

# SFI Biodiversity Species Fact Sheet

## Bayard's Adder's-Mouth Orchid (*Malaxis bayardii*)

Globally Critically Imperiled Plant; State Rank: S1 (critically imperiled) Global Rank: G1 (critically imperiled)

### Identification

Bayard's adder's-mouth (also called Bayard's malaxis) is an orchid species that grows about 4-11 inches tall, has one round to oval-shaped leaf attached to the stem and a tall slender stalk of bright-green flowers. Bayard's adder's-mouth resembles the more common green adder's-mouth (*Malaxis uniflora*) but has a longer and slenderer flower stalk. The flowers of Bayard's adder's-mouth are also more spread out at the tip. Another distinguishing characteristic is that green adder's-mouth grows in moist or wet habitats while Bayard's adder's-mouth is found in drier sites. This species blooms from July through September and produces fruits from mid- to late summer.

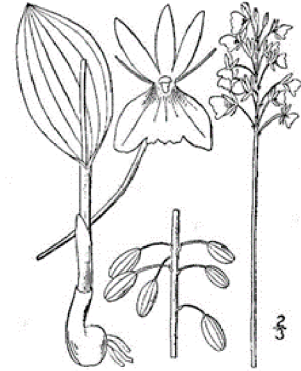
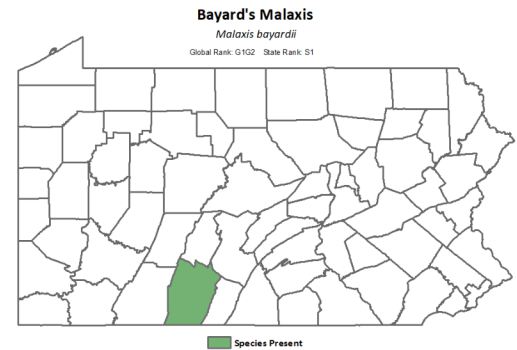


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### Biology-Natural History

Orchids, in general, have unique life histories that contribute to their rarity. Their tiny seeds require sites with suitable fungi to colonize new locations. Orchids are also often vulnerable to poaching, which harms the population. Pollinator information is not known for this species, but it is assumed to be fungus gnats. It grows in open, dry areas and can tolerate some shading but does not appear to compete with other ground-level plants.



### Distribution and Habitat

Across its range, Bayard's adder's-mouth has been found in dry, open, upland forests, shale barrens, open, rocky woods, slopes, mixed hardwood and pine forest, or oak barrens. Globally, only seven scattered populations are known to occur, from Massachusetts to North Carolina. There is only one extant population in Pennsylvania, located in Bedford County.

### Conservation Concerns

The primary threat to this species is overgrowth of woody plants that shade the orchid's habitat, which can be caused by the suppression of fire in previously fire-maintained areas. Other major threats include habitat loss or conversion and encroachment by invasive plants. Dry barrens habitats have been undergoing succession over the last century in Pennsylvania, in part, due to fire suppression; many of these habitats are no longer suitable for species that require open conditions.

### Management Practices

Management actions that may benefit the plant include hand-pulling aggressive herbs and vines from known habitat and providing some soil disturbance (taking care not to introduce invasive species). In fire-maintained systems, restoring the historical fire regime may benefit the species. It is unclear whether thinning of the tree canopy would be of substantial benefit. Avoid picking or taking orchid species and allow them to grow with their native fungal associates. If anyone observes this species they should call the jurisdictional agency, DCNR Bureau of Forestry at 717-787-3444.