

# Bachman's Sparrow

*Aimophila aestivalis*

## Guidelines for Landowners Using Conservation Practices

Missouri Department of  
Conservation

Common name ▪ Bachman's Sparrow  
Scientific name ▪ *Aimophila aestivalis*  
State status ▪ Endangered  
Federal status ▪ None

### Ecology

Missouri is the northwesternmost portion of the Bachman's sparrows' range. They inhabit glades, pine woodlands, and overgrown grassy fields with scattered shrubs in the Ozark Plateau region. Birds migrate north to breed in Missouri between mid-March and late April. Females will lay as many as three clutches of eggs in one breeding season. Incubation is 12 to 14 days long, and young leave the nest after only 10 days, before they are able to fly. Bachman's sparrows forage on the ground for insects and for seeds of herbaceous plants and pines. Bare ground with a well-developed herbaceous layer is important to Bachman's sparrow.

### Reasons for Decline

Historically, Bachman's sparrows occupied glades and open pinewoods in many areas in southern Missouri. Their population has diminished mainly because of the logging of pine forests in the early 1900s. Succession of savannas and glades to dense, woody areas because of fire suppression and invasion by cedars has also drastically reduced available habitat. In addition, harvest rotations that maintain unsuitable timber age classes will affect Bachman's sparrow populations.

### Recommendations

Bachman's sparrows prefer areas with a thick undergrowth of grasses with little leaf litter and an open overstory canopy (less than 30% coverage). Due to succession, this type of habitat is often

ephemeral (temporary), so potential and existing areas should be protected and managed. Where possible, glade and shortleaf pine savannas should be restored for potential sparrow habitat. A burn or thinning schedule should be developed to help maintain and create habitat. Since single areas will usually not support favored population habitat, successful management in a region will require the provision of a variety of sites in different stages of vegetative succession. Development projects should be avoided in core areas of open, mature pine forests and glades.

Consider the balance between adverse and beneficial practices when determining the overall effect of a conservation practice.



Photo Credit: Missouri Department of Conservation

### Beneficial Practices

- Restore or maintain areas with a diverse mixture of native warm-season grasses and forbs or with a mix of wildlife-friendly cool-season grasses, such as redtop or timothy, mixed with legumes. Glade and savanna should be maintained or restored whenever possible.
- Restore or maintain old fields, glade and savanna by thinning overstory trees (less than 30% canopy).
- Conduct controlled burns no less than every three years in areas of potential sparrow habitat, especially in areas where pine woodland restoration is possible and in glades to rid areas of woody vegetation.

Avoid impacting greater than 75% of the practice acres annually.

- Controlling invasive plants in habitats where this species occurs.
- Prescribed grazing can be beneficial when woody cover exceeds 33% of the ground vegetation.

#### **Adverse Practices**

- Extensive ground disturbances activities such as brush clearing, wind rowing and roller chopping.
- Unmanaged grazing of livestock.
- Moderate to excessive grazing on glades or savannas may discourage or terminate nesting attempts.
- Prescribed burning, mowing, haying or other disturbances on grasslands, glades or savannas between May 1 and July 15 and if disturbing greater than 75% of the practice acres.
- Establishing invasive vegetation, such as tall fescue, Bermuda grass or Caucasian bluestem on sites or nearby where it could spread into the native plant community, and thus degrade or destroy habitat for this species.
- Destruction or degradation of open brushy fields, glades and savannas.
- Unmanaged application of pesticides, animal waste or fertilizers that destroy or degrade habitats that support populations of this species.

#### **Information Contacts**

Missouri Department of Conservation  
Policy Coordination Section  
P.O. Box 180  
2901 W. Truman Blvd  
Jefferson City, MO 65102-0180  
Telephone: 573-751-4115  
<http://www.mdc.mo.gov/nathis/endangered/>

Missouri Department of Natural Resources  
Division of Environmental Quality  
P.O. Box 176  
Jefferson City, MO 65102-0176  
Telephone: 800-361-4827 / 573-751-1300  
<http://www.dnr.mo.gov/env/index.html>

U.S. Fish and Wildlife Service

Ecological Services Field Office  
101 Park DeVillie Dr., Suite A  
Columbia, MO 65203  
Telephone: 573-234-2132

<http://www.fws.gov/midwest/partners/missouri.html>

#### **Legal**

The Missouri Department of Conservation prepared these guidelines for conservation practices with assistance from other state agencies, contractors, and others to provide guidance to those people who wish to voluntarily act to protect wildlife and habitat.

Compliance with these management guidelines is not required by the Missouri wildlife and forestry law or by any regulation of the Missouri Conservation Commission. Other federal, state or local laws may affect construction practices.

“State Endangered Status” is determined by the Missouri Conservation Commission under constitutional authority, and specific requirements for impacts to such species are expressed in the Missouri Wildlife Code, rule 3 CSR 10-4.111.