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THE OTTAWA NATURALIST

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Nos. 5 and 6.

THE PURPLE MARTIN.

BY CHARLES MACNAMARA, ARNPRIOR, ONTARIO.

None of the higher forms of our wild life have adapted themselves so readily to the changed conditions brought about by the advent of the white man to America as some of the birds. In general, the culture our ancestors brought from Europe has been destructive of almost all the indigenous animals; most of the mammals are approaching extinction, while of the birds, two or three species are already exterminated, and a number of others are fast disappearing. But in marked contrast to these, a few species of our avian fauna have known not only how to resist our deadly encroachments, but appear in some ways to have actually benefited by the new conditions. One curious illustration of this is afforded by the nest of the chipping sparrow, which nowadays is invariably lined with horsehair. No doubt the bird originally used some vegetable fibre for the purpose, but when horsehair became available it took exclusively to that superior building material.

It is, though, in the choice of a nesting site that the adaptiveness of certain birds is best seen. Besides the several species, such as the robin, the phoebe and the wren, which, while still nesting freely as of old in the fields and woods, often delight us by the confidence with which they build around our houses, there are others that have become almost wholly dependent on man for their domicile. One of these is the chimney swift. In these latter days the swift nearly always glues its curious bracket of dry twigs inside a disused chimney. Very seldom is the bird seen at any distance from a house, and when it is found ranging over the forest, its nest is almost certain to be discovered on the inner wall of a deserted shanty or shed.

Even more dependent on man is the purple martin. Its original practice is disclosed by the fact that, in the western part of its range, where human habitations are rare, it still sometimes nests in cavities in trees. But in the east it looks exclusively to man for accommodation. I have seen it occasionally rearing its brood on some shelf-like

eave or house cornice, but for the most part it relies for its nesting places on man's direct bounty in the shape of boxes or houses specially provided for it, and it has, throughout the eastern United States and Canada, practically forsaken its primitive nesting habit.

For a good many years, I have had a martin house on the gable end of an outbuilding overlooking the square grassy yard at the back of our house. It has accommodation for eleven families, and is usually all taken up every summer. Sometimes in the early spring, before the martins have come, a pair of English sparrows decide that this is just the home they have been looking for, and begin to carry in great quantities of straws, sticks and feathers. Then when the rightful occupants of the house arrive, a fierce battle breaks out and rages for several days, but always ends by the sparrows being evicted, and their nesting material contemptuously cast forth. One year, however, the pertinacity of a particularly obstinate pair of sparrows finally wore out the martins, and the interlopers were permitted to occupy one of the lowest corner apartments. Considering that the whole vast countryside was open to them, the site seemed to be a poor choice for the sparrows, for their sufferance in the house was of the most intolerant description. They were continually harassed by the martins as they passed in and out of their nest, and were never permitted on any account to rest for a single second on the gallery in front of their door. It was comical to see how cautiously they had to approach the house, hopping with great circumspection from roof to roof of the adjoining buildings, and then while still some distance away, dashing straight into their compartment, too quickly for the martins to get a peck at them. But in spite of all their hardships, they managed to rear their young.

It may be worth while here to remark that while the pugnacious English sparrow is often and justly blamed for driving away many of our smaller native birds, it does not always succeed in its nefarious projects in this respect. A friend tells me that a pair of sparrows built this spring in a box in his garden usually occupied by a family of house wrens, and the young sparrows were hatched shortly before the wrens returned from the south. But the wrens were not to be dispossessed so easily. Immediately on their arrival, they opened an attack of such sustained ferocity, that the sparrows were driven off, their nest broken up, and their naked young ruthlessly tumbled out onto the ground.

The purple martins reach Arnprior on their spring migration about the middle of April. The average date for the last six years, as given me by Mr. Ligouri Gormley, is the 14th. But while they may be seen around the town as early as the 9th or 10th, it is a remarkable fact that for five years past, during which I have kept a record, the first of them have—with one exception—always taken up their

quarters in my bird house on the morning of the 19th of April. The exception was in 1916, when they came on the 18th April. But 1916 was a leap year, and it would seem that the martins' calendar ignores the intercalary day of the 29th February—you can scarcely expect birds to go into such refinements in the computation of time, and the day we humans counted in 1916 as the 18th April was really the 19th for them! I feared that this lost day might destroy their subsequent record for punctuality, and I anxiously awaited their arrival in 1917. They had not put in their appearance by the 18th, and as soon as I awoke on the morning of the 19th I hurried to get a view of the bird-house. There to my delight were three tired-looking martins—two glossy blue males and a gray-breasted female,—resting silently on galleries of the house.

But while the first-comers arrive so punctually, it is usually a week or ten days later before the house receives its full complement of tenants. The upper compartments are the preferred ones, and are invariably taken up first. When any are left unoccupied, it is always some on the lower floors. Nesting thus in colonies is not really natural to the martins. While they have been quick to adapt the gregarious habit, they are as yet anything but sociable, and are continually squabbling. A great deal of their lovely liquid warbling that charms us so much is really abuse of the neighbors. Each household is exceedingly jealous of its territorial rights, and instantly resents any encroachment on its part of the verandah, fiercely threatening the trespasser with open bill. Assault soon culminates in battery and the combatants tumble off the gallery, and fight it out in the air. They are decidedly noisy birds, and I can easily understand how annoying a colony of them might be to anyone who is not fond of birds. I remember a visitor who had occupied the "spare room," which looks toward my martin house, asking rather querulously at breakfast, "what are those black birds at the back of the house?" I fear they had kept him awake from some unconscionable hour of the morning. But just as the honest bark of YOUR dog cannot possibly annoy anyone, and it must be the howling of the miserable cur next door that keeps the neighbourhood awake; so to the true bird-lover, the piercing trills and loud warblings of the purple martin are delightful sounds, even at four o'clock in the morning.

The nest consists of a few perfunctory straws, and usually four eggs are laid, the time of incubation being from twelve to fifteen days. One year the female of the pair occupying apartment No. 6 of my house was accidentally killed not long after the breeding season had begun. I felt sorry for the poor widower, and wondered what would become of him. To my surprise, in a few days he had another mate. Whether he had picked up an unattached female somewhere, or had eloped with some one else's wife, I had, of course, no means of know-

ing; but probably there is always an occasional spinster or bachelor bird fated to spend the summer alone unless some such accident as this provides a mate.

Some of the birds meet their affinities much sooner than others, for the first young of the colony are out two weeks before the last broods are hatched. By the first of July most of the doors are crowded with little heads, and the whole front of the house blossoms suddenly with enormous yellow mouths whenever an old bird sweeps in with its beak full of insects. Numerous counts made at different times of the day during the first two weeks of July, 1917, showed that, with remarkable regularity, a parent arrived with food every thirty seconds. This year nine pairs occupied the house, and assuming that each pair had four young, and that they were fed in turn, then each nestling was fed every eighteen minutes. A similar count for a whole day, from 4 a. m. to 8 p. m., cited in Chapman's Handbook of Birds of Eastern North America, when reduced to the same basis as my results, gives a feeding every twenty minutes. This is the colony's busiest time, and the strain begins to tell on the old birds, their glossy plumage becoming dishevelled and soiled. As the young grow up however, they are not fed so often. After the middle of July the pace slackens considerably, and the old birds have more time to sit around on the verandahs and nearby trees, and gossip and scold.

The martins usually fly high but they do not hunt far afield, and my colony can generally be seen hawking within a radius of a quarter of a mile from their home. They appear to find ample food in this comparatively small area,—an indication of the large number of insects that must frequent the upper air. A considerable proportion of their prey seems to consist of dragon flies. Now the purple martin stands very high in the list of birds useful to mankind, but in destroying the rapacious and carnivorous dragon fly, it cannot be said to be conferring any favor on us. The truth is, in order to determine the value of any species of bird to man, it is necessary to open an account with it, debiting it on the one side with the beneficial insects it consumes, or the toll it levies on our vegetables or cultivated fruits, and crediting it on the other side with the noxious insects or weed seeds it destroys. When this is done, very few birds will be found without a large balance to the good; and I doubt if we should be able to refuse even the cheque of the English sparrow with the excuse of "no funds."

Besides the supply of food to the young, a very important duty of the parents is the removal of excremental matter from the nest. As they leave after feeding their brood, they almost always carry away a dropping enclosed in its gelatinous sac, generally conveying it some distance from the nest, but sometimes letting it fall alarmingly close to the inoffensive observer. Once or twice a mother was seen to dispose

of the morsel by swallowing it; a higher example of maternal devotion would be hard to find.

One purple martin looks very much like another, and it is, of course, on their essential resemblances that the species is founded. But the close study of any species of animal always discloses more or less marked differences between individuals, not only in structure and appearance, but in temperament also. It is said that individuality can be noticed in creatures as low in the scale of life as the annelids, and that earthworms display marked idiosyncrasies of conduct. If this be true, we may confidently look for decided variations in the mental traits of purple martins, and an incident I observed this year seems to confirm the expectation.

The guiding principle of the purple martin ethic is a virulent family egoism. Charity both begins and ends at home, and all there ever is to spare for a neighbour is a peck or a curse. But while watching the young birds being fed, I remarked an astonishing exception to this rule. On three different occasions, the father of apartment No. 5 was seen, after he had rammed a few insects into the gaping mouths of his own offspring, to bestow the rest of his beakful on the young of apartment No. 4 next door, who, in the general habit of all young martins, always reached out long eager necks and clamored for food when they saw their youthful neighbours being fed. This behaviour of father No. 5 was unique. Not the smallest spark of generosity was ever seen to warm the frigid selfishness of any of the others; and the question is: did this action presage the dawn of a martin altruism, or was father No. 5 merely too stupid to distinguish his neighbour's young from his own? Optimists will adopt the first alternative, pessimists the last.

Shortly after the middle of July, some of the young begin to creep out onto the verandah; and now it becomes plain that my bird-house, although built on an approved plan, does not sufficiently imitate the deep cavities in trees that are the birds' natural habitations. For the adventurous nestlings, crawling out too soon from the shallow cabins of the house, accidentally tumble off the verandahs, or launch out before they can fly properly and come piteously to the ground, where they fall an easy prey to prowling cats. We always keep a lookout for these rash youngsters, and either put them back into their nest, or if they are nearly fledged, place them on the branch of a tree, where the old birds feed them for a day or two until they can fly. But in spite of all our care, the cats get four or five of them every year.

As soon as the fledglings can take the wing, the whole family leaves the house for good, and during the rest of the season spends the nights in the tree tops. By the first of August all are flown, and the house is empty. For about three weeks after this they may still be seen hawking in flocks of four or five—probably family groups—and

continually calling to one another with plaintive notes. Rarely a pair may pay a flying visit to the house, and sit and warble a minute on the galleries as of old. But towards the end of August the whole tribe leaves for the palms and temples of Central America, and the martin house is silent and deserted for another year.

ALBERNI NOTES (BOTANY).

By J. K. HENRY, VANCOUVER, B.C.

The purpose of this paper is to indicate, rather than to discuss in any fullness, the floral riches of the very interesting district between Cameron Lake and Anderson Lake, Vancouver Is.; to make a small contribution to Mr. J. M. Macoun's "Addition to the Flora of Vancouver Island"; and to describe a few new forms. It is not supposed that all the plants in the brief lists are now collected for the first time, though with the exception of those in the first two lists, they have either not been definitely listed, or have been referred to other species. The grasses were determined for me by Prof. A. S. Hitchcock and the sedges by Mr. K. K. MacKenzie.

Alberni, (Lat. 49° 15' N.) which lies in the centre of the district, unites north and south alpine and maritime, in its flora. Here, as Prof. John Macoun discovered years ago, is the northernmost station of *Lilaea subulata* H.B.K. and *Juncus supiniformis* Engelm., both of which occur in California but not in Washington. Not very distant, at Ucluelet, is the southernmost station of *Vaccinium Vitis-Idaea* L., a distinctively northern plant.

The following alpine or sub-alpine plants occur practically at sea-level (below an altitude of 200 ft.):—

Listera caurina Piper, Alberni, (W. R. Carter and J. K. Henry).

Tiarella laciniata Hook. Alberni, (W. R. Carter).

Epilobium lactiflorum Reich. Anderson Lake, (W. A. Newcombe).

Pedicularis racemosa Dougl. Hidden Lake, (W. R. Carter).

Phlox diffusa Hook. Anderson Lake, (W. A. Newcombe).

Arnica latifolia Bong. Anderson Lake.

Erigeron sahsuginosus Gray. Anderson Lake.

The following plants, (the list is merely suggestive) mostly rare or not often seen in southern British Columbia, occur at Alberni or in its neighborhood:—

Isoetes Nuttallii A. Br. (Cat. Can. Pl.)

I. maritima Underw. (Cat. Can. Pl.)

Limosella tenuifolia Wolf

- Montia Chamissoi* (Ledeb.) D. & J.
Pleuricospora fimbriolata Gray, (W. R. Carter).
Newberrya congesta, Mt. Arrowsmith, (W. R. Carter).
Subularia aquatica L. (Cat. Can. Pl.)
Erythronium Smithii Hook.

Verbena hastata L. (W. R. Carter).
Elatine americana (Pursh) Arn. (Dr. C. F. Newcombe).

The following plants not hitherto reported from Vancouver Island have been recently collected by Mr. W. R. Carter:—

**Corydalis Scouleri* Hook. Nitinat, Ap. 28, 1915. Det. by Dr. C. F. Newcombe. New to Canada.

**Pedicularis ornithorhyncha* Benth. Mt. Arrowsmith, July 24, 1915. Det. by Dr. C. F. Newcombe. New to Canada.

Apocynum cannabinum, (The form sometimes distinguished as *A. Suksdorfii*) Cameron Lake.

Potentilla dissecta Pursh. var. *glaucophylla* S. Wats. Mt. Arrowsmith.

Antennaria parvifolia Nutt. (?) Mt. Arrowsmith. Differs from the common B. C. form in its yellowish, but acute, tegules.

Erigeron salsuginosus Gray, var. *angustifolius* Gray. Mt. Arrowsmith (?)

Mitella caulescens Nutt. Alberni.

Prunella vulgaris L. var. *lanceolata* forma *candida* Fernald Port Alberni. Not rare.

Euphorbia hirsuta (Torr.) Wiegand. Sproat Lake; introduced.

Lythrum Salicaria L. var. *tomentosum* (Mill) DC. Salt marsh, Alberni; introduced.

Trifolium arvense L. Englishman's River; introduced.

Hypopitys brevis Small. Beaufort Range. Distinguished from *H. Hypopitys* L. by the strongly funnel-form stigmas which seem to characterize all our western species.

The following plants were collected by the writer near Alberni in June, 1916.—

Melica Smithii (Porter) Vasey. Alberni.

Melica Geyeri Munro. Alberni. The range of this grass is said to be California to Oregon. If it occurs in Washington, it has not yet found its way into the floras.

Glyceria leptostachya Buckl. Alberni.

Carex obnupta Bailey. A little-known plant in southern B.C.; differing from *C. magnifica* Dewey (*C. sitchensis* of authors) in its more slender spikes. Low ground, Port Alberni, apparently rare.

Carex praticola Rydb. Dry woods, Alberni.

*Dr. C. F. Newcombe informs me that both of these plants were collected by Mr. J. M. Macoun during the season of 1915 at possibly earlier dates. The *Pedicularis* was also collected in 1915 on the mountains near Squamish.

Carex feta Bailey. Plentiful on the cleared townsite, Port Alberni.
Montia diffusa (Nutt.) Wolf. A few plants only, to which my attention was directed by Miss M. E. St. G. Mahaffy, M.A., perhaps introduced.

Viola pallens (Banks) Brainerd. Hidden Lake; fruiting plants only, but matching specimens from Vancouver city so det. by Prof. Brainerd. Our western plant differs from the eastern in its smaller size and brown seeds.

Limosella tenuifolia Wolf. With *Lilaea subulata* near the mouth of the Somas River; best distinguished from *L. aquatica* by its much stouter petioles and slightly fleshy blades.

Veronica scutellata L. var. *villosa* Schum. Stems densely soft-pubescent (not pilose). This var., according to Gray's New Manual, is introd. in Eastern America. It is undoubtedly native at Alberni and probably so at New Westminster. Det. by Prof. Macbride of the Gray Herbarium.

Sisyrinchium segetum Bicknell. Somas River above the falls: Cameron Lake. (W. R. Carter).

Castilleja Dixonii Fernald. Salt marshes, Prince Rupert to Wn. Merely a thick-leaved halophytic form of *C. miniata* Dougl.

Grindelia oregana Gray and the var. *Wilkesiana* Piper. Salt marshes, Alberni Canal.

Variation is very marked in the plants of the West Coast. Mr. Carter showed me the following albinos.—

Allium cernuum Roth;

Camassia quamash Greene;

Calypso bulbosa (L.) Oakes;

Rubus spectabilis Pursh;

Ribes Lobbii Gray;

Gentiana sceptrum Griseb.

And the following with double flowers.—

Rubus spectabilis Pursh;

Rubus macropetalus Dougl.;

Trillium ovatum Pursh;

Claytonia lanceolata Pursh.

Most of these variations are rare and only call for passing notice. Color variations are, however, as Prof. Macbride has recently pointed out, of great interest to the collector, and, when not uncommon, deserving of recognition. The following may be noted.—

Allium cernuum Roth. forma *alba* f.n. Perianth white. Mt. Arrowsmith where it has been collected on several occasions by Mr. W. R. Carter.

Veronica americana L. forma *rosea* f.n. Corolla pink. Port Alberni; not uncommon at Crescent, B.C. (near Blaine, Wn.) A striking form always clearly distinct from the species.

Camassia quamash Green forma *albiflora* f.n. Perianth white. Common, brackish marshes, Alberni; rare about Victoria; also in Wn.

The following new varieties and species may be noted:—

Erigeron philadelphicus L. var *glabra* v.n. Plants 2-7 dm high; stems nearly glabrous or somewhat hirsute; leaves thick, nearly or quite glabrous, denticulate to sinuate-denticulate; tegules sometimes purple-tipped, not hirsute. Salt marshes, Murdoch's Landing and Alberni. It bears much the same relation to the species as *Castilleja Dixonii* Fernald to *C. miniata* Dougl.; i.e., it is probably a holophytic form. It differs mainly from the species in its thick glabrous or glabrate leaves.

Aster Carteriana s.n. Stem slender, usually leafy to the top, rather softly herbaceous especially above, 2-6 dm. high, simple or usually with 3-6 comparatively long erect branches each terminating in a solitary head; the short pubescence of the stem uniform above, in lines below; leaves usually entire, sometimes serrate at the middle, very thin, glabrous except for occasional ciliation at the base and the single scabrous-ciliolate line on the margins, rather dark-green, narrowly oblong or narrowly lanceolate, the largest 7-12 cm. long and 5-7 mm. wide, mostly slightly narrowed to a sessile base, the apex pungently indurated, the lowest more or less withered at flowering and some of them somewhat petioled; heads 3.5-5 cm. broad, the tegules usually very leafy and often exceeding the rays, like the leaves in texture margin and apex, but also often smaller, 6-9 mm. long, erect subequal, more or less scarious towards the base, loosely imbricated, lanceolate, glabrous except on the short-ciliolate margin, apex pungently tipped; rays blue, the limb 15-20 mm. long; pappus brownish-white; achenes very pubescent. Common along the outer edge of stony and gravelly shores, Cameron and Horne Lakes, Vancouver Island; W. R. Carter's Nos. 225, 226, Sept., 1916. Distinguished from such related forms as *A. foliaceus* (Gray) Howell, and *A. Douglasii* Lindl. by its solitary heads at the end of the long erect branches, the lower habit, the thinner leaves, the often more foliaceous tegules, and the longer rays; in foliage not unlike *A. microlonchus* Greene, from which it differs in the smooth leaf-surface, the much longer rays, and the very different tegules; nearest *A. Douglasii*, but with a different habitat, thinner leaves, larger heads, etc.

The following changes in nomenclature are suggested:—

Allium Watsoni Howell (*A. vancouverense* Macoun, Cat. Can. Pl. iv. 39). Through the kindness of Prof. A. R. Sweetser, of the University of Oregon, I have been able to compare the plants which have borne the above names. As the flowers of the Mt. Arrowsmith plants were young and those of the Oregon plant mature, the former, in their slightly longer and narrower perianth-segments, seemed at first sight to be different; but a few more mature flowers showed no essential

difference. The plants have the same general appearance. They are clearly distinct from *A. falciforme* not only in their more slender habit and smaller flowers, but in having stamens about two-thirds as long as the perianth-segments; whereas in *A. falciforme* the stamens are less than one-half as long as the segments. As unfortunately Prof. Macoun never published a description of *A. vancouverense*, this name must be replaced by *A. Watsoni* Howell.* Another species is thus added to the short list of plants found in Oregon and Vancouver Island but not in Washington.

Sisyrinchium idahoense Bicknell var. *birameum* (Piper) New Comb. Usually taller than the species; branching above the two branches subtended by a leaf, or the stem often strongly geniculate with a leaf at the joint; the bracts, as compared with those of the species, often subequal.

When Prof. Piper first published his *S. birameum* (Contrib. U.S. Nat. Herb. vol. xi., pg. 203) he was doubtful whether it was distinct from *S. idahoense*; but in a recent book his doubts have disappeared and it is placed on an equality with that species. That it is, however, a variety appears from the following observations based on Alberni plants: The plants are intimately associated. Straight leafless stems, straight stems with a single leaf above, geniculate stems with a leaf at the joint, and branching stems all grow together. Branching and simple stems may occur in a single tuft. All the forms have the same tendency to darken in drying. While the bracts of the branching forms are often subequal, they may also be very unequal (24 and 44 mm. in one specimen and 23 and 38 mm. in another). The leaves of unbranched plants may be as long as the stem and of branching hardly half as long.

CANADA AND UNITED STATES WILL PROTECT BIRDS.

The International Convention for the protection of migratory birds in Canada and the United States, ratified in December last, constitutes the most important and far-reaching measure ever taken in the history of bird protection. It affords the best means of ensuring not only a cessation of the decrease in the numbers of our migratory birds such as the insectivorous birds, the wild-fowl, waders and sea birds, but, in many cases, it assures an increase in their numbers, which have been ruthlessly depleted. It affects over 1,000 species of our chief insect-eating and game birds. It guarantees to the farmer the continued existence of the insect-eating birds, the most powerful

*Prof. Sweetser, to whom I sent specimens of the Mt. Arrowsmith plant, writes: "From what we have been able to do with it, should say you are justified in thinking this the same form as *A. Watsoni* Howell."

and active allies he has in the fight against the destroyers of his crops; and it guarantees to the sportsmen a never-failing supply of ducks, geese, and other game birds.

In the fulfilment of its obligations under the Convention, the Canadian Government introduced the Migratory Birds Convention Bill to carry out the provisions of the Convention, and this measure received Royal Assent on August 31st, and is now law. It is expected that the Regulations under the Act will shortly be promulgated.

In the case of insectivorous birds, it will be unlawful to kill them or to take their eggs at any time of the year. The close seasons on ducks and geese will not exceed three and one-half months, and the dates of opening and closing will be fixed in accordance with local conditions and after consultation with the proper authorities in the different provinces. On a number of birds, such as the cranes, swans, curlew and most of the shore-birds, with the exception of woodcock, snipe, certain plover and yellow-legs, which are becoming greatly reduced in numbers, a close season of ten years will be provided. The wood duck and eider duck will also be given special protection. Where they are injurious to agricultural or other interests, provision will be made for the killing of protected birds under special permit. Regulations will also be made to prohibit the shipment of migratory birds or their eggs during the close seasons and generally to govern the traffic in them and their eggs.

While the numbers of the migratory birds in Canada and the United States have been most seriously depleted by various causes, confidence is felt that, with international co-operation, and, particularly, the prohibition of spring shooting, a gradual increase in the abundance of our wild bird life will take place.—C.G. H.

THE WIDESPREAD INFLUENCE OF THE CHILDREN'S MUSEUM.

There are indications that men and women of the United States and of several foreign countries are becoming more and more interested in the establishment of Children's Museums. And if the results which in the past have followed similar manifestations of interest can be regarded as indicative of things to come, there is reason to believe that a good many such institutions will be added to the fraternities of Museums within the next ten years.

The Children's Museum of Boston, founded in 1912, had been in the minds of a considerable number of public spirited Bostonians for several years before it became an actual fact. Similarly the Children's Museum which is soon to become a part of the new Cleveland Museum of Art, has been contemplated by the Director of the

Museum and other citizens of Cleveland for more than three years. And now the Municipal Museum in Wellington, New Zealand, having followed through the British Journals the progress of Children's Museum development in the United States, has taken its initial step towards a Museum for children by discontinuing its organization for adults and perfecting plans for reopening as a Children's Museum when the war ceases.

From no less than five different parts of the United States, men and women are now calling upon the staff of the Brooklyn Children's Museum for information to be used for arousing interest in the establishment of other Children's Museums. In one city a building has been secured and funds are being raised for the organization of a permanent Museum Association. Prominent citizens of another city have asked officers of the Brooklyn Children's Museum to outline a plan of Children's Museum work that can be immediately started in a building recently obtained for the purpose. For another locality they have submitted floor plans of a new Children's Museum Building together with a written outline of the character and scope of work which could be profitably undertaken.

More significant possibly than any other indication, is the fact that college students are presenting for class discussion original essays dealing with the conditions and progress of Children's Museums. Indeed, the subject has become of sufficient importance to cause one college to write for information concerning the requirements of training and preparation for college students who desire to engage in Children's Museum work.

HARLAN I. SMITH.

NOTES FROM THE JOURNAL OF WILLIAM POPE.

In 1833, Mr. William Pope left England for Canada and after spending some time investigating the counties of Elgin and Norfolk, he made his home near Port Ryerse.

Through the kindness of his grandson Mr. Thomas Pope, of that village, I am permitted to make extracts from his writings.

The journal and diary which have come into my hands cover a period of less than two years, but they throw a great deal of light upon the conditions among the wild things in those days.

W. E. SAUNDERS.

Having determined on paying a visit to America with the intention of settling in Canada provided I liked the country and found things as prosperous and flourishing as they are represented to be, I engaged a berth in the packet ship Ontario (500 tons, Captain Sebor)

lying in St. Katherins Docks and for which said berth I paid 35 guineas. Accordingly on Good Friday, 28th March, we left the City and were towed down the River by two steamers as far as the Hope where we cast anchor for the night.

We had rather boisterous and contrary winds for two days in passing the Downs, which helped to break me in a little for the sea, and I suffered in common with the rest of the passengers, the greater part never having been to sea before.

We touched at Portsmouth on the 31st and arrived at Plymouth in the evening of the same day. We stayed all night here and departed on the next day about 12, the wind being quite favorable.

About ten miles from land a little bird called the Titlark came flying around the ship. I saw a great many white gulls and several species of divers. On the 2nd April we met the *Lady Melville*, East Indiaman, returning home. We passed within a quarter of a mile of the Eddystone Lighthouse and the same evening after running by the Lizard at the rate of ten knots an hour we bade farewell to Old England, upon whose weather beaten cliffs I stood gazing with a last lingering look until they disappeared in the distance.

We now had for several days a most favorable breeze chiefly going at the rate of 9 or 10 knots an hour, which is considered very good sailing. On the 7th a couple of Martins came to the ship and settled on the rigging. They stayed some time with us and left during the night. They were evidently on their route to some northern clime. On the 9th we spoke the *Brig Merope*, of Poole, bound for Quebec.

On the 10th we met with three of those magnificent though dangerous pieces of ice called icebergs. Two we saw in the morning, one of which was very similar in shape to Westminster Abbey, though far exceeding it in magnitude. The other we passed about ten o'clock at night, Lat. 44-6, Lon. 44-28. They are beautiful in the extreme when the sun is shining on them giving them most splendid colors, such as would defy all the powers of art to imitate, tints of the richest blue and green contrasted with the purest white. I was much gratified at the sight. They have a very great influence on the atmosphere in their immediate neighborhood, causing a great degree of coldness, as was sufficiently proved in this instance by the thermometer falling 6°. It is from this fact that navigators are able to judge of their vicinity in thick cloudy or foggy weather.

Up to this time the wind was very favorable, so much so that if it had only continued for four days more we should have been at New York and should have made the quickest passage ever known. We should have made it in thirteen days. We were all now in the highest glee, looking forward to the speedy termination of our voyage and discomforts but alas! all our hopes and prospects were suddenly overturned. We were not destined to be so lucky as to make our way

across the trackless Atlantic without encountering a little of the rage and fury of its deceitful bosom. On the evening of the 10th, the day we saw the icebergs the atmosphere became overclouded and the wind after shifting round to the north-west began to blow rather stormy.

There was now every appearance of bad weather approaching and indeed before morning the wind from blowing hard increased to a regular gale, and for the space of eighteen days we scarcely did anything else than beat about against contrary winds, and a most tremendous sea running "mountains high." I have known the winds to blow pretty hard on land sometimes, but here out on the open sea with nothing to break its force, it came with tenfold the power it has on land. Several times we were obliged to have every sail furled and even then the naked masts would bend like reeds.

On the 28th April it blew a most tremendous gale, with thunder and lightning and very heavy hail, but our vessel rode it out in gallant style, hardly shipping any water except in the evening through the fault of the man at the helm, who contrived to run the head of the vessel into an immense wave which overflowed the whole of the deck, set the water casks afloat, and sent a few hogsheads down the fore hatch which happened to be left open, frightening and drenching some of the steerage people. In the evening of this day I beheld a very beautiful meteor in the south-east. It was of a bright blue colour at first and after running a short course in the heavens gradually faded into red and then vanished. We constantly had the bird called the Stormy Petrel, by the sailors Mother Carey's Chicken, following in the wake of our ship; sometimes making short trips on the ocean skimming up and down the surface of the water, rising and sinking with the waves, and then returning back again to the stern of the vessel. This bird had a great resemblance to the martin and might easily be mistaken for that bird. Their manner of flying is very much the same. They are of a dark brown color, shaded with black on the back and wings, and a pure white on the rump. They follow in the wake of the vessel for the purpose of picking up any bits of bread or biscuit or any grease that may be thrown overboard. They are very easily caught with a piece of dark coloured string and a small hook baited with a piece of pork, or another way is merely to tie a small piece of wood at the end of a black thread and let it drag after the vessel. The birds come flying around the wood to see what it is doing; they fly against the thread and entangle their wings and you have only to pull them in, but they are harmless little creatures and no use after you get them, so that catching them would not do for me. According to the sailors they are the constant forerunners of a storm but we had them more or less the greater part of the voyage, and for two or three days

(To be continued).

NOTES.

DEER MOUSE DEVOURS HER YOUNG.—On September 8th. while hunting Batrachians, my friend Johnson and I turned a six foot log exposing two Jefferson's Salamanders and the nest of a White-footed Mouse.

The White-footed mother, leaving in haste, dragged two of her five pink, blind and hairless young a foot or so from the nest. We replaced them and put the log back in position.

Passing that way two days later, we again turned the log and were surprised to find only three young mice, the other two having totally disappeared. We captured the mother and placed her with the nest and three young in a covered aquarium with plenty of food and water. The following morning the young were gone, without doubt devoured by the mother, who evidently considered them contaminated by the human touch.

Johnson, who has had considerable experience in pet raising, states that ferret, white rat and domestic rabbit females will sometimes eat their young if the nest is disturbed even very slightly.

CLYDE L. PATCH, OTTAWA.

KILLING BIRDS HELPS THE ENEMY.—Killing birds that eat insects and weed seeds helps the enemy. The annual food loss in the United States from the ravages of insects on crops, according to the U. S. Department of Agriculture, exceeds \$1,200,000,000. The loss in Canada is in proportion. Every careless person who kills a bird that is less injurious than it is valuable as an eater of weed seeds and insects is helping the enemy by killing our bird allies and by so doing is giving aid and comfort to the weeds and insects that reduce our food supply. Most of our birds are of this beneficial class and are really our allies. Robbing their nests is also an aid to the enemy. One can hardly go into the country without seeing boys and even men killing birds. Doubtless many of these persons would be surprised to know they were practical traitors and would gladly stop aiding the enemy if they knew it.

A large number of utterly fearless wild ducks are reported near Niagara. In one swamp along a brick highway where hundreds of autos pass daily and trolley cars run every 15 minutes, there have been 500 ducks for a month and they come up to this roadway to feed. Such a sight has not been seen in the region at least for years and the residents would pity any one who would molest the ducks. This is due to the Migratory Bird Law, and the recently arranged treaty between Canada and the United States.

The Buffalo Boy Scouts' Council has started a wild life club, the members of which are pledged to do a good turn for the wild creatures of field and forest. A bronze button will be given the boys on qualifying for membership and, as they progress, silver and gold buttons will be awarded. When the plan is perfected it will be offered to the National Council with the hope that it will be adopted by the entire membership of the Boy Scouts, which exceeds 200,000. Some of the boys are giving illustrated talks in the schools on the value of wild life and the best means of protecting it.

The startling statement by no less an authority than Dr. C. K. Clarke, Superintendent of the Toronto General Hospital, that more than 12 per cent. of the patients admitted to the public wards of that institution have syphilis, is the feature of the eighth annual report of the Commission of Conservation just issued. These conditions, it is pointed out, are no doubt representative of those prevailing elsewhere in Canada where statistics are not yet available. The return of thousands of soldiers at the end of the war lends more than usual interest to this feature of the Commission's report. Other phases of the subject, including measures for controlling the menace, are discussed by Drs. J. J. Mackenzie, C. H. Hair, and Wm. Goldie, of the Faculty of Medicine, University of Toronto.

An address on The Production and Preservation of Food Supplies, by Dr. P. H. Bryce, gives tables showing the relative values of different foods. Results of experiments by the Commission at Port Dover, Ont., in utilizing fish waste in the manufacture of stock meal, oils and fertilizer, are set forth, whilst Drs. H. J. Wheeler and Frank T. Shutt make interesting contributions on the use of commercial fertilizers. In addition, a readable account is given of the varied activities of the Commission, including town-planning, game preservation, water-powers, agriculture, mining and general publicity work.

The Comstock Printing Company of Ithaca, N.Y., recently published a most interesting volume of 438 pages entitled "The Life of Inland Waters." This book, the price of which is \$3.00, is an elementary text of fresh-water biology for American Students. The authors are James G. Needham and J. T. Lloyd. This book is divided into seven chapters: I. Introduction; II. The Nature of Aquatic Environment; III. Types of Aquatic Environment; IV. Aquatic Organisms; V. Adjustment to Conditions of Aquatic Life; VI. Aquatic Societies; VII. Inland Water Culture. There are 244 text figures.

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