OCCASIONAL PAPERS OF THE MUSEUM OF ZOOLOGY

UNIVERSITY OF MICHIGAN

ANN ARBOR, MICHIGAN.

PUBLISHED BY THE UNIVERSITY.

NOTES ON CRUSTACEA RECENTLY ACQUIRED BY THE MUSEUM.

By A. S. Pearse.

The following notes are the result of the study of the Crustacea acquired during the past year. The Museum is under particular obligations to Mr. Chauncey Juday for the gift of certain specimens collected by J. M. Jessup in Alaska and Yukon Territory. Several of the species listed were collected by the Shiras Expedition (1912) to the Whitefish Point Region in Chippewa County, Michigan.

PHYLLOPODA.

Limnetis gouldii Baird.—This species was abundant in a pond at Woods Hole, Mass., July 4, 1912, where several specimens were collected by the writer. Dr. G. S. Dodds sent four specimens collected near Tolland, Colorado, during the sum-

SCIENTIFIC PAPERS OF THE UNIVERSITY OF MICHIGAN, NO. 1.

mer of 1912, and more than fifty specimens were secured by Misses C. and H. Thompson at White's Woods near Ann Arbor, Michigan, June 2 and 11, 1912. Several specimens that probably belong to this species were taken at Alma, Michigan, by Professor H. MacCurdy during the spring of 1910.

Polyartemiella hanseni (Murdoch).—Collected at the following localities by J. M. Jessup: Muskeg Lake, Coastal Plain of Arctic Ocean, Lat. 69° 40′ N., Long. 141° W., July 25, 1912 (with *Branchinecta paludosa*); Muskeg pools on flood plain of Firth River, Lat. 69° 20′ N., Long. 141° W., June 23, 1912.

Branchinecta paludosa (O. F. Müller).—Muskeg Lake, Coastal Plain of Arctic Ocean, Lat. 69° 40′ N., Long. 141° W., July 25, 1912 (with *Polyartemiella hanscni*); young in puddle at White Horse, Yukon Territory, June 7, 1912.

Eubranchipus gelidus Hay.—In pools on flood plain of Klondike River, one mile above Dawson, May 27, 1911; puddle at White Horse, Yukon Territory, June 7, 1912; on Old Crow River, in pool, fifty miles north of Rampart House; in ponds near Carmack's, Yukon Territory; small puddle, Norden Skiiold, Yukon Territory, June 3, 1912; Ann Arbor, Michigan, May 3, 1912.

Jessup's northern records greatly extend the range of this species which has not been previously recorded north of Massachusetts nor west of Indiana.

Eubranchipus vernalis Verrill.—Specimens have been received from Woods Hole, Massachusetts, through Mr. George Gray; others were taken at Ann Arbor, Michigan.

Apus aequalis Packard.—Hyannis, Nebraska, August, 1903; three specimens.

AMPHIPODA.

Hyalella asteca (Saussure).—Puddle at White Horse, Yukon Territory, June 7, 1912; lakes forty-eight miles north of Rampart House, Alaska, June 7, 1911; various localities on the shores of Lake Erie.

Gammarus limnaeus Smith.—Small lakes forty miles north of White Horse, Yukon Territory; White Horse, Yukon Territory; lake forty-eight miles north of Rampart House, Alaska, June 7, 1911.

Gammarus locusta Linnaeus.—Arctic Ocean, Alaska, July 31, 1912.

Cragonyx vitreus (Cope).—Creek eighty miles north of Rampart House, Alaska.

ISOPODA.

Asellus intermedius Forbes.—Fifteen females were taken at Omaha, Nebraska, March 17, 1900; five specimens from Alma, Michigan, April, 1910.

Porcellio rathkei Brandt.—Females carrying young were taken on Tondron Island, Muskoka Lakes, Ontario, July 18, 1903; Wayne Junction, Michigan, June 2, 1912.

Armadillidium vulgare (Latreille).—Five specimens (in green-house) Omaha, Nebraska, June 13, 1903.

DECAPODA.

Cambarus propinquus Girard.—Put-in-Bay, Ohio, 1899; Long Point Creek, Canada, August 18, 1899; Erie Harbor, Erie, Pennsylvania, August 14, 1899. Cambarus virilis Hagen.—Whitefish Point, Chippewa County, Michigan, July 12 and August 6, 1912; Beaumaris, Muskoka Lakes, Ontario, July 20, 1903.

Cambarus diogenes Girard.—The northern range of this species has been extended in the State of Michigan by its discovery at Whitefish Point by the Shiras Expedition, and through collections made by Professor Frank Smith at Douglas Lake in Cheboygan County.

Cambarus immunis Hagen.—Three specimens were collected near Littleton, Colorado, and in the reservoir at Fort Logan, Englewood, Colorado, September 3, 1912, by Peter Okkelberg.

Cambarus immunis spinirostris Faxon.—Put-in-Bay, Ohio, July 14, 1899; Long Point Creek, Canada, August 18, 1899; Omaha, Nebraska, June 10, 1913 (five young).

Potamobius trowbridgii (Stimpson).—One male, taken at Cheney, Washington, July, 1905, by R. H. Johnson.

Palaemonetes exilipes Stimpson.—There are specimens in the Museum that were collected by the United States Fish Commission, in 1899, at the following places along the shores of Lake Erie: Put-in-Bay; East Pond, Rondeau Harbor, Ontario, Canada; near Sandusky, Ohio; Big Pond, Erie, Pennsylvania.

STOMATOPODA.

Pseudosquilla lessonii (Guerin).—One specimen taken in False Bay, San Diego, California, July 28, 1908, by C. S. Cass.