

## Vascular Plants of Williamson County

*Gaillardia amblyodon* – NARROW BLANKETFLOWER [Asteraceae]

*Gaillardia amblyodon* Gay, NARROW BLANKETFLOWER. Annual, taprooted, not rosetted, 1–several-stemmed at base, with ascending or spreading lateral branches, in range to 70 cm tall; shoots with only cauline leaves, stems and foliage pubescent. **Stems:** ridged aging cylindrical, to 8 mm diameter, with 3 ridges descending from leaf, tough, ± striped light green and white, with jointed multicellular hairs along ridges having enlarged colorless bases (on old stems hairs in lines); pith internodes hollow. **Leaves:** helically alternate, simple, petiolate (lower leaves) and short-petiolate to sessile and clasping with basal lobes, without stipules; petiole slender, flattened top-to-bottom, to 30 mm long; blade oblanceolate or oblong to spatulate, 20–60 × 6–20+ mm, tapered or on clasping leaves with rounded basal lobes, wavy and entire on margins or with to 2(–3) pairs of low teeth approaching tip, the teeth serrate with callous points, tapered to rounded lobed at base, entire (with several low teeth), acute at tip, pinnately veined with midrib raised on both surfaces but most veins inconspicuous, surfaces with longer, jointed multicellular hairs with broad multicellular bases + short-hirsute. **Inflorescence:** head, solitary, terminal with head oriented horizontally on long peduncle, head radiate, in range 25–42 mm across, of (8–)10–13 neuter ray flowers (lacking stamens and style; other forms not observed) and many bisexual disc flowers, bracteate; peduncle 8-ridged, stemlike, 90+ × 1.5 mm, striped light green and whitish, pubescent, lacking bracts at top (calyculus); **involucre** hemispheroid + ascending leaflike phyllaries, base of involucre indented at top to peduncle and lacking leafy phyllaries where fused at base, phyllaries to 32, those having green blades 21–26 + 6 in inner series, lower portion of phyllary obovate and parallel-veined, with whitish, winglike margins, green portion broadly lanceolate grading to narrowly lanceolate-linear, to 17 mm long, conspicuously shaggy-ciliate and often inrolled on margins nearly to acuminate tip, surfaces short-hirsute to somewhat short-hispid, persistent, the innermost phyllaries appressed to ray flowers, linear and narrowly acuminate, < 3 mm long, with red pigment (inner 2 series red-tinged); receptacle domed (hemispheroid), ovaries of disc flowers densely surrounded and concealed by many ascending, needlelike hairs (setae), mostly to 3.5 mm long but ca. 2 per flower to 6 mm long and thicker, white, setae not minutely 2-forked at tip. **Ray flower:** bilateral, to 7 mm across (corolla); **calyx (pappus)** scales 6–11 in 1–2 series, suberect, obovate, 1.2–2 × 0.3–1 mm, lacking veins, sparsely puberulent on outer (lower) surface and jagged at top, occasionally with short bristlelike tip but typically lacking points > 0.5 mm long (not aristate); **corolla** (2–)3-lobed, 2-colored; tube compressed, ca. 2 mm long; limb narrowly fan-shaped, 15–25 × 4–7 mm, with obtuse to acute triangular lobes 2–3.5 mm long, upper surface lower portion burgundy, upper portion from below midpoint dull scarlet, lower surface glossy burgundy, parallel-veined, the central veins forked below sinuses, having 4 veins entering each lobe but only 3 converging at tip, lower surface with principal veins slightly raised with dense short hairs and tissue with scattered, short-stalked glandular hairs; **stamens** absent; **pistil** 1, presumed sterile; ovary inferior, carrot-shaped, ca. 3 × 0.8 mm, pale green, 5-veined, 1-chambered; **nectary disc** at top of ovary, short mound on vestigial style, ca. 0.8 mm across, rose, producing thin nectar; style absent. **Disc flower:** radial, ca. 2 mm across, 11–12 mm long; **calyx (pappus)** scales 8–12 in 2 series, ascending

to suberect, scale with bristlelike tip (aristate), in range to 10 mm long, lower portion scarios, lanceolate (oblanceolate), in range to  $4.5 \times 1$  mm, conspicuously 1-veined and veined raised, with bristle (aristate) 3–6 mm long having upward-pointing barbs (antrorse), bristles orangish aging tawny, scale margins minutely jagged (cellular), surfaces glabrous; **corolla** 5-lobed; tube cylindric, ca.  $1.5 \times 0.5$  mm, 5-veined and 5-angled, pale green, glabrous but with several colorless, sessile glands; throat bell-shaped conspicuously wider than tube, ca.  $5.5 \times 2$  mm, colorless to rose approaching lobes, with 5 raised veins to sinuses; lobes triangular, 1.1–1.4 mm long + extended hairs, orange-yellow aging burgundy, with dense short hairs; **stamens** 5, attached at top of corolla tube; filament flattened front-to-back, 1.1–1.2 mm long, yellowish; anthers fused into cylinder surrounding style, basifixed, dithecal, ca. 4 mm long including narrowly ovate appendages 0.8 mm long,  $\pm$  light rose, longitudinally dehiscent; pollen orangish yellow; **pistil** 1; ovary inferior, inversely pyramidal, ca.  $1.7 \times 0.9$  mm, white, -chambered with 1 ovule; **nectary disc** surrounding base of style, 0.15 mm long, colorless, producing copious thin nectar; style 8–9 mm long, lower portion enlarged in corolla tube and colorless, 2-branched at midpoint (top of anthers), the stigmatic branches exerted, widely spreading, crimson aging burgundy, conspicuously papillate. **Fruits:** cypselae (achenes), dimorphic (wherever ray flowers also fertile), pappus of colorless, scarios scales firmly attached; of ray flowers  $\pm$  4-sided club-shaped,  $3.5\text{--}4.2 \times \pm 1.5$  mm, glabrous, dark brown, at top with colorless, wavy rim 0.2 mm long outside pappus, scales ascending to spreading, in range 6–11 in 1–2 series, obovate,  $1.2\text{--}2 \times 0.3\text{--}1$  mm, lacking veins, sparsely puberulent on outer (lower) surface and jagged at top, occasionally with short bristlelike tip but typically lacking points  $> 0.5$  mm long (not aristate); of disc flowers 4-sided inversely narrow-pyramidal, in range ca.  $2.5 \times 1.5$  mm, brown, attached at fruit base with many ascending, stiff, straight hairs, scales 8–12 in 2 series, in range to 10 mm long, lower portion scarios, lanceolate (oblanceolate), in range to  $4.5 \times 1$  mm, conspicuously 1-veined, with bristle (aristate) having upward-pointing teeth (antrorse), margins minutely jagged (cellular), surfaces glabrous.

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