

- Color and sculpture different 5
5. Head and thorax brownish red, gaster in part or entirely brown; cephalic rugae coarser than in *molefaciens*, interrugal spaces with delicate punctures *barbatus* var. *fuscatus* Emery
- Color from ferruginous to black; head and thorax very coarsely rugose, interrugal spaces of head with traces of 2-3 fine rugules, node of petiole rather coarsely and irregularly rugose *barbatus rugosus* Emery
6. Epinotal spines at least $1\frac{1}{2}$ times as long as their interbasal distance; node of petiole as broad as long, or nearly so; body opaque *occidentalis* (Cresson)
- Epinotal spines shorter than their interbasal distance; node of petiole distinctly longer than broad; body subopaque *occidentalis utahensis* Olsen

Pogonomyrmex occidentalis (Cresson)

This is by far the most widely distributed species of the entire genus. It can be readily separated from all other members of the genus in Utah, with the exception of its subspecies *utahensis*, by the rather densely rugose head, the interrugal spaces of which are distinctly punctate; by the presence of a pair of epinotal spines; and by its ferruginous color.

Distribution.—Brigham, Promontory Point, Iosepa, Elberta, La Sal, Westville, Mt. Sterling in Cache Co., Blue Bench and Current Creek—both in Duchesne Co., Farmington, Little Mountain west of Ogden, Little Valley in Tooele Co., Mendon, Ouray, Big Cottonwood Canyon in Salt Lake Co., Hardup, Low, Locomotive Springs and Promontory Ridge—both in Box Elder Co., Blue Creek, Lucin, Meadow, Wild Cat Canyon in Beaver Co., Bovine, Howell, Elsinore, Salt Lake City, Virgin, Orr's Ranch in Tooele Co., Springdale, Brigham, Fillmore (Knowlton); Blue Creek (Knowlton and Fronk); Willard, Howell (Knowlton and Stains); Riverdale, Santaquin (Knowlton and Smith); Granite in Salt Lake Co. (Knowlton and Allen); Greenriver (Knowlton and F. C. Harmston); Cove in Cache Co. (Knowlton and Hardy); Logan (Knowlton and R. L. Janes; Meacham); Tintic (H. R. Harmston); Thompsons, Point of Mountain, Stansbury Island in Great Salt Lake, Mt. Pleasant, Cache Jc. (Titus); Ft. Douglass Reservation in Salt Lake Co. (Grundmann); Salt Lake Co., Summit Co. (Grundmann and Rees); Lehi (Hooker); Bluff (Stafford); Sandy, Kaysville (Klamback); Ft. Duchesne (R. L. Janes); Grantsville (Shannon); Beaver (Rowe); Brigham (Olsen); Millard Co., La Sal, La Sal Jc., Wales, Brush Creek, St. George (Rees); Leeds (Vasquez); Providence (R. L. Janes); Hardup (Thomas); Salt Lake Co. (Chamberlin); Snowville, Delle, Brigham, Ogden, Tooele, Zion Natl. Park, Kanab (Cole); Elsinore, Collinston (collectors unknown).

This is undoubtedly the most prevalent mound-building ant of the sagebrush plains. The cone-shaped pebble mounds, which are scattered about in the open areas, are frequently several feet in diameter and a foot or so in height. Surrounding each mound is a denuded area which results after the workers have cleared away the plants that grow there. The mound contains chambers in which seeds are stored and into which the brood is placed by the workers during periods of optimum mound temperatures. The nests, which continue underground, may contain thousands of individuals. The winged castes appear usually during July. At high elevations colonies are generally scarce or absent.

Pogonomyrmex occidentalis utahensis Olsen

I prefer to regard these ants as representing a subspecies rather than a variety of *occidentalis*. In both structure and habitat the requirements of the subspecific category are met.