

ists in each locality, to create a corps of collecting botanists wherever there may be few or none at present, to encourage the formation of field clubs, to publish lists of local floras in the local press, to conduct from year to year exact phenological observations, etc.; for which purposes the secretaries for the provinces may appoint secretaries for counties or districts, who will be expected, in like manner, to transmit the same impetus to as many as possible in their own spheres of action. Members and secretaries, while carrying out plans of operation which they may find to be promising of success in their particular district, will report as frequently as convenient to the officer under whom they may be immediately acting. Before the end of January, at the latest, reports of the work done within the various provinces during the year ended December the 31st, previous, should be made by the secretaries for the provinces to the general secretary, from which the annual report to the Royal Society shall be principally compiled. By the first of January, therefore, the annual reports of county secretaries and members should be sent in to the secretaries for the provinces.

The annual report of the club for the year May 20, 1898, to May 20, 1899, issued as a part of Vol. V., *Trans. Roy. Soc. Can.*, second series, 1899-1900, contains a sketch of the history of 'Phenological Observations in Canada.' It also indicates the progress of botanical research, points out the results obtained in Newfoundland, as well as in Labrador, Prince Edward Island and Nova Scotia. This is followed by 'Observations in a Wild Garden,' by Dr. G. U. Hay, of St. John, New Brunswick, besides notes on work done in Ontario. Professor Macoun's researches in the 'Cryptogamic Flora of Ottawa,' published in *The Ottawa Naturalist*, and Mr. James M. Macoun's 'Contributions from the Herbarium of the Geological Survey of Canada' have been published in *The Canadian Record of Science* and in *The Ottawa Naturalist*.

Full descriptions of the new species of Ottawa Violets were given with excellent plates in *The Ottawa Naturalist* of January, 1899, No. 10, Vol. XII., and reference is also made to *Viola Watsoni* Greene, from Prince Edward Island, and another new species from British Columbia,

besides notes on the genera *Antennaria* and *Fragaria*.

From Alberta, Assiniboia and British Columbia reports are also sent in. The teachers of the Department of Public Instruction in Nova Scotia, of which Dr. A. H. MacKay is Superintendent, have been most active in recording phenological observations, from which excellent results were gathered.

The officers of the Botanical Club of Canada for the ensuing year are:

*President*: John Macoun, M.A., F.L.S., Ottawa.

*General Secretary-Treasurer*: A. H. MacKay, LL.D., Halifax.

*Secretaries for the Several Provinces*: Newfoundland, Rev. A. C. Waghorne, Bay of Islands.

Prince Edward Island, Principal John McSwain, Charlottetown.

Nova Scotia, Dr. A. H. MacKay (General Secretary-Treasurer), Halifax.

New Brunswick, George U. Hay, M.A., Ph.B., St. John.

Quebec, Professor D. P. Penhallow, B.Sc., McGill University, Montreal.

Ontario, Principal Wm. Scott, B.A., Normal School, Toronto, Toronto.

Manitoba, Rev. W. A. Burman, B.D., Winnipeg.

Assiniboia, Thomas R. Donnelly, Esq., Pheasant Forks.

Alberta, T. C. Willing, Esq., Olds, N. W. T.

Saskatchewan, Rev. C. W. Bryden, Willoughby.

British Columbia (Mainland), J. K. Henry, B.A., High School, Vancouver.

Vancouver Island, A. J. Pineo, B.A., High School, Victoria.

H. M. A.

OTTAWA, June, 1900.

#### DISCUSSION AND CORRESPONDENCE.

##### HERMAPHRODITISM AMONG THE DOCOGLOSSA.

IN a recent number of *SCIENCE* (ix, 914) Dr. Dall gives a brief account of the newly discovered *Bathysciadium conicum*, in the course of which he remarks that should the animal prove to be really hermaphrodite, it will be the first of the Docoglossa to exhibit this character. This statement is one of Dr. Dall's rare slips; hermaphroditism has already been recorded in the case of *Patella vulgata* (Gemmill, *Anat. Anz.*, xii, 392-4, 1896), and of *Acmæa fragilis* (Willcox, *Jen. Zeitschr.*, xxxii, 441 et seq., 1899). Gemmill believes that this condition in *Patella* is excep-

tional; in *A. fragilis* it seems to be the normal condition. My reason for this opinion is that the nephridial papilla, which appears to function as a penis, is present in all individuals. This papilla is much larger in *A. fragilis* than in any other *Acmaea* with which I am acquainted, reaching even in the contracted state almost to the edge of the mantle; it is highly muscular and richly provided with large blood sinuses. These facts point to its use as an intromittent organ and if this be conceded, then its universal presence would indicate that every individual is at some time functionally a male.

But however this may be, hermaphroditism either as a regular or as an exceptional condition has already been described in two *Docoglossa* so that the case of *Bathysciadium* is the third rather than the first recorded instance.

M. A. WILLCOX.

Wood's HOLL, MASS., July 25, 1900.

#### SOME RECENT REPORTS OF FOREIGN MUSEUMS.

THE report of the South African Museum for 1899 notes the completion of a new wing and the opening of a new hall containing a collection of South African rocks, minerals and fossils, while the number of visitors was over 88,000, a gain of 7000 over the previous year. As the appropriation for the Museum is only £2500 the increase of the collections is mainly dependent on gifts, and although a special appropriation of £2000 for the purchase of specimens was made in 1895 this is now exhausted. The progress made is as rapid as could be hoped for under the circumstances, but one can well sympathize with the remark of Mr. Peringuey, in charge of the entomological collections, that the chance of obtaining a thorough representation of the insect fauna of South Africa during the modest span of life usually allotted to man, seems to grow more and more distant.

The Museum has just issued the first part of the second volume of its *Annals* which is devoted to 'A Collection of Slugs from South Africa, with Descriptions of New Species' by Walter E. Collinge. Two well-known species are added to the fauna of South Africa while four species are described as new; *Amalia pon-*

*senbyi*, *Apera natalensis*, *Oopelta flavescens* and *O. granulosa*.

THE report of the Museum of Oxford University for 1899 indicates much progress in educational work and scientific research, as well as in the growth and arrangement of the collections. Three new buildings are in course of construction, the Laboratory of Animal Morphology and Botany, the Pathological Laboratory and the Radcliffe Library. Accessions to the well-known Pitt-Rivers Museum of Ethnology have been the most numerous, although exceeded in number of individual specimens by the insects added to the Hope Collection in charge of Professor Poulton. Our own scientific schools may derive some comfort from the small number of students who seem to have attended many of the courses of lectures, and when Professor Tylor reports a class varying from four to six undergraduates others have little reason to expect more.

PART one of volume three of the *Boletim do Museu Paraense* contains the report of the Director for the fiscal year ending December 31, 1898, together with other papers. The Zoological and Botanical Gardens of Para are included in this report and these, as well as the Museum proper, seem to be in a flourishing condition, while as the visitors during the year numbered somewhat over 75,000, the Museum would seem to be appreciated by the public. The average number of animals in the Garden has been something over 400, representing 130 species, and the Botanic Garden gives a list of 531 species of plants. Attention is called to the fact that the Museum publications represent but a portion of the work of the staff as numerous articles are published in foreign scientific journals.

THE Para Museum has just issued as the first of its memoirs, in quarto form, an account by the Director, Dr. Goeldi, of the exploration of the mortuary vaults constructed by a former race of Indians on the banks of the Rio Cunany, and of the pottery found therein. These vaults or pits were about seven feet deep and half that in diameter, closed above by a granite disk, and at the bottom expanding into a somewhat hemispherical chamber in which the