

# Arrow-feather, Three-awn *Aristida purpurascens*

## Description

Arrow-feather is a slender perennial grass that grows from 16 to 30 inches (4-7 dm) high. The leaves are linear, elongate, less than 1/8 inch (1-2 mm) wide and 4 inches (10 cm) long. The individual flowers are in spikelets, with their most conspicuous feature being 3 hair-like projections, or awns, that are 1/2 to 1 inch (1.5 to 2.5 cm) long, protrude from the top of the spikelet, and are oriented more-or-less perpendicular to the spikelet. The overall cluster of spikelets, located on the middle and upper stem, has a bristly appearance due to these awns.

## Distribution & Habitat

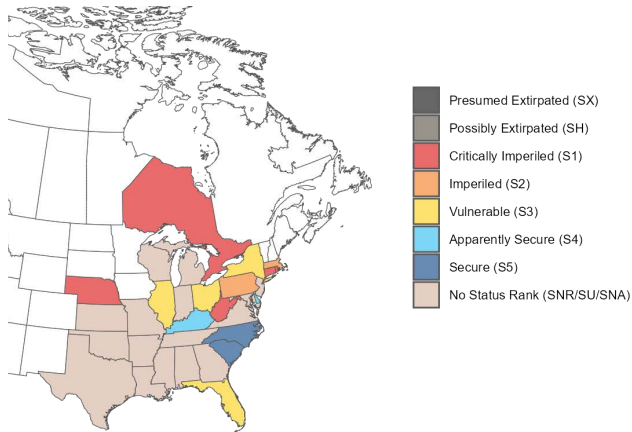
Arrow-feather has a range in eastern North America, from Ontario east into New England, and south into Texas and Florida. In Pennsylvania, it has been documented historically primarily in the southeastern counties. The species grows in dry to seasonally dry, open, rocky places, especially on serpentine barrens.



Photo source: John Kunsman (PNHP)

## North American State/Province Conservation Status

Map by NatureServe 2025



## Current State Status

The PA Biological Survey (PABS) considers Arrow-feather to be a species of special concern, based on the few occurrences that have been recently confirmed and its specialized habitat. It has a PA legal rarity status and a PABS suggested rarity status of Threatened. Fewer than 10 populations are currently known from the state.

## Conservation Considerations

The populations of this species in the state are mainly on serpentine barrens and the seasonally scoured riverbed and shoreline rock outcrops along the lower Susquehanna River. The viability of the species on serpentine will require maintaining early successional, grassland conditions and controlling invasive species. The riverine populations will require maintaining the natural hydrology of the Susquehanna River, with its seasonal fluctuations in water levels, as well as retaining the natural conditions of the shorelines and islands.

## NatureServe conservation status ranks

**G5** – Globally Secure; **S2** – Imperiled in Pennsylvania.

## References

- NatureServe. 2025. NatureServe Explorer [web application] NatureServe, Arlington, Virginia. Available at <https://explorer.natureserve.org> (Accessed: May 8, 2025)
- Pennsylvania Natural Heritage Program. 2025.
- Rhoads, A.F. and W.M. Klein, Jr. 1993. The Vascular Flora of Pennsylvania. American Philosophical Society, Philadelphia, Pennsylvania. Rhoads, A.F. and T.A. Block.
- 2007. The Plants of Pennsylvania: An Illustrated Manual. 2<sup>nd</sup> edition. University of Pennsylvania Press, Philadelphia, Pennsylvania.

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