



©Hugh and Carol Nourse

Common Name: PINELAND BARBARA'S BUTTONS

Scientific Name: *Marshallia ramosa* Beadle & F.E. Boynton

Other Commonly Used Names: southern Barbara's buttons, pine barrens Barbara's buttons, southern marshallia

Previously Used Scientific Names: none

Family: Asteraceae/Compositae (aster)

Rarity Ranks: G2/S2

State Legal Status: Rare

Federal Legal Status: none

Federal Wetland Status: FACU

Description: Perennial **herb** with stiff, erect stems 1 - 2¼ feet (30 - 70 cm) tall, branching near the middle of the plant. **Leaves** 2 - 7¾ inches (5 - 20 cm) long, narrow, decreasing in size and number upward on the stems. **Flower heads** 4 - 12 per plant, at tips of branches, each head less than 1 inch (2 cm) across, with a whorl of blunt or broadly pointed bracts surrounding the underside of the head. Heads with many pale pink or white **disk flowers**, each with 5 long, twisting, spreading lobes; there are no ray flowers.

Similar Species: Narrow-leaved Barbara's buttons (*Marshallia graminifolia*) is usually taller, up to 3 feet (1 meter). It is usually a single-stemmed plant, branched near or below the middle. Its lower leaves are 2 - 8 inches (5 - 20 cm) long and about ½ inch (0.5 - 1.5 cm) wide, widest above the middle, tapering to the base and to a rounded tip; stem leaves are numerous, much smaller and narrower, held upright against the stem. Flower heads are wider than 1 inch (2.5 cm), purple, rarely white, and the bracts surrounding the underside of the flower head have long, pointed tips (see drawing). It flowers late July-mid October.

Related Rare Species: Broadleaf Barbara's buttons (*Marshallia trinervia*, Special Concern) occurs on sand bars, natural levees, and shady, streamside woods in Harris, Bartow, and Walker Counties. The stem is up to 2½ feet (40 - 80 cm) tall, with 10 - 20 leaves of equal size scattered along the stem, not clustered at the base of the plant. Its flower heads are similar to Mohr's Barbara's buttons. Also see Mohr's Barbara's buttons (*Marshallia mohrii*) on this website.

Habitat: Altamaha Grit outcrops, ultramafic rock outcrops, and the shallow soils of surrounding longleaf pine forests; also roadsides and utility rights-of-way through these habitats.

Life History: Pineland Barbara's buttons is a perennial herb. Its flowers are pollinated by beetles, butterflies, and other small insects, and must be cross-pollinated in order to set viable fruit. As a means of avoiding self-pollination, flowers on a given plant produce pollen before that plant's stigmas become receptive. The seeds are probably dispersed by birds and other small animals.

Survey Recommendations: Surveys are best conducted during flowering (mid-May-June, sometimes until July).

Range: Found almost entirely in Georgia, with one population in the Florida Panhandle.

Threats: Fire suppression and encroachment by woody plants, use of herbicides in utility rights-of-way, conversion of habitat to pine plantations, clearing, and development.

Georgia Conservation Status: Approximately 30 populations are known, but only 3 occur on conservation lands.

Conservation and Management Recommendations: Conduct frequent prescribed fires to control woody species. Avoid use of herbicides in rights-of-way. Avoid mechanical clearing and bedding. Acquire conservation easements for sites.

Selected References:

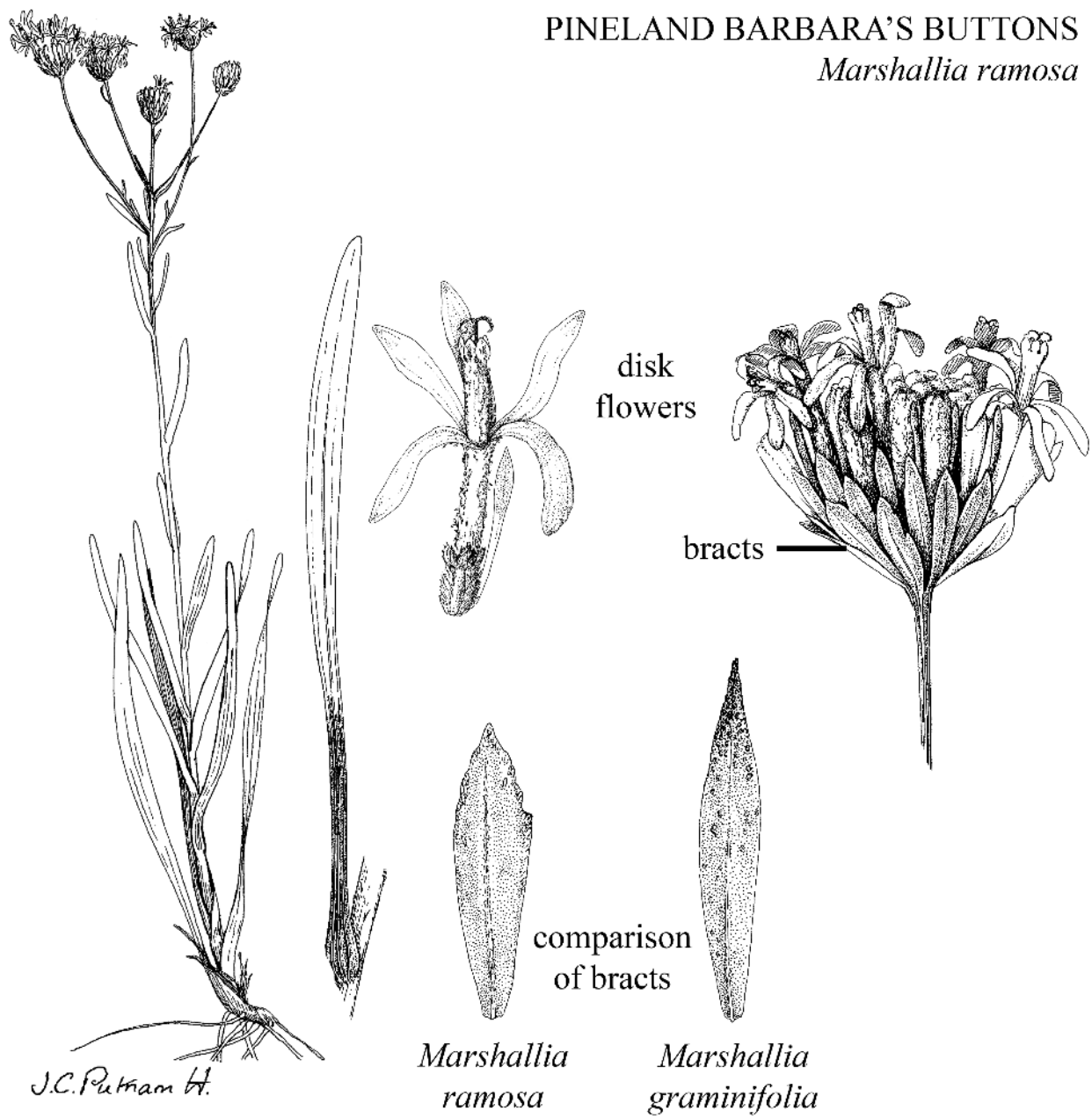
- Chafin, L.G. 2007. Field guide to the rare plants of Georgia. State Botanical Garden of Georgia and University of Georgia Press, Athens.
- Channell, R.B. 1957. A revisional study of the genus *Marshallia* (Compositae). Contributions of the Gray Herbarium 181:41-132.
- Coin, Patrick. 2005. *Marshallia* – beetle magnet. New Hope Audubon Society Newsletter 31 (3): 2. Chapel Hill, North Carolina.
- Cronquist, A. 1980. Vascular flora of the southeastern United States, Vol. 1, Asteraceae. University of North Carolina Press, Chapel Hill.
- FNA. 2006. Flora of North America, Vol. 21, Magnoliophyta: Asteridae, Part 8: Asteraceae, Part 3. Oxford University Press, New York.
- Kral, R. 1983. A report on some rare, threatened, or endangered forest-related vascular plants of the South. Technical Publication R8-TP2. United States Forest Service, Atlanta.
- NatureServe. 2007. NatureServe Explorer. Arlington, Virginia.
<http://www.natureserve.org/explorer>
- Patrick, T.S., J.R. Allison, and G.A. Krakow. 1995. Protected plants of Georgia. Georgia Department of Natural Resources, Natural Heritage Program, Social Circle.
- Watson, L.E. and J.R. Estes. 1990. A biosystematic and phenetic analysis of morphological variation in *Marshallia* (Asteraceae). Systematic Botany 15: 403-414.
- Weakley, A.S. 2008. Flora of the Carolinas, Virginia, Georgia, northern Florida, and surrounding areas. University of North Carolina Herbarium, Chapel Hill.
<http://www.herbarium.unc.edu/flora.htm>

Author of Species Account: Linda G. Chafin

Date Compiled or Updated:

L. Chafin, June 2008: original account
K. Owers, Feb. 2010: added pictures

PINELAND BARBARA'S BUTTONS
Marshallia ramosa





©Hugh and Carol Nourse