***Echinodorus berteroi*** (Spreng.) Fassett, UPRIGHT BURHEAD. Aquatic annual or short-lived perennial herb, rhizomatous (if perennial), fibrous-rooted, rosetted, 1(–several)-stemmed at base, scapose and forming a tall inflorescence, in range 6–80 cm tall; shoots with emergent and sometimes floating and submersed leaves, with conspicuously angled petioles and peduncle, in range glabrous; rhizomes cormlike, covered by old leaf bases. **Leaves:** helically alternate, simple, petiolate, without stipules; of emergent leaves, petiole channeled, narrowly winged and 3–8-ridged, 30–300 mm long, in ×-section triangular to ± hemi-cylindric, in channel with a smaller central vein between 2 principal ridges, very wide at base, flexible, wiry, tough, in ×-section with numerous air canals; blade of emergent leaves ascending to erect, heart-shaped (ovate), in range 30–150 × 20–140 mm, at base curving inward and upward (except on the smallest leaves), cordate at base (of smaller leaves sometimes truncate or broadly tapered at base), entire and rose-edged to purple-edged on margins, acute to rounded at tip, palmately veined with conspicuous primary veins arching from leaf base (5–)7(–9) and strongly raised on lower surface (slightly raised on upper surface), with parallel secondary veins bridging primary veins, dull; blade of floating leaves, similar to emergent leaves but blade flat, sometimes elliptic, sometimes truncate or broadly tapered at base; blade of submersed leaves (seldom present) linear to lanceolate, to 450 × 30 mm, wavy on margins, parallel-veined with major central veins and less conspicuous submarginal veins, with a wavy, winged petiole. **Inflorescence:** panicle (raceme) of cymes, terminal, erect, 15–400+ × 17–300+ mm, 1–several per plant, many-flowered, with primary branches (if present also secondary) in whorls of 3 and flowers in whorls of 3–6 (except terminal flower), bracteate, glabrous; peduncle petiolelike, > ascending leaves, typically 3–5-angled; bracts subtending branches whorled (1 per branch), acuminate-lanceolate to lanceolate, 6–25 mm long, < pedicel, with scarious margins, prophyll inconspicuous and missing on mature plant; flowering branchlet = a several-flowered cyme; bractlet subtending pedicel ca. 5 mm long; pedicel spreading to ascending, cylindric, 6–10(–28) mm long increasing in fruit. **Flower:** bisexual, radial, 10–12 mm across; with a spheric receptacle; **sepals** 3, deltate-ovate, (1–)4–5.5 × (1–)3.5–5 mm, green, cupped but soon becoming somewhat reflexed, broadly acute (obtuse) at tip, with 8–14 slightly raised ribs on back, parallel-veined and often aging purplish, persistent; **petals** 3, clawed, roundish, (2.5–)5–7(–8) × (3.5–)4.5–6.5 mm, white, claw to 0.5 mm long, limb delicate becoming shriveled but often persistent; **stamens** ± 12(–15), free; filaments unequal, 1–2.5 mm long, greenish; anthers versatile, dithecal, 0.8–1 mm long, yellow with a reddish, ellipsoidal connective on inner side, longitudinally dehiscent; pollen yellow; **pistils** many (> 125), helically alternate; ovaries superior, fingerlike and gradually tapered to base, 1–1.5 mm long, green, glabrous, each 1-chambered with 1 ovule; stigmas sessile, minute. **Fruits:** achenes in a many-fruited, spheric, burrlike cluster; cluster 6–8 mm in diameter, in mass appearing purplish or dark reddish brown; achenes beaked, asymmetric with 2 conic ends and the widest above midpoint, 1.6–3 × 1–1.3 mm, ca. 12-ribbed with ca. 4 ribs developed into principal angles from base, typically with 3 angles on top and 1 on bottom, in ×-section wedge-shaped, whitish at base to red-purple and beaked at tip, with 2 oval glands between ribs on 1 face above the widest part; beak 0.5–1 mm long. **Seed:** compressed-oblong, 1.2–1.5 × 0.5 mm, minutely pitted in a linear pattern, contoured to ∩-shaped embryo. Mid-June–early November.

Native. Emergent aquatic herb occasionally found along margins of ponds and lakes of the SMM. Terrestrial plants can be much shorter in comparison with those growing in moist mud or shallow water, and therefore have much smaller leaves and simpler inflorescences. *Echinodorus berteroi* is not observed every year, but this species can be found growing in dense stands with its relative *Alisma triviale*, as at the pond of SMMNRA Rocky Oaks in 2005, 2008, and 2010.
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