

Natural Heritage Resources Factsheet

Spreading Pogonia (*Cleisthes divaricata*)



Description

An elegant and understated wildflower, spreading pogonia is a member of the orchid family. Its stem averages about eighteen inches in height, with one tapering leaf at the base and one at the top of the stem just below the flower stalk. Orchids are known for their complex and unusual flower structures, which are often highly specialized in order to attract one particular insect species to effect pollination. The flower of the spreading pogonia consists of three long, slender, reddish-brown to purple sepals, which join at the base of the white to pink petals and the purple lip. The petals are mostly fused, with the tips curving backwards. The long lower petal has a rose red lip with its margin crisped. Flowers appear in early June.

Habitat

Spreading pogonia is found in wet habitats such as pocosins, damp pine barrens, seepages, savannahs, and bogs. It can also occur in the sphangnous, low-nutrient portions of wet meadows, powerline right-of-ways, and streams edges.

Historically, the Virginia habitat of this plant was maintained by wildfire that killed off woody plant species. These fire-

maintained openings were favorable to herbaceous plants that require direct sunlight.

Distribution

Spreading pogonia is known from New Jersey to Florida. It is also found in Kentucky and Tennessee. In Virginia, where it is extremely rare, spreading pogonia has been found in eight counties

Life History

Spreading pogonia is a perennial herb. Generally, it produces a single stem annually, with older plants more likely to produce a flower, as well as more stems. Spreading pogonia reproduces both vegetatively and by seed. The brightly colored flowers attract insect pollinators, primarily bumblebees. Other species of the genus *Cleisthes* are known as "mimics," meaning that they are colored like other nectar-producing plants, but do not actually produce a nectar as a reward for insects which visit the flower. This strategy saves the plant some energy, but since many pollinators, especially bumblebees, learn to avoid such plants, mimics risk not getting a enough visits for successful pollination to take place. To overcome this limitation, spreading pogonia and its relatives produce a sticky pollen so that each visiting insect is more likely to carry away

pollen to the next plant. Also, the flower stays fresh for a longer period of time to increase its chances for a visit from a bee. Successful fertilization results in a fruit, called a capsule, which may contain several thousand very tiny seeds.

Conservation

The primary threat to spreading pogonia is loss of habitat. In Virginia, loss has occurred mainly through suppression of fire. Until the last 50 years, wildfires maintained open areas required by plants which cannot compete with woody vegetation. Habitat loss may also occur through alteration of water level and water quality. Ditching, draining, damming of streams, and sand and gravel mining in or near these habitats may unfavorably impact spreading pogonia.

Landowners and land managers can use Best Management Practices to help conserve Virginia's natural heritage resources. Landowners can also use landscaping methods which reduce both environmental impacts and landscaping costs. The Bayscapes program of the Alliance for the Chesapeake Bay has demonstrated the effectiveness of such methods and can be contacted for more information on these techniques.