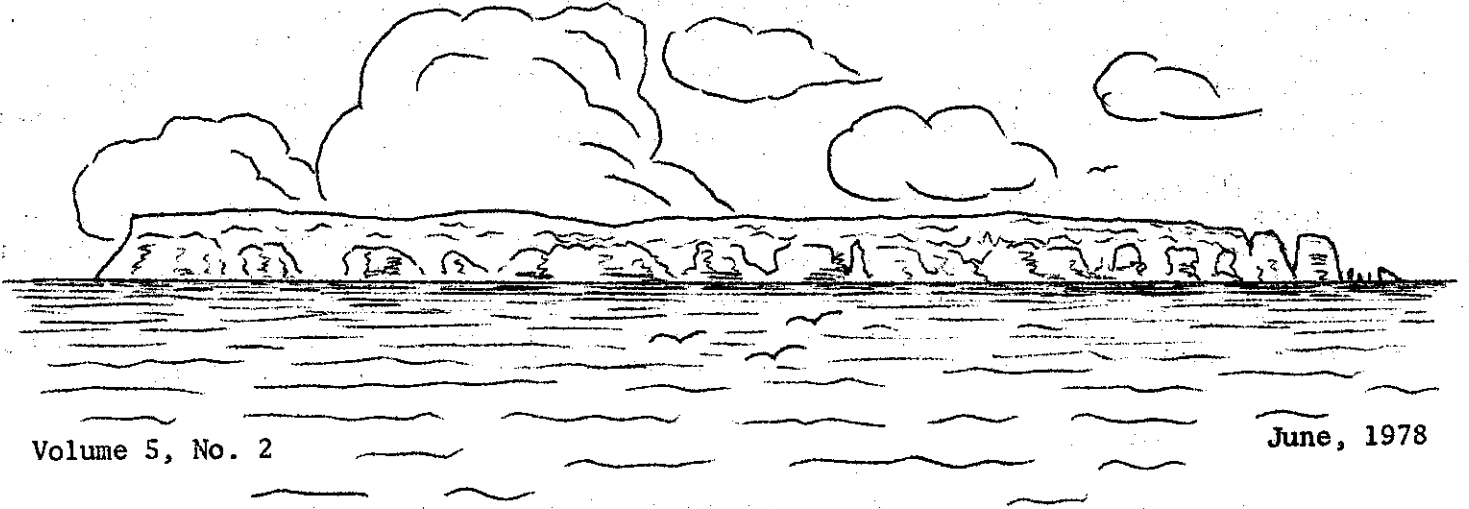


BLOMIDON NATURALISTS SOCIETY NEWSLETTER



Volume 5, No. 2

June, 1978

THE BLOMIDON NATURALISTS SOCIETY NEWSLETTER

IS published quarterly by the Newsletter Committee of the Society.

Co-editors: Jean Timpa and Roy Bishop
Art/Production: Roy Bishop and Julia Melzer

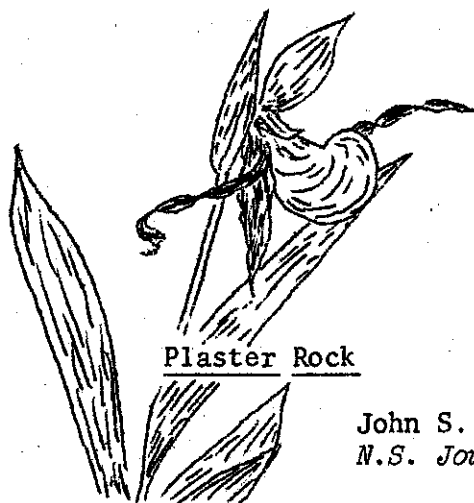
"...the primary object of the Society shall be to encourage and develop in its members an understanding and appreciation of nature. For the purposes of the Society, the word 'nature' will be interpreted broadly and shall include the rocks, plants, animals, waters, air and stars..."

from the BNS Constitution.

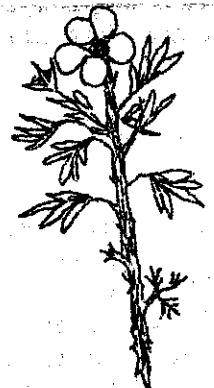
June

*It is the month of June,
The month of leaves and roses,
When pleasant sights salute the eyes,
And pleasant scents the noses.*

*N. P. Willis
June, 1957
N.S. Journal of Education*



Plaster Rock



*John S. Erskine, Wolfville, N.S.
N.S. Journal of Education, June, 1958*

IT is one of the surprises of Nova Scotia to emerge from dark spruce forest or from the yellow-green of grassland and to be faced by low white escarpments like miniatures of the chalk cliffs of Dover. Yet one may meet them over half the province, a long interrupted belt that extends from Amherst and Hantsport to Cheticamp and Dingwall in northern Cape Breton. They must have been recognized early as valuable deposits, for

they are gnawed by the quarryings of many ages, surface-pits connected by cart-tracks to river banks, long cuts served by light railways, and, the most recent, great devastated areas which roads or railways link to the sea.

This gypsum is far commoner than meets the eye, for in wide areas it is hidden by an overburden of glacial clay which becomes forest or farming land. Then the underlying plaster rock is revealed only by springs with a sulphurous smell and a border of red-stemmed dogwood-bushes. Today the quarrymen prefer this deep unweathered gypsum, which is often greyish-blue in colour. Bulldozers scrape the surface free of soil; dynamite blasts explode in long lines; steam-shovels load endless files of trucks along the face of the cut, and the hill moves off piecemeal towards the sea.

The white weathered gypsum on the surface is now of little value and remains untouched. At its edge, too, farming stops, for the surface is sculptured into a gigantic honeycomb of vertical caves through which rainwater seeps down towards sea-level, and in the roughest areas even cattle cannot graze, for the vegetation is scanty and the danger great. These few small ears remain almost unchanged by man, and in them one glimpses a native vegetation which has been driven wholly from the richer lands.

The Flowers of the Gypsum

It is in early spring that the flowers of the gypsum are at their best, for the humus is thin and the plaster rock holds up little water. Before the gypsum "chimneys" become parched, some early flowers live out a few brilliant weeks. Fringing the top of the cliffs is a golden border of small ragwort which will have withered to dry stems above perennial crowns before its relatives have come into bloom. The crumbling cliff-faces carry patches of a tiny blue primrose, a rare small sedge and clumps of fleabane like flimsy lavender daisies; and the sulphurous pools below are jewelled with the floating golden flowers of Pursh's buttercup. In the shade of hardwood trees rich clumps of leafy-stemmed violets lift constellations of sky-blue flowers, and among pincushions of rare mosses grow masses of yellow lady's-slippers. In a month all these herbs will have vanished, but a few hardy shrubs will wring a living even from the bare cliffs which glare, blinding white as snow, in the sun of summer. Always there is the clumsy rough-stemmed dogwood which seems to flower rarely and to fruit more rarely still; there are shrubs of leathery-leaved shepherdia, twin red berries in the axils of its leaves, its stems coated with cinnamon-coloured fur which helps to protect it from drying in the drought of summer; and there is the shrubby cinquefoil with its large butter-yellow flowers.

Not all of these plants are absolutely confined to the gypsum. Four--the ragwort, fleabane, buttercup and sedge--I have never found except on gypsum; others, such as shepherdia and the dogwoods, will tolerate cliffs of basic rock and even river-bluffs that are not too acid; but others, such as the cinquefoil and yellow lady's-slipper, are found also in open marshes or bogs too acid for most plants to tolerate. In part the reason is that bog-plants must have mechanisms to reduce evaporation, since few of them can withstand the poisoning of much acid bog-water, and this reduction in waste of water is valuable also on the gypsum; the other reason is that these are marginal plants, equipped for economical survival but not for competition. In Europe the most probable places for finding the most primitive of surviving human types are in areas of rough mountain and in the slums of old cities, environments in which complex culture is of least survival value. It is the lack of competition on gypsum that allows the many unexpected survivals that make its botany interesting.

Rarities

In Roland's *Flora of Nova Scotia* there is a tantalizing record of the Canadian violet which was once found at Wentworth in Hants County. For many years I made pilgrimage every spring to the gypsum in search of that purple-veined white violet with a yellow eye. I have never found it; but once, when we were weaving our way among the gypsum chimneys, my wife, who has a longer experience of botany than I, asked suddenly: "What bush is that?" It was a nondescript shrub about a yard tall. I groped for a name, for in spring my knowledge of plant names has been weakened by a winter of thinking of other things. "Canada honeysuckle," I replied, "...only it isn't. It has alternate leaves." I broke a branch, but, although the wood was brittle enough, the bark refused to part, and I knew that we had found leatherwood, a shrub common in central Canada but here unknown.

Another spring I was trying to fight off a headache by scrambling over the Newport gypsum. The familiar chimneys and gullies offered me only familiar sights, budding ragwort and smooth grey poplars unfolding furry white leaves. I pushed through tangles of brambles, crunched over wastes of rusted cans, and then clambered up to the clean ridges of gypsum where the shrubs were budding. All morning I had not found a lady's-slipper, either the common pink ones with leafless stems or the even commoner

yellow, but now I saw at my feet a clump already in flower. They were very small, and the slipper was white thickly veined with purple and was pointed at the front as though by a goat's beard.

Often when one meets a new plant, it is already familiar, an old acquaintance known from illustrations or from dried specimens. One feels a sense of triumph but little surprise. But this flower puzzled me. I had been quite sure that there were no more orchids of this genus left to be found in Nova Scotia. So I turned to the books of wider range, and these were in no doubt. This was the ram's-head lady's-slipper whose easterly range reached to central New England and southwestern Quebec.

There was something in common between these newly-found species. In central Canada both these and the Canadian violet seem to have had a prosperous period when they followed the retreating glaciers northward and flourished for a space on the shattered land before forest closed over them. Now they survive patchily in thin soils and by open glades, in places that the forest has never mastered. Here in Nova Scotia the gypsum provides similar protection. We are quite uncertain that conditions after the glacial retreat were the same in Nova Scotia, for other things point to a succeeding period of local glaciers and coniferous forests, but we shall probably have to wait for a thorough study of the pollen records of our bogs before our picture of the period can be made clear.

Pre-historic Times

Sometimes what seems most remarkable is that the gypsum itself should have survived. It is so soft and defenceless. The weathered rock crumbles in one's fingers, and the occasional veins of selenite--gypsum that has been dissolved by water and recrystallized--is smooth and clear as glass, yet one's thumbnail will scratch it. So soft, and yet three hundred million years have passed since that gypsum was first formed.

It is difficult to picture the Minas area as it was in those days. At one time the shoreline of the Atlantic had been squeezed into long wrinkles, here thrust up as the South Mountain, there thrust down in a great bay that paralleled the sea. Then for fifty million years rain and frost and snow gnawed at the mountain-range and tore it down. The ridge was cut into sharp peaks, and the peaks became rounded hills, and the crumbled rock was washed by the rivers to form great swamps in the shallows of the inland sea.

If we could board out time-machine and spend a holiday on that sea, we should notice first the extraordinary bleakness of the skyline where no trees soften the bare outlines of the hills. There is no North Mountain behind us, no red slope of Blomidon, for these are still far in the future. The rivers are nearly dry, for there has been no rain for months. When a thunderstorm comes, the water pours down the bare slopes where only mosses and lichens hold the surface, and the rivers belch out a yellow flood that smothers the corals far out into the shallow sea. The swamps are overflowed, there where Melanson will be, where the flats are dark with forests of *Lepidodendron*, horsetail-trees six inches thick and twenty feet high, and dead logs drift away on the flood and are scattered in a tangle along the muddy shore.

Away from the river-mouth the sea is a shining blue, for the bottom and even the shores are white with gypsum which bacteria are precipitating from the still water. The sea is not wholly landlocked, since here and there are signs of life, beds of shell-fish which stand up like submarine islands, for any of their free-swimming larvae that sink to the bottom elsewhere are smothered in the sludge of gypsum. Ammonites in tightly curled ramshorn shells float at the surface, waving their tentacles, and at our approach sink gently towards the bottom. And occasionally slow fishes slide past, primitive fishes that, dying, leave horny scales in the mud while their soft skeletons dissolve into the sea...

For millions of years that sea remained, while the hills were smoothed away and trees of new type rose to dominance in the swamps and disappeared again. The shell-beds built up towers of limestone, while around them the persistent rain of gypsum, perhaps the yearly thickness of a hair, rose to a thousand feet in depth. The earth stirred after a long sleep, and the gypsum was heaved up from beneath the sea...

Today one may book a passage to the moon, but no one has yet offered us tours of the Carboniferous era when the gypsum was laid down. But there much of it remains, a feature of the Nova Scotian landscape. Around Windsor and Upper Musquodoboit quarries are hacking away the limestone hills which rise abruptly from the soft gypsum. In the limestone you may see the thickly clustered lampshells and occasionally the curl of an ammonite. And at Horton Bluff, where gypsum is replaced by shale, the mud of a forgotten river, the present beach, which is also that of ancient times, is rippled by the wavelets and cracked by the sun of those days, and is printed at the former high-water mark by the overlapping shells of prehistoric trees. There too, embedded in hard shale,

are the sausage-like bodies of corals smothered by the floods of long ago.

Acknowledgements

Our thanks to all those who have made this Newsletter possible; also to the many people who contributed slides for the showing at the April meeting, and to Andy Dean for his June slide show of King's Landing, New Brunswick, and the other based upon slides taken in the Land of Evangeline.

"It is very far from true that the photographer need be merely mechanical, that he can have no personal vision. He cannot, like the painter, impose upon Nature a pattern or design which isn't there. But he can select and frame his picture in such a way as to reveal the pattern and design which the merely casual observer has failed to see, either because he did not look closely enough or because it was confused by adjacent irrelevancies. The more the painter invents, the farther he takes us from the world which actually exists and to that extent he may even encourage us in an alienation from the real. The master photographer, on the other hand, discovers rather than invents, and in that way he may second H. D. Thoreau in Thoreau's most insistent injunction, namely: 'Be not among those who have eyes that see not and ears that hear not'."

J. W. Krutch

Letters to the Editors

Curtis H. Chipman
R. R. 3, Lunenburg, N.S.
BOJ 2C0

May 7/78

To the Editors:

On returning recently to Wolfville and working my way through an accumulation I found two copies of your Bulletin. I am writing to say how very much I enjoyed each issue: so much so that I have passed each copy along, one to a friend and one to my son. The contributed articles were interesting and reports of your activities make me wish my domicile was less mobile. Thank you for your effort.

Sincerely yours,
Curtis Chipman

Thank you for your encouraging words. We are pleased to see the BNS Newsletter passed around. Sometimes we do have extra copies available. If any of you have friends who might be interested in a copy, call 542-5678. We might be able to oblige.

JULY

*Earth is all in splendor drest
Queenly fair, she sits at rest,
While the deep delicious day
Dreams its happy life away.*

- M. E. Sangster

Outdoor Chat

Dr. Harrison F. Lewis
from *The Shelburne Coastguard*

August 1953

In this coastal region July and August are marked by the great southward migration of sandpipers, peeps, plovers, turnstones and other shorebirds. Some of these attractive feathered inhabitants of beaches and marshes nest in Shelburne County, but

many nest in more northern regions, including the Arctic. They seem to stay there as short a time as possible and to spend most of the summer in moving slowly southward along the coast and, to some extent, the shores of inland waters. Several species of our shorebirds winter in South America. The chunky bird that goes by the name of knot or robin snipe nests as far north as northern Ellesmere Island and north-western Greenland and goes as far south as Patagonia, at the southern end of South America. What a round trip to make every year! Although it is summer in southern South America in December and January, when these birds are there, they do not nest there. In February, as autumn of the southern hemisphere approaches, they feel the annual instinctive interest in reproduction and set out on the difficult and dangerous journey of thousands of miles that takes them at the right time in June to the tundra and melting snowbanks of Arctic Canada.

Naturally enough, the southern tip of Nova Scotia is an assembling area for shorebirds on their southward journey. The beaches, marshes and mud flats around The Hawk, at the south side of Cape Island, are well suited to their needs. Here, on August 12th, we found 14 different kinds of shorebirds, some of them present in hundreds. They were building up strength and resolution for the over-water flight that they faced, whether to the New England coast, or, as some go, direct to the West Indies or to South America. Perhaps the most interesting of them all were five Hudsonian godwits, standing in a group by themselves. These are stout brown birds, with long bills that are slightly upturned, and with a conspicuous white patch on the back, just above the base of the tail. They are so rare that they were thought, not long ago, to be close to extinction, but an expedition from the Royal Ontario Museum found, more recently, that they still occur in moderate numbers on the west coast of James Bay.

Because of reduction in numbers, comparatively small size and low reproductive rate, all these snipe, plover and similar birds of our shores are protected by law throughout the year. The only members of the shorebird family for which there is an open season in Canada are the woodcock and Wilson's snipe, which, as gunners know, are seldom or never found on open shores. The woodcock prefers damp thickets and Wilson's snipe is a bird of meadows, marshes and bogs. In the United States there has been no open season for Wilson's snipe for several years past.

During June and July, while their young are still unable to fly, black ducks are very clever at keeping out of sight, but now that the young are on the wing, these birds are showing themselves on suitable waters throughout the county. The prospects for duck hunting in the open season, which will begin on November 21st, are considered so good that the season has been lengthened to 60 days and the daily bag limit has been raised to 8 ducks.

This year the woods seem to abound with small mammals, such as squirrels, chipmunks, rabbits and porcupines. Through open woodlands the number of trees or large bushes of wild or Indian pear that have been severely cut back or broken over by porcupines is impressive. These awkward, timorous animals are causing some damage to apple trees, but, fortunately, they are easily driven away. To prevent rabbits from damaging plants in country gardens is more difficult.

The roadsides of Shelburne County are productive and attractive. They are a source of quantities of good food, such as blueberries and cranberries, and they are bright in season with various beautiful flowers, including mayflowers or arbutus, bluets, roses and orchids. All this usefulness and beauty is threatened with destruction by the spray treatment with which the provincial Department of Highways is experimenting. If you want to see what a sprayed roadside looks like, take a look at the sides of Route 3 between St. Margaret's Bay and Halifax. Then consider whether you want roadsides like that in Shelburne County.

. . . ○ . . .

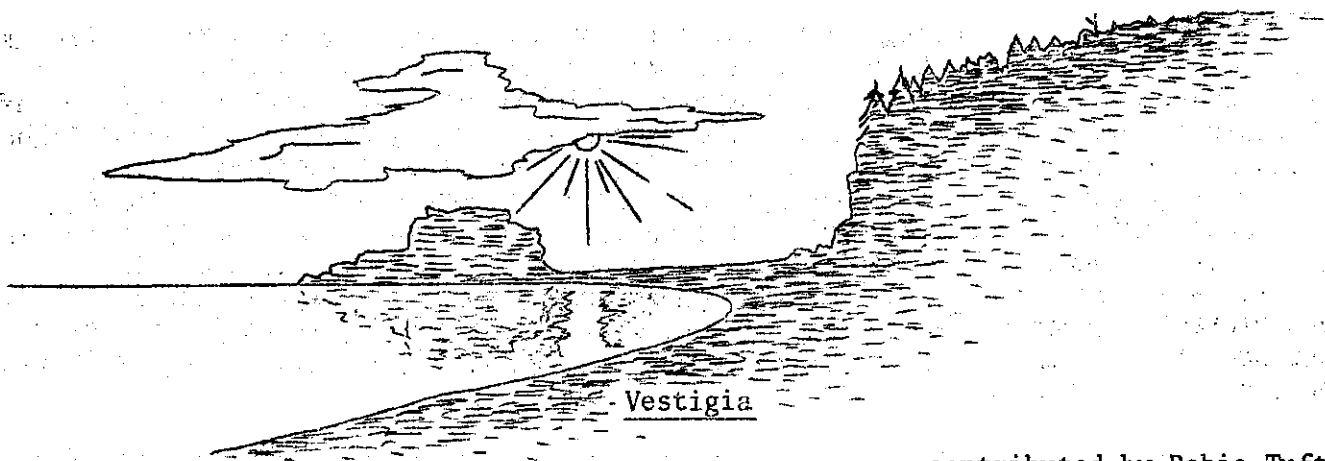
"The human brain, so frail, so perishable, so full of inexhaustible dreams and hungers, burns by the power of the leaf. Only the green plant knows the secret of transforming the light that comes to us across the far reaches of space."

-- Loren Eiseley

August

*Dust on thy mantel! dust,
Bright summer! on thy livery of green.
A tarnish as of rust,
Dims thy late - brilliant sheen;
And thy young glories, leaf, and bud, and flower,
Change cometh over them with every hour.*

W. D. Gallagher



contributed by Robie Tufts

Bliss Carman (a New Brunswicker) at the height of his fame, was Canada's unofficial poet laureate. On one occasion he lectured at Acadia University, and I had the honour of hosting him over the week-end. On our way to the hall that night I asked him if he was going to recite his poem VESTIGIA. Before replying he turned and asked me--"Do you like Vestigia?" I replied that I not only liked it but had memorized it years ago. At that, he pressed my hand and said: "Vestigia is the loveliest piece I ever wrote." Roughly translated the word means 'traces of God in Nature'. Here it is:

I took a day to search for God,
And found Him not. But as I trod
By rocky ledge, through woods untamed,
Just where one scarlet lily flamed,
I saw His footprint in the sod.

Then suddenly, all unaware,
Far off in the deep shadows, where
A solitary Hermit Thrush
sang through the holy twilight hush -
I heard His voice upon the air.

And even as I marvelled how
God gives us Heaven here and now,
In a stir of wind that hardly shook
The poplar leaves beside the brook -
His hand was light upon my brow.

At last with evening as I turned
Homeward, and thought what I had learned
And all that there was still to probe -
I caught the glory of His robe
Where the last fires of sun-set burned.

Back to the world with quickening start
I looked and longed for any part
In making saving Beauty be
And from that kindling ecstasy
I knew God dwelt within my heart.

BLISS CARMAN

The Status of the Blomidon Naturalists Society: A Crisis?

by Larry Bogan

During the past year and a half, I have acted as President of the B.N.S. without really trying to determine the direction the Society should take. At the meeting in April when we were unable to change executive; I was forced to consider in more detail, the future of the B.N.S.

I have always assumed (and properly so, because it is written in the Constitution) that the function of the B.N.S. is to have educational evening programs and outdoor field trips to observe nature. These have been provided and we have been fortunate to have excellent resource people, and as a result I would say that all our sessions have been very rewarding for those present.

The difficulty is that, because of attendance, some of those sessions have been disasters and embarrassing to those who arranged them. Now, I don't believe that members of a Society should attend meetings only out of sense of duty, but lack of attendance does show a certain general lack of interest in the Society and what it is trying to

do. This was particularly apparent when the attendance at the annual meeting was so small that no business could be transacted (and it is indeed necessary to have some business meeting in our type of Society).

We can not blame the above results on a lack of members for our paid membership has stayed reasonably large for our small area (70 - 90 persons). I have concluded that the form of the Society, as originally designed, does not fit the expectations of Society membership. I may be wrong, but I see the membership looking for (1) an interesting local newsletter on Natural History (2) evening programs that educate and entertain and (3) fascinating field trips to new places lead by experts in some field of natural history. These have been provided!

But these do not come free, someone has to pay for them. We are a volunteer group, so it has been a few members paying with their time, talent and sometimes money. The dues of \$2 a year only pay for supplies to produce and mail the newsletter and meeting announcements.

Now some of the core members of B.N.S. have decided that they do not have the time and commitment to continue to carry the Society. Will some other members be willing to take over some of the responsibilities? We are still waiting for Volunteers!

Perhaps, it is necessary for some evolution to take place. Some Naturalists' societies run well on the basis the B.N.S. was built (e.g. the Halifax Field Naturalists) but others run better as an informal club (e.g. the Chignecto Naturalists).

There are several possibilities for the B.N.S.: (1) remain as it is and find a new executive, (2) dissolve the B.N.S. and give assets to other like-minded body, (3) redesign the executive to a committee structure and find a committee to share responsibility of leadership, (4) decrease the scope of the Society to a club of mutually interested persons with few public meetings or (5) join some other Naturalist Society or Scientific Society (e.g. the Halifax Field Naturalists or the N.S. Institute of Science).

At one time or other in the past it was thought the B.N.S. could do some very important things: (A) provide continuing education in natural history to the people of the Annapolis Valley (B) maintain a conservation committee for monitoring the health of the natural environment of the Valley (C) do valuable studies of the local natural environment (D) publish information on local or N.S. Natural History. But, alas, although perhaps all of the above should be done, it requires a strong organization with many active members.

It is clear that the B.N.S. will change unless we have more active involvement. What should we do? Do you really care? Write to the Newsletter or Volunteer.

L. Bogan

HALIFAX FIELD NATURALISTS PROGRAM

- 3 August INSECT WORKSHOP: Ken Neil will have Nova Scotian and tropical moths and butterflies on display and will be giving details of their structure, life history, trapping and preservation techniques. Nova Scotia Museum, 8:00 p.m.
- 1st or 2nd weekend CENSUS OF LEACH'S STORM PETREL on Pearl Island. Anne Linton, who is studying this small seabird, needs a limited number of keen volunteers who would enjoy helping find out more about this rare bird and are willing to spend a day burrow searching. Dept. of Lands and Forests is being asked to help with transport. Phone 422-2977 after 6:00 p.m.
- 5 August RISSER'S BEACH: An interesting attempt by N.S. Lands and Forests to create a park which integrates the recreational and natural history of a beach taking into account the sensitivity of loose sand. Meet N.S. Museum 10:00 a.m. Bring food.
- 26 August TANCOOK ISLAND: These islands have been highly modified from the original vegetation by a long period of cultivation. Bring a picnic. Meet N.S. Museum 9:30 a.m. Ferry leaves Chester 10:45 a.m.
- 7 Sept. PLANT DISPERSAL WORKSHOP: Jane Spavold will have examples available and will explain the often curious ways by which plants travel. Nova Scotia Museum, 8:00 p.m.
- *****

A MATTER OF SURVIVAL

The field experience of which I am about to write is actually so commonplace in the animal world about us that it would not warrant the stroke of a pen if we were given the opportunity more often to witness such actions or contests in operation.

It happened in late autumn. I was pheasant hunting with a friend in the Canard area of Kings County when unexpectedly a flock of Hungarian Partridges flushed ahead of us. They were in the open, near an orchard and just beyond gun-shot. While watching them with little more than casual interest our attention was suddenly diverted by a streaking Goshawk which appeared from no where in hot pursuit. With apparent ease it overtook its quarry and we saw it strike with its talons one of the fleeing birds with such force as to send it spinning to the ground. There it fluttered for a brief moment soon to regain sufficient control to enable it to scurry at top speed into the protective arms of a pile of old apple-tree limbs which happened to be close by. Following the strike the hawk had applied its 'brakes' with amazing alacrity in order to retrieve its stricken prey. The timing was spectacular, the pursuer missing its dinner by a hairs-breadth. For a moment it perched on one of the branches peering down into the tangle. But this stance was soon broken, for noting our proximity, seemingly for the first time, it took off in haste.

By removing the brush-pile, branch by branch, we could readily have recovered the bird for our own use but we both agreed that the terrified creature had already suffered enough anguish and proceeded on our way. And I distinctly recall how pleased we both were that the Hun had escaped unharmed; a reaction which I'm quite sure would have been shared by all my readers had they been present.

In such circumstances why do we so react? Both participants in the drama were struggling for survival, each in its own way. If the hawk doesn't eat it must die. If the Hun gets caught it must die. Of the two, the hawk--an example of Nature's finest architecture--is far more impressive in appearance. Why were we not sorry it missed out? Look at the matter this way. Suppose we had seen a Sparrow Hawk drop from its favourite perch on an overhead wire to pounce on a mouse in the meadow below, would our reaction have been the same: sorry it didn't escape? I think not. We'd have been glad the hawk in this case had been successful. The point I'm trying to make is that in such circumstances as above described we should not allow our compassion to run riot in favour of the participant we happen to like better. Not that it really matters one iota one way or the other, but we should always be able to justify our stand or our thinking regardless of the subject matter involved.

In their eternal struggle to stay alive all 'children-of-the-wild' live and act in strict adherence to Nature's Code. By so doing the species thrive; the individual doesn't matter, but the smartest and the most virile among them are more likely to live longer. In other words--'the survival of the fittest'.

Wolfville, June 4, 1978.

R. W. Tufts

September

*Season of mists and mellow fruitfulness
Close bosom friend of the maturing sun;
Conspiring with him how to load and bless
With fruit the vines that round the thatch-eaves run;
To bend with apples the moss'd cottage trees,
And fill all fruit with ripeness to the core.*

--J. Keats

BNS Newsletter Deadline - SEPTEMBER 21, 1978!

MEMBERS! Our files are very empty of contributions! Please be alert during this summer to anything which might interest the rest of us and jot it down. Give any such articles to Roy Bishop or Jean Timpa at meetings or outings or mail to Box 1382, Wolfville, N.S. *Let's make a super-packed issue in the autumn!*