

## ON SOME NORTHWESTERN ANTS AND THEIR GUESTS.

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These notes are based on a collection of ants and myrmecophiles made by the writer in Washington and Idaho, during 1908-1909, while a student at the State College of Washington, at Pullman. Some collecting had been done previously at Helena, Montana, and six weeks were spent at the Puget Sound Marine Laboratory on Orcas and San Juan Islands, Puget Sound, where considerable collecting was done.

I am under obligations to Prof. William M. Wheeler of Harvard University, for determining my ants, and to Prof. A. L. Melander, through whom I was given opportunities to visit and collect in a number of localities. This paper was prepared in the Entomological laboratory of Stanford University.

In collecting little sifting was done, but traps were used wherever practicable. A piece of board or a flat stone buried in a mound proved a good means to attract inquilines.

**Solenopsis molesta** Say.—Common in vicinity of Pullman and Wawawai, Wash.

**Pheidole oregonica** Emery.—Common at Pullman and Wawawai, Wash. At the latter place, four specimens of *Cremastochilus knochii* were found in a nest. A great many other nests were examined, but no inquilinous beetles were found.

**Aphaenogaster subterranea** Latr. subsp. **occidentalis** Emery.—Many nests examined at Pullman and Wawawai, Wash. During April and the early part of May the Pselaphid *Ctenestes pulvereus* Lec. was taken commonly, nearly every nest containing one or two. April 10, Prof. A. L. Melander took a number of specimens of an undescribed *Batrisus* with this ant at Kendrick, Idaho. Several nests were examined and all contained the beetles. A single specimen of *C. pulvereus* was found here also.

**Pogonomyrmex occidentalis** Cress.—Occurs commonly in the Snake River Canyon at Wawawai, and at Lewiston, Idaho.

**Myrmica rubra** L. subsp. **brevinodis** Emery.—Taken at Helena, Montana.