



Best Management Practices for Construction and Development Projects

Geocarpon

Geocarpon minimum

Common name • Geocarpon
Scientific name • *Geocarpon minimum*
Federal status • Threatened
State status • Endangered

Purpose and Use

The information in this document is to be used to help avoid and minimize species impacts due to construction practices. It is not intended to be used as a guide to manage habitat for a given species. Contact the Department for management information.

Ecology

Geocarpon is a small succulent plant that grows to about 1.5 inches tall. It is an annual that germinates in November and overwinters as a tiny rosette. Plants bloom the following spring from mid-March to early May, and die 4-6 weeks later, after seed set. Geocarpon grows on Channel Sandstone glades and outcrops in shallow sandy depressions, where not crowded out by deeper rooted plants. In Missouri, Geocarpon is found in Dade, Polk, Greene, Cedar, Lawrence, Henry and St. Clair counties.

Reasons for Decline

Geocarpon is threatened by conversion of glade habitat to non-native species such as cool season pasture grasses. Grazing may lead to nitrification of the sandy depressions and crowding out by other species. Woody invasion of glades and accumulation of leaf litter can also have detrimental effects on Geocarpon. Excessive offroad vehicle use is also a threat, causing destruction of plants during the early spring growing season.

Specific Recommendations

Projects planned within the seven-county Missouri range of Geocarpon should include a review of affected areas for the presence of Channel Sandstone exposure. If found, these habitats should be surveyed for Geocarpon between March 1 and June 1.

- Maintain native vegetation on sandstone glades by cutting to control woody invasion and by prescribed burning.
- Avoid herbicide use on glades except during the period of July through September when Geocarpon exists only as a seed bank. Monocot specific herbicides may be applied through spot application at other times.

- Limit construction activities to deeper soil areas, away from sandstone exposures.
- Avoid heavy use of glades by grazing livestock, although some level of periodic disturbance should benefit Geocarpon.

Information Contacts

For species information:

[Missouri Department of Conservation](#)

Resource Science Division
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Jefferson City, MO 65102-0180
Telephone: 573/751-4115

For species information and Endangered Species Act Coordination:

[U.S. Fish and Wildlife Service](#)

Ecological Services
101 Park Deville Drive, Suite A
Columbia, Missouri 65203-0007
Telephone: 573-234-2132

For Clean Water Act Coordination:

[Missouri Department of Natural Resources](#)

Water Protection Program
P.O. Box 176
Jefferson City, MO 65102-0176
Telephone: 573/751-1300, 800/361-4827

[U.S. Army Corps of Engineers](#)

Regulatory Branch
700 Federal Building
Kansas City, MO 64106-2896
Telephone: 816/983-3990

[U.S. Environmental Protection Agency](#)

Water, Wetlands, and Pesticides Division
901 North 5th Street
Kansas City, KS 66101
Telephone: 913/551-7307

Disclaimer

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by any regulation of the Missouri Conservation Commission. Other federal laws such as the Clean Water Act and the Endangered Species Act, and state or local laws may affect construction practices. Please contact the appropriate agency for further coordination.