Project Highlight – SD State Wildlife Grant

Project Type inventory

Title Biodiversity inventory of native bees in the Black Hills Ecoregion

In a nutshell This was a baseline survey to document bee species in the Black Hills to assist in detecting future changes. A total of 296 species was collected, including a previously undescribed species.

Relevant Habitats forests, meadows and shrub-steppe habitats of Black Hills

Cooperators South Dakota State University

Purpose

- provide a biodiversity inventory of the native bee species of the Black Hills
- focus the survey and inventory on exemplary forest, meadow, and shrub-steppe habitats in the Black Hills of Lawrence, Pennington, Custer, and Fall River counties in South Dakota
- document host flowers and analyze floral visitation patterns through seasonal changes
- use data collected on species occurrence and associated habitat characteristics for initial geospatial evaluations in order to seek patterns associated with historical and contemporary land-use

Timeframe August 2009 – December 2012

Location Black Hills of South Dakota and Wyoming

Summary or Important Findings

- 94 sites were surveyed using pan traps and hand netting
- 296 species were collected from 40 genera; 188 species were not previously recorded in this region
- one species of *Dianthidium* was a new previously undescribed species
- pan trap size influenced the number of bees captured, indicating the importance of using a variety of pan trap sizes in future work

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More Information

- Drons. D.J. 2012. An inventory of native bees (Hymenoptera: Apiformes) in the Black Hills of South Dakota and Wyoming. M.S. Thesis, Plant Science Department, South Dakota State University, Brookings. 98 pp.