

**Grassland and Savanna Protocol
for
Incidental Take Permit and Authorization
Slender Glass Lizard (*Ophisaurus attenuatus*)**

Note

If carrying out a given protocol is not feasible, or multiple listed species in a given management area pose conflicts, contact the Bureau of Natural Heritage Conservation (NHC) at 608-264-6057. Staff in NHC will work with Science Services staff, species experts and managers to establish an acceptable protocol for a given site that will allow for incidental take without further legal consultation or public notice.

I. Species Background Information

A. Status

State Status: Endangered.

Wisconsin Range: The slender glass lizard is found in Adams, Columbia, Green Lake, Jackson, Juneau, La Crosse, Monroe, Sauk and Waushara counties.

Global Range: Southern Wisconsin and northwestern Indiana west to southeastern Nebraska and eastern Colorado and south through eastern Texas and western Louisiana.

B. Habitat

General Habitat Description: The slender glass lizard inhabits dry- to dry-mesic prairies, oak savannas and oak openings.

Over-wintering Habitat: Same as summer habitat.

C. Life History

Home Range: Ranges from 0.2 - 5.0 acres with males generally having larger home ranges than females. In Kansas, where glass lizard densities are much higher, home ranges vary from 0.3-1.1 acres.

Communal Behaviors: The slender glass lizard does not typically exhibit communal behaviors.

Site Fidelity: Unknown

Nest Location: Underground in sandy or well drained soils.

Breeding: Mating usually occurs in spring following emergence from overwintering.

Nesting Period: Females lay up to 17 eggs from mid-June into July. Males and females mature in their second full year.

Activity periods:

Seasonal: Slender glass lizards have a maximum active period of March 15 – October 15. During the summer, two periods of increased activity have been observed, one in early June and again in late July to the end of August. Glass lizards are typically active until daytime highs drop to the low 60's in the fall.

Daily: Glass lizards are strictly diurnal. Their optimum temperature ranges from 68°- 79°F, and in the heat of summer they prefer mornings and late afternoons. Despite appropriate temperatures in the morning, dew seems to limit their activity as it does their invertebrate prey.

II. Management Protocols for Permitted/Authorized Incidental Take

If the management activity is for the purpose of recovering, maintaining or improving the grassland, prairie or savanna ecosystem that includes habitat for western slender glass lizards, then incidental take is allowed if these conditions are followed. However, if incidental take of slender glass lizard is observed, please notify the Bureau of Natural Heritage Conservation's Incidental Take Coordinator for informational purposes.

A. Burning:

1. If conducted prior to March 15 or after October 15, there are no restrictions.
2. If conducted from March 15 – October 15, should occur only on days when ambient air temperatures remain below 55° F when sunny, and below 60° F on cloudy days, during the hours involving the burn.

B. Mowing/Haying:

1. Herbaceous Vegetation Mowing should be done as follows:

- a. In small patches that are mowed in a monthly rotational pattern, with no more than 33% of the available grassland habitat on the site affected in any one year,

AND

- b. If done from March 15 – October 15, conduct mowing in the morning and be completed before the air temperature reaches 55° F or on cool days (i.e., when highest temp is below 55° F).

(Note: Mowing on cloudy days is preferred.)

2. Mechanical brush-mowing should be done as follows:

- a. Conduct from October 16 – March 14,

OR

- b. If done from March 15 – October 15, conduct in the morning and be completed before the air temperature reaches 55° F, or on cool days (i.e., when highest temp is below 55° F).

C. Selective Brush/Tree-cutting:

Selective brush-cutting (i.e., chain saw) may occur without restriction.

D. Grazing:

Light to moderate grazing (0 - <1.0 head per acre) is allowed but should be terminated if more than 50% of the ground layer vegetation is reduced to less than 8 inches in height.

E. Herbiciding:

To the maximum extent possible, herbiciding should occur during the lizard's dormant period (October 16 – March 14).

Where active season herbiciding is necessary to control herbaceous vegetation, spot treat, preferably with a low persistence/short half-life herbicide (i.e. Round-up®), using wick, sponge or hand-held spray applications, not broadcast applications.

Basal-bark or cut-stump-treatment methods should be used when treating woody vegetation.

Definitions

Definition of “Site”: A given field or habitat patch and all of the directly adjoining (contiguous) suitable grassland habitat that is under DNR ownership or for which there is a management agreement.