



N.B. Naturalist

8(4) September 1977



From the Herbarium.

Pedicularis Furbishiae S.Wats.

Fifth Annual General Meeting

The federation's fifth annual meeting was held in St. Andrews, based at the Sunbury Shores Arts and Nature Centre. K.H. Deichmann, D.S. Christie and Tom Moffatt have summarized most of the formal activities as follows:-

Chamcook Mountain - Aug.26

On Friday afternoon a trip to Chamcook Mountain was led by Henrik Deichmann. 20 people participated in the easy hike to the top of the mountain, 550 feet above sea level. We passed through a fire origin forest, then older growth near the top. Most of the typical tree species possible in southwestern New Brunswick were found, as well as a number of herbs. On the summit we noted names in the rock dating from as far back as 1830. A highlight was the spotting of a Cooper's Hawk (probably a ♂). Four members of the Canadian Nature Federation tour joined the outing. (We gained access to the mountain due to special permission from Mr. Brewin, owner of Rossmount Inn). - KHD

Introduction to the Theme - Marine Life of Passamaquoddy Bay - Aug.26

Dr. David Scarratt introduced the topic by giving an overview of the physical characteristics and some of the peculiarities of the Bay of Fundy.

In winter there is limited circulation as northwest winds cut across the bay. In summer southwest winds blow along the length of the bay introducing plankton enriched waters from the Gulf of Maine to the general counter clockwise circulation pattern. In summer, water temperatures are generally 11-12°C, rising to 18-20°C in Minas Basin. Passamaquoddy Bay has a unique circulation system of its own.

At the head of the bay the water is too laden with silt to permit development of the classic food chain based on plant plankton. Light penetration in the water is too restricted to permit large amounts of plankton to develop. In the Passamaquoddy where the water is not silt laden, the turbulence and temperature changes are too great to allow maximum plankton production. In both cases, there is a modified system based largely on the productivity of intertidal seaweed beds. Masses of rockweeds exposed to the sun on broad expanses of intertidal rock are efficient primary producers. Much of the energy they capture is exported from the intertidal region to the surrounding waters. At the head of the bay on hot days microscopic algae multiply rapidly and cover the mud flats with a greenish-orange bloom which is swept up by the rising tides to nourish many tiny animals.

In the Bay of Fundy, the herring fishery is a six to seven million dollars per year industry for 1000 fishermen and an additional 2000 people engaged in processing.

The Nova Scotia stock herring fry are carried up the bay in winter. There is not much to eat at that time, but there isn't much to eat them either! Then in early spring as the circulation patterns shift due to the change in wind patterns, they come into the Maces Bay area, just as the rich seasonal upwelling of planktonic food begins.

Clams do not have large populations at the head of the bay because changing sediments smother or expose them and in their mature state they are unable to accommodate these changes. Shrimp populations vary greatly from season to season. Shad and Gaspereau are important in nutrient cycling. The winter flounder is an important food of the goosefish (*Lophius*). Each estuary seems to have its own population of tomcod. (This could be an interesting topic for study). There are about 1000 lobster fishermen in the Bay.

The BIG question about tidal power developments and the fishery is how circulation patterns would be changed at various times of the year. If herring fry movements were out of synchrony with food and site, their populations could be greatly reduced. Also,

what would happen to the famed Digby scallop, if its larvae were not to be circulated back to the proper area at the time for them to settle to the bottom and begin their adult life.

Oil and other petroleum products cause selective mortality. (Oil attracts lobsters, but they don't feed when they get in contact with it; also their flesh becomes tainted very easily).

Fin whales feed in the upwelling areas, where euphasids are abundant. Harbour Seals occur off Grand Manan, Lotate, Maces Bay, Brier Islands and the Five Islands Group.

Reference was made to the significance of the upper Bay of Fundy tidal mud flats as a source of food, and as a staging area for shorebirds. - KHD

Films and Slides - Aug. 26

Two films were shown on Friday evening, "Forecast for Survival", about the "Arrow" disaster at Chedabucto Bay and computer simulations of oil spills in other Canadian coastal waters, and "Still in one Piece Anyway" showing the problems of docking, unloading and navigating a super tanker.

Tom Moffatt kindly showed a number of slides of interesting places such as the Wolves and Head Harbour Passage. - KHD

Geology Field Trip - Aug. 27

On Saturday morning Art Ruitenberg gave a short talk on the geology of the St. Andrews area relating present structures to past incidents of volcanism, subsidence, continental drift, erosion, glaciation, etc. There followed a visit to Oak Bay where movement along a large fault has offset corresponding rock formations by about half a mile on opposite sides of the bay. At Waweig, we examined an area of intrusive rocks where different rates of crystallization had resulted in lumps of dark gabbro within a light granite mass. At that point the trip divided and those who were not otherwise busy during the afternoon continued with Art towards St. George to visit other sites of interest. (Three, I think, Bald Eagles were seen by them too). - DSC

Boat Trip on Passamaquoddy Bay - Aug. 27

9 Federation members were able to join with a Canadian Nature Federation tour that went from the St. Andrews wharf to the western end of Head Harbour Passage on Saturday morning. The water was calm, and under sunny skies we encountered many birds, particularly Bonaparte's Gulls at the outermost leg of the trip. Numerous terns in a variety of plumages were seen, and at least one Arctic was seen perched demurely on a weir pole. Some porpoises were seen breaching.

There was one flock of phalaropes seen (possibly 100 birds) mostly Northern with one or two birds thought to be of the Red species, which are normally well off shore.

A second boat trip in the afternoon went past the offshore side of Minister's Island, and around Hospital and Hardwood Islands. A similar trip took place Sunday afternoon. - KHD

Edible Wild Plants - Aug. 27

Fourteen persons ate their way through Saturday morning in the Edible Wild Plant session. Under Tom Moffatt's direction, special emphasis was given to identification and preparation of seashore plants, for the seashore is perhaps St. Andrews most exciting habitat.

Glosswort (alias Samphire Greens), Orach, Seaside Plantain (otherwise known as Goosetongue greens), Sea Rocket, Beach Peas, and Sea Blite were each tasted.

From there students moved on to a second course of Wild Sarsaparilla, Yellow Birch twigs, and Fireweed tea.

Subsequently the group broke for lunch. - TM

Sam Orr's Pond - Aug.27

On Saturday afternoon Carl Medcof was leader of a field trip to Sam Orr's Pond, a small pond of several acres located about 1½ miles east of Chamcook. It is of extreme interest to naturalists because it receives significant tidal water only during spring tides. The pond is separated from the bay by two rock sills. Due to this its salinity and temperature characteristics are very variable. At times of neap tides, its water warms up considerably permitting the spawning of the quahog Mercenaria mercenaria, a population of which the pond supports. It also has very high numbers of the mud snail Nassarius obsoletus. Unlike in most of Passamaquoddy Bay, marine eelgrass Zostera marina is a common plant in the pond. The quahog species present in this pond represents the only population on the New Brunswick shore of the Bay of Fundy.

The thought was expressed by several walk participants that this site deserves recognition as a marine ecological reserve. - KHD

Picnic - Aug.27

For supper on Saturday a number of participants gathered at Indian Point to roast various food around a campfire on the beach. Some of the cooking was a bit burnt but the king-sized appetites worked up during the day didn't seem to mind. - DSC

Annual Business Meeting - Aug.27

At the federation's business meeting on Saturday evening Henrik Deichmann delivered an annual report. The most important matters were that the federation had applied for incorporation and that charitable organization status was being sought from the Dept. of National Revenue. Activities since last year had included moral and financial support of the wilderness area project being undertaken by the Conservation Council of N.B., construction of an observation blind on Machias Seal Island, presentation of briefs on the Pittson oil refinery proposal at Eastport (U.S. Environmental Protection Agency), the expansion of Fundy National Park (N.B. Tourism Advisory Council), on rural resources (Legislature Select Committee on Rural Life), on environmental goals for New Brunswick (N.B. Environmental Council), and on the impact of the Dickie-Lincoln Dam project (U.S. President and Governor of Maine), and the organization of three weekends of outings in addition to the annual meeting. On the matter of publications the president reported that it had been decided to discontinue the News-letter and proceed only with the New Brunswick Naturalist. He thanked Sunbury Shores Arts & Nature Centre for hosting the present meeting.

The auditor's report on the financial balance at December 31, 1976 (\$970.77) was accepted and the treasurer reported that as of August 26 the federation's funds stood at \$997.29, but several outstanding bills had not been received. David Smith was reappointed as auditor. The meeting voted that the board of directors should increase the membership fees in order to cover rising costs of services.

The secretary reported that the nominating committee's slate had been elected by acclamation, namely:

President:	K.H. Deichmann, Alma
Vice-president:	Freeman Petterson, Shampers Bluff
Secretary:	David Christie, Saint John
Treasurer:	Brian Townsend, Moncton (more recently Albert)
Director-at-large:	Daryl Linton, Milltown

The president conveyed his sincere thanks to Hinrich Harries, outgoing vice-president, and Jim Wilson, outgoing treasurer for their work on behalf of the federation during the past two and three years.

A northwestern New Brunswick locale (Edmundston, Grand Falls or Plaster Rock) was suggested for the 1978 annual meeting to be held in early summer, since the federation will be heavily involved as co-host, with the Prince Edward Island Natural History Society, of the 1978 Canadian Nature Federation meeting to be held in Charlottetown during the latter part of August. - DSC

Owl Prowl - Aug. 27

On Saturday evening, following the annual meeting, Tom Moffett led an "owl prowling". We drove up along the western shore of Chamcook Lake. After playing tapes of Barred Owls calls we received only one weak response. However, after travelling a few hundred feet up the railway tracks and playing the tapes again, and giving a great horned owl imitation, we got a reply from first one and then a second Barred Owl. In the bright moonlight, amplified by a sporadic flashlight beam we got fair to good views of the birds. The variety in the calls was a surprise to most of us; chuckles, mews, and mocking laughing were interspersed with more typical hoots. In all, a truly remarkable experience! - KHD

Beach Walk - Aug. 28

At 7 a.m. on Sunday morning David Christie led a beach walk at Indian Point. As low water was at about six o'clock, we went directly to the extreme edge of the tide, but not without a brief interlude to watch a Bairds Sandpiper in company with some other "pooch". The great abundance of life, sea stars, urchins, and great masses of mussels thrilled the walk participants. Under practically every rock were found rock oels (gunnols) amphipods and also various worms. We also found live green crabs and several sea stars were noted to be ingesting mussels. On one rock a one-shelled Jingle Shell (*Anomia*) was found, as well as coil worms *Spirorbis*. Several trumpet worms were found and at least one sea slug. Although we found mussels to be extremely numerous we didn't see any of commercial size. Several reasons were suggested for this, including predator pressure, both natural and human, and disturbance from people walking on the shell beds. A special treat on the return to the breakwater was the sighting of a Parasitic Jaeger, which stayed in sight several minutes darting around the gulls and other water birds. - KHD

North Atlantic Salmon Research Centre - Aug. 28

Twenty people gathered at the Salmon Research Centre, Chamcook, where Dr. Richard Saunders, director, explained the unique work of the facility on salmon stocks and their heritable characteristics, and ways to utilize superior or desirable characteristics in breeding programs. Currently stocks are being studied from the Magaguadavic River, the Saint John, the Big Salmon River, and Rocky Brook of the Miramichi. Besides the hatchery we were also shown the catchment facility in Chamcook Basin. - KHD

Huntsman Marine Laboratory - Aug. 28

We had an interesting tour of this fine facility, saw displays on marine life, marine geology and catch techniques including weirs, but the live harbour seals stole the show! - KHD

FIELD TRIP TO MARY'S POINT

B. J. Schneider

The season was warm and dry and every field showed hay harvest. The sky was clear blue with little puffs of clouds. Already tree swallows were lining up on telephone wires.

The view of Mary's Point was awe-inspiring, fifteen hundred acres or so of sand and mud flats exposed by the receded tide. Gulls wheeled as the hot sunshine was cooled by a strong inshore breeze. Dispersed evenly over this vast expanse were tiny white moving dots, all shorebirds! Thousands and thousands of them. Most of them were semipalmated sandpipers. This must be one of the largest concentrations in North America. There were 60 to 70 thousand there during our visit July 29-31. Some years during migration the population reaches 250 thousand.

The incoming tide brought all these birds right up to our feet. Slowly the tide water pushed them together so they were wing to wing in two or three large groups. Most were sleeping, preening or roosting. Some were walking (or hopping on one foot in many cases) among the throng. In two or three places were color-marked birds - lemon yellow or orange, looking like police officers on duty. Periodically as the throng got restless, a few here and a few there would rise and fall. Suddenly the whole flock would rise in a dramatic rush of air. This impressive sound was augmented by vocal cheers from the flock. The flock would rise 30 feet in the air and settle on the same place or perhaps mix itself up and settle just 100 feet away. One way the flock would wheel, speckled brown was in evidence. As they wheeled the opposite way white breasts and wing linings sparkled like silver. Being this close to so many avians, one could actually smell them.

Not all were semipalmated sandpipers. On the edges of the flock were semipalmated plovers running, then stopping. Dispersed among the flock were a few white-rumped sandpipers. Grouped always at the edge but on the water side were 200 knots and 75 short-billed dowitchers. And just at the water's edge was a handful of sanderlings. Over the flock flew a Bonaparte's gull. At one time a group of hikers scared a deer from the woods on the point. It bounded across the marsh to the mainland in full view.

At high tide while keen birdwatchers were focused on sandpipers, 300 feet up the beach was a white-winged dove. The exclamations from the crowd scared it off. The same day two were seen at the opposite end of the Bay of Fundy.

Side trips were made to marshes, good botanizing areas and areas of historical interest. Children and adults alike enjoyed relaxing recreation as well as educational exposure to flora and fauna. - Beverley J. Schneider

Che-urr in the Dusk
Harold Hatheway

Part of the birdwatcher's progress from rank beginner to legitimate amateur is finding out that even 'Peterson' doesn't solve all the questions. Having discovered that great truth this summer, I offer myself as a horrid example.

For the last few summers the population of Swainson's Thrush with which I share the south end of Oromocto Lake seems to have increased. The distinctive "whit" note, remarked by all authorities, makes up for the bird's relative shyness and habit of getting up in the tops of the high trees in the area.

Unfortunately for my peace of mind these birds choose to gild the lily by adding a dropping "che-urr" immediately after many of the "whit" notes, at least during dusk and early night hours. In spite of the fact that I knew the bird's identity, I just couldn't manage a definite sight identification of one in the process of giving that "che-urr" call.

To make things worse, there was no mention of such a call in my battered Peterson, the only reference taken along, because of the lugging and boating necessary to get to the camp. I redoubled my efforts, spent a considerable number of hours skulking under trees, feeding mosquitoes, peering at vague shadows cheerfully calling "whit che-urr", then moving on as I tried to get close enough for a positive definition.

The final blow was when I took advantage of a flying visit to home base and checked other authorities. No "che-urr" in Chapman, not a mention in Squires and, the ultimate letdown, nothing in Bent's monumental 26-volume life histories!

Eventually I appealed to David Christie, who confirmed the identity and kindly steered me to H.E. Forbush's Birds of Massachusetts and Other New England States, where a note describes an "Alarm note on the breeding grounds che-urr, che-urr". As David pointed out, Peterson's is a field guide and must be limited, making it reasonable to leave out a breeding call seldom heard in the area the guide is primarily intended to serve. So don't believe everything you don't read, either! - H.R. Hatheway

WILDFLOWER BLOOMING DATES 1977

David Christie

The survey of spring wildflowers brought less response than it did two years ago. More than ten species were reported from only seven areas (versus 14 in 1975), only one of which was in the northern half of the province.

The major reports came from Sisson Ridge, Victoria Co. (Erwin Landauer), Woodstock (Marjorie Gray), Campobello Island (Sheila Mallock), Rothesay (Dick Filliter), Moncton (Doreen Carter) and from Stoney Creek (Della Layton) and Harvey (David Christie) in Albert County. Smaller reports and isolated observations were submitted by several persons who are credited when their observations are mentioned. Most species, from among the 23 requested, were reported by Della Layton and Sheila Mallock, with 20 each, and Dick Filliter, 19. Of the seven main areas earliest blooms were most often at Campobello Island and the latest at Harvey.

As compared to the preceding two springs, 1977 flowers were about a week earlier than 1975's during April, from two to four days earlier in May, but two days later in June. By contrast they were a week later than in 1976 until the heat wave of May 22-24 after which they were only about two to four days later.

The dates listed in the following accounts are those on which the species was first noticed in bloom, not necessarily when it actually began blooming. If the date is underlined, more than ten plants were in bloom at that time.

Speckled Alder - Alders began blooming just before the survey forms were mailed out so most people missed the first pollen. March 31 (Mary Pugh) and Apr. 9 (Nick & Ann Shoppard) at Fredericton, Apr. 2 at Mactaquac (Shoppards), Apr. 12 at Petitcodiac (DSC), before April 23 at Harvey.

Trembling Aspen - April 15 (20) at Campobello, Apr. 19 (21) at Sisson Ridge, Apr. 26 (full bloom) at Petitcodiac (DSC), May 4 (7) at Stoney Creek.

White Elm - Apr. 1 Fredericton (Pugh), Apr. 26 (full bloom) Petitcodiac (DSC), Apr. 27 Woodstock, May 1 (4) Stoney Creek.

Billberry/Shadbush - May 19 (19) Rothesay May 19 (21) Stoney Creek May 19 Saint John (DSC), May 20 Sisson Ridge, Bloomfield (DSC) and Penobsquis (DSC), May 20 Woodstock, May 21 Moncton, and not till May 28 Harvey.

Pin Cherry - May 17 (20) Campobello, May 20 Woodstock, May 22 Sisson Ridge, May 22 (23) Moncton and Stoney Creek, May 23 (23) Rothesay, before June 5 Harvey.

Apple - May 22 (23) Campobello, May 22 Woodstock, May 24 (30 full bloom) South Branch, Kings Co. (DSC), May 25 (27) Stoney Creek, May 26 (26) Rothesay, May 28 Sisson Ridge, June 4 (before 11) Harvey.

Choke Cherry - May 30 (June 1) Campobello, May 31 Sisson Ridge, June 1 (full bloom) South Branch (DSC), June 2 (2) Rothesay, June 2 (4) Stoney Creek.

Rhodora - Week of May 19-23 (full bloom) Campobello, May 23 Moncton, May 25 Shampers Bluff, Kings Co. (Mary Majka), May 25 (26) Stoney Creek, May 29 Sisson Ridge, May 30 (30) Rothesay, May 31 Saint John (DSC), June 6 Harvey.

Dogtooth Violet - Apr. 27 (30) Fredericton (Sheppards), Apr. 30 Mactaquac (Sheppards), May 1 Moncton, May 1 Kingston Peninsula (Dona Acheson), May 11 Nauwigewauk, Kings Co. (Hugh Cunningham), May 12 Sisson Ridge, May 12 (12) Rothesay, May 12 Woodstock, May 12 Welsford (DSC), May 19 (21) Stoney Creek.

Red Trillium - between May 2 and 7 Mactaquac (Sheppards), May 6 (9) Campobello, May 11 Nauwigewauk (Cunningham), May 12 Woodstock, May 15 Castalia, Grand Manan (Elmer Wilcox), May 15 (15) Moncton, May 17 (17) Rothesay, May 18 Sisson Ridge.

White Violet - (Most early reports probably are of *V. incognita*). May 6 (8) Campobello, May 9 (12) Stoney Creek, May 15 (full bloom) Harvey, May 17 (17) Rothesay, May 18 (19) Moncton, May 22 Sisson Ridge, May 22 Woodstock.

Blue Violet - At Harvey I watched three species of blue violets with the following results: *Viola selkirkii* May 1, *V. septentrionalis* May 6, *V. cucullata* May 22 (23). Other blue violet dates, most often probably *V. septentrionalis* were: Apr. 30 Fredericton (Sheppards), May 12 (15) Stoney Creek, May 14 (17) Campobello, May 20 Moncton, May 21 (21) Rothesay, May 21 Woodstock.

Goldthread - May 17 (18) Rothesay, May 19 (23) Campobello, May 20 (22) Stoney Creek, May 24 Sisson Ridge, May 29 Moncton.

Painted Trillium - May 18 (20) Campobello, May 22 Sisson Ridge and Moncton, May 26 (29) Stoney Creek.

Canada Mayflower (Wild Lily-of-the-Valley) - May 25 (full bloom) Campobello, May 28 (31) Stoney Creek, May 31 Sisson Ridge, May 31 (31) Rothesay, June 1 Harvey.

Bunchberry - May 28 (full bloom) Campobello, May 30 (June 2) Stoney Creek, May 31 (31) Rothesay, June 11 Sisson Ridge, June 12 (full bloom) Harvey.

Starflower - May 27 (31) Stoney Creek, May 23 Sisson Ridge, May 28 (full bloom) Campobello, May 29 (30) Rothesay, June 12 (full bloom) Harvey.

Coltsfoot - Mar. 23 (Harvey McLeod) and Apr. 6 (DSC) at Saint John, Apr. 9 (13) Campobello, Apr. 10 Deep Cove, Grand Manan (Joyce Hunter), Apr. 18 (21) Rothesay, Apr. 24 Hopewell Hill (Wajke), Apr. 30 Moncton, May 5 Harvey, May 13 Sisson Ridge.

Dandelion - Apr. 6 (wk. of Apr. 11-15) Campobello, Apr. 8 Fredericton (Sheppards), Apr. 14 (16) Moncton, Apr. 19 (21) Rothesay, May 2 Woodstock, May 9 (19 full bloom) Saint John (DSC), May 16 Sussex (DSC), May 21 Sisson Ridge, May 23 (24 full bloom) Harvey, May 30 Stoney Creek.

Strawberry - May 1 Jemseg (on extreme south slope; Jean Wilson), May 5 Campobello, May 6 (17) Rothesay, May 6 (20) Sisson Ridge, May 8 (15) Harvey, May 22 Moncton, May 22 (24) Stoney Creek, May 22 Woodstock.

Yellow Rocket - May 29 Moncton, May 30 Sisson Ridge, June 1 (1) Rothesay, June 1 (full bloom) Apohaqui (DSC).

Tall Buttercup - May 15 (18) Moncton (unusually early - probably in error for June 15 - DSC), May 26 (30) Campobello, June 2 (3) Stoney Creek, June 6 (6) Rothesay, June 16 Woodstock.

Oxeye Daisy - June 8 (13) Campobello, June 16 Woodstock, June 17 (17) Rothesay, June 17 Norton (DSC), June 18 (22) Stoney Creek.

Nature News
David Christie

Summer 1977 was noteworthy for the wet weather during June. Precipitation ranged from one and one half to three times the normal amount (240 mm was a record for June at Chatham). During that dull, damp month, several stations recorded

20 to 21 days with measurable rainfall and sunshine amounts were low (a record low 112 hours at Fredericton). When the wet weather concluded, a dry period with about half the normal rainfall began and lasted till mid-August. Temperatures were close to normal except during June when they were just slightly on the cool side.

The wet early summer probably had minor adverse effects on some birds (see notes on flycatchers and swallows), insects (spruce budworm?) and plants (fungus diseases more frequent, also slugs).

Mammals

The Arctic Shrew that was reported from the Southeast Upsalquitch in May (NB Nat. 8:26), on examination of the skull has proved to be just a Masked Shrew, somewhat different in coloration than most. (Don McAlpine).

Coyotes continue to increase in the province. Over 30 were examined by provincial fur biologist David Cartwright last winter. Don McAlpine picked up one, not full-grown, killed on the highway at Petersville, Queens Co. in late July and on Aug. 17 I saw a similar sized one alive in the same area. Perhaps they were litter mates. Another Coyote seen by Carlton O'Connor at New Ireland about the beginning of September is the first report I've had from Albert County.

On May 29 Stanley Tatton saw an animal unknown to him at Letang. His description fits fairly well the Pine Marten, a weasel relative that has been very scarce, perhaps non-existent, in much of the province during the last 50 years. There have been indications that it has been recovering and spreading southward recently. Mr. Tatton also reports the first time he has seen a Panther or Cougar on July 5, near St. George. Quite a number of recent sightings have come from the St. George-St. Andrews area.

Birds

Each year in June, a number of observers participate in the wildlife service sponsored Breeding Bird Survey (BBS) project. This year 40 routes were surveyed in the Maritime Provinces and I have compared the 1977 results with those in 1976 for 24 routes which were conducted by the same observer in both years. The BBS changes quoted below result from that comparison, which was done for 28 species, chosen because they winter in large numbers in the eastern United States which experienced cold weather and bird mortality last winter.

A point of interest concerning the BBS results this year is that Jim Wilson found 97 species at Hampton, the greatest number ever recorded in a BBS route. They are conducted throughout the U.S.A. and southern Canada.

The nesting success of Common Loons is reduced on many lakes because of disturbance by motor-boats but city water reservoirs provide more peaceful habitat. A pair on the Turtle Creek reservoir was seen with two young from July 29 to August 7 (Doug Whitman & Doreen Carter) but at Loch Lomond a pair had only one young Aug. 5 (telephone call to museum) although their nest had contained two eggs.

Gannets appear to be prospecting a potential nesting site at White Horse Island, Passamaquoddy Bay. Dick Brown, of the Canadian Wildlife Service, saw one bird on the island Aug. 6 and a pair on Aug. 15. Readers may recall that a single Gannet claimed a territory on Kent Island in 1972 and 1973 and that a pair built a nest there in 1974. With luck perhaps we'll have Gannets once again nesting in the Bay of Fundy. They nested at Gannet Rock until about 1866.

Enid Inch felt that Great Blue Herons were "less plentiful than usual" in the Washademoak area this summer. No one else commented on it. A Snowy Egret was at Saint John West from at least July 11 through August 9, with two birds present July 24 (Cecil Johnston et al). Other Snowies were at Castalia in mid-August (McAlpine)

and at Chance Harbour on Aug. 20 or 21 (Dorothy Marshall). At Arcostook Junction Steve Clayden and Hal Hinds saw 12 Black-crowned Night Herons flying down river at dusk Aug. 20 suggesting that there may be an unknown colony in that part of Victoria County. They also saw a Green Heron there. An immature Yellow-crowned Night Heron was at White Head Island from about August 3 (Nancy and Carl Small) through the 10th (Elmer Wilcox). On the 15th it was found dead (D.R. Gunn) and preserved as the second New Brunswick specimen. A Least Bittern, a hard bird to find, was heard "cooing" at Red Head Marsh, a traditional spot for it, on June 14 (Wilson). A Glossy Ibis, found dead at North Tay, York Co., in early May (Kitt and Colby Gardiner) has been mounted for the museum collection.

A further report of Redheads, seventeen of which were reported in the spring issue, is of two pairs seen at Cambridge May 8 (Inch). A tantalizing waterfowl report has been received from Ian Walker. On May 21 he saw two Harlequin Ducks fly up the Nepisiguit River near Indian Falls. Combined with Hank Deichmann's July 30, 1969 observation of a female Harlequin at Indian Falls this suggests that a new nesting species of duck may be found in the province. A 1959 record for the Gaspé is the farthest south known breeding of the Atlantic coast population.

A possible Black Vulture was described to Don LeHeup by Milton Storey, who saw the bird circling at Wildcat Brook near Sunny Corner about the end of August. Ospreys are apparently doing well in New Brunswick. Sheila Mallock found them "abundant" at Campobello this spring. A pair around Cambridge did not use the nest of which Enid Inch knew the location, one of them was seen having a difficult time carrying a Muskrat on August 6 (Niven Thorne). Harold Hatheway reports a successful brood at Oromocto Lake and on July 17 at the headwaters of the Little Southwest Miramichi Richard DeBow saw four, two of which appeared to be young. Other reports of more than two came from Incos Bay (4 on Aug. 7, Johnston), Walton Lake, Kingston Peninsula (4 during August, Joyce Golden) and St. Stephen-Calais (3 on Aug. 9, DSC and 10 on Aug. 16, Nellie Ross) where sardines were found in the river from July 19 to mid-August (fide Bill Townsend). A summer Merlin on probable nesting grounds was seen at Squaw Cap, Restigouche County, July 3 (Clayden).

An Am. Coot at Red Head Marsh June 14 (Wilson) was to be expected but not so much two the following day at Cap-des-Cassie, Kent County (Clayden & Hinds).

Visiting Miscou Island June 18 to 21, Jim Wilson, Cecil Johnston and Evan Smith found four Piping Plover nests. In many areas, these interesting little plovers are disappearing because of beach disturbance, particularly by vehicles. Nesting Willetts have apparently spread northwestward along Northumberland Strait from Cape Tormentine as three were at Cap-des-Cassie June 15 (Clayden & Hinds). Migrant Willetts on the Bay of Fundy were at Mary's Pt July 26 (Michael Rigby) and Castalia Aug. 14 (Brian Dalzell). Summer Greater Yellowlegs on boggy habitat always make me wonder about nesting. This year one was noted on Rankine Bog, Kouchibouguac Park, June 17 (Clayden & Hinds).

Peter deMarsh, visiting Miscou Island August 7, thought Least Sandpipers were most common among the smaller shorebirds and Lesser Yellowlegs among the larger. The huge concentration of Northern Phalaropes was reported in the Eastport-Deer Island area as follows: some on July 9 (in Guillemot), several thousand July 25 (Townsend), 50,000 Aug. 1 (Peter Vickery) and two million Aug. 21 (Vickery & Davis Finch). The more unusual shorebird migrants were a Baird's Sandpiper at St. Andrews Aug. 28 (NEFN trip), a Stilt Sandpiper at Saint John West Aug. 30 (Johnston), a Marbled Godwit at Saint John West Aug. 9-10 (Johnston) and a Wilson's Phalarope at Miscou Island Aug. 7 (deMarsh).

Source gulls at Deer Island Point Aug. 28 (Vickery & Finch) were a Little and a Sabine's. The earliest Kittiwake at Grand Manan was off Whale Cove on August 1 (Dalzell). At Hach's Seal Island Malcolm Russell believes that Common Puffin

numbers were down considerably this year. He thinks there may have been heavy wintering ground mortality on Georges Bank because of the "Argo Merchant" oil spill.

A startling happening during the federation's Mary's Point shorebird field trip July 31 was the appearance of a White-winged Dove on the beach. It is a bird nesting from southeastern California to western Texas and south into Central America. At first we thought it must have been an escaped cage bird but then we discovered that it wanders to Florida and had even been found in Canada (B.C., Ont.). More surprising was later learning that Mr. and Mrs. George Smith of Fredericton identified two of the species the same day at East Quoddy Head on Campobello Island. Was there an invasion? It seems not, at least no reports have reached me from other areas of the northeast. Doves are favoured cage birds but this species should not be kept commonly in captivity. On the other hand, a Ringed Turtle Dove, a domesticated species, seen at Chamcook Aug. 28 (DSC et al) probably escaped locally.

Have you seen many owls lately? Doreen Carter writes that her family had always been hoping to see owls and suddenly found four during June and July. Probably it's a coincidence, rather than a population explosion. Owls are always around somewhere. Brian Dalzell reports a Whip-poor-will calling at Price Settlement, Northumberland County, June 25. They may be there regularly but we get few reports away from often visited locations such as the Richibucto Road between Fredericton and Minto. Nighthawks were migrating at Hammond River Aug. 28 and 29, when respectively 40 and 12 were seen (Wilson). Dorothy Hall discovered a Ruby-throated Hummingbird incubating on its nest high in a Red Ash near Hammond River July 3. About a week later the nest was abandoned.

The Yellow-bellied Sapsucker was one of the species possibly affected by last winter's weather. The Maritime BBS routes recorded 36% fewer than in 1976. It is primarily a New Brunswick species. A Northern Three-toed Woodpecker was reported on the Model Farm Road, Quispamsis, June 20 (Hall) while the more common Black-backed was seen at Petitcodiac July 17 (Carter).

Enid Inch reports an excellent comeback this year of Eastern Kingbirds which were greatly reduced in the Washademoak area by cold wet weather in the spring of 1974. Several families were seen this year, with two young flying from a nest in her orchard at Cambridge Aug. 15. On the other hand Eastern Phoebes have been greatly reduced by last winter's weather. Ron Weir reports "only one, where usually 8 to 10 seen" in the Erbs Cove-Kingston area. The BBS routes showed a 75% decrease from 1976.

Swallows are often bothered by cool, damp weather which grounds many of the flying insects on which they depend for food. BBS data showed Traze Swallow decreases in New Brunswick and P.E.I. although numbers were up in Nova Scotia. On June 6 an emaciated, dead Bank Swallow and a weakened Olive-sided Flycatcher were picked up at Porter Cove, Northumberland County (Dalzell & Tim Davis), and in the Fredericton area dead Barn Swallows were reported in June (Nettie Moore, Bev and Marc Schneider). At Mary's Point Barn Swallows had a successful nesting season. Five young of a possible second brood there did not begin flying until Sept. 11 (Mary Majka et al). Perhaps the rain affected Cliff Swallows, none of which nested at Turtle Creek Dam this summer (Whitman). There had been 45 nests in 1976 but only 4 in 1975. Marion Belyea worried about the Purple Martin colonies at Cambridge during June when the birds were very inactive but apparently they nested successfully. At dusk on Aug. 11 Brian Dalzell watched a mixed flock of swallows, numbering about 2500 descending into alders at Ingall's Head, Grand Manan.

Winter Wrens were one of the most severely reduced species this summer, with 58% drop in the BBS data. Enid Inch found them scarcer on the Washademoak and at Erbs Cove Ron Weir wrote "a crash, only 4 versus 20 to 30 normally." Long-billed Marsh Wrens were to be found in their usual habitat, one at Tintamarro Nat'l Wildlife Area June 19 (C.U.S. staff) and 3 at Shepody Nat'l Wildlife Area July 30 (N.B.F.N. trip). A singing House Wren was at the Kingston dump July 3-6 (Weir).

An unusual observation was of three Hockingbirds near Lake Utopia May 29 (Tatton). One was singing at Millidgeville June 14-15 and one was up north at Balmoral June 9 (McAlpine, Rigby & David Clark). A pair of Brown Thrashers were at Price Settlement June 8 (Dalzell).

Ron Weir found four Wood Thrushes singing on territory in the Erbs Cove area, more than in previous summers. To remind us that that beautiful singer is found north to Chaleur Bay are Steve Clayden's records of one at River Charlie July 1 and one at Flatlands July 2. Hermit Thrushes were "fewer than normal, but no crash" at Erbs Cove (Weir) and down 15% on BBS routes in the Maritimes.

A postscript to the fall 1976 flight of Wheatears which brought 14 of them to New Brunswick and New England and eight more further south to Florida and the Bahamas was just recently passed along to me by Harry Walker. Marilyn Boston reported to him a Wheatear she saw ^{between} Chatham and Loggieville. As noted in the spring issue Ruby-crowned Kinglets have declined greatly, a 63% reduction in BBS numbers being noted. Other comments: "seems to be very scarce this year" (Clayden), "seen on only four occasions" (Inch), and "fewer in numbers" (Weir). Ron Weir also noted a decline in Golden-crowned Kinglets which I have heard was also noticeable in Ontario. A Blue-gray Gnatcatcher was at Mary's Point Aug. 19-20 (DSC), the umpteenth record there.

Although the BBS recorded 22% more Common Yellowthroats in the Maritimes the increase was mainly in Nova Scotia and P.E.I. A Yellow-throated Warbler at Machias Seal Island July 22 (Russell, Clayden & Pauline Crouch), the second provincial record, was followed by one seen on Kent Island on August 4 and 19 (David Lank, Beverly Greenspan, Richard Podolsky, Ruth Fogler and Norman Carlin.)

In the BBS Common Grackles numbers decreased 20% whereas Brown-headed Cowbirds increased 21%. Ron Weir found 20 nests containing cowbirds' eggs. They belonged to the following species: Solitary Vireo (2), Magnolia (11) and Myrtle (2) Warblers, Am. Redstart (2) and Chipping (1) and Song (2) Sparrows.

Ron Weir found more Purple Finches than usual this summer, reporting up to 15 or 20 singing males at some sites in the Erbs Cove area, where he also found Pink Siskins very common. It was also a good year for siskins at Fundy National Park (Henrik Deichmann) and Mary's Point (DSC).

Indigo Buntings have been scarce, but regular summer residents, obviously breeding, yet never proven to do so until this summer. At Woodman's Point, Jim Wilson saw two or three males and a female and found an empty nest on June 16. Six days later there were four eggs in the nest. At Douglas, York County, Lisa O'Hara watched a singing male in early July and found the female feeding a young out of the nest on the 8th. A pair were also reported at Cambridge on July 9 (Elizabeth Warden). A single Rufous-sided Towhee was reported, at Rosevale June 9 ("Mike" Majka).

Reptiles, Fishes, Invertebrates

Alan Madden writes that Gilles Godin reported a Snapping Turtle at Bathurst this summer. Alan received two Wood Turtle reports in 1975, one at McLeod's Siding, Restigouche County (Bill Fraser) and two at Bel River Crossing (Serge Bergeron), and notes that the only reptiles he personally has found in Restigouche County (although he hasn't made any effort to locate them) were five Garter Snakes at Tide Head May 5, 1970 and one on Heron Island, May 29, 1970.

A medium-sized White Shark, was caught in a weir at Leteto, Charlotte County in early August (press reports). Brian Dalzell who worked part of the summer with a Grand Manan fisherman, reports a 150 pound Sea Sturgeon caught off Whale Cove August 1 as their most interesting catch. From late July through August the number of Shad taken increased steadily.

Monarch butterflies were noted in various places along the Bay of Fundy beginning in late July with several seen at Cape Enrage in early August (A.W. Thomas). The numbers were larger than usual at this season. Tiger Swallowtails were abundant at Erbs Cove in late June (Weir).

On August 29 Doug Whitman saw a live Praying Mantis, which he later picked up dead, outside the CN Building in Moncton. I had heard people mention seeing mantids but had no definite records so I wrote the Canada Dept. of Agriculture where Dr. H.E. MacGillivray reports, "I believe specimen(s) were in the UNB collection some thirty years ago but I don't recall the collecting site. It is unlikely that these insects could become established here because of our severe winters. There are several companies promoting the use of these, I am told, in pest management programs or by individual gardeners who do not wish to use insecticides. So we may expect to see more of mantids in the future, transported by automobile or train or imported directly."

Flora

Furbish's Lousewort Pedicularis furbishiae a plant known only from the upper Saint John River in Maine and New Brunswick has disappeared from most of its known stations so a concerted effort was made to rediscover it this summer. George Stirrett and Fred Tribe found one colony and Hal Hinds located another. Hopefully, some type of protective action will be taken to prevent destruction of these particular habitats.

Members of the Saint John Naturalists' Club were dismayed to find over thirty Yellow Ladyslippers picked and dropped along a trail in Rockwood Park on June 21.

Two new species of plants for New Brunswick have been reported recently. Michael Burzynski found primroses blooming above the cliffs in Fundy National Park a couple of years ago. In early June he guided Hal Hinds and Stephen Clayden to the flowers which proved to be Laurentian Primroses Primula laurentiana a northern species apparently not previously reported here although it has been found in Quebec just across the bay from Dalhousie.

The second new species is the Hairy Willow-herb Epilobium hirsutum, a European species. Gayl Hipperson found it well established and growing five to seven feet tall in a wet field at Glen Falls, Saint John East, August 26. Several days later Elmer Wilcox brought in a specimen from nearby Forest Hill where he had first noticed it two years previously.

Goutweed Aegopodium podagraria is becoming established as an aggressive weed in parts of the Saint John area. Art Callaghan at Musquash and Joyce Golden at East Riverside have been having difficulty eradicating it from their gardens for the last two or three years. It is also growing vigorously at the edge of the museum parking lot on Bentley Street (DSC). Goutweed is found here as two forms, one, often called "Youth and Old Age" which has variegated leaves, persists about old gardens but seems to be much less aggressive than the all-green-leaved wild form just noted.

Our Friends, the Swallow

J.E. Farquhar

Each summer at our home in Upper Kintore, Victoria County, the Barn Swallows construct their bowl-shaped nests of mud on the drip caps over the windows and are usually successful in rearing a few broods of young.

This summer a pair started several times to build a nest on the west side of our house but were unsuccessful. In this area in New Brunswick after a spell of very dry weather it began raining on the evening of June the first, and kept it up nearly every day or night throughout the month. This prolonged wet spell plus the

fact that it was often quite cold, apparently discouraged the birds so they moved to a more sheltered place on an old school house nearby.

During the first half of July, I often heard the rapid clicking sound made by the Tree Swallow male and would see a pair perched on the power lines leading to our house. A watch was kept at intervals during this time to see if this handsome pair were nesting in a hole in a tree or hydro pole nearby. On July 18, I noticed one of the birds fly into the vent of our electric clothes drier and said to my wife "those birds must intend to nest in our drier."

Our clothes drier is vented outside by a flexible plastic pipe about 3½ inches in diameter. On the outside of the wall there is a metal cap which contains a hinged damper. As the birds flew in and out we could always hear the sound of the damper clicking as the birds brushed by it.

By July 25, we could hear the young birds twittering while being fed. We also witnessed the busy parents making many trips to and from the nest. We didn't use the drier during this period of time.

On August 2, the young were still heard in the nest but the following day all was quiet. It was at this time we decided to investigate and clean out the machine so it could be used again when necessary.

On taking off the vent pipe and cleaning it we discovered it contained not only a nest made of dried grass and chicken feathers but to our surprise out rolled ten, tiny white eggs! Our bird book states that the Tree Swallows lay from five to seven eggs. I looked for egg shells but they must have been removed by the adult birds as none were found. By accident, I broke one of the eggs and was amazed to note that it was fresh and assumed that the other nine may have been also.

What induced this little bird to lay so many more eggs than they incubated remains a mystery. However, it is with pleasure to complete this report by noting that our swallow population is greater and will be working hard to keep down the insects around our home.

N.B. FLORA PROJECT

In recent years interest has been generated in the publication of a New Brunswick Flora or at least a checklist of the vascular plants of the Province. A flora is an inventory of the plants of a definite area, a basic reference for botanists and a useful aid to environmental and resource planning.

Work is currently centred at the U.N.B. Connell Memorial Herbarium under the supervision of a N.B. Flora Planning Committee made up of faculty members. Hal Hinds is coordinating this project and would appreciate receiving the names and addresses of anyone interested in helping either in the preparation of specimens and/or the collection of plants from various parts of the Province.

Amateur botanists can do very valuable service in this regard and they will receive due credit for their assistance. Hal Hinds, Biology Dept., UNB, Fredericton.

1977 CHRISTMAS BIRD COUNTS

This winter Christmas Bird Counts should be conducted on one calendar day during the period Dec. 17, 1977 through January 2, 1978. New compilers may receive forms from the New Brunswick Museum, Saint John. Observers not familiar with the compiler for their area should also contact the museum. Counts are expected to be done in the following areas: Machias Seal I., Eastport-Campobello, St. Andrews, Pennfield, Lopreau, Saint John, St. Martins, Fundy Park, Albert, Sackville, Moncton, Cape Tormentine, Kauchibouguac Park, Newcastle-Chatham, Lamèque, Sussex, Hampton, Cambridge-Narrows, Jussac, Fredericton, Hatterquac, Stanley, Nackawic, Woodstock, Hartland, Perth-Andover, Plaster Rock and Nictau.