

ECOSYSTEM IMPACTS ASSOCIATED WITH ESTABLISHING BLOWOUT PENSTEMON HABITAT IN THE SANDHILLS OF NEBRASKA

Researchers.

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Rationale. Blowout penstemon is considered an endemic, successional species found only in and around sand blowouts in western Nebraska and eastern Wyoming. Historically, blowout penstemon was common across the Nebraska Sandhills, but in 1987 the species was listed as endangered species and is currently known as the “rarest species native to the Great Plains region.” Today, only a few small populations remain, primarily due to sand dune stability

which is likely the result of current moisture patterns and modern grazing patterns in the Sandhills. Thus, restoration and conservation of this penstemon species requires development of suitable habitat by managing (e.g., grazing, mechanical, etc.) for disturbance that creates bare and blowing sand. Historically widespread, today these sand blowouts represent a microhabitat in a grassland landscape. Ecologically, penstemon habitat may be important for other groups or communities of species adapted to this early successional habitat. The Institute is conducting this project to measure the potential impacts of creating small scale, isolated blowout habitats on the small mammal community, as well as other terrestrial and avian species.

Species: blowout penstemon
Topic: small mammals, restoration
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