



White Irisette



The federal Endangered Species Act.

The Endangered Species Act of 1973, as amended (Act), recognizes that many of our nation's valuable plant and wildlife resources have been lost and that other species are close to extinction. The Act provides a means to help preserve these species and their habitats for future generations. White irisette (*Sisyrinchium dichotomum*) is found on only a few scattered mountain slopes in western North Carolina and northern South Carolina. The U.S. Fish and Wildlife Service added this plant to the *Federal List of Endangered and Threatened Wildlife and Plants* as an endangered species on October 28, 1991.

Description, habitat, and biology

White irisette is a perennial herb that lives in shady areas with partial sun. The species is found on mid-elevation slopes, characterized by open, dry to mesic oak-hickory forests. White irisette usually grows in shallow soils on regularly disturbed sites (such as woodland edges and roadsides) and over rocky, steep terrain.

An individual white irisette plant is typically defined as a cluster of stems arising from fibrous roots. It generally grows from 10 to 16 inches tall and has winged stems. There may be 10 or more stems on one plant. White irisette flowers from late May through July. The seeds are very small and black, and three to six seeds are contained in each capsule.

Why is white irisette so rare?

White irisette is threatened by many human-caused disturbances, such as residential development, road construction, and herbicide use. It is also indirectly affected by the extirpation of elk and bison and the suppression of fire. The elimination or suppression of these natural disturbances allows vegetative succession to occur, often accompanied by exotic invasive plants that out-compete this native species.

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 as 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. Since the Pilgrims landed at Plymouth Rock in 1620, more than 500 species, subspecies, and varieties of our nation's plants and animals have become extinct. By contrast, during the 3,000 years of the Pleistocene Ice Age, all of North America lost only about 90 species.

All living things are part of a complex and interconnected network. The removal of a single species can set off a chain reaction that could affect many other species. For example, the loss of a single plant species can result in the disappearance of up to 30 other species of animals and plants. Each plant and animal extinction diminishes the diversity and complexity of life on earth.

Furthermore, wild plants and animals are important to the development of new and improved medicines, agricultural crops, and other industrial products. One-fourth 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 strains of

many common crops, such as wheat and corn, to produce hybrids that are more resistant to disease, pests, and marginal climatic conditions. If these organisms had been destroyed before their values were known, their secrets would have died with them. When a species is lost, the benefits it might have provided are gone forever.

What you can do to help

- Tread lightly, and stay on designated trails. On some popular mountains, the vegetation has virtually been destroyed by human trampling.
- Visit arboretums, botanical gardens, and parks to learn all you can about endangered plants and the causes of their decline.
- Don't collect or buy plants that have been gathered from wild populations.
- Participate in the protection of our remaining wild land and the restoration of damaged ecosystems.



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- Be careful with the use and disposal of pesticides and other chemicals, especially near sensitive habitats.
- Recycle as much as you can. As landfills become full, new ones are often placed in uninhabited areas, causing the destruction of hundreds of acres of wild habitat.

Wild land and the plant and animal life that inhabit unique natural places are now dependent on us for survival. These natural places, with their diversity of life, can be enjoyed by and benefit all of us; with our help, they can be there for future generations.

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White irisette county distribution in North Carolina