

*Salix gooddingii* C. R. Ball, GOODDING'S BLACK WILLOW. Small tree, winter-deciduous, with 1–several trunks, in range to 15 m tall; dioecious; shoots in spring with inflorescences appearing after appearance of new leaves, leaves same color bright green on both surfaces, soft-hairy and never glaucous, the hairs whitish, becoming glabrescent or nearly so; buds on ascending-appressed, triangular, 1.5–2 mm long, acute at tip, swelling prior to flowering, with scale margins free but overlapping on side facing stem, glabrous, green becoming orange-brown; bark coarsely furrowed, gray. **Stems:** cylindrical, yellowish green, becoming ± knobby on young twigs due to flaring leaf bases; twigs dull yellowish to yellow-gray; leaf scars ± crescent-shaped, stipule scars lateral to leaf scar, elliptic, 0.7–1 mm long. **Leaves:** helically alternate, simple, petiolate, with stipules; stipules 2, attached to stem, asymmetric, earlike or ± kidney-shaped, 1–8 × 0.9–4 mm, short-dentate on margins, veins obscure at base, margins and upper surface (facing stem) with conspicuous green, stalked, balloonlike resin glands, not glaucous, deciduous; petiole deeply channeled at base and cylindrical approaching blade, 1–7 mm long, channel conspicuously hairy, often with a pair of resin glands next to blade on upper surface; blade narrowly lanceolate or elliptic to oblong (small leaves), 10–90 × 4–16 mm, broadly tapered to rounded at base, low-serrate or entire on margins, on developing leaves with conic resin glands = glandular points on teeth next to sinus, some points with filaments, acuminate to acute at tip (± rounded at tip for first leaf of new growth), pinnately veined with midrib raised on lower surface, at maturity glabrescent or nearly so. **Inflorescences:** unisexual catkins, terminal on leafy shoot emerging with 1–several short leaves from winter bud, spikelike, many-flowered, flowers alternate, bracteate, with fine, soft hairs. **Staminate inflorescence:** catkin (ament) spreading to pendent, cylindrical, typically 50–60 × 8 mm, ± lax, flowers sessile, tomentose; peduncle to 6 mm long; axis with silvery hairs; bract (bractlet) subtending flower (“floral bract”) ovate or elliptic to obovate or oblanceolate and cupped, (1–)1.3–2.5 × 0.7–0.9 mm, light yellowish tan, rounded or truncate (2-toothed) at tip, sometimes with conspicuous red veins, tomentose on lower surface, persistent. **Staminate flower:** **perianth** absent; **stamens** (4–)5–8 (even on same inflorescence), ascending to spreading, fused for ± 0.5 mm at base; filaments unequal, (1.5–)2.5–3.2 mm long, greenish, hairy below midpoint; anther basifixed, dithecal, 0.5–0.65 mm long, bright yellow, longitudinally dehiscent; pollen bright yellow, copious; **nectaries** 2–4, truncate to rounded at tip, the largest on upper (adaxial) side of stamens somewhat rectangular, 0.25–0.4 × 0.2–0.4 mm, the others typically on lower (abaxial) side of stamens, oblong or fingerlike to tongue-shaped, 0.25 × 0.1–0.25 mm, dark red, compressed top-to-bottom; **pistil** absent. **Pistillate inflorescence:** catkin ascending, cylindrical, 30–50+ × 4 mm, in range soft-hairy; peduncle at anthesis to 3 mm long increasing 2× in fruit; axis with silvery hairs; bract (bractlet) subtending flower (“floral bract”) oblong to oblanceolate, ± 2.5 mm long, light yellowish tan or whitish, not strongly cupped, truncate to rounded or acute at tip, villous; pedicel = stalk of ovary (stipe). **Pistillate flower:** **perianth** absent; **stamens** absent; **nectary** 1, above base of pistil, squarish, 0.4 × 0.4–0.6 mm, pale yellow; **pistil** 1, ascending, stalked (stipe); stipe ± 1.2 mm long increasing to 2× in fruit, with some hairs at base; ovary superior, ovary + style inverted club-shaped to lanceoloid, 2–2.5 mm long, green, sparsely fine-hairy near midpoint, with 2 lateral suture lines, 1-chambered with to 8 ovules attached to each placenta on outer side; style < 0.3 mm long, 2-branched (stigmas); stigmas often 2-lobed, very short, greenish aging reddish. **Fruit:** capsule, dehiscent by 2

valves, to 16-seeded, moustache-shaped, immature 6–8 mm long, dehiscing with spreading or recurved valve tips; style short, and stigmas persistent. **Seed:** attached via ring at seed base, ovoid and plump, about 1.2 mm long; hairs fine, 4–4.5 mm long. Mid-March–mid-April.

Native. Widespread deciduous tree of wetlands in California but so far collected in range only at two locations, where planted in riparian woodland in Agoura Hills (SMM) and a thriving population near the shoreline at Chatsworth Reservoir (SH). *Salix gooddingii* characteristically has narrow-lanceolate leaves green on both surfaces (never glaucous) with low-serrate margins, and the small, ear-shaped stipules have conspicuous glands on the surface facing the stem. Like *S. laevigata*, the bud scale has free, overlapping margins. Goodding's black willow has (four) five to eight stamens for flowers on a single inflorescence and is the only local species ever having more than five stamens. The male flower of *S. gooddingii* also is distinctive in having dark red (purple) nectaries, which are easily observed with a hand lens.

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