

History of the Sage Grouse in Kansas

Roger D. Applegate

Research and Survey Office
Kansas Department of Wildlife and Parks
P O Box 1525
Emporia, Kansas 66801
(rogera@wp.state.ks.us)

A number of authors publishing on the range of the Greater Sage-Grouse (*Centrocercus urophasianus*) and Gunnison Sage-Grouse (*C. minimus*; Young et al. 2000) have included southwestern Kansas in the known historical range for the genus (Cable et al. 1996, Braun 1998, Schroeder et al. 1999). The only known extant citations for the occurrences of any sage-grouse in Kansas are those of Goss (1883, 1886) and Cable et al. (1996).

Goss's (1883, 1886) record for sage-grouse came from "the authority of Mr Will. T. Cavanaugh, Assistant Secretary of State," who reported observing and shooting sage-grouse near the southwestern part of Kansas during the 1870s. The southwestern part of Kansas is within 240 km of the historic range of sage-grouse in Colorado (Young et al. 2000). Cable et al. (1996) cited observations of sage-grouse harvested in Morton County, Kansas, in the early 1930s.

Anecdotal historical records such as those used by Goss pose problems for understanding the past distribution of sage-grouse populations. Did Cavanaugh actually know where he was? This question is not as absurd as it may appear: southwestern Kansas was largely unsettled by European-Americans in the 1870s. There were no roads here, only the Santa Fe Trail and some military trails used by the U.S. Army. Most people knew their location only by geographic features and by the amount of time it took to travel between known points (and this, in turn, presumed that both points were at known locations in respective states!).

Of the three tall species of sagebrush closely associated with sage-grouse habitat, Big Sagebrush (*Artemisia tridentata*), Three-tip Sagebrush (*A. tripartita*), and Silver Sagebrush (*A. cana*), none are known to have occurred in Kansas (Stephens 1973). The dominant—and only—shrubby sage found in Kansas is the Sand or Sandhill Sage (*A. filifolia*). This species is characteristic of the *Artemisia filifolia* Shrubland Alliance found in southwestern and south-central Kansas (Lauver et al. 1999).

Vagaries in nomenclature also present problems in evaluating the historical literature. Captain Albert Barnitz, Seventh U.S. Cavalry, noted in an 1868 letter to his wife that he shot two "sage hens" while camped on Cavalry Creek in present-day Comanche County. Barnitz thought these birds to be "much like prairie chickens" (Utley 1977). It is quite likely that Barnitz's two sage hens were Lesser Prairie-Chickens (*Tympanuchus palidicinctus*). Many rural Kansans still refer to this species as "sage hen" because of its affinity for Sandhill Sage.

Isolated records of birds harvested, while always of general interest, do not necessarily represent viable or wild populations. Biases of memory and lack of skill in identification can also pose difficulties, and the

inference of the presence of established populations from these old records may be untoward.

Goss (1891) dropped the Sage Grouse from his later compendium on the history of Kansas birds. Thompson and Ely (1989) regard the genus as being of hypothetical occurrence in Kansas. Based on such sketchy historical evidence that populations of sage-grouse even occurred in the Sandhill Sage areas of southwestern and south-central Kansas, the genus should be considered hypothetical. Compilations of avian distribution (e. g. Schroeder et al. 1999) should not include Kansas as part of the historical range of sage-grouse unless better evidence is uncovered.

Acknowledgments

This work was supported by the Kansas Department of Wildlife and Parks' Small Game Management and Research Project. B. E. Flock gave useful suggestions on the manuscript.

Literature Cited

- Braun, C. E. 1998. Sage grouse declines in western North America: what are the problems? *Proceedings of the Annual Conference of the Western Association of Fish and Wildlife Agencies* 78: 139–156.
- Cable, T. T. 1996. *Birds of Cimarron National Grassland*. U. S. D. A. Forest Service General Technical Report RM-GTR-281. Rocky Mountain Forest and Range Experiment Station. Fort Collins, CO.
- Goss, N. S. 1883. *A catalogue of the birds of Kansas*. Kansas Publication House. Topeka.
- . 1886. *A revised catalogue of the birds of Kansas*. Kansas Publication House. Topeka.
- . 1891. *History of the birds of Kansas*. George W. Crane and Co., Topeka.
- Lauver, C. L., K. Kindscher, D. Faber-Lagendoen, and R. Schneider. 1999. A classification of the natural vegetation of Kansas. *Southwestern Naturalist* 44: 421–443.
- Schroeder, M. A., J. R. Young, and C. E. Braun. 1999. Sage Grouse (*Centrocercus urophasianus*). In A. Poole and F. Gill, eds. *The Birds of North America* 425. The Birds of North America, Inc., Philadelphia, PA.
- Stephens, H. A. 1973. *Woody plants of the North Central Plains*. University of Kansas Press. Lawrence, KS.
- Thompson, M. C., and C. Ely. 1989. *Birds in Kansas*. Vol. 1. Public Education Series 11, University of Kansas Museum of Natural History. Lawrence, KS.
- Utley, R. M. 1977. *Life in Custer's cavalry: diaries and letters of Albert and Jennie Barnitz, 1867–1868*. Yale University Press. New Haven, CT.
- Young, J. R., C. E. Braun, S. J. Oyler-McCance, J. W. Hupp, and T. W. Quinn. 2000. A new species of sage-grouse (Phasianidae *Centrocercus*) from southwestern Colorado. *Wilson Bulletin* 112: 445–453.

—Received 9 March 2001; accepted 1 May 2001.

