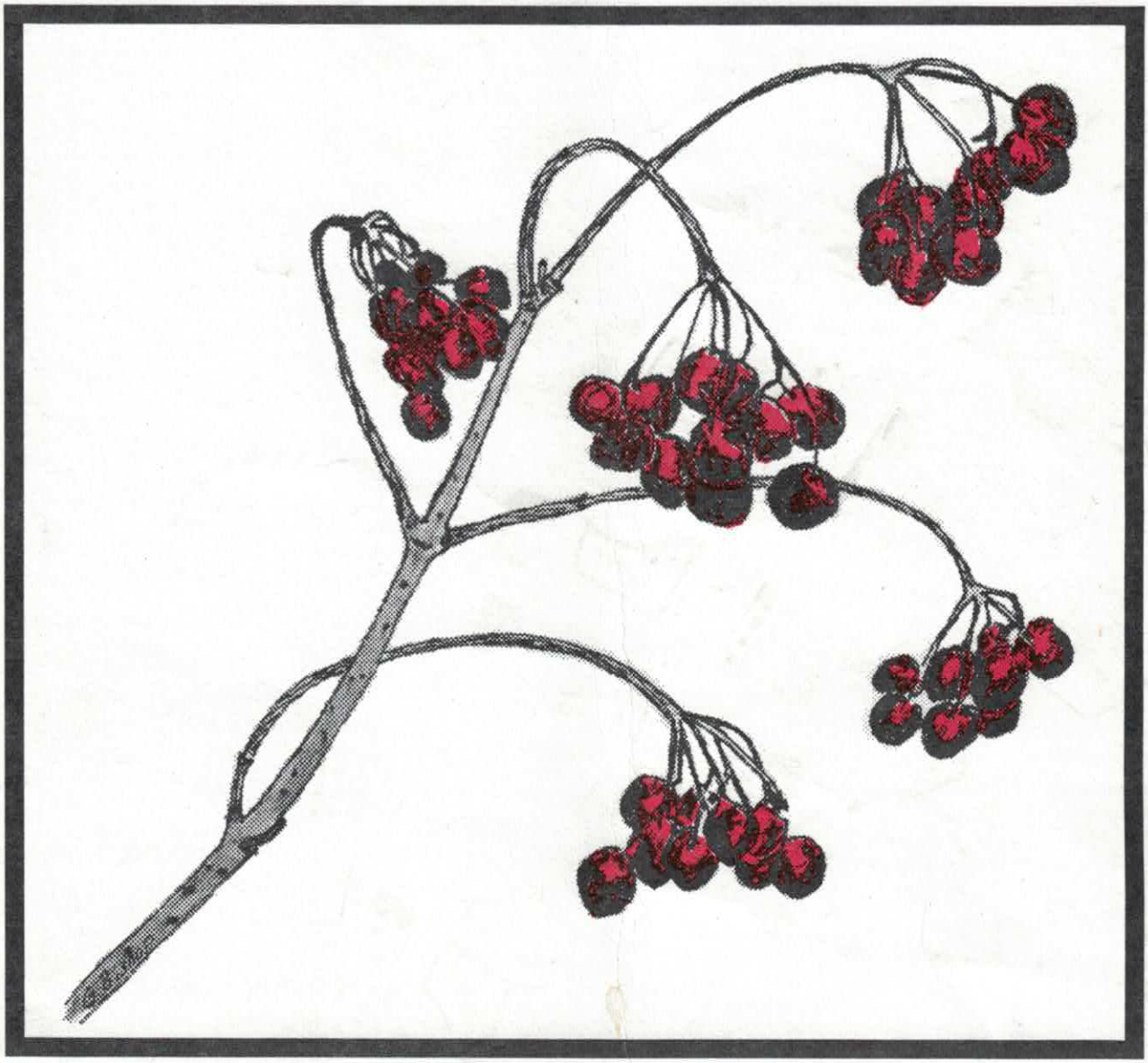
22 (4) December / décembre 1995

N.B. Naturalist
Le Naturaliste du N.-B.



Seasons Greetings

In This Issue / Dans ce numéro

President's Message 87
Bay Of Fundy Marine Life - 1994 (Part 2) 88
Birds and Berries Don't Mix 92
Be Aware: Rabies 93
Ann Lavoie, First Woman Guide! 94
Little Thought of the Day 94
L'Aventure du Râle jaune 95
Blue Jays Don't Seem To Like Me 96
Lady Bugs 99
Cape Jourimain - National Wildlife Area and the Fixed Link 100
Take A Closer Look At The Softwood Trees 101
The Enlightened Firedfly 102
Nature News: September / October 1995 103

On the Cover: Highbush Cranberry by G. Bishop

President's Message

Frank Longstaff

On a night in mid-November, I received a telephone call from Jim Wilson, the noted birder, broadcaster, bon vivant, and member of the Saint John Naturalists' Club. Jim explained that the Club was in the throes of building a bird observatory — which is to say , a blind — at the tip of Point Lepreau. The project got started on the strength of a healthy contribution from the Club's coffers and the donation of materials from local businesses. The Coast Guard had leased land to them at the tip of the point and N.B. Power had agreed to allow access through the grounds of the Nuclear Generating Station. Volunteers had put in many hours, pouring a six foot by eight foot concrete base, then building a structure on top of it. To put the project over the top, they needed to buy some cedar shingles to weatherproof the blind, but they had run out of cash. Could the Federation help with a one hundred dollar donation?

A project like this, it seems to me, is exactly the sort of thing naturalist organizations should be doing. Our financial resources are slim, but I canvassed the executive and all agreed that the project was worthwhile and we could afford to give support. That decision was ratified by the Board of Directors at the December meeting. I am pleased to be able to tell you that the shingles have been purchased and now are in place.

Point Lepreau is an ideal place for a bird observatory. It thrusts about three kilometers out into the Bay of Fundy. At spring migration, birds follow the coastline in massive waves as they move from wintering territories to nesting grounds. In the fall the flow reverses and the count may be even more impressive. Seabirds, waterfowl, songbirds, and raptors — all can be seen passing in front of the observation post in prodigious numbers.

The setting is not merely a delight for birders. There is a scientific value as well. Jim and his friends will be monitoring the various species and their numbers, collecting data that will help us understand and protect the passing parade. I predict the Point Lepreau Bird Observatory will become as important and well known as similar observatories in similar settings, such as Long Point, Ontario, or Cape May, New Jersey.

Everyone with an interest in birds is welcome to use the PLBO, but access is a bit complicated. To get to the Observatory, you must pass through the grounds of the Nuclear Generating Station. N.B. Power restricts visitors to those who clear a security check. Thus all visitors must be screened and approved before arriving at the site. Contact Jim at 506-847-4506 or Dave McCurdy at 506-849-2082 for more details.

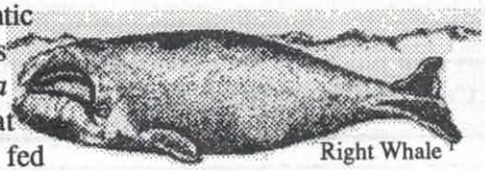
This is a project where everyone wins. N.B. Power, which has made this wonderful birding locale effectively off limits for the past fifteen years, must be commended for showing flexibility and good community relations. Birders regain access to an important observation post. And the birds benefit from the collection of data and the migration monitoring. I'm glad the Federation was able to play a small part in making it happen.

BAY OF FUNDY MARINE LIFE - 1994 (PART 2)

Laurie Murison

PLEASE NOTE: This article is courtesy of the Grand Manan Nature Society. It appeared, in part, in Volume 3 (1994) of The Razorbill, their newsletter. Laurie Murison is the manager of the Grand Manan Whale & Seabird Research Station at North Head. She is also the chief naturalist for Ocean Search, operated by the Marathon Hotel. Most of the following observations were made from the D'Sonoqua, Ocean Search's schooner. Part 1 appeared in the September 1995 *N. B. Naturalist / Le Naturaliste du N.-B.*

The summer (1994) was also noteworthy for the number of North Atlantic Right Whales (*Eubalaena glacialis*) that frolicked and fed in the deep water of the Grand Manan Basin between Grand Manan and Nova Scotia; at least 180 individuals were recorded.



Right Whale [1]

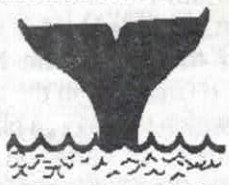
Right whales are identified through unique patterns of naturally occurring craggy patches or callosities which grow on their heads. Many Right Whales also have markings and scars which may aid in their identification. By photographing Right Whale heads and other markings a catalogue of individuals has been developed by the New England Aquarium, Boston, MA. If interested, your own photographs can be sent to the Aquarium (Scott Kraus, New England Aquarium, Central Wharf, Boston, MA, 02110-3399) for identification. Helpful information to send with the photograph are date, time, approximate location, behaviour of the whale (i.e., feeding, in a courtship group) and whether there were other whales, birds, sharks, etc. in the area. Right Whales seen in places other than the Bay of Fundy are also helpful to the cataloguing process. Since this work is done by only a few people, please allow some time for the results.

An adventure of sorts happened in November to one of the Right Whale's calves that spent the summer in the Bay of Fundy with his mother, Wart. Wart's calf, Shackleton, for reasons only known to himself, made a detour into the Delaware River, on his way south from the Bay of Fundy, having separated from his mother at some point between the Bay and the Delaware River.

Shackleton was tracked by the U.S. Navy using night-vision, infrared technology and generally attracted the attention of everyone living along the Delaware River and beyond. He spent several days swimming up and down the river, as far as Philadelphia. His movements were sluggish, scrapes and bruises were present on his head and it was feared that he was badly injured, entangled in rope or netting, or sick. He wandered amongst boats, docks and bridges, collided with an aircraft carrier and a tug boat, swam past a nuclear power plant and was stranded for a short time near an oil refinery.

After nearly two weeks of coaxing and herding, he disappeared from Delaware Bay and it is hoped that he is on his way to an unknown wintering area and will be seen again next summer. One known wintering area is Florida where he was born,and first photographed on 23 January, 1994.

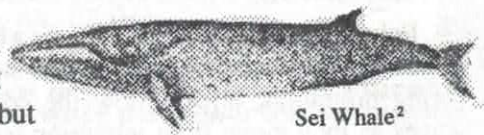
We now know from Delilah's calf, that Right Whales can manage on their own after as little as 6 months spent with their mothers. Delilah, of course, was the female Right Whale that died in September of 1992 and washed ashore at Deep Cove. The whereabouts of her calf were unknown when she died and the likelihood of survival was also unknown. Her calf has survived successfully and returned to the Bay of Fundy in 1993 and 1994.



Right Whales usually venture into the Bay of Fundy in late July. However, for the past two years, they have been arriving at least one month earlier. At the same time a few have been seen off Nova Scotia between Browns and Roseway Banks, a well known summer area for these whales. The presence of Sei whales (see below) in the Bay may also be connected to the possible lack of concentrations of plankton off the Scotian coast.

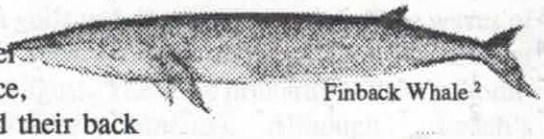
Sei Whales (*Balaenoptera borealis*) were again spotted in August in the Grand Manan Basin, although fewer sightings were made compared with 1993. They were also reported by Nova Scotia whale watchers. They were always found with Right Whales and occasionally with Finback Whales (*Balaenoptera physalis*).

Sei Whales can be confused with Finback Whales but certain subtle behaviour and



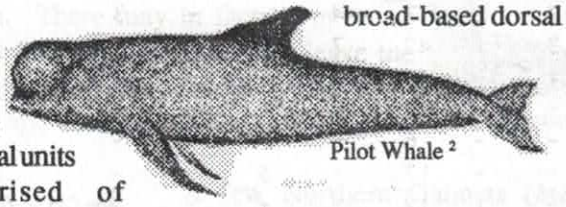
Sei Whale [2]

physical clues will allow you to tell them apart. Sei Whales are a dark charcoal grey, often have circular scars along their sides and do not, of course, have the typically white right jaw that Finbacks have. Seis also spend more time than Finbacks cruising just below the surface when they come up for air . In fact, they can be followed by the series of "foot prints" or "fluke prints" that well up to the surface.

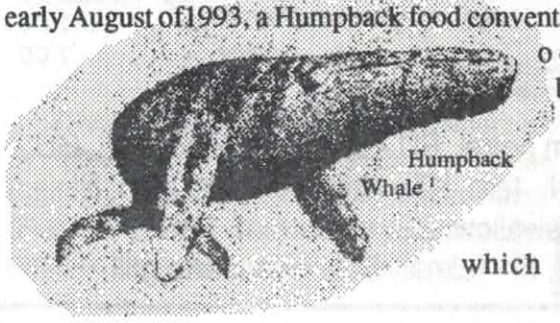

Finback Whale [2]

When Sei Whales surface, the blow, and their back and dorsal fin are seen in quick succession while with Finbacks, the blow is followed by a long expanse of back before the dorsal fin finally emerges. Another difference is that Sei Whales filter small plankton from the water, while Finbacks tend to filter larger plankton and small schooling fish.

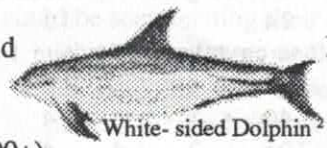
For at least two days in late August and 1 day in September, 25 to 30 Long-finned Pilot Whales (*Globicephala melaena*) were also spotted in the Grand Manan Basin or the Bulkhead area. Twice they were observed frolicking with Right Whales, each trying to mimic the other's behaviour. Pilot Whales have also been seen cavorting with Right Whales off Nova Scotia in an area between Browns and Roseway Banks. Mature male Pilot Whales are easily identified from females and immature males by a large, broad-based dorsal fin. Pilot Whales travel in social units comprised of both sexes of all ages. Also called Pothead Whales, they have a bulbous forehead or melon, hence the name pothead. They are all black except for an hour glass pattern on their belly. They reach a length of 6 m (20') and weight of 2.7 tonnes (3 tons) for males, with females being smaller. They prefer squid and their presence in the Bay of Fundy in 1994 was consistent with the amount of squid observed.


Pilot Whale [2]

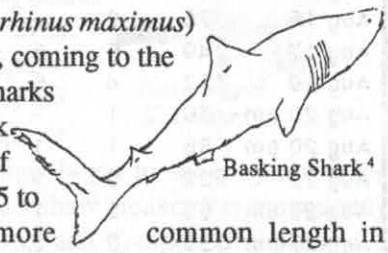
Fewer Humpback Whales (*Megaptera novaeanglia*) were seen in 1994 than in 1993 but the numbers seemed to be closer to "normal". For nearly three weeks in late July and early August of 1993, a Humpback food convention of sorts occurred between Swallowtail and Great Duck Island which delighted visitors and residents alike. Up to 24 Humpback Whales fed in this area in a night. Seldom are people lucky enough to have whales keep them awake at night because of the roar of the whales' exhales when they come to the surface with their mouths full of herring.


Humpback Whale [1]

While most people were hopeful for the same event in 1994, only 6 to 8 Humpbacks were occasionally seen in this area. Humpbacks, of course, can be identified by markings on the body and in particular the underside of their tails. Each whale is born with a unique skin colour pattern under their tail and the trailing edge of the tail has a unique serration pattern.


White- sided Dolphin [2]

White-sided Dolphins (*Lagenorhychus acutus*) appeared in late July but no large groups (200+) were seen; most groups had 50 or less dolphins. Dolphins are always a joy to see. They are curious about boats and will try to ride in the bow wave of a moving vessel. They are active at the surface, frequently leaping clear of the water. Because the groups are composed of both sexes and all ages, social interactions are common and mothers may bring their calves close to a vessel as if to introduce the calf to a new experience.


Basking Shark [4]

Basking Sharks (*Cetorhinus maximus*) also appeared in late July, coming to the surface to "bask". These sharks are the second largest shark species, attaining lengths of over 10 m (32') although 5 to 7 m (16 to 23') is a more common length in the Bay of Fundy. Only the Whale Shark (*Rhincodon typus*) is larger, but both species are planktivorous, filtering plankton from seawater using modified gill structures called rakers. The gill rakers have fine hairs arranged in rows, similar to the bristles of paint brushes. Basking Sharks are also called Mud Sharks by local fishers.

Basking Sharks, (for unexplained reasons) breach or jump clear of the water, something we normally think of as a whale behaviour. On close approaches to these sharks, at least two Remoras were seen clinging to the sharks' sides. Remoras (*Echeneididae* Family) are usually found in warmer waters but catch rides primarily on sharks, skates and rays to wherever they might take them. Basking Sharks are relatively slow moving at the surface and boats must be aware of this to avoid collision. At times these sharks bask far enough below the surface that their large dorsal fins are not visible further complicating detection and the ability to avoid

OCEAN SEARCH SIGHTINGS: SEABIRD SPECIES (JULY TO SEPTEMBER)

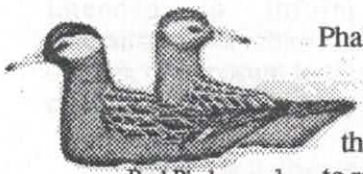
DATE	GR	SO	MA	SP	PU	RZ	GU	PH	GA	JS	TN	KT	LO	EI	EO	OTHER
Jul 6	49+	7	-	14+	3	3	6	-	3	-	-	-	-	-	1	
Jul 8	50	3	-	100	-	3	-	-	3	-	-	-	-	-	1	
Jul 12	100	4	-	95	-	-	-	-	2	-	-	-	-	-	1	
Jul 13	300	10	-	1000+	-	1	10	17	1	-	-	-	1	20	3	
Jul 14	200	2	-	400	1	-	-	-	4	-	-	-	-	-	-	
Jul15	10	-	-	12	-	-	2	-	4	-	10	-	-	2	-	
Jul 17	14	1	-	18	-	-	-	6	-	-	-	-	-	1	-	
Jul 18	46	-	-	48	3	1	-	104	3	1	4	-	6	-	-	
Jul 20	14	-	-	-	5	-	1	-	1	-	5	-	-	8	-	
Jul 27	22	-	-	4	1	-	30	-	2	-	1	-	-	-	-	4 BG
Fog conditions on July 27																
Jul 28	16	-	-	-	-	3	7	-	-	-	5+-	-	1	40	-	1 SW
Fog conditions of July 28.Trip ended early because of weather																
Jul 29	24	1	-	10	-	-	-	1	2	-	11	-	-	-	1	
Fog conditions on July 29, 30, Aug 1 and 2																
Jul 30	129	4	-	48	-	1	-	9	1	1	6	-	-	-	-	2 CM
Jul 31	40	3	-	4	-	-	3	3	5	-	-	-	-	10	2	2 CO
Aug 1	70+	2	4	4	-	2	2	10	6	-	6	-	-	-	1	2 CM
Aug 2	54	-	-	-	-	3	1	1	2	-	9	-	-	20	-	8 SB
Aug 6 am	50	3	1	2	-	1	-	-	1	-	-	-	-	-	1	3 CM / 1FL
Aug 6 pm	50	3	4	10	1	2	2	12	10	-	10	1	-	4	-	1 SB
Aug 7	47	4	-	272	2	-	-	35	4	-	18	-	3	-	-	
Aug 8	42	-	-	795	-	3	-	218	1	-	19	-	1	-	-	2 CM
Aug 9	148	1	1	2876	1	-	-	447	5	-	7	-	-	-	-	
Aug 10	282	1	-	1177	13	6	-	1609	2	-	25	-	2	-	-	
Aug 11	426	2	4	117	-	-	-	160	1	-	15	5	-	-	-	
Aug 12	215	1	2	27	-	9	1	280	9	-	11	-	-	-	-	
Aug 15	59	2	1	1	1	-	-	-	1	-	10	-	-	-	-	1 CM
Aug 16	76	2	-	-	-	-	4	-	4	2	7	4	-	-	3	
Aug 17	249	5	6	-	2	1	-	9	3	1	42	7	-	-	-	
Aug 19	327	4	5	7	3	1	1	24	1	-	40	1	-	-	-	
Aug 20 am	39	1	-	-	-	-	1	-	-	-	25	9	-	-	-	1 BG
Aug 20 pm	56	1	1	1	2	-	-	4	-	-	6	-	-	-	-	2 SB
Aug 22	522	9	-	1	6	8	1	30	-	-	17	-	3	-	-	1 CM
Aug 23 am	55	2	1	-	3	-	2	11	-	1	12	-	-	-	-	1 CM / 60 CO
Aug 23 pm	350	8	3	16	16	-	-	2	-	-	25	-	1	-	-	
Aug 24	263	2	-	-	33	2	-	4+	1	1	43	-	-	-	-	2 CO
Aug 25	25	3	-	-	2	-	-	3	1	-	31	3	-	-	1	1 CO
Aug 26	98	2	2	-	2	1	-	5	3	3	11	-	-	-	-	
Aug 28	56	1	1	-	11	2	9	67	2	2	13	-	4	200	-	20 CO
Aug 31 am	122	2	-	-	18	3	-	-	-	1	9	10	1	-	1	2 CO
Aug 31 pm	94	4	-	-	-	-	-	11	2	1	19	213	-	-	-	1 CO / 2 CM
Sept 1	711	12	2	-	17	-	-	34	2	3	27	22	-	-	6	1 CM
Sept 3	12	-	-	-	5	-	-	6	3	2	1	10	-	-	-	
Sept 4	10	-	1	-	5	1	-	-	1	1	3	6	-	-	-	1 WWS
Sept 8	87	4	4	-	14	-	-	1	-	1	6	-	-	-	-	1 FW / 1HM
Sept 9	51	13	1	-	6	2	-	1	22	1	-	-	-	-	-	3 CO
Sept 10	182	7	-	-	-	-	-	-	8	-	2	1	-	-	-	12 CO
Sept 13	340	5	-	-	-	-	-	-	12	1	3	-	2	-	-	7 CO

Shearwaters: GR - greater, SO - sooty, MA manx; SP - storm petrel, PU - puffin, RZ - razorbill, GU - guillemot, PH - phalarope, GA - gannet, JS - jaegar/skua, TN - tern, KT - kittiwake, LO - loon, EI - eider, E) - eagle/osprey, CM - murre, CO - cormorant, SW - swallow, SB - shorebird, HM - hummingbird, WWS - white-winged scoter, FW p fall warbler, FI - fulmar, BG - bonaparte gull

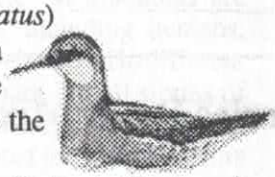
collision. Dead Basking Sharks are sometimes reported as whales because of their size, and because they also tend to float.

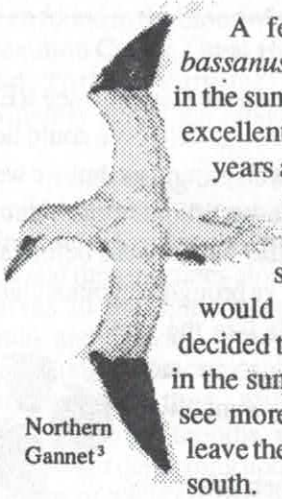
Seabird occurrence trends become evident when presented in table form, with the exception of herring and black-backed gulls which are not reported. Two waves of Storm-Petrels seem to occur, one in mid-July and another in early mid-August. These are primarily Wilson's Storm-Petrels (*Oceanites oceanicus*). Although Leach's (*Oceanodroma leucorhoa*) do nest on Kent Island and other islands in the Bay of Fundy, their numbers are dwarfed by Wilson's. By late August, Wilson's Storm-Petrels were rarely seen, most having left for the south Atlantic where they nest.


Leach's Storm Petrel [3]


Red Phalarope [3]

Phalaropes also show a peak in early mid-August. Phalaropes, migrating from nesting areas in the Arctic, stop in the Bay of Fundy to replace fat reserves which will be used to fly to the west coast of South America. We see both Red (*Phalaropus fulicarius*) and Red-necked Phalaropes (*Lobipes lobatus*) between Grand Manan and Nova Scotia. There may in fact be more waves than this since females leave the nesting area first, followed by the males and lastly the juveniles.


Red-necked Phalarope [3]


Northern Gannet [3]

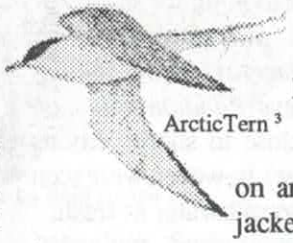
A few Northern Gannets (*Morus bassanus*) could be seen almost everyday in the summer. Gannets have experienced excellent nesting success in the last few years and the normal colonies are filled to capacity. The birds we see may be ones that can not find nest sites or are too young to nest. It would be thrilling if Gannets again decided to nest in the Bay of Fundy. Later in the summer and fall, we begin to see more adult Gannets as they leave the nesting areas and head south.

Greater Shearwaters (*Puffinus gravis*) are by far the most common seabird over the summer, and although Sooty Shearwaters (*Puffinus griseus*) are seen throughout the summer, they are much less common. Both are wintering here, nesting in the south Atlantic, while Manx Shearwaters (*Puffinus puffinus*) typically do not appear until August after leaving their nesting grounds in the north Atlantic.

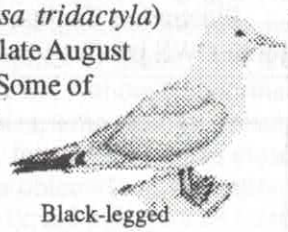

Greater Shearwater [3]

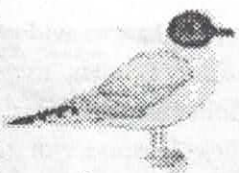

Sooty Shearwater [3]

Arctic and Common Tern (*Sterna paradisaea, S. hirundo*) numbers increased as the summer progressed with the first ones seen in mid-July. In August after they had left Machias Seal Island, adult terns could be seen feeding their chicks. The chicks are not very proficient hunters at first and still depend on their parents for food. Terns prefer not to sit on the water surface (although they will) but rather enjoy standing on anything that floats, including a life jacket, wood and general flotsam and jetsam.


ArcticTern [3]

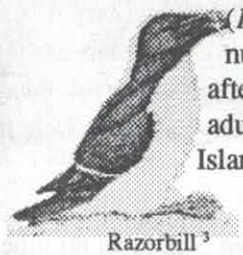
Black-legged Kittiwake (*Rissa tridactyla*) numbers increased dramatically in late August and the beginning of September. Some of the birds we saw earlier may be the ones that now nest on the Wolves and are out foraging. Bonaparte Gulls (*Larus philadelphia*) are not seen as frequently east of Grand Manan, although they begin to show up about the same time. They prefer the inshore areas of Passamaquoddy Bay, Deer and Campobello Islands and the Whale Cove area. In the fall, Kittiwakes, Bonaparte's, Herring and Great Black-backed Gulls (*Larus argentatus, L. marinus*) can all be seen from the Whistle (Long Eddy Point) for a good comparison of size and plumage characteristics.


Black-legged Kittiwake [3]

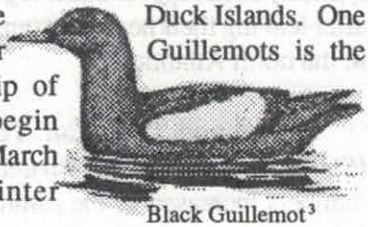

Bonaparte's Gull [3]

As can be seen from the table, Puffin (*Fratercula arctica*) numbers begin to increase after mid-August, when the adults leave Machias Seal Island. A few are seen early and may be foraging adults or non-breeding adults and juveniles. Razorbill (*Alca torda*) numbers do not show an apparent increase. Common

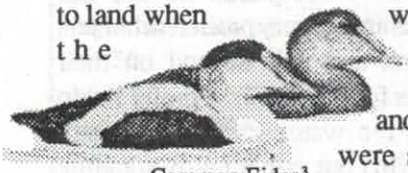

Puffin [3]


Razorbill [3]

Murres (*Uria aalge*) were seen only 8 times probably related to the small number which nest in the area. Guillemots (*Cepphus grylle*) numbers reflect where we were sailing, and were generally seen coming or leaving port or if we were close to the Bishop or the Duck Islands. One of the nest sites for Guillemots is the Bishop at the northern tip of Grand Manan. They begin showing up there in late March after spending the winter elsewhere.


Black Guillemot[3]

Similarly Eiders (*Somateria mollissima*) were seen close to land when we were looking for seals. For the most part Bald Eagles (*Haliaeetus leucocephalus*) and Ospreys (*Pandion haliaetus*) were seen close to shore. Loons (*Gavia immer*), however, were seen anywhere offshore, as comfortable in salt water as fresh.


Common Eider[3]

Cormorants (*Phalacrocorax auritus*) were noted particularly when they were migrating, hence the increased number in late August and early September. After the Labour Day storm, Cormorant numbers were much higher around the island perhaps because they were blown here on the strong easterly winds from areas to the northeast. The weirs which withstood the fierce storm were plagued by as many as 100 Cormorants diving simultaneously in pursuit of fish. Several schools of Herring were driven from weirs because of the Cormorants. Unlike the Cormorants which stay around the island in the summer, these blown-in birds showed no fear and could not be easily scared from the weirs.

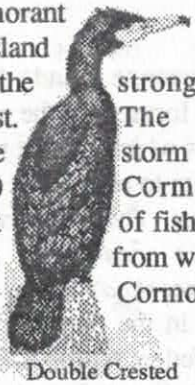
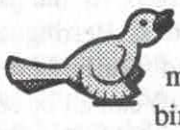

Double Crested Cormorant[3]

Illustration Credits: From *Whales of the Bay of Fundy*, used with permission,1 - Tim Beatty, 2 - Bon Harriott; From CWS publication *Guide to the Seabirds of Eastern Canada*, used with permission,3 - I.L. Jones; 4 - G. Bishop.

Birds and Berries Don't Mix

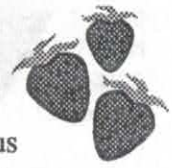
Irene Doyle, Restigouche Naturalists' Club



My sister Margaret and I are as avid bird watchers as you'd ever want to meet. We will drive 400 miles to add a new bird to our list. We go out at least once or twice a week to see what's around the area. Not a peep from a bird gets by us, binoculars and books in hand.

One fine sunny, windy Saturday morning the two of us got up at 7 a.m. and headed for the Wild Strawberry fields. Our motto: "It's gonna be a hot day, so gotta start early". Even with hiding our cars away in a neighboring driveway so as not to divulge our great secret berry patch, we were in the fields by 8 a.m.

With plenty of berries around we picked as no other pickers could for a few hours. Then we started to see RED, and after a while more saw nothing but RED. We could hear birds singing their little hearts out all around us, but we were too absorbed with our picking to even lift our heads. Among those songs, we heard a few we had never heard before and one of us mentioned, "We should've brought our binoculars". The other replied "Yeah, sounds like the same bird we heard last year and didn't see; same place too." And the wild picking went on.



It was well after 4 p.m. when one of us mentioned "Hey, there's something wrong here. We've been listening to those birds all day and never even lifted our heads to see what they were. Yet last winter we drove all the way to Grand Manan to see a sea gull!"

BE AWARE: RABIES

James Goltz

New Brunswickers have become rather complacent about rabies, since rabies has been only a rare and sporadic disease in the province for many years. Although there was an outbreak of rabies in New Brunswick in the mid 1960s, just three rabid animals (two horses and one Little Brown Bat) have been detected here in the past 10 years. All of our recent cases of rabies are believed to have been of bat origin. However, major outbreaks of rabies in raccoons and foxes are now sweeping toward us from nearby Maine and are expected to reach the province within one to three years. This article is intended to inform naturalists about rabies, so that our risk of exposure to this disease can be minimized.

Illustration by Enid Blyton

Rabies is a disease that has been recognized since ancient times and occurs throughout most of the world. It is caused by a virus and is usually transmitted by bite wounds inflicted by rabid animals. All species of mammals are reported to be susceptible to rabies, including humans. Different strains of the rabies virus have evolved in different species of wildlife and domestic animals, but all strains of rabies can cause disease and death in susceptible mammals. In northeastern North America, the most important vectors of rabies are wildlife species, including foxes, raccoons, skunks and bats. Although antibodies against rabies have been found in the blood of several species of birds (including Common Crows, Great Horned Owls and Turkey Vultures), birds evidently do not get rabies.

After being bitten by a rabid animal, the rabies virus multiplies at the wound site and then migrates along nerves to the spinal cord, brain and salivary glands. Fortunately for us, this process takes time, often from one to six months, or even longer depending upon the part of the body that was bitten. Hence, persons who have been bitten by a rabid animal may receive certain post exposure treatments (including antiserum and vaccines) that, if administered in a timely fashion, will keep them from dying of rabies. As a result, human death due to rabies very rarely occurs in countries with high levels of health care. Rabies is almost always fatal in humans and other mammals that have not been adequately vaccinated or given proper post exposure treatments.

Illustration by Ernest Aris

What can be done to minimize the risk of rabies?:

1. Give wild mammals a wide berth to prevent the possibility of being bitten - i.e., enjoy wildlife, but from a healthy distance. Wild mammals may look cute, but justifiably may defend themselves if cornered. Be especially cautious of wild or domestic mammals that seem to be exhibiting abnormal behaviour. Since rabies affects the brain, nerves and spinal cord, it often causes lameness and behavioural changes such as aggression, abnormal tameness, or activity at unusual times of the day. Animals with rabies are more likely show evidence of encounters with porcupines or skunks, and are more likely to eat stones. **Please note:** Although abnormal behaviour may be indicative of rabies, it may also be a result of other factors (e.g., young age, intruders being in close proximity to offspring) or disease problems (e.g., starvation, canine distemper, etc.). Conversely, animals may be rabid or incubating rabies, even if they seem to look healthy.

2. If handling wild mammals, especially foxes, raccoons, skunks and bats, take precautions so that you will not be bitten or exposed to their saliva. Consider being vaccinated against rabies if you work in a profession that places you at high risk of exposure to rabies. Human intervention to "help" wild mammals that seem to be experiencing difficulty or appear to be abandoned may be well-intentioned, but should not be too hasty and should preferably be left to persons with appropriate knowledge and experience. Make sure that the animal is truly in trouble before you try to help out.

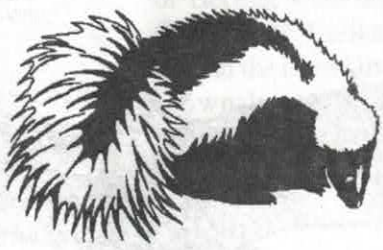
3. Wear waterproof gloves and protective clothing

when handling dead animals. The rabies virus remains infectious in the saliva and tissues of rabid animals for some time after death. It is possible for the rabies virus to enter cuts in the skin, even if the cuts are small and cannot be seen with the naked eye.

4. Ensure that pets (e.g., dogs, cats, ferrets, etc.) are regularly vaccinated against rabies.

5. If bitten by an animal that may possibly be rabid, thoroughly cleanse the bite wound with soap and water (for at least five minutes) and consult your physician.

6. Since rabies has been documented to occur in persons who have visited bat caves, likely as a result of inhaling virus particles, persons who wish to explore bat caves should be aware of the potential risk and should consider wearing appropriate protective masks and/or being vaccinated against rabies.



What else can be done to help prevent the spread of rabies? Please try to learn all that you can about the disease and convey this information to others that you care for, especially children. Good brochures on rabies are available from Agriculture Canada. If you observe a wild mammal that you suspect may have rabies, please report your observations to your local Department of Natural Resources and Energy office. Please do not transport wild animals from one area to another. The raccoon rabies outbreak in the northeastern United States was introduced into West Virginia about 20 years ago by hunters who brought rabies-infected raccoons from the southeastern United States. Have a healthy respect for the wild mammals that share our province!

Ann Lavoie, First Woman Guide!

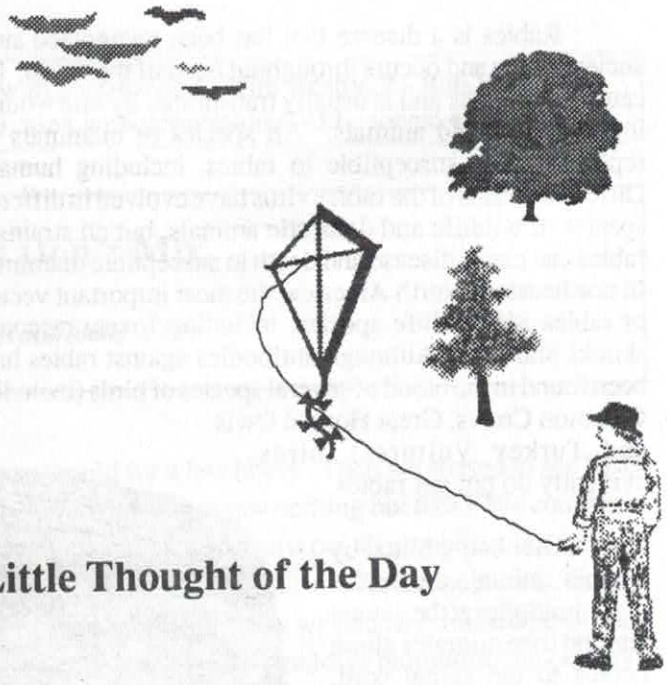
by Irene Doyle, Restigouche Naturalists' Club

The past president of the Restigouche Naturalists' Club is setting a precedent by being the first woman guide for the Restigouche Salmon Club. In height, she is a small woman of four foot some... but she's certainly not small in talent and determination.

As a guide her duties are many. After the pleasant task of picking up members and guests at the Charlo airport you'll find her at the helm of the long motorized canoes. She navigates the challenging Restigouche, poling the boat if the water is too low. Besides being knowledgeable of the best salmon pools, she keeps the fishing equipment in good repair and is responsible for ensuring the release of any fish over 63 cm.

An article about her exploits was recently placed in the local newspapers and on Nov. 8, she spoke on a CBC radio program about the Restigouche area. She is a woman not afraid of breaking new ground, and a true naturalist in every sense of the word.

Congratulations Anne!!!!



Little Thought of the Day

Keep my spirit wild and free
Like the bird and kite on the wind
And as I've grown let me always know
The child that lives within
Who always sees joy in the smallest of things.

Flora Couture
Restigouche Naturalists' Club

L'Aventure du Râle jaune

Rosita Lanteigne

Le 6 juillet 1995, nous étions, mon conjoint Benoît Lanteigne et moi-même Rosita Lanteigne, dans la région d'Inkerman pour essayer de voir le Fuligule à tête rouge.

Après avoir regardé à plusieurs reprises pour le Fuligule, Benoît décide qu'il est temps de partir pour chez-nous. Étant persistante, je décide de regarder une dernière fois mais sans succès. Cependant, tout en observant, j'entends une première fois, un chant inhabituel à mes oreilles. J'en fais pas trop de cas mais lorsque je l'entend pour une deuxième fois, je demande à Benoît de retracer sur la cassette le chant du Râle jaune. Après écouté, je dis à Benoît que ce que j'ai entendu correspond au chant que je viens d'entendre dans le prés. N'en faisant pas plus de cas, nous partîmes pour Caraquet.

Le 7 juillet, Benoît Hébert est de retour de Terre-Neuve et, par téléphone, me laisse savoir ses observations d'oiseaux dans cette province. Durant notre conversation, je lui fais part de ce que j'ai entendu dans le prés à Inkerman. Le samedi matin, vers 5 h 30, Benoît Hébert se rend à Inkerman pour vérifier mon histoire. Il fait jouer la cassette et le Râle jaune chante une fois. Il m'en fait part et ce n'est que le 19 juillet que j'appelle Benoît pour savoir s'il est intéressé d'aller appeler "Caller" le Râle jaune.

On part donc de Caraquet vers 21 h 20 pour se rendre à Inkerman. La soirée est belle, quelques nuages, pas de vent.

Arrivé à Inkerman, Benoît étant déjà prêt, va sur le bord de la route avec la cassette et appelle le Râle jaune. À notre grande surprise, il répond. Je ne sais quelle sensation Benoît Hébert a ressenti mais moi, ça ne s'exprime pas. Je crois que toute personne qui découvre un oiseau rare doit savoir de quoi je parle. C'est une joie extraordinaire.

C'est bien beau de l'entendre, faut le voir. Nous décidons d'aller dans le prés et là le fun commence. Les maringouins!!! Pas de problème pour moi, je me suis couverte d'un filet utilisé pour les abeilles mais Benoît Hébert, les maringouins vont lui manger la tête. Je lui prête les clés de ma voiture pour qu'il aille au dépanneur acheter de l'insecticide. Je lui demande aussi d'appeler Corine Mallet et Gilles Hébert pour qu'ils viennent nous rejoindre, ce qu'ils firent.

Lorsque Benoît revient du dépanneur, un Grand-duc d'Amérique juvénile passe devant la voiture, se fait frapper et se retrouve dans le fossé avec une aile de blessée. Imaginez Benoît Hébert, avec la voiture de quelqu'un d'autre qui frappe un oiseau. Les nerfs, les nerfs.

Vous croyez que les malheurs de Benoît sont terminés, pas du tout. La voiture est stationnée sur le bord de la route toujours en marche, phares allumés. Après avoir regardé dans le fossé ou se trouve le Grand-duc, il retourne à la voiture pour je ne sais quelle raison. Terminant ce qu'il voulait faire dans la voiture, il en sort et décide d'appuyer sur le bouton servant à maintenir les portes débarrées mais que pensez-vous qu'il fit. Et oui, il appuie sur le bouton qui barre les portes, les quatre portes s'il vous plaît et ferme la porte. Là, il réalise ce qui vient de se produire. Portes barrées, voiture en marche, phares allumés et plus de clefs. Les nerfs, les nerfs !!!

Faut dire que la chance a finalement tournée en notre faveur. Une personne s'est arrêtée et elle avait un téléphone dans son camion. Nous avons donc pu rejoindre mon mari à Caraquet qui, couché, s'est fait réveiller par une voisine. Il est venu nous amener une clé pour ouvrir la voiture toujours en marche depuis à peu près 35 minutes.

Avant que la clé arrive, il ne faut pas oublier que nous avons un oiseau blessé dans le fossé. Notre bon samaritain au téléphone est allé chercher une grande boîte dans laquelle le Grand-duc fut placé et mis à l'arrière du camion de Guy Hébert venu nous joindre avec Corine Mallet.

Après avoir reglé le problème du Grand-duc et de la voiture, nous pouvons enfin nous consacrer au but ultime de notre sortie, le Râle jaune. Il est environ 23 h 00. Benoît Hébert, notre chanceux, Guy Hébert, Benoît Lanteigne, Rosita Lanteigne et Corine Mallet entrons dans le pré et, avec la cassette, essayons de localiser l'espèce rare. Nous cherchons environ 30 minutes à l'aide de la cassette et de la lumière pour finalement le voir prêt d'une flaque d'eau. Quelle récompense, quelle joie. On a pu très bien l'observer. Guy Hébert était posté assez près de la flaque d'eau, qu'à un moment donné il aurait pu le toucher. Faut dire aussi que c'est quelque chose d'impressionnant d'être proche de cet oiseau lorsqu'il chante, laissez-moi vous dire que c'est assez fort et c'est bien différent que le chant de la cassette.

Le lendemain soir, une sortie est organisée à 22 h 00 et 19 personnes du Club de Naturalistes de la Péninsule se rencontrent et réussissent à le voir grâce au travail fait par Benoît et Guy Hébert pour le localiser dans le pré.

Pour ce qui est de la voiture, elle n'a rien. Le Grand-duc a été conduit au zoo de Magnetic Hill et il semble qu'il sera très bien soigné.

La soirée du 19 juillet 1995 restera gravée à jamais dans la mémoire de Benoît et Guy Hébert, Benoît et Rosita Lanteigne et Corine Mallet. Ce fut un travail d'équipe et nous en sommes très fiers.

Depuis cette soirée, nous avons découvert que le Râle jaune, c'est une première mention officielle pour le Club de Naturalistes de la Péninsule mais si on se fie sur ce que le père de Bernadette Mallet, membre du CNPA lui racontait, cet oiseau était déjà présent depuis bien longtemps. Il est âgé d'environ 70 ans et il raconte que, lorsqu'il était jeune, lors de la coupe du foin, il s'amusait à essayer d'attraper cet oiseau en lui courant après. D'ailleurs, fait assez frappant, la veille de notre sortie pour voir le Râle, il mentionnait à Bernadette en soirée tout en regardant vers le pré, que c'est une soirée comme celle-ci qu'il entendait le clac clac de cet oiseau lorsqu'il était jeune. Depuis notre sortie le 19 juillet, Benoît Hébert a entendu le clac clac de deux Râles à Inkerman et Bernadette a entendu ce clac clac aussi mais dans la région de la Baie de Petit-Pokemouche où elle demeure près de son père.

Blue Jays Don't Seem To Like Me

Donald G. Gibson

In the mid-70's, like so many others, I decided to put up a bird feeder in my backyard. Soon the common species for the area, Black-capped Chickadee, Evening Grosbeak, Blue Jay and House Sparrow, were visiting the feeder on a regular basis, and later Pine Siskin, American Goldfinch and Common Redpoll started making appearances. After a few seasons had passed I began to notice a trend at my feeder. Through the early part of autumn Blue Jays were regular visitors, but at some point, just before Christmas, they would abandon my feeder for the remainder of the winter. This intrigued me. I felt that I should devise some method to determine if this was indeed true and if it was true: Why?

Since I did not want to spend a lot of time keeping these records, I decided that simplicity was a must. In an effort to achieve this, each species that is likely to appear at my feeder was assigned a number. These numbers were repeated in 31 rows (maximum number of days in a month). The sheet is kept at a convenient location and when a bird is observed at the feeder the number for that species is circled for the appropriate day.

Since this was deemed to be for winter feeding, the time period selected was from November 1 to March 31 inclusive. The other rule that applied was the bird had to be observed taking food that had been put out. Abiding by these rules has caused some minor disappointments, as White-crowned Sparrows and a Carolina Wren have dined at my feeder but just outside the designated period. Also, Pine Grosbeaks have appeared in my backyard during the winter, but chose to eat only natural food.

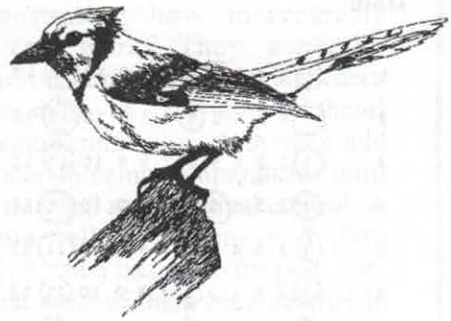
On the attached sheet the occurrences of three different species have been plotted for the past 12 years. As previously mentioned the Blue Jay was regular visitor through November and December but very rarely for the rest of the season; although for two consecutive winters, 1988-89 and 1989-90, they found my offerings to be satisfactory. The Common Redpoll, on the other hand, seldom visits feeders until the natural food has been consumed, usually in January or February. Some years they do not appear at all. The third example illustrated is the Northern Cardinal, a species that is spreading northward, obviously aided by the numerous feeders now in existence. In October 1990 a pair of cardinals first graced my feeding platform and have been fairly regular ever since.

Why do the Blue Jays desert me in December? Well, I am not sure that I have a definitive answer to that question. Although they are considered nonmigratory, Blue Jays do undergo some southward movement during winter and since I usually only have one or two at the best of times, when the very cold weather sets in, other locations apparently become more appealing. The answer to the original question seems less important now, as I faithfully keep my records. To date 32 different species have been tallied and I am eagerly awaiting number 33, which I anticipate to be the Carolina Wren that has been seen frequently in my backyard since August; or maybe a Green-tailed Towhee or a Brambling or .....!

P.S. On November 10, 1995 a small reddish brown bird with a buffy breast and a cocked tail plucked a sunflower seed from my hanging feeder and as expected the Carolina Wren became number 33.

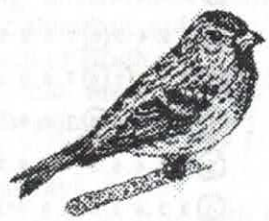
Blue Jay

	November	December	January	February	March
1983-84	xxxxxxxxxx	xx xx			
1984-85	xxxxxxxxxx	xx x x x x	x		x x
1985-86	x xxx x x	x x			
1986-87	xxx xxxx x	x x			xx
1987-88	xxxxx xxxxx	xx			
1988-89	x x x	x xxx x	xx xxxx	xxx x x xx	xx x x x
1989-90	xx xxxxxxx	xxxx x x xxx	x xx xx x	xx xx x xxx	x x x x x
1990-91	x xxxxxxx x	xxxx			
1991-92	xx xxxxx xx	xxx			
1992-93	x				
1993-94	xx xx	x			
1994-95	x x			x	x



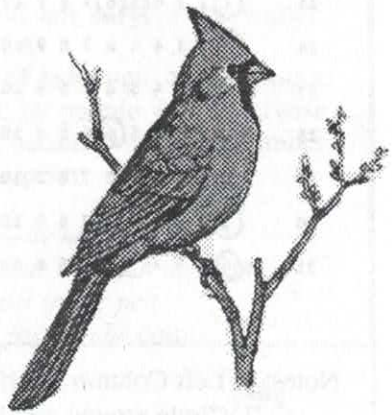
Common Redpoll

	November	December	January	February	March
1983-84					
1984-85					
1985-86				xx x x	xxxxxxxx
1986-87		x	xxxx	xxxxxxxxxx	xxxxxxxxx x
1987-88				xxxx xx	xxx xxx
1988-89					
1989-90					
1990-91					
1991-92				xxxx	xxx x
1992-93					
1993-94			xxxxxxxxx	xxxxxxxxxx	xxxxxx xxx
1994-95					



Northern Cardinal

	November	December	January	February	March
1983-84					
1984-85					
1985-86					
1986-87					
1987-88					
1988-89					
1989-90					
1990-91	xxx x xxx x	xxxxxxxxxx	xxxxxx		x
1991-92	xxxxxx xxxx	xxxxxxxxxx	xx xxxxxxx	xxxxxxxxxx	xxxxxxx
1992-93	x xxxxxxxxx	xxx xx x x x	xx	xxx xxx	x x
1993-94	xx x xx	xx x			x
1994-95	x xx xx xx	x xxx	xxx xxx x x	xxx x xx xxx	x x xx



SAMPLE DATA SHEET

Year:- 1995
Month:- March
Location:- 50 Golf Club Rd

Date	Species
1	(1) 2 3 4 (5) (6) 7 8 9 10 (11) 12 13 14 15 16 17 18 19 20 21 22 23 (24) 25 (26) 27 28 29 30
2	(1) 2 3 4 5 (6) 7 8 9 10 (11) 12 13 14 15 16 17 18 19 (20) 21 22 23 (24) 25 (26) 27 28 29 30
3	(1) 2 3 4 5 (6) 7 8 9 10 (11) 12 13 14 15 16 17 18 19 (20) 21 22 23 24 25 (26) 27 28 29 30
4	(1) 2 3 4 (5) (6) 7 8 9 10 (11) 12 13 14 15 16 17 18 19 (20) 21 22 23 24 25 (26) 27 28 29 30
5	(1) 2 3 4 5 (6) 7 8 9 10 (11) 12 13 14 15 16 17 18 19 (20) 21 22 23 24 25 (26) 27 28 29 30
6	(1) 2 3 4 5 (6) 7 8 9 10 (11) 12 13 14 15 16 17 18 19 20 21 22 23 (24) 25 (26) 27 28 29 30
7	(1) 2 3 4 5 (6) 7 8 9 10 (11) 12 13 14 15 16 17 18 19 (20) 21 22 23 24 25 (26) 27 28 29 30
8	(1) 2 3 4 5 (6) 7 8 9 (10) (11) 12 13 14 15 16 17 18 19 (20) 21 22 23 24 25 (26) 27 28 29 30
9	(1) 2 3 4 (5) (6) 7 8 9 10 (11) 12 13 14 15 16 17 18 19 (20) 21 22 23 (24) 25 (26) 27 28 29 30
10	(1) 2 3 4 (5) (6) 7 8 9 10 (11) 12 13 14 15 16 17 18 19 (20) 21 22 23 24 25 (26) 27 28 29 30
11	(1) 2 3 4 5 (6) 7 8 9 10 (11) 12 13 14 15 16 17 18 19 (20) 21 22 23 (24) 25 (26) 27 28 29 30
12	(1) 2 3 4 5 (6) 7 8 9 10 (11) 12 13 14 15 16 17 18 19 (20) 21 22 23 24 25 (26) 27 28 29 30
13	(1) 2 3 4 5 (6) 7 8 9 10 (11) 12 13 14 15 16 17 18 19 (20) 21 22 23 24 25 (26) 27 28 29 30
14	(1) 2 3 4 (5) (6) 7 8 9 10 (11) 12 13 14 15 16 17 18 19 (20) 21 22 23 24 25 (26) 27 28 29 30
15	(1) 2 3 4 5 (6) 7 8 9 10 (11) 12 13 14 15 16 17 18 19 (20) 21 22 23 24 25 (26) 27 28 29 30
16	(1) 2 3 4 5 6 7 8 9 10 (11) 12 13 14 15 16 17 18 19 20 21 22 23 24 25 (26) 27 28 29 30
17	(1) 2 3 4 5 6 7 8 9 10 (11) 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
18	(1) 2 3 4 (5) (6) 7 8 9 10 (11) 12 13 14 (15) 16 17 18 19 (20) 21 22 23 24 25 (26) 27 28 29 30
19	1 2 3 4 5 6 7 8 9 10 (11) 12 13 14 (15) 16 17 18 19 (20) 21 22 23 24 25 (26) 27 28 29 30
20	(1) 2 3 4 5 (6) 7 8 9 10 (11) 12 13 14 15 16 17 18 19 (20) 21 22 23 24 25 (26) 27 28 29 30
21	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 (26) 27 28 29 30
22	(1) 2 3 4 5 6 7 8 9 10 (11) 12 13 14 (15) 16 17 18 19 (20) 21 22 23 24 25 (26) 27 28 29 30
23	(1) 2 3 4 5 6 7 8 9 10 (11) 12 13 14 15 16 17 18 19 20 21 22 23 24 25 (26) 27 28 29 30
24	(1) (2) 3 (4) (5) (6) 7 8 9 10 (11) 12 13 14 (15) 16 17 18 19 (20) 21 22 23 24 25 (26) 27 28 29 30
25	(1) 2 3 4 (5) (6) 7 8 9 10 (11) 12 13 14 15 16 17 18 19 (20) 21 22 23 24 25 (26) 27 28 29 30
26	(1) 2 3 4 5 6 7 8 9 10 (11) 12 13 14 (15) 16 17 18 19 (20) 21 22 23 24 25 (26) 27 28 29 30
27	1 2 3 4 5 6 7 8 9 10 (11) 12 13 14 (15) 16 17 18 19 (20) 21 22 23 24 25 (26) 27 28 29 30
28	(1) 2 3 4 5 (6) 7 8 9 10 (11) 12 13 14 (15) 16 17 18 19 (20) 21 22 23 24 25 (26) 27 28 29 30
29	1 2 3 4 5 6 7 8 9 10 (11) 12 13 14 (15) 16 17 18 19 (20) 21 22 23 24 25 (26) 27 28 29 30
30	(1) 2 3 4 5 6 7 8 9 10 (11) 12 13 14 (15) 16 17 18 19 (20) (21) 22 23 24 25 (26) 27 28 29 30
31	(1) 2 3 4 (5) (6) 7 8 9 10 (11) 12 13 14 (15) 16 17 18 19 20 (21) 22 23 24 25 (26) 27 28 29 30

Key

1. Black-capped Chickadee
2. Blue Jay
3. Evening Grosbeak
4. Hairy Woodpecker
5. Downy Woodpecker
6. American Goldfinch
7. White-breasted Nuthatch
8. Common Redpoll
9. Purple Finch
10. Pine Siskin
11. American Tree Sparrow
12. European Starling
13. Brown-headed Cowbird
14. House Sparrow
15. Common Grackle
16. Ruby-Crowned Kinglet
17. Red-Breasted Nuthatch
18. Dark-eyed Junco
19. White-throated Sparrow
20. Mourning Dove
21. Song Sparrow
22. Red-winged Blackbird
23. Cedar Waxwing
24. Northern Cardinal
25. Fox Sparrow
26. Rock Dove
27. Pine Grosbeak

Notes: 1. Left Column signifies the day of the month
2. Circle around number means that species was present on that particular day. (see code on right)
3. With respect to the code, Cedar Waxwing and Pine Grosbeak have never been tallied. All of the others have been: plus Yellow-rumped Warbler, Bohemian Waxwing, House Finch, Chipping Sparrow, Rufous-sided Towhee, Rusty Blackbird and Pine Warbler.

LADYBUGS

Mary Majka

Not long ago, on a sunny October day, I sat on the deck of our cottage at Mary's Point with ladybugs virtually "swarming" around me. As I was contemplating this unusual occurrence, a friend phoned to report the same thing at her place not far away. Then somebody else phoned from a bit farther, and then someone else. [I later learned that they were also numerous at Hampton and Fredericton.] Ladybugs were on the move.

Curious, I took to the books. Here is what I discovered.

Ladybugs are beetles, family Coccinellidae, more correctly called ladybird beetles. Forty-eight genera and about 400 species are widely distributed throughout the world. Great numbers of those small insects congregate in autumn to hibernate on hillsides, under the snow in high mountains, or in other sheltered locations. What were they doing on the seashore? We probably will never know. Perhaps "swarms" of them were flying to hibernate and just as stray birds were diverted by strong winds and landed in our area. Small as they are, they have been reported flying as high as 1500 metres (5000 feet) and covering distances of 80 km (50 miles).

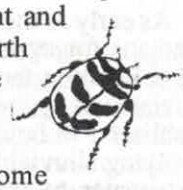
Their name comes from the Middle Ages, when the beneficial insect was dedicated to the Virgin and became the beetle of Our Lady, one of the most useful "bugs" in nature. Larvae as well as adults prey on aphids, white-flies, and scale insects and act as a natural control of plant pests. They have been largely or, in some cases entirely, responsible for eradication of harmful insects.

Many species of ladybugs are native to this continent. Not all have the familiar orange colour and black spots we associate with them. Some have yellow spots on a black background, some have deep red markings, some are covered with hair or are black with reddish head and lower abdomen, but all have the rounded appearance and a very similar life history. When disturbed they often exude a sticky yellow fluid which is repulsive to predators.

Eggs are generally attached to leaves. When the larva hatches it will feed voraciously on the same insects as the adult. After four larval stages, it forms a pupa. In a few days it emerges as an adult.

The most famous of the ladybugs is the Vedalia ladybug, *Rhodolia cardinalis*, which became savior of the California citrus industry. In 1872 the Cottony Cushion Scale infested the citrus groves and within 15 years nearly destroyed all the trees. Since the scale originated in Australia its natural enemy the Vedalia ladybug was imported and in two years the little beetle was able to bring the pest completely under control, thus demonstrating how marvelously biological control can work! They generally congregate in huge numbers on mountain sides where there are sometimes as many as 30 million of them! They are collected commercially in cloth sacs and placed in storage at near freezing temperatures until spring. Then they are released as biological control. A business in California sells a gallon of 75,000 ladybugs at a cost of $10, not a bad price for pesticide, when you calculate that each of them may destroy in its lifetime 90 adult and 3000 larval scale insects, and that a single female can lay a thousand eggs.

The Vedalia ladybug is not the only ladybug that is used to control destructive pests. Here are a few examples. The Lateral Ladybug controls mealy bugs that threaten the redwoods and Monterey cypress. Dusky Ladybug also feeds on aphids, red spiders and mites. Convergent Ladybug and Fifteen-spotted Ladybug are two of the most abundant and beneficial, occurring over much of North America. Studies estimate that the larvae will consume 25 aphids a day and each adult as many as 56!



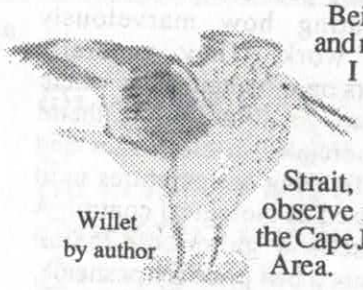
Of course there are always some "rotten apples in the barrel." And so it is with the otherwise wonderful tribe of ladybugs. Three of the leaf-eating ladybugs can become serious pests. Luckily they do not occur in our part of North America. One of them, the Mexican Ladybug, is damaging to the bean family. The Squash Beetle specializes in squash and pumpkin. Here too biological control was tried. A wasp imported from Mexico wiped out the Bean Beetle to everyone's delight. Disappointingly it turned out that the wasp would have to be imported every summer since as a subtropical species it could not survive the winter, even in the southwestern USA.

This then is the story of ladybugs, a little insect not feared or rejected even by people who otherwise dislike "bugs". Perhaps it's because we still remember from our childhood the little poem:

Ladybug, ladybug fly away home,
Your house is on fire, your children do roam,
Except little Nan who sits in the pen
Weaving gold laces as fast as she can.

Cape Jourimain - National Wildlife Area and the Fixed Link

by Paul Martin : Forest Technician, Kennebecasis Naturalists



Willet
by author

Being both an avid naturalist and newcomer to the Maritimes, I began exploring the New Brunswick coastline in the fall of 1994. As I travelled along the Northumberland Strait, one of my first stops to observe migrating shore birds was the Cape Jourimain National Wildlife Area.

As part of the continuing mandate of the Canadian Wildlife Service to acquire important wildlife habitats, the Cape Jourimain Wildlife Area was established in 1979 to conserve and protect approximately 640 hectares of habitat for waterfowl and shorebirds [2]. The Cape was acquired from private landowners by Government during the 1930's and left to Mother Nature until the 1960's, when the first proposed link from N.B. to P.E.I. resulted in the construction of a roadbed that dissects the property.

As early as the 1700's, the area had been utilised by the Acadians for agricultural purposes. Rather than clearing and cultivating the uplands they preferred to cultivate the alluvial land by the sea [4]. Dual function dyke systems were established to hold back the invading saltwater from the low-lying alluvial flats while at the same time allowing the fresh water to reach the sea. This activity profoundly affected the environment of the Cape.

By the 1800's , the saltmarshes were being harvested for marsh hay and a road was constructed to the Inner and Outer Jourimain islands where permanent residences were established. Those who took up residence on these islands soon cleared and cultivated the land for produce which again created changes in the Cape's ecosystem.

Habitat	Area	Habitat	Area
Salt Marsh	240 ha	Forest	105 ha
Old field growth	62 ha	Brackish impoundments	55 ha
Tidal channel	25 ha	Shrub upland	27 ha
Sand dune	24 ha	Freshwater marsh	18 ha
Brackish edge of impoundments	18 ha	Beaver pond flooding	12 ha
Sweet Gale swamp	6 ha	Alder swamp	9 ha
		Cedar swamp	1 ha

The dyked areas, the old road beds and the once inhabited islands all combine to create diverse habitats which support an abundance of unique fauna and flora. There have been 45 species of uncommon plants reported in the Cape area, including a rare variety of the Annual Salt-Marsh Aster, *Aster subulatus*. In addition to the rare flora, you are likely to encounter the more common species of New Brunswick's ferns and wildflowers such as the Blue Flag Iris, Evening Primrose, and various asters and thistles.

The Willet, *Catoptrophorus semipalmatus*, was "once nearly extirpated in eastern North America[1]". Yet this rare visitor has done well within the Cape area. A 1989 survey of breeding Willets at Cape Jourimain reported "14 pairs and 7 lone birds on the 30th of May, while 11 pair and 6 lone birds were observed on the 27th of June[1]." The number of Willets within New Brunswick along the Cape Tormentine Peninsula is hopefully on the rise.

Cape Jourimain, jutting prominently into the Northumberland Strait, makes the Wildlife Area a natural stopping place for birds on spring and fall migration, at times it appears like a rush hour traffic jam of shorebirds and waterfowl. I found the Cape to be excellent for birding. Perhaps only Mary's Point on the Bay of Fundy offers a similar diversity of species and habitats.

The following are often observed at migration;

Waterfowl

Blue-winged Teal	Green-winged Teal
Black Duck	Canada Goose
American Widgeon	Northern Pintail
Pied-billed Grebe	Red-breasted Merganser
Northern Loon	Red-throated Loon
Scoter(s)	Common Eider
Wood Duck	Oldsquaw

Shorebirds

Semipalmated Sandpiper	Short billed Dowitcher
Lesser Yellowlegs	Pectoral Sandpiper
Semipalmated Plover	Least Sandpiper
Black-bellied Plover	Dunlin
Sanderling	Ruddy Turnstone
White-rumped Sandpiper	Hudsonian Godwit
Willet	

Migrant songbirds accompany the shorebirds and waterfowl. It is common to see many species of warblers and sparrows. Cliff Swallows nest along the cliffs near the lighthouse on the Cape, with up to 120 nests occupied each season. In addition to the abundant birdlife, other wildlife observed on the cape include White-tailed Deer, Red Fox, Coyote, Snowshoe Hare, Meadow Vole, Raccoon, Muskrat and Beaver.

Cape Jourimain offers much for naturalists interested in botany, ornithology, entomology and general field biology. In summer its photogenic long sandy shores attract those wishing to swim or enjoy a scenic picnic. In winter, cross country skiing and snowshoeing are favourite activities.

Unfortunately the qualities of the Cape that make it attractive for migrating birds also make it a prime location for the "Fixed Link" causeway that will cut through the very centre of the Wildlife Area. There is talk of opening a nature centre once construction is complete, but I have to ask myself, with the highway right on top of the Wildlife Area, will the Cape still be as attractive to birds and other animals?

Will the causeway affect the migratory patterns of waterfowl and shorebirds? Will they fly around the man-made structure, rather than fly over it, as some would suggest? The Cape will definitely not remain the peaceful locality it is known to be at present. It is important to make careful observations of the changes brought on by the construction of the Fixed Link. Detrimental changes should not be ignored, but rather be publicized in hopes that they can be changed or modified to minimize their effect.

References

[1] Technical Report Series #128, Atlantic Region 1991, Canadian Wildlife Service, C.M. MacKinnon, R.J. Hicks

[2] Technical Report Series #129, Atlantic Region 1991, Canadian Wildlife Service, C.M. MacKinnon, C. Ellingwood

[3] Technical Report Series #130, Atlantic Region 1991, Canadian Wildlife Service, C.M. MacKinnon, R.W. Daury, R.J. Hicks

[4] The Acadians of the Maritimes : Thematic Studies, The Ministry of the Environment, 1982, edited by Jean Daigle

[5] Field Guide to the Wildflowers, Peterson Field Guides, Volume 17, 1968 by Roger Tory Peterson and Margaret McKenny

[6] The Audubon Society Master Guide to Birding, Volume #1 : Loons to Sandpipers, 1987, John Farrand Jr. editor

[7] The Audubon Society Nature Guides : Wetlands, 1989, William A. Niering

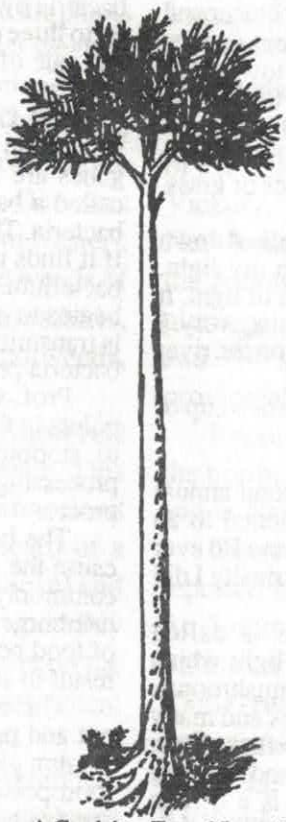
TAKE A CLOSER LOOK AT THE SOFTWOOD TREES

Rob Walker

Now that the leaves have fallen from the hardwood trees, the softwoods are the dominant feature of the living landscape. The 10 species of softwood trees,also called conifers, native to New Brunswick (can you name them?) are extremely valuable to our economy as well as being immensely important to the survival of wildlife. Along with a few species of evergreens from overseas, such as the Norway Spruce, Scots Pine and Japanese Yew, the softwoods make a major contribution to the beauty of this province. With some knowledge of the geneology of the conifers we will better appreciate these "living fossils" when we walk in a forest, plant and prune evergreens in our yards and when we read this journal which is manufactured from their wood fibres.

Do you want to see a 300 million years old forest or at least what is left of one? You can see such a forest in the form of coal seams in the rocks of many areas of New Brunswick. On the upper Bay of Fundy, where I live, these fossil forests can be seen in sandstone cliffs at Joels Head at Alma, at Cape Enrage and at Grenadiers Cap at the extreme tip of Marys Point. Most of these fossils are bits-and-pieces of leaves, branches and bark (remember that each coal seam and fossil layer is a forest destroyed by flooding). Diligent observation of a cliff face may reveal cross- and longitudinal-sections of fossil trees trunks and roots. All of these plants, except one, were spore-producing pteridophytes; the ancestors of today's horsetails, club-mosses and ferns. The one exception is a primitive seed-bearing conifer that we call Cordaites.

During the Late Carboniferous Period (320 to 285 million years ago), Cordaites forest covered a large part of the Earth's land area. Some of the trees were 30 metres tall with strap-shaped leaves up to a metre long. Insects were abundant in these forests, as were amphibians and primitive lizard-like reptiles and let's not forget the two-metre long "millipede" that left behind trackways 20 centimetres wide.



A Cordaites Tree, 25 m tall
drawing by Rob Walker

Cone-bearing trees were the Earth's dominant plants 180 million years ago at the time of Pangaea, the supercontinent. Weather conditions on Pangaea included extremes of heat and cold, beyond what Earth experiences today, plus temperate conditions such as we have in much of North America today, thus stimulating the development of a great variety of cone-bearing trees and bushes. Some grew in forests that resembled the Redwood stands that we can visit in California. Sequoias,cedars and pines grew in these forests and no doubt served as food for some of the giant reptiles. So if the dinosaurs and a lot of other creatures became extinct, how is it that the conifers are still with us?

By 100 million years ago, a new group of plants were displacing the conifers; these were the angiosperms, the flowering plants that bear their seeds in a hollow ovary (what we call a fruit, berry, nut, pod, kernal and lots of other names depending on the type). Almost everywhere the conifers were replaced by the more adaptable flowering plants (today we have about 500 species of conifers in contrast to over 200,000 species of angiosperms). Almost everywhere that is except here in the "Great White North" and other places, such as high moutain slopes, where life is "at the edge."

Softwoods survive in areas with freezing winter weather and in areas where glaciers have scraped away most of the soil. In addition, softwood trees are much better at surviving summer droughts than are hardwood trees (this

reminds us of their heyday back on Pangaea). It is the small, waxy, long-lasting (about three years) leaves, or needles as people usually call them, of the softwoods that makes them the survivors that they are. The softwoods have a life-style that might be called "waste not, want not," whereas the hardwoods lead a "boom or bust" sort of existance.

Those green needles allow the soft woods to manufacture food and to grow whenever the temperature is above freezing. Once they have manufactured wood, bark and needles they keep them for a long time. The oldest, heaviest and tallest creatures on Earth are all softwood trees living in California; namely the Great Basin Bristlecone Pine, wi some over 3,000 years of age, the Giant Sequoia, and t Coastal Redwood reaching a height of 110 metres. We ca say that softwoods metabolize substances slowly whenev conditions allow and that hardwoods metabolize substanc rapidly when conditions are prime.

By-the-way, those 10 softwood trees native to Ne Brunswick which I asked you to name are White Pine, Re Pine, Jack Pine, White Spruce, Red Spruce, Black Spruce Tamarack, White Cedar, Eastern Hemlock and Balsam Fi We also have three native softwood shrubs; Canada Yew Common Juniper and Creeping Juniper.

The Enlightened Firedfly

drawing by A.Comstock

by Jim Brown

October the 2nd of this year was a very warm and foggy evening. In fact it was warm enough to wear a light t-shirt. It was about 8 p.m. and the conditions seemed just right !

Just right, I thought, for my second annual firefly larvae hunt. I grabbed my weapon, (a small pen light), and drove to the top of Anagance Ridge. I parked the vehicle and began to walk. It took a few minutes for my eyes to adjust to the darkness.

Damp ditches and pond fringes seem to be the preferred habitat of the immature firefly. About 20 minutes went by and no larvae were seen. they are somewhat hard to spot as the light they emit is not as intense as the adults. They don't' get their quartz bulbs till spring.

I spent some time with my pen light on and as I walked I noticed a couple of worms on the road. I looked closer and saw they were actually Red-backed Salamanders, a nice surprise. I decided to move further down the hill toward the marsh. As I searched the ditches I'm listening to a Great Horned Owl in the distance; closer by I saw a Bull Frog.

Finally I spotted in the ditch dozens of dim lights,- the elusive firefly larvae.Some of them were on blades of grass, others were on the ground .

Content that I had seen my target species, I walked down to the Anagance River. I scanned the area with my light. There on the bridge, I saw something in the beam of light. It was a Blue Spotted Salamander, an unexpected discovery. I carefully picked it up to examine it, then placed it on the river bank

The time was now 11 p.m., time to go home for a cup of tea and then bed.

You will notice I referred to this as my second annual firefly larvae hunt. The first was actually incidental to an evening hike on Sept. 29, 1994. It was the first time I'd ever seen this phase of the firefly and to satisfy my curiosity I did some research.

The occurrence of this light in nature is called **bioluminescence**. It is a chemically produced light which creates no heat. There are bioluminescent mushrooms, mosses, fish, microscopic plankton, worms, flies and many more. In fact there are nearly 200 species of fireflies alone.

For many years I have enjoyed the spring and summer light shows created by the fireflies, but there is a certain intrigue in searching for the larvae in the fall. Perhaps next year some like minded folk will gather for a field trip in search of this little bug.

A recent article in our local newspaper, The Telegraph-Journal, referred to the firefly and described an interesting use for this amazing insect. Food science professor Mansel Griffiths, of the University of Guelph, has discovered the gene which causes Fireflies and other luminescent organisms to glow - something called "the lux gene" This discovery could help detect the presence of deadly bacteria in food.

Prof. Griffiths said, "It is widely recognized by meat companies and regulatory agencies that rapid test methods for dangerous bacteria in foods are necessary". Current methods of testing involve scientists taking a sample of meat and waiting for bacteria to form and then identifying the bacteria by its physical characteristics - a process that takes up to three days. In an industry that requires quick shipment and sale of a perishable product, this is a truly impractical process.

Prof. Griffiths has developed a system which can identify bacteria in a matter of hours. Here's how it works. The lux genes are removed from a Firefly and placed in a virus, called a bacteriophage, which preys on a specific type of bacteria. The bacteriophage is mixed with the meat sample. If it finds its bacterial prey, it transfers the lux gene to that bacterium. The infected bacterium copies the gene and begins to glow. The sample is photographed and the image is transmitted to a computer, which indicates the amount of bacteria present.

Prof. Griffiths says his method can also identify the points in the food preparation process that are most critical to stopping contamination. It can also test food after processing to measure the effectiveness of the processing process.

The lux gene can be used to identify the bacteria that cause the four most dangerous food illnesses: *salmonella*, commonly found in poultry; *E. coli 0157*, which causes hamburger disease; *Staphylococcus aurus*, a common source of food poisoning; and *Listeria monocytogenes*, which can result in severe blood poisoning and meningitis.

This use of fireflies illustrates the importance of seeking out and preserving organisms in our natural habitat. From the dim glow of firefly larvae we potentially save lives from food poisoning. Who knows what potental is lost when a species is destroyed by our push for progress.

Nature News: September / October 1995

David Christie

Deadlines require that this edition of Nature News covers the months of September and October rather than September through November as in past years. The next summary will treat November through January. Observations should be sent to me (at RR#2, Albert, N.B. E0A 1A0; or maryspt@nbnet.nb.ca) by the end of January.

My apologies to Dwight Staubi for botching his name in the September issue (breeding moorhens, p. 80). It also should be noted that the Mockingbird nest at St-Jacques reported by Denys Bourque(p. 82) was at Isabelle Thériaults. Kathy Popma advises that she is not sure what species the small seal was that she saw at Westcock Marsh in March (June issue, p. 56).

Flora, Reptiles and Mammals

We think of spring and summer as the time for blooming wildflowers, yet a considerable number of plants are still flowering in mid autumn, especially in disturbed habitats. Jim Goltz tallied the plants he found blooming during the last week of October at Fredericton, 51 species in all. Only nine species were natives (3 asters, 2 goldenrods, Yarrow, Horseweed, Daisy Fleabane and Evening Primrose). One was Lupine, an escaped ornamental from western North America, and the rest were weeds of Eurasian origin, including mustards, chickweeds, grasses, clovers, knotweeds, and several plants of the family Compositae.

Yarrow
by B. Bagnell

There was a noticeable dispersal of **Gray Squirrels** to areas where they are of infrequent occurrence. This was noted particularly in Albert and Westmorland counties during October (v.o.), but I also heard of a report from the Miramichi (*fide* Tom Greathouse) and of one at Tide Head (Oct. 1—Denise Zyveniuk), possibly a first for the Restigouche. A number of reports on the Kingston Peninsula about Sept. 22 suggested movement there too (Mitzi Withers, Mark Deichmann+).

Two jet black **Red Squirrels** were photographed: Oct. 3 at Miscou Lighthouse (SIT) and about the same time at Shediac River (Théo Arsenault). The one at Miscou had some brown hairs on its feet and in the tail. The opposite pigmentation abnormality occurred in two young squirrels at Quispamsis last spring; they were entirely white except for dark eyes. *The Mammals of Canada* mentions both types as occasionally seen but the black ones were the first I'd heard of personally. What's black or white, but brown all over?

Black Bears were frequently seen feeding close to homes on the Miramichi this fall, because of the poor berry crop (*fide* Sam Inch).

David Myles encountered a large **Snapping Turtle** at Little Magaguadavic Lake in early September. He estimated it as 3 ft. long (nose to tail tip) and about 30-40 pounds, probably about as big as they grow at the northern edge of their range.

Birds

Highlights of this period were the provinces first reports of Tufted Duck and Virginia's Warbler, a Pacific Loon, a Say's Phoebe, a Black-throated Gray Warbler, two Western Tanagers, and pronounced influxes of Cardinals and Red-bellied Woodpeckers.

On Aug. 26 a **Pacific Loon** flew within 60 metres of a whale-watching boat off Campobello Island (Peter Vickery, Charles Duncan+). There have been a few New Brunswick reports of this loon, which is rare on the Atlantic coast, but only one other in full breeding plumage. Identification in winter plumage is difficult, and the species has not yet been accepted on the provincial list.

Reports of **Red-necked Grebes** included two in the north, at Lac Baker Oct. 26 and 31 (JDB, GT; DC) and at Val-Comeau Oct. 29 (BH).

Observations from a Sept. 16 pelagic trip were reported by Rob Walker in the previous issue (p.76). An impressive 10,000-bird feeding frenzy near the Bulkhead Rip, SE of Grand Manan, Oct. 26 included 5000 **Greater**, 1000 **Sooty** (a surprising number so late in the season), and 5 **Manx Shearwaters**, 100 **Northern Gannets**, 1 **Pomarine Jaeger**, 2500 **Black-legged Kittiwakes**, an adult **Sabines Gull**, 3 **Dovekies**, 15 **Razorbills**, and 150 **Atlantic Puffins** (Laurie Murison).

They were all within a half-mile by one-mile area.

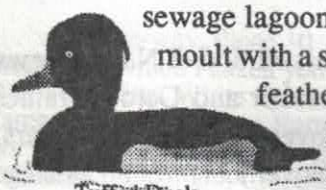
Northern Fulmars were numerous farther south, in the area of the Grand Manan Banks. Three trips to the banks from Bar Harbor, Maine, Oct. 8, 14 and 21, produced totals of 50, thousands, and 235, respectively (DEBL, Maine Audubon). The maximum number of **Pomarine Jaegers** was 12 SE of Grand Manan Sept. 29 (SIT) and there were still 5 in the Grand Manan Channel Oct. 29 (JGW+). The most Parasitic Jaegers was also 12, at Kent I. Sept. 1 (BED). There were two unconfirmed reports of **Long-tailed Jaegers**, which are very rare in our waters, 2 near Pigeon Hill wharf about Sept. 10 (*fide* Rose-Aline Chiasson) and one on the Grand Manan Banks Oct. 14 (DEBL). There were also two reports of unidentified **skuas** during trips from Bar Harbor to the Banks Oct. 8 and 14 (Maine Audubon, DEBL).

There were lots of **N. Gannets** in Northumberland Strait the weekend of Oct. 7-8 (DD, NB). **Double-crested Cormorant** migration past Marys Point was more drawn out than usual, from Sept. 6 to Oct. 20, with the most seen being 460 in 7 flocks Oct. 19 (MFM).

An elusive **Wood Stork** (or more?) caused considerable birdwatching excitement this fall. On Sept. 9, Barry MacPhee and Marven Bradstreet observed an immature for 40 minutes as it fed in a dead water at Hampton. It could not be found there later in the day, possibly driven off by a raven that had begun to swoop on it. We ultimately learned that a possible stork had been at Red Head Marsh, Saint John, Sept. 8 (*fide* Cecil Johnston). On Sept. 11, Janice Poirier was intrigued by a large, long-necked, long-legged, black-and-white bird circling overhead at Moncton and decided it was probably a Whooping Crane, but it seems more likely to have been the stork (*fide* SIT). On Sept. 13, Mike Majka saw a Wood Stork fly in off the bay at Marys Point but it could not be found minutes later. On Oct. 2, Allen Gorham identified a Wood Stork flying up the Saint John River at Westfield, but again, the bird could not be relocated. Finally, we learned that a Wood Stork was seen later in October in the Magdalen Islands (*fide* Peter Whelan). There is one previous record of this species in New Brunswick, a bird at Saint John in June 1911. In those days its population was much larger than now. They have suffered from habitat loss due to drainage in Florida.

The only report I've had of **Snow Goose** is of one white and one blue morph 2 km north of Hartland early in October (Grant Milroy).

The first **Tufted Duck** for the province was discovered by Benoît Hébert Oct. 14 at the Tracadie sewage lagoon. An adult male, late in its moult with a somewhat sparse pendulous feather tuft on the back of its head, it was joined by a similar bird Oct. 20 (PAP+). The two were seen till late in the month (*fide* BH). This European species has been appearing in Newfoundland and Nova Scotia during fall and winter the last few years. By the end of October this fall there also had been reports in N.S., Massachusetts, Rhode Island, and Quebec.


Tufted Duck
by D. Christie

A young male **Harlequin Duck** was seen at Little Shippagan Oct. 5 and 15 (SIT, RNC). A few migrant scoters stopped inland in Madawaska County: 16 **Black Scoters** at Lac Baker Oct. 19 (DC), one there Oct. 23+ (Gilles Roussel+), and one at St-Basile Oct. 19 (JDB); a **Surf Scoter** at Lac Baker Oct. 26Nov. 12 (JDB, GT+). Two male and possibly 6 female **Barrow's Goldeneyes** at Edmundston Nov. 4+ (JDB, GT+) were the first record for the Madawaska clubs records. **Hooded Mergansers** were numerous at Lac Unique, near Lac Baker, where 30 were seen Oct. 21 and 43 on Oct. 30 (v.o.). The next largest group reported was 18 near Miscou Lighthouse Oct. 4 (SIT). A moderate showing of **Ruddy Ducks** included an adult male at Coverdale Oct. 1 (SIT), a female at Tracadie Oct. 15-20 (D. Myles, DG+), 2 at Harvey, Albert Co., Oct. 20 (DSC), and 1 at the Anchorage PP, GM, Oct. 21 (*fide* BED).

The only **Turkey Vultures** mentioned were individuals at Holderville, near Long Reach, Sept. 6 (Frank & Mitzi Withers) and near Pocologan in the first week of October (immature—NBBIL).

Concentrations of migrating hawks were little reported. Quite a few, including **Sharp-shinned**, **Broad-winged** and **Red-tailed** were seen along the Albert County coast Sept. 3 (DD). An adult **Golden Eagle** was the highlight of a small movement of raptors at Southwest Head Sept. 16 (Bev & Marc Schneider). Included were two **Peregrine Falcons**. A cluster of Peregrine reports between Sept. 30 and Oct. 19 probably represented passage of breeders from northern Canada. The largest number of hawks reported was a kettle of 85

Broad-winged Hawks passing NW over Kent I. Sept. 25 (BED). There were also 20 **Sharp-shinned** at Southwest Head Oct. 14 (SIT, BED).

A fledgling **American Kestrel**, from a particularly late nest, was picked up unable to fly at Fredericton Sept. 2. Following 8 days in captivity, it was released at Marys Point and observed successfully catching grasshoppers (EMM). A possible family group of 2 adult and one immature **Merlins** were seen near Murray Corner, Sept. 4 (Ken Winkler).

Someone has released **Wild Turkeys** on the Miramichi, where Grant Milroy saw a few at the Enclosure PP Sept. 16. Their future is bleak.

Up to 12 **American Coots** were at the Saint John West sewage lagoon about the end of October, while one at the St-Basile sewage lagoon (JDB+) was a first for Madawaska.

A late **Piping Plover**, juvenile, was at Marys Pt. Oct. 1 (DD, NB). The last **Willets** were at Shediac in the last week of September (DD) and Robichaud Oct. 8 (SIT). Two **Upland Sandpipers** were at Hopewell Hill Sept. 12 2 (EMM). Perhaps 40 **Whimbrels** were at Waterside Sept. 3 (BC, RE) and a late one at Kent I. Oct. 1-2 (BED). Numbers of **Sanderlings** at Long Pond Beach, GM, were high this fall with estimates of 600 Sept. 13 (PAP) and 525 Oct. 29 (BED). 35 **Killdeer** on a gravel island in the river at Fredericton Sept. 3-5 were accompanied by a **Hudsonian Godwit** and 4 other shorebirds (PAP).

An almost totally white **Semipalmated Sandpiper** at Kent I. Sept. 4 (BED) was thought to be the one that had been at Long Pond Beach, GM, Sept. 2-3 (SIT), but one was described as having yellowish legs and eyes, the other a pink bill and legs but dark eye.

Among the scarcer species of shorebirds, juvenile **Western Sandpipers** were seen by many observers at Long Pond Beach in September. Two exceptionally long-billed individuals were there Sept. 2, 2 on Sept. 7, a different individual Sept. 12-13, and 2 again Sept. 14. There was also a juvenile at Cap Bimet, Barachois, Sept. 14 (SIT). There were as many as 2 **Baird's Sandpipers** at Long Pond Beach Sept. 2-9 (v.o.), individual **Stilt Sandpipers** at Inkerman Sept. 9 (BH) and Castalia Marsh Sept. 14-15 (PAP, DG), 2 juvenile **Buff-breasted Sandpipers** at Long Pond Beach Sept. 1-2 (DG+) and one near Miscou Lighthouse Oct. 3 (SIT). At first 2, then only 1, **Long-billed Dowitchers** were at Castalia Marsh Oct. 29Nov. 4 (JGW+). Two were at the Sackville Waterfowl Park about the same time (NBBIL).

This seasons winner in the most unusual habitat category goes to the **Red-necked Phalarope** that was feeding under fox pens at Salisbury Oct. 9 (Ron Steeves+). Insects attracted to waste food and feces apparently provided nourishment for this stray from the sea.

An immature **Laughing Gull** was seen at The Whistle, GM, Oct. 7 (Andrew Sharkey) and a **Little Gull** from the ferry off Ashburton Head, GM, Sept. 10 (Jeff Gordon+). An adult **Common Black-headed Gull** was at Shippagan Oct. 6 (SIT), an adult at Long Eddy Pt., GM Oct. 7 (DEBL), and an immature at Shediac Bay Oct. 11 (DD). A **Lesser Black-backed Gull** at the Whistle Sept. 12 (JGW) was followed by one at Shediac in the third week of September, 2 at The Whistle in the second week of October, and one at Moncton from Oct. 19 (all NBBIL).

A very late **Black-billed Cuckoo** was at the Matthews Head Trail, FNP, Oct. 28 (RAM, EP). More usual in October are **Yellow-billed Cuckoos**, of which there was a good flight this fall. About 12 to 14 were reported between Sept. 13 and Oct. 31, 4 of them in Albert County Oct. 19 (BC, SIT). In the north a first for Madawaska was at Edmundston Oct. 1 (JDB), and 3 on Lamèque and Miscou islands Oct. 5-9 (JGW, GB, Jacques Guignard).


Yellow Billed Cuckoo

The last of the **Ruby-throated Hummingbirds** were at Marys Pt. Sept. 21 (EMM), North Head Sept. 30 (RAM, EP+) and Saints Rest Marsh, Oct. 1 (SIT). On the Miramichi, one hummer was reported with a hornet clinging to its underparts about the end of August (*fide* Tom Greathouse, via Sam Inch).

One **Red-headed Woodpecker** was visiting feeders at North Head Oct. 17-25 (Jim Leslie). **Red-bellied Woodpeckers** staged a major invasion. From Oct. 3, when a male was seen at Kent I. (BED) till the end of the month this species was reported in several areas of the province, including the first for the Acadian Peninsula, at Saumarez, Tracadie-Sheila, Oct. 16-19 (Willard Mallais+), an inland report at Keswick Ridge Oct. 21 (Leona Keenan, PAP) and three on Oct. 24: Saint John (Ethel Bosence), Alma (RJW), and Riverside-

Albert (Ken & Greta Clark+).

A **Say's Phoebe** at Inkerman Sept. 23 (André Robichaud+) was the only vagrant flycatcher reported this fall. Its the fourth provincial report, the third to be well documented. An unusually late **Yellow-bellied Flycatcher** at Miscou Island Oct. 3 appeared weak and was feeding near the ground (SIT). Two days later, a vigorous **Least Flycatcher** was there (SIT).

Brian Dalzell was puzzled by an apparent **Cliff Swallow** at Bancroft Pt. Oct. 31. An immature with a very pale buff rump patch, it may have been a western subspecies or, he speculates, perhaps even a Cave Swallow. Unfortunately, the bird was seen too briefly to permit detailed study. A late **Barn Swallow** was seen near Miscou Centre Oct. 4 (SIT).

A strong migration of **Black-capped Chickadees** indicated excellent reproduction during the summer. Most of the migrants are young birds as shown by the banding of 25 immatures and only one adult at Bancroft Pt. in 2 hours Oct. 11 (BED). At Marys Point, chickadee movement was obvious between Sept. 9 and Oct. 21. Observations here included 250 Sept. 21, some flying off to the east over the marsh (DSC), 300 that flew to the end of the point and turned back Sept. 26 (RJW), and 200, 125 of them in one loose flock, Oct. 4 (DSC). Elsewhere, about 50 were moving down the Upper Salmon R., in the interior of FNP, Sept. 26 (RJW+), 150 flew across the river towards Dorchester Cape from Hopewell Rocks Sept. 27 (RJW+), 150+ passed S past the lighthouse at Southwest Head Oct. 14 (SIT), and 300+ in small flocks were moving, predominantly toward the east, along the coast between Cape Tormentine and Port Elgin Oct. 21 (SIT). Small numbers of **Boreal Chickadees** sometimes accompanied the Black-caps.

Red-breasted Nuthatches were common during the fall, and there was a noticeable dispersal of **White-breasted Nuthatches** to areas where they are not regularly seen. Reports of them began Sept. 13 at Grand Manan and during October in Saint John, Albert, Westmorland and Gloucester counties.

A **Carolina Wren** visited a feeder near Youngs Cove Sept. 30+ (Doug & Shirley Gibson). Migrant **House Wrens** were noted at Grand Manan: Oct. 9 at North Head (PAP) and Oct. 14 at Southwest Head (2—SIT), and a **Marsh Wren** was at Alma Oct. 19 (SIT, RJW).

Golden-crowned Kinglets were the most common species banded at Kent Island (219, all young birds), most of them in the last half of September (BED). There were still newly fledged young there as late as Sept. 25. They were also common elsewhere along the Fundy coast during September and October.

As usual in recent years **Blue-gray Gnatcatchers** were seen frequently along the Fundy coast, especially at Grand Manan. There were also two reports from the northeast: Oct. 15 at Rivière du Portage (Yolande Paulin) and Oct. 26 at Miscou I. (Émile Ferron).

Northern Wheatears were found at Little Shippagan Oct. 1-4 (GB, DB+) and Southwest Head Oct. 13 (SIT, BED). **Brown Thrasher** reports came from Kent I. Sept. 15 and Oct. 3 (2 the latter dayBED), Deep Cove Sept. 16 (DG), Deer I. Oct. 14 (Charles Graves) and Harvey Oct. 20 (RJW).

A vagrant **Yellow-throated Vireo** was seen at Saint John West Oct. 1 (Dave & Iris McCurdy) and several at Grand Manan September 10-30, including individuals on the Dark Harbour Road (SIT), White Head Island (at least 2v.o.), the Whistle Road (NBBIL, Andrew Sharkey) and near Southern Head (NBBIL). A **Warbling Vireo** was still singing at Fredericton Sept. 12 (DG). Brian Dalzell commented on the extended migration of **Red-eyed Vireos** at Kent I. where 35 were banded Sept. 9 and at least 20 were still present Oct. 3. A late one was at Fundy Park Oct. 27 (SIT).

Among a large movement of warblers and other migrants at Southwest Head Oct. 14, Stuart Tingley discovered a **Virginia's Warbler**, a first for the province. This southwestern species would have been totally unexpected had it not been for its occurrence in Labrador and Nova Scotia in autumn 1994. It was observed well during 10 minutes but could not be found when Stu returned with a camera shortly after. For an encore, Stuart found New Brunswick's second **Black-throated Gray Warbler** at McLaren Pond, FNP, Oct. 27; this one stayed long enough for photos and to be shown to several other observers.

Less rare vagrant warblers were a **Golden-winged Warbler** banded at Kent I. Sept. 23 (possibly carrying some Blue-winged Warbler genes—BED), a **Yellow-**

throated Warbler there Sept. 18 (BED), a possible **Prothonotary Warbler** near Whale Cove Sept. 17 (Jim Brown), and a female **Hooded Warbler** near Southern Head Beach, GM, Sept. 12 and 15 (R. Steeves).

The most **Orange-crowned Warblers** ever reported in New Brunswick were seen this fall. Records extended from the third week of September into November. Up to the end of October a minimum of ten and possibly as many as 15 were reported from Grand Manan to Alma. On Oct. 14 at least 5, probably more, were at Southwest Head (SIT, BED)

Single **Prairie Warblers** were reported at Machias Seal I. (SIT), Pettes Cove (JGW), Southwest Head (SIT), and Kent I. (BED), GM, during Sept. 5-29, at Herring Cove, FNP, Sept. 26 (SIT, Oscar LeBlanc), Petite-Lamèque Oct. 8-15 (HC+), and Park HQ, FNP, Oct. 23 (SIT). **Pine Warblers** were uncharacteristically absent from October reports.

It was a great fall for **Yellow-breasted Chats** in the Grand Manan archipelago, where all but one report originated. During Sept. 1-15, 3 were banded on Kent Island (BED) and individuals seen at Deep Cove, North Head, Castalia Marsh, The Whistle, Southwest Head, and White Head I. (SIT, Jim Edsall, JGW). Later, there were chats at two different places in North Head Oct. 9 and 10 (PAP), and at Long Eddy Pt. (*fide* BED) and Alma (SIT, RJW) Oct. 19.

Two **Western Tanagers**, a great rarity this far east, were found this fall, a female near Prangle Pt. on White Head I. Sept. 15 (J. Edsall, JGW) and another at Inkerman Sept. 24 (BH, Donald St-Pierre, Guy Hébert+). Scarlet Tanagers were also around at these times, several being seen at White Head and one at Inkerman.

A big influx of young **Northern Cardinals** into New Brunswick (also Nova Scotia, Quebec, and Ontario) this fall eclipsed that of 1993. This species must have had a very successful breeding season in the northern USA. The invasion began in mid-October. Numbers were largest in the southwest, but Cardinals were seen in most parts of the province. A first for the Acadian Peninsula, a female at Petite-Lamèque Oct. 16 (J. Guignard), was quickly followed by others at Landry Office, near Maltampec, Oct. 19 (D. St-Pierre), Bertrand Oct. 25 (2—Antonia Doiron), St-Isidore Oct. 28 (Donald Cormier), and Lamèque and Tracadie-Sheila about the end of the month (*fide* Pierre Duguay). Elsewhere in the north they were at Moulin-Morneault from Oct. 21 (male, joined 3 weeks later by a female—Don & Monique Plourde+), Ste-Anne-de-Madawaska Oct. 26 (Florida Lavoie), Tétagouche-Nord Oct. 27 (Renaud Godin), and Bushville, Miramichi City, about the end of October (Irma & Frank Powers).

Ten or more **Indigo Buntings** were reported along the Bay of Fundy beginning Sept. 12 (v.o.), the most being 4 in Alma Oct. 16 (RJW). There was also one near Miscou Lighthouse Oct. 3 (SIT). Numerous reports of **Dickcissels** along the Bay of Fundy included 4 at Kent I. between Sept. 6 and Oct. 3 (BED) and 7 different individuals at Rob Walker's feeder in Alma during these two months. In the north, one was at Caraquet Oct. 15 (R&BL) and inland, one at Fredericton Nov. 6 (Shirley Sloat). Individual **Rufous-sided Towhees** were at Saint John Oct. 18 (DFS), Alma Oct. 21 (Louise Butland), and near Albert Oct. 22-23 (David Clark).


Indigo Bunting

Clay-colored Sparrow was reported Sept. 19 at North Head (Alain Clavette), in the first week of October at Pt. Lepreau (NBBIL), and Oct. 31 at Southern Head Beach (SIT). A **Field Sparrow**, perhaps two, visited feeders in Alma Oct. 14+ (RJW, Doreen Rossiter+). Others were seen at Edmundston Oct. 15 (GV), St-Basile Oct. 18 (GV), Bancroft Pt. Oct. 25 (BED) and North Head Oct. 31 (BED). In addition to the **Lark Sparrow** that remained at Alma till Sept. 12 (RJW), there were others at Hay Island, GM, Sept. 4 (*fide* BED), Marys Point Sept. 7-9 (DSC, EMM+), and Miscou Island Oct. 1 (2—DB, GB+). A **Grasshopper Sparrow** was found at Alma Beach, FNP, Oct. 23 (SIT, RJW) and a **Seaside Sparrow** at Castalia Marsh Sept. 10-11 (JGW+). An **Oregon Dark-eyed Junco**, perhaps of the pink-sided race, was reported at Saint John West Oct. 31 and Nov. 7 (E. Bosence, C. Johnston).

A young male **Yellow-headed Blackbird** was at Kent I. Sept. 5 (BED). A couple of large flocks of **Common Grackles** were reported in September, a line of at least 1000 flying N near Hammondvale Sept. 2 (RJW) and a similar number feeding on a lawn and mowed field at Pine Glen, near Riverview, Sept. 26 (DSC, EMM).

House Finches have established a beach-head in the northeast at Caraquet, where adults were seen

feeding young during the summer and remained into the fall (BH). Several re-appeared at Harry Walkers feeder in Newcastle in early October.

Most migrants from the north were noted realtively early. **Rough-legged Hawks** appeared Oct. 6 at St-Jacques (Gemma Ouellette, GT), Oct. 9 at Rivière-Verte (Benoît & Rita Clavette), Oct. 25 at Marys Pt. (MFM) and Oct. 31 at Southwest Head, GM (SIT). A **Gyrfalcon**, light morph, was reported at Castalia Marsh Oct. 30 (J. Leslie). An **Iceland Gull** was back at Pigeon-Hill Oct. 22 (GB).

Bohemian Waxwings reached us early with 20 at Pt. Escuminac Sept. 24 (JGW), one at Marys Pt. Oct. 7 (DSC), 5 at Southwest Head Oct. 13 (SIT), and 2 at Edmundston Oct. 15 (B. & R. Clavette). Returning **Northern Shrikes** were at Miscou I. Oct. 7 (R&BL) and Southwest Head Oct. 13 (SIT). In most areas they were first seen during Oct. 20-29.

Am. Tree Sparrows were seen first at Miscou Island Oct. 1 (HC) and 4 (8 the next day—SIT), then at Fredericton Oct. 14 (Halton Dalzell). They were widely reported Oct. 24-26. A **Fox Sparrow** appeared in Saint John Oct. 13 (DFS). The earliest **White-crowned Sparrow** was at Miscou I. Sept. 17 (HC), one was banded at Kent I. Sept. 19 (BED) and one was at Shediac in late September (DD). By Oct. 1 there were lots at Miscou (RAC+) and 7 at The Whistle (BC, RE). A **Lapland Longspur** was at Great Pond, GM, Oct. 7 (PAP). **Snow Buntings** appeared Oct. 2 at Grande-Anse (BH), Oct. 10 at Bancroft Pt. (5BED), and Oct. 26-31 in greater numbers in several areas.

Common Redpolls were early, Sept. 17 at Miscou I. (RAC), Oct. 1 at Lac Baker (DC), and Oct. 13 at Southwest Head (4—SIT). A small movement of **Pine Grosbeaks** was noticed in the last week of October.

Observers and other abbreviations:

(date)+ and following days; (observer)+ and other observers; BC Barbara Curlew; BED Brian Dalzell; BH Benoît Hébert; DB Denise Benoît; DC Denise Cyr; DD Denis Doucet; DEBL Downeast Birdline; DFS David Smith; DG Don Gibson; DSC David Christie; EMM Mary Majka; EP Eileen Pike; FNP Fundy Natl Park; GB Gérard Benoît; GLT Gisèle Thibodeau; GM Grand Manan; GT Georgette Thibodeau; GV Gérard Verret; HC Hilaire Chiasson; JDB Denys Bourque; JGW Jim Wilson; MFM Mike Majka; NB Norm Belliveau; NBBIL N.B. Bird Info Line; PAP Peter Pearce; PP Provincial Park; R&BL Rosita & Benoît Lanteigne; RAC Rose-Aline Chiasson; RAM Rose-Alma Mallet; RE Rick Elliott; RNC Restigouche Naturalists Club; SIT Stuart Tingley; v.o. various observers

NATURE INFORMATION LINES

The following telephone numbers provide information taped messages concerning birds and other aspects of nature in New Brunswick. They don't cost you $3.99 a minute, but donations would be appreciated.

N. B. Bird Information Line 506-382-3825 (382-DUCK)
Moncton Naturalists' Club.....506-384-6397 (384-NEWS)
Les Ami(e)s de la Nature.....506-532-2873 (532-BUSE)

N. B. Naturalist /
Le Naturaliste du N.-B.
277 Douglas Avenue
Saint John, NB E2K 1E5
Return Postage Guaranteed / Port de retour garanti

Canadian Publications Mail Product
Sales Agreement No. 487716

To / à :

NB E2M 3Y9 95