the same remark, viz., that they had never before seen such a beautiful insect, and, of course, they all ask for its name and something of its life-history. Many of the boxes in which we have received these specimens contained, as well, pieces of sugar, etc. for the moths to feed on. Correspondents are surprised when told that they are unlike most other moths, in that they cannot feed.

Soon after the female moth emerges from the cocoon, she deposits whitish eggs, which turn dark before hatching. These are oval-cylindrical in shape and in size are about 2 mm. long by 1³/₄ mm. wide. They are attached to twigs or laid on the leaves upon which the caterpillars feed. In about from fifteen to twenty days, according to the season, the eggs hatch. The larvæ at first are pale green, about one-quarter of an inch in length, with brown markings on the head, and some have markings of the same colour along the side of the body. They cast their skins five times, and during the different stages noticeable changes take place. The tubercles on the body which at first are very small, become quite large in the later stages, and there is a conspicuous change in their colour. As the caterpillar becomes older yellowish lines appear on the body. The tubercles, when the larva is mature are, as a rule, pearl-colored tinged with purple; at the end of the body there are three brown spots edged with yellow. - In some specimens the tubercles are of a much brighter colour; one writer described them as "blazing like a coronet of rubies." The larva is now about three inches long and of a beautiful pale bluish-green colour, the yellow band along each side of the body being conspicuous.

The caterpillar has been found feeding on walnut, hickory butternut, maple, birch, beech, oak, willow, plum and sweet gum. When mature, in late summer, it, as a rule, leaves the tree upon which it has been feeding and makes an irregular oval cocoon, generally among leaves on the ground. The cocoon is thin, not nearly as tough as that made by the American Silkworm, *Telea polyphemus*, which is a much more common insect in eastern Canada. The winter is passed as a pupa inside of the cocoon and the moths usually emerge in May.

THE PREPARATION OF A CATALOGUE OF THE INSECTS OF CANADA.

BY C. GORDON HEWITT, D. Sc., Dominion Entomologist, Ottawa

At a meeting of the Executive Committee of the Entomological Society of Ontario, held at Guelph, Ont., on November 4th, 1910, it was unanimously agreed that the preparation of a catalogue of Canadian insects was desirable, and that such a list should be dedicated to Dr. C. J. S. Bethune, in recognition of his long and valuable services to Canadian entomology as Editor of THE CANADIAN ENTOMOLOGIST. A special committee of the society was appointed to arrange for and take charge of the work of preparing the proposed catalogue.

The following members constitute the committee:—Dr. E. M. Walker, (Pres.), Dr. C. Gordon Hewitt (Vice-Pres.), Messrs. G. Chagnon, N. Criddle, J. D. Evans, Arthur Gibson, W. H. Harrington, T. D. Jarvis, H. H. Lyman, G. A. Moore, G. E. Sanders, J. M. Swaine, A. F. Winn, F. H. Wolley-Dod and Prof. T. D. A. Cockerell.

Suggestions as to the form and scope of the catalogue, and the method of preparation, were drawn up and submitted to the members in a circular, issued on March 10th, 1911, with a request that it should be considered, and that further suggestions should be submitted.

Opinions which were submitted on the subject, and further suggestions on the part of members of the committee, have resulted in the formation of the following scheme, which will be adopted in the preparation of the catalogue, as they represent the views of the majority of the members.

1. The list will be entitled, "A Catalogue of the Insects of Canada and Newfoundland," and it will include all species known to occur in Canada, (including Labrador) and Newfoundland, whether previously recorded or not. Alaskan species will not be included, but may be published as an appendix.

2. The various species will be classified under the orders, sub-orders, families, sub-families, and genera, in ascending order wherever possible. The arrangement of the genera will be systematic and, so far as is possible, the species also.

3. The names will be given of the authors of all generic and specific names mentioned, with the date (year) in the case of each genus.

- 4. Under each species will be given:
 - (a). A reference to one or two good descriptions of the insect, not necessarily the original one; these will be descriptions which are as accessible as possible. If possible, reference will be given to a good published figure, and if such is contained in one of the references it will be indicated by the addition of (fig.) after the reference.

(b). The geographical distribution within Canada and Newfoundland; this will be indicated, as a rule, by Provinces, in order from east to west, e.g., N.S., Ont., B.C., etc. The characteristic faunal zones inhabited by the species will be indicated, so far as it may be possible, by abbreviations; thus: Ar.-Arctic, H.-Hudsonian, C.-Canadian, T.-Transition, Au.-Austral. Where a species is known from a few localities only, the names of these will be given with the name of the captor in cases where the species recorded is of great rarity.

- (c). If the type locality of a species is Canadian it will be given, and the places where type specimens of Canadian species are deposited will also be given when possible.
- (d). The Latin name of the chief food plants will be given in the case of the Lepidoptera, Cecidomyiidæ, Aphidæ, Coccidæ, Phytophagous Hymenoptera and Coleoptera. (Gray's New Manual of Botany will be used throughout for the names of the food plants).
- (e). In the case of parasitic species the name of the host or chief hosts will be given wherever known.
- 5. Recent important changes in synonymy will be noticed.

6. In the case of new and previously unpublished records the collector's name will be given in every case.

7. No species of which there is no trustworthy record or specimen available is to be included.

8. Fossil species will be included, and also introduced species, including greenhouse species, but the fact that they have been introduced will be indicated in those cases in which the fact is known.

The work of preparing the catalogue will be divided among the members, approximately, as follows:

Aptera, Orthoptera and Neuropteroid orders.—Dr. E. M. Walker.

Hymenoptera.—Messrs. W. H. Harrington, G. E. Sanders, and Prof. T. D. A. Cockerell.

Coleoptera.—Messrs. J. M. Swaine, G. Chagnon, N. Criddle, and J. D. Evans.

Lepidoptera.—Messrs. Arthur Gibson, H. H. Lyman, A. F. Winn, and F. H. Wolley-Dod.

Diptera and Siphonaptera.-Dr. C. Gordon Hewitt.

Hemiptera.-Prof. T. D. Jarvis, and Mr. G. A. Moore.

These members will be responsible for the lists prepared by them, and such lists will be published under their names. In the preparation of such lists it will be necessary to seek the co-operation and assistance of other specialists and all such assistance will be fully acknowledged.

The division of the work in the different orders will be

systematic rather than according to the geographical regions in which the members may be located; this will necessitate the co-operation of workers in different regions.

In the compilation of the catalogue it is intended to index the species on the regular card-catalogue cards 5 in. x 3 in., which will be supplied to the members. A single species will be listed on each card. The card will thus contain the information which it is intended to include in the catalogue. For example, the Spruce Budworm, *Tortrix fumiferana* Clemens, would be indexed and listed as follows:

T. fumiferana Clemens.

Proc. Ent. Soc., Phila., v. 139, 1865.

U.S. Ent. Comm., 5th Rep., pp. 830-838 (Packard), 1890.

Dist.: Eastern Can., Man., B.C.

Food Plants: Abies, Picea, Pseudotsuga.

The catalogue will be published, under the editorship of the writer, by the Geological Survey of Canada, by arrangement with and the consent of the Minister of Mines and the Director of the Survey. It will appear in parts as the different orders, or families, in the case of large families, are completed, and its publication will necessarily extend over a number of years.

GENERAL EXCURSION TO CHELSEA.

The general Excursion of the Club to Chelsea on May 27, was a most successful one. The attendance was fairly large and included many normal school students. The afternoon was spent chiefly in Gilmour's Grove and along the river bank. Most of those present were interested in botany, so under the leadership of Dr. Blackadar and Mr. J. W. Gibson, the party first visited the falls and then at once started to gather specimens. Only a few of the more interesting ones are here noted. Among trees the Striped Maple (Acer pennsylvanicum) and the Mountain Maple (A. spicatum) were in fruit. No doubt all the species of Acer could have been discovered, but the others were past the flowering stage. Among the herbs that have a more or less aromatic or edible root the following were noted:-Wild Sarsaparilla (Aralia verdi-caulis), the Dwarf Ginseng (Panax trifolium), the Toothworts (Dentaria laciniata and D. diphylla), the Wild Ginger (Asarum canadense) and the Indian Cucumber-root (Medeola virginiana).

The lily family is well represented at this time in the woods. Some well in fruit including the Bellwort ($Uvularia \ perfoliata$), the Dog's-tooth Violet ($Erythronium \ americanum$), the Purple Trillium and the large white one, (*Trillium erectum* and *T*.



Hewitt, C. Gordon. 1911. "The Preparation of a Catalogue of the Insects of Canada." *The Ottawa naturalist* 25(5), 83–86.

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