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Common Name: PURPLE HONEYCOMB-HEAD

Scientific Name: *Balduina atropurpurea* Harper

Other Commonly Used Names: purple balduina, bog honeycomb-head

Previously Used Scientific Names: *Endormia atropurpurea* (Harper) Small

Family: Asteraceae/Compositae (aster)

Rarity Ranks: G2/S2S3

State Legal Status: Rare

Federal Legal Status: none

Federal Wetland Status: FACW

Description: Perennial **herb** 1 - 3 $\frac{1}{4}$ feet (30 - 100 cm) tall. **Stems** erect, angled (but not winged), and purplish at the base. **Basal leaves** up to 5 inches (12 cm) long and $\frac{1}{2}$ inch (1 cm) wide, with dark red leaf stalks. **Stem leaves** smaller, widely spaced, alternate, slightly fleshy, spoon-shaped, and dotted with tiny translucent glands. **Flower heads** with many dark, reddish-purple **disk flowers** in the center, and 10 - 20 yellow **ray flowers**, each ray with 3 - 5 teeth at the tip. **Fruits** small, dry, and seed-like, held in a “honeycombed” **receptacle** at the center of the head; the “honeycomb” may be seen by removing the disk flowers or the fruits. *Balduina* species are the only members of the aster family with honeycombed heads.

Similar Species: Yellow honeycomb-head (*Balduina uniflora*) often grows with purple honeycomb-head; it has yellow disk flowers. Southeastern tickseed (*Coreopsis gladiata*) has dark red disk flowers, but only 5 - 8 ray flowers and no “honeycomb.” Sneezeweeds (*Helenium* spp.) often have purple disk flowers but they bloom in the spring and early summer, and lack the gland-dotted leaves and honeycombed receptacle. Blanket flower (*Gaillardia* spp.) has yellow rays and dark disk flowers, but occurs only in dry, sandy uplands.

Related Rare Species: None in Georgia.

Habitat: Wet pine flatwoods and savannas, seepage slopes, pitcherplant bogs, and wet ditches; often occurs with yellow honeycomb-head.

Life History: Purple honeycomb-head produces only a rosette of leaves during its first year; it produces flowering stems in following years. Plants are self-incompatible, relying on a variety of insects, including bumblebees and butterflies, to effect cross-pollination. Different species in the genus *Balduina* do not hybridize. Purple honeycomb-head often occurs with yellow honeycomb-head but may be prevented from hybridizing by their differently sized pollen grains and different chromosome numbers. Plants at Fort Stewart, Georgia, were found to have low seed production but high seed viability, compared to other composites.

Survey Recommendations: Surveys are best conducted during flowering (August–October) and fruiting (September–October).

Range: Coastal Plain of Georgia, Florida, South Carolina, and, possibly, Alabama and North Carolina.

Threats: Ditching, draining, and filling in wetlands. Fire suppression and plowing firebreaks through habitats. Conversion of habitat to pine plantations and developments.

Georgia Conservation Status: About 45 populations have been seen in recent years, but only 3 occur on conservation lands; about 10 other populations are under conservation management.

Conservation and Management Recommendations: Burn every 2 - 3 years during the growing season. Avoid soil disturbance, ditching, draining, firebreak construction, bedding, and mechanical clearing in wetlands.

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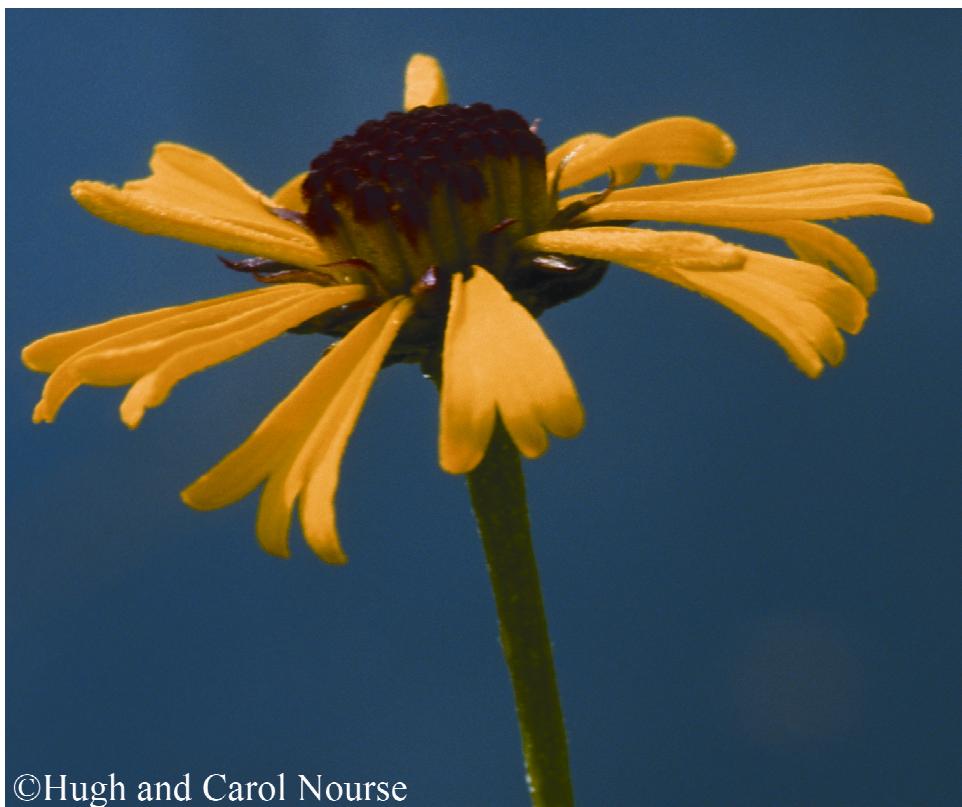
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Author of species account: Linda G. Chafin

Date Compiled or Updated:

L. Chafin, Aug. 2007: original account

K. Owers, Jan. 2010: updated status and ranks, added pictures



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