

Common Name: SOUTHERN WATER-PURSLANE

Scientific Name: Ludwigia spathulata Torrey & Gray

Other Commonly Used Names: spatulate seedbox, spoon-leaved primrose-willow

Previously Used Scientific Names: Isnardia spathulata (Torrey & Gray) Small

Family: Onagraceae (sundrops)

Rarity Ranks: G2G3/S2S3

State Legal Status: Special Concern

Federal Legal Status: none

Federal Wetland Status: OBL

**Description:** Perennial **herb** with very hairy stems creeping and rooting at the nodes, sometimes forming mats. **Leaves** usually less than  $\frac{5}{8}$  inch (0.9 - 1.7 cm) long and less than  $\frac{3}{8}$  inch (0.3 - 0.9 cm) wide at the widest point, oval with rounded tips, narrowed abruptly to the base, opposite, very hairy. **Flowers** solitary in the angle between leaf and stem, with 4 hairy, green **sepals**  $\frac{1}{16}$  inch (1.7 mm) long and 4 stamens; there are no **petals** and no flower stalk. **Fruit** a hairy, 4-sided capsule, usually less than  $\frac{1}{4}$  inch (2.5 - 4.5 cm) long.

**Similar Species:** Common water-purslane (*Ludwigia palustris*) and creeping seedbox (*L. repens*) also form creeping mats in wetlands; both have more or less hairless stems, leaves, and fruits. Creeping seedbox flowers have 4 yellow petals; common water-purslane has no petals. Pond seedbox (*Ludwigia arcuata*) forms mats of creeping stems; its fruits are on stalks  $\frac{5}{8}$  -  $\frac{13}{8}$  inch (1.5 - 3.5 cm) long and its petals are longer than  $\frac{1}{4}$  inch (0.7 - 1.1 cm).

**Related Rare Species:** See Long Beach seedbox (*Ludwigia brevipes*) on this website.

**Habitat:** Exposed shores and bottoms of cypress - gum depression ponds and limesink depression ponds; granite outcrop pools.

**Life History:** Southern water-purslane probably spreads primarily by vegetative reproduction, rooting from nodes on the creeping stems. Most species of *Ludwigia* are pollinated by bees and flies, but the lack of petals on the flowers of this species suggests that it is self-pollinating.

**Survey Recommendations:** Surveys are best conducted during flowering (June–October), but growth form, leaves, and stems are distinctive throughout the growing season.

Range: Georgia, Alabama, Florida, South Carolina, and North Carolina.

**Threats:** Clearing, draining, and filling of wetlands. Fire suppression in surrounding uplands and fire exclusion from wetlands. Construction of roads and firebreaks in wetland ecotones. Lowering of the water table by excessive removal of water from the aquifer for irrigation and other purposes. Disturbance to granite outcrops by dumping, off-road-vehicle use, quarrying, and development.

**Georgia Conservation Status:** Five populations are currently known; four in Coastal Plain depression ponds are protected; one in Piedmont granite outcrop pools is not. Populations in Decatur, Mitchell, Hancock, Echols, and Oglethorpe counties have not been seen in many years and are likely destroyed.

Conservation and Management Recommendations: Protect depression wetlands from clearing, draining, and filling. Protect natural water table levels from excessive drawdown. Allow fires in adjacent uplands to periodically burn into and across wetlands. Avoid placing firebreaks in the transition zones between uplands and wetlands. Protect granite outcrops from dumping, off-road vehicle use, development, and other disturbances.

## **Selected References:**

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Peng, C-I., C.L. Schmidt, P.C. Hoch, and P.H. Raven. 2005. Systematics and evolution of *Ludwigia* Section *Dantia* (Onagraceae). Annals of the Missouri Botanical Garden 92(3): 307-359.

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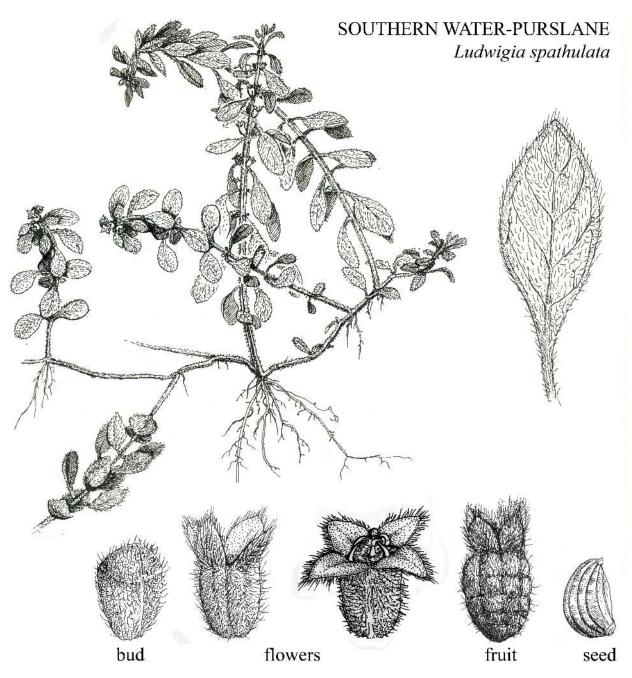
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**Author of Species Account:** Linda G. Chafin

## **Date Compiled or Updated:**

L. Chafin, May 2007: original account K. Owers, Feb. 2010: added pictures





J.C. Putham H.

