

Vascular Plants of Williamson County
Bifora americana – PRAIRIE BISHOP [Apiaceae]

Bifora americana (DC.) Benth. & Hooker, PRAIRIE BISHOP. Annual, taprooted, not rosetted, 1-stemmed at base, initially unbranched later repeatedly forked by forming ascending, flowering lateral branches downward from axils of successive cauline leaves, erect, in range to 45+ cm tall; shoots with to 8 nodes of only feathery cauline leaves, glabrous but slightly scabrous from beads and minute teeth along ridges on axes, when crushed with a faint, carrotlike (*Daucus*) smell. **Stems:** 8-ridged, to 2 mm diameter, with ridges descending from leaves, tough, internodes to 55 mm long, finely striped green or aging reddish with colorless ridges, minutely scabrous mostly at leaf junctions. **Leaves:** helically alternate, to 3-pinnately compound or dissected with leaflets regularly paired, petiolate, without stipules; petiole sheathing stem node and inconspicuously closed about 1 mm, channeled, < 20 mm long, flattened at base with membranous wings < 1 mm wide to 8 mm long, if petiole short enough then membranous wings fused to the lowest secondary leaflet or otherwise lobed (auriclelike), 3-ridged on lower side with ridges with beads and teeth at stem junction, whitish in channel; blade ovate in outline, to 53 mm long, halves of blade mirror images, typically with opposite primary, secondary, and tertiary lateral leaflets or lobes on each, to 6 opposite pairs along principal leaf axis, the lowest often the most dissected decreasing to the uppermost pair simple and unlobed, leaflets and ultimate segments, pinnately veined, ultimate segments linear, 3–12 to threadlike \times 0.3–0.4 mm, channeled, green or reddish and purple at acute tip. **Inflorescence:** compound umbel, in terminal, cymelike arrays, flat-topped, to 48 mm across, of (4–)6 clustered umbellets, many-flowered, typically < 20 mm long in flower, umbellet of 1–3 pistillate flowers and 3–11 staminate flowers, bracteate, glabrous, with minute teeth along some of the ridges on axes; peduncle to 50 mm long, green, with 1+ ridges irregularly toothed; **involucre** of bracts subtending primary rays, often 6 (1 per primary ray), mostly linear, 3–4.5 \times 0.3–0.4 mm, larger if 3(5)-forked, bract and lobes 1-veined; primary rays strongly 5-ridged, subequal, to 12 mm long increasing somewhat in fruit, > bracts, 0.5–0.6 mm diameter, colorless ridges with conspicuous teeth approaching involucre; involucre a whorl of ca. 6 bractlets subtending outer series of pedicels, unlobed or with 2–3 lobes below midpoint, to 4 mm long, pinnate with central lobe the longest, green with purple tips; pedicels dimorphic, 1.5–2 \times \pm 0.4 mm (of pistillate flowers) and 2.5–3 \times \pm 0.25 mm (of staminate flowers), ridged. **Staminate flower:** radial, 4–4.5 mm across; **sepals** with receptacle cup-shaped and starlike, unequal, spreading, triangular, 0.4–0.9 mm long, only the largest with midrib, green with narrow, minutely toothed, whitish margins, persistent; **petals** 5, spreading (erect and folded along midline before anthesis) and lacking tip curved inward, short-clawed heart-shaped, 1.5–1.8 mm long, white, lobes rounded, sinus nearly to midpoint, margins often wavy, minutely papillate on upper (inner) surface and with midridge poorly developed; **stamens** 5, free, opposite sepals, to 2 mm long; filaments 1.2–1.4 mm long, white; anthers dorsifixed, dithecal, 0.5–0.6 mm long, light pinkish purple, longitudinally dehiscent; pollen white; **pistil** = vestigial pistil with a platform (stylopodium, stylar tissue) and no styles, stylopodium flat-topped, in 2 halves, from above starlike with 10 lobes, 0.7–0.8 mm diameter, greenish white. **Pistillate flower:** radial, 5–5.5 mm across; **sepals** with receptacle cup-shaped and starlike, unequal, \pm ascending,

triangular, 0.4–0.9 mm long, only the largest with midrib, green with narrow, minutely toothed, whitish margins, persistent; **petals** 5, 1 often slightly larger, spreading (erect and folded along midline before anthesis) and lacking tip curved inward, short-clawed heart-shaped, 2–2.5 × 2.2–2.8 mm, white, claw to 0.5 mm long, lobes rounded, sinus nearly to midpoint, margins often wavy, minutely papillate on upper (inner) surface and midvein on lower surface ridged, with a raised, flap below the notch of folded tissue, minutely papillate on upper surface; **stamens** absent; **pistil** 1; ovary inferior, 2-lobed with a deeply 2-lobed platform (stylopodium, stilar tissue) on top, oblong and double D-shaped compressed side-to-side, 1 × 1.2–1.3 × 0.7 mm, faintly ribbed, ribs 10 and curved, dark green below perianth, 2-chambered, each chamber with 1 ovule, stylopodium pillowlike, 0.3 × 1.5 × 0.9 mm, colorless and opaque, with margin wavy and 10-lobed; styles 2, initially erect and appressed, ca. 0.6 mm long later curved-spreading, colorless and opaque; stigmas terminal on rounded tip. **Fruit:** schizocarp, of 2 dry, 1-seeded halves (mericarps), mericarps subspheroid when still green with inconspicuous and narrow ribs, flattish on inner face on fruit axis, 2.5–2.7 mm, with persistent sepals, stylopodium, and styles, when dry ± D-shaped having 3 prominent and corky ribs on curved outer face.

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