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THE STATUS OF THE MIGRATORY GREAT HORNED OWL (*Bubo virginianus subarcticus*) IN KANSAS AND MISSOURI, WITH COMMENTS ON THE BREEDING DISTRIBUTION OF SUBSPECIES IN THE GREAT PLAINS

Mark B. Robbins and Isaac N. Rush

*Division of Ornithology, University of Kansas Biodiversity Institute,
1345 Jayhawk Blvd., Lawrence, KS 66045 (corresponding author,
email mbrobbins@ku.edu)*

INTRODUCTION

Although migration in northern North America populations of the Great Horned Owl (*Bubo virginianus*; hereafter GHO) has been documented for well over a hundred years (Bruner 1896, Fleming 1908, Allen 1919, Swenk 1937, Houston 1978, Dickerman 1993), few birdwatchers and ornithologists are aware of this. Within the interior of the United States, pale *B. v. subarcticus* of interior Canada, has been documented from mid-November into March as far south as Nebraska and Iowa (DuMont 1934, Swenk 1937, Houston 1978, Dickerman 1993; T. Labedz, pers. comm.). The late fall and early winter of 2020 produced documented records for Kansas and Missouri. Details of those records with earlier records are discussed along with comments on the current breeding range of GHO subspecies in the Great Plains.

KANSAS AND MISSOURI RECORDS

The first definite record of *subarcticus* for Kansas was obtained from a bird banded ca. 8 km west of Cymric, Saskatchewan, Canada (51.250°, -105.083°) on 12 May 1984 and recovered on 17 February 1985, ca. 8 km north of Salina, Saline County, Kansas (38.916°, -97.583°; USGS Bird Banding Laboratory). The bird photographed on 25 November 2020, ca. 4 km southwest of Osawatomic, Miami County, by Craig Yerby represents the second confirmed record for Kansas (Figure 1). Apparently, there had been no prior reports for this taxon in the state (Swenk 1937, Houston 1978, Dickerman 1993). However, given the number of returns in Nebraska of birds banded in Saskatchewan (Houston 1978) and the more recent

records (Dickerman 1993; T. Labeledz, pers. comm.), the two Kansas records are not surprising. Potential confusion with the pale western subspecies, *pallescens*, could obfuscate the detection of *subarcticus* in the extreme western part of the state during winter months (but, see comments below).

The first unequivocal record for Missouri was obtained when a bird was photographed on 16 December 2020, at Loess Bluffs National Wildlife Refuge, Holt County, by Rush (Figure 2). This individual closely resembles a specimen salvaged on 12 March 1990, at West Point, Cuming County, Nebraska (Univ. of Nebraska State Museum, #16270) that Dickerman (1993) referred to as an “ultratypical” specimen of *subarcticus* (Figure 3). There have been at least four earlier observations of very pale GHOs during winter in the northwestern corner of Missouri (Holt, Nodaway, and Buchanan counties) during the past 50 years (F. Lawhon, P. Kondrashov, S. Kinder, pers. comm.), but none were documented with specimens or photographs. Given the documented records in abutting states north and west of Missouri, this taxon may be an occasional migrant to the state.



Figure 1. Great Horned Owl, 25 November 2020, ca. 4 km southwest of Osawatomie, Miami County, Kansas. Photo by Craig Yerby.



Figure 2. Great Horned Owl, 16 December 2020, at Loess Bluffs National Wildlife Refuge, Holt County, Missouri. Photo by Isaac Rush.



Figure 3. Great Horned Owl, salvaged specimen, 12 March 1990 at West Point, Cuming County, Nebraska (Univ. of Nebraska State Museum, #16270). The specimen that Dickerman (1993) referred to as an “ultratypical” specimen of *subarcticus*. Note how similar the specimen is to the Missouri bird (Figure 2). Photo by Tom Labeledz.

It is conceivable that two other northern subspecies might occur as vagrants in winter to Kansas and Missouri, the Rocky Mountain (central Alaska to northwest Montana) *lagophonus* and the eastern Canadian *heterocnemis*. The former is much darker and lacks the rich rufous tones of resident *virginianus*. The subspecies *lagophonus* has been recorded in winter as far south as Colorado and Texas (Artuso et al. 2020), but confirmation of its occurrence in Kansas and Missouri would require the elimination of a melanistic *virginianus*. Confirmation of *heterocnemis* in this region would likely require the recovery of a banded bird from the breeding grounds. It is presumed that there is extensive intergradation where the various forms meet as there are no geographic or habitat barriers, so some individuals that might appear in winter could be intermediate in plumage characters. Because of presumed relatively recent differentiation of these populations, mitochondrial analyses have not been able to confirm provenance (Dickerman et al. 2013).

Comments on the Breeding Distribution of Great Plains Subspecies

Various authorities have confined the western distribution of nominate *virginianus* to the eastern Great Plains, i.e., the eastern half of the Dakotas, Nebraska, Kansas, Oklahoma, and Texas (Swenk 1937, Dickerman 1993, Artuso et al. 2020). The southern breeding distribution of *subarcticus* has been considered to extend south to the northwestern Great Plains into the northern United States (Dickerman 1993). However, at the encouragement of Dickerman, Robbins collected and salvaged three specimens of GHOs from the northwestern corner of North Dakota at Kenmare and Lostwood National Wildlife Refuge, in late June 1995 (KU #87226, #88562) and early June 1996 (KU #88563). Two of the three are clearly referable to nominate *virginianus*, whereas the third (KU #88562) is referable to *subarcticus*. These were examined by Dickerman, who concurred with the identifications. Moreover, material collected in southwestern Kansas since Dickerman's (1993) revision also appear to be heavily influenced by the incursion of *virginianus*. Therefore it appears that, like many other taxa (e.g., Blue Jay [*Cyanocitta cristata*], Eastern Screech-Owl [*Megascops asio*]) that have spread westward since European settlement (Rising 1983, Smith et al. 2020), the eastern population of GHO has spread across much of the central and northwestern Great Plains.

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Tom Labeledz kindly provided references, information, and photographs of the UNSM specimen. We thank Craig Yerby for information and use of the photograph of the Kansas bird. Emily Ostrow brought to our attention the USGS banding data for the Kansas record. Dan Gibson and two anonymous reviewers provided comments that improved the manuscript.

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**In Memoriam
Wallace H. Champeny
(1925-2020)**

Max C. Thompson

Southwestern College, 100 College St., Winfield, KS 67156 (Max.Thompson@sckans.edu)



Photograph courtesy of Carolyn Schwab.

Wallace H. Champeny, 94, a life-long resident of Oxford, Kansas, and a life member of the Kansas Ornithological Society (KOS) since 1964, passed away on 14 January 2020, at the Medicalodge of Oxford.

Wallace was born on 14 August 1925, the son of Harry and Gladys (Wallace) Champeny in Wichita, Kansas. Wallace graduated from Oxford High School in 1943, and attended Kansas State University. In 1943 he enlisted in the United States Army and served in Europe and during the Korean War. Wallace owned and operated the Old Oxford Milling Company built in 1874, just north of Oxford along the Arkansas River. The mill was placed on the National Historical Registry in 1982. Wallace provided a trust to make sure the mill would live in perpetuity.

Wallace was a passionate birdwatcher and nature-lover. He identified the first record of the Anna's Hummingbird for Kansas at the residence of Jack and Norma Dennett in Oxford. Wallace was often seen sitting in his SUV in his yard watching the birds at the feeders. He maintained numerous feeders in his yard, including home-made feeders made from 2-liter pop bottles, and maintained a large bed of Canna lillies for hummingbirds. He also was notorious for taking numerous 50 pound bags of sunflower seeds to the locals in the Black Mesa, Oklahoma, especially during Christmas Bird Count (CBC's) season. He participated in numerous CBC's, and was a frequent attendee of KOS and Wichita Audubon Society meetings.

Even after his passing, Wallace has continued his legacy of bird conservation. He left the KOS 2% percent of his estate, or \$49,860. The Board put this into its endowment for future bird research. The research fund has been designated the Wallace Champeny Research Fund and funds are available upon application to the research fund committee. A portion of his estate was also left to The Nature Conservancy and the Wichita Audubon Society.

Wallace was much beloved by all who knew him and fondly called him Wally. His presence will be missed in the birding community.

COVID-19 PANDEMIC AND THE KOS BULLETIN

Members, libraries, museums, and friends of the *Kansas Ornithological Society*, as the editor of the *Bulletin* I want to express my sincere apologies for the delay of the 2021 *Bulletins*. Unfortunately, I was hospitalized with Covid in December of 2020, as many of you know. As a result of long-term issues associated with the disease I was unable to complete the *Bulletins* for the 2021 year. I think the *Society* tries to produce a quality product, and though it is late, I hope you will enjoy the 2021 publications, including the color images. The good news, this issue (September) means we only have December remaining, which I have content for, and should be available with the March 2022 issue.

Respectfully,

Eugene (Gene) A. Young, Editor

MANUSCRIPTS NEEDED AND INSTRUCTIONS TO AUTHORS

The Kansas Ornithological Society Bulletin is the official peer-reviewed journal of the Society, which is published quarterly. The KOS Bulletin is devoted to the field study of birds in Kansas, although other suitable materials can be published. Featured Articles, and short notes of scientific or general interest are solicited; potential authors are encouraged to submit any materials that contribute to the understanding of birds in Kansas, including details for documentation of unusual or rare species. The following guidelines should be followed if you wish to submit manuscripts.

1) Authors should review recent issues of the Bulletin as a guide to style and format for manuscripts. Most Featured Articles should be assembled in this order: title page, abstract, text (Introduction, Methods, Results, Discussion, Acknowledgments, and Literature Cited), tables, figure legends, and figures. Manuscripts should be double-spaced throughout (including the title page, tables, and figure legends); use the same font (12 point) throughout the manuscript. Margins should be at least 2.5 cm (1 in) on all sides of the page.

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3) Please include affiliations of the authors, authors' names, and e-mail addresses of authors (if you want them to be copied on the status of the manuscript). You may suggest up to two possible reviewers, and provide their names, affiliations, and e-mail addresses. Depending on the scope of the article, one to three (anonymous) reviewers may review a manuscript. Reviewer comments will be forwarded to the authors electronically, or via hard copy. Authors will be provided with a time-line for returning the manuscript and when publication may take place.

4) For photographs or drawings, a copyright notice with the photographers or artist's name and year may be included in the cutline.

Any questions or submissions can be sent to the editor: Eugene A. Young, Editor--KOS Bulletin, Northern Oklahoma College, 1220 E. Grand, PO Box 310, Tonkawa, OK 74653-0310, e-mail: Eugene.Young@noc.edu, Phone: 580-628-6482, Fax: 580-628-6209.