

SIMPSON'S ZEPHYR LILY, ZEPHYRANTHES SIMPSONII,  
AN ENDANGERED SPECIES

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Three species of Zephyranthes grow naturally in the southeastern United States, Z. atamasca (L.) Herb., Z. treatiae S. Wats., and Z. simpsonii Chapm. (1,2,3). Of these, Z. simpsonii (Fig. 1) is the rarest and has the most limited distribution. It is limited to Florida and occurs in isolated colonies from Alachua County south to Hendry and Lee Counties (2). Zephyranthes simpsonii is listed as endangered in Section 581.185, Florida Statutes.

Simpson's zephyr lily is a member of the Amaryllidaceae family. It grows from an underground bulb, producing foliage during the winter and spring and flowers mainly from February through April. The flowers are white, often tinged pink or purplish on the outside as are the buds. One upright flower is produced per stem.



Fig. 1. Zephyranthes simpsonii  
(DPI Photo #702748)

**DESCRIPTION:** Plants solitary or somewhat clumped from small tunicated bulbs. Leaves several, glabrous, elongate-linear, 1-3 dm long, about 2 mm wide, fleshy, rounded on back, edges rounded and smooth, sheathing bases overlapping. Scapes 1 or few, 1-2.5 dm tall, terete or somewhat flattened, broader than leaves and often appearing as foliage dies back. Bract about as long as perianth tube, splitting into usually 2 lobes as flower develops. Flower 1 per scape, often pink to purplish externally, white inside; perianth segments 6 in 2 similar series, oblanceolate, 3-7 cm long, erect to slightly spreading; anthers 6, filaments erect, inserted at top of perianth tube; style elongate, slender; stigma with 3 short linear lobes at about the level of anthers; ovary inferior. Fruit a 3-lobed capsule; seeds few, semicircular, shiny black (1,2,3).

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DISCUSSION: Zephyranthes simpsonii grows naturally in low pine flatwoods and savannas and at margins of wet hammocks. It also is adapted to pastures developed from such areas and to moist mowed roadsides (2). The main limiting factor appears to be competition from other plants. Mowing or grazing apparently reduces competition to acceptable levels. Although Z. simpsonii usually occurs and grows best in wet or moist soil, it grows reasonably well and multiplies on well-drained sandy soil if competition is adequately controlled. In northwest Gainesville in an area of high, well-drained, sandy soil, a few bulbs planted around 20 years ago have survived and multiplied to some extent in a mowed area of mainly centipede grass. The area is seldom mowed between October and May but is mowed frequently during the summer.

Zephyranthes simpsonii is an endangered species endemic to peninsular Florida. The main threats to its continued existence concern habitat destruction (2). Excessive drainage would drastically alter the species makeup of the associated vegetation as well as provide poorer conditions for this species. Development would almost totally eliminate this species. Bulldozing and root raking for pine planting would do severe damage to it. Less severe land preparation would be relatively harmless to Simpson's zephyr lily, although the later dense growth of pine trees probably would eliminate it except along roadways. The most hopeful indication for survival of this species is its adaptability to pastures and mowed roadsides.

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