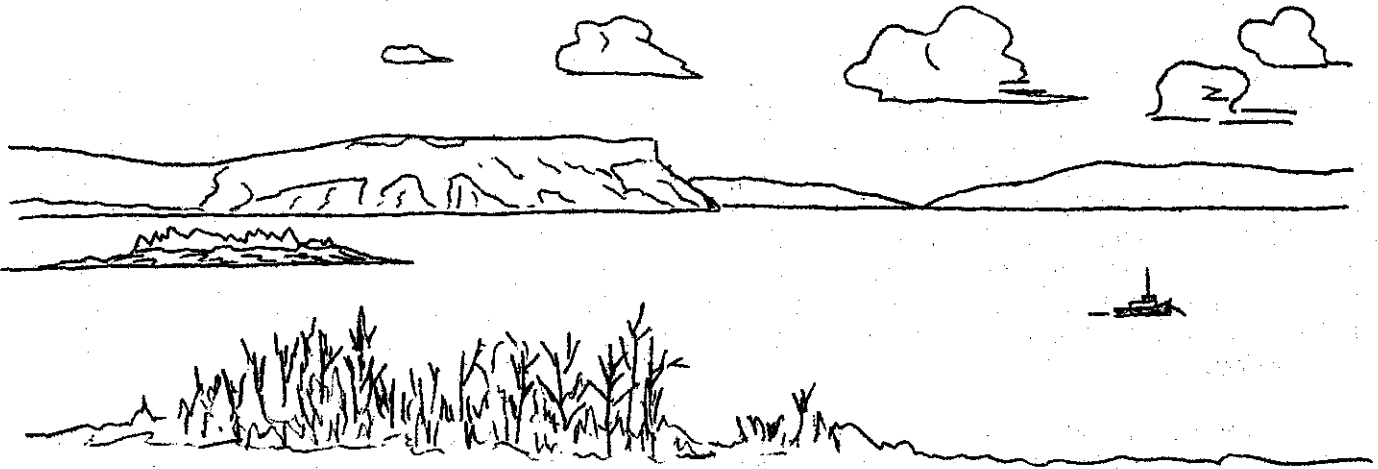


BLOMIDON NATURALISTS SOCIETY NEWSLETTER



Volume 5, No. 1

March, 1978

Novascotiana LXXXIV: The Great Nova Scotian Sea-Serpent

*Contributed by Shirley B. Elliott, Librarian,
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the Journal of Education, Summer, 1977*

Early in the month of July, 1976 residents of the fishing communities along the southwestern Nova Scotia coast were startled to learn an unidentified creature approximately fifty feet in length had been observed in the waters off Cape Island. On three separate occasions this monstrous 'thing' surfaced in the neighborhood of vessels engaged in fishing, causing the occupants to scurry for shore in fear of their lives.

On July 5 Eisner Penny sighted the creature while handlining off Polloch's Ledge; two days later Keith Ross and his son Rodney were anchored in the same area when it rose out of the waters adjacent to their Cape Islander; shortly afterwards Edgar Nickerson and his son Robert also sighted it in this same neighborhood.

Keith Ross is reported to have said 'Nothing like that was ever supposed to be in these waters', yet a creature answering to a similar description was sighted near Green Harbour, along the same part of the coast, August, 1855. The graphic account of its appearance was described in detail in the August, 1868 issue of *Ballou's Magazine*, an American periodical, giving strong credence to the possibility that Nova Scotian waters are just as capable of harboring a sea monster as is Loch Ness.

* * * * *

In the year 1855 I had occasion to visit the neighboring province of Nova Scotia, and was compelled, from the nature of my business, to remain there several months. I heard, while there, many curious stories related by persons well educated and intelligent, as well as by ignorant fishermen, which were so remarkable that I took the trouble of noting the circumstance, in the hope that time might give me an opportunity to unravel the mystery; and among these was the report of *repeated* appearances, in the harbors of the Province, of the veritable sea-serpent. The shores of the peninsula, both on the Atlantic and Bay of Fundy coast, are deeply indented with numerous capacious harbors, which on the western side, are subject to remarkable tides, or periodic currents, so powerful as to divert vessels crossing the mouth of the Bay from their course to the extent of many miles.

In the month of August in the year named, I paid a visit, partly of business and partly of pleasure, to a small village called Green Harbor, situated on the southern shore of the Province. It was by nature a beautiful spot, with a fine, capacious anchorage, which, with the outlying sea, afforded superior fishing grounds. The people were semi-agricultural and semi-piscatorial in their pursuits, tilling the land just enough to provide for their own wants, but depending on the sea for the means of barter and trade. The weighty portion of the farm-work being done, the inhabitants of the village,

male and female, busily engage in securing the ocean harvest. While the men fish, the women attend to the making and mending of the nets, and the dressing and curing of the daily catch of cod, mackerel and halibut. This last fish is cut into thin strips which, being slightly salted, are spread upon the rocks, or laid on elevated stages of lattice and dried. They are then packed away for the winter's consumption or for barter. The cod and mackerel are salted in the usual way and constitute the principal exports of the place.

ARRIVAL AT GREEN HARBOR

It was on the afternoon of a warm, quiet day in that month of August when I arrived. I drove up the one single street of the village and inquired for the house of Tom Larkin, whose acquaintance I had made on my trip from Boston. I found it without difficulty, a one-story cottage of wood, unpainted, and protected with an embankment of rockweed or kelp that reached almost to the window-sills. Great heaps of wood, in lengths of from eight to twenty feet, rose behind the cottage almost to the ridge-pole, and a barn of modest dimensions stood at the edge of a hill, at the foot of which the cottage was built. In front, across the rarely-used road, stretched a slope of grass and gray rocks, while beyond was the smooth water of the harbor and the boundless sea, whose restless surges beat upon the beach across the narrow strip which separated the cove from the Atlantic.

Larkin, I ascertained, was not at home. He and his two boys were outside the harbor in their little sloop, 'making a catch'. His daughter, a stout, rosy maid of fourteen, led my horse to the barn and fed him. At her invitation, I partook of some cold salmon and barley bread, and we walked over to the 'Pint', where half the women and children of the village were gathered. As we ascended the slope which overhung the mouth of the harbor, I noticed a great agitation among the women, some throwing up their hands, some running towards the village, giving utterance to screams of terror. 'Something's happened to the boats', said Jenny, 'or one of the children has fell in.' We sped up the hill, inquiring of the screaming fugitives what was the matter. The only reply I understood was, 'The snake! the snake!' Jenny uttered an exclamation of alarm, but we went on. A fleet of fishing-boats were pulling rapidly in for the mouth of the harbor with every appearance of apprehension. The men, we could see, were straining every nerve to reach shelter. It was an improvised race, each boat seemingly determined to outstrip the others. They did not appear to be a musket-shot from us as we looked down upon them from the cliff. I could see the agonized exertions of the men, and hear plainly the swift and regular strokes of their oars. But nothing to cause the alarm was visible. 'It's a sheer panic,' said I, aloud. 'It's the snake, and that's what it is,' answered Jenny. 'Can you see it?' 'No. He's sounded, mayhap.' Then with a shriek she exclaimed, 'There he comes! My God!' and she covered her eyes with her apron and pointed with her hand at the last lagging boat.

A HIDEOUS LENGTH OF UNDULATING TERROR

I looked, and sure enough, there was a monster apparently within a stone's throw of that two-masted white boat, whose crew of one man and two boys was making every effort to escape. Ah, never can I forget that sight! It was terrible! Slowly and majestically moved that hideous length of undulating terror, but fast enough to keep pace with the boats. Near what might be the head, rose a hump or crest, crowned with a waving mass of long, pendulous hair like a mane, while behind, for forty or fifty feet, slowly moved, or rolled, the spirals of his immense snake-like body. The movement was in vertical curves, the contortions of the back alternately rising and falling from the head to the tail, leaving behind a wake, like that of a screw-steamer, upon the glassy surface of the ocean.

The noise of the yells on the shore and the rattle of the oars in the row-locks did not seem to disturb him but on he came, and was now so near, as he followed the boats through the channel into the harbor, that I believe I could have shot him from where I stood. In a moment he raised his head, from which the water poured in showers, and opening the horrid jaws he gave utterance to a noise resembling nothing so much as the hissing sound of steam from the escape-pipe of a boiler. In spite of the knowledge of the security of my position, I shuddered as I gazed and heard.

He turned his head and displayed the inside of the jaws, armed with rows of glistening teeth, while from the lower section depended a long tuft of hair like goat's beard. The deep-sunk, evil eye was defended by a projection that gave it a most sinister expression. The head and upper portion of the body was of a dark, dingy blue, fading to a yellowish-white on the belly. Under the mane, as it floated about the neck, I could see the scales which defended the hide glistening in the sun. The head appeared to be of a smooth, horny texture, and perhaps five or six feet long from the muzzle to the neck. I could see nothing like a fin, nor gills. I am thus particular in describing this monster, as I had a remarkably good opportunity to observe his appearance at a very moderate distance.

After the boats arrived at the shore, the monster turned slowly round and moved towards the sea, remaining at least ten minutes in full view, so that I had ample time to make two rough sketches of him. Before reaching the open sea, and while abreast of the cliff on which I stood, he slowly sunk while moving oceanward, and I supposed I had seen the last of him. But I was mistaken, as will be seen.

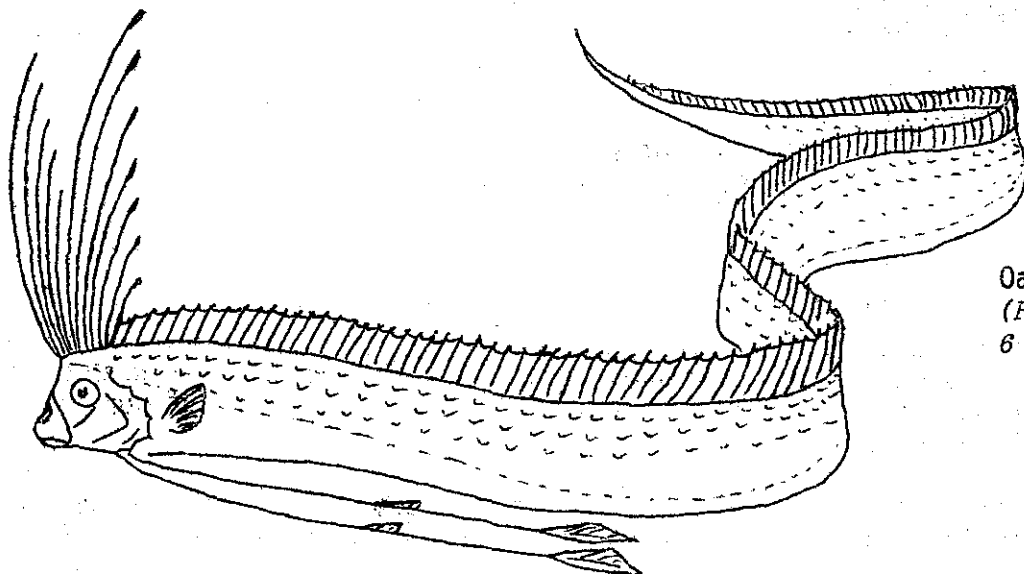
The little village was in a state of unusual excitement that night. Knots of men gathered about the two little stores, and in hoarse whispers talked of the cause of their panic. The great regret seemed to be that for a while, at least their fishing operations must be suspended, none having the hardihood to venture out while the presence of the 'snake' was suspected. I was anxious, notwithstanding the alarming indications, to have half a day's fishing on the morrow, but could find no one to go with me. Larkin told me he 'wouldn't go for the best catch of the season.' One of his boys, however, a fine, manly fellow of seventeen, offered to go if we could prevail on Sam Hethcote to accompany us. Sam was found, and promised.

THE SECOND APPEARANCE

Next morning was foggy, so that it was near noon before we had a clear sky. Then the fog dissipated, and we started down the harbor, two at the oars amid the warnings of old, grave-looking fishermen, and the evil prophecies of the women. Just outside the mouth of the harbor we anchored and prepared to fish. The water was of that transparent hue which at times allows the eye to pierce twenty or thirty feet below the surface. For more than an hour we enjoyed excellent success, when the fish refused to bite. After a long silence in the hope of a nibble, Hethcote remarked, that 'the snake must have come again, or we'd do better,' and proposed baiting for him. I, tired of the dullness, stretched myself along a thwart, and lay with my head over the gunwale gazing down into the clear green depths. By using my hands as a tube to concentrate my sight, it seemed as though I could pierce to at least fifty feet.

Thus silently musing on the wonders of the unknown depths of Neptune's dark empire, and particularly on that monstrous denizen who yesterday showed his huge proportions, I became aware of some immense moving mass in the line of my sight. First it was confused and indistinct, but presently as it assumed form and I became aware of its character, the cold perspiration of fear started out from my face. It was the snake. Fear paralyzed my voice. I dared not, could not, speak. I gazed in entranced silence and in abject terror. There, not fifteen feet below my face, was the monster whom it seemed I could reach with an oar. Suppose, noticing the shadow of the boat, he should rise and crush us in his powerful jaws! The thought was agony; still I gazed silently. The tide was 'making', and the serpent lay head to the current, which was flowing into the harbor, keeping up an undulatory movement just sufficient to retain his position. The shell-like head was just abaft the stern of the boat and the immense mane flowed wavelingly, either by the motion of the current or the convolutions of the body. To my affrighted sight, that portion of the body in the line of my clearest vision appeared to be perhaps six or seven feet in diameter. It may have been, yet I think not.

The instinct of self-preservation nerved me at last. I turned to my companions, who were as listless as I had been, and placing my finger on my lips motioned them to look over the side. As they did so, one after the other, the ghastly appearance of their terror-struck faces showed that they comprehended the situation. Hethcote moved silently to the stern and cut the rope that held the 'killick', and we drifted quietly with the tide into the harbor. At what was deemed a safe distance we put out the oars and pulled steadily forward. I watched the spot we had left as I pulled the after oar, when I was startled by a 'breach', and the convolutions of the snake could be seen sculling his huge carcass seaward.



Oar-fish
(*Regalecus glesne*)
6 metres +

Letters to the Editors

TO: The Editors, Blomidon Naturalists Newsletter January 9th, 1978
FROM: Sherman Bleakney, Acadia University, Wolfville, N.S.
RE: Sea Serpent Monsters.

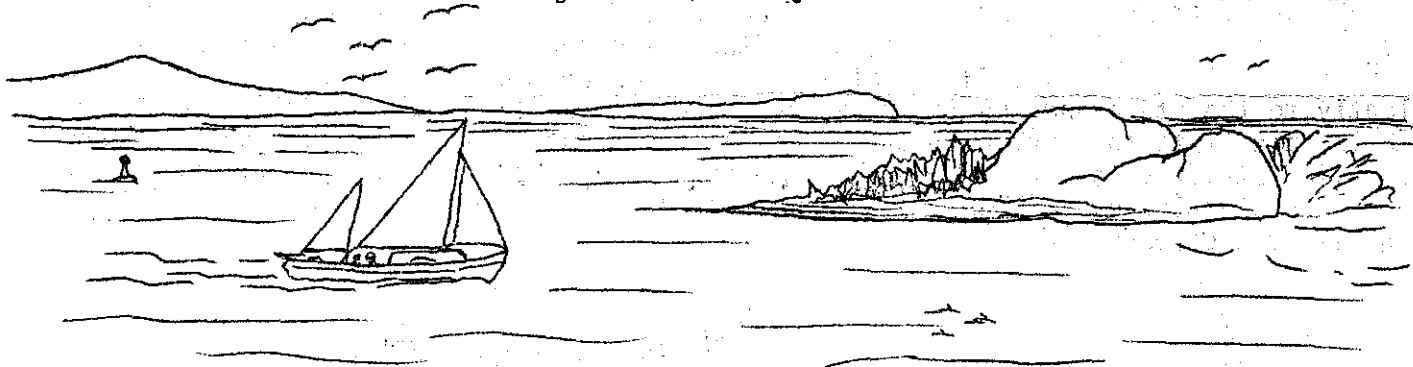
As knowledgeable experienced observers of natural history phenomena, can any of you readers of this newsletter truly accept the above incredible accounts of sea monsters with flowing manes in our local waters? Stories get better with the telling and this 1855 account was not put to paper until 1868. It was probably a large Wolf Fish in both cases, or the 1976 "eyewitnesses" learned of the original tale and thought they could resurrect it and have some fun with the press. After all, it was not seen by a scientist, no one took a photograph and, most damaging of all, the specimen was not collected. Why, if you were to accept this implausible Nova Scotia report by assuming that all parties involved were not inordinate liars, then by the same token, you would have to accept all those Loch Ness Monster eye-witness reports.

Well, prepare yourself, gentle reader, for a shock. The sea serpent reports from the South Shore of Nova Scotia of 1855 and 1976 are of a very real and very rare giant fish, *Regalecus glesne*, the Oar Fish or King of Herrings. It possesses a tall frilly dorsal fin that drapes mane-like over its scaly snake-like body. Although one of the world's rarer fishes, since 1740 specimens have washed ashore or been seen swimming at the surface off British Columbia, Japan, New Zealand, India, Bermuda (1860) and Norway and obviously it has worldwide distribution.

As fellow naturalists, you may be amused and dismayed to learn of the sequel. I sent copies of Shirley Elliott's article to the National Museum of Canada as the 1855 excerpt is a superb detailed eyewitness report of *Regalecus* in Canadian waters. Please note that this monster is not included in the official list of Canadian Atlantic Fishes. I was informed that "sightings" are quite unacceptable; a specimen must be submitted! Do you suppose that regulation applies to Loch Ness Monsters as well?

ACKNOWLEDGEMENTS

Our thanks over these past few months to all those who have contributed in one way or another to the production of this issue of the Blomidon Naturalists Society Newsletter; we should also like to thank particularly the speakers at our meetings: Ms. Susan Rotroff who came in November from Mt. Allison University to share her trip to the Galapagos Islands; in December, Mr. Tony Erskins told of his experiences in the Boreal Forests of Canada; and in January Jim Wolford with Cyril Coldwell's assistance gave a beautifully illustrated slide presentation of the Acadia Biology Department expedition (1977) into the Canadian Arctic Islands. At the February meeting, Peter Austin-Smith gave an interesting presentation entitled "Berries for Birds". Unfortunately several other meetings had been scheduled for the same evening and relatively few were able to hear Peter's talk.



A Sketch of the Sea

Roy L. Bishop
Avonport, N.S.

Nova Scotia is referred to as Canada's ocean playground, yet the closest many people ever come to the ocean is an occasional visit to a seaside village or a short swim at a beach. My experience is not extensive, but it has shown me one side of our province which is known to only a few of its residents.

Over the past decade it has been my good fortune to sail perhaps a thousand kilometres along the Atlantic coast of Nova Scotia, between Petpeswick Inlet east of Halifax

to Lunenburg in the west. The half dozen boats have ranged from 3 to 7 metres in length. Sometimes I have been alone; at other times I have had as many as four companions. Some voyages occupied but an afternoon, others lasted up to four days.

Many things are essential when venturing on the sea. Foremost is a sound boat and experience as to how it behaves and what can be expected of the sea. Lifejackets, charts, compasses (2), anchors (2), lights, tools, flares, radar reflector, motor, water, food, and foul weather gear are also required.

Most people are unfamiliar with sailing, and the very mention of it evokes comments about tipping over. However, a moderate-sized sailboat is more stable than a similar-sized motor launch in a rough sea. This stability is due to the large moment of inertia inherent in the mast and keel, plus the action of the water on the keel and the wind on the sails. A wave which will cause a launch to roll drunkenly will have little effect on a sailboat in a brisk wind. Another advantage of sail is that one is not at the mercy of an engine which could fail for one of many reasons. (Lack of wind is only temporary and merely boring. At such times an auxiliary motor is often used).

I would be remiss if I did not mention a matter seldom appreciated by many who venture on the water in our climate. This is the usual low temperature of the water. Whether it is a snowmobile that drops through the ice in January, a canoe that tips on a lake in May, or a boat that swamps on the ocean in July, death can arrive in less than an hour, not from drowning but from hypothermia, the loss of body heat. For the ocean, experience, alertness, and a deep respect for the sea are the best defence. Built-in flotation that you know is more than adequate to float a boat when full of water is also very desirable.

The Atlantic coast of Nova Scotia west of Halifax is a granite-bound, island and inlet studded paradise for sailing. There is nothing like it along the shores of the entire United States. The northern coast of Maine is attractive, but the tides of Fundy are a problem. In a British publication entitled "Dingy Cruising", various coasts are mentioned including those of England, Holland, the Mediterranean coast of France, and the Strait of Georgia in British Columbia; however, included is the comment: "Anyone who wants to try something exceptional should ship his boat to Halifax, Nova Scotia, and sail along that coast." So often we fail to appreciate our own land. We gaze wistfully across the fence toward fields like California and Barbados while around our feet the grass is cleaner and richer.

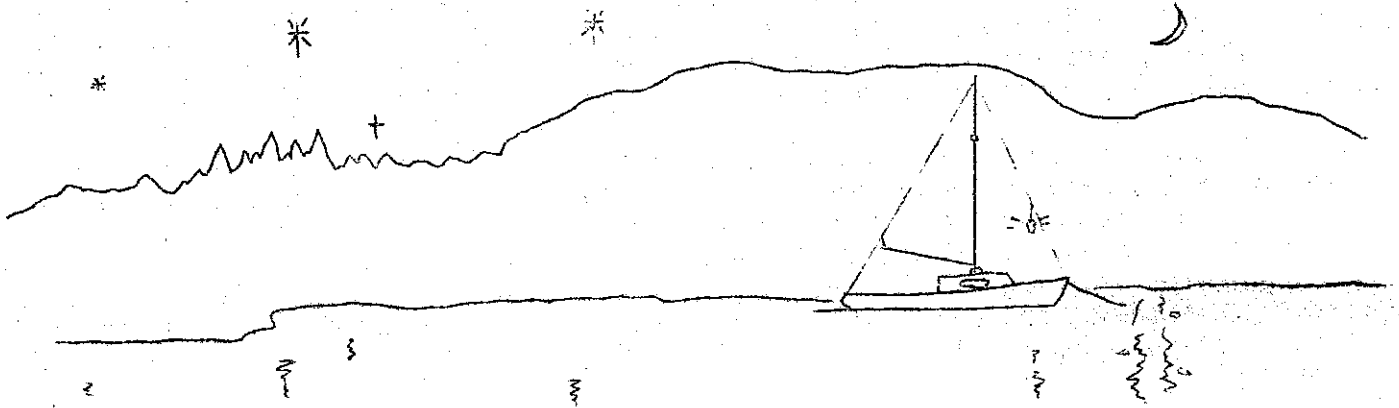
There is much that is unique about the sea as experienced from a sailboat. One aspect is the pulse of the sea itself -- the rise and fall of its surface as swells from some distant storm slide under the boat. These are not the waves of any lake. The slow, powerful beat is unique to the open ocean. Sometimes it is almost imperceptible and is felt rather than seen. At other times sight provides as powerful a sensation as the inner ear, as great hills of water go sliding by, one or two hundred metres from crest to crest. Once with such a sea rolling in from the south and a fresh wind from the north, the sails lost the wind as we fell into a trough. Several seconds later as the next crest shoved us skyward, the wind howled in the rigging as the sails caught the wind again.

Large swells themselves are of no danger to a small boat provided one condition is met: the water must be deep, preferably 10 fathoms or greater. A large swell entering depths of 5 fathoms or less is awesome, fascinating to watch from a distance but deadly to anyone who accidentally enters such an area. The first sign is a humping up of the water, as if a large whale were coming up to blow. With the right combination of swell size and depth the mountain of water will heave into the sky and stumble in a great frothing, thundering mass; capable of tumbling a small boat like a wood chip and of smashing a large ship on the rocks beneath. The sea is white in such a region and the thunder can be heard a great distance. Only along a variegated shore such as we have in much of Nova Scotia is easy access to land possible despite a rolling sea.

Many other features are characteristic of the sea. The air is nearly always cool, even on days that are unbearably hot inland. The moist blend of soil, flowers and evergreen of the land is replaced by the tang of salt, ions, and minute bits of living matter that are injected into the atmosphere by breaking waves. Without trees for shade, dark grass and soil, the light on the sea is deceptively bright. Even on dull days, sunburn can quickly creep up on the unwary. Land-based voices, the rumble of traffic and the calls of horns and telephones are replaced by the sounds of ship and sea. Each boat has its own collection of clunks and gurgles as it strains under the force of wind and water. This mixes with the hum of wind across one's ears, the call of a gull or tern, and perhaps the lazy clang of a bell buoy or the pervasive low groan of a whistle buoy. The latter sounds like a forlorn, lost cow, yet seems like the voice of the sea itself as it drifts in at night over a secure anchorage in a cove. Dew on the cabin roof, twinkling phosphorescent plankton in the water mimicing the stars above, and a muted roar

from the edge of the open sea are also part of a night on a boat.

The main attraction of sailing however, is the sheer joy of being as one with the wind and water. It is not a case of aiming a noisy, smelly motor, but of trimming the sails, listening to the rush of wind and waves, and feeling the boat respond as if it were an extension of one's own body. It is an ancient mode of travel. The skills and sensations have existed essentially unchanged for centuries. The blend of sunburn, salt, weariness and memories that mark the end of a sail evoke a deep feeling of contact with nature. As Thoreau has said "How happens it that the associations it awakens are always pleasing, never saddening; reminiscences of our sanest hours?"



THE BLOMIDON NATURALISTS SOCIETY NEWSLETTER

is published quarterly by the Newsletter Committee of the Society.

Co-editors: Jean Timpa and Roy Bishop
Art/Production: Larry Bogan and 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.

CANADIAN CONFERENCE FOR NATURE

AUGUST 16th - 21st
1978

UNIVERSITY OF
PRINCE EDWARD ISLAND

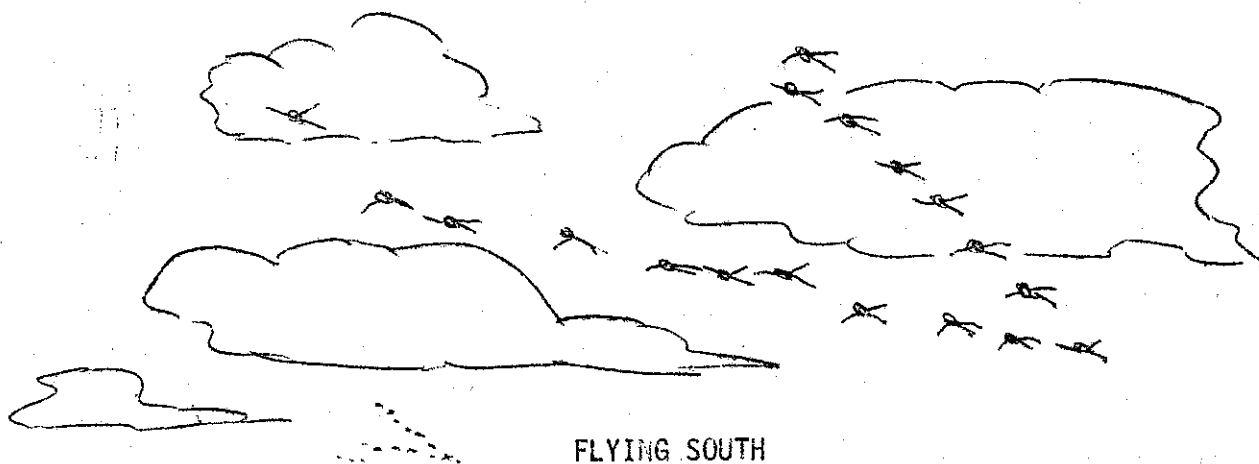
Each year the Canadian Nature Federation holds its annual Conference for Nature in a different part of Canada. It's an opportunity for members from across the country to get together in an informal atmosphere and to learn about the wildlife of a unique part of Canada. This year Canadian naturalists will gather in Charlottetown for the Conference; a pot-pourri of talk sessions, field trips, social activities and a photography workshop. The hosts will be the Prince Edward Island Naturalists in the field trip program. The Conference will start with field trips in New Brunswick on August 16th and then continue in Prince Edward Island. Field trips are planned to take you through inland and coastal habitats; social activities will offer opportunities to sample Island specialties. All activities promise to add up to 6 days of stimulation, adventure and fun. Emphasis will be on natural history and the environment in Prince Edward Island and the Maritimes in general and how they relate to our agricultural and marine environment.

The program will begin with a historical review of the original habitat and its wildlife species and how these have changed the settlement and cultivation of the land. Perhaps more than any other province, human activities have dramatically modified the natural systems of Prince Edward Island. The results of these habitat changes are amplified by our being an island, we lost all our large mammals and today's flora and fauna have adapted to a habitat which is extensively cultivated or otherwise disturbed. The vast fisheries reserves of the Gulf of St. Lawrence are dwindling in wake of fishing fleets. As recreational, agricultural and marine pressures increase, available wildlife habitats

are reduced. Serious planning for protection and in some cases restoration is required now. You and your naturalists groups are becoming very important in implementing this protection. Come to Charlottetown to hear, see and enjoy more of a unique Island. Complete details will appear in the next issue of Nature Canada.

For Further Information Contact:

CANADIAN CONFERENCE FOR NATURE 1978, BOX 2346, CHARLOTTETOWN, PRINCE EDWARD ISLAND.



By Robie W. Tufts

A noted bird authority discusses some of the mysteries of bird migration

(Reprinted from "The Second Mile", OCT. 1977)

This is the time of year -- mid-October -- when uncounted millions of birds are leaving us to spend the winter in the sunny south. Why do they go and how do they find their way? These are questions which deal with bird migration and the answers or explanations are not as simple as the casual Nature student may believe them to be.

There are numerous complex and puzzling aspects of bird migration, the solution of which have challenged the mind of man for centuries. Theory after theory has been evolved to explain the reason for this or that, only to be discarded when new light has been thrown on the subject under discussion.

And so the search continues, innumerable and clever devices being employed in an effort to solve the age-old and intriguing questions of *how* birds are able to find their way when flying long distances, and *why* they go. The subject is even mentioned in the Bible where we read -- "Yea the stork in the heavens knoweth her appointed time and the turtle(dove), the crane and the swallow observe the time of their coming."

Bird migration is a natural phenomenon and in the following lines I shall mention but a few of the many problems concerning it which present-day biologists are struggling to solve.

As for *why* the birds go south at autumn's approach, the answer seems obvious; they go in order to escape the rigours of our winter and to avoid certain death from starvation. Basically these are sound and acceptable answers but as we give the subject further and deeper study we begin to run into difficulties. For instance, the Arctic Tern (a small member of the gull family) and the larger Ivory Gull both nest in the far north. As summer wanes there, the tern starts off on a journey that will not be completed until the bird has reached the Antarctic, a distance of some 14,000 miles where it will spend the summer months of that region.

The Ivory Gull, on the other hand, a bird with equal power of flight, at winter's approach travels just far enough in a southerly direction to assure itself of open water, seldom travelling far enough south to reach even the offshore waters of Nova Scotia. Both are dependent upon food which they extract from the sea. Why this striking difference in their respective migratory flight patterns? The foregoing is merely one of many thorny questions for which no one has, as yet, come up with an acceptable answer. Or if one has been evolved I have yet to hear of it.

When we tackle the other question -- *how* do birds find their way when making long flights, the obvious answer is, -- the old or parent birds guide their youngsters. But this answer is weak, for it immediately raises the simple question -- who guided the parents in the beginning? That birds do not depend upon their parents to show them the way, is clearly revealed by citing the case of the Black-bellied Plover, a member of the shorebird tribe, which nests on the arctic tundra. At the end of the nesting season the young are sufficiently developed to fend for themselves but not yet strong enough of sinew to take off on a flight which Nature has decreed will cover some thousands of miles to South

America. But for reasons best known to their parents the time for *their* departure has come.

So, in effect, they say to the young birds -- "we are now leaving for the south; you must follow in a few weeks when you feel strong enough." We know this to be factual because the adults, or parent birds have jet black breasts, while those of the young are whitish. The adults arrive on our beaches in Nova Scotia about the first week in August while their white-breasted offspring don't show up here till four or five weeks later by which time their parents will have left us. How then did the young birds find their way?

And here's another poser. The Pacific Golden Plover, a bird about robin-size, nests on the Aleutian Islands which lie off the coast of Alaska. It winters on the Hawaiian Islands which lie some 2000 miles to the south. At the appointed time they take-off on their long non-stop flight. Normally they will have to contend with heavy cross-winds and clouded skies. Their destination is but a speck on the broad Pacific. If they are blown even slightly off course they will have by-passed their target soon to be hopelessly lost.

Some student has said that these birds, when confronted with foul weather, simply rise above the clouds thus being able to determine their proper course by the location of the stars and other celestial bodies. Admitting that such may be the case what will happen to the birds, even when they are on course, when they have arrived at a point directly above the Islands which may well be hidden from their view by low-lying clouds? In other words how will they know if it is safe to touch down? They alone know the answer.

So much for the traditional northward and southward treks. Through man's ingenious manipulations it has been determined that birds have the ability and the know-how to find their way, not only north and south, but in any direction they want to go. In this connection let's consider the case of the Manx Shearwater, a species of seafowl, one of which was captured while on its nest on an island off the coast of England.

It was taken by plane to Boston where it was released wearing a numbered leg-band for positive identification. In order to return to its nest it had to cover some 2000 miles of unfamiliar watery wastes. This feat the shearwater accomplished in twelve and one-half days, to the delight and amazement of its captors who had maintained a daily vigil. How did it chart its course? The experiment proved that the bird possessed sufficient physical endurance and that it knew which course to follow, but it gave its sponsors no clue concerning its *means of guidance*.

Then there is the question concerning how the bird knows *when* it is time to start on its long, dangerous and fatiguing flight. It is one which has caught the fancy not only of the scientist but also that of the poet, one of whom asks in these thought-provoking lines, -- "I wonder how the wildfowl know, -- unless a voice *we* cannot hear, calls high above the winds that blow the embers of the dying year, -- I wonder how they chart their way, and why of all the days was this the day?"

My personal records of the dates our migrants come and go, which I kept meticulously for many years, tell me, for instance, to expect the Yellow Warbler on May 13; to look for the first Nighthawk on May 20; the Tree Swallow on April 20 and for its close relative, the Barn Swallow on May 1st and so on. All of these I have cited feed largely if not wholly on insect fare. Why do they arrange to time their respective arrival dates so consistently?

Dates of many of the fall departures are equally predictable. Kingbirds, for instance, leave with surprising regularity on September 10; while the Chimney Swift will not be seen racing across our summer skies much later than the 26th of August. (Perhaps I should mention here that these dates are referable to the Annapolis Valley area, particularly Kings County).

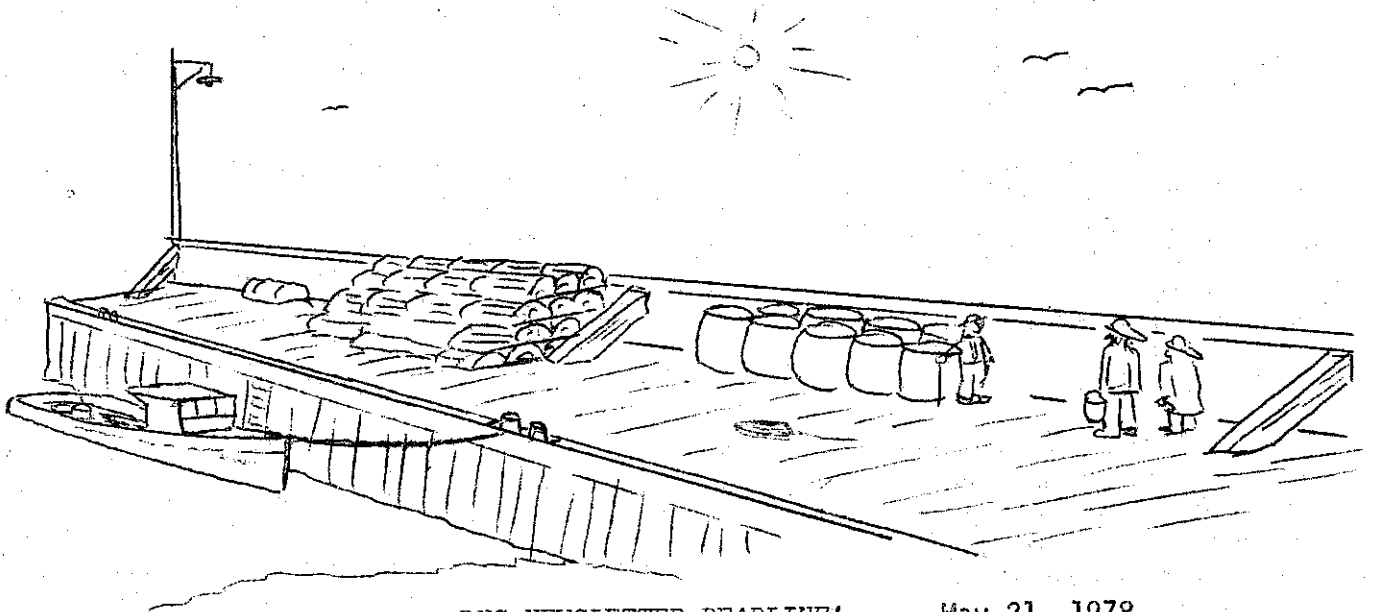
Some of our migrants venture forth only under cover of darkness, while others go mainly during the daylight hours. Those in the former group will be the weak flyers such as the rails, gallinules and herons. Obviously they feel safer from attack by winged predators during darkness. Strong flyers, such as the swallows and swifts travel during the hours of daylight while many others move along regardless of light conditions.

Some strong and hardy species of birds have been destined by Nature to live throughout the year in the bleak and forbidding far northern latitudes. Typical of such are the Snowy Owl and the aristocrat of all our birds of prey, the gyrfalcon. When conditions there are normal in winter these birds live well on northern hares, lemmings and other weaker forms of animal life. But some winters -- and they recur with a fair degree of regularity -- these prey species suffer severe population losses, with the result that the powerful predators are faced with starvation. What happens to them then?

Some thousands of miles to the south they could find plenty of food to their liking. But how do they *know* that? And how do they know which way is south? Some of

them may well be young birds-of-the-year which never before had been faced with such a dilemma. Well, Mother Nature comes to their rescue and that she guides their course unerringly is history, but how it is *accomplished* is still mystery.

I have dealt with only a few of the puzzling aspects of bird migration. One could pursue the subject at much greater depth, citing many instances of how birds react under intricate scientific tests which man is employing in his never-ending search for the elusive answer to the question -- *how do birds find their way?*



BNS NEWSLETTER DEADLINE!

May 21, 1978

Surely the members of BNS are not all armchair naturalists! Did you not see or hear something interesting during last Winter or perhaps even more recently? We need these items written up for our newsletter. Please won't you try to think of and jot down something for us today! Send it to Roy L. Bishop, Avonport, N.S., or to Jean M. Timpa, Box 1382, Wolfville, N.S. If you don't have anything original could you find a nice piece of poetry appropriate to natural history? Please be sure to quote the source. Roy and I will be watching our mailboxes. Please don't disappoint us!!

Pollock Fishing

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Out of the grey foggy dawn the fishermen emerged two by two, their boots rattling the beach pebbles and the small conch shells with which the "scrabblejacks", the hermit crabs, fill the lobster pots. There was no hurry, for the tide was not yet full and the pollock feed only at high tide, so the men gathered and sat talking among the great barrels where the split fish lay in salt. A few turned to splitting fish which had been lying overnight in brine to soak out the blood. In the clear shallow water beside the dock the stripped backbones of yesterday's catch gleamed white.

Grey fog hung over Seal Island, dimming everything beyond the fish houses and the dun blocks of stacked lobster pots. There was a steep beach of biscuit-shaped pebbles, a steaming pond in the waist of the island, some hummocky marshy pasture and the dark spruce woods behind. Swarms of sandpipers, grey and brown and white, trickled among the sea-wrack on the pebbles; thin mournful whistles of grey plover passed in the fog; and graceful terns wheeled overhead on narrow angled wings, creaking harshly, or hovered and plunged into the shallows. Trails of long-tailed sheep passed in single file along the gravel bluff of the shore, dark grey against the luminous grey of the mist.

The tide was rising and the chill fog thickened with it, so we scrambled down the ladder into the dory. I was going with the Nickerson brothers, Orville and Ralph, and we rowed out to where their boat rode at anchor. The engine coughed and roared and then settled down to a steady thrum, and the boats, all alike in their smooth lines, slid over the heaving sea, fanned out towards the southward, guided by the boom of the foghorn on the south point, and were lost in the fog.

The boats looked alike, largely because they were all Cape boats, custom-built by the same builder but gradually incorporating new suggestions in a constant evolution. Each was about twenty feet long and had a small cabin forward with stove and radio

transmitting set, a covered engine-cuddy behind, and a fishing-deck extending towards the stern. In this well-deck was a pen for the fish and the winch for lifting the lobster pots.

The Fishing Ground

We were in late July, but the damp air over the leaden sea was like a cold bath. To our left the foghorn bellowed, giving us direction, but also we followed the shadowy procession of the gulls which slid, dimly seen, overhead, all with a single aim, flying from their nests on the island towards the place where the pollock were feeding. Now and then Orville throttled down the motor and we listened, and then, having heard nothing, we continued on the track of the ghostly procession. At last we heard what we were seeking, the excited chorus of feeding gulls, and a few minutes later we were among them.

In the hundred-yard radius of visibility the air was full of flopping, screaming gulls. The heaving surface of the sea was broken here and there by the flap of a fish-tail as large as a hand, and a ten-inch herring would be tossed stunned into the air. The pollock below would swing to retrieve his prey, and the gulls above would swoop down to get there before him, hampering each other in their eagerness and then wheeling in a pack to hunt the successful rival. It is said that the pollock stun the herring in this way in order to swallow them head-foremost, which though it seems a clumsy method, fits in with what one can feel occurring at the end of a handline.

Now the boat was slowed to a crawl, and the lines were put overboard. No bait was used, except large versions of the artificial lures familiar to rod fishermen. The surface lines, one over the stern and one held out by a short boom at each side, were baited with silvered wooden plugs. At either gunwale there trailed a more heavily weighted line for catching at greater depth, and each of these carried a "Christmas-tree", a triangle of aluminum with silvered spinners and with two white lures of feathers like gigantic trout flies. The brothers took the side lines and put the central one in my charge.

Fishing

In a few moments the action began. The fishermen had two lines each to tend, so that with them the fish were hooked automatically, and the first sign of a strike was the angling of a line through the water. The pollock is a game fish and fights well, quite unlike his cousin the cod. As I had only the one line to mind, I held it in my hand in the hope of guessing what was going on at the end of it. First a tap and then a strong pull and the fish was hooked, just the pattern that we had seen on the surface, first the stroke of the tail and then the seizing of the herring. Sometimes the line came in easily with a mere three-pounder at the end; sometimes it seemed anchored in the sea and then advanced in rushes that threatened to entangle the other lines, and I knew that a twenty-pounder was there for the taking. I pulled them in with long sweeps of my arms until Ralph intervened. "This is the way fishermen does it", he said, showing me the twirling motion of the hands that worked fast, took up no space and left the line neatly piled on the deck. I tried it, and in a few minutes I had lifted strips of skin from my soft inefficient hands.

I was as much interested in my companions as in the fishing, for they were seeing with their experience so many things that my eyes missed. The line was in my hands, but usually Orville noticed first when it was fouled by a drifting strand of rockweed. Or when I was hauling in a dodging dashing fish, Ralph would say without taking his eyes from his own lines: "Don't try to haul that one over the stern. He's hooked in the corner of the mouth. Pass the line to Orville." Then Orville would nurse the fish alongside, strike him smartly with the short gaff and heave him aboard. And surely the hook would be in the thin cartilage of the jaw where an extra tug would have pulled it free.

Now and then another boat drifted into sight in the narrow circle of fog, and I could see the spinning hands of the fishermen hauling in pollock. The boats looked alike, but they were surprisingly different in their fishing results when plying the same waters with the same gear. The motors were adapted truck engines, not built specially for this purpose and the noise seemed to frighten the fish from the wake of certain boats. It was said that the action of the boat was also important, that a new boat scared the fish, while a "logy" boat, sluggish in its response to the waves, was the best for the fishing. How far these generalizations were accurate I could not judge, but I have always a great respect for the powers of observation of practical people, even though I usually take their explanations of cause and effect with a pinch of salt.

The Fishermen

Here among the inshore fishermen we see almost the last survival of the independent life which is the ideal of the continent and which in reality is so nearly gone.

Yet even here the intelligent fishermen are aware that the day of the individualist is over. Constantly I heard the complaint that they handled their fish ten times--catching, unloading, gutting, soaking, splitting, salting, loading and unloading for shore and delivery--and yet received only two cents a pound, whereas, after many less handlings, the retailer received more than twenty cents a pound. The government has stepped in to assist the fishermen by collective insurance and by capital loans that finance young fishermen in starting a boat. They are appreciative of this assistance, and they never seem to take into account the other side of this assistance which is directed towards the financing of more competition which can only lead to the lowering of the price of the fisherman's product. Perhaps they are right to see the problem in human rather than in economic terms. This assistance makes the life that they know available to more of the young people in whom they are interested. But what they need economically is to increase the demand for their product, and this needs more wholesalers to buy from them, more customers to buy from the retailers. This is possible only if new markets can be found or if the price can be lowered enough to tempt new customers. The most practicable method of achieving this is through co-operation, but this comes hard to them. The New England puritan tradition is still strong on this shore, and it makes for enterprising individualists and very uncertain co-operators.

Through the mist the foghorn continued to cough and grunt, but around us the yelling of the gulls died gradually away. Some birds sat heavily on the water, too puffed out with herring to fly, but most were now winging in silent procession towards their nests on the land. By what sense did they find their way through this eternal fog? In the swift and uncertain currents among the islands the fishermen would be helplessly lost without compass, radar and the blare of the foghorn, but the gulls were fishing here long before there were foghorns, as they will be when the foghorns are all silenced.

The pollock bit rarely now. The heavy chill was off the water as the flood-tide passed, and the midday sun loomed overhead, a dim brightness in the fog. We pulled in the lines, and Orville swung the boat around towards the northward, guided by compass and by the bellowing of the foghorn, confident as the gulls, feeling out the broad but invisible channel between the rocky shore and the granite reefs of the Limb and the Ledge.

Blomidon Naturalists Society Membership

Membership in the Blomidon Naturalists Society is open to all persons by sending \$2.00/adult registered or \$1.00/student registered to the Secretary-Treasurer, John W. Timpa Box 1382, Wolfville, N.S. A reminder to our 106 members from last year (1976-77): dues are overdue for 1977-78. We hope you'll all rejoin us!

BLOMIDON NATURALISTS SOCIETY MEMBERSHIP

Name: _____

Mailing Address: _____

Membership Fee Enclosed.

Are Your Dues Up To Date???

If your address on this newsletter is in red ink, then you have not paid for 1977-78 (\$2. - individual). If no action is taken, then this will be your last newsletter.