Chloropyron maritimum (Benth.) A. Heller subsp. maritimum, SALT MARSH BIRD'S-BEAK. Annual, photosynthetic root parasite (hemiparasite), taprooted, several-stemmed at base, with ascending to spreading branches, 20–40 cm tall; shoots with only cauline leaves, moderately pilose and with shorter, stalked glandular hairs; roots much-branched, yellow, forming haustoria irregularly along finer branch roots. **Stems:** cylindric, greenish on young growth soon becoming pinkish brown and then purplish red, pilose and glandularhairy. Leaves: helically alternate, simple, sessile, without stipules; blade lanceolate, $(5-)7-25 \times 1.5-7$ mm, green but becoming purplish red, rounded-truncate and sometimes slightly clasping at base, entire (sometimes aging with margins inrolled upward), acute at tip, 3-veined at base (large leaves) but typically only midrib evident and raised on lower surface, moderately pilose and stalked glandular-hairy, glaucous, lower surface sometimes \pm keeled at base. Inflorescence: leafy spike, terminal, $15-50 \times 13-18$ mm, with 5-15flowers, bracteate, moderately pilose and glandular-hairy; bract ("outer bract") subtending spike \pm leaflike to boat-shaped, entire and acute at tip or sometimes with lobes approaching tip; bractlet subtending flower boat-shaped, at anthesis 13–17 mm long increasing to 22 mm in fruit, green becoming glaucous and purplish at tip, not keeled, acute at tip and with lobe approaching tip on 1 or both margins, lobes $0.8-1.8 \times 0.3-0.5$ mm, the tips of lobes 0.5–2 mm below tip of bractlet, 3-veined or 5-veined, inner (upper) surface sparsely hairy, outer (lower) surface moderately pilose and stalked glandular-hairy. **Flower:** bisexual, bilateral, ± 4 mm across; calyx 2(-3)-toothed, lanceolate and boatshaped, 10.5–13 mm long increasing to 21.5 mm long in fruit, tube absent, green but tinged reddish on margins and at tip, 3-veined, sinus at tip 0.6–0.7 mm deep, externally pilose and glandular-hairy, internally sparsely hairy, persistent; corolla 2-lipped, \pm appearing like a bird's beak, 8.5–15 mm long, mostly pale yellow to creamy white but deep purplish red on most of lower lip and light green at tip of upper lip; tube-throat 5–10 mm long, constricted above ovary and flaring into lips, glabrous or pubescent; upper lip (galea) 3–4.7 mm long, compressed side-to-side and hooded having anthers and stigma initially positioned within hood (later exserted), pilose grading to densely papillatepubescent at tip; lower lip 3-lobed and \pm 3-pouched below each lobe and extending into throat, 2.8–4.7 mm long, deep purplish red, lobes rounded, curved up and in and then outward (most pronounced on lateral lobes, forming a transverse ridge below tip), lateral lobes \pm appressed to central lobe; pilose to papillate-glandular, internally ridged between pouches and pilose-pubescent or villous; stamens 4, lacking staminodes, fused to corolla at different levels, 2 arising below lower lip, 2 arising closer to corolla orifice and below upper lip (galea); filaments of 1 pair positioned lower and fused to roof of tube, slender, 3-7.5 mm long, filaments of other pair fused to floor of tube below galea, thicker and strongly wavy, 4.5–8 mm long, whitish or thicker filaments yellowish or yellowish green at base; anthers dorsifixed, dithecal with the sacs separate $1.5-2 \times 0.5-0.6 \text{ mm} + 1 \times 0.3$ mm (upper stamens) with the smaller anther sac at upper end and appearing suspended, monothecal and ca. $1 \times 0.3-0.5$ mm (lower stamens), anthers yellow, longitudinally dehiscent; pollen light yellow; nectary disc oblique at base of ovary, green; pistil 1, 8.5-14 mm long; ovary superior, ellipsoid compressed side-to-side, ca. $2 \times 0.8-1$ mm, green, mostly glabrous but with several hairs below style, 2-chambered, each chamber with ca. 20 ovules attached to center, lower chamber larger; style 6.8–12 mm long, mostly whitish with the terminal 1.5–3 mm thicker and green; stigma terminal, weakly and

asymmetrically 2-lobed, exserted, short-papillate. **Fruit:** capsule, loculicidal, dehiscent by 2 valves, several–21-seeded, asymmetrically ovoid to oblong, $4.5-7.5 \times 2-3.7$ mm, tan, obliquely attached at base, lower chamber larger than upper chamber, ribbed at suture zones, grooved over placentae; with the persistent calyx and damaged, old corolla. **Seed:** kidney-shaped, $1.5-1.8 \times 1.1-1.3$ mm, golden tan or golden brown, deeply netlike. Late June–August.

Native. Listed subspecies. Hemiparasitic annual of middle level salt marsh, to date not yet collected in range but at Pt. Mugu growing just across the northern boundary line for the flora. *Chloropyron maritimus* subsp. *maritimus*, formerly treated as a species of *Cordylanthus*, is listed as an endangered plant and should not be collected. This species typically has unlobed leaves and has narrow flowers without yellow on the corolla. B. A. Prigge & A. C. Gibson