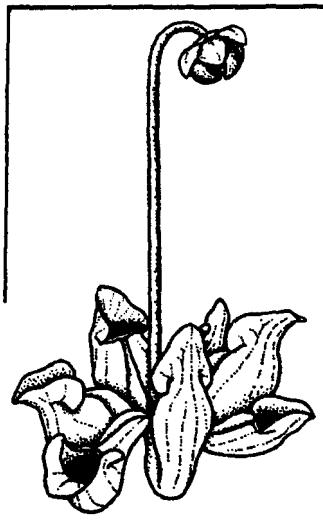


Sarracenia

Volume 9, Number 3 Winter 2000
Newsletter of the Wildflower Society of Newfoundland and Labrador

CONTENTS:

Winter-Spring Meetings

MARCH 8, 2000 - SPECIAL MEETING!

Location: MUN Botanical Garden, 8 pm
Botanical Art: A Continuing Tradition
Speaker: Joyce Cho

The American Society of Botanical Artists introduces a slide lecture showing of extraordinary, traditional and contemporary botanical art, designed to be used by ASBA members as an educational tool.

Local botanical artists, **Joyce Cho**, will present the slides and talk on behalf of the ASBA.

For those who cannot attend on March 8, there will be a second showing of this presentation at the Art & Culture Center on March 10, at 7:30 pm.

Please note that there will be no March 1 meeting. The Special March 8 meeting will be its replacement.

April 5, 2000

Endangered and Threatened Brayas
Speaker: Luise Hermanutz

May 3, 2000

Annual General Meeting; Speaker TBA

Unless otherwise noted, all meetings will be held at the MUN Botanical Garden at 8:00 pm.

EXECUTIVE:

Howard Clase, President	753-6415
Glenda Quinn, Secretary	834-5855
Carmel Conway, Treasurer	722-0121
Luise Hermanutz, Past-president	895-6851
Todd Boland, Editor	753-6027

Vice-president position is vacant...any takers!

Summer Field Schedule

Sundays, June 4, July 2, August 6 and Sept. 10: Regular monthly visits to Manuals River Trail

Meet at the Interpretation Center by the Manuals River Bridge at 2:00 pm. Leader: Glenda Quinn

June 24/25 - Overnight visit from Carbonear to Grates Cove

July 22 - Orchid Walk near Foxtrap Access Road

Aug. 2 (Regatta Day)- Recording Trip to Renews

Annual Summer Field Trip: July 8-12

(followed by the Canadian Nature Federation AGM in Corner Brook July 12-15)

Our tentative schedule:
July 8 - meet at Cow Head for first night
July 9 - drive to Roddickton/Englee with stops along the way
July 10 - explore the Roddickton/Main Brook area
July 11 - drive to Port au Choix stopping along the way
July 12 - continue down the Northern peninsula en route for Corner Brook for those attending the CNF meetings.

Hotel accomodations are not yet made. If interested in attending, please call Howard for more details.

Please Note: this schedule of summer field trips is still tentative. The next issue of **Sarracenia** will present a finalized schedule.

THE WILDFLOWERS OF WATER STREET

by: Howard & Leila Clase

For the past three years the Society has made monthly visits during the summer to the same place to follow the passage of the seasons. In 1997 it was Gallows Cove, Torbay, in 1998, Mundy Pond in St John's and this year we went fully urban and investigated the plants growing in the sidewalk cracks and waste-lots of downtown St John's. As might be expected in a purely man made habitat most of the plants are aliens, more or less the same as would be found in any city centre with a similar climate. Bill Hay, our Scottish member commented that the plants in downtown St John's were more or less the same as he would expect to find in a similar town in Scotland. In fact only four of the eighty five taxa we found are Newfoundland natives, the Pearly Everlasting, (*Anaphalis margaritacea*), Fireweed, (*Epilobium angustifolium*), Northern Willowherb, (*E. ciliatum)* and Lance-leaved Goldenrod, (*Solidago graminifolia*). Nevertheless, the aliens are plants that followed in our ancestors' footprints and are now part of our flora. They are mostly not suited to the bogs and barrens and seeing them adopting the new habitats we have provided can be as interesting as finding native plants in unaltered surroundings. A sharp-eyed botanist can always find surprises. This year our walks concentrated on the loop from the War Memorial along Duckworth St. past the Newfoundland Hotel, down Temperance St. and back along Water St. although we did get as far as the top of Cathedral Hill on one occasion and we have included a couple of species we found further along Duckworth St. while shopping one day. The best sites were three waste-lots, two on the north side of Duckworth and one on the south side of Plymouth St. and there is also a large rocky site between Prescott and Victoria Streets that we only visited once and which is probably worth a more careful visit.

The most unusual plants we found were on these waste-lots. A small, bushy cinquefoil at the bottom of Pilot's Hill was somewhat like the Norwegian Cinquefoil, (*Potentilla norvegica*), but its leaves were divided into five narrow leaflets rather than three rounded ones. It keyed out as (*P. intermedia*), the Russian Cinquefoil, and although this has only been found three or four times before in the Province it is easily overlooked. The Society found a Russian Cinquefoil at Doon Lodge, near Stephenville in 1997, and on the same trip we saw the Goatsbeard, (*Tragopogon pratensis*), growing in profusion alongside the old railbed. We think that our discovery of this on the Plymouth St. waste-lot is the first in the eastern half of the Island. We found it on our July walk when it was already in the "clock" stage, it will be interesting to see if it or some seedlings survive. The plant is a tall, spectacular dandelion like plant and has two subspecies one with long ray flowers and the other with them very short. The west coast plants are of the long-rayed kind. Unfortunately we didn't see it in flower, and some details of the Plymouth St. plant looked different from west coast stock which just happened to be flowering in our garden so we shall have to check out the site again this summer.

In the list you will see one or two garden escapes such as Dame's Rocket, (*Hesperis matronalis*), Columbine, (*Aqualegia vulgaris*), and that dreadful weed Ground Elder or Goutweed, (*Aegopodium podagraria*), we only included such plants if they seemed to have become well established on their own. We had a bit of a problem with trees since it's very difficult to tell which have been planted and which came of their own accord and they are also more difficult to identify when there is the gardeners catalogue to choose from as well as the natives. One that did impress us was the Swedish Whitebeam, (*Sorbus intermedia*), growing on an empty site right at the end of Empire Avenue. They were in magnificent flower on our June walk and even if the original was planted there were enough seedlings in the neighbourhood for us to include it on the list. This is a relative of the Dogberry but has oak-leaf like lobed rather than divided leaves and flowers like apple blossom - well worth a visit next June. A few bird sown specimens are known around the city, including a couple in the MUN Botanic Garden and there are also some mature trees along Queen's Rd.

We found all five species of clover that appear in the checklist, (although we hear that one or two others have recently been found in the province, probably introduced from hydroseeding mixes.) Two have yellow flowers, the Hop Clover, (*Trifolium aureum*), and Black Medic, (*Medicago lupulina*), named from its curious curled black seeds and not a true clover but you'd never know from looking at it! The other three are the Red, White and Alsike Clovers, (*T. pratense, T. repens* and *T. hybridum*). Like all members of the bean family, Fabacae, they have the ability to turn nitrogen gas from the air into nitrogenous fertilizer which makes them agriculturally important. This ability also enables them to grow on poor soil where other plants cannot survive, and makes them successful weeds in quite unlikely places.

There are three species of Sow Thistle found in Newfoundland. The Field Sow Thistle, (*Sonchus arvensis*) is common around outport harbours and we found this at the western end of our area, near Bates Hill, it is another dandelion-like plant with large yellow flowers. The Common Sow Thistle, (*S. oleraceous*), is, in fact, scarcer in Newfoundland, but it was growing in the sidewalk cracks along Water St. just by the War Memorial. (It's a very common downtown plant in St Pierre.) The specific name "oleraceous" means "suitable as a vegetable" and we gather that in the past its leaves have been eaten in salads, although on the whole we'd prefer lettuce. (The third species, Prickly Sow Thistle, (*S. asper*), is a weed in our garden, but we didn't find it downtown.)

The English or Lance-leaved Plantain, (*Plantago lanceolata*), is a very common weed in England, but coming across it in one of its few

Newfoundland sites, the Duckworth/Pilot's Hill, waste-lot we saw it in a new light as quite an elegant plant with its long narrow leaves and tall flowering stems even if the flowers themselves are insignificant.

John Maunder brought the small park at the top of Cathedral hill to our attention and two plants were found there and nowhere else. Sweet Cicely, (*Myrrhis odorata*) is a large umbellifer that was grown for its aniseed flavour and slight sweetness, but is now considered harmful. It is identified by its long black seeds, and characteristic smell. It had probably escaped from a nearby garden. Close by was a low weed that looked at first like the Hairy Bittercress, (*Cardamine hirsuta*), which has recently invaded St John's probably by way of potted garden plants shipped in by the local nurseries, but we realised that is was a bit too tall and had a "wavy" flower stem, suggesting that it might be the close relative, Wavy Bittercress, (*C. flexuosa*). A peek through a 10 x glass at the flowers' intimate parts confirmed that there were six stamens present and not the four expected for the hirsute species. Two other species that are not in Rouleau's Atlas were also found. The Sticky Groundsel, (*Senecio viscosus*), appeared in St John's about a dozen years ago and seems able to grow in the tiniest concrete cracks - it was growing all the way up the steps at the side of the War Memorial for example. It looks a bit like Common Groundsel, (*S. vulgaris*), but is greyer with a sticky feel and the flowers have short back-curved ray flowers which are absent from the common species. The other was one of a group that is normally considered both difficult and uninteresting by most botanists, the hawkweeds. There are two short hawkweeds of the "pilosella" group growing on roadside verges in the city, one with pale lemon-yellow flowers and a single flowering head per stem is clearly the Mouse-eared Hawkweed, (*Hieracium pilosella*), but the other has one to three butter-yellow flower head per stem and keys out in Gray's Flora and Stace's "New Flora of the British Isles" to (*Hieracium flagellare* syn. *Pilosella flagellaris*), which has no sensible English name, so we have called it the "Whiplash Hawkweed" by translating the Latin name which it gets from the whip-like stolons it sends out.

The Avalon Peninsula is one of the few areas in North America where Butter and Eggs and Striped Toadflax (*Linaria vulgaris* and *L. repens*), grow together and therefore where their hybrid, (*L. x sepium*) occurs. We found all three growing at the west end of Duckworth St.
The last name to be added to the list was the Sun Spurge, (*Euphorbia helioscopia*), which Leila found on the last of the four walks growing in one of the flower beds by the War Memorial. We had hoped to make a full century, but 85 species isn't a bad start. We certainly missed some grasses and sedges and couldn't find the Figwort, (*Scrophularia nodosa*), that grew just below the Victoria St. steps in earlier years. We'll keep the list open, so please let us know if you come across anything new in your downtown wanderings.

In summer 2000 we shall pay monthly visits to the Manuels River trail. See the list of field trips for more details.

The Linnaean names used in this article are based on those used by Rouleau and Lamoureux in their Atlas.

Downtown St. John's Plants June to September 1999

Linaean Name	An English Name
1 Achillea millefolium	Yarrow
2 Aegopodium podagraria	Ground Elder
3 Agropyron repens	Couch Grass
4 Alchemilla vulgaris agg.	Lady's Mantle
5 Alopecurus pratensis	Meadow Foxtail
6 Anaphalis margaritacea	Pearly Everlasting
7 Aquilegia vulgaris	European Columbine
8 Arctium minus	Common Burdock
9 Artemesia vulgaris	Common Mugwort
10 Barbarea vulgaris	Wintercress

11 Bidens frondosa Beggarticks
12 Calystegia sepium Hedge Bindweed
13 Capsella bursa-pastoris Shepherd's Purse
14 Cardamine flexuosa Wavy Bittercress
15 Carex nigra Black Sedge
16 Centaurea nigra Black Knapweed
17 Cerastium fontanum Mouse-eared Chickweed
18 Chamomilla suaveolens Pineapple Weed
19 Chenopodium album Lamb's Quarters
20 Circium arvense Canada Thistle
21 Circium vulgare Bull Thistle
22 Coronopus didymus Lesser Swinecress
23 Dactylis glomerata Cocksfoot
24 Epilobium angustifolium Fireweed
25 Epilobium ciliatum Northern Willowherb
26 Erysimum cheiranthoides Treacle Mustard
27 Euphorbia helioscopia Sun Spurge
28 Filaginella uliginosa Low Cudweed
29 Galeopsis tetrahit v. bifida Bifid Hemp-nettle
30 Galium palustre Marsh Bedstraw
31 Hesperis matronalis Dame's Rocket
32 Hieracium flagellare Whiplash Hawkweed
33 Hieracium pilosella Mouse-eared Hawkweed
34 Hieracium vulgatum Common Hawkweed
35 Hypericum perforatum Perforated St. John's Wort
36 Leontodon autumnalis Fall Dandelion
37 Lepidium campestre Field Peppergrass
38 Leucanthemum vulgare Oxeye Daisy
39 Linaria repens Striped Toadflax
40 Linaria vulgaris Butter and Eggs
41 Linaria x sepium Hybrid Toadflax
42 Lolium perenne Perennial Rye-grass
43 Medicago lupulina Black Medic
44 Myosotis arvensis Field Forget-me-not
45 Myrrhis odorata Sweet Cicely
46 Oenothera biennis Biennial Evening Primrose
47 Phleum pratense Timothy Grass
48 Pimpinella saxifraga Burnet-saxifrage
49 Plantago lanceolata English Plantain
50 Plantago major Common Plantain
51 Polygonum aviculare Common Knotgrass
52 Polygonum lapathifolium Pale Persicaria
53 Polygonum persicaria Lady's Thumb
54 Potentilla argentea Silvery Cinquefoil
55 Potentilla intermedia Russian Cinquefoil
56 Ranunculus acris Common Buttercup
57 Ranunculus repens Creeping Buttercup
58 Reynoutria japonica Japanese Knotweed
59 Rubus idaeus Raspberry
60 Rumex acetosella Sheep's Sorrel
61 Rumex crispus Curled Dock
62 Rumex obtusifolius Broad-leaved Dock
63 Sagina procumbens Procumbent Pearlwort
64 Senecio jacobaea Tansy Ragwort
65 Senecio viscosus Sticky Groundsel
66 Senecio vulgaris Groundsel
67 Solanum dulcamara Bittersweet
68 Solidago graminifolia Lance-leaved Goldenrod
69 Sonchus arvensis Field Sow-thistle
70 Sonchus oleraceus Common Sow-thistle
71 Sorbus decora Showy Mountain-Ash
72 Sorbus intermedia Swedish Whitebeam
73 Stellaria graminea Lesser Stitchwort
74 Stellaria media Common Chickweed
75 Taraxacum officinale Common Dandelion
76 Tragopogon pratensis Goatsbeard
77 Trifolium aureum Large Hop Clover
78 Trifolium hybridum Alsike Clover
79 Trifolium pratense Red Clover
80 Trifolium repens White Clover
81 Tripleurospermum maritimum Scentless (Sea) Mayweed
82 Tussilago farfara Coltsfoot
83 Veronica officinalis Common Speedwell
84 Veronica serpyllifolia Thyme-leaved Speedwell
85 Vicia cracca Tufted Vetch

North America's Best Kept Secret: Conserving Newfoundland's Rare Limestone Barrens Flora

by Luise Hermanutz

This article is reprinted from "Recovery: An Endangered Species Newsletter," February 2000 #15, published by the Canadian Wildlife Service.

For those interested in rare and unusual plants, the island of Newfoundland has been called "the best kept secret in North America". Geographic location, climate and geology support a vast array of vascular plants from northern arctic/alpine plants to more southerly Appalachian species. The island's west coast is especially diverse, with more than 200 plant species assigned as provincially rare (S1 and S2). These include Long's Braya (*Braya longii*) and Fernald's Braya (*B. fernaldii*), which the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) designated endangered and threatened respectively in 1997. Both plants are endemic to Newfoundland, occurring only on a narrow strip of land extending approximately 150 km on the extreme western portion of the Great Northern Peninsula. They share a common limestone barrens habitat, which is very tundra-like with extreme exposure to the Strait of Belle Isle and shallow, disturbed calcareous soils.

Habitat loss is the most immediate cause of low braya population numbers. Historically, the majority of the fishing settlements have been along this narrow strip, such that development and roads have heavily impacted the limestone habitat. In addition, gravel quarrying has destroyed much of the barrens habitat. At present, researchers know of only three populations of Long's Braya, the largest of which is growing on private land. Thanks to additional populations discovered in a 1999 field survey, scientists now know of 11 populations of Fernald's Braya.

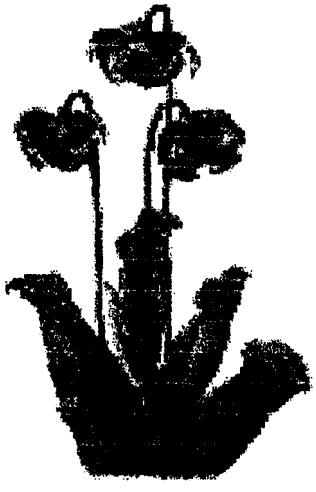
The two braya species are closely related to one another. With the exception of a few key characteristics, they look very similar. Both are arctic/alpine rosettes with a flowering stem of white flowers growing to about 1-10 cm tall. Leaves of both species are entire, linear-spatulate shaped, 1-4 cm long and 1-3 cm wide. The most obvious differences between the species are that Long's Braya has glabrous siliques (fruit), larger flowers (4-5 mm vs 2 mm petal length) and more greenish coloured, deciduous sepals.

The provincial government appointed a braya recovery team in 1997, representing several provincial departments, Memorial University, private environmental consultants and a community representative. The recovery team has had two very successful summer field sessions, during which all members participated in surveys and research on the braya species and developed stewardship initiatives with communities near the "at risk" habitats. These projects were made possible by funding from the Endangered Species Recovery Fund (administered by the World Wildlife Fund (Canada) and Environment Canada). This funding also allowed the team to involve Memorial University in these recovery efforts. To date, one graduate and three undergraduate students have undertaken theses on various aspects of braya biology.

In particular, the research is focused on how various types of disturbances determine the long-term viability of the existing populations. For example, the students are studying how natural disturbances such as frost boils compare with human caused disturbances in the survival and persistence of both species. Given the limited number of sites, and the likelihood that wild braya sites will undergo future disturbance, the Memorial University Botanical Garden established ex situ populations of both species in 1999. These populations will provide valuable knowledge on the reproduction and growth of both species, information that will enable the recovery team to establish a new synthetic population of Long's Braya on protected land.

In 1999, the recovery team received funding to produce a Braya Recovery Plan, targeted for completion by the end of 1999. The information gained by the recovery team and students will ensure the long-term conservation of both braya species, as well as the other arctic/alpine species found on the Limestone Barrens of Newfoundland's Northern Peninsula.

Currently the province of Newfoundland, with numerous partners, is investigating the rare plant flora of the island of Newfoundland. The first summer of fieldwork (1999) was dedicated to rare flora of the limestone barrens. In addition to the braya species, Fernald's Milk-vetch (*Astragalus robbinsii* var. *fernaldii*) has been recently designated as vulnerable and an additional nine plants are current candidates for COSEWIC listing. Therefore, the recovery team for Long's and Fernald's brayas sees recovery work on these two plants as a test for the long-term persistence of the entire limestone barrens community.



NEWFOUNDLAND & LABRADOR PLANTWATCH 2000

Hello to all Wildflower enthusiasts!

Spring is just around the corner, and Plantwatch volunteers are getting ready for our 3rd summer of observation. In 1998 the Memorial University of Newfoundland Botanical Garden and the NF&Lab. Wildflower Society sponsored a new program called "Plantwatch" in our province. By becoming a Plantwatch volunteer, you will be participating in tracking changes in our climate. And yes it was a very early spring last year with plants flowering 2-3 weeks early! Plantwatch is a global phenology survey that tracks plant flowering times. Phenology is the study of timing of important events in the lives of plants and animals, for example when plants leaf out, and flower as the weather warms in spring. With your help we can track the "green wave" across our province. With the information collected from plant monitoring, we can understand how the climate is changing in Newfoundland and Labrador, and compare it to other locations in Canada and the world. By increasing our awareness of Newfoundland & Labrador wildflowers, we will ensure our wild heritage will be protected in the future.

URGENT PLEA! We have 15 volunteers contributing to our flowering survey, and <u>we need more of our members to get involved</u>! Please consider becoming a volunteer this season. Nova Scotia has over 150 volunteers throughout the province!

For information about the Plantwatch program and how you can participate, please contact Madonna Bishop at the MUN Botanic Garden (737-3328; mbishop@morgan.mun.ca) or Luise Hermanutz (737-7919; lhermanu@morgan.mun.ca).

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CNF 2000

FIELD TRIPS INCLUDED IN REGISTRATION FEE

Thursday, July 13, 2000 Half-day Trips Available

Indicate first and second choice on registration form

TA Newfoundland Insectarium
TB Marble Mountain Ski Lift, Steady Brook Falls
TC Bog Walk - native orchids
TD Fern Workshop (indoor) Max- 20 participants

Saturday, July 15, 2000 One Full-day Trip (or two Half-day trips)

Indicate first and second choice on registration form.
If you prefer two half-day trips, list two first choices (AM and PM) and two second choices (AM and PM).
Box lunches will be provided. Provision will be made to stop at a local restaurant en route or back in Corner Brook where supper may be purchased.

Full-day trips Available:

SA Gros Morne National Park I
(Optional boat trip on Western Brook Pond $35 Extra)
SB Gros Morne National Park II
(Optional boat trip on Trout River Pond $35 Extra)
SC Blomidon Mountain hike (strenuous hike over serpentine rubble)
SD Port au Port Peninsula tour (focus on geology and plants)

Half-day trips Available: (box lunch will be available at noon)

SI-AM ,SI-PM Newfoundland Insectarium
SII-AM, SII-PM Marble Mountain Ski Lift, Steady Brook Falls
SIII-AM, SIII-PM Bog Walk - native orchids

A more complete description of the field trips will be available in January. Request it

by mail: CNF2000, Humber Natural History Society, 2A 4th Avenue, Pasadena, NF A0L 1K0

by email: hnhs2000@swgc.mun.ca or find it on our **website** http://www.swgc.mun.ca/cnf

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CNF 2000 - Preliminary Program

Please note: The program is not yet finalized.
There may be some minor changes in scheduling of events.

Wednesday, July 12

Noon - 10:00 PM Registration
8:00 - 10:00 PM Welcoming Reception

Thursday, July 13

AM	6:30 - 8:00	Early Morning Birding/Wildflower Walk
	8:45	Official Greetings
	9:00 - .12:30	Presentations on Newfoundland Natural History (Includes a Refreshment Break)
PM	12:30 - 2:00	Lunch
	2:00 - 5:30	Half-day Field trips/Workshops
	6:30	BBQ
	8:00	CNF AGM

Friday, July 14

AM	6:30 - 8:00	Early Morning Birding/Wildflower Walk
	9:00 - .12:30	Presentations on Newfoundland Natural History, And on Local and National Conservation Issues (Includes a Refreshment Break)
PM	12:30 - 1:45	Lunch
	1:45 - 5:15	Presentations on Local and National Conservation Issues (Includes a Refreshment Break)
	7:00	Banquet

Saturday, July 15

AM	6:30 - 8:00	Early Morning Birding/Wildflower Walk (tentative)
	9:00 - ?	All Day Field Trips (Box Lunch provided)*
	9:00 - 12:00	Half Day Field Trips (Box Lunch provided)
PM	1:30 - ?	Half Day Field Trips*

* Opportunity will be provided to purchase supper

Note: Longer Pre-conference and Post-conference tours will be made available through local tour operators. Please visit the website, or request details by post or email.

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CNF2000 REGISTRATION FORM

Please print name as you wish it on name tag. Complete a separate form for each registrant.

Name:_____

Address:_____

_____

Alternate contact method (please specify email, phone number, fax)

_____

REGISTRATION : Includes: refreshment breaks, lunches, Thursday BBQ, Friday Banquet, and field trips on Thursday Afternoon and all day Saturday (indicate choices below)

Early $125 (before May 10, 2000) **Regular $140** - after May 10, 2000) $_____

Thursday half-day field trip: First choice_____ Second choice _____

Saturday full-day field trip: First choice _____ Second choice _____

Optional boat trip SA or SB for extra $35 fee ....$_____

Extra Thursday BBQ tickets @ $20 each..... $_____

Extra Friday Banquet tickets @ $25 each ..... $_____

Please indicate any special dietary requirements:_____

Residence Accommodation @ $35/night (breakfast, towel included)
Include one night's payment as deposit.....$ _____

Please indicate nights required: __ Wed __ Thurs __ Fri __ Sat __ Sun

TOTAL PAYMENT INCLUDED ..... $ _____

Please indicate method of payment: __ cheque (payable to Humber Natural History Society)

__ VISA __ Mastercard Card# _____

Expiry date ___/____ Signature _____

Mail to: CNF2000, Humber Natural History Society, 2A 4th Avenue, Pasadena, NF A0L 1K0