

Microseris × *heterocarpa* (Nutt.) K. L. Chambers, BROWN MICROSERIS, STEBBINSOSERIS, STEBBINS' MICROSERIS, GRASSLAND SILVERPUFFS. Annual, taprooted, rosetted with ascending to erect leaves, ± 1-stemmed at base, acaulous or short-stemmed, erect, in range 3–36 cm tall; shoots forming 1–several scapelike inflorescences, sometimes appearing glabrous but foliage initially densely mealy with bladdery heads on finely-stalked hairs; taproot thin, white, white-fleshed; latex milky, copious. **Leaves:** helically alternate, unlobed or lobed to finely pinnately dissected, sessile, without stipules; blade linear to very narrowly elliptic, in range 3–200 mm long, leaf axis 1.8–4.5 mm wide (excluding lobes), lobes alternate to subopposite, widely spaced, < 8 per side, acute to acuminate, < 5 (or to 20) mm long, ⊥ leaf axis or arching toward leaf tip, narrowly tapered near base but expanded into a sheathing base with membranous margins, often with a small tooth on leading margin next to sinus of longer lobes, lobes entire or with widely spaced teeth and narrowly acute to long-acuminate at tip, pinnately veined, flat or troughlike, dull green but generally aging rose-red with lighter margins. **Inflorescence:** heads solitary on erect peduncle (scape), erect in bud, head ligulate, 5–15 mm across, (2–)5–70+-flowered, flowers withering midday and when water-stressed, bracteate; peduncle cylindric, 50–600 mm long, < 2 mm diameter at base, slightly tapered upward to ca. 1 mm diameter below involucre, hollow, initially mealy to base of involucre; bracts at top of peduncle subtending head 4–5 (calyculus), ovate-triangular to lanceolate, 2.4–3.7 × 1.1–1.6 mm, narrowly whitish membranous on margin, acuminate at tip, green and commonly red-dotted, aging reddish along medial ridge; **involucre** in bud narrowly conic to cylindric, at anthesis cylindric and flaring at top, conic to ovoid and reflexed in fruit, in range 6–20 × 3–6 mm, phyllaries ca. 8 in 2 series, lanceolate, 9.8–14 × 2.4–3.7 mm, membranous on margin, acute at tip, each with a broad midridge at base, inner phyllaries flat with wider membranous margins and having dark purplish red hairs on outer surface; receptacle without bractlets (paleae), honeycombed, ± papillate and hairy on ridges between flowers, the hairs dark purplish red, < 1.2 mm long. **Ligulate flower:** bisexual, bilateral, ca. 1 mm across, light yellow to white; **calyx (pappus)** of 5, awn-tipped scales, scales erect, 3.9–4.9 mm long (excluding awn), generally 2-toothed at tip with the midvein extending from notch as an awn 1.7–2.5 mm long, enlarging in fruit; **corolla** shallowly 5-toothed, 7.7–9 mm long, light yellow to cream or white; tube 3.5–4 (–5) mm long, whitish; limb strap-shaped, 4.2–5 × 1–1.3 mm, teeth short on truncate tip; stamens 5, fused to corolla at tube orifice; filaments ca. 1 mm long, white; anthers fused into cylinder surrounding style, exerted, basifixed, dithecal, ca. 1 mm long, orange-yellow, longitudinally dehiscent; pollen orange-yellow; **pistil** 1, 6.5–1 mm long; ovary inferior, oblanceoloid, ca. 1.5 mm long, 1-chambered with 1 ovule; style 5–5.5 mm long, 2-branched, with ascending short hairs below fork, the branches stigmatic, 0.5–0.6 mm long, tapered to an acute tip, short papillate-hairy. **Fruits:** cypselae, with pappus, lacking beak, slender-cylindric to very narrowly fusiform, in range 4–9.8 × 0.5–0.55 mm, mottled brown on light yellowish tan, pale reddish brown, or grayish surface, 10-ribbed, truncate at top, densely scabrous along ribs; pappus of 4 awned scales, the scales in range 6–7.5 × 0.65–1.1 mm, tan on midvein, pale tan on membranous margins, entire or short-serrate on margin, 2-toothed at tip with midvein extending as awn 3.5–4.3 mm long, each awn densely barbed. Mid-March–late April.

Native. Annual occurring occasionally in native to partially disturbed grasslands or open patches in shrubland, growing with either other restricted native herbs or weedy introductions. This species, in many places treated as *Stebbinsoseris heterocarpa*, is an allotetraploid interspecific hybrid between *Microseris douglasii* and *M. ×lindleyi* (= *Uropappus ×lindleyi*), itself an interspecific hybrid with one parent also being a species of *Microseris*. Brown silverpuffs in nature is a stable hybrid but has apparently evolved several times independently, hence technically it is not a single species, if the definition of species is rigidly enforced. This grasslike annual generally has cream-colored ligulate flowers and is highly variable in plant height, with the smallest plants having small heads with relatively few flowers scaling to the tallest individuals having the largest heads and many flowers. *Microseris ×heterocarpa* has heads that are described as drooping in bud, although often they do not. Both *M. ×heterocarpa* and *M. ×lindleyi* may grow together, and when they do only individuals of *M. ×heterocarpa* have conspicuous mealy hairy on the leaves and scapes, red hairs on the receptacle between flowers, and brown pappus ("brown microseris"), and so they can be identified reliably in range in either vegetative or reproductive condition, in addition to differences in the nature of the pappus scales.

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