



Virginia Spiraea

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. There are only 31 known populations of Virginia spiraea (*Spiraea virginiana* Britton) spread throughout seven states. The U.S. Fish and Wildlife Service added this plant to the *Federal List of Endangered and Threatened Wildlife and Plants* as a threatened species on June 15, 1990.

Description, habitat, and biology

Virginia spiraea is a perennial shrub with many branches. It grows 3 to 10 feet tall. Its alternate leaves are single-tooth serrated; are 1 to 6 inches long and 1 to 2 inches wide; are occasionally curved; and have a narrow, moderately tapered base. The leaves are also darker green above than below. The plant produces flowers that are yellowish green to pale white, with stamens twice the length of the sepal. It blooms from late May to late July, but flower production is sparse and does not begin until after the first year of establishment. Virginia spiraea has a clonal root system that can fragment and produce more plants. This form of vegetative reproduction is more common than flower pollination and seed dispersal.

Virginia spiraea occurs along rivers and streams and relies on periodic disturbances, such as high-velocity scouring floods, which eliminate competition from trees and other woody vegetation. However, if the frequency and intensity of these floods is too great, the plant may become dislodged and wash downstream into less suitable habitat.

Why is Virginia spiraea so rare?

Due to its specific habitat requirements, Virginia spiraea is also vulnerable to alterations of stream-flow patterns. Impoundments, road construction, unmanaged recreational use of river corridors, industrial development, lack of watershed management, and uncontrolled development of river corridors have already threatened and exterminated several populations of this species. Another threat to Virginia spiraea is competition from exotic invasive plants.

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 been virtually 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.
- Be careful with the use and disposal of pesticides and other chemicals, especially near sensitive habitats. Wetlands and streams are particularly valuable habitats for many rare plants and animals; be careful not to alter their hydrology or allow polluting chemicals to drain into them.
- 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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Virginia spiraea county distribution in North Carolina