

Habitat Model for Species: Brown-headed Cowbird

Alpha Code: BHCO Status: Resident

[Distribution Map](#)

[Habitat Map](#)

Landcover Category

0 - Comments

Lowther, 1977

Lowther, 1984
Fleischer, 1986

Hill, 1976

Murphy, 1986

Burhans, 1997
Thompson III et al., 2000

Robinson et al., 2000

Coker and Capen, 1995

Hahn and Hatfield, 1995
Stribley and Haufler, 1999

Hochachka et al., 1999

Brittingham and Temple, 1983

01 - Maple-Basswood Forest

Stauffer and Best, 1980
Friesen et al., 1999
Lowther, 1993

02 - Oak-Hickory Forest

Stauffer and Best, 1980
Kahl et al., 1985
Donovan et al., 2000
Robinson et al., 1999
Morris and Thompson III, 1998
Lowther, 1993

03 - Post Oak-Blackjack Oak Forest

Lowther, 1993

04 - Pecan Floodplain Forest

Lowther, 1993

05 - Ash-Elm-Hackberry Floodplain Forest

Stauffer and Best, 1980
Zimmerman and Tatschl, 1975
Obermeyer, 1992
Lowther, 1993

Habitat Restrictions

Comments

Summary of parasitized species from the egg collection in the Museum of Natural History, Accounts of species parasitized in Kansas. prairie (species not described) with dogwood patches and scattered osage orange and cottonwood trees. All but one grassland host species received moderate to heavy parasitism. grassland with scattered trees to woodland and forest-edge. old fields Populations negatively correlated to proportion of forest cover and positively correlated with edge In Illinois fragmented habitats, grassland and shrubland species were parasitized significantly less often than forest species. Model that includes variables describing area of patch, distance to closest chronic disturbance patch, and number of livestock areas within 7 km of the patch best predicts cowbird patch use. Present in 1300 ha forest. Probability of cowbird presence was 3-3.5 times greater when agricultural lands were present within 3 km of a study site. Study areas were across the U.S. Increased forest coverage within 10 km of an area resulted in lower rates of parasitization. brood parasitism of forest songbirds is highest near open habitat.

06 - Cottonwood Floodplain Forest

Zimmerman and Tatschl, 1975
Kahl et al., 1985
Burhans, 1997
Lowther, 1993

07 - Mixed Oak Floodplain

Zimmerman, 1993
Lowther, 1993

08 - Bur Oak Floodplain Woodland

Zimmerman, 1993
Kahl et al., 1985
Lowther, 1993

09 - Mixed Oak Ravine

Zimmerman, 1993
Lowther, 1993

10 - Post Oak-Blackjack Oak Woodland

Payne, 1976
Lowther, 1993

11 - Cottonwood Floodplain Woodland

Lowther, 1993

12 - Sandsage Shrubland

Lowther, 1993

13 - Saltbush - Grama Shrubland - not mapped

Lowther, 1993

14 - Willow Shrubland

Lowther, 1993

17 - Tallgrass Prairie

Zimmerman, 1983

Elliot, 1980
Parker, 1999
Elliot, 1978
Zimmerman, 1993
Cink and Lowther, 1989
Kahl et al., 1985
Robinson et al., 1999
Lowther, 1993

18 - Sand Prairie

Lowther, 1993

19 - Sandstone Prairie - not mapped

Lowther, 1993

20 - Western Wheatgrass

Lowther, 1993

Prairie sites (Konza) had a higher percentage parasitism than oldfield sites (Ft. Riley).
cattle pasture

absent from annually mowed and burned areas.
especially old field types.

22 - Mixed Prairie

Wilson, 1976
Lowther, 1993

24 - Alkali Sacaton Prairie

Lowther, 1993

25 - Shortgrass Prairie

Lowther, 1993

26 - Grass Playa Lake

Lowther, 1993

27 - Salt Marsh/Prairie

Lowther, 1993

28 - Spikerush Playa Lake

Lowther, 1993

29 - Playa Lake

Lowther, 1993

30 - Low or Wet Prairie

Cink and Lowther, 1989
Lowther, 1993

absent from annually mowed and burned areas.

31 - Freshwater Marsh

Facemire, 1980

33 - Cattail Marsh

Facemire, 1980

36 - Cottonwood Savanna - not mapped

Lowther, 1993

37 - Winterfat - Blue Grama Prairie - not mapped

Lowther, 1993

40 - Non-native Grassland

Stauffer and Best, 1980
Donovan et al., 2000
Morris and Thompson III, 1998
Lowther, 1993

41 - CRP

Klute and Robel, 1997
Lowther, 1993

42 - Salt Cedar or Tamarisk Shrubland

Lowther, 1993

44 - Cultivated Land

Wilson, 1976
Zimmerman and Tatschl, 1975
Morris and Thompson III, 1998
Lowther, 1993

milo stubble and alfalfa fields

50 - Deciduous Forest-Mined Land

Lowther, 1993

51 - Maple Floodplain Forest

Stauffer and Best, 1980
Lowther, 1993

52 - Evergreen Forest-Disturbed Land

Burhans, 1997
Lowther, 1993

old fields

55 - Deciduous Woodland

Lowther, 1993

60 - Mixed Prairie-Disturbed Land

Lowther, 1993

70 - Weedy Marsh

Facemire, 1980

71 - Weedy Upland

Zimmerman and Tatschl, 1975
Lowther, 1993

81 - Urban Areas

Lowther, 1993

91 - Ozark Sandstone Glade / Prairie - not mapped

Stauffer and Best, 1980
Lowther, 1993

92 - Ozark Limestone Glade - not mapped

Lowther, 1993

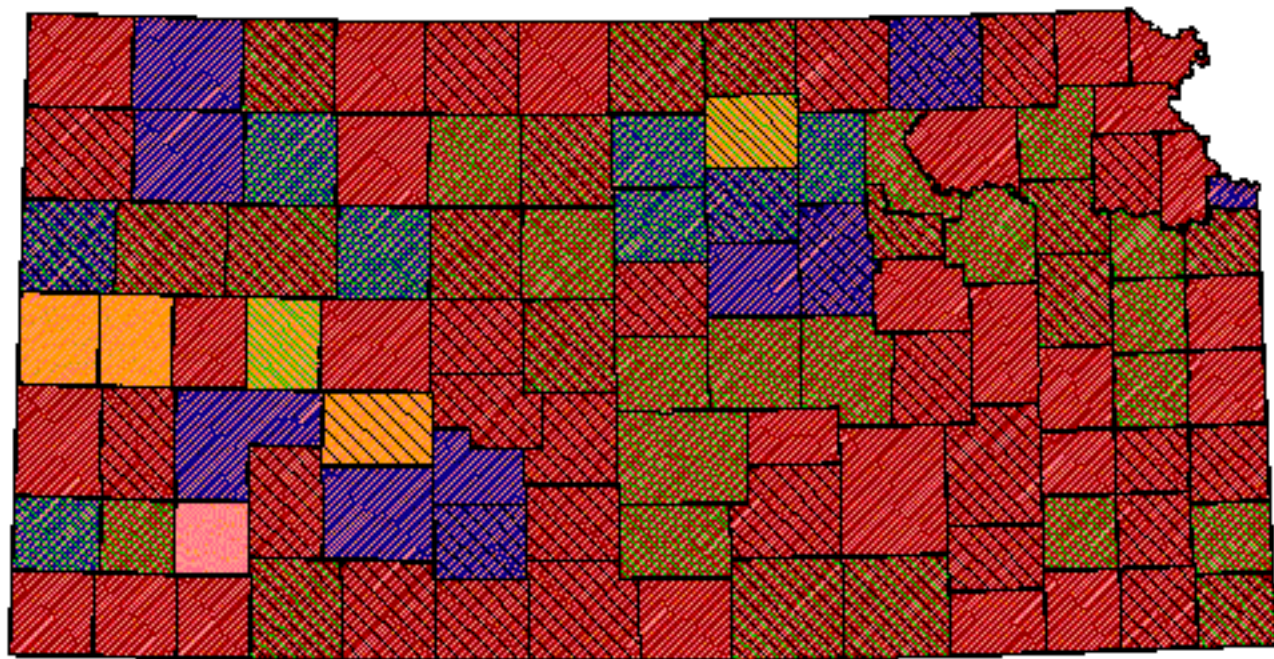
Reference List

1. Brittingham, M. C. and S. A. Temple. 1983. Have Cowbirds caused forest songbirds to decline? *Bioscience* 33(1):31-35.
2. Burhans, D. E. 1997. Habitat and microhabitat features associated with cowbird parasitism in two forest edge cowbird hosts. *Condor* 99(4):866-872.
3. Cink, C. L. and P. E. Lowther. 1989. Breeding bird populations of a floodplain tallgrass prairie in Kansas. Pages 259-262 *in* T. B. Bragg and J. Stubbendieck, editors. *Prairie Pioneers: Ecology, History and Culture*. Proceedings of the Eleventh North American Prairie Conference.
4. Coker, D. R. and D. E. Capen. 1995. Landscape-level habitat use by Brown-headed Cowbirds in Vermont. *Journal of Wildlife Management* 59(4):631-637.
5. Donovan, T. M., F. R. Thompson III, and J. R. Faaborg. 2000. Cowbird distribution at different scales of fragmentation: trade-offs between breeding and feeding opportunities. Pages 255-264 *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, USA.
6. Elliot, P. F. 1978. Cowbird parasitism in the Kansas tallgrass prairie. *Auk* 95:161-167.
7. _____. 1980. Evolution of promiscuity in the Brown-headed Cowbird. *Condor* 82:138-141.
8. Facemire, C. F. 1980. Cowbird parasitism of marsh-nesting Red-winged Blackbirds. *Condor* 82:347-348.
9. Fleischer, R. C. 1986. Brood parasitism by Brown-headed Cowbirds in a simple host community in eastern Kansas. *Kansas Ornithological Society Bulletin* 37(2):21-29.
10. Friesen, L., M. D. Cadman, and R. J. MacKay. 1999. Nesting success of neotropical migrant songbirds in a highly fragmented landscape. *Conservation Biology* 13(2):338-346.
11. Hahn, D. C. and J. S. Hatfield. 1995. Parasitism at the landscape scale: Cowbirds prefer forests. *Conservation Biology* 9(6):1415-1424.
12. Hill, R. A. 1976. Host-parasite relationships of the Brown-headed Cowbird in a prairie habitat of west-central Kansas. *Wilson Bulletin* 88(4):555-565.
13. Hochachka, W. M., T. E. Martin, V. Artman, C. R. Smith, S. J. Hejl, D. E. Andersen, D. Curson, L. Petit, N. Mathews, T. Donovan, E. E. Klass, P. B. Wood, J. C. Manolis, K. P. McFarland, J. V. Nichols, J. C. Bednarz, D. M. Evans, J. P. Duguay, S. Garner, J. Tewksbury, K. L. Purcell, J. Faaborg, C. B. Goguen, C. Rimmer, R. Dettmers, M. Knutson, J. A. Collazo, L. Garner, D. Whitehead, and G. Geupel. 1999. Scale dependence in the effects of forest coverage on parasitization by Brown-headed Cowbirds. *Studies in Avian Biology* 18:68-72. Literature cited, p.292-312.
14. Kahl, R. B., T. S. Baskett, J. A. Ellis, and J. N. Burroughs. 1985. Characteristics of summer habitats of selected nongame birds in Missouri. University of Missouri Agriculture Experiment Station Research Bulletin 1056. University of Missouri,


Columbia, Missouri, USA.


15. Klute, D. S. and R. J. Robel. 1997. Will conversion of Conservation Reserve Program (CRP) lands to pasture be detrimental for grassland birds in Kansas? *American Midland Naturalist* 137:206-212.
16. Lowther, P. E. 1977. Old Cowbird breeding records from the Great Plains Region. *Bird-Banding* 48(4):358-369.
17. _____. 1984. Catalog of Brown-headed Cowbird hosts from Kansas. *Kansas Ornithological Society Bulletin* 35(3):25-33.
18. _____. 1993. Brown-headed Cowbird. A. Poole and F. Gill, editors. *The Birds of North America*. No. 47. The American Ornithologists' Union and The Academy of Natural Sciences, Philadelphia, Pennsylvania, USA.
19. Morris, D. L. and F. R. Thompson III. 1998. Effects of habitat and invertebrate density on abundance and foraging behavior of Brown-headed Cowbirds. *Auk* 115(2):376-385.
20. Murphy, M. T. 1986. Brood parasitism of Eastern Kingbirds by Brown-headed Cowbirds. *Auk* 103:626-628.
21. Obermeyer, B. 1992. Effect of logging on breeding bird diversity in riparian forests on Fall River Wildlife Area. *Kansas Ornithological Society Bulletin* 43(3):21-27.
22. Parker, T. H. 1999. Responses of Bell's Vireos to brood parasitism by the Brown-headed Cowbird in Kansas. *Wilson Bulletin* 111(4):499-504.
23. Payne, R. B. 1976. The clutch size and numbers of eggs of Brown-headed Cowbirds: effects of latitude and breeding season. *Condor* 78:337-342.
24. Robinson, S. K., J. D. Brawn, S. F. Morse, and J. R. Herkert. 1999. Use of different habitats by breeding Brown-headed Cowbirds in fragmented Midwestern landscapes. *Studies in Avian Biology* 18:52-61. Literature cited, p.292-312.
25. Robinson, S. K., J. P. Hoover, and J. R. Herkert. 2000. Cowbird parasitism in a fragmented landscape: effects of tract size, habitat, and abundance of Cowbirds and hosts. Pages 280-297 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, USA.
26. Stauffer, D. F. and L. B. Best. 1980. Habitat selection by birds of riparian communities: evaluating effects of habitat alterations. *Journal of Wildlife Management* 44(1):1-15.
27. Stribley, J. M. and J. B. Haufler. 1999. Landscape effects on Cowbird occurrences in Michigan: implications to research needs in forests of the inland west. *Studies in Avian Biology* 18:68-72. Literature cited, p.292-312.
28. Thompson III, F. R., S. K. Robinson, T. M. Donovan, J. R. Faaborg, D. R. Whitehead, and D. R. Larsen. 2000. Biogeographic, landscape, and local factors affecting Cowbird abundance and host parasitism levels. Pages 271-279 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, USA.
29. Wilson, J. K. 1976. Nesting success of the Lark Bunting near the periphery of its breeding range. *Kansas Ornithological Society Bulletin* 27(2):13-22.
30. Zimmerman, J. L. 1983. Cowbird parasitism of Dickcissels in different habitats and at different nest densities. *Wilson Bulletin* 95(1):7-22.
31. _____. 1993. *The Birds of Konza*. University Press of Kansas, Lawrence, Kansas, USA.
32. Zimmerman, J. L. and J. L. Tatschl. 1975. Floodplain birds of Weston Bend, Missouri River. *Wilson Bulletin* 87(2):196-208.


Brown-headed Cowbird





Kansas Breeding Bird Atlas


 Confirmed Breeding

 Probable Breeding

 Possible Breeding

 Breeding Bird Survey

 *Birds of Kansas,*
Horned Lark

 Range from Johnsgard, 1998
The Birds of Nebraska

Habitat

All shaded counties will be included in the possible distribution of the species.

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