his results have proved of such permanent and immediate value

to agriculturists.

Ville established the value of artificial fertilizers in keeping up the fertility of soil. By trial-plot and vegetative experiments carried on in pots, he was able to demonstrate to the eye the effect, on certain soils and with certain crops, of suitable forms of nitrogen, phosphoric acid, potash and lime on plant growth, This method of making the crops show the deficiencies, or otherwise, in plant food—or, as it has been tersely put, "making the plant analyse the soil," is now recognized as the only infallible guide to rational and economic manuring—and it is in vogue wherever progress in farming is being made.

Professor Ville was born at Port Saint Esprit in 1824, and at the time of his death occupied the Chair of Vegetable Physiology in the Muséum d'Histoire Naturelle, Jardin des Plantes. He has been called the Lavoisier of Agriculture, for what that great man did for chemistry that did Ville for scientific agriculture. He has introduced exactness; he has explained underlying principles; he has illustrated in the most graphic ways the truths of agriculture. In this way Ville has helped farmers to help themselves, for he has shown them how their work may be

carried on with true economy.

His published works are many and cover many of the branches of modern agriculture. Certainly one of his chief is "L'Analyse de la Terre par les Plantes," a classical work, giving the results of many years' careful investigation in pot experiments with various fertilizers.—F. T. S.

Notes for the Month of March, Ottawa, 1897.

By H. B. SMALL, Esq.

Although March set in exceedingly cold, the generality of of the month was marked with faulty high temperature. More snow, however, fell in this district than all through the previous part of the winter. Spring birds arrived earlier than usual.

Crows.—On 6th instant, first flight of crows passed over. Although some of these birds winter around the Experimental Farm and the slaughter-houses up the Rideau river, they do not seem to extend their flight till the mild weather evidences itself, when they apparently wing their way to the ice on the Ottawa

river, where they find abundant food in the refuse deposited there.

Song sparrow.—This bird seldom appears before the 27th instant, but one was heard and afterwards seen by three different people on 18th instant, in a garden between Wilbrod and Theodore streets. In 1894 this bird was seen on March 11th, in 1895 on April 3rd, in 1896 on April 10th. Its advent depends on the weather south, and this year a warm south wind had been blowing two days and nights prior to its appearance.

Robins.—The first reliable appearance of this bird was on March 22nd, on a telegraph wire on Theodore street where it was in full song. It was reported as seen on the Glebe property, Mutchmor street, a few days prior to this, but it may have been a shrike which was mistaken for it, as my informant said it was

chasing sparrows.

Thunder.—On 20th instant the first thunder shower occurred at 3 p.m., two vivid flashes of lightning and heavy peals of thunder being noticed, with a heavy down-pour like a summer shower.

Earthquake,—A heavy earthquake shock was experienced at 6 h. 2 m. p.m., felt east as far as Father Point and west in the Kingston district. Montreal seems to have felt the heaviest shock.

Grossbeak.—An unusually large number of these birds, known in England as the Hawfinch, have visited Ottawa during February and March, the attraction apparently being the abundant berries of the mountain ash, as that tree has been largely planted in grounds surrounding public buildings, and the trees are gaining maturity, the crop of berries is larger than in former years. This may account for the preponderance in the number of these birds over years ago.

Redpote.—Quite a number of these birds have been seen in in and around Ottawa during the winter. Their song is suggestive of spring, and unless the bird is seen it might easily be

mistaken for one of our spring emigrants.

Purple finch.—I am not certain if a flock of birds seen in the Park one day early in March consisted of these birds, but from the notes I heard I am much inclined to think they were this finch. I could not get within sufficient distance to see them plainly, as they were very shy and took flight at approach.

Shrike or Butcher Bird.—One of these birds was seen for several days on Daly avenue, near King street, in the locality where it has appeared several winters Whether the same bird, or some of its progemy, or a fresh arrival cannot be ascertained.

Frequenting the one locality would give colour to the first theory.

Swallows.—On the 28th instant, white-breasted swallows were observed on the Ridean river, between Cummings' brigde and the falls. I could not determine whether they were the white-breasted or the bank swallow.

Bluebirds.—Although I have not seen any of them myself, I have reliable authority that they have been seen in the closing days of the month, but I could not get the actual date of their arrival. Probably 27th or 28th.—H. B. SMALL.

ORNITHOLOGY.

Nature has provided us with no more delightful or interesting objects for study than the birds. They are our "feathered poets of the grove "each with his own peculiar strain of melody; now sweet, now sad, now boisterous, now seeming to tell in long and varied song some tale that thrills us as we listen. wonderful and beautiful markings they have! There are few who can fail to enjoy the sight of a brilliantly coloured or delicately marked bird, or when the hidden nest is found, the eggs unrivalled in colouring even by the bird which laid them. watch them building their nests, catching their food, hopping about from branch to branch apparently with no object, or stretching their wings for a long flight, is a pleasure which can be shared by all. But half the joy is lost unless we have learned the songs and calls of the different birds; unless we recognize them whenever seen and in whatever plumage they are dressed, be it in that of the full-grown male, the less brightly marked female, the young bird, or in that of the winter season; unless we can tell them from their habit of flight even when too distant for the colour of the bird to be ascertained; or unless when we find the tiny nest in the thicket, or the large one in the lofty tree we know what bird has built the nest or what bird has laid the eggs.

It is hoped that throughout this year a greater interest will be manifested in our birds. Here is a field for the young people with untold pleasure in store for all who are eager for it. The leaders of the Club will most gladly assist any who desire to begin the study of our birds.



Small, H. Beaumont. 1897. "Notes for the month of March, Ottawa, 1897." *The Ottawa naturalist* 11(1), 27–29.

View This Item Online: https://www.biodiversitylibrary.org/item/89188

Permalink: https://www.biodiversitylibrary.org/partpdf/370151

Holding Institution

Harvard University, Museum of Comparative Zoology, Ernst Mayr Library

Sponsored by

Harvard University, Museum of Comparative Zoology, Ernst Mayr Library

Copyright & Reuse

Copyright Status: Public domain. The BHL considers that this work is no longer under copyright protection.

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at https://www.biodiversitylibrary.org.