

*Spartina foliosa* Trin., CALIFORNIA CORD GRASS. Perennial herb, emergent saltwater aquatic, evergreen, clonal, rhizomatous, 1–several-stemmed at base, fibrous-rooted, erect with terminal inflorescence, in range 50–90 cm tall; shoots with 7–10 suberect to ascending cauline leaves; rhizomes with internodes < 15 mm long, solid and white, with short, ovate, colorless, bladeless scales; adventitious roots at nodes of rhizomes and submersed lower stems, commonly 6+ per node, each nodal root with numerous slender lateral roots. **Stems (culms):** cylindric, 5–10 mm diameter, green (white below low-water line), finely veined, internodes 10–45 mm long, glabrous; hollow. **Leaves:** alternate distichous, simple with sheath; sheath open, 95–160 mm long, with colorless to tannish membranous margins overlapping most of length, narrowly V-shaped at throat, finely veined, glabrous (sometimes sparsely pilose at throat), without lobes (auricles) at top; ligule densely ciliate (with hairs matted together so appearing jaggedly cut), 1–2 mm long; blade linear, 135–270 × 8–15 mm, flat to midblade and inrolled forming a cylinder above midblade, entire (sometimes minutely toothed) on margins, tapered to a narrow-acuminate tip, glabrous, upper surface deeply but finely ridged and glaucous; lower surface green and smooth. **Inflorescence:** spikelets, in terminal, compact panicles, panicle narrowly cylindric, in range 65–185 × 5–6 mm, sometimes partially enclosed in sheath of flag leaf and often surpassed by flag leaf, of 3–13 spikelike branchlets, branchlets 1 per node appressed to rachis, each branchlet with sessile spikelets arranged alternately on outer side of rachis, commonly with the lowest spikelet sterile (glumes only) and having 9–18 spikelets each with 1 floret, bracteate, with inconspicuous awns; rachis triangular in x-section, winged, slightly twisted; branchlets in range 19–55 mm long. **Fertile spikelet:** narrowly oblong to lanceolate compressed side-to-side, in range 8–16 × 1.5–2.3 mm, with its broad side appressed to branch axis, breaking beneath glumes; **glumes** 2, folded along midvein, strongly keeled and flattened, unequal; lower glume linear, in range 6–6.5 × 0.4 mm, 1-veined, membranous with green midvein, acuminate at tip; upper glume, semi-lanceolate and strongly keeled, in range 9.5–16 × 1.3–1.5 mm, membranous, 5–7-veined with a conspicuous green midvein and faint lateral veins, ciliate-scabrous along keel, midvein-keel extended beyond tip to 1.1 mm as a minute awn; **lemma** strongly folded, 7.5–10 mm long, asymmetrically 3–5-veined, membranous with a conspicuous green midvein and obscure lateral veins, glabrous (sparsely appressed-pubescent on sides); **palea** membranous, 7.5–9.2 mm long, commonly palea > lemma, obscurely 2-veined, acute or sometimes minutely 2-toothed at tip. **Flower:** bisexual; **perianth (lodicules)** absent; **stamens** 3; filaments cylindric, 5.5–7 mm long, initially fleshy and semitransparent becoming threadlike or narrowly flattened and whitish but swollen at base; anthers basifixed, dithecal, linear, in range 3.5–5 × 0.5 mm, greenish yellowish, arrow-shaped at base, acuminate at tip, longitudinally dehiscent; pollen pale yellow; **pistil** 1, 8–13 mm long; ovary superior, ellipsoid, 1.3–2 mm long, yellowish green, 1-chambered with 1 ovule, glabrous; style 1 and branched or unbranched or styles 2 and distinct but adjacent at top of ovary, 3.5–5.5 mm long; stigmas 2 or sometimes united at base (where style unbranched), bottlebrushlike, 3.5–5.5 × 0.5–0.6 mm, greenish yellow to golden brown, densely short-hairy. **Fruit:** achene (caryopsis) rarely produced, not seen in range. Late summer.

Native. Emergent perennial herb growing in mudflats of salt marsh at Pt. Mugu Naval Station in monospecific stands in Mugu Lagoon near opening to Pacific Ocean, but also

known in the western part of Mugu Lagoon (out of range). *Spartina foliosa* is sometimes difficult to collect because it grows in the intertidal zone, often in shallow water at low tide. The shoots are erect with conspicuous, suberect, C<sub>4</sub> leaves that are inrolled as a cylinder above midblade, so it cannot be confused with any other halophytic grass species found in range, but there are other species along the northern coast of California that could invade, and those species would not have twisted branchlet axes on the panicle.

B. A. Prigge & A. C. Gibson