



Common Name: CANBY'S DROPWORT

Scientific Name: *Oxypolis canbyi* (Coulter & Rose) Fernald

Other Commonly Used Names: Canby's cowbane

Previously Used Scientific Names: *Oxypolis filiformis* (Walter) Britton var. *canbyi* Coulter & Rose

Family: Apiaceae/Umbelliferae (carrot)

Rarity Ranks: G2/S2

State Legal Status: Endangered

Federal Legal Status: Endangered

Federal Wetland Status: OBL

Description: Perennial **herb** forming colonies by long, thin underground stems (rhizomes). **Stems** up to 5 feet (1.5 meters) tall, erect, smooth, the lower portion purple, branching only near the top. **Leaves** 8 - 12 inches (20 - 30 cm) long, alternate, round in cross-section and tapering to a point, hollow except for cross-partitions; lower leaves usually drop by flowering or are underwater. **Flowers** in flat-topped clusters (umbels) containing 7 - 12 smaller, flat-topped clusters (umbelets). Flowers with 5 tiny, white **petals**, curving up and inward. **Fruits** less than ¼ inch (4 - 6 mm) long, flattened and broadly oblong, with corky ribs and broad, thickened wings, giving the fruit a flattened, rectangular shape in cross-section. All parts of the plant smell faintly of dill.

Similar Species: Common dropwort (*Oxypolis filiformis*) occurs in similar habitats but it is a coarser plant, with thicker stems and leaves than Canby's dropwort. It retains its lower leaves while flowering, and each flower cluster contains 10 - 20 smaller clusters. Mature fruits have narrow, thin wings with only a few corky ribs, giving them a spindle-shape in cross-section.

Related Rare Species: See savanna cowbane (*Oxypolis denticulata*, Special Concern) on this website.

Habitat: Wetlands, such as cypress ponds and sloughs, Carolina bays, and wet savannas, with acidic, organic soils; fluctuating though usually high water levels; and patchy or no canopy cover.

Life History: Canby's dropwort reproduces sexually as well asexually by the spread of rhizomes, sometimes forming extensive colonies. Canby's dropwort flowers are capable of both self- and cross-pollination. Some umbels contain only bisexual flowers while others have female flowers in the outer part of the umbel and male flowers in the inner. Because the stamens typically mature and shed pollen before the pistils become receptive, self-pollination rarely occurs; and, due to the isolation of the small, usually clonal populations, cross-pollination is also rare. As a result of these limitations, sexual reproduction is uncommon and most reproduction is by spread of rhizomes. Adults of the black swallowtail butterfly (*Papilio polyxenes asterius*) lay their eggs on Canby's dropwort stems (as well as on the stems of other plants in this genus); once hatched, the larvae (caterpillars) often chew through the stems just below the umbels, further limiting the chance of sexual reproduction. In some populations, as many as 17% of the Canby's dropwort stems were eaten through by butterfly larvae.

Survey Recommendations: Surveys are best conducted during flowering (late June–August) and fruiting (August–October). Both flowers and fruits are useful for identification.

Range: Coastal Plain of Georgia, South Carolina, North Carolina, Maryland, and Delaware.

Threats: Conversion of habitat to pine plantations and agriculture by ditching, draining, and destroying wetlands; fire suppression in wetlands and surrounding woodlands; building firebreaks in transition areas between uplands and wetlands; lowering of water table by ground water withdrawal.

Georgia Conservation Status: Fewer than 25 populations are known, only 6 on conservation lands.

Conservation and Management Recommendations: Apply prescribed fire every 2 - 3 years and allow fire in uplands to burn into edges of ponds and Carolina bays; avoid placing firebreaks in transition zones between uplands and wetlands. Avoid ditching, draining, or altering hydrology of ponds, sloughs, and bays. Limit ground water withdrawal.

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Date Compiled or Updated:

L. Chafin, July 2008: original account

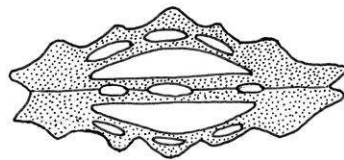
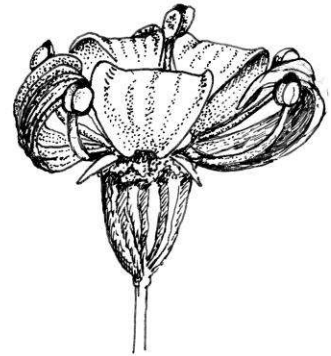
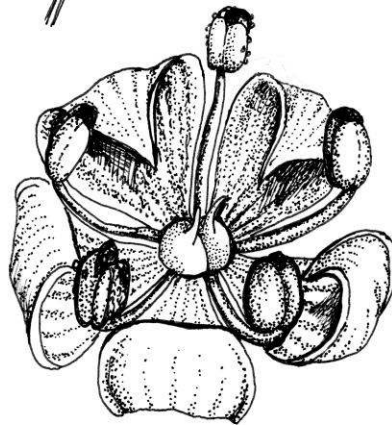
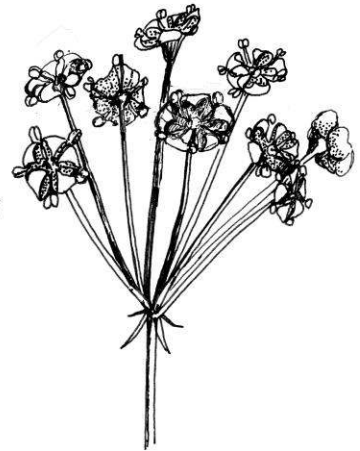
K. Owers, Feb. 2010: added pictures

G. Krakow, Apr. 2015: updated link at NCNHP reference

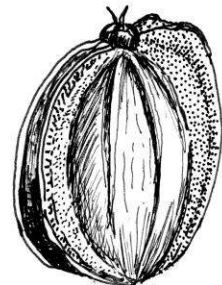
leaf with
cross-partitions



CANBY'S DROPWORT
Oxypolis canbyi



cross-section of fruit
showing ribs and wings

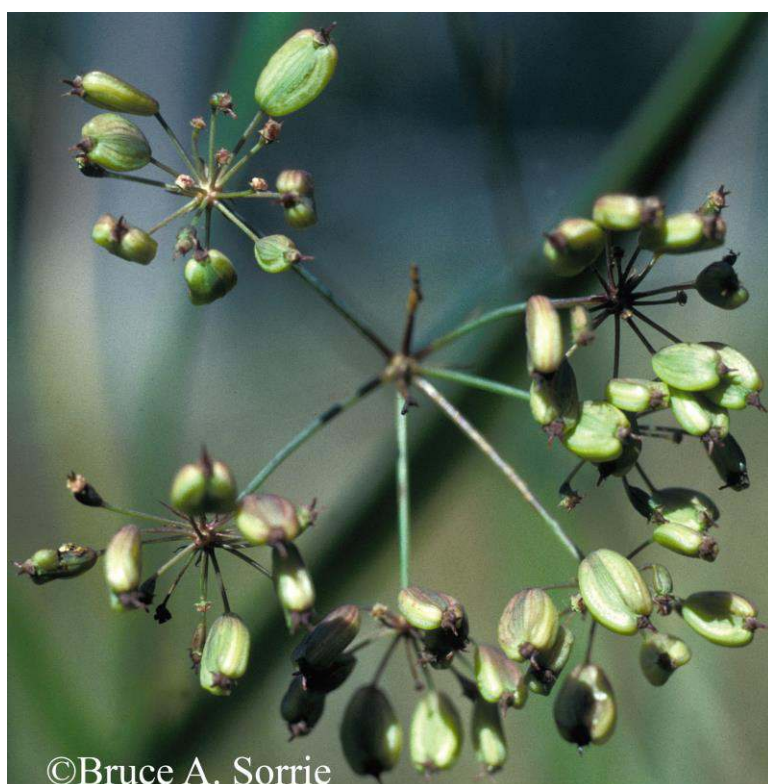


fruit

J.C. Putnam H.



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