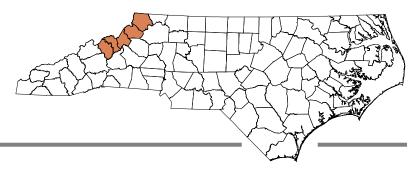
Roan Mountain bluet

Houstonia montana (=Hedyotis purpurea var. montana) Endangered (April 5, 1990)



Description: Roan Mountain bluet, a perennial herb of the coffee family, grows in low, loose tufts 4-6 inches (10-15 cm) tall. The small leaves along the erect stems are lance- or ellipse-shaped, 0.2-1.2 inches (0.8-3 cm) long; stems are four-angled. A rosette of leaves also grows at the base of the shallow-rooted plant, but may not be visible during flower-ing. The funnel-shaped flowers grow in flat-topped clusters colored bright, deep purple, each cluster containing only 1-4 flowers. This plant is distinguished from *Hedyotis purpurea* var. *purpurea* by a larger flower size, larger seed size, and by the different flower color, deep reddish-purple instead of bluish-purple or white.

Life History: Flowering occurs May through September. The fruit is a small, round capsule containing many seeds. Four main pollinators are small staphylined beetles, bumblebees, flies, and ants.

Habitat: Endemic to western North Carolina and eastern Tennessee, it grows on grassy balds, cliffs, outcrops, and steep slopes with full sun at high elevations 4,590-6,230 feet (1400-1900 m). It typically grows in gravelly filled pockets between rocks. Adjacent forests are dominated by red spruce (*Picea rubens*) and Fraser fir (*Abies* fraseri). Known soil substrate is usually composed of metamorphic and acidic rocks. Usually shares habitat with other federally listed species: Heller's blazing star, Blue Ridge goldenrod, and spreading avens.

Distribution: Scattered mountaintops of western North Carolina and eastern Tennessee. In North Carolina, exists in only fragmented populations in Ashe, Avery, Mitchell, Watauga, and Yancey counties.

Threats: Habitat destruction is the most immediate and prevalent threat to nearly all extant populations of Roan Mountain bluet. The greatest threats occur in commercial, residential and recreational development at privately owned sites. Hikers, rock climbers, and other sightseers create erosion and compaction of soil at cliff and trail side locations on national forest lands, often trampling populations and habitat. Blowdown of weakened and killed trees due to air pollution and infestation of wooly aphid allows soil erosion and loss of habitat.

Management Recommendations: Survey suitable habitat for additional populations; monitor and protect existing populations by avoiding new construction of paths and platforms near population sites; erect fences separating sites from existing trails and sightseeing points; conduct research on autecology and management needs of species; and restore populations to historic sites.

Sources: Murdock per. com; Radford et al. 1964; USFWS 1992a, 1996b.