

THE STATUS OF *PYRROCOMA HALOPHILA* (ASTERACEAE: ASTEREAE)

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ABSTRACT

Pyrrocoma halophila Greene is recognized as a distinct species of Lake Co., Oregon, and closely adjacent areas of Modoc and Washoe counties — it is mapped and illustrated. Its resemblance to *P. lanceolata* is noted, indicating a need for further study, and it also may be closely related to *P. pyramidis* from southern Washoe County.

Hall (1928) placed *Pyrrocoma halophila* Greene among subspecies of *Pyrrocoma racemosa*, "of doubtful affinities" and known only from the type collection in Lake Co., Oregon. Mayes (1976) treated it as a synonym of *P. racemosa* (var. *virgatus*), perhaps following Ferris (1960), and since Hall's monograph, it has not been recognized in floristic or taxonomic accounts.

As recognized here, *Pyrrocoma halophila* is characterized by its low habit with decumbent-ascending to ascending-erect stems, leaves with sharp-toothed leaf margins and lightly tomentose faces, cauline leaves rounded-truncate at the base and with proximal margins densely long-cobwebby-ciliate with white hairs, and heads usually in a loose, few-flowered raceme or subspike.

The ca. 18 plants in the type collection are consistent in morphology (Figs. 1-7). More recent collections of similar plants expand the geographical range, but this expression still is known mostly from southeastern Lake County and closely adjacent areas (Map 1; Figs. 8-14), where identified mostly as *P. lanceolata* (Nesom 2025b), which they resemble (Figs. 15-17). As interpreted here, typical *P. lanceolata* does not occur within the geographic range of *P. halophila*. Focused attention is needed to test the hypothesis that two species are represented, but since the name *P. halophila* already exists it seems useful at least to call it to attention.

Recognition of *Pyrrocoma halophila* suggests also that it may be closely related to *P. pyramidis* (Nesom 2025a), described as a Washoe County endemic from about 150 miles south of the collections cited here. Both species have a low habit, similar vestiture of stems and leaf surfaces, and small heads — heads of *P. pyramidis* are consistently fewer (1–)2–3, involucre are wider (10–12 mm), and the cauline leaves are not basally rounded-truncate to clasping or subclasping and they lack the long-ciliate proximal margins.

PYRROCOMA HALOPHILA Greene, Leafl. Bot. Observ. Crit. 2: 16. 1909. *Haplopappus racemosus* subsp. *halophilus* (Greene) Hall, Publ. Carnegie Inst. Wash. 389: 136. 1928. *Haplopappus racemosus* var. *halophilus* (Greene) Peck, Man. Pl. Oregon, 712. 1941. **TYPE: Oregon.** Lake Co.: Goose Lake Valley, alkaline meadow, 19 Aug 1901, W.C. Cusick 2769 (holotype: US; isotypes: F, GH, MO, NDG, NY, OSC, RM, RSA, UC, WS). Figures 1-7.

On 19 Aug 1901, Cusick made collections of other species from "Goose Lake Valley" — "near Lake View, alkaline soil near thermal springs," "alkaline soil about thermal springs," "alkaline meadow," and "dry soil." The type probably is from the area of Hunter Hot Springs, just north of Lakeview, where other collections of similar plants have been made.

Stems decumbent-ascending to ascending-erect, 12–25 cm, sparsely pubescent to glabrate or glabrous. **Leaves:** basal lanceolate to narrowly oblanceolate, 4–7 cm long, basally attenuate to a petiole or petiolar region 1/4–3/5 the leaf length, with cottony tufts at the petiole bases, margins serrate with sharply acute teeth, fibrous remnants of petiole bases persistent, blades 4–8 mm wide, lightly

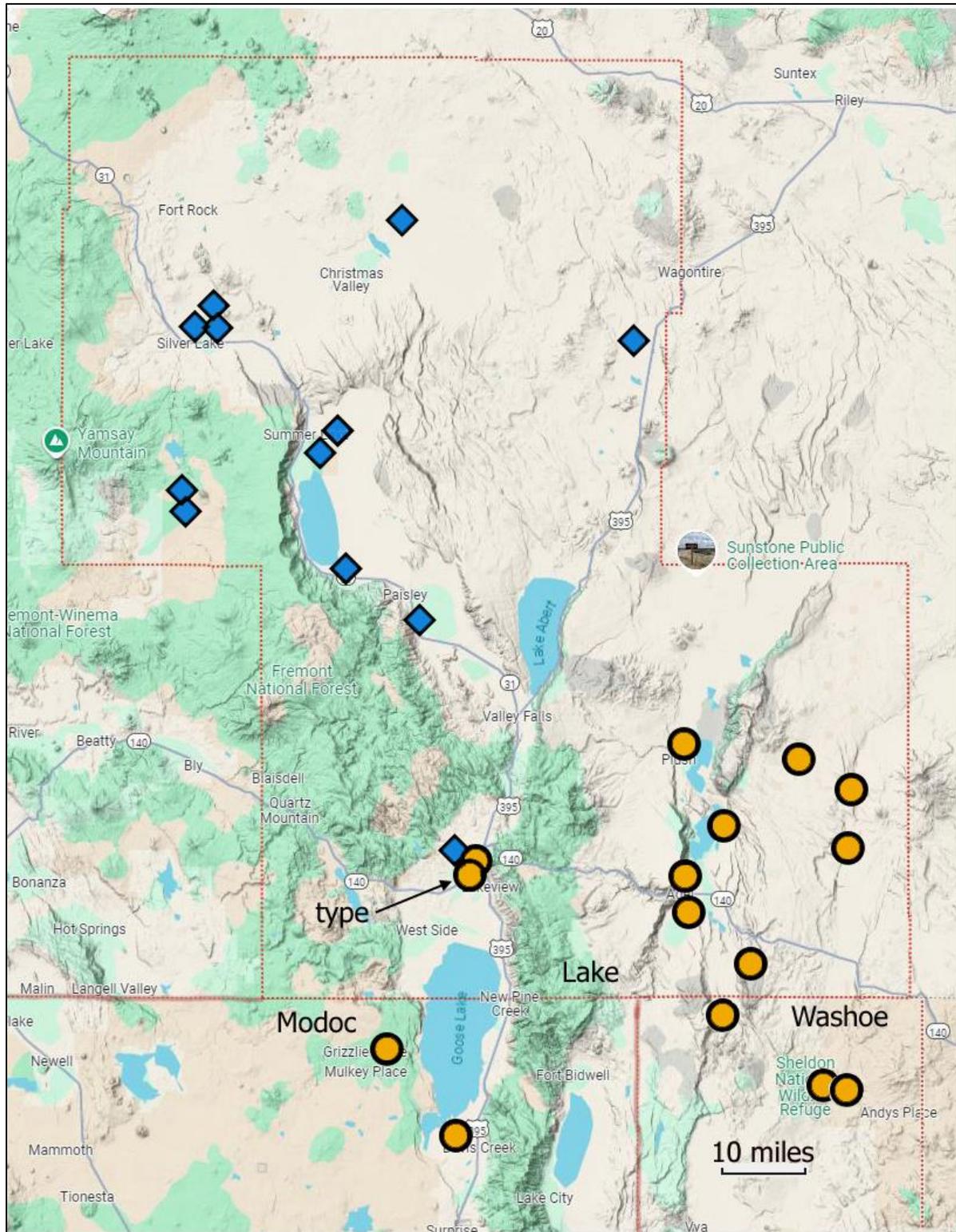
tomentose, glabrescent, margins serrate to serrulate, cauline mostly oblong-lanceolate to narrowly lanceolate, usually gradually reduced, subclasping to clasping, base rounded-truncate to slightly auriculate, proximal margins densely long-cobwebby-ciliate with white hairs. **Heads** mostly in a loose, open raceme or subspike, less commonly single or 2–3, without immediately subtending bracts. **Involucres** 7–10 mm wide (pressed); phyllaries oblong to oblong-lanceolate with a deltate-ovate to deltate-acuminate apex, in 2–3(–4) series of unequal length, inner 5–7 mm long, green patch usually sharply delimited in the distal 1/3–1/2 or only in the deltate apex, with a white midline, stramineous proximally, usually sparsely villous-pubescent, eglandular, margins pubescent or less commonly fringed-ciliate. **Ray florets** 10–15, corollas ca. 8–9 mm long, 1–1.5 mm wide, mostly erect but coiling at last. **Disc corollas** 5 mm long. **Achenes** sericeous-strigose.

Flowering June–July (–August). Alkali meadows, clay lake beds, sage flats, roadsides; 4800–5700 feet.

Additional collections. California. Modoc Co.: S side of Goose Lake, ca. 5 km SSE of McGinty Point, 41.74° N, 120.4366° W, open alkali flat, 1400 m, 18 Jun 1990, *Bartholomew 5365* (CAS); Pease Flat, Devil's Garden, 41.9023° N, 120.5965° W, formerly wet adobe flat, 5000 ft, 27 Sep 1935, *Wheeler 4008* (CAS, RSA). **Nevada.** Washoe Co.: Cottonwood Creek, 41.344° N, -119.353° W, alkaline area fairly close to the creek, ca 5300 ft. 12 Jun 1993, *Clifton 29378* (RENO); 1.5 mi S of Oregon state line, Coleman Valley, Cottonwood Creek Crossing, Coleman Ranch, alkali soil, dry grassy creek, 5 Jun 1939, *Train 2990* (NY-2 sheets); Bald Mountain, 3 mi E of Charles Sheldon Antelope Refuge headquarters buildings, 41.851° N, 119.582° W, dry meadow about spring, 6200 ft. 6 Jun 1939, *Train 2995* (RENO); floodplains on W side of Swan Lake Reservoir, 6.3 air mi E of Refuge Sub-HQ, Sheldon National Wildlife Refuge, 41.834° N, 119.509° W, 5640 ft, 18 Jun 1978, *Tiehm 4505* (NSMC, NY, OSC, RENO). **Oregon.** Lake Co.: E slope of Hart Mountain, lower part of Rock Creek, 16 Jul 1932, *Applegate 7749* (CAS); Hill Camp, 42.039369° N, 119.71909° W, rocky low sage flat, *Polycytenium fremontii*, 28 Jun 1977, *Crosby 1527* (OSC); Crump Lake, alkali meadow on the E side, ca. 1¼ mi N of Cox Hot Springs, 42.303° N, 119.779° W, alkali meadow, with *Sesuvium verrucosum*, *Heliotropium curassavicum*, *Distichlis stricta*, 9 Aug 1977, *Crosby 1747A* (OSC); Warner Valley, NW side of Pelican Lake, 3 mi N of Adel on the Adel-Plush Road, 1/4 mi E of road, 42.211971° N, 119.87829° W, saltgrass meadow, 27 Jun 1980, *Crosby 2470* (OSC, WTU); Guano Valley, just off Hwy 140, 42.058954° N, 119.49202° W, 5 Jun 1979, *Crosby 2230A* (OSC, WTU); Plush, Hart Mountain National Antelope Refuge, 1 mi W of Desert Lake, 42.3792° N, 119.57830° W, 28 Jun 1955, *Hall 56* (OSC); near Lakeview, roadside, 22 Jun 1927, *Leach 307* (OSC-2 sheets); near Spanish Lake [Spanish Lake Research Natural Area, Hart Mountain Refuge], dry, 24 Jun 1941, *Leach s.n.* (OSC); Hunter Flat Springs, near Lakeview, 13 Aug 1931, *Loveless 366* (PH); Hot Lake, Lakeview [Hunter Hot Springs, 2 mi N of central Lakeview], 30 Jun 1927, *Peck 15348* (OSC, WTU); near Adel, damp meadow. 22 Jun 1937, *Peck 19465* (WILLU); Hot Spring Campground, Hart Mountain Antelope Refuge, 11 Jul 2000, *Reynolds 11* (HPSU); 3.7 air mi NW of Lone Grave Butte, 3.4 air mi W of Beatys Butte Road, 42.36333° N, 119.47213° W, dry, clay lake bed, 5195 ft, with *Camissonia tanacetifolia*, *Plagiobothrys scouleri*, *Downingia elegans*, 23 Jun 1983, *Shelly 579* (OSC).

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Map 1. Distribution of *Pyrrcoma halophila* (gold circles). Lake Co., Oregon; Modoc Co., California; Washoe Co., Nevada. Typical *P. lanceolata* (blue diamonds, shown only from Lake County) apparently is allopatric.



Figure 1. *Pyrocoma halophila*. Cusick 2769 (US). Holotype.



Figure 2. *Pyrocoma halophila*. Cusick 2769 (GH). Isotype.



Figure 3. *Pyrocoma halophila*. Cusick 2769 (NDG). Isotype.



Figure 4. *Pyrocoma halophila*. Cusick 2769 (NY). Isotype.



Figure 5. *Pyrocoma halophila*. Cusick 2769 (RM). Isotype.



Figure 6. *Pyrrcoma halophila*. Cusick 2769 (POM). Isotype.



Figure 7. *Pyrracoma halophila*. Cusick 2769 (WS). Isotype.



Figure 8. *Pyrrcoma halophila*. Applegate 7749 (CAS).

Figure 9. *Pyrocoma halophila*. Crosby 2230A (WTU).

Figure 10. *Pyrocoma halophila*. Leach s.n. (OSC).



Figure 11. *Pyrocoma halophila*. Reynolds 11 (HPSU).



Figure 12. *Pyrrocomma halophila*. Shelly 579 (OSC).



Figure 13. *Pyrocoma halophila*. Washoe, Co., Nevada, Train 2990 (NY).



Figure 14. *Pyrocoma halophila*. Washoe, Co., Nevada, Train 2995 (RENO).



UNIVERSITY OF NEVADA RENO
HERBARIUM

Flora of Oregon, U.S.A.

Haplopappus lanceolatus (Hook.) T. & G.
(Asteraceae)

LAKE COUNTY: The Nature Conservancy's Katherine
Ordway Sycan Marsh Preserve; Sycan Marsh, 40
kilometers south of Silver Lake. (N end Sycan, N
end 2X property between Bratton properties)

Elevation 1524 meters.

John A. Christy

26 August 1980



RENO

Figure 15. *Pyrocoma lanceolata*. Lake Co., Sycan Marsh, Christy s.n. (RENO).



Figure 16. *Pyrocoma lanceolata*. Lake Co., south of Paisley, Hall 12207 (DS).



Figure 17. *Pyrocoma lanceolata*. Lake Co., Hot Lake, Lakeview, Peck 15348 (WILLU).