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COMMON BLACK-HAWK: A PROBABLE KANSAS RECORD AND RECENT RANGE EXPANSION IN THE SOUTHWESTERN U.S.

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Abstract – We report an observation of a raptor in sub-adult plumage representing the genus *Buteogallus*, which the authors believe was a Common Black-hawk (*Buteogallus anthracinus*). This raptor was seen flying overhead at the Elkhart, Morton County, Kansas, shelterbelt on the morning of 10 April 2011. Here within, we discuss our field observations of this raptor through our own individual accounts. Identification tips for separation of the United States breeding Common Black-hawk from the Central American breeding Greater Black-hawk (*Buteogallus urubitinga*) are provided for future investigators. We discuss the distribution and the rapid northerly range expansion of the Common Black-hawk along riparian corridors of the southwestern United States with close attention to northeastern New Mexico. We recommend further coverage of riparian areas in extreme southwest Kansas, especially throughout early spring (March and April) and early to mid-summer (June and July); periods with relatively little observer coverage. Early spring and early to mid-summer are periods when pioneering Common Black-hawks may be investigating new territories and dispersing after the nesting season, respectively.

INTRODUCTION

On 10 April 2011, the authors found a probable Common Black-hawk (*Buteogallus anthracinus*) at the cemetery shelterbelt, an oasis of mature deciduous and coniferous trees in Elkhart, Morton County, Kansas. The raptor was observed at approximately 0850 (CDT), flying overhead at less than 10 meters away. A female Cooper's Hawk (*Accipiter cooperi*), which was nesting near the northern terminus of the shelterbelt, was small compared to the fleeing *Buteogallus* as it chased the larger raptor directly over our heads. The observation lasted about 30 seconds in duration. The black-hawk flew out of sight to the southeast. Efforts to relocate

the bird were unsuccessful.

The objectives of this paper are to: 1) provide a description of our Common Black-hawk sighting, 2) provide information on Common Black-hawk nesting distribution and the most recent records outside of nesting areas and 3) discussion of field marks critical to species identification in juvenile *Buteogallus*, especially focused on separating Greater Black-hawk (*Buteogallus urubitinga*) from Common Black-hawk.

OBSERVATIONS

Each of the three observers had independently identified the bird before coming together in chase at the end of the shelterbelt. The following description was compiled from each of the three observers (authors).

RAYNOR observed a mid-sized raptor, whose size dwarfed the Cooper's Hawk chasing it. The length and wingspan of this raptor was approximately a fifth longer and a third wider, respectively, than the Cooper's Hawk in pursuit. Initially, I thought that a Black Vulture (*Coragyps atratus*) was flying above the shelterbelt based on its flight profile with extremely wide, short wings and a very short tail but then I noticed it was a heavily streaked raptor with a hawk-like head and noticeably large, hooked, bill with a pale, yellowish base seeming to slightly extend onto the face. This heavily streaked, dark raptor was not a *Buteo* as it was observed flying overhead. The odd proportions of this raptor's flight profile including broad, rounded wings, a short but wide-fanning tail and a burly-chested appearance eliminate characteristics for any buteo or accipiter species. It was also more robust looking and with broader wings than one would observe in Zone-tailed Hawk (*Buteo albonotatus*).

The buff-colored and heavily streaked underwings were pale at the interface of the primary bases and the primary coverts, which is a feature not observed in any variation of Red-tailed Hawk (*Buteo jamaicensis*) or other buteos. For example, the juvenile dark-morph Harlan's Red-tailed Hawk (*Buteo jamaicensis harlani*), exhibits entirely pale primaries with adjacent dark primary coverts unlike a juvenile *Buteogallus*, which has pale primary coverts and only the primary bases are pale. In fact, in North American raptors this pale primary base and primary covert interface of the underwing is only present in the *Buteogallus* genus (Clark and Wheeler 1995, Clark et al. 2006).

In addition, I observed a broad buff-whitish patch on its lateral auricular running wide and horizontal from the base of the bill to the nape. This auricular "bar" was limited dorsally and ventrally by a dark eyestripe and a bold, dark malar stripe, respectively. As previously mentioned, a large and yellow-cere, pale bill dipped in black was also seen. This feature in combination with the facial pattern is a key feature for *Buteogallus* and is not observed in other juvenile North American raptors. Adult *Buteogallus* have a bold yellow bill with a black tip and an entirely black head. Also, the bold, yellow cere of an adult distinctly extends onto the face. A distinct wide, dark sub-terminal band followed by several distinct thinner bands to the base of the vent was also noticed and later aided in confirmation of the identification to *Buteogallus* and also eliminated juvenile Broad-winged Hawk (*Buteo platypterus*), which exhibit uniformly broader, tail bands.

CABLE initially saw the bird flying directly towards him. It flew low directly over his head so he was able to look straight up at it as it glided over. Having recently seen Common Black-

hawks in Arizona, he immediately recognized the shape which in his mind eliminated all other North American raptors. Cable got excellent looks at the tail shape and banding pattern, the streaked undersides of the wings and their distinctive shape, and the heavily streaked breast and of course the general buff color. He felt confident of the identification as an immature Common Black-hawk before he encountered the other observers who were also chasing the bird on foot to get a photograph.

WIGGINS had a fleeting glimpse of the bird as it flew overhead through a gap in the canopy, and mostly noticed the odd wing shape, heavy streaking underneath (seemingly too symmetrical for a *Buteo*), the tail strongly banded with relatively thin bands, and what seemed an unusually large head. The wing shape appeared more similar to a Great Horned Owl (*Bubo virginianus*) than to a *Buteo*.

DISTRIBUTIONAL SUMMARY AND RANGE EXPANSION

The Common Black-hawk nests in riparian habitat, where its favored aquatic prey including fish, frogs, snakes, and turtles are available (Boal and Mannan 1996). The breeding range extends from northwestern Arizona, southern New Mexico, and western Texas (Figure 1) to northern South America, with isolated populations in the Caribbean. The northernmost populations are migratory (A.O.U. 1983). Adult birds arrive at Arizona nesting grounds in early March and depart by mid-October with winter records scarce throughout all of southwestern United States except the Lower Rio Grande Valley, Texas, where they are irregular (see Schnell 1994).

In New Mexico, Common Black-hawks are one of the earliest birds to return in the spring with a median arrival date of 15 March (Sartor O. Williams, New Mexico Editor, North American Birds, pers. comm.) Information on timing and route of migration is scant and what information that is available pertains to the Arizona population. Furthermore, migration of juveniles is unknown. Based on anecdotal information of the New Mexican population, offspring from the previous year are regularly recorded in spring throughout the entirety of their breeding range, including in the north, arriving about the same time as adults (S. O. Williams, pers. comm.).

A northerly extension of Common Black-hawk breeding range is currently underway. Range extensions in New Mexico (Hundertmark 1974, Hubbard 1978, Williams 1993, Parmeter et al. 2002) and Utah (Wauer and Russell 1967) and vagrant sightings in Colorado (where

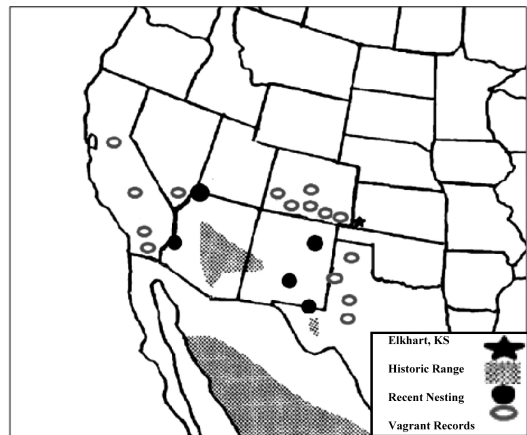


Figure 1. Approximate breeding range of Common Black-hawk (shaded; U.S. range after Schnell 1979, modified from Daniels et al. 1989), with northward movements in nesting and vagrancy.

now currently annual in southern part of state), Nevada, and California, led Schnell (1994) to suggest that the species is expanding its range. Although less than one percent of the species total estimated population (220-250 pairs; Schnell 1994) occurs in the United States, a northward advance in breeding suggests the United States population is increasing. For example, the New Mexico population in 1994-1995 was 70-90 pairs (Skaggs 1996) and with recent nesting in eastern New Mexico to the Middle Rio Grande and the Canadian River, the statewide population is likely closer to 100 pairs (New Mexico Department of Game and Fish 2008). However, Sartor O. Williams (pers. comm.) states “the New Mexican population is greatly underestimated and is more likely be to around 150-200 territories.” The northeastern expansion of Common Black-hawk breeding range may have been responsible for recent sightings in southern Colorado and north of the Trans-Pecos area of western Texas (Table 1). The proximity of these locations to southwestern Kansas is intriguing, especially with sightings as close to Elkhart, Kansas, as Amarillo, Potter County, Texas, and Two Buttes Reservoir, Baca County, Colorado, which are approximately 200 and 100 km, respectively, from the location of our sighting.

New Mexico’s northernmost sightings are located in Colfax County where the headwaters for the “wet” Cimarron River originate. This river then connects to the Canadian River, where nesting Common Black-hawks are moving further upstream every year (S.O. Williams pers. comm.). The Canadian River then heads east through the Texas panhandle and is a tributary of the Arkansas River. However, the “dry” Cimarron River also originates in Colfax County, New Mexico, but the headwaters are farther east than the “wet” Cimarron River. The “dry” Cimarron River heads east to the Oklahoma Panhandle then it flows north to the Cimarron National Grasslands and south again to its terminus at the Arkansas River. This information may be valuable to the understanding of Common Black-hawk dispersal in the southern Great Plains.

A Common Black-hawk in heavy post-juvenile molt was hit by a truck driving along a bridge on 18 September 1976 at Bemidji, Minnesota. This bird was first considered to be a wild vagrant (Elwell et al. 1978), but it has since been regarded as an escapee (DeSante and Pyle 1986). To our knowledge, this record is the only extralimital report for a sub-adult Common Black-hawk.

That this “black-hawk” was seen in Elkhart, Kansas during spring 2011 may not be surprising. Many birders anticipated that this species would be found in Kansas based upon the other nearby sightings on the southern Great Plains. For example, Common Black-hawks have nested no less than 330 km from Elkhart at the Clabber Hill Ranch along the Canadian River in northeastern, New Mexico (Williams 2004a) and further upstream in subsequent years (S. O. Williams, pers. comm.). Moreover, with the historically severe drought and associated fires in the southwestern United States (including the Davis Mountains in west Texas where Common Black-hawks nest), it seems reasonable to expect some vagrancy from this region. In fact, less than a month after this “black-hawk” sighting, a Painted Redstart (*Myioborus pictus*) whose breeding range overlaps that of the Common Black-hawk, was seen and photographed by many observers just eight miles north of where the Black-hawk was reported. Lastly, when our query to Sartor O. Williams on the New Mexico population commenced, he stated “given the relentless range expansion of the species in recent years, it’s surprising one hasn’t been found north to southwest Kansas earlier.”

Table 1. Common Black-hawk (*Buteogallus anthracinus*) records outside of their current breeding range in nearby states. County is italicized.

LOCATION	DATE	OBSERVER(S)	SOURCE
Douglas, <i>Jefferson</i> , CO	6/21/1980	R. Andrews, C. Kittleman	Gent, 1987
Carizzo Mountain, <i>Baca</i> , CO	6/15/1991	Rupert Higgins	Nelson, 1993
Durango, <i>Las Platas</i> , CO	4/13/2001	B. and G. Tomberlin	Leukering and Semo, 2003
Montrose, <i>Montrose</i> , CO	6/09/2001	Steve Dinsmore	Leukering and Semo, 2003
Two Buttes Reservoir, <i>Baca</i> , CO	4/19/2005	Marshal Illif	Semo, 2007
Canon City, <i>Fremont</i> , CO	9/10/2006	Rich Miller	Semo, 2008
<i>Mesa</i> , CO	5/25/2007	Roger Linfield	Semo and Faulkner, 2009
Hotchkiss, <i>Delta</i> , CO	6/12/2009	Jason Beason	Semo and Faulkner, 2010
<i>El Paso</i> , CO	5/16/2010	Brandon Percival	Semo and Faulkner, 2011
<i>Mesa</i> , CO	5/26/2011	Ron Lambeth	Arnold, 2011
<i>Delta</i> , <i>Delta</i> , CO	6/23/2011	Michael O'Brien	O'Brien, 2011
Conchas Dam, <i>San Miguel</i> , NM*	6/2003	William West	Williams, 2004a
Cimarron, <i>Colfax</i> , NM**	7/29/2004	David Cleary	Williams, 2004b
Texico Marsh, <i>Curry</i> , NM	4/04/2010	Dave Hawksworth	Hawksworth, 2010
Mosquero, <i>San Miguel</i> , NM	4/22/2011	Martin MacRoberts	MacRoberts, 2011
Amarillo, <i>Potter</i> , TX	4/21/1999	Laura Sare	Seyffert, 2011
Lubbock, <i>Lubbock</i> , TX	5/01/2010	Cameron Carver	Carver, 2010

*denotes nesting along Canadian River in northeastern New Mexico.

**this record pertains to the more southerly flowing, "wet" Cimarron River that flows into Oklahoma and meets the Arkansas River.

SEPARATION FROM GREATER BLACK-HAWK

The circumstances of the brief sighting did not allow us to eliminate its close relative, the Greater Black-hawk found in South America, Central America and Mexico. The Greater Black-hawk is not on the American Birding Association list of North American birds because a naturally-occurring Greater Black-hawk has never been positively identified in the United States. Greater Black-hawks have been reported from Florida, but these birds were deemed to have escaped from captivity (Daniels et al. 1989, Pranty et al. 2008, 2010).

We believe that the geographic range of these species and historic patterns of vagrancy strongly and reasonably point towards the bird we observed being a Common Black-hawk. However, there is an extremely remote possibility that a Greater Black-hawk from Mexico could occur in Kansas. Based on that possibility, we offer information on separating Common Black-hawks from Greater Black-hawks. Our hope is that when Common Black-hawks are again seen in Kansas that circumstances will allow observers to visually confirm the particular species of *Buteogallus* being observed.

Field marks for the juvenile age class of the larger, Greater Black-hawk that overlap with Common Black-hawk but not any other North American raptor include largely rufous and buff, streaked and barred black underwings and narrow tail bands. However, on the Common Black-hawk the tail appears whitish, crossed by approximately 5-8 wavy narrow dark bars unlike the juvenile Greater Black-hawk with a tail crossed by 10-14 narrow dark bars (Ridgely 1976, Hilty and Brown 1986). In both species, juvenile plumage is retained through winter and gradually molted during the next spring, summer, and fall (Palmer 1988). Unlike the Common Black-hawk, the Greater Black-hawk has a distinctive second-year immature plumage, similar to the juvenile, but with only 5 or 6 tail bands; hence, overlapping with juvenile Common Black-hawk and not documented in our observations. Furthermore, the sub-terminal blackish band is much wider, constituting about a fifth of the entire tail length, unlike juvenile plumages of both species in which the sub-terminal band is only slightly broader than the others (Friedmann 1950). This additional and critical tail feature was not specifically noted in the observation that is the subject of this paper.

CONCLUSION

To date, this record of Common Black-hawk has not been accepted by the Kansas Bird Records Committee as the first state record under hypothetical status. Therefore it is not part of the official State bird list maintained by the Kansas Ornithological Society. However, because of this sighting and the recent sightings of other Common Black-hawks in neighboring states, we encourage observers to visit Elkhart, Kansas, and other areas in southwest Kansas (e.g., along the Arkansas River) during March/April and June/July; historically periods with little field coverage. Additional field work in the southwest corner of Kansas may yield more Common Black-hawk records as well as sightings of other southwestern denizens. The Cimarron National Grasslands is a veritable, last frontier in Kansas ornithology where exciting observations of southwestern rarities are not unexpected (Cable and Seltman 2011).

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NOTES ON FOOD ITEMS OF A SNOWY OWL IN KANSAS

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Abstract – A Snowy Owl (*Bubo scandiacus*) was observed from 6-27 January 2005, in Sumner County, Kansas. Remains of two pellets obtained on 9 January included six hispid cotton rats (*Sigmodon hispidus*), one prairie vole (*Microtus ochrogaster*), and a harvest mouse (*Reithrodontomys* sp.).

Introduction

The Snowy Owl (*Bubo scandiacus*) is a regular winter resident in the northern Great Plains (Kerlinger and Lein 1986) and becomes more sporadic southward. Snowy Owls are rare and irregular winter visitants in Kansas with extreme dates of occurrence between 1 November and 18 May (Thompson et al. 2011). Kansas is within the occasional winter range for this species (Kerlinger et al. 1985, Parmelee 1992) where it occurs in open habitats statewide (Thompson et al. 2011).

Records of food consumption by Snowy Owls in Kansas or the southern Great Plains are few. Data from the southern Great Plains indicate diet consists of birds and small mammals (Isaacs 1979, Morgan 1985, Parmelee 1992). Herewith, we report on the remains from two pellets obtained from a Snowy Owl in Sumner County, south-central Kansas, during January 2005.

Observations And Methods

The individual in Figure 1 was first observed by Seibel on 7 January 2005 and remained in the area until 27 January, although a local farmer told Norman Smith it was present on 6 January. Initial observations were about 14.5 km south of Oxford, Sumner County, Kansas. Site fidelity appeared high (assuming the same individual based upon plumage characteristics), usually being observed near the original location where it was first observed, but found up to 2.4 km from this site. Total area occupied over this three week span was approximately 5.2 km². Plumage



Figure 1. Snowy Owl perched during ice-storm, 5 January 2005, Sumner County, Kansas, showing extent of streaking and white-bib on ventral surface. Photograph © David Seibel.



Figure 2. Snowy Owl flying after regurgitating pellet collected on 9 January 2005. Photograph © Norman Smith.

and width, weighed, and dissected. All osteological pieces were mammalian and separated from fur for analysis. Skulls were identified to genus, or species level, when possible. Fur was examined microscopically for small fragments of invertebrates or feathers, and bones were examined to determine if any avian species were present (Woodman et al. 2005).

Results And Discussion

The timing of pellet regurgitation, 1700 CST, is typical for wintering Snowy Owls. Pellets are usually regurgitated prior to the resumption of hunting activities (Boxall and Lein 1982a). The larger pellet was broken into two pieces after collection. The larger piece was 76.12 mm long x 35.36 mm wide, with a mass of 22.15 g; the smaller piece was 31.10 mm long x 27.32 mm wide, with a mass of 2.42 g. Combining both pieces provides a maximum length of 107.22 mm, with a maximum width of 35.36 mm and a total mass of 24.57 g. The second pellet was 49.22 mm long x 28.42 mm wide, with a mass of 7.5 g.

The larger pellet was greater than the mean length for 51 pellets analyzed in Michigan, 60.6 mm \pm 30.5 mm as was the weight 7.7 g \pm 6.3 g (Chamberlin 1980). Morgan (1985) recorded a range in weight from 1.3 to 12.2 g for six pellets from Oklahoma, three of which contained remains of a large bird, believed to be a Mallard (*Anas platyrhynchos*).

Eight specimens of three genera were found in the two Kansas pellets. Of these, six (75%) were hispid cotton rats (*Sigmodon hispidus*), with one specimen (12.5%) each of prairie vole (*Microtus ochrogaster*) and harvest mouse (*Reithrodontomys* sp.). The larger pellet contained seven of the individuals (87.5% of total specimens), including all six hispid cotton rats and the prairie vole. The smaller pellet only contained osteological evidence of a harvest mouse

characteristics (Josephson 1980, Parmelee 1992) from several photographs taken by Seibel and N. Smith, and the known wintering patterns of various age classes (Kerlinger and Lein 1986), indicate that the bird was an immature male (Figures 1-3).

On 9 January 2005 (about 1700 hrs CST), Silliman and N. Smith observed the owl regurgitate a pellet while sitting on a fence post in an agricultural field along the intersection of Oxford Rd and East 100th St, Sumner County. Silliman collected two pellets from the site soon after N. Smith took a picture of the bird as it flew away (Figure 2).

Each pellet was measured in length



Figure 3. Snowy Owl sitting on fencepost, 8 January 2005, notice streaking on back, minimal barring on tail, along with characteristics from Figure 1 and 2. Photograph © Norman Smith.

(maxilla with teeth). The prey items consumed are consistent with those of Snowy Owls wintering in the northern Great Plains (Boxall and Lein 1982b, Parmelee 1992) and Oklahoma (Isaacs 1979, Morgan 1985), mostly small mammals. We found no remains of birds or invertebrates.

The hispid cotton rat and prairie vole are common in uplands, wetlands, and roadside ditches associated with the nearby Slate Creek Wetlands (Young unpubl. data, Young 1993). *Reithrodontomys* could not be identified to species, but both the plains harvest mouse (*R. montanus*) and western harvest mouse (*R. megalotis*) can be found in the area (Young unpubl. data). The large proportion of hispid cotton rats in pellets from this sample and the Oklahoma samples (Isaacs 1979, Morgan 1985) suggest that open, grassland habitats are preferred for hunting.

Hispid cotton rats range in mass from 50 to 250 g; harvest mice, 10 to 16 g; and prairie voles 49 to 71 g (Timm et al., undated web page). The total live mass represented in the larger pellet would have been 359-1571 g, within the expected required daily biomass of at least 400g/day for wintering owls (Parmelee 1992).

Although Snowy Owls are recorded in Kansas almost annually, we were unable to find any data pertaining to their food habits in the state other than one vague reference to a bird near Emporia by Parmelee, though contents were not reported in Parmelee (1992). Normally, their diet consists of lemmings, voles, rats and sometimes birds (Gross 1944, Williams and Frank 1979, Parmelee 1992). Minimal data from Oklahoma (Isaacs 1979, Morgan 1985) and this study suggest that hispid cotton rats are the most selected food item in the southern central plains.

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TWO NEW BANDING RETURNS FOR CEDAR WAXWINGS FROM KANSAS

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Introduction

Cedar Waxwings (*Bombycilla cedrorum*) are well known as an eruptive species, dependent upon local food sources. When fruits, especially those on eastern red-cedar trees (*Juniperus virginiana*) are abundant, large flocks of Cedar Waxwings may be present all winter throughout Kansas with some lingering well into the summer with a few remaining to nest (Thompson et al. 2011).

Well known as a “wandering” species, there is little documentation as to where these nomads come from, or go to, on their journeys to and from Kansas. Thompson et al. (2011) lists 999 Cedar Waxwings banded in Kansas with only three encounters reported. At the time of publication, these encounters included two birds which were banded in Kansas and encountered in Minnesota, and one bird banded in Kansas which was encountered in Illinois. Since publication of “Birds in Kansas” (Thompson et al. 2011), two more Cedar Waxwing encounters have been documented for Kansas, nearly doubling the records for the species.

Recoveries

On 23 February 2011, Miller, was contacted by a woman from Coffeyville, Montgomery County, Kansas, stating that an injured bird with a leg band had been turned in to City Hall. Upon submitting the band number to the banding office Miller found the bird had been banded by Ms. Jennifer McCabe on 6 August 2008, at the Teton Science School, Jackson, Wyoming. McCabe identified the bird as a female, hatched in 2007. Distance traveled was about 914 miles in a southeasterly direction from the banding site and the bird was at least three years of age. After documenting the band, the injured bird was delivered to a rehabilitation center at Pittsburg State University. The injured bird apparently suffered from a fractured clavicle and skin separation behind the upper bill due to a probable collision. The bird was cared for by Bob Mangile and released to the wild on 6 September 2011.

On 14 March 2011, Flowers (banding permit #22849) was notified that a Cedar Waxwing he banded in Meade, Meade County, Kansas, on 25 November 2005, had been recaptured by Michal Pavlik at Revelstoke, British Columbia, Canada, on 29 July 2010. This locale is about 1,295 miles northwest of its banding location and the individual was captured four years, eight months after banding. The bird was banded as a hatching-year bird of unknown sex since it partially retained its juvenile plumage; including a streaked breast and some down feathers. Cedar Waxwings undergo only a partial “pre-basic” molt with the first “pre-basic” molt occurring primarily on the wintering grounds (Pyle 1997). The presence of juvenile feathers does not indicate that this bird was a local bird. Nesting, or suspected nesting has been reported from

western Kansas in Morton, Norton, Russell, Scott, and Wichita counties (Shane and Shane 2000).

Discussion

These encounters are significant in that they contribute to our knowledge of the dispersal of Cedar Waxwings. While all prior encounters in Kansas had been in a northeasterly direction, one of the latest encounters is from a northwesterly direction. Witmer (1997) says that “Banding recoveries suggest that (this) species may be divided into eastern and western populations...but some interchange does occur...within these two regions...” Brugger (1994) noted that of 386 Cedar Waxwing banding encounters, eight “crossed the Rocky Mountains between banding and recapture.” Much more remains to be learned about the nature of migration in this species but Kansas may have contributions from both the eastern and western populations.

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