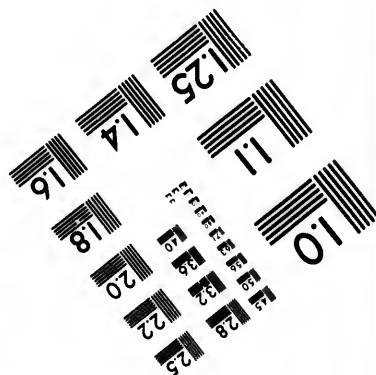
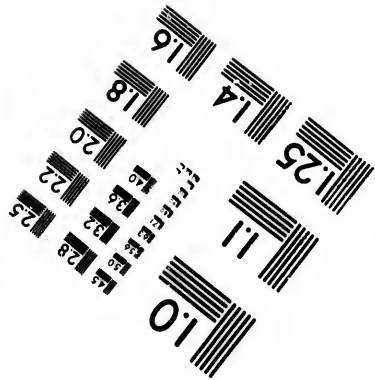
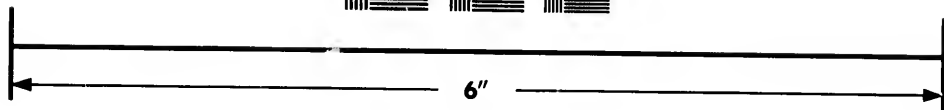
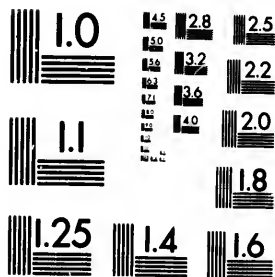


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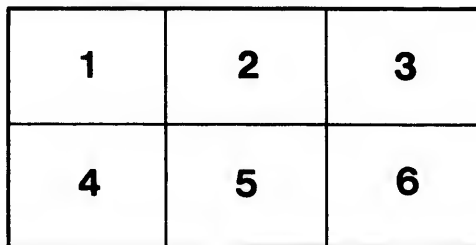
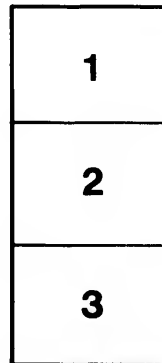
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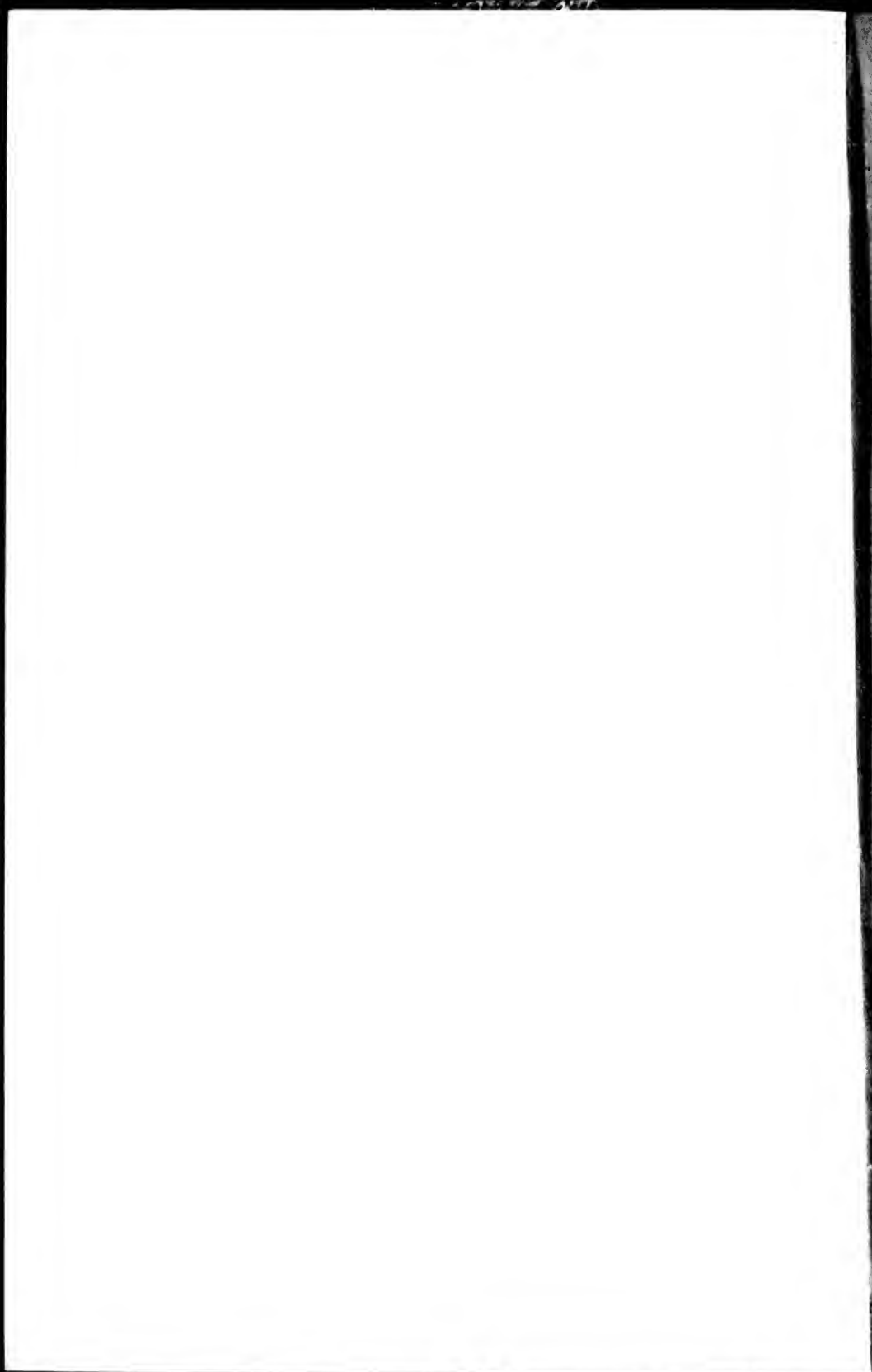
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ON THE  
NATURAL HISTORY  
OF THE  
GULF OF ST. LAWRENCE,  
AND THE  
DISTRIBUTION OF THE MOLLUSCA OF EASTERN CANADA.

BY  
ROBERT BELL, JR.

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*(Extracted from the Canadian Naturalist.)*

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Montreal:  
PRINTED BY JOHN LOVELL, ST. NICHOLAS STREET.  
1859.



*J. Richardson Esq*  
*with the best respects of the*  
*Author*

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Having been employed by Sir W. E. Logan to assist Mr. Richardson in his geological explorations in the Gulf of St. Lawrence during the summer of 1858, and at the same time to collect as many specimens as possible, to illustrate the natural history of that part of the Province,\* the following lists, prepared by his directions, contain a brief summary of my observations, together with numerous facts regarding the distribution of the Mollusca in other parts of the country.

The district explored is that part of the Province below Quebec which is bounded on the north west by the St. Lawrence, east by the Gulf, and south-east by the Bay of Chaleurs and Ristigouche River, and is chiefly comprised in the counties of Rimonski, Gaspé, and Bonaventure. By referring to a map of the Province the localities mentioned in this article will be readily found, the greater number of them being situated on the south-east side of the St. Lawrence, between Quebec and Gaspé. In these lists I give the names of all the localities at which each species was found when not generally diffused, from which some inferences may be drawn in regard to their geographical distribution; and I must here acknowledge my indebtedness to Mr. D'Urban of the Geological Survey, who most kindly furnished me with a list of the Birds, and drew up the accompanying Catalogues of Coleoptera, Lepidoptera, and Plants.

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\* During the summer of 1857, I accompanied the same party on an expedition to the Gulf, and some observations which I then made on the natural history of the country through which we passed are published in the Report of Progress for that year.

## VERTEBRATA.

## MAMMALIA.

*Vespertilio subulatus* (Say's Bat).—Numerous in the vallies of the Ristigouche and Matapedia Rivers. I killed one of them with my fishing rod, which in its eagerness to take the bait from my hook, did not cease to fly after it, till it met with its death.

*Sorex Forsteri* (Forster's Shrew Mouse).—Procured two specimens; said by the Indians to be very abundant.

*Ursus Americanus* (The Black Bear).—Not uncommon; there are two varieties in the district, one all black, and the other, which is said to be more ferocious, black with a white spot on the breast. The fur of the Gaspé bears is of a highly superior quality.

*Mustela martes* (The Pine Martin).—The Indians bring home from their winter hunts, more of the skins of these animals than of any other.

*M. vison* (The Mink).—Ranks next to the marten in its importance to the Indian hunter.

*M. vulgaris* (The Common Weasel).—Abundant.

*M. Canadensis* (The Fisher).—Does not seem to be very abundant, but the Indians always bring to market a few of their skins when they return from their hunts.

*Mephitis Americana* (The Skunk).—Not uncommon, and sometimes killed by hunters for its skin, which is used for making sleigh robes.

*Lutra Canadensis* (The Canada Otter).—Very abundant along every stream. One of our Indians told me that he once secured three otters of large size, with one shot. He said, that after watching for them some time, they all came up together through a hole in the ice, when he aimed at the middle one and killed it on the spot, only a few grains of shot striking the other two, who immediately set on one another, as though mutually supposing each other to be the cause of their pain, and during the combat he dispatched them both with his tomahawk.

*Canis lupus* (The Common Wolf).—I was informed by the Indians that the wolf does not come farther north than the St. John River, where they are sometimes seen in small packs, and destroy the young moose.

*C. fulvus* (The American Fox).—Three varieties of the fox, the black, silver grey and yellow, exist throughout the district.

*Lynx Canadensis* (The Loup-cervier or Canada Lynx).—Abundant, and much sought after by the hunters.

*Phoca* — ? (Seal).—A seal generally of a mottled grey colour, ascends the St. Lawrence beyond Cacoma. Farther down the river, we sometimes saw, during summer, quite a number of them swimming together.

*Castor fiber* (The Beaver).—Formerly when the fur of the beaver brought such a high price, they were very much hunted in this part of the country, but since it has fallen to less than quarter of what it was, the Indians do not kill them, except when an opportunity of shooting one accidentally falls in their way, and they consequently now re-occupy, often in great numbers, the places which they had long deserted.

*Fiber zibethicus* (The Musk-Rat).—This animal, so abundant in all other parts of Canada, is likewise so, in the lakes and quiet streams of our present district.

*Mus musculus* (The Common Mouse).—Infests barns in the summer time.

*Pteromys volucella* (The Common Flying-Squirrel).—Rare.

*Sciurus (Tamias) Lysteri* (The Chip-munk).—Rare also.

*S. Hudsonius* (The Red Squirrel).—Abundant throughout the whole district.

*Hystrix pilosus (dorsata)* (The Canada Porcupine).—Appears to be much more abundant in the north-eastern part of the district (Gaspé) than in the counties of Rimouski, or Bonaventure. They become light grey or almost white when very old, but are said to be the same colour all the year round.

*Lepus Americanus* (The American Hare).—Notwithstanding its numerous enemies, is probably the most abundant quadruped in the woods.

*Cervus alces* (The Moose Deer or Elk).—For the last few years most of the hunters have devoted their time to killing the moose simply for the sake of their skins, which now command a higher price than formerly, and this they do at any season of the year which suits their own convenience. We were informed, that a party of these hunters had procured 300 skins the previous winter, and that another party of only three Indians had killed during the same season between 90 and 100 on one expedition, as many as six sometimes falling a prey to them in one day, yet still these noble animals roam in vast numbers over the district.

*C. tarandus* (The Caribou).—Very numerous about the Shick Shock Mountains. Some of our party, who were on the extensive flat top of Mount Albert, one of this range, reported that there, an area of great extent was strewn with vast quantities of fragments of their horns, most of which gave evidence of great antiquity.

#### AVES.

*Haliaetus leucoccephalus*, Linn. (Bald Eagle).—Immature individuals frequently seen from Green Island to Martin River, in June and July, and an adult on the Ristigonche, August 31st. At St. Anne, on June 17th, I saw one of this species flying off

with a long string of seaweed entangled in its claws, and on the 30th at the same locality I observed a large eagle, which I took to be this species, and which, after hovering about for some time, dashed into the water at the mouth of the river, with such velocity that it entirely disappeared beneath the surface for some seconds, rising again with a fish of considerable size, apparently of the species commonly called the Sea Toad (*Cottus Greenlandicus*) and flew off with it towards the mountains inland. I picked up wing-feathers of this species on several occasions on the shore, and at Green Island and Marcouin River I was shown wings of specimens which had been shot at those places.

*Astur fuscus*, Gmel. (Sharp-shinned Hawk).—Two specimens observed at Capuchin, about the clearings, in August.

*Surnia funerea*, Gmel. (Hawk Owl).—When at Green Island I was shown the head and wings of a specimen which was shot there about the middle of October.

*Syrnium nebulosum*, Gmel. (Barred Owl).—Occurred on the Marcouin River.

*Chordeiles Virginianus*, Briss. (Night jar, Mosquito Hawk).—Observed at Chatte River June 18th, Ste. Anne, June 28th to July 17th, and at the mouth of the Matapedia August 28th. At Ste. Anne July 17th, I was shown the eggs of this species deposited on the bare ground without any attempt at a nest. The parent bird was sitting on them, and although very frequently disturbed for some days, and her eggs much handled, one having been even cracked, she made no attempt to remove them, as this bird is said to do on similar occasions, and she invariably returned to the nest, as soon as we left the spot, probably because the eggs were nearly hatched. She appeared incommoded by the day-light, and permitted us to approach very closely before she took to flight.

*Hirundo bicolor*, Vieill. (White-bellied Swallow).—Very abundant at Cape Chatte and Ste. Anne, June 28th and 30th, and at Martin River July 20th. This species breeds in holes in decayed trees standing on clearings, in vast numbers at the above localities.

*Hirundo fulva*, Vieill. (Cliff Swallow).—Numerous at Metis, at the beginning of June.

*Hirundo rustica*, Linn. (Barn Swallow).—Abundant at Trois Pistoles, where they were building their nests under the eaves of a store, May 30th, also observed at Metis, June 10th, and near Long Point, June 15th.

*Hirundo riparia*, Linn. (Sand Martin).—A few observed making holes in a sand cliff on the banks of the river at Ste. Anne, June 28th.

*Sylvicola coronata*, Lath. (Yellow-crowned Warbler).—One shot at Green Island Village, May 25th.

*Troglodytes hyemalis*, Vieill. (Winter Wren).—Observed on the Patapedia River, September 5th.

*Parus atricapillus*, Linn. (Black-cap Tit).—First seen on the Patapedia, September 5th, afterwards frequently observed in various localities.

*Regulus satrapa*, Lich. (American Golden-crest).—Several specimens were obtained at Rivière du Loup, May 18th.

*Turdus migratorius*, Linn. (Robin).—Numerous at Rivière du Loup, Cacouna, Metis, Matanne, Long Point, Chatte River, Ste. Anne, Marcouin and Matapedia rivers. At Marcouin river, July 24th, I observed numerous young birds feeding on the maggots and grubs in rotten fish.

*Anthus Ludovicianus*, Lich. (American Pipit).—Abundant, running about on low flats near the sea shore at Rivière du Loup, May 10th and 20th, Cacouna May 22d, Green Island Village, May 25th, and Rimouski June 5th. The colour of this bird so exactly resembles the tint of the low, wet ground, stained yellowish with iron, and covered with withered herbage, where it resorts in immense numbers, that although hundreds were running around me, I could distinguish none till they rose in the air.

*Alda alpestris*, Linn. (Shore Lark).—In large flocks on the stubble in the wheat-fields at the beginning of October, about Rimouski.

*Plectrophanes nivalis*, Linn. (Snow Bunting).—Large flocks at Kamarouska at the beginning of November. Mr. Richardson captured a specimen alive, which had been injured by flying against the Telegraph Wire.

*Emberiza socialis*, Wils. (Chipping Bunting).—Common at Rivière du Loup, Rimouski, Long Point, and Chatte River.

*Niphaea hyemalis*, Linn. (Common Snow Bird).—Abundant from Rivière du Loup to Martin River, and at Little Lake Matapedia. I saw young birds full grown at Ste. Anne, July 15th, and found a nest containing 4 eggs, July 17th.

*Carduelis tristis*, Linn. (Yellow-bird or Goldfinch).—Common at St. Fabien and along the coast to Martin River.

*Fringilla Pennsylvanica*, Lath. (White-throated Sparrow).—Very numerous everywhere about the clearings along the coast. I found a nest containing four eggs near Long Point, June 16th. It was on the ground and composed of dry grass. The eggs were bluish with some dull red spots at the larger end.

*Erythropsiza purpurea*, Gmel. (Purple Finch).—One specimen observed at St. Fabien, May 30th, and flocks were seen at Ste. Anne, July 18th.

*Agelaius phoeniceus*, Linn. (Red-winged Starling, "Blackbird").—Two seen at Ste. Anne, July 17th.

*Quiscalus ferrugineus*, Lath. (Rusty Grackle).—Numerous flocks seen in the clearings along Metis River, and between Metis and Rimouski, in September and October.

*Corvus Americanus*, Aud. (Common American Crow).—Abundant all along the coast, feeding on *Littorina*, and digging up *Mya arenaria* at low tide. They frequently carry the latter a considerable distance from the water, and at Cacouna the empty valves were lying in great numbers on the cliffs in the vicinity of their nests. At Trois Pistoles I found an old nest nearly filled with the shells of *Succinea obliqua*, each having a hole picked in it. On one occasion having wounded a Crow, I tied him to the root of a tree, and his outcries soon attracted an immense number of his fellows, several of which I shot. Near Green Island Village I saw a flock chasing a Fox round a field. At Cacouna, May 21st, I found two nests on Spruce trees, one contained 5 eggs nearly hatched, and as is usual with the eggs of the *C. v. v.*, they differed much in colour and markings. The other nest contained four unfledged young, two being much larger than the others. It was also an abundant bird on the Ristigouche in August.

*Garrulus cristatus*, Linn. (Blue Jay).—One seen at Little Lake Matapedia, August 19th.

*Garrulus Canadensis*, Linn. (Canada Jay, "Moosebird").—Very common all over the district in the Forest, often approaching within a yard or two of us, when at our meals, in its well known familiar manner. The Indians consider this bird one of their greatest annoyances, as it steals the bait from their traps, and devours their moose-meat when hanging up to smoke. One of our Indians told me, that the preceding winter, while in the act of skinning a deer one of these birds commenced feeding on the flesh, and he split its skull with his knife.

*Bombycilla Carolinensis*, Briss. (Cedar Bird).—Common at Metis, Ste. Anne, and at the mouth of the Marcouin river.

*Sitta Canadensis*, Linn. (Red-bellied Nuthatch).—Several observed August 19th, at Little Lake Matapedia, and one picked up dead near the foot of Big Lake Matapedia.

*Trochilus colubris*, Linn. (Humming-bird).—One seen at Metis about the middle of August.

*Alcedo alcyon*, Linn. (Belted King-fisher).—Abundant on every river and lake throughout the district, from May 19th to the end of September. A hole about three or four feet from the top of a sand cliff near the mouth of the River Ste. Anne, in which a pair of Kingfishers had their eggs, I found to be upwards of six feet in depth.

*Picus pileatus*, Linn. (Pileated Woodpecker, "Log-cock").—I

was given a specimen which was killed near Green Island. The Indians report it to be rare in this district.

*Picus villosus*, Linn. (Hairy Woodpecker).—I shot a specimen at Ste. Anne, June 28th, and another I noticed on the 30th June at the same place, had its nest in a White Birch tree about 35 feet from the ground, and the young were distinctly heard. This Woodpecker was also observed between St. Fabien and Bic, Marcouin and Martin Rivers.

*Ectopistes migratoria*, Linn. (Passenger Pigeon).—Not very numerous, but a few seen at Chatte River, Ste. Anne, Matanne and Metis. It was rather numerous in August between Metis and Matepelia Lakes, and on the Ristigouche.

*Tetrao umbellus*, Linn. (Ruffed Grouse, "Partridge").—Near Rimouski, but rather scarce.

*Tetrao Canadensis*, Linn. (Canada Grouse, "Spruce Partridge"). On the 25th June, I was shown one which was caught in a trap near Matanne. I observed several on the Marcouin River at the end of July, and on the 30th July we met an old Grouse with her brood about half grown, which flew at us as we passed, exactly as a common hen would have done. A few occurred near the Matepelia Lakes, but it was by no means as plentiful as on the Magdalen River last summer.

*Streptopus interpres*, Linn. (Turnstone).—Observed at Green Island October 26th.

*Tringa pusilla*, Wils. (Little Sandpiper).—Abundant at Rivière du Loup and Green Island in May, and at Chatte and Martin Rivers in July.

*Tringa*, ——— ?—A Sandpiper which Mr. D'Urban has been unable to identify, was shot at the mouth of the Marsoni river, August 4th.

*Totanus solitarius*, Wils. (Solitary Sandpiper).—One specimen shot August 31st, on the Ristigouche where it was abundant.

*Totanus vociferus*, Wils. (Tall-tale Tatler).—Many pairs seen at Rivière du Loup, May 20th.

*Scolopax Noveboracensis*, Gmil. (Red-breasted Snipe).—One specimen obtained out of a large flock near Green Island, May 25th.

*Ardea Nycticorax*, Linn. (Night Heron, "Swamp Hen").—Abundant in the swamps near Dalhousie, N.B., also observed on the Patapelia and near Lake Metis.

*Anser Canadensis*, Linn. (Common Wild Goose).—Abundant at Rimouski at the beginning of June, near Chatte River June 17th, and in vast flocks near Green Island and Cacouna at the end of October.

*Anser leucopsis*, Bechst. (Barnacle Goose, "Berneche" of the



Canadians).—Great numbers were passing down the coast when I was at Rimonski on 1st October, and I saw many that were shot by the numerous gunners stationed on the quay over which the Geese passed in their course, and they were also numerous at the end of the month at Green Island.

*Fuligula Fusca*, Linn. (Velvet Duck).—Numerous flocks observed along the coast from June 17th. Dead specimens were picked up on the sea shore near Ste. Anne in July.

*Fuligula perspicillata*, Linn. (Surf Duck).—I was given the stuffed head of a specimen killed at Green Island, I also noticed it in a collection of Bird skins, made by Pierre Fortin, Esq., J. P., commanding the Government Schooner "La Canadienne," on the coast of Labrador.

*Fuligula clangula*, Linn. (Golden-eyed Duck).—Numerous near Bic and Green Island in October. One killed on Metis Lake September 18th.

*Fuligula histrionica*, Linn. (Harlequin Duck).—One killed at Ste. Anne, several on the Ristigouche, August 26th, and on the Patapedia, September 7th.

*Mergus serrator*, Linn. (Red-breasted Merganser).—First met with at Ste. Anne, June 30th. Common on every river and lake, as well as on the coast, throughout the district, several young birds were killed on the Matapedia August 21st.

*Phalacrocorax carbo*, Linn. (Cormorant, "Mouniac" of the Canadians).—Very abundant between Bic and Green Island, middle of October.

*Larus atricilla*, Linn. (Black-headed Gull).—In great abundance along the whole coast. Several other species of Gull were observed, but no specimens were obtained.

*Mormon Arcticus*, Linn. (Puffin).—In Capt. Fortin's collection from the coast of Labrador.

*Alca Torda*, Linn. (Razor Bill).—With the last species.

*Uria Troile*, Linn. (Common Guillemot).—With the two last species.

*Uria Grylle*, Linn. (Black Guillemot).—Very abundant at Hare Island at the beginning of May, at Green Island at the end of that month, and at Ste. Anne, and near Martin River in July. At the last named locality a fisherman informed me, that they generally lay three eggs, but that he has found five in one nest. On our return to Green Island, October 26th, it was still numerous there.

*Colymbus glacialis*, Linn. ("Loon").—Observed at Rimouski, Marcouin River, and on Lake Metis.

*Colymbus septentrionalis*, Linn. (Red-throated Diver).—Anticosti, Mr. Richardson, 1856.

## REPTILIA.

Reptiles appear to be very scarce in this district, and the three following species so widely distributed over Canada were the most frequently met with :

*Tropidonotus sirtalis*, Linn. (Striped or Garter Snake).

*Rana pipiens*, Gmel. (Leopard Frog).

*Salamandra*, (*Plethodon*) *erythronota*, Green, (Red-backed Salamander.)

## PISCES.

For the scientific names of several of the fishes mentioned in the following list, I am indebted to Principal Dawson, of McGill College, who kindly favoured me with a list of those which I had preserved in spirits; but of many common species I did not preserve specimens, and mention them here merely to note some fact connected with their history in our waters.

*Gasterosteus biaculeatus*, (Three-spined Stickleback).—In the greatest abundance in small streams, ponds, ditches, &c., near the shore. I also found a specimen among some trout, caught in a net in Lake Matapedia, which magnificent sheet of water is about 500 feet above the sea.

*G. pungitius*?\* (Ten-spined Stickleback).—Same habitat as the preceding species.

*Cottus Granlandicus*, (Sea Toad).—Very numerous in shallow water at fishing stations, where it seems to feed on the offal thrown into the water.

*C. ————*, (Fresh-water Bullhead).—Ristigouche River and Metis Lakes.

*Scomber vernalis*, (The Mackerel).—Is said to ascend the river no farther than Rimouski; but is not abundant for a considerable distance farther down.

*Salmo salar*, (The Salmon).—Ascends all the Rivers in the peninsula which are not shut up by mill-dams. The Ristigouche River and its tributaries are considered the best of all for salmon fishing, and the Ste. Anne of those on the south-east side of the St. Lawrence.

*S. fontinalis*, (Common Brook Trout).—Very abundant in every stream and lake, often at a great height above the sea, and in apparently inaccessible places.

*S. trutta*, (The Sea Trout).—The same fish as that referred to on page 97 of this volume, is abundant for a short distance up all the streams in Gaspé, and is also caught in gill-nets set at right angles to the shore near the mouths of the rivers.

\* (?) *G. Dekayi*, Ag.

*Osmerus viridescens*, (The Smelt).—Caught in the fisheries along with sardines. They are also taken very readily with the hook and line.

*Alosa præstabilis*, (Common Shad)—Taken in brush fisheries, and cured in considerable numbers.

*A. tyrannus*, (Alewife).—One specimen procured at Rimouski.

*Clupea virescens?* (Sardine).—These little fish are taken in great quantities in the fall of the year in brush fisheries along the shores of the St. Lawrence as far up as the salt water extends.

*C. elongata* (Common, Herring).—The herring fishery is not much attended to on the south-east side of the St. Lawrence, although the fish are very abundant. In spring they are largely taken at some places in brush fisheries, and sold fresh for a few pence per bushel; often for nothing else but to manure land.

*Mallotus villosus*, (The Capelin).—Proligiously abundant along the whole coast during the fore part of summer, and are taken in immense quantities in brush fisheries, and with scoop nets for manuring land and for bait for cod. There is one of these brush fisheries at almost every second house, each of which takes enough, not only to supply the owner with an abundance of manure, but also some of the farmers in the back concessions, who depend upon him for their supply. It is a wonder that any of the unfortunate capelin escape at all, considering the vast number of these set to intercept their progress. I was informed, on good authority, that 40 cart loads (8 bushels each) were frequently taken out of one of these enclosures. Every family along the coast has a number of scoop nets, made by placing a fine meshed net between the prongs of a forked stick, with which they dip great quantities of capelin out of every shoal they see passing by their part of the beach. On the 11th of June, I saw 15 men engaged at this work, in one place, where a great shoal was kept close against the shore by the waves. They were standing in the water dipping them ashore, while a number of cars were busily engaged in drawing them off, the women and children assisting to load them. There were at least 200 bushels lying on the beach at the moment we visited the spot, and they said that they had been engaged at the same work nearly the whole day. One of these men told me that this was nothing to what was sometimes done, and added that he had seen 3000 bushels taken in a day by the inhabitants of one place.

*Ammodytes Americana*, (Sand Lance).—Abundant, and used for bait for mackarel, in the stomachs of which they are frequently found.

*Morrhua Americana*, (Cod).—I was informed that the extreme height to which the cod ascend the St. Lawrence was Apple

Island, not far from Trois Pistoles, and that some seasons they did not go so far. They are plentiful as far up as Rimouski, and are caught abundantly, of large size, at Metis, where a considerable fishing is done about five miles from land. To these upper limits they follow the capelin in spring, but remain after they have disappeared.

*M. aeglefinus*, (The Haddock).—Taken with cod at all the fishing stations, and a few are sold mixed up with them; but when sold separately they bring a much lower price.

*M. prumosa*, (The Tomcod).—Plentiful in the mouths of rivers from the county of Rimouski upwards. This is the same fish which is taken in such great abundance at Three Rivers during the winter.

*Motella cimbria?* (The Four bearded Rockling).—One specimen from Ste. Anne. This appears to be the first time the occurrence of this species has been noted on this coast.

*Zoarces viviparus*, (The Viviparus Blenny).—A Blenny which cannot be distinguished from this species, was caught in the dredge in deep water off Marcouin, which is, I believe, the first time it has been found in the Gulf.

*Hippoglossus vulgaris*, (The Halibut).—These large fish ascend the St. Lawrence as far as Green Island, and are caught in considerable numbers at all the fishing stations. I was informed that they were sometimes caught between six and seven feet in length; but I never saw one quite so large, although they generally attain a considerable size.

*Sphyrax acanthias*, (Spinous Dog-fish).—At Les Islets I saw a spinous shark, which, I have no doubt, from my notes, was this species. It was a very large specimen, and was brought ashore by some men, who caught it when fishing for cod.

*Raja radiata* (Starry Ray).—Occasionally caught with codfish at Ste. Anne. A hunter here cures the flesh of the starry ray, with which he baits his traps in winter, and says that it is preferable to any other for some animals.

*Salmo*.—A fish of this genus, called by the Indians "Toag," and by the French Canadians "Tourali," exists in great numbers in all the larger lakes, but are said never to be found in any of the rivers. In the Metis Lakes they are said to be of the same average size as the salmon, and are taken in winter by dropping a line through a hole cut in the ice. A settler at Lake Metapedia told us that he could spear enough of them in two nights to last his family all winter. They are of a much darker colour than the salmon trout. The head is large, and the body tapers regularly to the tail. The flesh is of a yellow colour, and for the table is equal to the salmon. In the Metis Lakes there are, besides

"Toag" and a large red variety of *S. fontinalis*, called "Rag," at least two other species of the genus *Salmo*.

*Coregonus*.—A species of herring trout, probably *C. clupeiiformis*, abounds in the deep clear water of the Metis Lakes. Our Indians informed me that in the fall immense shoals of them approach the shores of the lakes, and that hundreds of barrels might be taken with a seine.

*Cyprinus*.—A species of chub, with very large scales, was abundant in Lake Metapedia and elsewhere.

*Catostomus*.—Black suckers were abundant in the Restigouche River and the larger lakes, but as I did not preserve specimens I could not be certain of the species.

*Anguilla*.—Eels, probably *A. acutirostris*, are abundant about the mouths of all the rivers, and toward the upper limits of the salt water are barrelled in considerable quantities for the market. A thick short black eel is extremely abundant in the Metis Lakes and River. The remains of a contrivance for catching these fish, which was long ago built by the Indians almost across a narrow part of the lower Lake, are still in existence.

*Platessa*.—Flounders, or as the French Canadian fishermen called them *Plaise*, were taken in great abundance with cod lines at Ste. Anne and other places, and used for manuring land. Small flatfish are also taken among shoals of capelin.

## INVERTEBRATA.

### CRUSTACEA.

*Hyas fissirostra?*—A spider crab agreeing with Say's description of *Lissa fissirostra* and DeKay's *Hyas coarctata*, (but not however with Bell's description under the same name,) in fishing grounds of moderate depth, and especially at Ste. Anne, and were devoured in great numbers by almost all kinds of fish. In the stomachs of halibut some very large specimens were procured, but the largest of all were caught by fishermen with cod hooks. The carapace of one of these measures 4 inches from the anterior to the posterior extremity. This is quite a different crab from the large *Muia*, parts of which Principal Dawson obtained in Gaspé Bay.

*Cancer irroratus*.—This is probably the most abundant crab in the Gulf. The breadth of the carapace of the largest specimen in the collection is  $4\frac{1}{2}$  inches.

*Pagurus Bernhardus*.—Abundant in shells of Natica, Buccinum, Fusus, &c.

*Homarus Americanus*.—Lobsters are rare on the south-east side of the St. Lawrence, but very abundant on Anticosti and in the Bay of Chaleur as far up as Dalhousie, and Principal Dawson mentions them as being likewise abundant in Gaspé Bay.

*Astacus Bartonii*.—The common crawfish is abundant in the Mat pedia, Restigouche and Metis Rivers, and in 1857 I found a specimen just below the high falls of the Ouatichouan, which empties into the south side of Lake St. John.

*Crawgon vulgaris*.—Although the common shrimp is abundant in the St. Lawrence, and largely devoured by the cod, the fishermen have not yet got into the way of using them for bait.

*C. sculptus*.—A specimen corresponding nearly with Bell's description of this, was caught in the dredge, off Cape Chatte.

*Hippolyte* (?).—A shrimp of this genus was dredged near Metis; but the specimen is so much damaged, that the species is not satisfactorily determined.

*Orchestia* (?).—A species of beach-flea swarms in all the pools left by the receding tide.

#### MOLLUSCA.

##### *Gasteropoda* (Marine).

*Fusus scalariformis*.—Peter River, Ste. Anne and Marcouin, in stomachs of haddock and flounders, and living specimens dredged in 60 fathoms at the latter place.

*F. Islandicus*.—Trent, Ste. Anne and Marcouin, not common.

*F. tornatus* (Gouli).—Parts of large individuals were found on the shore at Rimouski, and complete specimens near Ste. Anne. This is the same species as the one so common in the Post Pliocene clays near Montreal.

*F. decemcostatus*.—Two good specimens in a collection of shells brought from near Cape Gaspé by Sir W. E. Logan in 1844.

*F. rufus*.—Numerous specimens from stomachs of fish at Ruisseau Vallée.

*F. Bamffius*.—Same source.

*Pleurotoma bicarinata*?—One specimen from same source.

*Buccinum undatum*.—Whole coast from Rivière du Loup downwards; very abundant at low tide, and constitutes one of the principal articles of bait used by the fishermen after the capelin have disappeared.

*B. Donovanii*.—Dead specimens were found at different parts below St. Flavie.

*Nassa trivittata*.—Plentiful in Bay Chaleur as far up as Dalhousie, but was not observed on the north coast of Gaspé, although it was found by Principal Dawson in Gaspé Bay.

*N. obsoleta*.—A number of specimens in Sir W. E. Logan's collection from the gulf.

*Purpura lapillus*.—Whole coast below Little Metis; extremely abundant and used as bait for cod.

*Trichotropis borealis*.—Dead specimens obtained at Ste. Anne and near Cape Chatte.

*Velutina haliotoides (lævigata)*.—Ste. Anne, in stomachs of flounders, rare; living specimens dredged in deep water off Marconi.

*Lamellaria perspicua*.—Ruisseau Vallée, one specimen amongst fish offal.

*Natica heros*.—Large and abundant in the sandy coves along the Gaspé coast. Great numbers of them of small size were found on the beach near Dalhousie, N.B.

*N. clausa*.—Collected on the shore at Bic and St. Luce, and found plentifully in stomachs of fish at Capuchin, Ste. Anne, Ruisseau Vallée and Marcouin.

*N. triscriata*.—I found this species in Magdalen Bay in 1857, but never in any other place.

*N. flava?*—Rimouski, Les Islets and Glande.

*N. helicoides*.—Marcouin, in stomachs of haddock.

*Rostellaria occidentalis*.—Incomplete specimens common at Bic. A young specimen was procured at Glande, and a perfect one at Ste. Anne.

*Rissoa minuta*.—Green Island and Long Point, abundant.

*Lacuna vineta*.—Very abundant from Rimouski downwards.

*Littorina palliata*.—Whole coast from Rivière Ouelle downwards. At Dalhousie they are of a beautiful clear yellow colour.

*L. rudis* including *tenebrosa* which may be only a variety.—Whole coast.

*Margarita cinerea*.—Obtained in considerable numbers from stomachs of flounders and haddock at Ste. Anne, and a few from the same source at Marcouin, Ruisseau Vallée and Peter River.

*M. undulata*.—In fishes stomachs at Ste. Anne and Ruisseau Vallée, but not so plentiful as

*M. helicina*.—Trent, Les Islets and Ste. Anne, abundant.

*Skenea costulata*.\*—A specimen of this beautiful little species was found by Principal Dawson in examining some of the material which was dredged in deep water off Marcouin.

*Diadora noachina*.—Plentiful in stomachs of haddock taken at Capuchin, Ste. Anne and Marcouin, also dredged in considerable numbers at the latter place.

*Crepidula fornicata*.—One specimen found at Dalhousie, N.B., very abundant at Carraquette.

*C. plana*.—Carraquette.

*Acmæa (Lottia) testudinalis*.—Dead specimens common at Rivière du Loup, but first found alive near Trois Pistoles; very

\* Forbes & Hanley, Vol. III. 167; Vol. IV. 271.

abundant along the whole coast and in Bay Chaleur. At Les Islets where the water inside of the islets becomes by the heat of the sun perceptibly warmer than that outside, these shells exist in immense numbers and attain the diameter of 1 inch and 7 lines.

*A. caeca*.—Numerous dead specimens dredged at Marcouin.

*Chiton marmoratus*.—One large specimen found at Bic; numerous on stones and dead shells dredged off Ste. Anne and Marcouin, and found in fishes' stomachs at coves on the Gaspé coast.

(Fresh Water.)

*Planorbis trivolvis*.—L'Orignal on the Ottawa, Lachine, Montreal, and in the Rimouski, Metis and Ristigouche Rivers; found also, in 1857, in Lake Kenogami, between Chicoutimi and Lake St. John, at the head of the Saguenay.

*P. campanulatus*.—Renfrew on the Bonnechere River, Montreal, and in shell marl from near Philipsburgh, St. Armand and St. Rose, Terrebonne, and living in Lakes Metis and Matapedia.

*P. bicarinatus*.—Renfrew, L'Orignal, Montreal, in marl from Ste. Rose, Shefford Mountain and Carleton, Bay of Chaleur, also living in the Ristigouche River.

*P. lentus*.—Renfrew and near Montreal.

*P. parvus*.—L'Orignal and Montreal, in marl from Anticosti and several localities in the Eastern Townships; inhabits still water throughout the whole of the Peninsula of Gaspé.

*Physa heterostropha*.—Mississippi River, L'Orignal, neighbourhood of Montreal, Eastern Townships, and along the south-east side of the St. Lawrence below Quebec as far down as Gaspé Bay. They seem to thrive as well and grow to as large a size in Gaspé as anywhere else. I found a few Physas in some shell marl from Anticosti, which appear to belong to this species.

*P. aurea*.—L'Orignal and Carillon on the Ottawa, Lachine Canal, Montreal, and several localities in the County of Rimouski.

*P. ancillaria*.—L'Orignal and near Rimouski village.

*P. elongata*.—L'Orignal, Montreal, Green Island, Metis and Ste. Anne (Gaspé.)

*Limnæa megasoma*.—This fine species was found by Mr. Billings in the Bonnechere River, and by myself in a creek near Hawkesbury Village, where it was rather abundant.

*L. jugularis (stagnalis)*.—Plentiful in many streams and small lakes on the south side of the Ottawa and in the St. Lawrence near Montreal, and extremely abundant in the Metis Lakes in the county of Rimouski.

*L. raperata*.—St. Lawrence near Montreal, and very plentiful in Lake, Matapedia.

*L. umbrosa*.—Common in ponds between Montreal and Lachine,



and near Ste. Anne, (Gaspé) at which place I found an individual having its aperture turned to the left side.

*L. clodes*.—This is by far the most common Linnæa inhabiting stagnant waters in the Ottawa valley and about Montreal, but as it is a variable species, I am uncertain whether it occurs or not among those collected below Quebec.

*L. catascopium*.—Rimouski, Ristigouche and Dartmouth Rivers.

*L. opacina*.—St. Lawrence, between St. Nicolas and St. Antoine; alive and pretty abundant at low tide at Point Levi, in the Metis River above the high fall, Rimouski and White Rivers.

*L. acuta*.—This is the most abundant species in the shell marl from Marl Lake, Anticosti.

*Ancylus rivularis*.—Old quarries near the mile end toll-gate, Montreal.

*Pulidina decisa*.—South Nation River, L'Original, Lachine Canal and St. Helen's Island.

*Melania acuta*.—St. Lawrence, near Montreal and Varennes.

*M. Niagarensis*.—Same localities.

*Ammicola pcrata*.—Occurs in marl from the Lachine railway and Shefford mountain, and was found living in Little Lake, Matapedia (County of Rimouski.)

*Valvata tricarinata*.—Abundant in marl from Philipsburgh, St. Armand and the Lachine railway, and inhabits Lake Matapedia.

*V. sincera*.—Marl Lake, Anticosti.

(Terrestrial.)

*Helix alternata*.—This is perhaps the most widely diffused species of the land snails found in Canada. It occurs abundantly on both sides of the Ottawa, at Montreal, Point Levi opposite Quebec, and down the south-east side of the St. Lawrence into Gaspé, and is common over the whole peninsula as far as my observations extended, at Dalhousie, N.B., and along the Ristigouche River.

*H. albolabris*.—One of the most common species in the Ottawa Valley, at Montreal and Point Levi, but does not extend so far down as the County of Gaspé, having been last observed on the coast of Metis. It was, however, found at Lake Matapedia, 25 miles south-east of Metis, and was extremely abundant at Dalhousie and along the Ristigouche as far up as the mouth of the Patapedia.

*H. monodon*.—Very abundant under stones in pasture fields near L'Original and in the augmentation of Grenville, Montreal mountain, Point Levi under decaying leaves lying on disintegrated shale, but was not found further down the St. Lawrence. Not

having collected a single individual of this species during the previous part of the summer while travelling in the northern part of the district, I was astonished on coming to the Ristigouche to find them in the greatest profusion in many places along that river, as well as at Dalhousie.

*H. exoleta*.—One specimen found on the Ristigouche about five miles above the mouth of the Matapedia.

*H. tridentata*.—Montreal mountain, rare.

*H. concava*.—A few specimens found near L'Orignal and on the Montreal mountain; plentiful at Point Levi.

*H. hortensis*.—It seems scarcely credible that this species has been imported from Europe, considering how widely diffused and vastly numerous it has become along the Lower St. Lawrence. On the main land it was first observed on Mount Commis, about nine miles south of St. Luce and on the coast at Meis, where it was abundant, and below which it seems to occupy the place of *H. albolabris*, but is generally much more numerous. In 1857 I found vast numbers of them on the Brandy Pots and Hare Island in the middle of the St. Lawrence opposite Rivière du Loup. The climate of Gaspé seems to be very favourable to their propagation, as they appear to have spread over the country for a considerable distance inland. The yellow and banded varieties seem to be about equally numerous. Where land has been recently cleared and burnt over, their withered shells may be seen strewn in thousands over the surface of the soil. In the valley of the Marcouin they were observed to extend 12 miles inland, which was farther than at any other place. The height at which the last specimen was found was about 1500 feet above the sea, as indicated by the barometer which we had with us. The young from the size of a grain of duck shot to half that of the adult shell were met with in our journey up this valley in the end of July.

*H. arborea*.—This and the next species are probably the most abundant snails in the Ottawa valley and all along the Lower St. Lawrence from Kamouraska to Gaspé Bay, and in every part of the peninsula which we visited, and also around Lake St. John at the head of the Saguenay. Both these species exist on the Island of Anticosti, as I found specimens of them imbedded in fresh-water shell marl which Mr. Richardson brought from there in 1856. They are amongst the commonest land shells at Montreal and Point Levi, although they may not appear to be so owing to their small size.

*H. striatella*.—Found everywhere with the preceding species.

*H. lineata*.—L'Orignal, Augmentation of Grenville, Carillon, Montreal Mountain, and in many localities along the St. Lawrence from Berthier to Marsoni River, Gaspé.

*H. labyrinthica*.—L'Original, Rivière du Loup (en-bas), Green Island, and a few localities in Gaspé.

*H. pulchella*.—Carillon, Montreal, Berthier, mouth of Magdalen River and Dalhousie.

*H. electrina*.—Carillon.

*H. chersina*.—L'Original, Trois Pistoles, Ste. Anne, Marcouin, Magdalen River and mouth of the Matapedia.

*Bulimus lubricus*.—Montreal, Rivière du Loup, Trois Pistoles, Metis Lakes and Campbellton, mouth of Restigouche River.

*B. harpa*.—Metis, mouth of Magdalen River, and very abundant in the Marsoni valley.

*Vitrina pellucida*.—Rivière du Loup, Trois Pistoles and Ste. Anne.

*Succinea ovalis*.—L'Original, Metis, Matan and Ste. Anne.

*S. avara*.—L'Original, Matan, mouth of Magdalen River, and along the Ristigouche, near the mouth of the Patapedia.

*S. obliqua*.—Abundant in the Ottawa valley, at Montreal, Point Lévi, all along the south-east side of the St. Lawrence from Rivière du Loup to Gaspé, and in nearly every place examined in the interior of the peninsula or on the Ristigouche.

#### *Acephala* (Marine).

*Pholas crispata*.—Dead specimens were found at Bic Harbour, Rimouski, and near the Trent.

*Saxicava rugosa*.—Abundant living in stiff mud at Les Islets and at Ste. Anne in Limestone, nullipore and the roots of a large green sea weed with perforated fronds (*Agarum Turneri*). Empty specimens were collected at Cape Chatte, Marsoni and Grande.

*Mya arenaria*.—Found abundantly in every favourable locality along the whole coast. In ascending the river they gradually become smaller as they approach the fresh water, and probably extend only a short distance above Rivière Ouelle, where, after searching for some time I found only one small living specimen. In the Bay of Chaleur they seem to be as large as on the north coast of Gaspé.

*M. truncata*.—Fresh valves numerous along the shore at Bic, Rimouski and St. Luce. Numbers of fine specimens found at different places between Metis and the Trent; valves dredged at Ste. Anne and Marcouin.

*Glycimeris siliqua*.—Cape Chatte, Ruisseau Vallée and Marcouin.

*Osteodesma hyalina*.—Ste. Anne, several very fine specimens from stomachs of flounders.

*Machaera costata*.—Very common at Rimouski.

*Solen ensis*.—Bic, Rimouski, St. Luce, Cape Chatte, Ste. Anne, and extremely abundant at Grande and Peter Rivers.

*Tellina proxima (calcareo)*.—Ste. Anne, Ruisseau Vallée and Marcouin, stomachs of haddock.

*T. Groenlandica*.—More or less abundant along the whole coast. In 1857 I found this species at Bay St. Paul, on the north-west side of the St. Lawrence only, about 55 miles below Quebec, which is probably the nearest approach of the living marine shells to their fossil ancestors in the Post Pliocene deposits in the Ottawa Valley, some of which are nearly 400 miles distant.

*Maetra ovalis (ponderosa)*.—First met in Bic Harbour, but becomes very abundant at Rimouski, 12 miles farther down. Occurs at Metis and Ste. Anne, and in the coves at the mouths of Marcouin, Glante and Mont Louis Rivers.

*Mesodesma arctatum*.—Dead specimens were found as far up as Green Island, and the first living ones at Bic. This species probably ranks next to *Mytilus edulis*, in abundance along the south-east side of the Lower St. Lawrence. In an ancient sea beach between Metis and the Trent, about 15 feet above the present sea level, these shells are found in heaps and mixed with sand and fragments of other shells, the same as along the present shore. Some imperfect valves were found at Matau in a bed of sand near the top of the 50 feet terrace occurring there.

*Venus mercenaria*.—Specimens in Sir W. E. Logan's collection from the Gulf; occasionally found among oysters from Carraquette.

*V. gemma*.—Very abundant at low tide in coarse sand around the islets between Green Island and the main land.

*Aphrodite Groenlandica*.—Abundant at Bic and Rimouski. At the latter place a fine specimen more than three inches long was procured. Plentiful in flounders stomachs at Metis, Ste. Anne and Ruisseau Vallée.

*Cardium Islandicum*.—A valve was found in Bic Harbour, and another at Rimouski. Common in stomachs of flounders at Metis and Ste. Anne, these shellfish, which were sometimes found alive in their maws, seem to constitute their principal food; their average size was two inches in length.

*Cardita borealis*.—Dredged at Marcouin and found in fishes maws at Capuchin, Ste. Anne and Ruisseau Vallée.

*Astarte sulcata*.—Rare at Bic Harbour, Cape Chatte, Ste. Anne and Ruisseau Vallée, but was one of the commonest shells dredged in 60 fathoms off Marcouin. Among the Marcouin dredgings were a number both of living and dead specimens of a variety or perhaps a distinct species which bear a very close resemblance to *A. Laurentiana*, the common species of the Post Pliocene deposits near Montreal, and which differs in many respects from *A. sulcata*.

*Lucina flexuosa*.—Ste. Anne, Ruisseau Vallée and Marcouin ; stomachs of haddock

*Lima subauriculata*.—One specimen of this rare and beautiful species was found in the stomach of a haddock at Ste. Anne.

*Mytilus edulis*.—Found farthest up the St. Lawrence at Kamouraska and gradually becomes more abundant in descending the river. The largest individual found on the Gaspé coast is  $3\frac{3}{4}$  inches long. In the Bay of Chaleur they are much wider posteriorly than in the St. Lawrence, they resemble the fossil variety, but are generally either straight or concave along the ventral margin.

*Modiola discors* (Linn.) *discrepans* (Lam.)—Ste. Anne, found in great numbers adhering to the roots of large Algae (*Agarum Turneri*) which were thrown up on the beach by a violent storm. As many as a dozen individuals were sometimes attached to the base of the same sea weed, each completely enveloped in its great bissus. Of about 200 specimens which I obtained in this way, the largest is 1 inch,  $5\frac{1}{2}$  lines long and 10 lines high. The large shells are of a very dark colour. Some living specimens were dredged in the Marcouin cove.

*M. plicatula*.—Numerous specimens in Sir W. E. Logan's collection from the Gulf.

*M. Glandula*.—Common in stomachs of flounders and haddock at Ste. Ann, Ruisseau Vallée and Marcouin, and many living specimens were dredged in about 60 fathoms off the latter place.

*M. pectinula*.—Three specimens were obtained among fish offal at Ruisseau Vallée.

*M. nexa*, (Gould).—Ruisseau Vallée, one specimen from same source

*Leda limatula*.—Very abundant in stomachs of flounders and haddock at Capuchin, Ste. Ann, Ruisseau Vallée, Martin and Marcouin Rivers.

*Nucula tenuis*.—Capuchin, Ste. Ann, and Ruisseau Vallée, in stomachs of haddock, rare.

*Pecten Magellanicus*.—Glaude River, Gaspé. Fragments of valves were collected at Ste. Ann and two specimens obtained from fishermen of the same place who brought them from the north shore directly opposite. In 1844 Sir W. E. Logan brought a great number of specimens of this species from the neighbourhood of Cape Gaspé.

*P. Islandicus*.—First occurs near Metis where numbers are frequently found in fishes' stomachs. While at Ste. Ann, I collected upwards of 170 specimens of this species, presenting a great variety of beautiful tints of red and pink colouring, from the stomachs of flounders which the inhabitants had taken when

fishing for cod, and spread on their fields for manure. The fishermen frequently haul up large and beautiful specimens on their hooks with the valves closed on the bait. Some good living specimens were dredged at Marcouin in about 30 fathoms, and they were found in abundance in the stomachs of flounders at all the coves visited on the coast below Ste. Ann. The largest specimen from Ste. Ann is 3 inches and 8 lines in height and there are a number more nearly as large, I have also a specimen from the Island of Anticosti.

*Anomia ephippium*.—Ste. Ann, adhering to the dorsal valves of *Pecten Islandicus*; also dredged at Marcouin.

*Terebratula \* psittacea*.—Common in the stomachs of flounders and haddock at Ste. Ann. At Ruisseau Vallée I procured more than 130 fine specimens of this shell in a spot where there had been a heap of fish offal, but all the soft matter having decayed away, nothing remained but the bones of the fish and the shells which their stomachs had contained. A considerable number of living specimens were dredged in 60 fathoms off the mouth of the Marcouin River. There were also many valves and imperfect specimens in the material dredged here, showing that this species is very plentiful on the Gaspé coast.

Tunicaries of the genus *Assidium* were very common between Cape Chatte and Ste. Ann.

(Fresh Water.)

*Unio radiatus*.—Very abundant in the Ottawa and some of its tributaries from Ottawa City downwards in the Lachine Canal and the St. Lawrence in the vicinity of Montreal. Mr. Billings has a number of specimens of this and the next species from Lake Nipissing.

*U. complanatus*.—Lake Nipissing, Ottawa River, Lachine Canal and the St. Lawrence as far down as Berthier below the Island of Orleans, where the last living specimen was obtained, but valves both of this and the preceding species were very frequently found on the beach all the way down to Gaspé. Abundant in Lake St. John, and said to inhabit the Little River St. Marguerite on the north shore opposite Ste. Ann, Gaspé.

*U. gibbosus*.—Very abundant in the Ottawa at L'Orignal, and on St. Helen's Island, Montreal.

*U. ventricosus*.—Bonchere and Ottawa Rivers, Lachine Canal and St. Lawrence near Montreal.

*U. ellipsis*.—Calibute, (the channel between Calumet Island and the north shore of the Ottawa) and St. Helen's Island.

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\* (*Hypothyris*.)

*U. rectus*.—Culbute, Ottawa near L'Original, Lachine Canal and St. Helen's Island.

*U. alatus*.—Common in Ottawa at L'Original, where I once caught a large specimen with a baited fish-hook in about ten feet of water.

*Margaritana rugosa*.—South Nation River, Lachine Canal and St. Helen's Island.

*M. marginata*.—Culbute and St. Helen's Island.

*M. arcuata (margaritifera)*.—Green and Rimouski Rivers, Lake St. John and both the Matapediac Lakes.

*M. undulata*.—Culbute, L'Original and St. Helen's Island.

*Anodonta subcylindracea*.—Lachine Canal, Grand Lac about 10 miles south of Rimouski, a small lake 6 miles southwest of Grand Metis, Lakes Matapedia and St. John.

*A. pavonia*.—Very abundant in the creek at L'Original and in old quarries near the mile end toll-gate, Montreal.

*A. fluviatilis?*—Ottawa near L'Original and Lachine Canal.

*Cyclus similis*.—Very abundant in the creek at L'Original, Lachine Canal, Metis Lakes and a pond 6 miles S. W. of Metis.

*C. Orbiculata*.—St. Lawrence near Montreal.

*C. Dubia*.—Ottawa City, Carillon, Montreal, Point Levi, Mare Lake Anticosti, Eastern Townships, and throughout the eastern peninsula of Lower Canada.

Besides the above 128 species of recent shells occurring in Canada, there are in the collection of the Geological Survey many more, the names of which have not yet been determined. I hope to be able to give a list of these in a future number of the Naturalist. Principal Dawson has kindly undertaken to name the Tubicolae, Bryozoa, Foraminifera, &c., dredged on the north coast of Gaspé, and will publish a list of them in another number of this magazine.

#### RADIATA.

*Ophiocoma bellis*.—Abundant at Ste. Anne adhering to the roots of *Agarum Turneri*.\*

*Astrophyton scutotum*.—This beautiful species does not seem to be very rare in the Gulf. I was informed by a person at Green Island, who possessed a specimen, that about a dozen of them were found clinging to a chain which had been submerged for some time, at a short distance from the island. A fine specimen from the Gulf in the collection of the Survey is about 16 inches in diameter, and I saw a fresh specimen in the hands of some fishermen who had, however, already disposed of it, which was nearly as large.

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\* An Alga with large perforated fronds.

*Cribella oculata*.—Near Ste. Anne, I found two fine specimens of this species which had just been thrown up by the waves.

*Solaster papposa*.—Rather small specimens dredged at Marcouin in about 30 fathoms.

*Uraster*, ——— ?—The species described by Principal Dawson on page 159 of this volume, and which may be *Asteracanthion Forbesi*, is by far the most abundant starfish on our coast. This is a well marked species and its characters are very constant. Amongst multitudes of them, I have never seen one which had either fewer or more than six rays, although an occasional individual was otherwise deformed. When alive their colour is deep purple above and light straw-colour beneath.

*U. rubens*.—Very abundant near low tide at Les Islets.

*Echinarchinus Atlanticus*.—Very abundant on smooth or muddy bottoms along the whole coast, from Rimouski downwards, and often found in stomachs of cod and haddock.

*Echinus granularis*.—Extremely abundant along the whole coast.

*Cucumaria corumarius*.—Sea Cucumbers, which seem to be identical with this species, were found alive very frequently at low tide about Ste. Anne, and for some miles farther up the coast; but they may have come from the Laminarian zone, as specimens were afterwards dredged in 12 fathoms at the same place.

*Psolus* (?)—A species of this genus is abundant in many places on the coast between Metis and St. Clair. When the black skin covering the scaly arrangement is removed, the whole of the body is of a bright vermilion colour. They seem to differ from *P. phantopus* of Linnaeus, but may be only a variety of that species.

Montreal, 14th May, 1859.

CATALOGUE OF COLEOPTERA COLLECTED BY MR. ROBERT BELL, 1858.

*Cicindela longilabris*, Say.—Green Island Seigniory, between Metis and Lake Matapedia, and Ste. Anne.

“ *vulgaris*, Say.—Ste. Anne, Ruisseau de la Grande Vallée, and between Metis and the mouth of the Matapedia.

“ *duodecimguttata*, Dej.—Metis River, between Metis and the Matapedia, and Ste. Anne.

“ *Baltimorensis*, Herbst. (*repanda*, Say).—Rimouski, Metis River, and Capuchin.

*Brachinus*, (not determined).—Abundant at Metis River.

*Cymindis repleta*, Lec. (*marginata*, Kirby).—Rivière du Loup, Rimouski, Metis, and Matanne.

*Calathus gregarius*, Say.—St. Simon, from the mouth of the Marcouin to the Shick Shock Mountains, 14 miles up that river, and Mount Commis on the Metis.



- Platynus sinuatus*, Dej.—Point Levi, St. Simon, and Marcouin River.  
 “ *extensicollis*, Say.—Metis River.  
 “ *melanarius*, Dej.—Point Levi opposite Quebec.  
 “ *tenuis*, Say.—Berthier and Ste. Anne.  
 “ *cupripenne*, Say.—Point Levi, St. Simon, and Ste. Anne.  
 “ *retractus*, Lec.—Berthier, Rivière du Loup, and Ste. Anne.  
 “ *picipennis*, Kirby, (*lenum*, Lec.)—Berthier, Marcouin River, and between Metis and the Matapedia.  
 “ *lutulentus*, Lec.—Point Levi.  
 “ *placidus*, Say.—Berthier, Matanne, and Ruisseau de la Grande Vallée.
- Facilus lucublandus*, Say.—Very abundant at Point Levi, Berthier, Rivière du Loup, Green Island Village, St. Simon and Metis.
- Pterostictus erythropus*, Dej.—Point Levi.  
 “ *patruelis*, Dej.—Green Island Seigniorie.  
 “ *mandibularis*, Kirby.—Between the mouth of the Marcouin and the Shick Shock Mountains.  
 “ *caudicalis*, Say.—Berthier and Green Island Seigniorie.  
 “ *corvinus*, Lec.—Point Levi.  
 “ *orinomum*, Leach. (*vitreus*, Esch.)—Abundant from Rivière du Loup to Ste. Anne, and Mount Commis on the Metis.  
 “ *Luczotii*, Dej. (var. præc.?)—Metis and Ste. Anne.  
 “ *adjunctus*, Lec.—Rivière du Loup to Ste. Anne.
- Amara libera*, Lec.—Rivière du Loup.  
 “ *pallipes*, Kirby, (*depressa*, Lec.)—Rimouski.  
 “ *impuncticollis*, Say.—Berthier and Ste. Anne.  
 “ *fallax*, Lec.—Green Island Seigniorie and Matanne.  
 “ *interstitialis*, Dej.—Rimouski and Matanne.
- Anisodactylus Harrisii*, Lec. (*agricola*, fide Harris).—Point Levi and Berthier.
- Harpalus viridiæneus*, Beauv.—Very abundant at Green Island Seigniorie, between Metis Lake and the Matapedia, Matanne, and Ste. Anne.  
 “ *pleuriticus*, Kirby.—Abundant from Berthier to Rimouski.  
 “ *megacephalus*, Lec.—Rivière du Loup.  
 “ *rufimanus*, Lec.—St. Anne.
- Chlænus sericeus*, Say.—Point Levi, Berthier, and St. Simon.  
 “ *chlorophanus*, Dej.—Metis River.  
 “ *tricolor*, Dej.—Berthier.
- Cychrus* (*Sphæroderus*) *Brevoortii*, Lec.—Rivière du Loup, St. Simon, Mount Commis, 20 miles up Metis River, Ste. Anne, and Marcouin River.
- Carabus serratus*, Say.—Rivière du Loup to Matanne, and between Metis and the Matapedia River.  
 “ *Lapilayi*, Dej.—Rivière du Loup and Green Island Seigniorie.
- Calosoma calidum*, Fabr.—L'Islet, Rimouski, Metis, Matanne, and Ste. Anne.
- Elaphrus californicus*, Mann. var. *punctatissimus*, Lec.—St. Simon.  
*Patrobus longicornis*, Say.—Berthier, Metis, and mouth of the Matapedia.  
 “ *angicollis*, Randall.—Metis River.
- Bembidium dilatatum*, Lec.—Metis River.  
 “ *lucidum*, Lec.—Point Levi.
- Dytiscus confluens*, Say. (*O. oligbulii*, Kirby.)—Mouth of Metis River.  
*Agabus striatus* (?), Say.—Rivière du Loup, Green Island Seigniorie, and Ste. Anne.

- Necrophorus velutinus*, Fabr.—Metis River.  
*Silpha lapponica*, Herbst.—Very abundant at Ste. Anne.  
*Staphylinus villosus*, Grav.—Rimouski, Metis, Matapedia, and Ste. Anne.  
*Omosila colon*, Fab.—In vast numbers in fields manured with Capelin.  
*Pediacus planus*, Lec.—Between Metis and the Matapedia.  
*Byrrhus picipes*, Kirby.—Ste. Anne.  
*Platycerus depressus*, Lec.—Ste. Anne.  
*Aphodius fossor*, ("absolutely the same as the European," Leconte, in lit.)  
 —Rivière du Loup and Ste. Anne.  
 " *finetarius*, Fabr.—Abundant from Metis to the Matapedia.  
 " *N. sp. (?)*.—Metis.  
*Lachnosterna fusca*, Fröhlich.—Point Levi and Rivière du Loup.  
*Dichelonychu subvittata*, Lec.—Ste. Anne.  
*Ancylochira maculiventris*, Say.—Metis River, and between Metis and the Matapedia.  
*Ellychnia corrusca*, Dej.—Capuchin, Ste. Anne, and Ruisseau de la Grande Vallée.  
*Meloe rugipennis*, Lec.—Between Metis and the mouth of the Matapedia.  
*Serropalpus substriatus*, Hd.—Metis River.  
*Upis reticulata*, Say.—Metis.  
*Tomicus* (not named).—Between Metis and the Matapedia.  
*Physocnemum ligneum*, Fabr.—Green Island Seigniory.  
*Monohammus confusor*, Kirby.—Metis.  
 " *scutellatus*, Say.—Metis and Ste. Anne.  
*Chrysomela scalaris*, Lec.—Metis.  
*Galleruca* (not named).—Between Metis and the Matapedia.  
*Coccinella novemnotata*, Fabr.—Rimouski and Metis.

NOTE.—The species in the above catalogue were most kindly determined for me by Dr. J. L. Leconte, and great confidence may therefore be placed in it. A considerable number of species besides the above were also collected by Mr. Bell, but were unfortunately destroyed on the journey to Philadelphia.

W. S. M. D'URBAN.

CATALOGUE OF LEPIDOPTERA COLLECTED BY MR. ROBERT BELL, 1858.

RHOPALOCERA.

- Papilio Turnus*, Linn.—Extremely abundant at Ste. Anne and along the coast from Cape Chatte to Martin River, from June 18th to the end of July, frequently assembling round muddy places in great numbers.  
*Colias philodice*, Godart.—Abundant at Cape Chatte and Ste. Anne from June 10th to the middle of July. A few were observed between Metis and Lake Matapedia and at Campbellton, at the mouth of the River Ristigouche in August. It was very numerous at the mouth of the Matapedia on 27th August and was last seen on the Ristigouche on 1st September.  
*Pieris oleracea*, Harris.—Observed at St. Simon on May 28th. Common at Ste. Anne from June 20th to the middle of July.

- Limenitis arthemis*, Drury.—One specimen was taken at Ste. Anne on July 10th, and another was observed on Marcouin River July 26th.
- Cynthia cardui*, Linn.—Two specimens only were met with; the first in the Seigniorie of Grand Metis, August 16th. and the second near Dalhousie, N. B., August 25th.
- Vanessa J. album*, Boisduval.—Two specimens taken on the Patapedia River at its junction with the Awaganissis, September 12th.
- “ *antiopa*, Linn.—One specimen taken at Metis, and another near Rimouski, September 29th. It was not observed elsewhere.
- Grapta progne*, Fab.—Frequently met with from Rivière du Loup to Ste. Anne from May 18th to July 19th. Very abundant at Lake Matapedia August 17th, and all along the Ristigouche and Patapedia Rivers up to September 12th.
- “ *C. aureum*, Cramer (?).—One specimen taken at the mouth of the the Awaganissis Brook
- Argynnis aphrodite*, Fab.—First observed at Ste. Anne on the 20th June, and was very abundant there for the next month. It was also observed at the Marcouin River, between Metis and Lake Matapedia, at the mouth of the Matapedia, on the Ristigouche, and lastly, at the mouth of the Awaganissis September 12th.
- “ *Myrina*, Cramer.—Not uncommon at Ste. Anne about the end of June and beginning of July. It was also observed between Metis and Lake Matapedia August 16th.
- “ *Bellona*, Godart.—One specimen at the mouth of the Matapedia River August 27th.
- Melitea Tharos*, Cramer.—A few specimens of this species were taken at Ste. Anne at the beginning of July.
- Polyommatus pseudargiolus*, Boisd.—Numerous at Rivière du Loup May 19th, and from thence to Chatte River June 18th.
- Hesperia* ——— (?).—Numerous about Metis August 13th, and at Lake Matapedia August 17th.

## HETEROCERA.

## BOMBYCINA.

- Orgyia* ——— ————Matapedia River August 20th.
- Ctenucha Latreillana*, Kirby.—In great abundance at Ste. Anne July 20th
- Phragmatobia fuliginosa*, Linn.—Matan June 12th, not common.

## NOCTUINA.

- Manestra* ———.—Ste. Anne.
- Plusia* ———.—Common in Gaspé and on the Ristigouche.

## GEOMETRINA.

Five species of undetermined genera.

## PYRALIDINA.

- Pyralis* (?) ———.—Mouth of the Matapedia River.
- Crambus* ———.—Very abundant in meadows at Ste. Anne, and at the mouth of the Matapedia.

CATALOGUE OF PLANTS COLLECTED BY MR. ROBERT  
BELL, 1858.

*Ranunculaceæ.*

*Anemone Pennsylvanica*, Linn. In full flower August 12th, Metis.

*Thalictrum Cornuti*, Linn. In full flower July 16th, Ste. Anne.

*Ranunculus repens*, Linn. " " " "

" *acris*, Linn. " " " "

" (undetermined). No flower, September 1st, River Ristigouche.

*Caltha palustris*, Linn. In full flower June 5th, Rimouski.

*Aquilegia Canadensis*, Linn. In full flower May 16th, L'Islet.

*Nymphaeaceæ.*

*Nuphar advena*, Ait., (a very small form). In full flower August, West end of Lake Metapedia.

*Sarraceniaceæ.*

*Sarracenia purpurea*, Linn. In full flower June, Ste. Anne.

*Fumariaceæ.*

*Corydalis aurea*, Pursh. In full flower August 30th, Ristigouche River.

*Cruciferae.*

*Sinapis arvensis*, Linn. In full flower July 11th, Ste. Anne.

*Violaceæ.*

*Viola cucullata*, Ait. In full flower May 30th, St. Simon.

*Cistaceæ.*

*Hudsonia tomentosa*, Nutt. In full flower August 31st, River Ristigouche.

*Parnassiaceæ.*

*Parnassia Carolinianum*, Michx. In full flower August 30th.

*Caryophyllaceæ.*

*Silene inflata*, Smith. In full flower July 6th, Ste. Anne.

*Mochringia lateriflora*, Linn. In full flower July 23rd, Portage between Martin and Marcouin rivers.

*Spergula arvensis*, (?) Linn. No flower August 12th, Metis.

*Oxalidaceæ.*

*Oxalis acetosella*, Linn. Very abundant all up the River Marcouin.

" *stricta*, Linn. Going to seed August 30th, River Ristigouche.

*Anacardiaceæ.*

*Rhus Toxicodendron*, Linn. Fruit ripe August 31st, River Ristigouche.

*Sapindaceæ.*

*Acer spicatum*, Linn. Abundant everywhere on low land; just out of flower July 5th, Ste. Anne. In seed Sept. 11th, mouth of the Awaganissis brook.

" *saccharinum*, Wang., (Hard Maple). On rich soil only.

*Leguminosæ.*

*Trifolium repens*, Linn. Abundant round clearings, &c., throughout the district.

*Desmodium Canadense*, D. C. In full flower August 12th and 31st, River Ristigouche.

*Vicia Cracca*, Linn. In full flower July 11th, Ste. Anne.

*Lathyrus palustris*, Linn. In full flower, August 4th, mouth of the Marcouin.

*Oxytropus Lamberti*, (?) Pursh. In full flower August 31st, River Ristigouche.

*Rosaceæ.*

*Prunus pumila*, Linn. Fruit nearly ripe August 31st, River Ristigouche.

" *Pennsylvanica*, Linn. Abundant throughout the counties of Rimouski and Bonaventure.

" *Virginiana*, Linn. Fruit ripe Sept. 1st, River Ristigouche.

*Agrimonia Eupatoria*, Linn. In seed August 21st, Fifteen miles up the River Matapedia.

*Potentilla Anserina*, Linn. In full flower August 4th, mouth of the River Marcouin.

*Fragaria Virginiana*, Ehrhart. Grass land throughout the district. Fruit ripe beginning of July, at Ste. Anne.

*Rubus triflorus*, Rich. Fruit ripe July 12th, Ste. Anne; mouth of the Awaganissis.

" *strigosus*, Miche. Extremely abundant on burnt land and about fences throughout the district.

*Rosa blanda*, Ait. In blossom, July 5th and 20th at Ste. Anne, and August 12th at Metis.

*Cratægus tomentosa*, Linn. River Ristigouche.

*Pyrus Americana*, D. C. Moderately abundant throughout the district.

*Onagraceæ.*

*Epilobium angustifolium*, Linn. In full flower July, 16th Ste. Anne.

" *coloratum*, Muhl. In seed July, three miles up the River Marcouin.

*Oenothera biennis*, Linn. In full flower July 11th, Ste. Anne, and August 30th, mouth of the River Matapedia.

*Circæa alpina*, Linn. In flower July 31st, mouth of the River Marcouin.

*Saxifragaceæ.*

*Mitella nuda*, Linn. Seed ripe July, three miles up the River Marcouin.

*Umbellifereæ.*

*Heracleum lanatum*, Michx. In full flower July 16th, Ste. Anne.

*Sium lineare*, Mich. In full flower August 12th, Metis.

*Cornaceæ.*

*Cornus Canadensis*, Linn. In full flower July 5th, Ste. Anne.

" *stolonifera*, Michx. In full flower June, Ste. Anne.

*Caprifoliaceæ.*

*Linna borealis*, Gronov. In full flower June, Ste. Anne, and abundant everywhere.

*Lonicera ciliata*, Muhl. In fruit July 30th, Marcouin river.

*Diervilla trifida*, Mæneh. In full flower August 30th, River Ristigouche.

*Sambucus Canadensis*, Linn. Abundant on low land.

*Viburnum opulus*, Linn. In full flower July 16th, Ste. Anne.

*Compositæ.*

*Eupatorium purpureum*, Linn. In full flower Sept. 3rd, mouth of the River Patapedia.

" *ageratoides*, Linn. In full flower July 31st, mouth of the River Marcouin, and August 30th, River Ristigouche.

*Aster miser*, Linn., Ait. In full flower August 12th, Metis.

" *simplex*, (?) Willd. " " " " "

" *longifolius*, (?) Lam. " " " " "

*Diplopappus umbellatus*, Torr. and Gr. In full flower June 30th, mouth of the River Matapedia.

- Solidago bicolor*, Linn. Going out of flower August 30th, River Ristigouche.
- “ *Canadensis*, Linn. In full flower August 12th, Metis.
- Achillea Millefolium*, Linn. In full flower July 11th, St. Anne, and mouth of the Awaganissis, September.
- Leucanthemum vulgare*, Lam. In full flower July 4th, Ste. Anne, and August 30th, River Ristigouche.
- Cirsium Muticum*, Michx. In full flower August 30th, mouth of the River Matapedia.
- “ *pumilum* (?), Spreng. Out of flower August 30th, River Ristigouche.
- Hieracium Canadense*, Michx. In full flower August 30th, River Ristigouche.
- Nabalus racemosus*, Hook. (“variety with truncate and obovate leaves,” G. B.) August 30th, River Ristigouche.
- Lobeliaceæ.**
- Lobelia Kalmii*, Linn. In full flower August 30th, River Ristigouche.
- Campanulaceæ.**
- Campanula rotundifolia*, Linn. In full flower August 4th, mouth of the River Marcouin, and Aug. 30th River Ristigouche.
- Ericaceæ.**
- \**Vaccinium Pennsylvanicum*, (?) Lam. In great profusion on hills which have been burnt over.
- Chiogenes hispidula*, Torr. and Gr. In great abundance throughout the district.
- Andromeda polifolia*, Linn. In full flower July 16th, Ste. Anne.
- Pyrola rotundifolia*, Linn. “ “ “ “ “ “
- Plantaginaceæ.**
- Plantago maritima*, Linn. In full flower August 4th, mouth of the River Marcouin.
- Primulaceæ.**
- Primula farinosa*, Linn. Abundant all along the southern shore of the Gulf. In full flower end of May and June.
- Lentibulaceæ.**
- Utricularia vulgaris* (?) Linn. Metis.
- Scrophulariaceæ.**
- Chelone glabra*, Linn. In full flower August 12th, Metis.
- Veronica Americana*, Schweinitz. Nearly out of flower July 12th, Ste. Anne.
- Pedicularis Canadensis*, Linn. In full flower August 10th, Matanne.
- Labiatae.**
- Lycopus Virginicus*, Linn., (a very coarse form). In flower August 30th, River Ristigouche.
- Brunella vulgaris*, Linn. In flower, July 11th. Ste. Anne.
- Scutellaria nervosa*, Pursh. In flower August 12th, Metis.
- Borraginaceæ.**
- Mertensia maritima*, (?) Don. In flower beginning of July, Ste. Anne.
- Apocynaceæ.**
- Apocynum androsæmifolium*, Linn. In full flower August, between Metis and Lake Matapedia.
- Asclepiadaceæ.**
- Asclepias Cornuti*, Decaisne. Abundant all along the Ristigouche.

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\* This Blueberry is very useful to the Micmac Indians, who are said to preserve the fruit in dried cakes for winter use.

*Oleaceæ.*

*Fraxinus sambucifolia*, Lam. (Black Ash). In valleys, and along the shores of the Lakes.

*Polygonaceæ.*

*Rumex Acetosella*, Linn. Coming into flower July 16th, Ste. Anne.

*Urticaceæ.*

*Ulmus Americana*, Linn., (Swamp Elm), Very abundant, and of large size, along the River Ristigouche.

*Cupuliferae.*

*Corylus rostrata*, Ait., (Hazel nut). Marcouin River.

*Betulaceæ.*

*Betula papyracea*, Ait., (White Birch). The most abundant deciduous tree throughout the eastern peninsula, and reaching a large size.

*Betulaceæ.*

*Betula excelsa*, Ait., (Yellow Birch). Most abundant round Lake Matapedia, and in the valleys of the Rivers Marcouin and Ristigouche; generally associated with Hard Maple on rich soil.

*Alnus incana*, Willd., (Alder.) Everywhere bordering the streams and rivers, forming dense thickets.

*Salicaceæ.*

*Populus tremuloides*, Michx. (Common Poplar). Abundant on high lands.

" *balsamifera*, Linn. (Balsam Poplar, Balm of Gilead.) Abundant on the borders of rivers and lakes.

(No Willows were collected).

*Coniferae.*

*Pinus resinosa*, Ait., (Red Pine). Abundant, but of small size, along the upper part of the River Patapedia.

" *strobus*, Linn., (White Pine). Abundant everywhere.

*Abies balsamea*, Marshall, (Balsam Fir). Very abundant.

" *nigra*, Poir., (Black Spruce). Principal and in many places the sole tree covering the hilly country of the eastern peninsula.

" *Alba*, Michx., (White or "Sea Spruce" of the Indians). The commonest tree along the coast and rivers.

*Larix Americana*, Michx., (Tamarack). Rather scarce, but occurring in every variety of situation throughout the district.

*Thuja occidentalis*, Linn., (White Cedar). Very abundant in the valleys of all the rivers, reaching a large diameter, but no great height.

*Taxus baccata*, Linn., var. *Canadensis*, (Ground Hemlock). Abundant amongst trees on low ground.

*Alismaceæ.*

*Sagittaria variabilis*, Engelm. In full flower August 15th, Metis.

*Orchidaceæ.*

*Platanthera flava*, Gray. In full flower September 1st, River Ristigouche.

" *psycodes*, Gray. In full flower August 17th, West end of Lake Matapedia.

*Spiranthes decipiens* (?) Hooker. Coming into flower July 30th, Marcouin river.

*Corallorhiza Macraei*, Gray. Going to seed July 31st, Three miles up the River Marcouin.

*Iridaceæ.*

- Iris versicolor*, Linn. In full flower July 1st, Ste. Anne.  
*Sisyrinchium Bermudiana*, Linn., (variety *noveboracense*, Gray). In flower July 16th, Little St. Anne.

*Smilacaceæ.*

- Trillium erectum*, Linn., (very large). Fruit ripe July 1st, Three miles up the Marcouin river.

*Liliaceæ.*

- Smilacina stellata*, Desf. In full flower June, Ste. Anne.  
 " *bifolia*, Ker. In seed, but not ripe, July 20th, Marcouin river.  
*Clintonia borealis*, Raf. Throughout the district.

*Melanthaceæ.*

- Streptopus roseus*, Michx. In full flower June, Ste. Anne.  
*Tofieldia glutinosa*, Willd. Seed ripe August 30th, River Ristigouche.

*Cyperaceæ.*

- Eriophorum vaginatum*, Linn. Ste. Anne.

*Gramineæ.*

- Phleum pratense*, Linn., (Timothy). Very abundant everywhere.  
*Calamagrostis Canadensis*, Beauv. Shick Shock Mountains.  
*Elymus Canadensis*, Linn. River Ristigouche.  
*Avena striata*, Michx. (*Trisetum purpurascens*, Torr.) Shick Shock Mountains.

*Equisetaceæ.*

- Equisetum pratense*, Ehrh. Metis.

*Filices.*

- Asplenium Felix-fœmina*, R. Br. Mouth of the Awaganissis brook.  
*Aspidium spinulosum*, Swartz. " " " "  
*Osmunda regalis*, Linn. Round Metis Lake, &c.  
*Botrychium Virginicum*, Swartz. Fertile fronds ripe July 23th, River Marcouin.

*Lycopodiaceæ.*

- Lycopodium lucidulum*, Michx. In fruit Sept. 1st, River Ristigouche.  
 " *dendroideum*, Michx. " " " "  
 " *clavatum*, Linn., " " " "  
 " *complanatum*, Linn. " " " "

*Musci.*

- Polytrichum commune*, Linn. }  
*Hypnum splendens*, Hedw. } Collected on the River Marcouin.  
 " *Schreberi*, Willd. }  
 " *Crista-Castrensis*, L. }  
 " *reptile*, Michx. }

*Lichenes.*

- Peltigera aphthosa* (?) Hoffen, infert. }  
*Sticta pulmonaria*, Ach. } River Marcouin.

NOTE.—In drawing up the above Catalogue of Plants, collected by Mr. Robert Bell, in the counties of Rimouski, Gaspé and Bonaventure, in the eastern peninsula of Lower Canada, I derived much assistance from George Baraston, Esq., of the Hon. Hudson's Bay Company, who obligingly determined for me all those species about which I was in doubt. The list, from unavoidable circum-



stances, is not so extensive as could be wished, but it will be found to contain some very interesting species.

It is remarkable that no Oak, White Ash, Basswood, Soft Maple, Beech, Butternut, and Hemlock Fir, were observed in this district.

W. S. M. D'URBAN

Montreal, 14th May, 1859.



