

BUMBLE BEE (*BOMBUS LATREILLE*) SPECIES DIVERSITY IN NATIVE AND TRADITIONAL PLANTINGS AT SOUTH DAKOTA STATE UNIVERSITY

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ABSTRACT

South Dakota State University contains a surprising diversity of native and non-native flowering plants throughout campus. These plantings provide resources like nectar, pollen, and habitat to native and introduced pollinator species and other invertebrate species. Habitat conversion to conventional row-crop agriculture reduces available resources for pollinators so providing abundant and diverse pollinator habitat in an urban setting is important for the conservation of these important insects. Plantings at South Dakota State University range from those composed primarily of native species, including plantings associated with Bee Campus USA, and more traditional plantings typically composed of non-native forbs and woody plants. The objective of this study was to compare the diversity of bumble bee (*Bombus* Latreille) species in native and traditional plantings on the South Dakota State University campus. Bee specimens were hand-collected from native and traditional plantings on an alternating once to twice weekly schedule from late May to early October. Bumble bee specimens were documented through imaging of important morphological characters in the field and released into the same habitat where they were collected. Using these records, we will examine the variation in bumble bee species diversity between native and traditional plantings.