Halifax Field Naturalists Newsletter

MARCH - MAY, 1984. No. 35.

HFN LOGO CONTEST !

Don your thinking caps, dig out your paper and markers, draw a design, then deliver it to the Musesum.

If you happen to be the lucky winner, your reward will be a book that's sure to suit your fancy!

Halifax Field Naturalists

MARCH - MAY, 1984 No. 35.

MEETINGS: 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.

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 Nova Scotia Museum.

Individual memberships ..... $7.00 per year
Family " ..... $10.00 " "
Sustaining " ..... $15.00 "
This covers our fiscal year - January 1 to December 31.

Members receive the HFN Newsletter and notices of all meetings, field trips and special programs.

EXECUTIVE for 1984:

President	John van der Meer	(r) 455-1029.	(o) 426-8276
Vice-President.....	Edna Staples	(r) 868-2919	
Treasurer	Bernice Moores	(r) 422-5292	(o) 445-2500
Membership	Colin Stewart	(r) 455-6576	
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Past-President	Doris Butters	(r) 463-0033	

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Program Co-ordinator. Filip Volckaert
Bill Freedman
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Aileen Meagher
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NEWSLETTER Editor ..... Doris Butters 463-0033
Edna Staples
Aileen Meagher

MAILING ADDRESS: Halifax Field Naturalists
c/o N.S. Museum, 1747 Summer Street, Halifax, B3H 3A6.

HFN is a member organisation of the Canadian Nature Federation.
HFN is incorporated under the Nova Scotia Societies Act.
HFN NEWSLETTER is produced by courtesy of the Nova Scotia Museum.

*** Now that running a car is so expensive, it would be appreciated if those travelling in someone else's car on field trips share the cost of the gas. Thank you.

hfn news

REMINDER:-

July and August meetings will be held at the Nova Scotia Archives, corner of Robie/University ..... at 7.30 p.m.

WELCOME to:

Helen Goss
Geth Coolen
Don and Joan Embree
Hildegund Schremp
Amalie Frolich
Richard Morash
Oriel MacLennan
Ann MacPherson
Harley Hutchinson
Ted Dalgleish and family
F. and H. Doolittle

CONGRATULATIONS to:

Michael and Helen Downing on the birth of their second son, Benjamin, on March 1st.

Andrew and Georgina MacFarlane on the birth of a daughter early in March.

Colin and Elizabeth Stewart, on the birth of Jennifer, at the end of March.

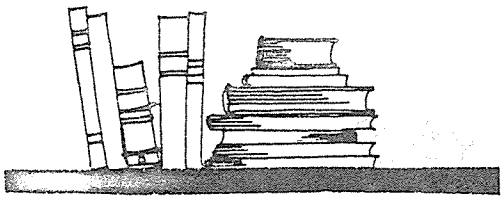
THANK YOU to:

The Nova Scotia Museum for the use of their facilities during the 1983-84 school year.For the help given to us by staff members who have presented talks, led field trips and assisted with difficult identifications. Also for providings printing facilities for the HFN Newsletter.

NOTICE -

Would the member of the audience at the June 7 HFN meeting, whose neighbour raises organically-fed beef, please get in touch with Stephanie Robertson, Ph: 469-2454

NEXT DEADLINE --- 25 July 1984 for the August issue. Mail contributions to N.S. Museum OR phone the Editor at 463-0033



ON THE SHELF

The April issue of Nature Canada contains the last of the four-part series on Canadian forests, by David Folster. The article includes remarks and conclusion drawn by Prof. Ian McLaren on pesticide spraying in Nova Scotia forests.

Newsletters from other naturalist societies continue to pour in, as do periodic issues of Nature Canada, Environment Canada's Update and ENGO's Ottawatch. All well worth spending a little time in reading. Any article of special interest to any person, can be reserved before outdated copies are destroyed.

Blomidon Naturalist Society newsletter is often of particular interest as the content is so 'close to home'.

The Catherine Traill newsletter deals with many wide-ranging topics. Concern over local environmental matters is often offset by items on faraway places such as Iceland or the Upper Reaches of the Amazon. The current issue even has a very practical article on how to build nesting boxes.

The latest issue of "Parkscan" appeals for ..."ideas and opinions on the management and development of national parks, historic parks and heritage canals"; the specific interest for the Atlantic Region being Grand Pré national historic park in Kings County.

Documents are available at :

Atlantic Regional Office,
Parks Canada, Historic Properties
Upper Water St., Hfx., B3J 1S9

or contact:

Area Superintendent
Hist.Sites/Southwestern N.S.
Annapolis Royal, BOS 1AO.

nature notes

On March 28, Dorothy Morris noticed a grouse in Shubie Park; walked slowly away then flew off displaying its fan-shaped tail..... early in May Stephanie Robertson and Fulton Lavender spotted a visitor from Florida at Martinique Beach - a Tri-coloured Heron.

Early sightings this year included Pussy Willows in full bloom on March 1, on the topmost branches of a tall shrub in a Dartmouth garden (probably *Salix discolor*, which is an early bloomer)..... on 17 March at Musquodoboit Bernice Moores found her first Pussy Willows ..... Dorothy M. spotted Coltsfoot in Shubie Park on 25 March ..... and here's one that perhaps does not properly qualify as it was not a Nova Scotia first - but your Editor found *Hepatica* sp. in full leaf and bud on April 15 under 75 cm of snow. So what? -- this was 35km from the Arctic Circle in Finland. We scattered the snow to speed up thawing, and the little purple flowers bloomed overnight. Crocus and Grape Hyacinth also shot up within 48 hours.

ANTS ARE FUN TO WATCH - A nature story by Ray Tanton.

(Extracted from St.John Naturalist Club newsletter dated October 1983)

Recently I listened to a talk on the wonders of the lowly ant. They are found almost everywhere on our planet from the North Pole to the South Pole. There are various species of ants. They are related to the wasp, bee and termite. They live in communities, enjoying a highly developed social way of life that has excited us from ancient times.

In some magic way each one has been given its own job to do and sees that it is done. Ants are not jealous and will permit a number of Queens to be in the same community or ant hill. They do not swarm as bees do. About haying time each year, males and females develop wings and are seen flying together. After the pairing or mating season is over the males die immediately and the females lose their wings and become workers. They lay their eggs everywhere, mostly near footpaths; other workers gather the eggs and place them in a dry,warm place in the hill community. When we see disturbed ants running around with what seems to be eggs, they are not eggs but pupae or cocoons. The eggs are so small they can scarcely be seen with the naked eye. Soon, little legless grubs appear and for a considerable length of time are fed with honeydew by the nurses and workers ...Besides nurses there are soldiers, builders, caretakers. Some invade the nests of other species and bring back pupae to hatch, giving them slaves that will do their bidding. Some use slaves to excess...Some of the workers are farmers who grow a type of fungus which can be stored for food. Still others live a pastoral life, using other insects - mostly aphids - as we do cows, to provide them with a life-giving nectar. The ant strokes the aphid with its feelers...until it gives off a honey-like secretion seemingly through its pores. This the ant scrapes off, storing it for future use.

In the Deep South I was amused by their antics as they scurried around, each with a definite purpose, and when we entered a cottage which had been closed for a few days, the owner exclaimed "I see an ant track!" There it was, plain as day, a narrow red streak going up the wall onto the table that touched the wall an over to the sugar bowl that had been carelessly uncovered, The track was made up of tiny red ants carrying the sugar to their storehouse, keeping to the same trail coming and going...when one finds a food source it immediately heads for home to spread the word. On the way it excretes a tiny bit of smelly fluid, leaving a trail which directs those at home back to the find.

Some ants will remove the flesh from a dead animal leaving only the bones. Others will denude a tree just as fast. All are such efficient workers that they prompted Solomon to say: "Go to the ant, thou sluggard, consider its ways and be wise". It is marvellous how efficiently they conduct themselves, rivalling the perseverance and ingenuity of other creatures of nature, including the human being.

When next summer comes and you are enjoying a picnic, and see an ant hill, remember that it is a highly-developed city with everyone striving to make it a better place in which to live. Should you accidentally step on it - or intentionally tear it apart - it would be just as devastating...as a bomb laying waste your city... That little ant running across your picnic table is just a scout doing its duty and looking for food; hundreds of inhabitants of that little city depend upon it for their very existence.

Like you, the little ant has a definite place in the great scheme of things.

R.T.

"THE YUMMY MUDS OF MINAS"

by
Sherman Bleakney of
Acadia University

(Extract from BLOMIDON NATURALISTS' SOCIETY NEWSLETTER of June 1983, Vol.10, No.2 - guide notes and drawings for the Acadia Lyceum (1983) students; reprinted courtesy of Dr.Sherman Bleakney).

The Minas Basin is one of the world's most unusual bodies of water. The tides are now 14 to 16 metres twice daily, but 6000 years ago the tidal amplitudes were nil. About 1/3 of the floor of the Basin is exposed on each tide, nearly 240 sq.km, and at several sites this inter-tidal exposure is 3km wide. In summer the water reaches 22°C and high tides lap along the shores where apples, tobacco and grapes are growing. But in winter the frozen inter-tidal flats chill the Basin waters to -1.5°C and create blocks of ice some 5m thick, which form great drifting masses of pack ice.

This constantly churning shallow basin is obviously a muddy mess. Light can hardly penetrate the first metre, thus plankton is sparse, and therefore (the textbooks tell us) without much plant life there will be very little animal life. Rock-weeds and kelps can't grow on mud and sand, so again without the primary producers (plants) there can't be primary consumers (herbivores) nor secondary consumers (carnivores). So the Minas Basin should be a write-off -- but it certainly is not.

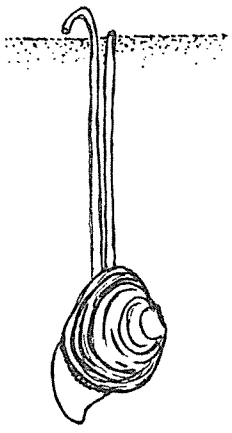
The muds and sands are packed with animals. We know of at least 440 species. In fact, the flats are so rich in animal matter that tens of thousands of shorebirds which nest in the Arctic, fly here in July -August-September to refuel on their way to South America. They quickly double their body weight by adding layers of fat from eating worms and crustaceans from Minas Basin muds and then they take off and fly to South America.

As yet, marine scientists do not really know how the Minas Basin functions, that is, they cannot explain where all the stored energy comes from to feed so many animals. Is it possible that the Basin functions very much as a cow's stomach and a rabbit's intestine? Can you deduce and explain how there can be such a relationship?

To introduce you to the variety and density of Minas Basin organisms we have organised a triple-trip.....

First Area:- muddy ooze at Cape Blomidon Park -

We will look for the little Macoma Clam, of which (it has been estimated) there are 24×10^9 in the Minas Basin. They produce each day 6×10^6kg of excreta (feces and pseudofeces) which drift about suspended by tidal currents, and upon which bacteria flourish, and upon which - in turn - the numerous tentacle and filter feeders depend for much of their nutrition.



LITTLE MACOMA

Note the Macoma star-pattern feeding trails. How are these created. Take a count from 0.25m^2 of mud after screening it in the stream.

1. Macoma balthica (clam)
2. Corophium volutator (crustacean)
3. Heteromastus filiformis (worm)

Second Area: saltmarsh grassy flats and pools and creeks near Kingsport-

1. Grassy salt marsh flats. Now you are tramping over (and on!) insects, spiders, beach fleas, crabs, snails and sea slugs. There are about 1470 hectares of salt marsh habitat in Kings County. The dead grasses wash out to sea with high tides and add plant matter to the entire Minas Basin, thus creating a bacteria-rich detritus foundation for the Basin's peculiar ecosystem.

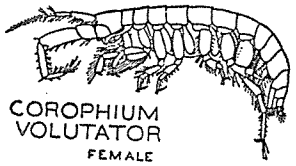
2. Pools. There are 783 of these marsh pools in Kings County and they range in size from 6m^2 to 403m^2 (with a rough average near 100m^2). So far, 73 species of animals belonging to 11 Phyla have been found in these pools.

Look for the unusual white sea anemones protruding from the bottom that eat insects and snails; examine under binocular microscope. Seive 15cm^2 of mud from bottom of a pool and count the tiny adult Hydrobia snails. These are like rabbits in their feeding habits (coprophagous). Nos.of Hydrobia:_____

Seine a pool and identify the fish, noting the species and numbers of each.

3. Creeks: If you block off the upper kilometre of one of these creeks at high tide, as many as 6000 Gaspereau and 15,000 Herring can be trapped by your net as they retreat back into the Basin with the ebbing tide. About 2000 fish/tide would be average in summer and 18 different species of fish have been caught in these creek nets. There are 8-10km of creeks in Kings County, so potentially how many fish might be feeding in these creeks in one 24hr day?

(1a) Try pulling the seine net through a pool in the marsh creek and discover what fish and other creatures are living there. Note the species and numbers of each.



(Miner, R.W., Field Book of Seashore Life, 1950.)

(1b) What do the larger fish that come up these tidal creeks, find so attractive? Food? Mark off 0.25m^2 and seive the mud and count some of the yummy critters which live there. Corophium volutator: _____ . (Sandpipers snap these up at the rate of 20 to 30/minute and can consume 9600 to 26,000 in a day, which at the end of 1 to 3 weeks makes them 10gms fatter)

(1c) Examine the green algal carpet which coats the surface of the mud high up the sides of the creek and try to find a green photosynthesizing snail without a shell (Elysia chlorotica). Examine under the microscope.

Third Area: Tidal Cornwallis River at Port Williams Bridge. ...

Hang a plankton net from the bridge and let the tidal stream push the water through the fine screening. After about 5 minutes haul in the net and pour some of the muddy water into a large white pan. How much is mud and how much is animals?

Examine smaller sub-samples under the binocular microscope and refer to your guide sheet of plankton organisms.

Most marine ecosystems are based on sunlight and multiplying phytoplankton, and these tiny one-celled plants are in turn eaten by zooplankton, particularly copepods, crustaceans, planktonic larvae of worms, barnacles, snails, fish and so on. It is a seasonal system because the sun is high in summer and low in winter. However, this unique muddy Minas Basin has a food chain not based on phytoplankton but instead on bacteria-coated yuk (pieces of dead marsh plants, dead seaweeds and diatoms, pseudofeces and feces by the ton!). Constantly stirred up and suspended and transported by the world's greatest tides. As sunlight is of lesser importance in this marine system of constantly stirred bowl of Basin soup, there are as many (often more) copepods in the water at Port William's bridge in cold, dark December as there are in July.

field trips

AN OUTING TO CYRIL COLDWELL'S FARM

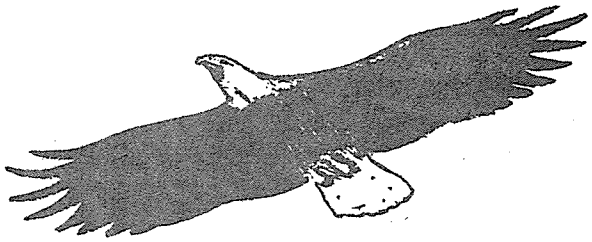
Site: Coldwell's Farm, nr. Melansen, Gaspereau Valley.
Date: Sunday, February 5, 1984.
Participants: 27
Weather: Relatively mild (9°C in town, colder in the Valley), with mist, drizzle and rain.

We set out shortly after 9.00 am. The drive was fairly unenventful, but it foretold the weather ahead: fog. We arrived at Mr. Coldwell's farm. No one was home so we looked out across the fields towards the river and were rewarded by the sight of two immature and one adult Bald Eagle. Visibility was poor but the white head of the adult made for easier viewing.

Filip began taking small groups behind the barn to see the wounded raptors which were recovering in various cages. There were three Long-eared Owls, two ravens, several Bald Eagles and a Rough-legged Hawk. We also saw several ravens and juncos flying about. We needed strong stomachs, for in the middle of the yard were carcasses of coyotes, raccoons pigs, etc., to be served to both the wounded raptors and the uninjured ones out in the fields.

After viewing the wounded birds we walked to a lower field. In the distance, vague in the fog, (although clearer with binoculars) up to 15 eagles were spotted. However, the day being rather dismal, there was not much activity by birds. The most activity was provided by voles trying to escape a rather tenacious farm dog.

We broke for lunch at 1 pm, then met at the marshes at Grand Pré an hour later. We saw a number of hawks in the marshes, sitting on fence posts. The marsh itself was too wet to walk on, although two people did attempt it, and we stuck primarily to the road. In addition to the hawks, we saw two ducks flying, and of course, the ubiquitous seagull.



It began to rain, so we headed back to the cars, then drove to an open stretch of beach across the dyke. It was desolate, with dirty pieces of ice being slowly carried out on the tide. Despite the rain, pheasants, Horned Larks, Herring Gulls and Black-headed Gulls were spotted. We finally decided to pack it in, and headed slowly back to Halifax, hampered once more by fog. It was agreed, however, that we must return in the spring, when there will be more activity on the marshes.

Leigh Mazany

ANIMAL TRACKS

Date: Saturday, 18 February 1984
Site: End of Fraser Road, Harrietsfield,
Participants: 15
Weather: Sunny and cool.
Guide: Ed Claridge, N.S. Museum.

We met at NSM at 10 am and drove to Harrietsfield, leaving our cars at the end of Fraser Road. The walk began at an old farm property. A great deal of the topsoil had been removed and used for landscaping the North Common in Halifax. As a result, the land was barren, with alders growing up - a good habitat for moose.

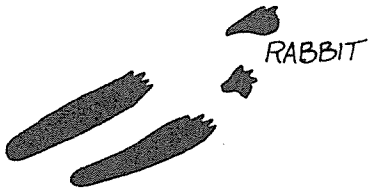
We proceeded along a trail in dense woods, stopping to examine the numerous signs of animal habitation. The main trail was continuously crossed by small runs beaten down by Snowshoe Hares, squirrels, porcupines, mink and partridge. The remains of an old snare were found on one of these runs, with clumps of Snowshoe Hare fur still attached. Ed mentioned that two Goshawks had been caught in similar snares in Nova Scotia, indicating that they must also walk along these runs.

The lack of snow on the ground turned out to be an advantage since much of the scat and other animal signs were uncovered for our examination. These signs were both recent and old and the great number of occurrences indicated that we were on a busy highway even though we didn't see the animals themselves. Older, misshapen trees gave evidence of having had new shoots eaten annually. Recent browsing was indicated by sap running from the fresh twig stumps.

Animal sign seen on this walk included the following:

Snowshoe Hare - small, round, light-coloured scat of the snowshoe hare was found everywhere. Evidence of their browsing included

stumps of twigs cut off cleanly and close to the ground, as well as gnawed bark low down on saplings. Hares prefer hardwood trees and Maple is their favourite.



Red Squirrel -a squirrel midden was found on the top of a stump. It consisted of the remains of the winged seeds stripped from various types of cones.

Ruffed Grouse - on the same midden, and later on the trail, scat from Ruffed Grouse was found. This was elongated and light coloured. Ed told us that the scat of Spruce Grouse was similar in size but greener, due to their diet of spruce and fir needles.

Bobcat - bobcat scat was found at a high open part of the trail. We found both very old and relatively recent scat in this small area. Ed said that this was typical of the bobcat since it tended to toilet habitually in one area. The scat was elongated, approximately 3" and held together by a large amount of grey hair, probably from snowshoe hare in winter. There were small bone fragments scattered throughout.

Moose - moose scat was found frequently on the walk. Summer scat is a formless mass, due to the animal's diet of fresh green food. Winter scat is in the form of dark brown, oval pellets about 1" long, reflecting the more fibrous nature of winter browsing. Our youngest walker wondered if these pellets might be moose eggs! Browsing was evidenced by twig stumps high off the ground. These stumps had tendrils of bark on them caused by the tearing action of the moose's eating, due to the animal's lack of upper teeth. Ed explained that the very high browsing on some saplings was due to the moose straddling the sapling and pushing it down with its body to get at the top shoots. One large moose track was the only definitely recognisable animal track seen on the walk.

White-tailed Deer - deer scat was also quite numerous and we saw the same type of difference between summer and winter scat as we did for the moose. Winter pellets were about one half the size of those of the moose.They are pointed at one end and dimpled at the other. Deer browse did not show the same tendrils of bark on the twig stumps as did the moose browse, being more cleanly cut.

Porcupine - porcupine browsing was indicated by bark stripped from trees. In some cases almost all of the bark had been removed from young trees; this would result in their dying. Ed told us that the porcupine's favourite tree is larch.

In addition to these signs we saw mayflowers in bud and a Sharp-shinned Hawk, a Raven and some Black-capped Chickadees.

This proved to be a very informative trip; some of us had not expected to see much as there was no snow on the ground for tracks, but were amazed at the great amount of information available. Ed Claridge is to be thanked for pointing out these signs and explaining how we can determine the animals from the signs.

Author Unknown.

DUNCANS COVE WALK

Date: Sunday, 4 March 1984 Participants: 30+
Site: Duncans Cove to Ketch Harbour Leader: Philip Volckaert.
Weather: Overcast with flurries - sunny in the afternoon - somewhat breezy - temperature -2°C.

We started out from NSM shortly after 10 am, stopping off at Chebucto Head lighthouse to look at the view and check for birds; however, only a few eider ducks were spotted.

We arrived at Duncans Cove about 11 o'clock and in a biting wind and heavy snow flurry we started on our walk. Crossing a small, kelp-filled beach and scrambling up a wet, stony path through the scrub to the old signal station on the cliff top, we set off along this beautiful coastal trail. The flurry of snow soon subsided and almost immediately several seals were seen on the rocks and in the water - I believe the 'official' count to be about 20. One big, old bull surfaced close inshore and stared stolidly back at us. Also, more eiders were seen.

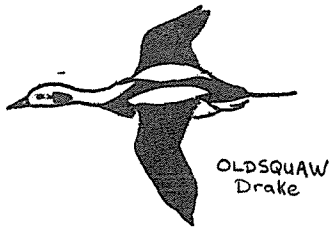
Spread out in a long, wandering line, we hiked on along the cliff trail; in one little cove we passed through a burned-over area where bleached, ghostly skeletons of White Pine still stood. On the barrens, frozen but still intact, cranberries were found; at one point a Bald Eagle was sighted and at another spot we found signs of a bobcat.

About 1 o'clock we reached a small, sheltered cove where some of the faster walkers had built a warm, but smoky bonfire. Huddled around the welcome warmth, we enjoyed our lunch in bright sunshine. While there six or seven Red-necked Grebes were sighted on the water. After lunch we decided it might be worthwhile for one or two members to push ahead to Ketch Harbour and establish a car ferry back to the other cars at Duncans. A good idea and one much appreciated by the group - the coastal trail is very beautiful, but in places pretty rough going.

The rest of us hiked on to Ketch Harbour, some short-cutting through the spruce woods, others continuing along the coastal path around the headland. A recently-dead rail was found among the rocks and later taken to the Museum where Fred Scott identified it as a Sora Rail (*Porzana carolina*) which had started to change into spring plumage. Noting that the bird was very thin, Fred said he thought that it had probably been blown off-course during the recent very high winds, and had starved to death on the beach. Nevertheless, the body was in very good condition and Fred was pleased to add it to the Nova Scotia Museum's collection.

On being ferried back to Duncans most people left for home around 3.30, after a wonderful and invigorating trip.

Grant Mitman.



However, one carload took its usual side trip, making brief stops at other little coves along the shore, sighting guillemots, cormorants, a flock of Oldsquaw Ducks and among the gulls at Herring Cove a white Icelandic Gull. The high spot was at Purcell's Cove where we sat for 30-40 minutes watching the Harbour(?) Seals on nearby rocks. We saw at least 20, some a pale biscuity-brown, others ranging from silver grey to charcoal. A small rocky islet in the harbour suddenly disappeared - and we realised it had been a group of seals, heads upraised, motionless on a submerged rock!

Doris Butters.

SALAMANDER CRAWL '84.

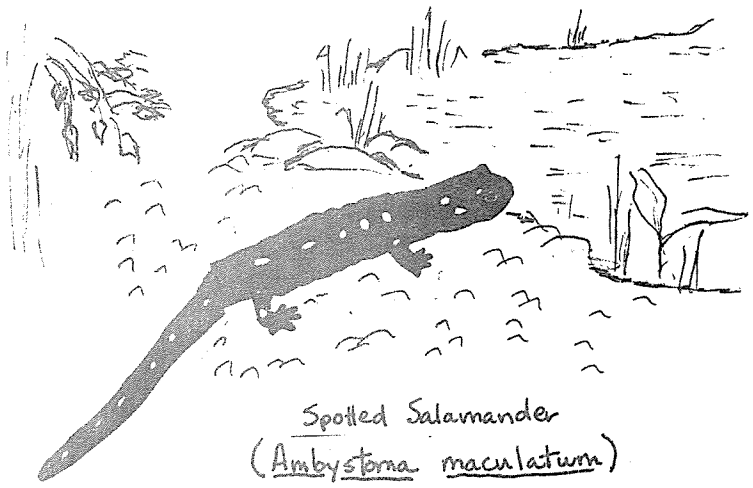
Place: The Heart-shaped Pond (Julie's Pond) at Rockingham on the Bedford Highway.

Date: Saturday, April 7, at 8.30 p.m.

Participants: 13.

Leader: John Brownlie

Weather: A gorgeous, clear and cool evening, about +1°C.



Spotted Salamander
(Ambystoma maculatum)

I received a call from Bernice at 6.40 in the evening, informing me that the annual Salamander Crawl was to be held that night, and that we were to meet at the Nova Scotia Museum at 8 o'clock. This I had been waiting and waiting for.

While walking to the Museum I was thinking about what an interesting life I lead - Saturday night and I am going on a salamander crawl. WOW!! When Bernice suggested that I do the report, it seemed very appropriate.

We all met at the parking lot and with flashlights and rubber boots, walked over to the stream. John had been there the previous night, which was milder and rainy, so he knew the salamanders were up and about. Almost immediately we sighted a Yellow-spotted Salamander, then another, and within ten minutes located several of them in a small area, nudging each other, circling, and turning - really quite active. There must have been at least 12, and John informed us that there was probably only one female amongst them and that all the males would try to court her.

Further along we found several under the leaves in the pond, struggling to get up, though one was playing possum (acting as if dead). We sighted another group, again with only one female present, performing their underwater mating dance which broke up when our flashlights shone on them. We should have known better, as salamanders are such secretive creatures.

We then went over to the pond itself, where we could hear the mating calls of frogs; here we spotted a Wood Frog in the pond and a potato chip bag sitting on a stump.

There were many questions asked, all of which John answered so well, giving us much additional information — e.g., that salamanders can live to 16 years of age, and are mature at three.

We left the pond about 10 o'clock, a little more knowledgeable about salamanders and feeling fortunate to have seen so many in different situations.

The NSM has published an information pamphlet on salamanders and I was fortunate enough to pick one up on the Sunday. The pamphlet offers not only the information that John gave us, but a great deal more on Nova Scotia's five species of Salamander, plus excellent black-and-white reprints of several of Fred Scott's detailed drawings (the water-colour originals are beautiful - Ed.)

Following are a few general notes taken from the pamphlet - Unlike lizards, which have a dry,scaly skin, salamanders are amphibians like frogs and toads and their skin is smooth and moist. Salamanders are quite common but because of their secretive way of life, most of us only notice them in spring when they wake from winter hibernation and migrate to woodland ponds and roadside ditches to breed. Males court females with an underwater dance. The male then places a small white package of sperm (a spermatophore) near a female. If receptive, she takes the spermatophore and holds it to her abdomen until egg-laying time. Salamander diet consists of insects, worms, snails, spiders and slugs, They use sight and smell to find prey. Nova Scotia salamanders make no sounds and cannot hear, but do feel vibrations in the ground with their forelegs and lower jaw. They can regrow legs or tail if these are bitten off by a predator. Newts also breed in ponds, but Red-backed Salamanders and Four-toed Salamanders lay their eggs on land. Salamander larvae are slimmer than frog tadpoles, with flattened heads and feathery external gills.

The salamander leaflet is free and well worth reading.

Rikki Garrett.

CAPE SPLIT - 1984.

Place: Cape Split, Scott's Bay, Kings County, N.S.
Date: Saturday, May 26, 1984
Participants: 35
Leader: Pierre Taschereau
Weather: Sunny and warm with a light SW wind.

Thirtyfive members and guests, guarded by "Chelsea", departed from the N.S. Museum carpark at 9.40 am, and following a leisurely drive, a brief regrouping, sharing of Muskol and conversation, set out at noon across a rather damp bit of trail.

On entering the wooded, uphill climb, we found the going progressively drier. To our delight it would seem that most of the blackflies had had their 'fill' on earlier groups, as we were only slightly bothered.

Goldthread, white and blue violets and Spring Beauty were present in abundance; but the flower of the day was the Red Trillium. While not out in great number, they were almost flawless in bloom and presentation. One 'quintet' was photographed almost constantly. Dutchman's Breeches and Rose Twisted-stalk came in a close second in interest from our party.

The trail was in good shape, quite the driest in the experience of most of us, and the almost total absence of litter was both noted and appreciated.

At the Split we learned that this was an anniversary occasion - Lesley Butters' 35th trip to this magnificent part of Nova Scotia.

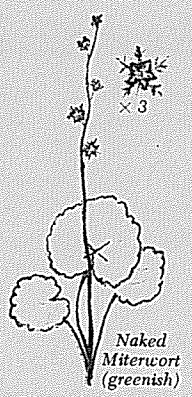
On the rocky outcrop, nesting Cormorants and gulls were observed, though this year no chicks or fledglings were seen. Other varieties of birdlife were noted along the trail, especially by a select few who arrived at the Split after most of us had eaten and were ready to start the return trek. A multitude of interests was apparent from bird life, flowers, tree growth patterns, to animal life and geology.

On the return trip via the cliff top trail, Lesley and several individuals climbed down to Broad Cove beach - the area known for agates and amethysts - but on this occasion found more enjoyment than gem stones.

The remainder of the return walk was quiet - the early evening sun creating most interesting shadows and sidelighting for the visual enjoyment of all.

Nancy Wynn.

Not only the birders fell behind the faster walkers, but Pierre and a small group spent a great deal of time in close scrutiny of the wayside flora - noting especially the abundance and large blooms of Spring Beauty, many of which had a pinker tinge than usual with darker pink-mauve streaks. We also took note of the trilliums and violets. Among the less showy finds were White Mandarin, Toothwort, Rattlesnake Root, Baneberry (White? Red?), Bunchberry, Kidney-leaved Buttercup, and closer to the water, Sedum on the point of blooming. A number of other plant species needed a day or two more before coming into bloom - False Solomon's Seal, Starry False Solomon's Seal, Meadow Rue, Wild Sarsaparilla etc. Pierre also found the leaves of Stinging Nettle, a species not too frequently observed in Nova Scotia. While probing around an old stump we came across the inconspicuous but intricately formed Naked Miterwort (*Mitella nuda*), another plant which is not too abundant in this area.



(Newcombe, L., Newcombe's Wildflower Guide, 1977.)

We fell so far behind the rest of the party that even the chip-wagon was closing when we got back to the parking lot at 6.45 pm. But even then we didn't want to break it up, so several of us stopped off for supper at Apple Tree Landing, a favourite restaurant of ours in Canning - a fitting close to a lovely day.

Doris Butters.

From the 1880's "How to" book written by the English gardener, Charles W. Quin:

"Crickets - Arsenic and Honey may be mixed together, and laid about for the creatures. Lay it in bits, about the size of a small French Bean , on the smooth side of oyster shells, peices (sic) of glass, or broken glazed crockery; it is necessary to use something that will not absorb moisture from it. This preparation must be used with caution, as domestic animals will eat it and be destroyed thereby. On the nights on which it is laid down, exclude the garden cats from the houses, or these most useful animals will come to an untimely end."

Thanks for all contributions. Our apologies if your article has not been included in this newsletter - watch for it in the next issue.