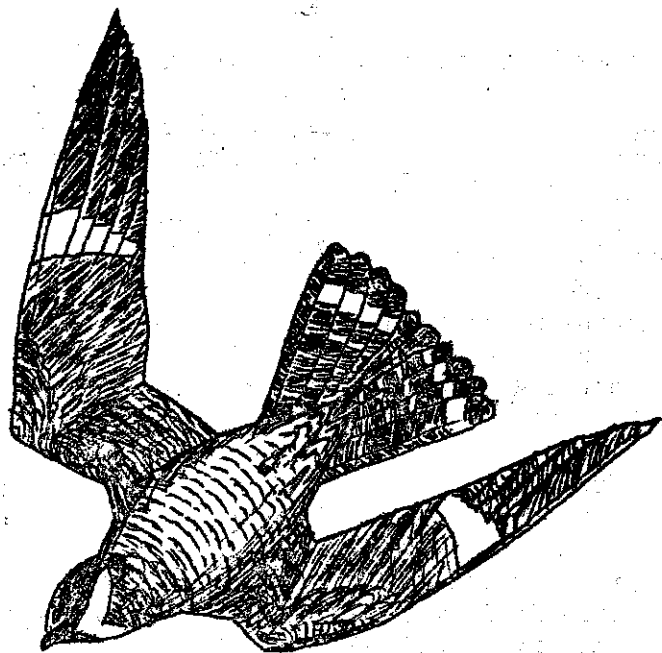


Blomidon Naturalists Society Newsletter



Volume 6, No. 2

June, 1979

The BNS Newsletter is published on the equinoxes and solstices.

Editors: Jean Timpa and Roy Bishop

Art/Production: Roy Bishop

"...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.

ACKNOWLEDGEMENTS

Our thanks to Anne Linton, Roy Bishop, and Andy Dean for informative and beautifully illustrated presentations in our April and May lecture series; and to all those who answered our plea for Newsletter articles and otherwise assisted in its production.

Could We Stop?

Alice Fuller
Hantsport, N.S.

For the last few years it has been a pleasant hobby to really see the wild flowers, and even the weeds, about us. Identifying and making a list of the places where I happened to find them continues to remind me of happy times and drives through an all too short Nova Scotia season. It also brings to mind patient friends who must at times despair when they hear a "could we stop" - probably in the most unsuitable places, in traffic or on a busy highway.

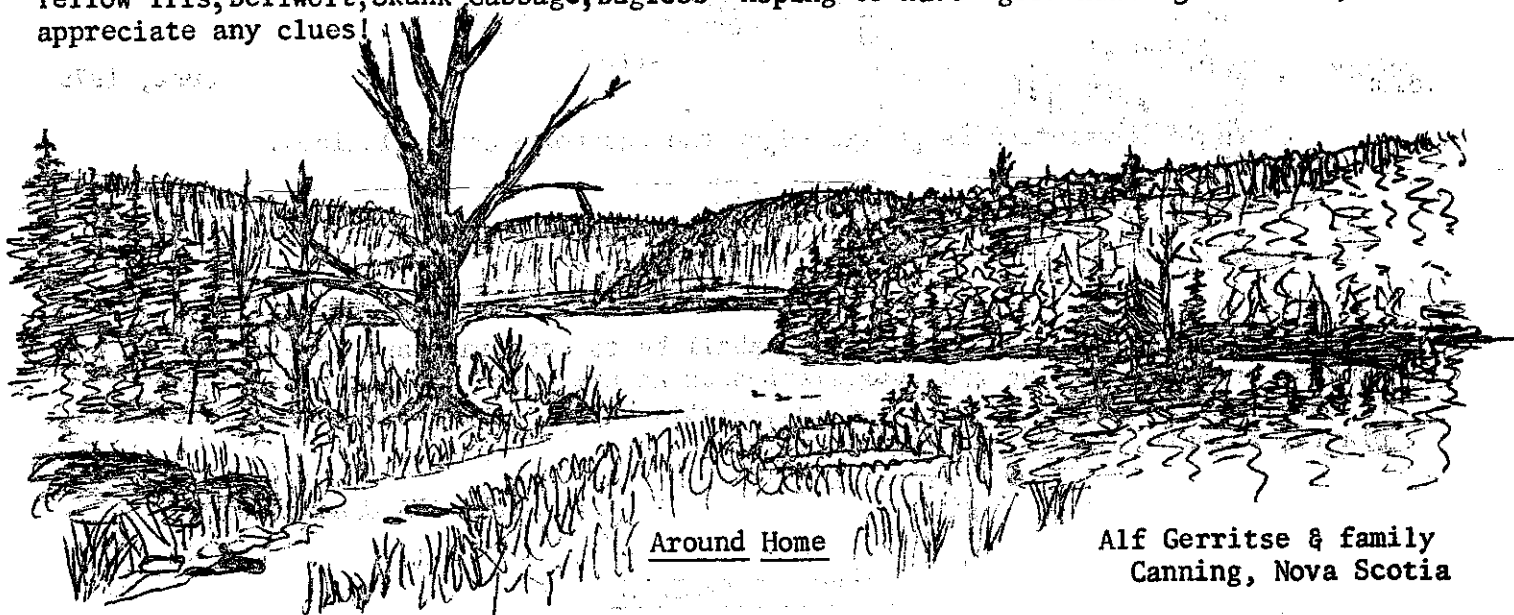
Living near a woody area and the remains of a pond where the Shaws made bricks at one time, offers many an escape from household duties and many contented moments. Sitting on it's bank while the birds swoop to feed, one also sees gulls soaring over the Avon and may hear a pheasant who announces his presence, but refuses to be seen. It can be frustrating too, as one wonders what each and everything is, in and under water. Each season offers so much there. In winter, there are still a few who enjoy skating on the old pond and it is good to see the family and dog going down the hill for a special time together. Often the ice surface must be swept clear before the frolic can begin! Unhappily this winter the family pet was caught in a steel trap but with Parent to the rescue, no real harm done.

In February a friend and I started for a short walk on the Bluff Road but with chatting and looking about we found ourselves at the Blue Beach Road. We walked in to the Beach and even at that time of year found a truck stuck in the shale. The owner was trying desperately to get it free before the tide came up to it. At Earl's Creek we decided to walk the rest of the way back by the track and after a hardy, laughing scramble up the high frozen bank we reached the old track bed. There we saw, as far as we could see, a stand of old Queen Anne's Lace, each cup half filled with the light, sparkly snow which had started a short time before. A strong sun came through at that time and it remains a delightful scene to remember for us.

Back to my list and some specials on it:

Name	Where	Name	Where
Calopogan	Centreville Bog	Yellow Violets	Bog Road, Hantsport
Silverweed	Brick Pond, Hantsport	May Apple	Shelburne
Wood Anemone	" " "	Indian Cucumber	Card Lake
Pipsissewa	Bridgewater	Bird's Eye Primrose	Brier Island
Dutchman's Breeches	The Split Trail	Coral Root, Pyrola	Experimental Farm Ravine
Twisted Stem	" " "	Rabbit's Foot Clover	Richibucto
Wake Robin-Spring Beauty	" " "	Arethusa	Diligent River
Gold Thread	" " "	Twin Flower	" "
Grass Leaved Arrowhead	Piggott Lake	Yellow Lady Slipper	
Swamp Candles	" "	Sun Spurge	Old Halifax Market - now in my garden!
Pitcher Plant	" "	Water Plantain	Falmouth
Ladies Tresses	" "	Comfrey	Hantsport
Trout Lily	Gaspereau		

There are many still to be found and among them are Bloodroot, Cheeses, Puttyroot, Yellow Iris, Bellwort, Skunk Cabbage, Bugloss--hoping to have "good hunting" in 1979, would appreciate any clues!



Around Home

Alf Gerritse & family
Canning, Nova Scotia

It was as one of those beautiful promises, the way the dawn arrived; a haze under an absolutely cloudless sky, with ever increasing orange light on the eastern horizon. It was nearly 5 a.m. as we left home to go via route 12 to Butler Road for a bit of fishing. Fishing is the only excuse we use for getting up at this hour, even though our success over the past years can be counted in number of eels only.

Our effort at this sport was quickly replaced by a desire to take advantage of the hour and observe some nature trails. We were rewarded a short time later when we encountered 3 kit foxes in the middle of the road. As their fear of people was equal to their curiosity we had nearly half an hour to observe them. Only our desire to be closer and get more pictures finally made them decide to leave us.

Continuing our trip with interruptions to look at a very large owl, to photograph a mass of sundew in an effort to catch the myriad of deflected sun rays, and to move a large brown garter snake off the road, we arrived at a small brook carrying only sufficient water to warrant the name. We discussed the probability of fish and the catching thereof, when our attention was drawn to a very large turtle on the side of the road. The head indicated that we had encountered a snapping turtle; the shell measuring approximately 14" long and 11" wide was well marked and several photographs were taken. It appeared that she was there to drill her eggs into the roadside, although she was completely still while we were there, and only our proximity brought her to her feet to snap and hiss at us. To accommodate the photographer, a small stick was used to persuade the poor animal into showing its defences. We hated to leave such a fine specimen.

However, we moved on to Mantle Tree Lake to observe fauna and flora in general. Many species of plants were photographed; and the lake provided some fine scenic shots. After consuming some late wild strawberries and early raspberries, we decided to return home to spend the afternoon at more conventional pass times.

We just wanted to write this to indicate how rich we are, how close to Nature we can still be, what tremendous influence our little forays have had on our lives, especially on those of the younger members of our family; to show how easy it is to teach respect for Nature, even though "going fishing" may seem to contradict this, and also to show how little we know and of what tremendous importance an organization like BNS can be by enlightening us with information on names, species and areas. Being a naturalist is being fanatically religious without a need for denomination or doctrine.

Coming from a densely populated European country, I wonder if anyone is aware of the freedom, the space and the vast wealth of Nature we can explore here so easily. In Holland the claustrophobic conditions create a strong need for self-preservation which expresses itself in protection of property with "no trespassing" signs and fences. Few places are accessible to the public without a permit, entry fee, the risk of a fine or a pitch fork carried brazenly by an irate farmer.

In Nova Scotia we do not have this, but can we keep it this free? I believe that BNS has a duty to fulfill in teaching respect for this freedom and beauty, and that we as beneficiaries should support the organization because the time will come when homes, highways, factories and garbage will cover all our beauty spots, endanger our wildlife and destroy the flora. I believe that the occasional bit of pollution or spray or whatever, that causes our present society to get up in arms is not as serious (and can be assimilated by Nature) as the threat of population density. Will our children know what it is worth to be able to leave some early morning and spend the day with Nature? I am trying to teach mine against all odds. I need the BNS and everyone else to be concerned and to teach respect by knowing, seeing and experiencing.

From the Outdoor Chat column, Shelburne Coastguard

Dr. Harrison F. Lewis

No. 18, July, 1954

Early in July Mrs. Wilfred Bower reported a nighthawk perching in the oak in front of Shelburne Post Office and inquired where in that vicinity a pair of these birds might nest. Nighthawks frequently perch in trees but are seldom noticed there because they have the habit of resting lengthwise on top of a large limb, instead of perching across a limb or twig, as most birds do. Their original nesting places, if one may use that term for birds that construct no nest, are on bare rock, gravel or soil in the open. Many still lay their eggs on such materials in secluded places in Shelburne County. Nowadays they commonly make their homes also in cities, towns and villages, where the eggs are laid on flat, gravel-covered roofs, such as often cover modern public buildings. These birds, of course, are not hawks, but are exceptionally useful insect-eaters, specializing in the consumption of mosquitoes, beetles and flying ants. One nighthawk's stomach was found to contain more than 500 mosquitoes; another held 2,175 ants.

* * * * *

Last month this column referred to our three kinds of insect-eating plants and described one of them, the pitcher plant. The two others are inconspicuous little plants, the sundews, which are plentiful in the county in damp places, such as bogs and the borders of roadside ditches. These two kinds of sundew are much alike, the most obvious difference between them being that in one the leaf-blades are nearly round, while in the other they are elongate and spoon-shaped. The leaves are reddish and are arranged close to the ground in a tuft or rosette. A short, slender central stem bears small white flowers that open one or two at a time.

The upper surface of a sundew leaf bears numerous fine bristles, those near the outer edge being longer than the central ones. At the tip of each bristle is a tiny droplet of a clear, sticky liquid. When a small insect touches a droplet, it adheres to it and struggles. This promptly brings it into contact with numerous other droplets, to which it also adheres. The bristles or hairs immediately curl in toward the center of the leaf, covering the insect and holding it fast. The insect soon dies and its body is then retained under the infolded hairs for days, while a special fluid supplied by the leaf digests it. The liquid containing nourishment resulting from this digestion is absorbed by the leaf. When the process is complete the hairs straighten, releasing the dry, hard parts of the insect, which blow away. The leaf is soon ready for another victim. Untold numbers of gnats and small flies are thus destroyed.

* * * * *

Nova Scotia is fortunate in that no poisonous or dangerous snakes occur in the province. Four kinds of snakes are known to occur commonly in Shelburne County. Their bodies, crushed by traffic, are often seen on roads and may be easily identified.

Our most conspicuous snake is the common garter snake, which differs obviously from our other species by the fact that its back is spotted and mottled. The length of young at birth is about 7 inches and that of adults about 20 inches. The garter snake feeds largely on earthworms, salamanders and toads.

Our next largest snake is the smooth green snake. It is indeed a beautiful creature, with light green upper surface that enables it to be recognized at first glance. It is remarkably gentle and inoffensive and can scarcely be induced to bite. Its food, as far as known, consists entirely of insects. Average length, about 15 inches.

The ring-necked snake, with a length of 12 inches, is dull bluish gray above, with a yellow neck-ring. Although this snake is not rare, it is secretive and not often seen. It eats insects, earthworms, and small toads, salamanders and snakes.

Our smallest snake is the red-bellied, about 10 inches long. It is dark above and reddish beneath, with three yellowish spots behind the head. It is a persistent destroyer of slugs, which are practically its only food.

The ribbon snake, with a length of about 2 feet, has been found in Nova Scotia only near Caledonia, but may also occur in the interior of Shelburne County. It is a slender snake, with three bright yellow stripes in strong contrast with a dark ground colour. If anyone finds one, please let us know!

* * * * *

No. 19, August, 1954

With the advance of summer the volume of bird music wanes to silence and the volume of insect music in the countryside increases. On the 5th of August we heard the first loud, shrill, monotonous buzzing of a cicada. While the sound is scarcely attractive, in the mind of one who has lived much in these latitudes it is so associated with mid-summer days as to be welcomed. This long-continued noise is produced only by male cicadas. It emanates from a vibrating membrane on each side of the insect's body and is amplified by special chambers that act as resonators.

A common insect sound, as pleasantly associated with midsummer evenings as that of the cicada is with hot days, is made by the large green grasshopper called katydid. It is produced by rubbing together the bases of leathery front wings. The sounds thus made by Nova Scotian katydids, while readily recognizable, differ from those of katydids farther south by being much less loud and by including four to seven notes in each call, so that they cannot actually be fitted to the syllables "kat-y-did". It has been claimed that the rate at which the calls are given is so closely governed by the temperature that it is possible to compute the air temperature from the frequency of the sounds. It appears, however, from later investigations, that humidity, as well as temperature, affects the rate of calling and that some individual variation may be noted.

Sounds such as those of cicadas and katydids, which are produced by external mechanical apparatus, are not truly "voices" or "cries".

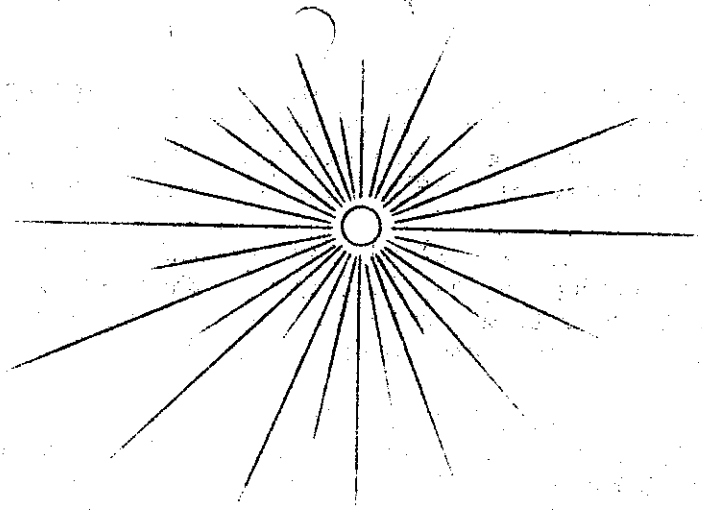
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At this season the tidal inlets along our coast are ornamented and rendered more attractive by a generous sprinkling of great blue herons. Locally they are often called cranes, but we have no true cranes in Nova Scotia and these birds are herons. Their faces are feathered, like those of most birds, whereas true cranes, which occur on the western prairies, have bare, red faces, as turkeys do. Great blue herons arrive here about the end of March and may be seen around shallow waters from that time to November. Now that the young have left the nests and are independent, the number of these birds to be observed is much increased.

Whether standing on some tide-flat or isolated rock, or flapping majestically overhead, these herons are stately and picturesque. The artistic value of herons is keenly appreciated by the Japanese, whose artists have depicted them so frequently that the sight of herons going about their daily affairs reminds us of Japanese screens and fans.

Although great blue herons spend much time about shallow water, where they obtain food, their nesting colonies are often miles distant, in dense woods. They usually nest in trees, either deciduous or evergreen. Apparently they prefer the tallest trees available, but in some situations these are not very tall. At times they nest on islands and, in the relative security that these afford, may even build their nests on the ground.

Since great blue herons eat many fish, they have often been accused of destroying valuable game fish, especially trout. The tidal flats on which they do much of their feeding along our coast are not, however, places to catch trout. In salt water these birds take such fish as small eels and herring. In fresh water their catch consists largely of suckers, horn-pouts, shiners, salamanders, frogs, tadpoles and other creatures of little or no value. At times they take many grasshoppers and field mice. It is not surprising if well-stocked open pools at a fish hatchery sometimes tempt them to eat trout, but the proper and efficient remedy for this difficulty lies in screening the pools, not in destroying the herons, which are protected by law.



EACH IN HIS OWN TONGUE

by William Carruth 1859-1924

Contributed by Robie Tufts

A fire mist and a planet,
A crystal and a cell,
A jellyfish and a saurian
And caves where the cave-men dwell.
Then a sense of law and beauty
And a face turned from the clod:
Some call it Evolution
And others call it God.

A haze on the far horizon,
The infinite tender sky,
The ripe rich tint of the cornfields
And the wild geese sailing high.
And all over upland and lowland,
The charm of the golden-rod:
Some of us call it Autumn
And other call it God.

Like tides on a crescent sea beach
When the moon is new and thin,
Into our hearts high yearnings
Come surging and welling in,
Come from the mystic ocean
Whose rim no foot has trod;
Some of us call it yearning
And others call it God.

A picket frozen on duty,
A mother starved for her brood,
Socrates drinking the hemlock
And Jesus on the rood,
And millions who humble and nameless
The straight, hard pathway plod:
Some call it Consecration
And others call it God.

TREE SWALLOWS: Their Unpredictable Life-Style.

Robie W. Tufts
Wolfville, N.S.
June 5, 1979

Among our resident summer birds the life-styles of none appear to be as strange and unpredictable as are those of the Tree Swallow. With practically all other species the

pattern of their behaviour on arrival in spring is regular and orderly. Respectively, they come back to us about the same time. Within two weeks nest sites will have been chosen and home-building underway. Some of them, if successful, will raise three broods while those of others will be limited to one or two.

For over 70 years I have watched Tree Swallows in my garden during the period of their nesting, and it is largely from these intimate observations that I shall endeavour to substantiate my contention that these birds are out-of-step with the others in several aspects of their day to day behaviour.

True, Tree Swallows come back to us from the south with a high degree of regularity which in this area of the province averages April 19. But aside from that incident their behaviour varies from normal to one that is irregular and at times even inexplicable. This year (1979), for instance, a pair arrived at the nest-box by my kitchen window on April 26. Up to the time of this writing--June 5--they have been coming to the box with marked irregularity, having at no time shown any inclination to build a nest though one or both occasionally entered the box. On May 25 the pair was particularly active, intermittently throughout much of the day about the nest-box even squabbling with two others of their kind which seemed to be competing for the nest site. This prompted me to place another nest-box at the far end of my garden with the hopeful anticipation that I might be favoured with two pairs. Very soon one of them went to the new box and clung momentarily to the entrance hole. Soon both pairs disappeared, and since then, to my knowledge, not a Tree Swallow has come to either of the boxes.

Last year, about the middle of May, a pair which had been showing up irregularly, began gathering material for a nest but after carrying in a few wisps of dead lawn grass and half of a dead leaf--no feathers--she laid four eggs practically on the bare floor of the box. After about 10 to 12 days of incubation I noticed the pair copulating on the clothes-line near the box. This performance was repeated several times during the days immediately following. Then they left not to return. On examination the eggs proved to be rotten due to infertility. Just why the pair delayed or so badly mis-timed this all-important act of intimacy which had the dire result of infertile eggs, there is no satisfactory explanation.

When it comes to competing for a nesting site, it has been apparent on numerous occasions that Tree Swallows, physically, are no match for the more burly, stout-beaked English Sparrows. But I know of one notable exception. Some years ago one of my bird-loving neighbours while cleaning out her swallow-box, after the young of the year had flown, found among the debris of the nest lining, the egg of an English Sparrow. Earlier, during the beginning of the nesting period, she had noticed much conflict between sparrows and swallows. Obviously the latter had successfully fought off their aggressive competitors, but details of how their victory was accomplished were not recorded.

Further to the strange habits of Tree Swallows it is not uncommon to see several adults suddenly appear at a nest-box which contains a brood that soon will be on-the-wing. I have seen as many as seven--two of which were probably the parents--standing in line, so to speak, waiting for their turn to feed the youngsters. Throughout such performances complete harmony is evident. This apparent communal activity is usually short-lived, ending as suddenly as it began.

It is commonplace for a particular pair of Tree Swallows not to tolerate another pair to nest nearby. But I have seen several instances of these birds nesting in small colonies, the nesting boxes being quite close together, and perfect harmony seemed to prevail throughout.

Tree Swallows are rated as a single-brood species which means that they do not raise more than one family a year. But there are exceptions, for I know of one pair which raised two broods during each of two successive seasons.

When the normal nesting season is ended, usually early in July, Tree Swallows suddenly become very uncommon. I believe they are among the first to leave on migration, though there are diverse views among bird students when it comes to explaining just where they do go so suddenly after the completion of their reproductive cycle.

With respect to the failure of Tree Swallows to nest in my garden, as above cited, such has been the case only in recent years. For over a long period I vividly recall that it was customary for a pair to build elaborate well-feathered nests, and it was taken for granted that the young would mature. And in this connection I might add that in recent years other ardent birders have, from time to time, reported similar accounts of errant Tree Swallows.

Around Kings County This Spring

telephoned reports from members

A pair of eagles is nesting once again at the Black River Lake site. By the 29th of March (early!) the female was incubating eggs. Keeping track of this nest via helicopter

One Glossy Ibis was first seen April 25th and several times thereafter at Scott's Pond near the Canard Poultry Processing Plant.

A Cattles Egret visited in the North Grand Pre area on June 5th.

Fifty or so Brant were observed off Starr's Point around the first week of June. These birds are not often seen here in Nova Scotia.

-- Cyril Coldwell, Gaspereau

* * * * *

Once again Bernard Forsythe of Wolfville is "hunting down" bird nests for the Maritime Bird Nesting Scheme, recording information regarding species, success and failure rates, and banding the young birds. He has promised us his usual detailed report for our September issue but has allowed us a sneak preview of some of his more unusual finds. The warblers are just starting to nest, but already he has found those of the Chestnut-sided and Yellow warblers. Other interesting nests have been those of the Rose-Breasted Grosbeak, Veery, Barred Owl (3), a Long-eared Owl on the Canard Dyke which had 2 eggs on May 9, and many crow and raven nests. Parasitism by cowbirds is all too evident!

For the first time since Bernard has been keeping track of the bird nests he has found the nests this spring of Brown Creepers (2), a Pileated Woodpecker, a Sharpshinned Hawk, and a Broad-Winged Hawk, containing 2 eggs. This latter record constitutes the first time Broad-Winged Hawks have been known to nest in Kings County.

Recently CBC filmed Bernard at the nest of a Goshawk and Barred Owl for This Land to be broadcast sometime in the Spring of 1980. We'll try to let you know more specific programming details in future newsletters.

Bernard also reports seeing several days ago four or five Crossbills.

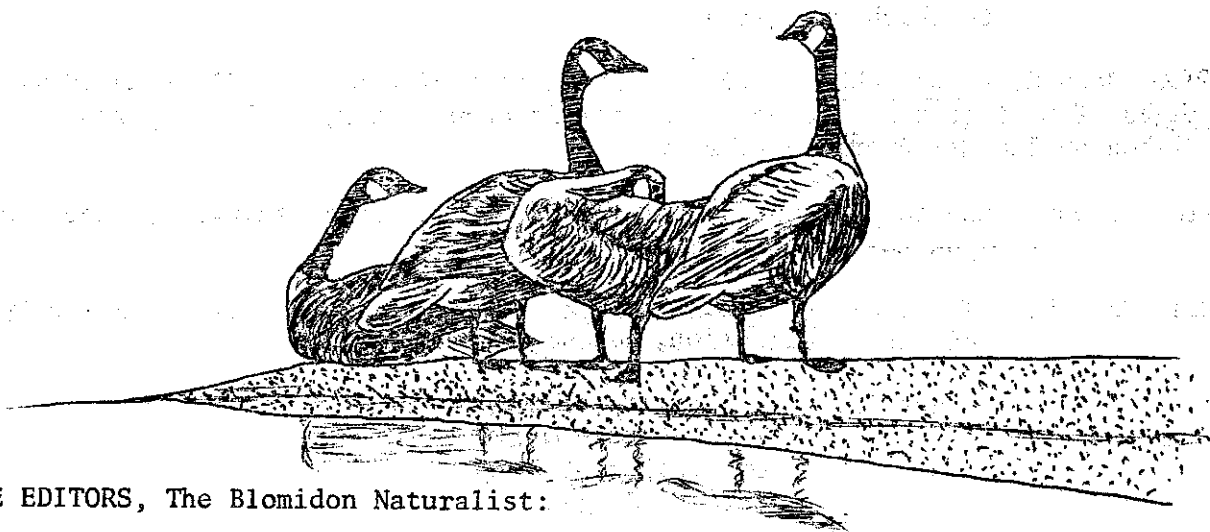
Any readers spotting active nests can give Bernard a call at 542-2427.

* * * * *

I have enjoyed the songs and antics of several male Northern (once upon a time it was Baltimore!) Orioles. They have appeared every spring in this part of Wolfville (Gaspereau Avenue, Winter Street area) since I have lived here.

-- Jean Timpa

Please telephone any interesting summer observations you'd like to share with us for the September newsletter by calling 542-5678 after September 10th.



TO THE EDITORS, The Blomidon Naturalist:

Edgar B. McKay
Bear River, N.S.

Sometime last year the officers of the Blomidon Naturalist Society asked the membership for ideas and suggestions regarding future programs. At the time interest among the members seemed to be waning or at best, passive. A few replies were sent in, and some good suggestions submitted.

In one sense there are two categories of members. The major group lives in and around the Wolfville area and is able to participate more directly in the programs and planning. Another group, a small minority to which I belong, has a real interest in the work of the Society, but its direct participation is limited by distance and time. However, even though somewhat removed by time and place from Wolfville, there are

contributions this minority could make to the enrichment and enjoyment of the society members. This in no way is intended to exclude members who live in or near Wolfville. It applies to all.

Depending on the person, three areas of interest and activity could be reported in the Newsletter, briefly or at some length. This would not only relieve the editors from part of their burden, but more importantly, it seems to me, it would in fact make the members committed participants--as we should be.

For one thing, from time to time we could tell something of our wanderings in nature--some episode involving "birds, beasts, bugs and beauty"--that we could share with all.

Secondly, we might enjoy hearing from members as to "how they got from there to here"--or how they developed enough interest in environmental matters to join a society such as the Blomidon Naturalist Society. Certainly, not all started as trained or amateur biologists or scientists; what events along the way triggered our interest in Nature? Was it a long ago trout stream now a quasi-sewer? Was it some observation by a friend? Or perhaps some question by a child who has an untarnished curiosity? It might be useful and fun to tell each other about the several paths we followed "from there--wherever we were".

Last of all I would like to suggest the role of good books--the kind Bacon says should be "chewed and digested". After all a good book is the distillation of the writer's experience, and if we take the time we can do something to remedy the universal defect referred to by a great teacher two thousand years ago "having eyes to see, they see not; having ears to hear, they hear not". Sometimes a good book can do much to increase our perception and sensitivity to the wonder and the beauty, to really see and hear what has been around us all the time. I shall not argue which comes first--book or field experience. They complement one another.

As a start at this point I shall mention three books of the many I have read over the years by such authors as Rachael Carson, Stuart Udall, Edwin Way Teale, Joseph Wood Krutch, Hal Borland, William H. Whyte, Raymond Dasmann, Fairfield Osborn, William Vogt, Paul Erlich, Sigurd Olson, Margaret Murie, Pierre Dansereau and others.

If one were to ask me to name three books as "starters" I would find it hard to choose, but I think I would choose my three from other writers, and I would be hard put to defend my choices. However, here they are:

1. Leopold, Aldo - A Sand County Almanac with other essays on conservation from Round River, (Illustrated by Charles Schwartz) 269 pp., Oxford University Press, 1966, New York, Copyright 1966.

Basic concept: land is not a commodity that belongs to us but rather a community to which we belong.

2. Storer, John H. - The Webb of Life - A First Book of Ecology, (Illustrated with 24 pages of photographs) 126 pp., A Signet Science Library Book - Paperback Published by The New American Library.

Basic concept: the complex interrelationship of all living things and their dependence upon the globe in all its parts.

3. Sears, Paul B. - The Ecology of Man - 61 pp., Condon Lectures, Oregon State System of Higher Education, Eugene, Oregon, 1967.

Order from: University of Oregon Books
107 Friendly Hall
University of Oregon
Eugene, Oregon

Basic concept: Man is part of Nature in complex ways interrelated to all life on the globe, and ecology must be viewed as more than a coordinating natural science. It is in a very real sense a social science.

TO THE EDITORS, Blomidon Naturalists Society Newsletter
Wolfville, N.S.

Curtis Chipman
R. R. # 3, Lunenburg

Dear Friends:

Your recent plea for contributions struck home when you indicated reports from travellers might be acceptable.

Mrs. Chipman and I have been fortunate in securing travel by freighters during the winter seasons. This year we sailed from New Orleans Dec. 19th. A fairly complete account of our experiences transiting the Panama Canal, visiting Japan, going South to Singapore and Indonesian ports, returning via the Phillipines, Taiwan, Hong Kong, and South Korea to Japan and then the nine thousand mile (plus) journey to Mobile would take many pages: perhaps I can tell you of bird related experiences.

In the New Orleans area, dykes keep the Mississippi within bounds. As one proceeds down river this situation changes so the river's course is marked only by bush-trees. Passage to the Gulf of Mexico takes eight hours and a pilot is in charge. In the Gulf Flying Fish attract one's attention: sometimes their travel out of the water appears to be over a hundred yards: their re-entry to the water whether the passage has been short or long comes very suddenly as if they had reached the limit of their endurance and were giving up.

Our transit of the Canal started in the evening, and the six and a half mile approach with reflecting lights on the banks lush with tropical vegetation was a very pleasant experience.

Passage through three locks raised the ship to Gatun Lake. What wonderful things man is capable of doing. Each lock in the canal is one thousand feet long and one hundred ten feet wide: after the ship enters and the gate is closed water comes in so quickly that the ship is lifted twenty-five to thirty feet and is moving out in only twelve minutes maximum. Our ship was 593 feet long and 70 foot beam: I was speculating about the time difference involved when the Q.E. II with 963 foot length and 105 foot beam was involved. The fee she paid was \$68,419.46 and ours \$17,000. We anchored in Gatun Lake for the night and with a new pilot got underway at 8:15 the next morning, so we had daylight to enjoy the beauty of Gatun Lake, man made, twenty-five miles long, supplying 52,000,000 gallons of water to one ocean or the other with the transit of each ship.

Rough winged swallows are about in great numbers and their twittering fills the air as they fly about the ship and often alight to explore. Turkey Vultures are seen circling in great flocks near the settled areas and in smaller numbers almost anywhere in the trip. Grackles were present near the lock areas - White Ibis, Blue Heron, Violet Green Swallows, the Magnificent Frigate Bird, Pelicans, Laughing Gulls in the canal area and, after entering the Pacific, the Brown Booby. Many of them were feeding on a school of fish and were exciting to watch; their dive is as swift as the Osprey and makes a cleaner penetration of the water's surface.

Pelicans fly in formation, often two to ten feet above the water's surface, sometimes in a Vee, but more often in line astern. When the leader comes to an invisible object in the air he rises over it, settles down to the previous level of flight, and each following bird goes through the same performance. On our return we had to wait two days at the Pacific end of the Canal, and the three avid bird watchers (of the ten passengers) had great fun watching these fascinating birds. One morning I saw forty-one birds in line astern proceeding out on their morning patrol using a very measured rhythmic beat of their great wings. To me they appear solemn, almost stoic. On the other hand, when at sea we watched porpoise about the ship as they raced along rising in graceful arcs through the bow wave, or as they leapt into the air again and again one wanted to cheer them on and shout for joy.

Our first stop was Acajutla, El Salvador, an early morning walk turned up some shore birds, flights of White Ibis and Pelicans. We left port in the morning. In the evening just at dusk I was conscious of a hawk flying about the superstructure of the ship. When I looked out our window first thing in the morning I saw what appeared to be leaves floating down to the deck. When I began circling the deck on my early morning walk I realized the leaves were feathers, and the hawk was travelling with us. We saw him about until the next day. One bird about the size and with some of the coloring of a Chat successfully eluded him by staying in areas where the hawk could not manoeuvre. I could not identify either of these birds.

After a week at sea we picked up the Black Footed Albatross who followed us for a week or more: fascinating to see them glide up past the stern and to the bridge of the ship, then turn and rush back to a position astern and start the procedure or a variation of it all over again. Very seldom could one see any evidence of propulsion. The whole performance was a masterful use of air currents from sea level, often between wave crests, to twenty-five to seventy-five feet above the sea. We would see Lipan Albatross nearly any time we watched for them, but they did not follow the ship.

I am ashamed to say I was not conscious of bird life in Japan. Certainly they do not have the gull population we have, and present in many areas we have visited, or I would have been aware of them. Our attention must have been given to people, sight-seeing, arranging transportation, etc. We found Japan a very interesting country to visit and the citizens most helpful, happy people.

A feature of the trip for me was the sunrises at sea. On one day I tried to describe what I saw thus: "Enjoyed my walk and the very beautiful sunrise. There is nearly always cloud at the horizon: today the cloud formations in front of the rising sun appeared as the skyline of a city: then the sun burst forth through a great opening and shafts of golden light radiated over one hundred eighty degrees of the sky". Our evening meal was over early, and it was regular procedure for all passengers to gather on deck for sunset and to try to see "the green flash". I had never heard of this phenomenon before, but we did see it on two occasions going west: just as the last bit of the sun sinks below the horizon a green iridescence shows for a split second. It is better observed through binoculars. To see the green flash atmospheric and cloud conditions have to be just right.

Speaking of weather, the following from Lord Home's autobiography, "The Way the Wind Blows", amplified my understanding of "Red sky at night...". We learned the broad truth of the saying 'a Red sky in the morning is the shepherd's warning', but we found that it is not always true. For when the dawn spreads its rosy fingers over the sky, and the colour does not come back to the sun, then the day ahead will be miraculously fine".

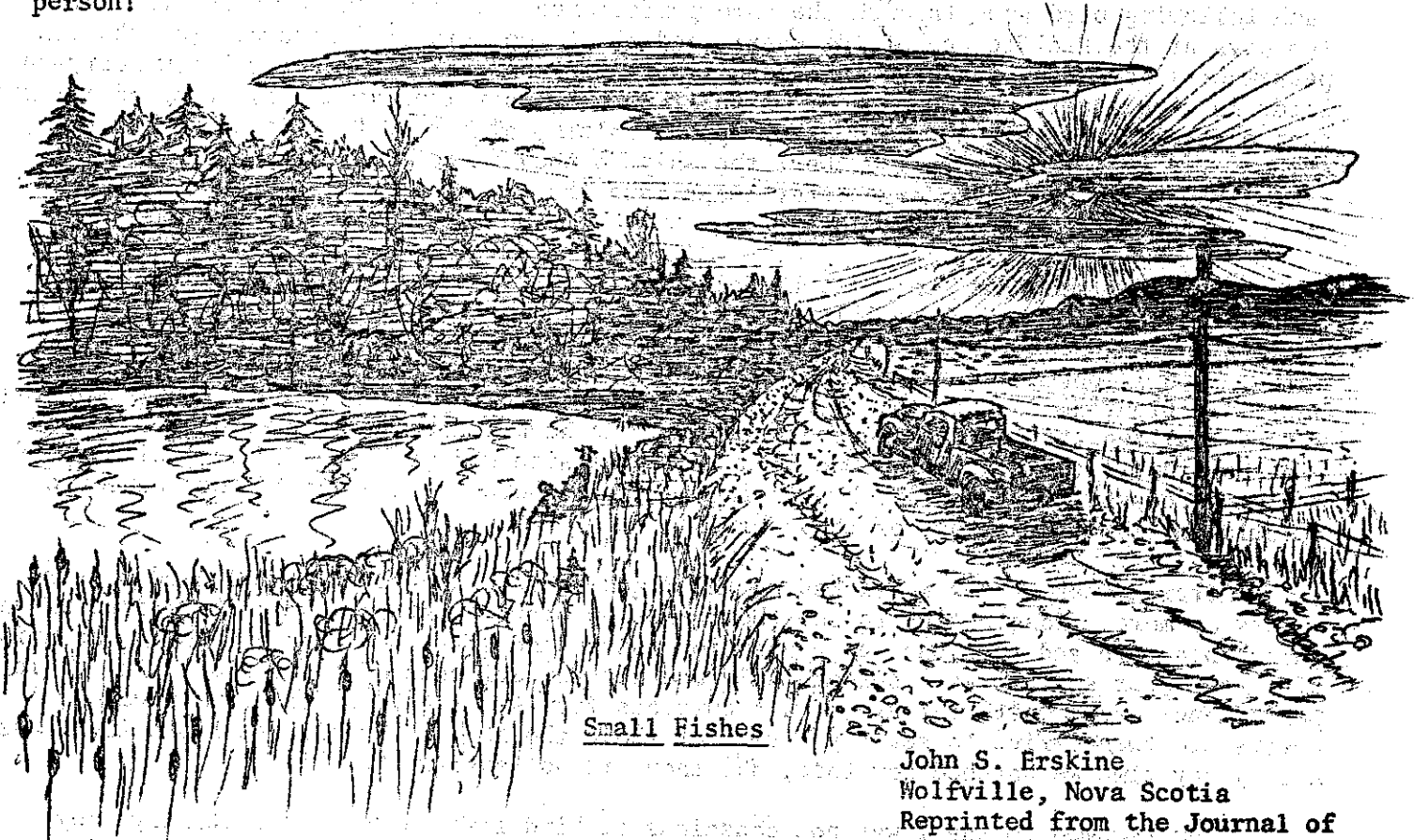
The next note I have in my diary on birds is "a very beautiful dove landed on our ship the morning of Feb. 5th." We were approaching the Equator at that time. The dove stayed with us twenty-four hours or more.

No reference is made to bird sightings again until we were at sea on route home. Once again we spent quite a bit of time watching the albatross. On occasion we would run through schools of porpoise, and while waiting transit of the canal we saw sail fish and sea snakes. On our outward journey before reaching Acajutla we saw a great many sea turtles.

Recording these impressions has caused me to review the trip again in relation to bird sightings. I am surprised to find that I have no recollection whatever of bird life in the beautiful Chinese gardens we visited in Kaoshiung and Taipei, Taiwan or in the lush agricultural area at Lake Taal near Manila. In the city itself we were guests at a fine home with swimming pool, landscaped area etc., but no birds. Naturalists' interests would be met in Singapore by visits to very fine garden areas, in one of which there is an orchid "house" with great variety and profusion of bloom.

It looks to me as if we would have to go back again to see what the situation is re birds! A wall hanging we purchased in Taipei shows birds in the scene depicted. There we did buy very fine kites that in flight are most bird-like, but only a caged bird, a beautiful singer, did we see otherwise.

So much for a report by one who, until now, regarded himself as an observant person!



Small Fishes

John S. Erskine
Wolfville, Nova Scotia
Reprinted from the Journal of
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I AM NOT a good fisherman. I lack the patience that goes with this endless quest after lurking-places and appetities and habits, for I find it difficult to stick to one

point when I am surrounded by a world in which almost everything is unknown and interesting. I had always seen fish dimly from a distance and had thought that some day I must try to learn more about them. Then Francis came back to Nova Scotia and the opportunity offered.

During the fifteen years that I had known him, Francis had grown up through an intense emotional interest in farm animals, to pet turtles and mice, and then into single-minded absorption in amphibians. Now the Museum claimed him for the summer, but, as his favourite amphibians had been well collected already, it was thought that he would do better to collect fish also, to provide more adequate collections for the Museum.

On the Road

In dark evenings in May, Francis, David and I had visited the local ponds and backwaters where the toads were trilling and the spring peepers were peeping shrilly. But it was late June before I could take the road, and we set out at last in a small truck carrying little equipment and even more inadequate knowledge of the fish we were pursuing. The spring chorus of frogs was over, except for the great thrumming note of the green frogs in the ponds and the rumbling "Jug o' rum!" of the bull frogs in the still stretches of brooks. Black-spotted green leopard frogs and black-spotted brown pickerel frogs had taken to the meadows, and toads were humping their suicidal way across the roads.

Our first objective was Digby Neck, the stretch of North Mountain that rises again beyond the breach of Digby Cut and drops after some forty miles into the sea at Brier Island. The North Mountain trap-rock is, after Cape Breton, the best reservoir of northern plant-species to be found in Nova Scotia, and such species were found by Dr. Roland and his expeditions to be abundant even at sea-level on Brier Island; but certain lakes and gaps on the mountain harboured plants of more southern origin which awaited explanation. When the ice-sheet sat upon Nova Scotia, was it thick enough to sink the North Mountain below sea-level? The distribution of fishes and frogs, which cannot stand salt, might give us a little understanding to supplement our knowledge of the plants whose seeds can fly across quite large barriers of water.

A Secluded Lake

We spent our first night at Lake Joli on one of the headwaters of the Bear River. It was a typical picturesque Nova Scotian lake surrounded by granite boulders and second-growth spruce, a tumbledown sawmill, an empty house and a shore of rotting sawdust. I had made two fish-traps of wire-screening, and we set these in the deepest water that we could reach. It seemed a beautiful and lonely place, miles from the nearest farm, so, when we had collected along the shore, we settled peacefully beside the road, Francis to wrestle with the supper and I to put my plants into press.

Then cars began to arrive, streams of them, families wishing to spend a fine summer evening in a beautiful and deserted spot. Motors roared, dust swirled, children clamoured up and down to the shore, fathers assembled rods and cast lines into the water with the gloomy hopeless air of those carrying out a sacred ritual, and friendly souls wandered up to see what I was doing and to ask fatuous questions. We count it to be true and self-evident that no man ever does anything except for profit. Therefore the questions fall naturally into historical groupings based upon the cultural level which the questioner has reached. Stone-age level: Are those plants good to eat? Mediaeval level: Do you know any plant good for arthritis? Mail-order level: Do you make funeral wreaths out of those? But this evening a short sandy man in blue jeans asked an unfamiliar question: "Have you found many orchids?" I disentangled a flower from the vasculum. "Lady's-slipper," he commented dispassionately; "have you found any cabbage-leaf orchids?" He described the plant to me, a tall spike of flowers, two large roundish leaves on the ground. "My wife's niece is a teacher. She told me its name. Stop in at the fire-tower as you go by and I'll show it to you."

When the crowd had gone, we ran the truck up a woods road, pitched our tent in the lee of a stack of pulpwood, and I turned in.

Morning Idyll

When I awoke in the chilly misty dawn, Francis lay at the edge of the woodpile in his sleeping-bag, looking like a long khaki caterpillar. He had gone to collect bullfrogs by the lake in the moonlight, and then had found it romantic to write his letters at that hour, and, when he returned, he had not wished to disturb me by crawling into the tent. I wandered away, collecting in the grey mist, and when I came back an hour later, I found two deer in the camp; one with her white tail aloft was sniffing with interest at the sleeping-bag. They saw me and bounded away, fluffy tails flapping, whistling like raucous toy-trumpets, their legs tending in all the possible places in the complex gait that makes deer look so unlike their more familiar relatives.

We cooked our breakfast, and while we were eating it a half-grown red fox trotted up the road from the lake and climbed the farther woodpile. He laid his big ears back and yapped into the distance: "Ow-ow-oooooo". Then he caught sight of us and disappeared. A moment later he was looking us over from the pile nearest us. What he saw did not suit him, so with an offended air he trotted away down the road, a smart little fellow in orange coat and sharply defined black gloves and woolly white-tipped tail. Just as he came to a curve which would have hidden him, he met another fox of his own size but of a smokier hue, and they stopped and touched noses and passed the time of day. I have never seen a more perfect example of animal speech, and I fully expected Smoky to join Reddy in bolting for safety. But, instead, Smoky came up the hill, climbed the woodpile and inspected us, decided that we could be tolerated, and continued down to the lowest pile overlooking the lake. Now he began to yap and was answered, perhaps by Reddy, from the lakeside. The opportunity for learning a new language was too good to miss, so I imitated his cry as well as I could. He gave me a look of contempt over his shoulder and returned to his song.

Close to Nature

We lifted our fish-traps, and to our surprise and pleasure we found our first catch. One trap contained two small yellow perch, the other a pair of medium catfish and a dead perch. There was no mark on the deceased to tell how he had met his death, but we came to expect that, when there was a catfish in the trap, its companions would be dead.

On the way out we called at the fire-tower, and the watcher came out to meet us. From his description his orchid might have been any of three *Habenarias*--*Hookeri* common, *orbiculata* uncommon, or *macrophylla* probably indistinguishable from the last. His estimate of its height suggested one of the last two, but in any case people interested in such matters are worthy of attention. He showed us his vegetable garden, potatoes growing well in a soil glistening with quartz sand, and among the plants *Corydalis*, our native fumitory was flowering pink and yellow above finely cut glaucous leaves. This flower was privileged to grow where it would and was not weeded out, an unusual tribute to beauty. He escorted us through the wood to his orchid which was truly *orbiculata* and a beautiful specimen. I refused to collect it, for it had been his pet for five years, and there was only the one plant. So we went in search of another which he remembered having seen the year before, and by luck we found it. When we passed his house, striped chipmunks were feeding on the doorstep. "They come right onto the kitchen table when we're eating," he grumbled, hiding his pleasure in them. There is so little needed to make wild creatures tame, only kindness and the absence of strange people, and here in the woods he and his wife were building their small patch of Eden.

Digby Neck

Gradually we were learning the impossibilities. Fish-traps were of little use by day but effective by night, so we planned to camp by lakes and ponds and to let the traps work while we slept.

We climbed Digby Neck and spent one night beside Midway Lake, a disappointing body of water where gulls in flocks stood resting on one leg a hundred yards from shore. I launched my little canvas boat to go out to set the traps, but at every stroke an oar or the bow bumped a boulder. The lake bottom was of rounded boulders only thinly bedded in fine silt.

Farther out along the Neck I had visited the Tiddville marsh in search of golden-crest, a plant whose discovery had first called Nova Scotian possibilities to Fernald's attention. A man and a boy were busy there, digging diatomaceous earth which underlies the marsh. The man dropped his work and led me over marsh and ditch to where the flower grew. He told me the history of the marsh, which had once been a racetrack, then had been worked by an American company, and later was abandoned. What was under the diatomaceous earth? I asked, for diatoms in such quantity must have come from the sea. It was loose rock, he said, like Fundy at low tide.

Now Midway Lake lay in the same central groove that runs along the crest of the North Mountain, marking the weak joint between two of the great flows of lava of which the mountain was built. Perhaps all the neck was submerged for long ages before ever the first ice moved down from the north.

The marsh beside the lake was patched with a miniature cottongrass, and bristly-stemmed bog-roses flowered pink among the rushes, and in the still evening a pair of ring-necked ducks drifted in square-headed silhouette upon the steely lake.

Fish in Fresh and Salt Water

In the morning one trap was full of sticklebacks, the nine-spined species; later, at the Lily Pond in Sandy Cove, we made our first acquaintance with mummichogs, stubby

green and yellow minnows, and in the brooks of Long Island there were trout. But this told us nothing, for all of these were tolerant of salt water. The progress of truly freshwater fish in such an area must be very slow, for the brooks are small and erode very little and can capture each other's headwaters only very rarely.

Fish are curiously balanced in their relation to water. A fish's skin is a permeable membrane, and by osmosis fresh water passes constantly through this skin into the saltier interior of the fish and must be eliminated by the kidneys in a perpetual stream. But the sea is usually saltier than the fish, so that the water passes outward through the skin into the sea and must be replaced by high concentrations of salt in the gills which can then take water into themselves. But how those fishes function which alternate between fresh and salt water I have never learned.

[To Be Continued]

DEADLINE FOR NEXT NEWSLETTER - SEPTEMBER 21

We had a wonderful response to our plea for articles for this newsletter. See, it wasn't so bad, now was it? But please do keep it up! We have a whole glorious summer ahead of us. Many of us will be vacationing away from our usual environ; some will be at local cottages and camps. Wherever, I'm sure there will be something which will delight the "nature lover" in you. Please share it with us, even if it is only 4 or 5 lines in a letter to us. Every contribution helps the BNS stay alive and healthy! I'm off to northern Cape Breton for July and August so expect to see and do more than I can possibly record!

Jean Timpa

P.S. Congratulations to Mrs. Walter Urban, Avonport, on discovering the first Mourning Dove nest known to have been found in Nova Scotia. On June 15, 1979 she found the nest in an apple tree a few hundred feet from her house. Two young were in the nest; about a week later they had fledged.

The summer status of the Mourning Dove in 1962 was listed as rare, but since has shown a steady increase in numbers. Although fledgling doves have been seen, no nest has been reported previous to this date.

During the winter months several dozen doves at a time can be seen feeding at Mrs. Urban's feeding station.

--Sherman Williams