

*Erodium* L'Hér. STORKSBILL, FILAREE

*Erodium botrys* (Cav.) Bertol., LONG-BEAKED FILAREE, BIG HERONBILL, BROAD-LEAF FILAREE, LONGBEAK STORKSBILL. Annual, taprooted, flat-rosetted, acaulous with 1–several spreading to ascending inflorescences, decumbent (ascending), in range 10–45 cm tall; shoots with basal leaves, basal rosette 6–55 cm wide, with nonglandular hairs but having glandular hairs only on flower buds. **Stems:** cylindric, fleshy, purplish red, hairs radiating to recurved, 1-celled, to 2 mm long. **Leaves:** helically alternate (basal leaves) and alternate or opposite (bracts), odd-1-pinnately lobed, petiolate, with stipules; stipules 2, attached to stem at node, lanceolate to ovate, 4–10 mm long, membranous, reddish, ciliate or not on margins; petiole 20–170 mm long, elliptic in  $\times$ -section with groove on upper side,  $\pm$  fleshy, exposed surfaces purplish red, with scattered hairs but denser in midgroove; blade  $\pm$  asymmetric ovate, 12–110  $\times$  9–60,  $\leq$  petiole, dark green with purplish red along principal veins, lobes 5–13 mm wide, toothed but teeth not sharply pointed, ultimate lobes and teeth 1.5–2 mm wide, acute at tip, pinnately veined with a vein to each major lobe, strigose especially on lower surface along principal veins. **Inflorescence:** cymelike array with umbel, axillary from basal leaf, umbel 1–4-flowered, flowers spreading but often nodding before darkness, bracteate, hirsute-strigose; bract at principal node = pair of stipules, deltate, 4.5–7 mm long, membranous often tinged purplish red, ciliate; peduncle bearing umbel ascending, straight, at anthesis 45–130 mm long increasing somewhat in fruit, the shortest if 1-flowered, generally purplish red on exposed side, with involucre at tip. **Involucre** of bractlets subtending pedicels of an umbel, bractlets  $\pm$  3 $\times$  pedicels, free or fused, flat to recurved, ovate, 2–4 mm long, scarious, ciliate, outer bractlets sometimes red-tinged; pedicel initially ascending with hook at tip, 15–25  $\times$  0.8 mm, becoming strongly bent  $> 90^\circ$  in fruit, purplish red fading in fruit, strigose. **Flower:** bisexual,  $\pm$  radial (petals not regularly distributed), (8–)11–15 mm across; **sepals** 5, ascending, overlapping, ovate to oblong-ovate, 7–10 mm long increasing to 18 mm and erect in fruit, with short awn at tip, green or the outermost sepal having 1–2 purple stripes, (3–)5–7-veined, hidden margin membranous, exposed margin hirsute and often with conspicuous glandular hairs, inner sepals hirsute along veins and ciliate, the awn 0.7–1 mm long, red-tipped, with several hairs + short bristles at tip; **petals** 5, spreading, overlapping,  $\pm$  equal, obovate to wedge-shaped, 10.5–14  $\times$  4.5–7 mm, rose-lavender narrowed to whitish base, base 2 mm, 3-veined or 5-veined with principal veins dark rose, sparsely hairy; **nectaries** 5, appressed to bases of stamens (althernate with petals), truncate and tongue-shaped, 1 mm long, reddish or green, with secreting tip incurved; **stamens** 5 fertile opposite sepals, staminodes 5 opposite petals, free; filaments erect, broad-tapered and flattened, ca. 5  $\times$  1 mm, pale greenish or pinkish, sparsely hairy; anthers dorsifixed, dithecal, burgundy, longitudinally dehiscent; pollen orangish; staminodes ca. 2  $\times$  0.4 mm, colorless, glabrous; **pistil** 1,  $\pm$  4.5 mm long, densely hispid-strigose; ovary superior, 5-lobed, lobes hemispheroid, green but covered with whitish hairs, 5-chambered, each chamber with 1 ovule attached to center; style column with 5, free, spreading tips, the branches stigmatic, spheroid, red-violet, short-papillate. **Fruit:** schizocarp, of 5 dry, 1-seeded mericarps, before dehiscence erect, needlelike (= beaks) with swollen base (= seed bodies), mericarp separating from base by coiling upward (= awn) from the persistent, central style column, (50–)80–110 mm long before splitting; seed body narrowly oblanceoloid, 8–11 mm long,

sharply pointed at base, cinnamon-brown, open on inner edge, densely appressed-hirsute, with 2 deep, ± circular concavities at top (1 on each side of seed chamber), with 2 deep furrows below each circular concavity, the concavities glabrescent (not glabrous); awn initially mostly 80–110 mm long, brown, becoming tightly helically twisted forming an erect shaft with > 10 gyres to above midpoint and having a long, straight terminal portion, short-hairy on outer surface and with short, straight hairs (fibers) on inner side. Early February–late May.

Naturalized. Annual common and often locally abundant in disturbed areas and along trails. *Erodium botrys* has a well-defined rosette with basal leaves flush against the ground, and a dense population can crowd out other herbs. Its leaves tend to be deeply divided, not compound, and dark green with veins and axes purplish red. The inflorescence is not conspicuously leafy, as in the other species, bearing a cyme with no more than four flowers. The corolla is radially symmetric with five overlapping petals. Long-beaked filaree is so named because it produces fruits generally longer than one hundred millimeters.

B. A. Prigge & A. C. Gibson