

# Spreading avens

## *Gerum radiatum*



*Spreading avens, Gary Peeples*

**Status:** Endangered

**Description:** Spreading avens is a tall perennial herb (eight to 20 inches) in the rose family. Its distinctive bright yellow flowers (generally up to 1 inch across) appear from June through September, and fruits form and ripen from August through October.

**Habitat:** This species grows in full sun on the shallow acidic soils of high-elevation cliffs (above 4,200 feet), rocky outcrops, steep slopes, and on gravelly talus.

**Range:** Spreading avens is known to occur only on high mountain peaks in Western North Carolina and Eastern Tennessee.

**Listing:** Endangered. April 5, 1990. 55 FR 12793 12797

**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. An exotic insect, the balsam woolly adelgid, contributes to the decline of the fir forests adjacent to the cliffs where spreading avens grows. Although spreading avens does not grow beneath dense forest, the death of the adjacent forests results in drier and hotter conditions, as well as increased soil erosion. All of these factors threaten the last remaining spreading avens populations.

**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 than other species become extinct. However, because of air and water pollution, forest clearing, loss of wetlands, and other man-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.

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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