

Vascular Plants of Williamson County
Erigeron modestus – PLAINS FLEABANE [Asteraceae]

Erigeron modestus Nutt., PLAINS FLEABANE. Perennial herb to subshrub, taprooted or root woody and enlarged, early season rosetted, several-stemmed at base, repeatedly forked in canopy, in range to 40 cm tall; shoots with basal leaves and cauline leaves, basal leaves absent or mostly so at flowering, mostly short-strigose on axes and foliage with upward-pointing hairs. **Stems:** low-ridged, to 2 mm diameter, with 3 ridges descending from each leaf, brittle. **Leaves:** helically alternate, simple and sessile to subsessile, without stipules; of basal and lower cauline leaves oblanceolate or spatulate to linear-lanceolate, < 30–100 × (3–)7–14+ mm, of late season in canopy linear, < 5–20 × 0.8–1.3 mm, long-tapered at base, with several pairs of teeth (lower leaves) to entire (canopy leaves), acute at tip, pinnately veined but 1-veined (late-season) with midrib sunken on upper surface and raised on lower surface. **Inflorescence:** heads, terminal, either solitary on erect peduncle or later in year 3–many in cymelike array, head radiate, in range ca. 13 mm across, with 40–50+ widely spreading pistillate ray flowers and 75+ bisexual (sterile) disc flowers, disc ca. 3 mm across, bracteate, short-hairy and having inconspicuous, minute glandular hairs with colorless heads; peduncle of solitary head ridged and mostly 50–120 × < 1 mm, green, short-hairy along ridges and with minute glandular hairs in furrows, with linear bract below midpoint and often 1–3 linear bracts approaching involucre; **involucre** ± hemispheroid, 3–4.5 mm long, phyllaries ca. 50 in 2–3 series (subtending ray flowers), linear, outer phyllaries ca. 3 × 0.4 mm, dark green, short-hairy and with inconspicuous glandular hairs, middle and inner phyllaries to 5.3 × 0.6 mm, with colorless margins having most glandular hairs; receptacle slightly convex, lacking bractlets (paleae), not obviously pitted, glabrous. **Ray flower:** pistillate, bilateral, ca. 0.5 mm across; **calyx (pappus)** of 2 whorls, outer whorl of many setae (needles) and inner whorl of 12–17 capillary bristles, the setae ca. 0.5 mm long and smooth, the bristles to 2.4 mm long with upward-pointing barbs, persistent; **corolla** minutely notched, never coiling; tube cylindric, 1 mm long, colorless; limb widely spreading, strap-shaped, 4.5–5.5+ × 0.4–0.6 mm, initially white often aging tinged light pink-purple on lower surface, glabrous; **stamens** absent; **pistil** 1; ovary inferior, 2-ribbed, ca. 0.6 mm long (including callous base), translucent, short-hairy with ascending hairs, 1-chambered with 1 ovule; **nectary disc** surrounding base of style, 0.2 mm long, white; style ca. 2 mm long, 2-branched, white at base to yellowish above and branches yellow, the stigmatic branches exerted, 0.5 mm long. **Disc flower:** bisexual (peripheral flowers sometimes appearing pistillate with sterile stamens), radial, < 0.4 mm across; **calyx (pappus)** of 2 series, outer series of many setae (needles) and inner series of 12–17 capillary bristles, the setae ca. 0.5 mm long and smooth, the bristles to 2.4 mm long and upward-pointing barbs, as long as top of corolla throat, persistent; **corolla** 5-lobed; of bisexual flower tube cylindric, ca. 0.7 × 0.25 mm, throat slightly expanded to orifice, to 1.8 mm long, 5-veined, colorless except yellowish veins to sinuses somewhat raised, with several inconspicuous papillate hairs on throat; lobes suberect, triangular, ca. 0.35 mm long, yellow, papillate on tips; of sterile or pistillate flower tube + throat narrowly cylindric not flared, to 1.5 mm long and with shorter lobes; **stamens** 5, arising at top of corolla tube; filaments 1 mm long, mostly somewhat orange-yellow; anthers fused into cylinder surrounding style, basifixed, dithecal, ca. 1 mm long including triangular appendages at top, golden yellow, longitudinally dehiscent; pollen golden yellow, not produced in

functionally sterile flower; **pistil** 1; ovary inferior, compressed wedge-shaped 2-ribbed, ca. 0.5 mm long (including callous base), translucent, with several ascending short hairs, 1-chambered with 1 ovule (ovary shriveled and ovule absent in some sterile flowers); **nectary disc** surrounding base of style, 0.2 mm long, white; style included, ca. 1.5 mm long, 2-branched, white at base to yellowish above and branches yellow, the stigmatic branches at level of anthers, 0.5 mm long. **Fruits:** cypselae (achenes) of ray and disc flowers, oblong (ray) and compressed-obovoid, 1.1–1.4 mm long, straw-colored, 2-ribbed (edges), having several ascending short hairs; pappus of short setae (outer series) and longer capillary bristles (inner series) slightly longer bristles on cypselae of disc flowers.
A. C. Gibson