

# Heller's blazing star

## *Liatris helleri*



*Heller's blazing star*; USFWS

### Status: Threatened

**Description:** Heller's blazing star is a perennial herb in the Aster family. It has one or more erect or arching stems arising from a tuft of narrow, grass-like, pale green basal leaves. Its flowering stems reach up to 16 inches in height; they are topped by a showy, three to eight inch-long spike of lavender flowers. The flowering season lasts from July through September, and its fruits are present from September through October. This species grows on the shallow acidic soils of high-elevation cliffs and rocky outcrops in full sun. Very little specific information is available on the biology of Heller's blazing star. Other species of blazing stars, also called rattlesnake masters and button snakeroots, have yielded valuable medicinal compounds. Particularly notable are drugs used to treat leukemia and other forms of cancer. Heller's blazing star has not yet been studied for potentially valuable medicinal or industrial chemical, in part due to the limited number of plants in existence.

**Habitat:** High elevation ledges of rock outcrops and cliffs in shallow acid soils.

**Range:** Heller's blazing star is known from Avery, Ashe, Caldwell, Watauga, and Burke Counties, North Carolina

**Listing:** Threatened, November 19, 1987. 52 FR 44397 44401

**Critical habitat:** None designated

**Threats:** Being confined to small areas on a few rocky mountain summits, this species is extremely vulnerable to such seemingly minor threats as trampling by hikers, climbers, and sightseers, as well as to more pervasive threats such as acid precipitation and other forms of air pollution that have been found to be concentrated at the higher elevations in the Southern Appalachian Mountains. All of these factors threaten the last remaining populations of Heller's blazing star.

**Why should we be concerned about the loss of species?** Extinction is a natural process that has been occurring since long before the appearance of humans. Normally, new species develop through a process known as speciation, at about the same rate other species become extinct. However, because of air and water pollution, forest clearing, loss of wetlands, and other human-induced environmental changes, extinctions are now occurring at a rate that far exceeds the speciation rate.

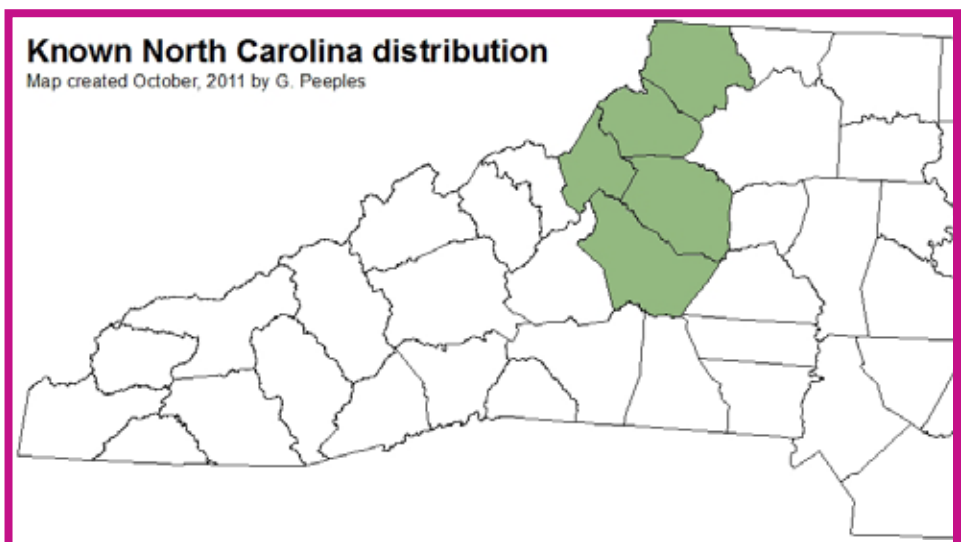
All living things are part of a complex and interconnected network. We depend on the diversity of plant and animal life for our recreation, nourishment, many of our lifesaving medicines, and the ecological functions

they provide. One-quarter of all the prescriptions written in the United States today contain chemicals that were originally discovered in plants and animals. Industry and agriculture are increasingly making use of wild plants, seeking out the remaining wild strain of many common crops, such as wheat and corn, to produce new hybrids that are more resistant to disease, pests, and marginal climatic conditions. Our food crops depend on insects and other animals for pollination.

Healthy forests clean the air and provide oxygen for us to breathe. Wetlands clean water and help minimize the impacts of floods. These services are the foundation of life and depend on a diversity of plants and animals working in concert. Each time a species disappears, we lose not only those benefits we know it provided but other benefits that we have yet to realize.

### What you can do to help

Tread lightly and stay on designated trails. Vegetation on popular high mountains has virtually been destroyed by human trampling.



## U.S. Fish & Wildlife Service

Visit arboretums, botanical gardens, and parks and learn all you can about endangered plants and the causes of their declines.

Don't collect or buy plants collected from wild populations.

Participate in the protection of our remaining wild lands and the restoration of damaged ecosystems.

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