

Vascular Plants of Williamson County

Frangula caroliniana – CAROLINA BUCKTHORN, INDIAN-CHERRY, YELLOWWOOD,
POLECAT TREE [Rhamnaceae]

Frangula caroliniana (Walter) A. Gray, CAROLINA BUCKTHORN, INDIAN-CHERRY, YELLOWWOOD, POLECAT TREE. Small tree, winter-deciduous, when a tree often with 1 trunk but < 8 cm diameter, in range to 6 m tall; shoots mostly 2-dimensional (plagiotropic), short-hairy. **Stems:** ± cylindric, initially purple to red, canescent, with raised leaf scar between a pair of stipular scars, soon forming periderm with scattered, fusiform, tannish lenticels; terminal buds not covered with scales. **Leaves:** helically alternate, simple, petiolate, with stipules; stipules 2, attached to stem at leaf base, awl-shaped with thickened, rounded base, to 2 mm long, red, early-deciduous, short-hairy, having 1–several inconspicuous food bodies near base of stipules, < 0.1 mm long; petiole cylindric, 4–15 mm long, short-hairy; blade elliptic or ovate to oblong, (25–)40–105+ × (7–)15–55 mm, relatively flat, tapered to subtruncate at base, short-crenate on margins, acute at tip, conspicuously pinnately veined with principal veins sunken on upper surface and conspicuously raised on lower surface, upper surface somewhat glossy and dark green and glabrate or aging glabrescent, lower surface lighter green and veins somewhat yellowish, short soft-hairy, principal veins not terminating in teeth. **Inflorescence:** panicle of umbel-like cymes, typically axillary with leaves present, each cyme < 10-flowered, bracteate, short-hairy; peduncle >> petiole, at anthesis to 30 mm long, stemlike; bract subtending each umbel-like cyme stipulelike but flatter, narrowly triangular to narrowly lanceolate, to 1.2 mm long, purple-red, early-deciduous; bractlet subtending pedicel resembling a minute stipule, narrowly triangular, < 0.5 mm long, red, tan-glandular at tip, short-hairy, early-deciduous; pedicel curved, 3.5–4 mm long increasing 2× in fruit, sparsely short-hairy. **Flower:** bisexual, radial, 4.5–5 mm across, nonshowy; bud 5-angled; hypanthium subtending and essentially free of ovary at base, bell-shaped, ± 1.5 × 1.8 mm, light yellow-green, weakly 10-ribbed, thick-walled, short-hairy aging sparsely hairy, persistent but spreading and not increasing in fruit; **sepals** 5, spreading, triangular, ± 2 × 1.5 mm, thick, pale green, upper surface with midridge and glabrous, lower surface glabrous to glabrate with scattered short hairs; **petals** 5, broadly heart-shaped (flattened) cupped inward around anther, ± 1 × 1 mm, white, cleft to 0.2 mm deep, short-hairy along fold; **stamens** 5, broadly attached to hypanthium rim, opposite petals, each loosely cupped by petal; filaments erect, narrowly triangular, 0.6–0.7 mm long, pale green; anthers dorsifixed, dithecal, ca. 0.5 mm long, greenish aging reddish, with a minute point at tip (apiculate), longitudinally and inwardly dehiscent; pollen nearly colorless, sticky, discharged before anthesis; **pistil** 1, 1.7–2 mm long; ovary superior, not embedded in hypanthium disc, ovoid, 0.7–0.8 mm long, greenish yellow (not orange or purplish red), 2-chambered, each chamber with 1 ovule; style included, erect columnar, ± 1.1 × 0.35 mm, light green, glabrous; stigma capitate and low-lobed. **Fruit:** drupe, (2–)3-stoned, oblate subspheroid with short beak (style) at truncate top, 6–6.3 × 6.7–7 mm, ± black (green and red when immature); pulp (mesocarp) thin; stones (endocarp) 3-sided to hemi-ovoid, (2.5–)3.8–4.6 × 3.5–4 mm, black, with encircling ridge; hypanthium in fruit platelike.

A. C. Gibson