

REGION 2 SENSITIVE SPECIES EVALUATION FORM

Species: Chestnut-collared longspur (*Calcarius ornatus*)

Criteria	Rank	Rationale	Literature Citations
1 Distribution within R2	C	The species breeds in Montana, North Dakota, South Dakota, Nebraska, Colorado, and Wyoming. Its wintering range begins in southern Kansas and southeastern Colorado. Confidence in Rank High or Medium or Low	<ul style="list-style-type: none"> http://www.npwrc.usgs.gov/resource/literatr/grasbird/longspur/longspur.htm DeChant et al. 1999
2 Distribution outside R2	C	Chestnut-collared longspurs breed from southern Alberta to southern Manitoba, south to west-central Colorado, and east through North Dakota and South Dakota to western Minnesota. Confidence in Rank High or Medium or Low	<ul style="list-style-type: none"> http://www.npwrc.usgs.gov/resource/literatr/grasbird/longspur/longspur.htm
3 Dispersal Capability	C	There are no known limits to this species' dispersal. The species migrates throughout the Great Plains and likely disperses in response to habitat availability. Confidence in Rank High or Medium or Low	<ul style="list-style-type: none"> Hill and Gould 1997
4 Abundance in R2	C	The species is locally abundant in parts of the Great Plains dominated by grazed grasslands. Confidence in Rank High or Medium or Low	<ul style="list-style-type: none"> http://www.mbr-pwrc.usgs.gov/cgi-bin/atlasa99.pl?05380
5 Population Trend in R2	A	The Breeding Bird Survey is a principal source of information on the population trend of grassland birds. The BBS indicates that throughout the species' range there has been a slight decline since 1966 but a significant decline in the Great Plains. In Colorado and Nebraska, the BBS indicates a slight upward trend since 1966, a sharp decline in South Dakota, and a level trend in Wyoming. Confidence in Rank High or Medium or Low	<ul style="list-style-type: none"> http://www.mbr-pwrc.usgs.gov/cgi-bin/atlasa99.pl?05380

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<p>6 Habitat Trend in R2</p>	<p>A</p>	<p>Chestnut-collared longspurs use level to rolling mixed-grass and shortgrass uplands, and, in drier habitats, moist lowlands. They prefer open prairie and avoid excessively shrubby areas. However, scattered shrubs and other low elevated perches such as Canada thistle (<i>Cirsium arvense</i>) often are used for singing. Grasslands with dense litter accumulations are avoided. In Alberta croplands, litter depth was positively correlated with number of productive territories and total productivity. In order of preference, Chestnut-collared longspurs use native pastures, followed by other grazed grasslands and hayland. Native grasslands continue to be converted to cropland and degraded by invasive species in Region 2 and elsewhere in the Great Plains.</p> <p>Confidence in Rank High or Medium or Low</p>	<ul style="list-style-type: none"> • Anstey et al. 1995 • Arnold and Higgins 1986 • Berkey et al. 1993 • Creighton 1974 • Creighton and Baldwin 1974 • DuBois 1935 • Fairfield 1968 • Harris 1944, • Owens and Myers 1973 • Renken 1983Stewart 1975 • Wiens and Dyer 1975 • Kantrud and Kologiski 1982
<p>7 Habitat Vulnerability or Modification</p>	<p>B</p>	<p>Conversion of grasslands to croplands remains a perennial and potent force in the transformation of native Great Plains habitats.</p> <p>Confidence in Rank High or Medium or Low</p>	<ul style="list-style-type: none"> • http://www.npwrc.usgs.gov/resource/literatr/grasbird/longspur/longspur.htm
<p>8 Life History and Demographics</p>	<p>B</p>	<p>Grasslands are dynamic to a point and the species can respond quickly to new available habitat after grazing and burning.. Permanent loss of grassland to cropland poses a more serious long term threat.</p> <p>Confidence in Rank High or Medium or Low</p>	<ul style="list-style-type: none"> • http://www.npwrc.usgs.gov/resource/literatr/grasbird/longspur/longspur.htm
<p>Initial Evaluator(s): John G. Sidle</p>			<p>Date: 6/20/01</p>

National Forests in the Rocky Mountain Region where species is KNOWN (K) or LIKELY(L)¹ to occur:

<u>Colorado NF/NG</u>	Known	Likely	<u>Kansas NF/NG</u>	Known	Likely	<u>Nebraska NF/NG</u>	Known	Likely	<u>South Dakota NF/NG</u>	Known	Likely	<u>Wyoming NF/NG</u>	Known	Likely
Arapaho-Roosevelt NF	K		Cimmaron NG	K		Samuel R.McKelvie NF	K		Black Hills NF			Shoshone NF		
White River NF						Halsey NF	K		Buffalo Gap NG	K		Bighorn NF		
Routt NF		L				Nebraska NF	K		Ft. Pierre NG	K		Black Hills NF		
Grand Mesa, Uncompahgre, Gunnison NF						Ogalala NG	K					Medicine Bow NF	K	
San Juan NF												Thunder Basin NG	K	
Rio Grande NF														
Pike-San Isabel NF														
Comanche NG	K													

References

Anstey, D. A., S. K. Davis, D. C. Duncan, and M. Skeel. 1995. Distribution and habitat requirements of eight grassland songbird species in southern Saskatchewan. Saskatchewan Wetland Conservation Corporation, Regina, Saskatchewan. 11 pages.

Arnold, T. W., and K. F. Higgins. 1986. Effects of shrub coverages on birds of North Dakota mixed-grass prairies. Canadian Field-Naturalist 100:10-14.

Berkey, G., R. Crawford, S. Galipeau, D. Johnson, D. Lambeth, and R. Kreil.

¹ Likely is defined as more likely to occur than not occur on the National Forest or Grassland. This generally can be thought of as having a 50% chance or greater of appearing on NFS lands.

1993. A review of wildlife management practices in North Dakota: effects on nongame bird populations and habitats. Report submitted to Region 6. U.S. Fish and Wildlife Service, Denver, Colorado. 51 pages.

Bock, C. E., V. A. Saab, T. D. Rich, and D. S. Dobkin. 1993. Effects of livestock grazing on Neotropical migratory landbirds in western North America. Pages 296-309 *in* D. M. Finch and P. W. Stangel, editors. Status and management of Neotropical migratory birds. U.S.D.A. Forest Service, General Technical Report RM-229.

Creighton, P. D. 1974. Habitat exploitation by an avian ground-foraging guild. Ph.D. dissertation. Colorado State University, Fort Collins, Colorado. 154 pages.

Creighton, P. D., and P. H. Baldwin. 1974. Habitat exploitation by an avian ground-foraging guild. U.S. International Biological Program, Technical Report No. 263. Colorado State University, Fort Collins, Colorado. 139 pages.

Currie, R. P. 1892. The Chestnut-collared Longspur. *Oologist* 9:243-244.

Dale, B. C. 1983. Habitat relationships of seven species of passerine birds at Last Mountain Lake, Saskatchewan. M.S. thesis. University of Regina, Regina, Saskatchewan. 119 pages.

Dale, B. C. 1984. Birds of grazed and ungrazed grasslands in Saskatchewan. *Blue Jay* 42:102-105.

Dale, B. C., P. A. Martin, and P. S. Taylor. 1997. Effects of hay management regimes on grassland songbirds in Saskatchewan. *Wildlife Society Bulletin*

25:616-626.

- Davis, S. K., D. C. Duncan, and M. Skeel. 1999. Distribution and habitat associations of three endemic grassland songbirds in southern Saskatchewan. *Wilson Bulletin* 111:389-396.
- Davis, S. K., and D. C. Duncan. 1999. Grassland songbird occurrence in native and crested wheatgrass pastures of southern Saskatchewan. Pages 211-218 *in* J. Herkert and P. Vickery, editors. *Ecology and conservation of grassland birds of the Western Hemisphere. Studies in Avian Biology* 19.
- Davis, S. K., and S. G. Sealy. 2000. Cowbird parasitism and nest predation in fragmented grasslands of southwestern Manitoba. Pages 220-228 *in* J. N. M. Smith, T. L. Cook, S. I. Rothstein, S. K. Robinson, and S. G. Sealy, editors. *Ecology and management of cowbirds and their hosts.* University of Texas Press, Austin, Texas.
- Dechant, J. A., M. L. Sondreal, D. H. Johnson, L. D. Igl, C. M. Goldade, M. P. Nenneman, and B. R. Euliss. 1998 (revised 2001). Effects of management practices on grassland birds: Chestnut-collared Longspur. Northern Prairie Wildlife Research Center, Jamestown, ND. 16 pages.
- Dechant, J. A., M. F. Dinkins, D. H. Johnson, L. D. Igl, C. M. Goldade, and B. R. Euliss. 2000. Effects of management practices on grassland birds: Brown-headed Cowbird. Northern Prairie Wildlife Research Center, Jamestown, N.D. Jamestown, N.D.: Northern Prairie Wildlife Research Center Home Page. <http://www.npwr.usgs.gov/resource/literatr/grasbird/grasbird.htm>.
- DuBois, A. D. 1935. Nests of Horned Larks and longspurs on a Montana prairie. *Condor* 37:56-72.
- DuBois, A. D. 1937. The McCown Longspurs of a Montana prairie.

Condor 39:233-238.

Faanes, C. 1983. Breeding birds of wooded draws in western North Dakota. *Prairie Naturalist* 15:173-187.

Fairfield, G. M. 1968. Chestnut-collared Longspur. Pages 1635-1652 *in* O. L. Austin, Jr. editor. *Life histories of North American cardinals, grosbeaks, buntings, towhees, finches, sparrows, and allies*. Dover Publications, Inc., New York, New York.

Felske, B. E. 1971. The population dynamics and productivity of McCown's Longspur at Matador, Saskatchewan. M.S. thesis. University of Saskatchewan, Saskatchewan, Canada. 133 pages.

Friedmann, H. 1963. Host relations of the parasitic cowbirds. *U.S. National Museum Bulletin* 233:1-276.

Giezentanner, J. B. 1970. Avian distribution and population fluctuations on the shortgrass prairie on north central Colorado. M.S. thesis. Colorado State University, Ft. Collins, Colorado. 113 pages.

Harris, R. D. 1944. The Chestnut-collared Longspur in Manitoba. *Wilson Bulletin* 56:105-115.

Hill, D. P., and L. K. Gould. 1997. Chestnut-collared Longspur (*Calcarius ornatus*). *In* A. Poole and F. Gill, editors. *The birds of North America*, No. 288. The Academy of Natural Sciences, Philadelphia, PA.; The American Ornithologists' Union, Washington, D.C.

Huber, G. E., and A. A. Steuter. 1984. Vegetation profile and grassland bird

response to spring burning. *Prairie Naturalist* 16:55-61.

Johnsgard, P. A. 1980. A preliminary list of the birds of Nebraska and adjacent plains states. University of Nebraska Press, Lincoln, Nebraska. 156 pages.

Johnson, D. H., and L. D. Igl. 1995. Contributions of the Conservation Reserve Program to populations of breeding birds in North Dakota. *Wilson Bulletin* 107:709-718.

Johnson, D. H., and M. D. Schwartz. 1993. The Conservation Reserve Program: habitat for grassland birds. *Great Plains Research* 3:273-295.

Kantrud, H. A. 1981. Grazing intensity effects on the breeding avifauna of North Dakota native grasslands. *Canadian Field-Naturalist* 95:404-417.

Kantrud, H. A., and R. L. Kologiski. 1982. Effects of soils and grazing on breeding birds of uncultivated upland grasslands of the northern Great Plains. U.S. Fish and Wildlife Service, Wildlife Research Report 15. 33 pages.

Kantrud, H. A., and R. L. Kologiski. 1983. Avian associations of the northern Great Plains grasslands. *Journal of Biogeography* 10:331-350.

Kondla, N. G., and H. W. Pinel. 1971. Some noteworthy records of cowbird parasitism in southern Alberta. *Blue Jay* 29:204-207.

Madden, E. M., A. J. Hansen, and R. K. Murphy. 1999. Influence of prescribed fire history on habitat and abundance of passerine birds in northern mixed-grass prairie. *Canadian Field-Naturalist* 113:627-640.

Maher, W. J. 1973. Matador Project: Birds I. Population dynamics. *Canadian*

Committee for the International Biological Programme, Matador Project, Technical Report 34. University of Saskatchewan, Saskatoon, Saskatchewan. 56 pages.

Maher, W. J. 1974. Matador Project: Birds II. Avifauna of the Matador area. Canadian Committee for the International Biological Programme, Matador Project, Technical Report 58. University of Saskatchewan, Saskatoon, Saskatchewan. 31 pages.

Martin, P. A. *in prep.* Benefits of minimum-tillage crop management regimes to grassland songbirds in southern Alberta. Report submitted to the Canadian Wildlife Service, Saskatoon, Saskatchewan. 38 pages.

McEwen, L. C., C. E. Knittle, and M. L. Richmond. 1972. Wildlife effects from grasshopper insecticides sprayed on short-grass range. *Journal of Range Management* 25:188-194.

McMaster, D. G., and S. K. Davis. 1998. Non-game evaluation of the Permanent Cover Program. Unpublished report. Saskatchewan Wetland Conservation Corporation, Regina, Saskatchewan. 75+ pages.

McMaster, D. G., and S. K. Davis. 1998. Non-game evaluation of the Permanent Cover Program. Saskatchewan Wetland Conservation Corporation, unpublished report. 75+ pages.

McMaster, D. G., J. H. Devries, and S. K. Davis. 1999. An integrated evaluation of cropland conversion in the Missouri Coteau of Saskatchewan: productivity of pintail and other grassland birds. Unpublished report.

Messmer, T. A. 1990. Influence of grazing treatments on nongame birds and vegetation structure in south central North Dakota. Ph.D. dissertation.

North Dakota State University, Fargo, North Dakota. 164 pages.

National Geographic Society. 1987. Field guide to the birds of North America, second edition. National Geographic Society, Washington, D.C. 464 pages.

O'Grady, D. R., D. P. Hill, and R. M. R. Barclay. 1996. Nest visitation by humans does not increase predation on Chestnut-collared Longspur eggs and young. *Journal of Field Ornithology* 67:275-280.

Owens, R. A., and M. T. Myres. 1973. Effects of agriculture upon populations of native passerine birds of an Alberta fescue grassland. *Canadian Journal of Zoology* 51:697-713.

Prescott, D. R. C., and G. M. Wagner. 1996. Avian responses to implementation of a complementary/rotational grazing system by the North American Waterfowl Management Plan in southern Alberta: the Medicine Wheel Project. NAWMP-018. Alberta NAWMP Centre, Edmonton, Alberta. 24 pages.

Rand, A. L. 1948. Birds of southern Alberta. National Museum of Canada, Ottawa, Canada. Bulletin no. 111. Biological series, no. 37. 105 pages.

Renken, R. B. 1983. Breeding bird communities and bird-habitat associations on North Dakota waterfowl production areas of three habitat types. M.S. thesis. Iowa State University, Ames, Iowa. 90 pages.

Renken, R. B., and J. J. Dinsmore. 1987. Nongame bird communities on managed grasslands in North Dakota. *Canadian Field-Naturalist* 101:551-557.

Ryder, R. A. 1980. Effects of grazing on bird habitats. Pages 51-66 in R. M. DeGraff and N. G. Tilghman, editors. Management of western forests and grasslands for nongame birds. U.S.D.A. Forest Service,

General Technical Report INT-86:38-47.

- Saskatchewan Wetlands Conservation Corporation (SWCC). 1997. Grassland bird conservation through Saskatchewan's native prairie stewardship program. Saskatchewan Wetlands Conservation Corporation, Regina, Saskatchewan. 25 pages.
- Schneider, N. A. 1998. Passerine use of grasslands managed with two grazing regimes on the Missouri Coteau in North Dakota. M.S. thesis. South Dakota State University, Brookings, South Dakota. 94 pages.
- Schneider, N. A. 1998. Passerine use of grasslands managed with two grazing regimes on the Missouri Coteau in North Dakota. M.S thesis. South Dakota State University, Brookings, South Dakota. 94 pages.
- Skeel, M. A., D. C. Duncan, and S. K. Davis. 1995. Abundance and distribution of Baird's sparrow in Saskatchewan in 1994. Saskatchewan Wetland Conservation Cooperation, Regina, Saskatchewan. 13+ pages.
- Smith, H., and J. Smith. 1966. A breeding bird survey on uncultivated grassland at Regina. Blue Jay 24:129-131.
- Stewart, R. E. 1975. Breeding birds of North Dakota. Tri-College Center for Environmental Studies, Fargo, North Dakota. 295 pages.
- Strong, M. A. 1971. Avian productivity on the shortgrass prairie of northcentral Colorado. M.S. thesis. Colorado State University, Fort Collins, Colorado. 70 pages.
- Sutter, G. C., and R. M. Brigham. 1998. Avifaunal and habitat changes resulting from conversion of native prairie to crested wheat grass: patterns at songbird

community and species levels. *Canadian Journal of Zoology* 76:869-875.

Sutter, G. C., S. K. Davis, and D. C. Duncan. 2000. Grassland songbird abundance along roads and trails in southern Saskatchewan. *Journal of Field Ornithology* 71:110-116.

Wershler, C., W. W. Smith, and C. Wallis. 1991. Status of the Baird's Sparrow in Alberta: 1987/1988 update with notes on other grassland sparrows and Sprague's Pipit. Pages 87-89 *in* G. L. Holroyd, G. Burns, and H. C. Smith, editors. Proceedings of the second endangered species and prairie conservation workshop. Natural History Occasional Paper 15. Provincial Museum of Alberta, Edmonton, Alberta.

Wiens, J. A., and M. I. Dyer. 1975. Rangeland avifaunas: their composition, energetics, and role in the ecosystem. Pages 146-182 *in* D. R. Smith, editor. Symposium on the management of forest and range habitats for nongame birds. U.S.D.A. Forest Service, General Technical Report WO-1.