. Pine Martin have been extirpated from mainland Nova Scotia. Live trapped in northern New Brunswick by Fundy National Park wardens, some 107 Pine Martins have been brought to Kejimkujik for re-introduction.

The martin we saw was caged for quarantine, as the park officials are very wary of the possible introduction of rabies to Nova Scotia from New Brunswick. Kejimkujik is an idea habitat for the martin, which prefers mature coniferous woods. As we observed the martin, a Grey Jay came down to within 5 feet

of our heads, begging for the scraps of meat he thought we had for the martin.

We took a cross country ski trip to Big Dam Lake through mature pine and spruce woods. The undergrowth was mainly *Kalmia*, Lambkill, with the occasional tract of fragrant Sweet Fern. Frequent troops of Red-breasted Nuthatches, Black-capped and Boreal Chickadees checked on our progress. Kinglets were heard but not seen. A flock of 7 or 8 Evening Grosbeaks conversed in the top of a pine tree, apparently an unusual sight for deep in Keji woods. Also unusual for winter at Keji were the Herring Gulls which flew overhead at one point, perhaps driven off course by the storm.

We saw porcupine tracks and located a den. Weasel, deer, grouse and various rodent tracks were recorded in the fresh snow as was the story of a mink chasing a hare. We saw where the deer had been browsing on lichens and saplings.

We thought we were brave visiting Keji on such a stormy winter day. But on the ski out we passed a couple snowshoeing into the woods for a night of sub-zero camping! Brrrrr!

We thoroughly enjoyed the trip. We would like to thank Peter Hope for taking us out. We would also like to thank an obliging Barred Owl perched on a telephone wire who said good bye to us as we left the park. He let us have a good long look at his handsome features.

Steve Saunders



ENVIRONMENT WEEK - RIVER CLEAN UP BY CANOE

DATE SATURDAY, JUNE 6, 1992
PLACE: MUSQUODOQUIT RIVER
LEADER: STEVE COOK
WEATHER: OVERCAST AND COOL
PARTICIPANTS: 2 HFNERS PLUS OTHERS



Together with Canoe Nova Scotia and the Musquodoboit River Association, HFN assisted in the clean up of the riverside. Unfortunately only the trip leader and the program representative participated from our club.

The canoe requirement may have deterred some members. But in the end, we did all the clean up on foot between the river side and the road. Once I started to collect the garbage, I found it incredible just how quickly I could fill a garbage bag! In only 10 yards, the bag was full! In the country! It did feel good to be doing something positive out in the fresh air.

Think of it though, if we do care for our environment, and I am sure we do, we should support more field trips of this kind. We should be pro-active about the natural environment. Show the world that we care by our actions!

Next year we'll organize a similar trip in a way to make it easier for you to contribute.



Steve Saunders

Showy Lady's-slipper,
(*Cypripedium reginae*).

LADY SLIPPER ORCHIDS OF NOVA SCOTIA

DATE: SUNDAY, 28 JUNE 1992

PLACE: SMILEY'S PROVINCIAL PARK, HANTS COUNTY

LEADERS: STEVE SAUNDERS, RICK BALLARD

WEATHER: MID-60S, OVERCAST, WITH THREAT OF RAIN

PARTICIPANTS: 30 ADULTS, TWO CHILDREN

Steve Saunders of the Orchid Society of Nova Scotia began our outing by explaining some of the botanical characteristics of orchids, and telling us about those to be found in Nova Scotia. We squelched our way, single file, into a sphagnum-rich, moist woods, to look at the spectacular Showy Lady Slippers, *Cypripedium reginae*. Those in shady areas were just opening, but in clearings the three-foot high plants had well-developed blossoms with a deep pink colour and the fragrance of vanilla. These were blooming together with Bunchberry, Labrador Tea, Lambkill, Twin-flower and Water Avens. The mixed woods of Larch, maple and spruce, laden with Old Man's Beard, was home to singing Ovenbirds, White Throated Sparrows, Parula Warblers, Flickers and

Hermit Thrushes, as well as squirrels..

Rick Ballard of HFN then led a walk to another part of the park. Near the parking lot, we saw Blue Cohosh plants, Nodding Trillium (in fruit), Sweet Fern, Bladder Campion, Fleabane, orange and yellow Hawkweed and Round-leaved Dogwood. The trail led through a mixed forest of Hemlock, Beech, birch, Large-toothed Aspen and Fir, skirting the sink-holes that are common there. Rick pointed out a great variety of interesting ferns, including the Sensitive, Beech, Oak, Lady, Interrupted, Christmas, Wood and New York Ferns, as well as several kinds of club-moss. Other plants included the Blue-bead Lily, Sarsaparilla, and Wood Sorrel (in bloom). With a sharp bit of spotting, Rick led us to the Northern Coral-root, *Corallorhiza trifida*., the least conspicuous orchid of the day. This small leafless plant with green flowers was growing beneath some Fir trees.

We returned to the picnic area for lunch, ducking under the shelters during a sudden heavy shower. When the sun came out again we drove a short way beyond the park in search of more orchids. The sight of Yellow Lady Slippers, *Cypripedium calceolus*, along the rocky crest of a hill brought us to a sudden halt at the side of a road, hedged in on both sides by outcroppings of gypsum. Photographers scaled the crumbling hill in quest of the perfect shot. Passing motorists slowed their cars and craned their necks to follow our gaze.

We had a better view of these orchids at the next site, which was a disused gypsum quarry at the end of an old wooded lane. We startled a Deer Mouse at the entrance, and a Garter Snake in the grass. Here our pleasure in seeing so many Yellow Lady Slippers was somewhat diminished by the presence of thick clouds of mosquitoes.

Finally, we roamed through the gypsum works, where Gypsum Ragwort, *Senecio pauperculus*, flourished in the chalky waste. We hoped to see the elusive Bird's Eye Primrose, *Primula mistassinica*, but could not find it. This tiny blue flower is mentioned by John Erskine in his essay "Plaster Rock", in Forest and Field. At the bottom of a sink-hole, we found a



Small Purple Fringed Orchid
(*Habenaria psycodes*).

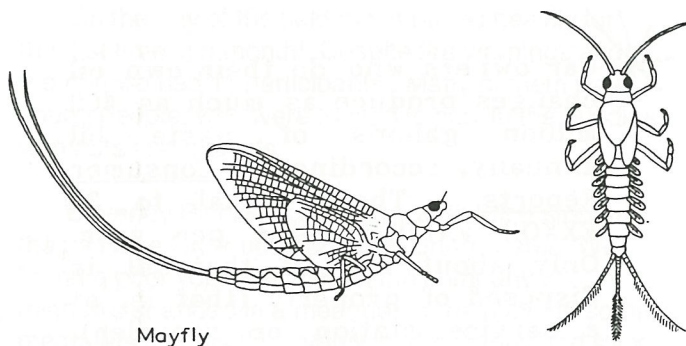
NATURAL HISTORY

MALTA IN SPRING

For a short spell of two or three weeks in April, dry, dusty, golden-hued Malta becomes a mass of waving colour as the spring flowers bloom among the grain and the grass of pastures. Most of the flowers are similar to those in North America but somewhat larger. The one that struck me most of all was a deep ruby red rounded cluster of bloom about 2 or 3 inches deep. No chance to get near enough when we were being driven through the agricultural areas but one member of our group heard me comment on the rich colour, so at one spot where we stopped to investigate "Calypso's Cave", she gallantly climbed over the dry stone wall and brought me back a specimen. The Maltese guide, when asked, had said that the plants were simply winter forage for the Island's many goats. Another person called them "Maltese ice plants" (don't ask me why). The lovely specimen on investigation turned out to be a clover: Italian or crimson clover (*Trifolium incarnatum*). "In two weeks" said the guide, "all the flowers will be gone." The winter rains bring on the spring growth before being overtaken by Malta's dry, windy summer.

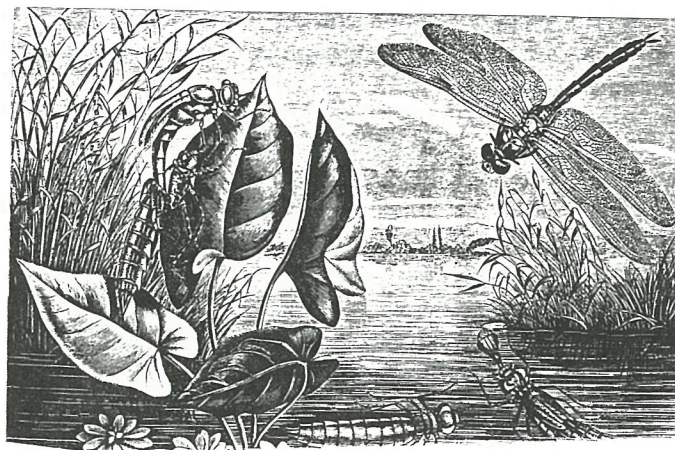
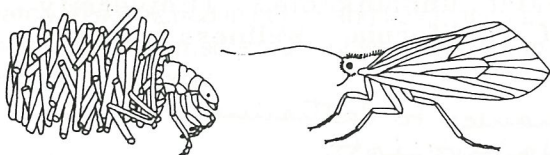
Another beautiful Maltese spring special is the Judas tree with its clusters of red blossoms, which bloom around Easter time, along its bare branches - Judas is held to have hanged himself on this species of tree and, of course, the red flower clusters are 'the blood of Christ.'

Doris Butters

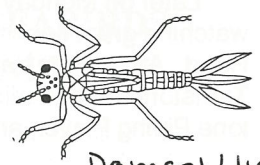


Mayfly

Caddisflies



Dragonfly



Damselfly

BOOK REVIEW: "THE HOME PLANET"; KEVIN KELLY (ED)

The front cover of a book I discovered recently tells a great deal about the fragility of our world when it shows "a thin seam of dark-blue light - our atmosphere". These are the words of a cosmonaut, from a book called "The Home Planet", which shows some of the beautiful photographs that have been taken during the many missions of the Space Explorers. Included with these photographs are some of the fascinating observations, thought and stories of the astronauts and cosmonauts who have bravely agreed to be shot into space to explore the unknown, and who have returned safely to earth.

Here are two more excerpts:

"Within seconds of attaining Earth orbit every cosmonaut without exception, be they a dry, reserved flight engineer or a more emotional pilot, uttered the same sort of confused expression of delight and wonder..... The emotional outbursts lasted forty-two seconds on average."

"From space I saw earth indescribably beautiful with the scars of national boundaries gone."

Kevin W. Kelly conceived and edited "The Home Planet" for the Association of Space Explorers; Jacques-Ives Cousteau provided a foreword. The price is \$29.95, soft cover.

Mary Primrose

TABLE DES MARÉES

HALIFAX HNA Z+

1992

OCTOBER-OCTOBRE

NOVEMBER-NOVEMBRE

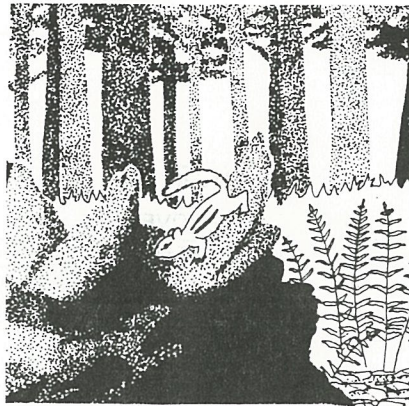
DECEMBER-DECEMBRE

Day	Time	Ht./ft.	Ht./m	Jour	Heure	H./pi	H./m	Day	Time	Ht./ft.	Ht./m	Jour	Heure	H./pi	H./m	Day	Time	Ht./ft.	Ht./m	Jour	Heure	H./pi	H./m	
1	0545	1.5	.5	16	0430	1.8	.5	1	0015	5.2	1.6	16	0640	2.2	.7	1	0030	5.4	1.6	16	0030	6.1	1.9	
	1110	5.8	1.8		1030	5.7	1.7		0715	2.2	.7		1155	5.6	1.7		0720	2.3	.7		0735	1.8	.5	
TH	1820	.9	.3	FR	1720	1.1	.3	SU	1225	5.1	1.6	MO	1910	1.0	.3	TU	1240	5.1	1.6	WE	1240	5.6	1.7	
JE	2350	5.3	1.6	VE	2310	5.2	1.6	DI	1930	1.5	.5	LU				MA	1920	1.8	.5	ME	1945	1.0	.3	
2	0645	1.8	.5	17	0525	2.1	.6	2	0105	5.1	1.6	17	0045	5.6	1.7	2	0115	5.3	1.6	17	0125	6.0	1.8	
	1200	5.4	1.6		1115	5.6	1.7		0810	2.3	.7		0750	2.1	.6		0805	2.2	.7		0835	1.7	.5	
FR	1920	1.2	.4	SA	1820	1.2	.4	MO	1320	4.9	1.5	TU	1255	5.4	1.6	WE	1335	4.9	1.5	TH	1345	5.3	1.6	
VE				SA				LU	2020	1.7	.5	MA	2005	1.1	.3	ME	2005	2.0	.6	JE	2040	1.2	.4	
3	0040	4.9	1.5	18	0000	5.1	1.6	3	0205	5.0	1.5	18	0150	5.7	1.7	3	0205	5.3	1.6	18	0230	5.9	1.8	
	0745	2.0	.6		0645	2.2	.7		0855	2.2	.7		0850	1.9	.6		0855	2.1	.6		0935	1.5	.5	
SA	1255	5.1	1.6	SU	1205	5.5	1.7	TU	1425	4.8	1.5	WE	1400	5.3	1.6	TH	1435	4.7	1.4	FR	1455	5.1	1.6	
SA	2015	1.3	.4	DI	1930	1.2	.4	MA	2105	1.8	.5	ME	2105	1.1	.3	JE	2050	2.1	.6	VE	2140	1.4	.4	
4	0140	4.7	1.4	19	0100	5.1	1.6	4	0305	5.1	1.6	19	0300	5.8	1.8	4	0305	5.3	1.6	19	0335	6.0	1.8	
	0845	2.1	.6		0755	2.2	.7		0945	2.1	.6		0950	1.6	.5		0945	1.9	.6		1035	1.2	.4	
SU	1355	4.9	1.5	MO	1305	5.3	1.6	WE	1530	4.8	1.5	TH	1520	5.3	1.6	FR	1540	4.7	1.4	SA	1610	5.2	1.6	
DI	2110	1.4	.4	LU	2030	1.1	.3	ME	2150	1.9	.6	JE	2200	1.2	.4	VE	2135	2.2	.7	SA	2245	1.6	.5	
5	0250	4.7	1.4	20	0210	5.1	1.6	5	0405	5.2	1.6	20	0405	6.0	1.8	5	0355	5.4	1.6	20	0435	6.0	1.8	
	0935	2.1	.6		0905	2.1	.6		1030	1.9	.6		1050	1.3	.4		1035	1.7	.5		1135	1.0	.3	
MO	1505	4.8	1.5	TU	1415	5.3	1.6	TH	1635	4.9	1.5	FR	1630	5.4	1.6	SA	1640	4.8	1.5	SU	1715	5.3	1.6	
LU	2200	1.5	.5	MA	2125	1.0	.3	JE	2235	1.9	.6	VE	2300	1.2	.4	SA	2230	2.2	.7	DI	2345	1.6	.5	
6	0405	4.8	1.5	21	0330	5.4	1.6	6	0455	5.5	1.7	21	0500	6.3	1.9	6	0445	5.6	1.7	21	0530	6.1	1.9	
	1025	2.1	.6		1005	1.8	.5		1115	1.7	.5		1150	.9	.3		1125	1.5	.5		1225	.7	.2	
TU	1615	4.9	1.5	WE	1535	5.4	1.6	FR	1725	5.1	1.6	SA	1730	5.6	1.7	SU	1730	5.0	1.5	MO	1810	5.5	1.7	
MA	2245	1.5	.5	ME	2225	.9	.3	VE	2320	1.9	.6	SA				DI	2320	2.1	.6	LU				
7	0500	5.1	1.6	22	0435	5.8	1.8	7	0535	5.7	1.7	22	0000	1.2	.4	7	0530	5.8	1.8	22	0040	1.5	.5	
	1115	1.9	.6		1105	1.5	.5		1200	1.4	.4		0550	6.5	2.0		1215	1.2	.4		0620	6.2	1.9	
WE	1710	5.1	1.6	TH	1650	5.6	1.7	SA	1805	5.2	1.6	SU	1240	6.2	2.0	MO	1815	5.2	1.6	TU	1315	5.2	1.6	
ME	2330	1.5	.5	JE	2320	.8	.2	SA			DI	1825	5.8	1.8	LU			MA	1900	5.6	1.7			
8	0540	5.4	1.6	23	0530	6.2	1.9	8	0005	1.8	.5	23	0055	1.2	.4	8	0015	1.9	.6	23	0130	1.5	.5	
	1200	1.6	.5		1205	1.0	.3		0610	5.9	1.8		0635	6.6	2.0		0615	6.0	1.8		0705	6.2	1.9	
TH	1800	5.3	1.6	FR	1745	5.9	1.8	SU	1245	1.1	.3	MO	1330	.4	.1	TU	1300	.9	.3	WE	1400	.5	.2	
JE				VE				DI	1845	5.4	1.6	LU	1915	5.9	1.8	MA	1855	5.4	1.6	ME	1950	5.8	1.8	
9	0010	1.5	.5	24	0015	.7	.2	9	0045	1.7	.5	24	0145	1.2	.4	9	0100	1.7	.5	24	0210	1.5	.5	
	0620	5.6	1.7		0615	6.6	2.0		0650	6.0	1.8		0720	6.5	2.0		0700	6.2	1.9		0750	6.2	1.9	
FR	1240	1.4	.4	SA	1255	.6	.2	MO	1325	.9	.3	TU	1415	.3	.1	WE	1340	.7	.2	TH	1440	.5	.2	
VE	1840	5.4	1.6	SA	1840	6.1	1.9	LU	1925	5.5	1.7	MA	2000	6.0	1.8	ME	1940	5.6	1.7	JE	2030	5.8	1.8	
10	0045	1.4	.4	25	0110	.6	.2	10	0125	1.6	.5	25	0230	1.2	.4	10	0150	1.6	.5	25	0250	1.5	.5	
	0655	5.8	1.8		0700	6.8	2.1		0725	6.1	1.9		0810	6.4	2.0		0740	6.3	1.9		0835	6.2	1.9	
SA	1315	1.2	.4	SU	1345	.3	.1	TU	1405	.8	.2	WE	1500	.3	.1	TH	1425	.5	.2	FR	1515	.6	.2	
SA	1915	5.5	1.7	DI	1930	6.2	1.9	MA	2000	5.5	1.7	ME	2045	6.0	1.8	JE	2025	5.8	1.8	VE	2115	5.9	1.8	
11	0120	1.4	.4	26	0200	.7	.2	11	0205	1.5	.5	26	0310	1.4	.4	11	0235	1.5	.5	26	0330	1.7	.5	
	0725	5.9	1.8		0745	6.8	2.1		0805	6.1	1.9		0855	6.2	1.9		0825	6.4	2.0		0920	6.1	1.9	
SU	1350	1.0	.3	MO	1435	.2	.1	WE	1440	.7	.2	TH	1540	.5	.2	FR	1510	.4	.1	SA	1555	.8	.2	
DI	1950	5.5	1.7	LU	2015	6.2	1.9	ME	2040	5.6	1.7	JE	2135	5.9	1.8	VE	2110	5.9	1.8	SA	2155	5.8	1.8	
12	0155	1.4	.4	27	0245	.8	.2	12	0250	1.5	.5	27	0355	1.7	.5	12	0320	1.5	.5	27	0405	1.8	.5	
	0800	6.0	1.8		0830	6.6	2.0		0845	6.1	1.9		0940	6.0	1.8		0915	6.4	2.0		1000	5.9	1.8	
MO	1425	.9	.3	TU	1520	.2	.1	TH	1525	.7	.2	FR	1620	.8	.2	SA	1555	.4	.1	SU	1630	1.1	.3	
LU	2030	5.5	1.7	MA	2105	6.1	1.9	JE	2125	5.6	1.7	VE	2215	5.8	1.8	SA	2200	6.1	1.9	DI	2235	5.8	1.8	
13	0230	1.4	.4	28	0335	1.1	.3	13	0330	1.7	.5	28	0440	1.9	.6	13	0415	1.7	.5	28	0445	2.0	.6	
	0835	6.0	1.8		0915	6.4	2.0		0930	6.1	1.9		1025	5.8	1.8		1000	6.3	1.9		1040	5.7	1.7	
TU	1500	.9	.3	WE	1605	.4	.1	FR	1610	.7	.2	SA	1705	1.1	.3	SU	1650	.5	.2	MO	1705	1.3	.4	
MA	2105	5.4	1.6	ME	2150	5.9	1.8	VE	2210	5.6	1.7	SA	2300	5.6	1.7	DI	2250	6.1	1.9	LU	2310	5.7	1.7	
14	0305	1.4	.4	29	0420	1.4	.4	14	0420	1.8	.5	29	0530	2.1	.6	14	0520	1.8	.5	29	0530	2.0	.6	
	0910	5.9	1.8		1000	6.1	1.9		1015	6.0	1.8		1105	5.6	1.7		1050	6.1	1.9		1120	5.5	1.7	
WE	1540	.9	.3	TH	1650	.7	.2	SA	1705	.8	.2	SU	1750	1.3	.4	MO	1745	.6	.2	TU	1740	1.5	.5	
ME	2140	5.4	1.6	JE	2235	5.7	1.7	SA	2300	5.6	1.7	DI	2345	5.5	1.7	LU	2340	6.1	1.9	MA	2350	5.6	1.7	
15	0345	1.6	.5	30	0515	1.8	.5	15	0525	2.1	.6	30	0625	2.2	.7	15	0625	1.9	.6	30	0620	2.1	.6	
	0950	5.8	1.8		1045	5.7	1.7		1100	5.8	1.8		1150	5.3	1.6		1145	5.9	1.8		1205	5.2	1.6	
TH	1625	1.0	.3	FR	1745	1.0	.3	SU	1805	.9	.3	MO	1835	1.6	.5	TU	1845	.8	.2	WE	1825	1.8	.5	
JE	2225	5.3	1.6	VE	2325	5.4	1.6	DI	2350	5.6	1.7	LU				MA				ME				
				31	0615	2.0	.6													31	0030	5.5	1.7	
					1135	5.4	1.6														0710	2.1	.6	
				SA	1840	1.3	.4														TH	1250	4.9	1.5
				SA																	JE	1905	2.0	.6

Wildlife Field Note: The Chipmunk

Capable of transforming bird feeders into fast-food outlets, chipmunks are noted for stuffing large quantities of food into cheek pouches. Records for individual animals include: 70 sunflower seeds in one case, six chestnuts (three per side) in another, 13 prune pits, 32 beechnuts and 31 kernels of corn. Their carrying ability and hoarding habit result in well-stocked larders for the winter months.

Several readers inquired about chipmunk houses following the nest box feature in our winter issue. Red squirrels use nest boxes; chipmunks dig underground dens. New burrows tend to be simple, with one chamber and one or two shallow tunnel entrances. Older burrows are more complex, as deep as three feet (one metres) underground, and up to thirty feet (nine metres) in length. One chamber is a "bathroom"; other rooms are excavated for food storage and sleeping. Excess dirt is removed through a special "work hole" that is sealed up afterward. This tactic leaves no fresh mound of earth to betray the presence of the entrance hole.



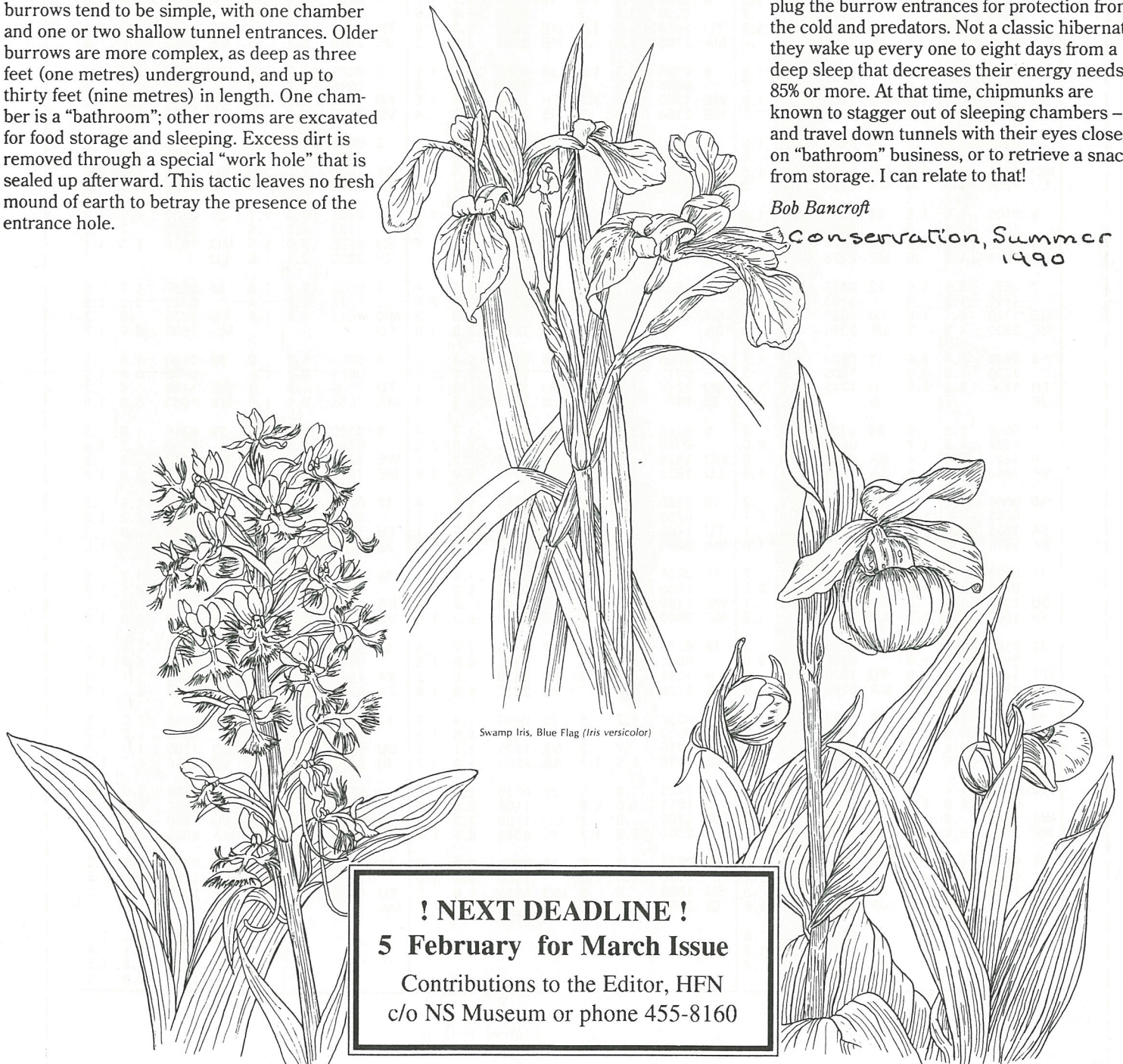
Chipmunk life centers around the burrow and a relatively small home range of 0.2 to 3.0 acres (0.8 to 1.2 ha). To encourage this species on your property, leave or create brush and rock piles, stone fences and hedges of thick vegetation on well drained soils. These provide shelter, and concealment for entrance holes. Plant or maintain a variety of native fruit and nut-producing shrubs and trees on the property.

If chipmunks learn about your bird feeder, these cheeky characters quickly become charming panhandlers. Hand feeding takes only a little time and patience. Before attempting this, keep in mind that forays to the "mother lode" at the feeder make chipmunks vulnerable to domestic cats.

As winter approaches, chipmunks use soil to plug the burrow entrances for protection from the cold and predators. Not a classic hibernator, they wake up every one to eight days from a deep sleep that decreases their energy needs by 85% or more. At that time, chipmunks are known to stagger out of sleeping chambers – and travel down tunnels with their eyes closed – on "bathroom" business, or to retrieve a snack from storage. I can relate to that!

Bob Bancroft

Conservation, Summer
1990



Swamp Iris, Blue Flag (*Iris versicolor*)

! NEXT DEADLINE !
5 February for March Issue
Contributions to the Editor, HFN
c/o NS Museum or phone 455-8160