Evidence of Cowbird Parasitism on Yellow-throated Warblers at Starved Rock State Park, Illinois, USA

Joseph A. Traina
Illinois Mathematics and Science Academy
1500 Sullivan Rd.
Aurora, IL 60506-1000

ABSTRACT

An adult yellow-throated warbler (*Dendroica dominica*) was observed feeding a fledged brown-headed cowbird (*Molothrus ater*) on July 1, 2010 at the Beehive Overlook at Starved Rock State Park (LaSalle County, Illinois, USA). Food in the form of captured insects was brought to the young cowbird five times during a period of approximately 15 minutes.

INTRODUCTION

The yellow-throated warbler's (Dendroica dominica) breeding range extends north to southern Wisconsin (Robbins, 1991). In Illinois, breeding records are more common to the south and are infrequent in the north (Hall, 1996). Although rates of brood parasitism by brown-headed cowbirds (Molothrus ater) are high in some warbler species (Ortega, 1998), there are relatively few published accounts with yellow-throated warblers as the host. Friedmann and Kiff (1985) list only four known records involving either observations of parasitized yellow-throated warbler nests or of adult warblers feeding a young cowbird: two from North Carolina, one from Ohio, and one from Oklahoma. Additional documented cases have also been reported in Florida (Cruz et al., 1998; Florida Fish and Wildlife Conservation Commission, 2003), Kentucky (Palmer-Ball, 1996), Missouri (Missouri Department of Conservation, 2011), and Tennessee (Robinson, 1997). The low frequency of observed instances of brood parasitism on yellow-throated warblers may be due, in part, to the fact that this species typically nests high in trees, making nest observations difficult (Bohlen, 1989; Hall, 1996; Robinson, 1997). Mumford and Keller (1984) report an average height of approximately 20 m for 11 nests in Indiana, and Robinson (1997) reports an average height of just over 10 m for 12 nests in Tennessee.

OBSERVATIONS

I observed an adult yellow-throated warbler feeding a fledged brown-headed cowbird within a few meters of the viewing platform at the Beehive Overlook at Starved Rock State Park (LaSalle County, IL) on July 1, 2010. The yellow-throated warbler fed the cowbird on five occasions throughout the roughly 15 minute time period during which I

made observations. The cowbird remained stationary near the main trunk on a horizontal branch of a white pine (*Pinus strobus*) as the adult warbler searched for food. The warbler either fed insects to the cowbird directly or placed the insects on the branch near the feet of the cowbird. The young cowbird immediately consumed all of the insects provided by the adult warbler. It is important to note that these observations do not automatically confirm that the yellow-throated warbler was the original foster parent of the fledged cowbird. Sealy and Lorenzana (1997) list several observations of fledged brownheaded cowbirds receiving food from more than one bird species or from a species different from that of the original host.

LITERATURE CITED

- Bohlen, H. D. 1989. The birds of Illinois. Indiana University Press, Bloomington and Indianapolis, Indiana, USA.
- Cruz, A., W. Post, J. W. Wiley, C. P. Ortega, T. K. Nakamura, and J. W. Prather. 1998. Potential impacts of cowbird range expansion in Florida. Pages 313-336 in Parasitic birds and their hosts: Studies in coevolution (Rothstein, S. I., and S. K. Robinson, Eds.). Oxford University Press, Inc., New York, New York, USA.
- Florida Fish and Wildlife Conservation Commission. 2003. Brown-headed cowbird (*Molothrus ater*) in Florida's breeding bird atlas: A collaborative study of Florida's birdlife. Retrieved January 22, 2011 from: (http://myfwc.com/bba/docs/bba_bhco.pdf).
- Friedmann, H., and L. F. Kiff. 1985. The parasitic cowbirds and their hosts. Proceedings of the Western Foundation of Vertebrate Zoology 2(4): 225-304.
- Hall, G. A. 1996. Yellow-throated warbler (*Dendroica dominica*) in The birds of North America online (A. Poole, Ed.). Cornell Lab of Ornithology, Ithaca, New York, USA. Retrieved September 25, 2010 from the Birds of North America Online: (http://bna.birds.cornell.edu/bna/species/223). doi:10.2173/bna.223
- Missouri Department of Conservation. 2011. Rates of brown-headed cowbird parasitism (Table) *in* Missouri breeding bird atlas 1986-1992 (online). Conservation Commission of Missouri, USA. Retrieved January 5, 2011 from: (http://extra.mdc.mo.gov/nathis/birds/birdatlas/appende.htm).
- Mumford, R. E., and C. E. Keller. 1984. The birds of Indiana. Indiana University Press, Bloomington, Indiana, USA.
- Ortega, C. P. 1998. Cowbirds and other brood parasites. University of Arizona Press, Tucson, Arizona, USA.
- Palmer-Ball, B. L., Jr. 1996. Kentucky breeding bird atlas. The University Press of Kentucky, Lexington, Kentucky, USA.
- Robbins, S. D., Jr. 1991. Wisconsin birdlife. The University of Wisconsin Press, Madison, Wisconsin USA.
- Robinson, J. C. 1997. Yellow-throated warbler. Pages 287-289 in Atlas of the breeding birds of Tennessee by Nicholson, C. P. The University of Tennessee Press, Knoxville, Tennessee, USA.
- Sealy, S. G., and J. C. Lorenzana. 1997. Feeding of nestling and fledgling brood parasites by individuals other than the foster parents: a review. Canadian Journal of Zoology 75(11): 1739– 1752.