Three-awned Grass Aristida dichotoma var. curtissii

Description

Three-awned Grass is a slender annual grass that may grow to 2 feet (.6 m) in height, but is often one-half or less as tall. The leaves are alternately arranged and consist of a basal sheathing portion that envelopes the stem and a bladelike portion that is 1-4 inches (2.5-10 cm) in length and 1/16 inch (2 mm) or less in width, and may appear even narrower because the blade often becomes inrolled or folded. The individual flowers, appearing in late summer or early fall, occur singly within a cluster of elongate scales called a spikelet, which in this plant averages about 3/8 inch (1 cm) in length. The 2 lowest scales, known as glumes, are slender, taper to a very pointed tip, and are unequal in length, a key identification feature that contrasts with Aristida dichotoma var. dichotoma, which has the glumes equal in length. The scale inside the pair of glumes, known as a lemma, is also long and slender, but has 3 hair-like projections, or awns, at its tip. The middle awn, besides being longer than the other 2, is coiled once or twice at its base and is oriented perpendicularly to the lemma, while the 2 shorter awns are straight and erect. Variety dichotoma is much more common and widespread in Pennsylvania than variety *curtissii*.



Distribution & Habitat

Three-awned Grass ranges from New Jersey to Wyoming and south into Florida and Colorado. In Pennsylvania, it has been documented historically in a few southern counties. It grows in dry openings, clearings, rights-of-way, and open woods.

North American State/Province Conservation Status



Conservation Considerations

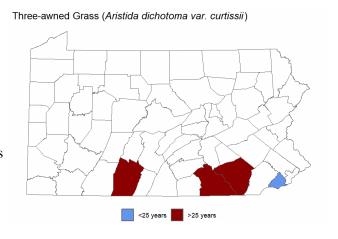
The viability of populations of Three-awned Grass may require maintaining early successional conditions and controlling invasive species. Active management, such as periodic mowing, may be needed to create the proper successional stage and ecological conditions for this species to thrive. Additional field surveys are needed to determine the distribution and habitat requirements of this species.

NatureServe conservation status ranks

G5T5 – Globally secure; S1S2 – Imperiled in Pennsylvania

Current State Status

The PA Biological Survey (PABS) considers Three-awned Grass to be a species of special concern, based on the few locations that have been recently confirmed. It has a PA legal rarity status of Tentatively Undetermined, but has been assigned a PABS suggested rarity status of Endangered.



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. 2nd edition. University of Pennsylvania Press, Philadelphia, Pennsylvania.

