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THE FORMICIDÆ OF THE SHIRAS EXPEDITION
TO WHITEFISH POINT, MICHIGAN, IN 1914.

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The collection of Formicidæ upon which this report is based was made by Mr. N. A. Wood while he was engaged in ornithological studies as a member of the Shiras Expedition to Whitefish Point, Michigan, in 1914. The report is published now primarily that there may be connected and easily available data on the faunistic collections made by the expedition. At a later time the writer plans to publish a comprehensive list of the Formicidæ of the state, based on the accumulating collections in the Museum of Zoology. Since 1906 no collections have been made of the ants of the northern peninsula of the state, and as the present collections were

made in the east instead of the west portion of the region, they are of interest.

The writer is indebted to Prof. W. M. Wheeler, of the Bussey Institution, for assistance in the identification of the forms. The notes under the several species in the following list are from the collector's field book.

MYRMICINAE.

Cremastogaster lincolata Say.—Two lots of this species occur in the collection. The first series collected on June 24 was found in a rotten pine log on the burned lands of the region. The second series was taken from a very large colony located in a rotten log in the pine forest along the Sheldrake River. At the time of collection, August 17, hundreds of aleate sexual forms, both male and female, were about to swarm from the nest.

Alphaenogaster fulva Roger subsp. *aquia* Buckley.—Two colonies of this ant were found in rotten logs in the burned-over areas.

Myrmica scabrinodis Nyl. var. *schenki* Emery.—A single colony was found near a marsh beneath a much decayed log on August 10. At that time several aleate males and females were present in the nest.

Myrmica brevinodis Emery var. *canadensis* Wheeler.—A small colony of this species was found in the earth beneath a fragment of bark in the pine forest west of Vermilion.

DOLICHODERINAE.

Tapinoma sessile Say.—A number of colonies of this species were found about Vermillion, both on the plains and in the pine forest. A nest was found beneath the loose bark of a dead tamarack in a rather dry swamp, and at the time,

July 9, contained a number of aleate females. Judging from the collection, this species was one of the most abundant in the region.

CAMPONOTINAE.

Lasius niger L. var. *americanus* Emery.—This species was frequently collected in the region, and often occurs in vials containing other species. Two colonies of the large form of this variety were found.

Lasius brevicornis Emery.—A single small colony of this species was found in a nest in the earth beneath a rotten log.

Lasius (Acanthomyops) latipes Walsh.—The single colony of this form was found in a nest beneath the bark on the under side of a rotten log. The colony consisted of about fifty workers and two dealate females. It was found on June 13.

Formica sanguinea Latr. subsp. *aserva* Forel.—Several colonies of this form were noted. A very large nest that was opened June 18 contained many female pupæ. On July 8 and 9, thousands of aleate males and females were noted along the Lake Superior beach, a part of them were living while many dead ones had been washed ashore. The females were much in the majority.

Prof. Wheeler designates this subspecies as essentially boreal (Bull. Mus. Comp. Zool., Vol. 53, p. 404).

Formica truncicola Nyl. subsp. *integra* Nyl.—One colony of this species is represented in the collection. Its nest was in a decaying stump of a Norway pine, and was situated both in the roots and in the portion above the ground.

Formica fusca L. var. *subsericea* Say.—It is curious that but a single colony of this most abundant form is represented in the collection.

Formica fusca L. var. *subænescens* Emery.—This form,

judging from the collection, was abundant in the region. Many nests were found over the jack pine barrens, usually in the soil beneath logs, etc. The nests opened between August 4 and 12 usually contained aleate males and females.

Formica (Proformica) neogagates neogagates Emery.—A few individuals of this species were collected on *Spirea* flowers, August 4.

Camponotus herculeanus L. subsp. *pennsylvanicus* DeGeer.—A single colony of what seems to be the typical subspecies is represented in the collection.

Camponotus herculeanus L. var. *whymperi* Forel.—This variety was one of the very abundant forms in the region, and is well represented in all its phases in the collection. Aleate males and females were found in nests from May 14 to August 14, practically all the time the party was in the field. Its habits seem to be similar to those of the well known preceding subspecies. The ant is strongly boreal in its affinities.