

*Geranium carolinianum* L., CAROLINA GERANIUM. Annual, taprooted, 1-stemmed at base, ascending, 10–70 cm tall; shoots with soft, cauline leaves, short-hairy, mostly lacking glandular hairs on shoot but glandular-puberulent in inflorescence. **Stems:** cylindric, to 6 mm diameter, only slightly swollen above nodes, green with reddish tinge at nodes or lower stem reddish, internodes increasing upward,  $\pm$  short-strigose with downward-pointing hairs and some minute glandular hairs without heads. **Leaves:** helically alternate (having opposite bracts and bractlets within inflorescence), blade deeply palmately divided with sinuses  $2/3$ – $7/8$  to base defining 5–7 lobes, petiolate, with stipules; stipules 2, attached to petiole, long-acuminate, 5–6 mm long, green axis with pinkish to reddish membranous margins aging brownish and papery, ciliate on margins; petiole slender, to 210 mm long decreasing upward,  $\gg$  blade, short-strigose and with longer, downward-pointing hairs; blade  $\pm$  round to widely depressed-ovate in outline, 20–65  $\times$  20–70 mm, lobes wedge-shaped decreasing to oblong at base, to 25 mm wide, with irregular lobes, sublobes, and teeth, of lower leaves lobes generally wedge-shaped, sublobes with sinuses  $1/3$ – $1/2$  to base, broadly acute with reddish callous at each tip, palmately veined from base with principal veins sunken on upper surface and raised on lower surface, upper surface with scattered, short hairs arching toward tip, lower surface with arching hairs only along veins. **Inflorescence:** cyme, 2-flowered, bracteate, hairy; bract subtending cyme 2 narrow, to 3 mm long; peduncle (cyme axis) slender, at anthesis to 20 mm long increasing in fruit, with downward-curving hairs and minute glandular hairs; bractlets subtending pedicel 2, narrow, to 3 mm long; pedicel at anthesis 2–7 mm long. **Flower:** bisexual, radial; **sepals** 5,  $\pm$  erect, broadly elliptic-ovate, 5–6.5  $\times$  3 mm increasing in fruit, with a red-tipped awn 1–1.5 mm long, light green with thin, colorless or pinkish margins, 3-veined, the awns with several short, ascending stiff hairs at tip, lower (outer) surface short-pubescent and with minute glandular hairs while having longer hairs along veins and margins; **petals** 5, obovate, 6–8 mm long and barely exceeding the awns of sepals but showy when spreading, in range pink-lavender but whitish at base and with 3 darker principal veins, shallowly notched at tip; **stamens** 10 in 2 whorls, free; filaments scalelike at base and colorless, cylindric and rose above midpoint; anther dorsifixed, dithecal, kidney-shaped, pale light yellow or with purple edges, longitudinally dehiscent; pollen light yellow; **pistil** 1, ca. 4 mm long, covered with ascending, straight, colorless hairs; ovary superior, 5-lobed, lobes spheroid, 5-chambered, each chamber with 1 ovule; style at anthesis 2–3 mm long, with 5 divergent and ascending tips, short-hairy and with minute glandular hairs; stigmas on side of style tips, light yellow. **Fruit:** schizocarp of 5 1-seeded mericarps, before dehiscence erect, needlelike (= beaks) with swollen base (= see bodies); seed bodies spheroid-oblong, 3–4.5 mm long, dehiscent on inner face, with straight, ascending hairs to 1.5 mm long; beak 12.5–19 mm long, terminal branches 1–2 mm long. Late March–early June.

Native. Annual known in scattered localities throughout the range often on shaded slopes, e.g., on the edges of southern oak woodland with *Ranunculus californicus* but often growing with naturalized forbs and grasses. *Geranium carolinianum* has paler flowers than the naturalized but uncommon *G. dissectum*, with which it sometimes occurs, while they are superficially similar in vegetative form.

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