



Schweinitz's Sunflower

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. Schweinitz's sunflower (*Helianthus schweinitzii*) is native to the piedmont of North Carolina and 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 May 7, 1991.

Description, habitat, and biology

Schweinitz's sunflower is a perennial that regularly grows approximately 6 feet tall (although it can be shorter if it is young or injured) and can occasionally reach heights of 16 feet. It has thickened roots that are specially designed to store starch. The stem is purple, and the upper third is branched at a 45 degree angle. The leaves are arranged in pairs on the lower part of the stem but usually occur singly on the upper part. They grow out from the stem at a right angle, and the tips of the leaves tend to droop. The leaves are thick and stiff, with a rough upper surface. They have broad spiny hairs that are directed toward the tip, and soft white hairs cover the underside. The plant produces small yellow flowers.

Schweinitz's sunflower blooms from late August until frost. It is able to colonize through the dispersal of seeds that readily germinate without a dormant period. In good conditions, it can grow 3 to 6 feet in a year and can live for decades. It occurs in full to partial sun and is found in areas with poor soils, such as thin clays that vary from wet to dry. This preference for poor soil helps eliminate competition from other species.

Why is Schweinitz's sunflower so rare?

Habitat destruction, fire suppression, alteration of native habitat, roadside and utility right-of-way maintenance, industrial development, mining, encroachment by exotic species, and highway construction and improvement have all contributed to the decline of

Schweinitz's sunflower. This species occurs in many rapidly developing areas within the piedmont region of North and South Carolina. As these areas develop, Schweinitz's sunflower loses habitat.

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

- 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.



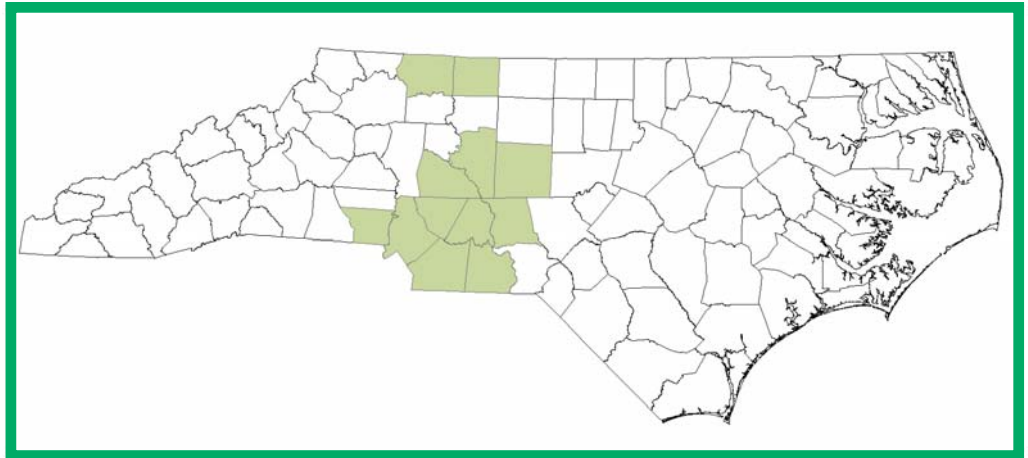
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- Be careful with the use and disposal of pesticides and other chemicals, especially near sensitive habitats.
- Recycle as much as you can. As landfills become full, new ones are often placed in uninhabited areas, causing the destruction of hundreds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

Prepared by:

U.S. Fish and Wildlife Service
Asheville Field Office
160 Zillicoa Street
Asheville, North Carolina 28801
828/258 3939



Schweinitz's sunflower county distribution in North Carolina