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REPORT ON THE CRUSTACEA COLLECTED BY THE
WALKER - NEWCOMB EXPEDITION IN
NORTHEASTERN NEVADA IN 1912.

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The Museum expedition¹ sent to northeastern Nevada in July and August, 1912, brought back a rather extensive series of crustaceans, and as the members of the expedition made an earnest effort to make a complete collection the twelve species obtained may be considered as representative of the fauna of the region visited. Work in the spring would with little doubt add other species to the list, particularly phyllopods and entomostracans. The absence of decapods is noteworthy.

The work of the expedition was confined to Maggie Basin and the surrounding mountains in Elko and Eureka Counties. The altitude of Carlin, on the edge of the Humboldt Valley,

¹For a general account of the expedition see Report of the Director of the Museum of Zoology of the University of Michigan to the Board of Regents, for the year ending June 30, 1913. Ann Arbor, 1913.

which crosses the end of this basin, is given as 4930 feet; and the collections made in the Humbolt Valley, and in Maggie, Susan, Annie and Woodruff Creeks were all taken at about this altitude. The springs in the Cortez Range are at an elevation of about 5,000 feet, and the specimens taken in James Creek were all from an altitude of about 6,000 feet. All of the specimens are from streams tributary to the Humbolt River.

My thanks are due to Professor H. B. Ward and to Dean E. A. Birge for the loan of the proof sheets of the former's "Fresh-Water Biology", which were used in the determination of the Cladocera and Ostracoda.

COPEPODA.

1. *Cyclops viridis americanus* Herrick.—This species was collected twice during July in ponds along the Humbolt River.

CLADOCERA.

2. *Simocephalus serrulatus* (Koch).—Taken in a pond along the Humbolt River on July 8.

3. *Simocephalus vetulus* Mueller.—This species was apparently common in the ponds along the Humbolt River, Susan Creek, and Maggie Creek. It appeared in ten collections made between July 5 and 22.

4. *Chydorus sphaericus* (O. F. Muller).—A single specimen was collected in a pond near the Humbolt River, July 5.

5. *Cypridopsis vidua* O. F. Muller.—Occurred in a pond near the Humbolt River, July 5.

6. *Cypris virens* Jurine (?).—A single specimen, probably referable to this species, was collected from Maggie Creek with a number of *Simocephalus vetulus*, July 11.

7. *Cypris incongruens* Ramdohr.—Collected at two stations along Woodruff Creek in the Pinyon Range, August 9.

8. *Cypris testudinaria* Sharpe.—Collected among weeds at two stations along Woodruff Creek in the Pinyon Range, August 9.

AMPHIPODA.

9. *Gammarus limnaeus* Smith.—An abundant species occurring in the Humbolt River, Annie Creek, Maggie Creek, and in Moleen Canyon, July 12 to 30.

10. *Hyalella azteca* Saussure.—Numerous among the aquatic plants in ponds near the Humbolt River and along Susan and Maggie Creeks, July 8 to 15. All the specimens in these collections have well developed median dorsal spines at the posterior angles of the first two or three abdominal segments. The number of segments in the flagella of the first antennae of thirty-two individuals collected from Maggie Creek, on July 15, was counted with the following results:

MALES.

Number of segments in flagellum.....	10	9	11	11	9	8	7
Number of segments in accessory flagellum.....	9	8	9	10	9	7	8
Number of animals.....	4	3	2	1	1	1	1

FEMALES.

Number of segments in flagellum.....	9	10	7	9	8	7	6	6
Number of segments in accessory flagellum....	8	8	6	7	7	5	5	6
Number of animals	5	4	4	2	1	1	1	1

11. *Hyalella ornata* Pearse.—This species was found at higher elevations than the last. It appeared in collections from Annie Creek, July 16, from James Creek, July 29, and from the springs in the Cortez Range, July 9 to 24. The first antennae of the specimens examined do not quite reach to the

flagellum of the second antennae. A count of the segments of the flagella of the first antennae of forty individuals collected in the Cortez Range, July 24, gave the following results:

MALES.

Number of segments in flagellum.....	13	14	14	14	19	17	16	15
Number of segments in accessory flagellum	10	11	10	12	10	10	11	11
Number of animals	5	4	3	2	1	1	1	2

FEMALES.

Number of segments in flagellum	13	12	15	11	10	16	14	14	13	12	12	12	7
Number of segments in accessory flagellum.....	10	10	8	8	7	9	10	8	11	11	9	8	6
Number of animals	4	3	2	2	2	1	1	1	1	1	1	1	1

It is apparent that in this species the flagella of the antennae contain more segments than those of *H. azteca*; in other respects the specimens examined agree with the original description of the species.² *H. ornata* has previously been reported from Lake Catemaco, Vera Cruz, Mexico, at an altitude of 1290 feet.

ISOPODA.

12. *Cyclisticus convexus* (De Greer).—Collected from four stations above the dam in Moleen canyon, July 25 to August 10. All specimens have the frontal lobe of the head very prominent, but agree in other respects with the published descriptions.

² 13 Ann. Rept. Mich. Acad. Sci., p. 109.