

GOULD'S WEDGE SANDMAT

Euphorbia deltoidea ssp. *adhaerens* Engelm. ex Chapman

Synonyms: *Chamaesyce deltoidea* (Engelm. ex Chapman) Small var. *adhaerens* (Small) Burch; *Chamaesyce adhaerens* Small; *Chamaesyce deltoidea* (Engelm. ex Chapman) Small ssp. *adhaerens* (Small) Herndon

Family: Euphorbiaceae (spurge)

FNAI Ranks: G2T1/S1

Legal Status: US-Endangered; FL-none

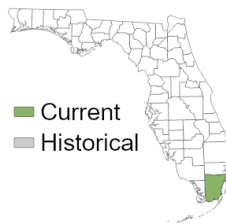


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Field Description: Stems prostrate to ascending, mat-forming, sparsely to densely villous, hairs uncinuate or irregularly twisted, 0.2 - 0.5 mm. **Stipules** villous with uncinuate or irregularly twisted hairs; petiole villous with uncinuate or irregularly twisted hairs; blade 2 - 4.5 by 2 - 4.5 mm, as long as wide, surfaces green, villous with uncinuate or irregularly twisted hairs. **Involucre** villous with uncinuate or irregularly twisted hairs. **Pistillate flowers:** ovary villous with uncinuate or irregularly twisted hairs. **Capsules** villous with uncinuate or irregularly twisted hairs. (FNA 2016)

Similar Species: There are many species of spurge (*Euphorbia* sp.) that are prostrate or mat-forming but they are noticeably different from this species. The most similar species are the related subspecies: pineland spurge (*Euphorbia deltoidea ssp. pinetorum*), wedge spurge (*E. deltoidea ssp. serpyllum*) and deltoid spurge (*E. deltoidea ssp. deltoidea*).

Related Rare Species: Three other rare subspecies of deltoid spurge (*Euphorbia deltoidea*) occur in south Florida pine rocklands: pinelands spurge (*Euphorbia deltoidea ssp. pinetorum*) with erect stems, leaves and stems villous-hirsute, hairs straight and spreading, 0.6-0.7 mm; leaf blades silver-green; wedge spurge (*Euphorbia deltoidea ssp. serpyllum*) with stems prostrate, leaves and stems canescent, hairs less than 0.1 mm; leaf blades 2 times longer than wide and silver-green; deltoid spurge (*Euphorbia deltoidea ssp. deltoidea*) which has prostrate stems with leaves and stems glabrous or very sparsely hairy, hairs 0.1-0.2 mm, appressed, uncinat; leaf blades abaxially reddish and adaxially bright green (FNA 2016).

Habitat: Pine rocklands.

Best Survey Season: Flowering and fruiting year-round.

Range-wide Distribution: Endemic to south peninsular Florida.

Conservation Status: The current known range of the species is entirely within remnant pine rocklands of the Miami Rock Ridge, which are difficult to manage given their landscape context within a highly fragmented landscape. Two of these populations appear to be well-managed and of good ecological integrity, while two other populations are extremely small and fire-excluded. One population (George N. Avery Pineland Preserve) appears to have suffered a reduction in the quality of the pine rocklands since 2002 (imagery), owing mainly to hardwood encroachment and succession. Fire exclusion and hardwood encroachment within the pine rockland habitat of known populations, represents one of the greatest threats to the species. Managing the remaining pine rockland habitat, where the species occurs, is particularly difficult, given that development immediately surrounds all of these conservation lands. Likely, the most serious issue related to prescribed fire is these remaining stands, is smoke management. In as little as 10 years, herbaceous species can be eliminated due to shading from hardwoods (Robertson, W. B. 1953 and Wade et al. 1980).

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Euphorbia deltoidea ssp. adhaerens

Protection and Management: Pine rockland habitats should continue to be managed with prescribed fire and invasive plant species should be treated to avoid degradation of the species' habitat or direct loss through competition.

References: Flora of North America (FNA) 2016, Weakley, A. S. and the Southeastern Flora Team 2023, Wunderlin and Hansen 2011



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