

## Brewer's Sparrow - *Spizella breweri*

Abundance: Common

Status: NSS4 (Cb)

NatureServe: G5 S5

Population Status: Populations are stable but vulnerable to impacts from increased industrialization in preferred habitat

Limiting Factor: Habitat - limiting factor is severe

Comment:

### Introduction

The Brewer's Sparrow breeds from southeastern Alaska and Saskatchewan south to southern California and southwestern Kansas. It winters from southern California, east to western Texas, and south to central Mexico. During summer, it occurs throughout most of Wyoming. The Brewer's Sparrow is considered a common summer resident in Wyoming.

### Habitat

Considered a sagebrush obligate, the Brewer's Sparrow is closely associated with sagebrush shrublands that have abundant, scattered shrubs and short grass. It can also be found in mountain mahogany, rabbitbrush, pinyon-juniper, or bunchgrass grasslands. It is positively correlated with shrub cover, above-average vegetation height, and horizontal habitat heterogeneity (patchiness). It is sensitive to shrub-steppe habitat fragmentation and sagebrush spraying or removal, especially tall, dense cover types.

### Problems

- h Human activities have caused the loss of suitable nesting habitat in some areas.
- h Impacted by fragmentation and removal of sagebrush habitat.
- h Nest parasitism by Brown-headed Cowbirds can be locally significant.

### Conservation Actions

- h In areas where Brewer's Sparrows occur, maintain large, dense, unfragmented stands of sagebrush habitat with tall shrubs, patchy distribution, openings in the canopy for grass seed production, some grass cover for a seed food source, and some bare ground for an insect food source.
- h Continue inventory and monitoring efforts and implement the Monitoring Wyoming's Birds grid-based monitoring program to determine density and population trends.
- h Work cooperatively with other agencies to conduct surveys and manage habitat for this species.

### Monitoring/Research

Monitoring data track population density but are not designed to address on-going habitat changes related to increased energy development and climate change. State Wildlife Grants project to conduct a mechanistic study of energy development impacts on sagebrush songbirds. State Wildlife Grants project to evaluate the suitability of Greater Sage-Grouse Core Areas for managing sagebrush obligate and dependent nongame birds. State Wildlife Grants project to develop essential datasets and a plan for minimizing wildlife and community conflicts with wind development in southeastern Wyoming.

### Recent Developments

An increase in industrialization in and fragmentation of Brewer's Sparrow habitat can negatively affect populations.

### References

Vander Haegen, WM, and BL Walker

. 1999. Parasitism by Brown-headed Cowbirds in the shrubsteppe of eastern Washington. Pages 34-40 in ML Morrison, LS Hall, SK Robinson, SI Rothstein, DC Hahn, and TD Rich, editors. Research and management of the Brown-headed Cowbird in western landscapes. Studies in Avian Biology 18.

Leukering T, Carter MF, Panjabi A, Faulkner D, Levad R. 2003. Monitoring Wyoming's birds: the plan for count-based monitoring. In: Nicholoff SH, compiler. Wyoming bird conservation plan. Version 2.0. Wyoming Partners In Flight. Lander: Wyoming Game and Fish Department. p 575-601. Online: [www.blm.gov/wildlife/plan/WY/menu.htm](http://www.blm.gov/wildlife/plan/WY/menu.htm).

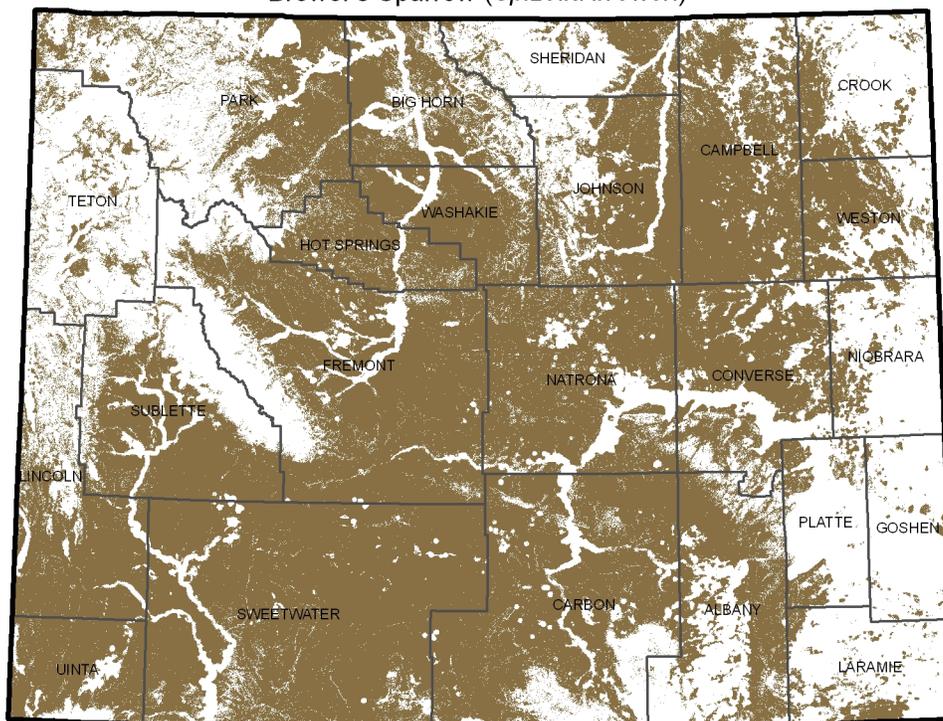
Nicholoff SH, compiler. 2003. Wyoming bird conservation plan Version 2.0. Wyoming Partners In Flight. Lander: Wyoming Game and Fish Department. 668 p. Online: [www.blm.gov/wildlife/plan/WY/menu.htm](http://www.blm.gov/wildlife/plan/WY/menu.htm).

Paige C, Koenen M, Kwan D, Mehlman DW. 1999. Brewer's Sparrow (*Spizella breweri*): species management abstract. The Nature Conservancy. Online: [www.conserveonline.org](http://www.conserveonline.org).

Paige C, Ritter SA. 1999. Birds in a sagebrush sea: managing sagebrush habitats for bird communities. Boise (ID): Partners In Flight, Western Working Group. 47p.

Rotenberry JT, Patten MA, Preston KL. 1999. Brewer's Sparrow (*Spizella breweri*). In: Poole A, Gill F, eds. The birds of North America. Nr 390. Philadelphia: Academy of Natural Sciences; Washington: American Ornithologists' Union.

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SOURCE: Digital maps of ranges and predicted distributions for Wyoming Species of Greatest Conservation Need: April 2010. Wyoming Natural Diversity Database. University of Wyoming, Laramie, Wyoming. Note that brown indicates the predicted distribution of the species; heavy black lines indicate outermost boundaries of possible occurrence.