Bolboschoenus maritimus (L.) Palla subsp. paludosus (A. Nelson) T. Koyama, SALTMARSH BULRUSH, ALKALI BULRUSH, BAYONET-GRASS. Perennial herb, emergent aquatic, rhizomatous and corm-bearing, fibrous-rooted, several-stemmed at base, erect, 70-120(-150) cm tall; shoots with folded basal leaves and cauline leaves, glabrous; rhizomes long with hard corms beneath shoots bearing many adventitious roots, corms 10–20 mm diameter. Stems: sharply 3-angled, in x-section triangular with flat sides, to 8 mm diameter, hidden by leaf sheaths, cover tough and internal tissue spongy; with large air canals just below surface in green tissue, core white. Leaves: alternate tristichous, simple with sheath; sheath closed,  $\pm$  green-striped, 3-keeled with thin wings, top opposite blade truncate with V-shaped membranous and veinless area aging whitish when dried; ligule absent; blade sharply keeled at base and flat near tip, linear,  $< 600 \times 3-18$  mm wide, the widest at base, margin and midrib minutely toothed, scarcely scabrous, parallel-veined. Inflorescence: spikelets, in terminal, dense, headlike (cymelike) arrays to 30 mm wide, of 4-many subsessile spikelets, each spikelet 25+-flowered, bracteate, glabrous; inflorescence bracts subtending outer spikelets 2–4, spreading, bladelike, the longest < 250  $\times$  4–12 mm, minutely toothed on margins and along midrib on lower surface, scabrous; rays absent. Spikelet: ellipsoid-ovoid to narrowly ovoid, to 15 mm long, with helically alternate, bracteate flowers; bracts subtending flower 2(-3), dimorphic, short bristle-haired on back and margins,  $\pm$  scabrous, lower bract narrowly lanceolate, typically 3–4 mm long, membranous and brown above on exposed surface, upper bract (= bractlet) awned, cupped around flower, ovate with notch at tip, 5-8 mm long + awn 1.5-3 mm long arising from notch, thin-membranous and colorless to yellow and brownish (grayish) on exposed surface, with raised midrib continuous with awn, often cut at tip. Flower: bisexual; protogynous; **perianth** of 6 threadlike bristles, ascending and curved, 1.5–2 mm long, translucent-white, short-barbed, typically abscising during fruit development, if persistent mostly < 1/2 fruit; stamens 3, free, on bractlet side of ovary, exserted; filaments linear, 7.5–8.5 mm long, elongating after stigma receptive, translucent-white, somewhat rectangular in ×-section, glabrous; anthers basifixed, dithecal, linear, 3–4.5 mm long, light yellow, tip with a minute tooth, longitudinally dehiscent; pollen light yellow; **pistil** 1; ovary superior, compressed-obovoid with conic knob at tip (beak), 2 mm long, greenish (especially knob), 1-chambered with 1 ovule; style exserted, threadlike, 8–10 mm long, red-veined, 2-branched from midpoint, the branches ascending or spreading. Fruit: achene, 2(-3)-sided obovoid, 2.5–4 mm long, flattened on axis side and 1(2) sides convex, smooth, dark brown; beak 0.1–0.2 mm long. Late April–late October.

Native. Perennial herb occurring in not only halophytic salt marsh but also freshwater drainage ditches and other standing water at scattered locations throughout the range. *Bolboschoenus maritimus*, formerly treated as *Scirpus maritimus*, is relatively easy to identify because it has a closed, membranous, truncate sheath. B. A. Prigge & A. C. Gibson