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## COMMON BLACK-HAWK (BUTEOGALLUS ANTHRACINUS) IN NEW MEXICO'S CLIFF-GILA VALLEY

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**Abstract:** A historically monitored population of Common Black-Hawks (Buteogallus anthracinus) in New Mexico's Cliff-Gila Valley, Grant Co. was re-surveyed during the 2010 and 2011 breeding seasons. A total of 31 active nest sites were found, 19 and 24 in 2010 and 2011, respectively. Of the 31 nest sites, 12 were occupied both years. Twenty-one territories were documented in 2001 in the same study area. An average linear density of 0.60 pairs/km on the 38 km of Gila River surveyed was calculated. If totals of successful nests for both years were combined, 38 of 43 pairs (88%) produced at least one fledged young each, a noticeably higher rate than in 2000 (75%) and 2001 (62%). Common Black-Hawks selected nest trees that were found closer to water, in habitats with younger cottonwoods and in patches with smaller trees, more trees/ha, and a greater subcanopy layer in 2010-11, than in 2000-01. Beginning in the early1990s, increased irrigation in the Cliff-Gila Valley resulted in increased widespread hydration of the soils with the concomitant increased growth of the understory in riparian woodlands. As recently as 1970, concerns were expressed about the high probability that Common Black-Hawks could be extirpated in New Mexico's Cliff-Gila Valley, however, since that time population numbers have been increasing. It is likely that this increase is the result of several factors including the consolidation of many small farms into larger holdings, an increase in fallow land, a decrease in access to the river corridor, and a decrease in wanton shooting.

#### INTRODUCTION

The earliest records of Common Black-Hawks (*Buteogallus anthracinus*) on the Gila River near Cliff, Grant Co., NM are attributed to J.S. Ligon, who in 1915 knew of specimens collected east of Cliff (Bailey 1928). In 1918, R.T Kellogg collected a Common Black-Hawk on the Gila River and, in 1921, found a pair nesting on the Gila River 20 mi west of Silver City (Bailey 1928). With increased interest in the avifauna of the Gila Valley starting in the 1960s, information on the status of Common Black-Hawks from Turkey Creek above the towns of Cliff and Gila, south to the Arizona-New Mexico border has been reported (Hubbard 1965, 1971, 1977; Egbert 1981; Johnson et al. 1973; Sadoti 2008; Skaggs 1996; and Zimmerman 1965, 1970).

Common Black-Hawks are obligate riparian breeders in Southwestern New Mexico occupying habitats found predominately along the Gila, San Francisco, and Mimbres rivers in Catron, Grant, and Hidalgo counties (Skaggs 1996). The Gila Valley from Mogollon Creek south to the Gila River Bird Habitat Management Unit ("Gila Bird Area") supports the highest known density of Common Black-Hawks in New Mexico (Skaggs 1996, Sadoti 2008), with most nesting territories documented on the U Bar Ranch upstream from the Highway 180 Gila River Bridge (Egbert 1981, Skaggs 1996, Sadoti 2008). Common Black-Hawks are migratory summer residents in the United

States and winter in Latin America (Schnell 1998). They are present on the Gila River from approximately March to 15 October with rare records into December (Williams 1993). Owing to a limited distribution in New Mexico, and dependence on riparian habitats, species has been listed the "threatened" by the New Mexico Department of Game and Fish (http://www.wildlife.state.nm.us/conse rvation/threatened endangered species /index.htm).

Study Area. For the purpose of this paper, New Mexico's Cliff- Gila Valley, Grant Co., is a portion of the middle Gila River Valley from approximately 3 km above the confluence of Mogollon Creek and the Gila River downstream to the southern border of the Gila Bird Area, a distance of approximately 38 river km (Fig 1). Elevations range from 1427 to 1320 m. Private lands were primarily those of the U Bar Ranch and The Nature Conservancy (TNC). Public lands managed by the U.S. Forest Service were located at both northern and southern ends of the study area.

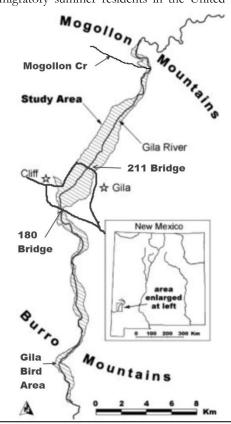


Figure 1. Cliff- Gila Valley study area (modified from Sadoti 2008).

The Cliff-Gila Valley is a mosaic of irrigated and non-irrigated pastures supporting livestock, small to large patches of riparian vegetation found principally along the river channel and irrigation ditches, and "stringers" of vegetation largely confined to the small irrigation ditches that return water to the river. Principle tree species, composed of many age classes, were Fremont's cottonwood (*Populus fremontii*), Goodding's willow (*Salix gooddingii*), boxelder (*Acer negundo*), Arizona sycamore (*Platanus wrightii*), and Arizona walnut (*Juglans major*). Velvet ash (*Fraxinus velutina*), Arizona alder (*Alnus oblongifolia*), New Mexico locust (*Robinia neomexicana*) and non-native Russian olive (*Elaeagnus angustifolia*) were less common.

#### **METHODS**

Nest Searches. Beginning in mid-April 2010 and 2011, one to six members of a six-person field crew searched for territorial pairs of Common Black-Hawks by walking adjacent to the Gila River while looking and listening for the birds. This species is known for its vocal territorial defense (Rodriguez-Estrella and Brown 1990, Schnell 1994, Skaggs 1996, Sadoti 2008) and pairs are relatively easy to detect early in the breeding season (Sadoti 2010). Searches took place throughout the day. GPS locations obtained for detected birds were later used to concentrate searches for active nests. GPS locations of active nests were also recorded.

We assumed that the Common Black-hawks in the Cliff-Gila Valley follow a similar pattern of nesting as the data recorded by Schnell (1994). They start arriving in the Cliff-Gila Valley around the middle of March, and nest construction starts almost immediately. Egg-laying occurs from April to June, with the majority of eggs being laid in mid-April. The eggs are incubated for approximately 38 days, hatching in late May. Fledging occurs at 46 days of age, near the beginning of July. Adults continue to feed young up to 110 days of age (Schnell, 1994). Fall migration takes place from the end of September to the middle of October, with rare sightings of individuals after that.

From mid-April until late July nests were visited on an irregular basis. The average number of visits per active nest was 7 (range 3 - 14). On each visit the number of adults on or at the nest, number of nestlings present, and eventually, number of fledglings present were recorded. A nest was considered active if an adult was vocalizing at or near the nest on several visits (especially in late in June or July) if an adult was on the nest, or if fledglings were found on or in the immediate vicinity of the nest.

A nest was considered successful if nestlings were present less than one week before expected fledgling date (> 80% of fledging age, Steenhof 1987, as used by Sadoti 2008), approximately 10 July in the Cliff-Gila Valley (estimated from Schnell 1994). When possible, fledgling age was estimated based upon fledgling plumage as described in Schnell (1994). If nestlings were not detected, but an adult gave the common defense or territorial call at the nest late in the season, it was concluded that there was a high probability that newly fledged young were present in the vicinity. Schnell (1994)

reported that nestlings depart the nest at an average age of 47 days, but remain secretive and non-vocal, and then at about 66 days, the protection of fledglings and general territorial defense by adults ceased. If nestlings were not detected, and if no adults defended the nest or territory, the nest was considered abandoned.

**Nest-site Selection.** In early to mid-July of both years, the field crew measured vegetation at each active nest site using techniques and definitions of Sadoti (2008) (see Table 1). Measurements were centered around the nest tree and within a 16 m radius plot (divided into quadrants). Statistical comparisons between the vegetative characteristics found in this study and those of Sadoti (2008) were made using t-tests (Table 1).

#### RESULTS

**Nests Located.** A total of 31 nests were occupied in 2010-11, consisting of 19 and 24 nest sites in 2010 and 2011, respectively. Of the 31 nest sites, 12 specific sites were active both years. In 2011, an additional six pairs occupied new nest sites within 200 m of inactive 2010 sites. One 2011 nest was located approximately 6 km from the Gila River on a small perennial tributary.

**Nesting Success.** In 2010, 18 of 19 active pairs (95%) were estimated to have produced at least one fledged young. Of the eight 2010 nests, where a nestling or fledgling was observed, only one young was observed at each nest. In 2011, 20 of 24 pairs (83%) were estimated to produce at least one young each, and two of these 20 pairs produced two young each for a total of 22 young. Combining totals for both years, a nesting success of 38 of 43 pairs (88%) was obtained, producing 40 young. All nest failures recorded were for unknown reasons.

Nest-site Selection. Vegetation data were collected at 29 accessible sites. In 2010-11, all nests located were found in Fremont's cottonwood. In our study, Common Black-Hawk nests were significantly closer to water (p = 0.01), had smaller mean minimum crown diameters (p = 0.001), and had a lower mean percentage canopy cover (p = 0.001) than those measured in 2001-02 (Sadoti 2008). As for stand characteristics, the number of subcanopy trees was significantly greater (p = 0.01), the mean tree DBH was less (p = 0.01), the number of trees 10 < DBH < 30 cm were greater (p = 0.05), and the number of trees  $\geq$  5 cm DBH/ha was greater (p = 0.05) in 2010-11, than in 2001-02 (Table 1).

Table 1. Characteristics of Common Black-Hawk nest plots in the middle Gila River Valley in the present study and that of Sadoti (2008). Mean and standard deviation (SD) of vegetative features are presented. Differences between sample means in two studies were tested with a t-test. \*\*\* indicated a significant difference (p = 0.05).

			This Study Nest Plots (N = 29)		Sadoti 2008 Nest Plots (N = 21)	
Variable Group Variable		Mean	(SD)	Mean	(SD)	
Nest	Nest height <sup>a</sup> (m)	17.6	(3.3)	17.8	(3.8)	
	Nest position (% of total height)	60.0	(10.6)	65.0	(11.0)	
	Nest tree height <sup>a</sup> (m)	29.7	(4.8)	27.5	(4)	
Location	Distance to patch edge <sup>b</sup> (m)	20.5	(11.7)	21.6	(10.4)	
	Dististance to water <sup>b</sup> (m)	64.1	(33.7)	112.0	(72)	
	Distance to human activity <sup>b</sup> (m)	659.2	(431.5)	444.0	(343)	
	Distance to road <sup>b</sup> (m)	546.3	(420.6)	415.0	(244)	
Canopy <sup>c</sup>	Minimum crown diameter of nest tree (m)	17.4	(5.6)	27.4	(5.6)	
	Mean canopy height <sup>a</sup> (m)	26.9	(3.6)	24.7	(4)	
	Mean canopy cover <sup>d</sup> (%)	60.0	(17)	77.7	(13.9)	
	Number of canopy trees	10.3	(9.0)	8.6	(7.4)	
Subcanopy <sup>c</sup>	Mean subcanopy heighte (m)	8.8	(3.3)	7.9	(3.6)	
	Mean subcanopy coverd (%)	21.0	(16.2)	16.4	(16.9)	
	Number of subcanopy trees	15.4	(9.3)	7.5	(7.0)	
Shrub layer <sup>c</sup>	Mean shrub height <sup>b</sup> (m)	1.9	(0.5)	2.0	(1.1)	
-	Shrub cover indexf (0-5)	1.0	(1)	1.0	(1)	
Tree Sizeg	DBH of nest tree (cm)	83.2	(29.9)	94.8	(35.0)	
	Mean tree DBH (cm)	33.2	(13.7)	51.6	(24.4)	
	Trees DBH ≥70 cm	1.8	(1.5)	2.4	(1.9)	
	Trees $50 \le DBH < 70 \text{ cm}$	2.8	(2.8)	2.1	(2.3)	
	Trees $30 \le DBH \le 50 \text{ cm}$	6.1	(4.9)	3.2	(4)	
	Trees $10 \le DBH \le 30 \text{ cm}$	10.8	(7.2)	5.7	(9.2)	
	Trees $7 \le DBH < 10 \text{ cm}$	2.7	(3.1)	1.6	(2.3)	
	Trees $5 \le DBH < 7 \text{ cm}$	1.6	(1.8)	0.9	(2.0)	
Other	Basal area of trees $\geq$ 5cm DBH (m <sup>2</sup> /ha)	38.5	(19.1)	44.7	(24.9)	
	Number of trees $\geq 5$ cm DBH/ha	321.0	(167.2)	198.0	(141)	

<sup>&</sup>lt;sup>a</sup> Measured using a laser rangefinder and inclinometer. Mean canopy height was calculated from measurements at the plot center and at 12 m in each cardinal direction.

b Measured using a laser rangefinder or tape if ≤ 30 m, otherwise measured by a GPS coordinate or Google Earth.

<sup>&</sup>lt;sup>c</sup> Canopy trees were all trees  $\geq$  0.67 % of the height of the tallest tree in the plot. Subcanopy trees were all trees > 3 m and < 67% of the height of the tallest tree in the plot. Shrubs were all woody vegetation < 3 m in height.

<sup>&</sup>lt;sup>d</sup> Measured using a convex densiometer at the plot center in each cardinal direction and at 12 m from the center in each cardinal direction.

- <sup>c</sup> Measured using a tape and inclinometer using the tallest subcanopy tree in each quadrant. The four heights were averaged. A subcanopy tree was any tree less than 67% of the height of the tallest tree within the plot and > 5 cm DBH (diameter at breast height).
- f Measured by ocular estimation of percentage shrub cover: 0 = none; 1 = 1 10%; 2 = 11 20%; 3 = 21 30%; 4 = 31 40%; and 5 = 41 50%. Median values  $\pm$  1 SD are presented.
- ${\rm g}$  All DBH measurements made 1.4 m from ground.

#### DISCUSSION

**Nests Located.** The number of active nest sites (31 in 2010-2011) compares favorably to that of Sadoti (2008) who surveyed approximately the same area as the present study. He found 16 territories with nests in 2000 (15 were located on the Gila River and one 8 km from the river on a perennial tributary) and the same 16 territories plus an additional 5 territories for a total of 21 nests in 2001. In 2002, Stoleson (in Sadoti 2010), estimated the number of breeding pairs in the Cliff-Gila Valley at 27.

Based upon 2011 active nest sites near the Gila River, there was a linear average of 0.60 pairs/km on the approximate 38 km of river surveyed. This compares with 0.42 pairs/km (Skaggs 1996) and 0.58 pairs/km (Sadoti 2008), for the same stretch of river. Further, for the upper 16 km of river from the Highway180 Gila River Bridge, we found an average of 0.75 pairs/km. Skaggs (1996) reported 0.58 pairs/km, whereas Egbert (1981) estimated 0.81 pairs/km for this same stretch of river.

Our calculated density compares favorably with reported densities elsewhere in the northern portion of the species range. Schnell (1994) cited an average density of 0.40 pairs/km along 28 km of Aravaipa Canyon in Arizona. A recent study in southeastern New Mexico reported only 0.12 pairs/km along a 57.5 km study area in the Rio Hondo Valley (Troy and Stahlecker 2008). The highest densities reported in Sonora, Mexico were 0.34 pairs/km along 65 km of the Rio Bavispe and 0.10 pairs/km along 80 km of Rio Yaqui (Rodriguez-Estrella and Brown 1990).

As recently as 1965, there were concerns that Common Black-Hawks could be extirpated in New Mexico's Cliff-Gila Valley (Hubbard 1965; Zimmerman 1965). Of particular concern was wanton shooting, in addition to the reduction of Common Black-Hawk numbers by professional hunters and trappers hired by the state to reduce predators (Zimmerman 1965). The destruction of large cottonwoods by some individual landowners, owing to the widespread belief that they "waste" water (Hubbard 1965; Zimmerman 1965, 1970), also reduced Common Black-Hawk habitat.

During the 1970s, Common Black-Hawk numbers in the Gila Valley from the Arizona border to Mogollon Creek were clearly low. Johnson et al. (1973) knew of only three or four pairs in the entire area of the Gila Valley. Zimmerman (1970) found these hawks in only six places, three of which were on National Forest lands and reported only one of four known nests in New Mexico to be in the Cliff-Gila Valley. He also found two Common Black-Hawks that had been shot. In 1969, Zimmerman observed only two Common Black-Hawks on National Forest land from Turkey Creek south to

approximately 8 km south of Wild Horse Canyon. He also believed "that the total population of this species in New Mexico consisted of fewer than 14 individuals—perhaps as few as four or five breeding pairs—most or all in the Gila and San Francisco Valleys" (Zimmerman 1970). Based upon field work from 1975 to 1977, Glinski and Snyder (as cited in Schnell et al. 1988) estimated a minimum of between 20 and 40 nesting pairs on the western portion of New Mexico's Gila River.

As discussed by Sadoti (2008), aerial photographs of the Cliff-Gila Valley from 1952 to 1986, show a general increase in riparian forest and a decline in cropland. From the 1950s to the early 1960s, Phelps Dodge Corp. began purchasing farm land in the Cliff-Gila Valley to obtain water rights. This water was then transferred from the Gila River to the Tyrone Mine south of Silver City. With the purchase of this farm land and the coalescence of many parcels into one large entity, land use changed from farming to ranching with formerly cultivated fields lying fallow for 20-30 years. Through a subsidiary, the Pacific Land and Cattle Co., Phelps Dodge managed its cattle operation, and in 1992, the U Bar Ranch leased all land owned by that company in the Cliff-Gila Valley. With consolidation, the number of farm residences in the valley decreased. This restricted access to the river corridor resulted in less human disturbance to the entire riparian corridor, and likely less wanton shooting (D. Ogilvie, U Bar Ranch, pers. comm.). However, D. Zimmerman (Western New Mexico University, pers. comm.) reported an incubating female Common Black-Hawk was shot and killed in 1997 in the vicinity of the Highway 211 Gila River Bridge.

**Nesting Success**. After determining if a nest was initially active, we found nesting success difficult to accurately determine for several reasons: 1) the mean nest height of 17.6 m (Table 1) precluded direct examination of nest contents; 2) most active nests were surrounded by foliage, further increasing the difficulty of viewing the contents; and 3) some nests were occupied by seemingly shy, generally non-vocal adults or young, complicating determination of occupancy.

As an example of the latter, one nest was first discovered on 30 April 2010, when an adult Common Black-Hawk was seen nearby. The nest was visited eight times from May to July. During this period, the attending adult was heard vocalizing at or in the immediate vicinity of the nest only twice, once in early July and once in late July after the young had fledged. A non-vocal adult was observed on the nest in May, and a juvenile was seen standing in the nest in mid-July. Owing to nest height and surrounding vegetation, if the location had not been known, it would have been exceedingly difficult to know that a nest was indeed present at this site. Inconspicuous, silent adults and a nestling could have easily permitted false conclusions to be drawn concerning the status of this nest site.

Our estimated nesting success (88% for 2010-11) was higher than observed in previous studies. Skaggs (1996) calculated a nest success of 84% (21 of 25 pairs) with 17 pairs producing a single young each and four pairs producing two young each.

Sadoti (2008) estimated 12 of 16 pairs (75%), and 13 of 21 pairs (62%) produced young in 2000 and 2001, respectively.

During this study, Southwestern New Mexico was experiencing a severe drought, especially in 2011(Fig. 2). According to the National Weather Service Weather Forecast Office's Drought Summary, January to September 2011 was the driest period on record in New Mexico. The water year from October 2010 to September 2011, was the second driest on record. Only 1956 was drier, based upon 117 years of weather data collected in New Mexico (http://www.srh.noaa.gov/abq/?n=drought). With the reduction in river flow during the 2011 breeding season, perhaps Common Black-Hawks were more successful at obtaining aquatic prey items. Increased prey availability could lead to increased food availability for nestlings and, therefore, a high nesting success.

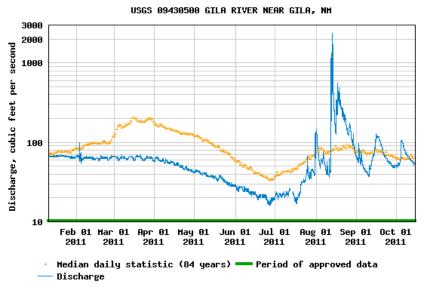


Figure 2. Gila River flow near Gila, NM, February to October 2011. The predominately upper plotted line is median daily statistic while the predominately lower line is discharge for the specified dates.

Nest-Site Selection. The vegetation data comparison indicated that the nest-sites that were selected were in younger vegetation (smaller nest-tree DBH; more, smaller trees; higher numbers of subcanopy trees; smaller mean crown diameters; less canopy cover). Beginning in the early 1990s, irrigated farm land increased in the Cliff-Gila Valley resulting in increased widespread hydration of the soils with the concomitant increased

growth of the understory in riparian woodlands (D. Ogilvie per. comm.). The significant differences in vegetative characteristics between 2010-11 and 2001-02, do not necessarily represent Common Black-Hawks selecting a different nesting habitat but rather, the whole riparian system changing as soil moisture increased. The nest site characteristics found in this study are similar to those reported in other southwestern studies (Table 2). Based upon 152 nests, Common Black-Hawks in the Southwest build nests with a mean height of 17.8 m in nest trees with a mean DBH of 1.0 m. While the mean nest height found in this study was very similar to the mean nest height of all nests, Common Black-Hawks in this study nested, on the average, in trees with a smaller DBH when compared to all nests (0.84 m compared to 1.02 m).

Table 2. Mean characteristics of nest-sites of Common Black-Hawks at various sites in the southwestern U.S. All measurements are in meters unless otherwise noted. Adapted from Sadoti (2008).

Location	N	Nest Height		Tree height		Distance to water	Tree density (trees/ha)
Cliff-Gila Valley, NM <sup>a</sup>	29	17.6	0.84	29.5	17.5	62.8	315.5
Cliff-Gila Valley, NMb	30	18.2	1.03	28.6	27.5	109.0	203
Aravaipa Canyon, AZ <sup>c</sup>	55	18.2	1.15			38.2	
West-central AZd	24	15.3	0.80	19.7	18.2	<120.0	222
Hondo Valley, NMe	10	21.3	1.14	32.3			
West-central TXf	4	15.7	0.84	23.1	17.0	<170.0	383
Average		17.8	1.02	26.2	21.1	75.7	254
N		152	152	97	87	142	87

<sup>&</sup>lt;sup>a</sup>This study

Management Implications. Throughout the Southwest, the preservation of riparian areas and particularly large cottonwoods is vitally important to the conservation of Common Black-Hawks (Schnell et al. 1988, Schnell 1998, Skaggs 1996). In the Cliff-Gila valley, consolidation of ownership, the resultant decrease in disturbance, and probable reduction of wanton shooting likely contributed to the increased numbers of this population.

bSadoti 2008

cSchnell et al. 1988

dMillsap 1981

eR. Troy, unpubl. data as cited in Sadoti 2008

fMaxwell 1999, including unpubl. data as cited in Sadoti 2008

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#### LITERATURE CITED

- Bailey, F. M. (with W.W. Cooke). 1928. Birds of New Mexico. Santa Fe: Department of Game and Fish. 257 pp.
- Egbert, J. 1981. Field inventories in New Mexico of selected Gila Valley birds. Final Report to the New Mexico Department of Game and Fish. Unpublished manuscript 78 pp.
- Hubbard, J.P. 1965. Bad days for the Black Hawk. Audubon Field Notes. 19: 474.
- Hubbard, J.P. 1971. The summer birds of the Gila Valley, New Mexico. Nemouria Occasional Papers of the Delaware Museum of Natural History. Number 2:1-35.
- Hubbard, J.P. (ed.). 1977. A biological inventory of the lower Gila River Valley, New Mexico. A report jointly prepared by Bureau of Land Management, Bureau of Reclamation, New Mexico Department of Game and Fish, Soil Conservation Service, U.S. Fish and Wildlife Service, and U.S. Forest Service. Unpublished manuscript 57 pp.
- Johnson, R.R, S.W. Carothers, and D.B. Wertheimer. 1973. The importance of the Lower Gila River, New Mexico as a refuge for threatened wildlife. Museum Northern Arizona and the U.S. Fish and Wildlife Service. Unpublished manuscript 51 pp.
- Maxwell, T. C. 1999. Common Black-Hawk nesting in west-central Texas. Journal of Raptor Research 33:270–271.
- Millsap, B. A. 1981. Distributional status of Falconiformes in westcentral Arizona—with notes on ecology, reproductive success and management. Technical Note No. 355, U.S. Dept. Interior, Bureau of Land Management, Denver, CO.

- Rodriguez-Estrella, R. and B.T. Brown. 1990. Density and habitat use of raptors along the Rio Bavispe and Rio Yaqui, Sonora, Mexico. J. of Raptor Research. 24: 47-55.
- Sadoti, G. 2008. Nest-site selection by Common Black-Hawks in southwestern New Mexico. J. Field Ornithol. 79(1):11-19.
- Sadoti, G. 2010. Common Black-Hawk (Buteogallus anthracinus). In Raptors of New Mexico, ed. J.E. Cartron, 212-225. Albuquerque: University of New Mexico Press.
- Schnell, J. H. 1994. Common Black-Hawk (*Buteogallus anthracinus*), The Birds of North America Online (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology.
- Schnell, J. H., R. L. Glinski, and H. Snyder. 1988. Common Black-Hawk. In: Proceedings of the Southwest raptor management symposium and workshop (R. L. Glinski, B. A. Pendleton, M. B.Moss, M. N. LeFranc, Jr., B. A. Millsap, and S.W. Hoffman, eds.), pp. 65–70. National Wildlife Federation, Washington, D.C.
- Schnell, J.H., 1998. Common Black-Hawk. In *The Raptors of Arizona*, ed. R.L. Glinski, 73-76. Tucson: University of Arizona Press.
- Skaggs, R.W. 1996. The Common Black-Hawk (*Buteogallus anthracinus*) in Southwestern New Mexico 1995-95 Inventories. Final report to the New Mexico Dept. of Game and Fish. Unpublished manuscript 14 pp.
- Steenhof, K. 1987. Assessing raptor reproductive success and productivity. In: Raptor management techniques manual (B.A. Giron Pendleton, B.A. Millsap, K.W. Cline, and D.M. Bird, eds.). pp. 157-170. National Wildlife Federation, Washington, D.C.
- Troy, R.J. and D.W. Stahlecker. 2008. Status of a disjunct population of Common Black-Hawks in Southeastern New Mexico: 2002-2003. New Mexico Ornithological Society Bulletin. Vol. 26(2):14-22.
- Williams, S.O. III. 1993. Southwest region: New Mexico. Field Notes. Vol. 47 (2):178-181.
- Zimmerman, D.A. 1965. The Gray Hawk in the Southwest. Audubon Field Notes. 19: 475-477.
- Zimmerman, D.A. 1970. Birds and bird habitats on National Forest lands in the Gila River Valley, southwestern New Mexico. Western New Mexico U. and Gila Nat'l. Forest, Silver City. Unpublished manuscript, 50 pp.

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## A SECOND INCIDENCE OF ELECTROCUTION OF TALON-LOCKING RED-TAILED HAWKS

#### ROBERT W. DICKERMAN

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On 27 February 2012, Michele Gallagher of the Office of Migratory Birds, U. S. Fish and Wildlife Service, retrieved two long-dead, mummified-skeletons of Red-tailed Hawks (Buteo jamaicensis) that had apparently locked talons, fell, hit electrical cables, were electrocuted and killed, and landed on the median of Interstate 40, between Tijeras and Carnuel, Bernalillo County, New Mexico. This is only the second such incidence reported (Dickerman, 2002. J. Raptor Research 37:176), in which the sexes of the pair could be determined. This pair also involved an adult and a first year bird (determined by plumage), and unlike the first documented birds, which were both females, these both appeared to be males (adult - wing chord 421 mm, tail 214 mm, tarsus 83 mm; immature - wing chord 220 mm, tail 220 mm, tarsus 82 mm). Also, unlike the first pair, this pair had only a single foot each involved in the clasp (one right, the other left). The adult was in the terminal stages of its basic molt, with the outer-most primary old and worn, and the next inner still in sheath, this indicating the birds probably died in late September or October. The skeletons when cleaned will be deposited in the Museum of Southwestern Biology (in the meantime for reference, their field numbers are RWD 27724 (ad.) and 27725 (imm.).

I would like to thank Michele Gallagher and the USFWS Office of Migratory Birds for transferring these birds to the Museum of Southwestern Biology.

## SPRING MIGRATION IN OHIO: WARBLERS, WOODLANDS, AND MORE

The secret is getting out about the incredible birding northern Ohio has to offer. Spring migration there is fast, furious, and full of color. Join Ashli Gorbet for a birding tour that will take in some of the premier hotspots northern Ohio has to offer, including the world renowned and Globally Important Magee Marsh Wildlife Area. These bird-rich areas are Ashli's natal birding grounds, and her intimate knowledge of the area's plants, wildlife, and birding areas are sure to make the trip a memorable

experience. This will be an NMOS sponsored fundraising trip, so you can feel good about birding like mad in northern Ohio, while at the same time, helping to support your society.

Though we'll be focusing on building an extensive list of migrant and resident woodpeckers, flycatchers, thrushes, sparrows and more, we'll be especially focused on ticking as many species of warblers we can find. Thirty species will be our goal and we hope to add Blue-winged, Golden-winged, Cerulean, and Louisiana Waterthrush to the numerous Magnolia, Bay-breasted, Black-throated Blue, and Palm Warblers we should encounter. Along the way, we'll be seeing and studying five species each of *Empidonax* flycatchers and brown-backed thrushes, dodging Tufted Titmouse, Northern Cardinals, and Blue Jays, and gawking at Scarlet Tanagers, Rose-breasted Grosbeaks, and Baltimore Orioles. We'll even get out into the grasslands, marshes, and onto the shore of Lake Erie to see what sparrows, shorebirds, and waterbirds we can dig up.

The dates for the trip are planned for May 16 to 22, 2013. This will afford five full days of birding with two travel days on either side. For more information or to register for this trip, contact Ashli Gorbet at antelope916@hotmail.com. Reservations will be accepted beginning January 15, 2013.

#### NMOS CUBA FIELD TRIP RECAP

The November 5-17, 2012 NMOS-sponsored Field Trip to Cuba was a smashing success. Limited to 14 people, NMOS participants included Michael Allen, Alan Craig, Steve Drilling, Dave Krueper, Pat Mehlhop, Narca Moore-Craig, Bruce Neville, Jerry Oldenettel, Christopher Rustay, Janet Ruth, Jim Shiflett, Dale Stahlecker, Richard Wagner, and Sandy Williams. We met in Miami the night before our flight to Havana to get organized and to address questions before our flight out the following morning. Upon arrival in Havana, we negotiated Immigration, Baggage Claim and Customs and then met our local Havanatur guide Raydalie Perez O'Farrill, our birding guide Giraldo Alayon, and the overall tour organizer Gary Markowski. The adventure was on!

During the next 13 days we birded in 10 of the 15 Cuban provinces and explored the western two-thirds of the country by comfortable bus transport. Our destinations and birding locations included: Havana, San Diego de los Banos, Guanahacabibes National Park, La Guira National Park, Zapata Peninsula and Zapata Swamp, Bermejas, La Turba, Las Salinas Wildlife Refuge, Camaguey, Najasa, Sierra Cubitas, and then back to Havana. We gathered avian relative abundance and distributional information at national parks, biosphere reserves and other locations visited by other birding groups during the previous 12+ years, that also documented similar information. This information will be deposited in the Natural History Museum in Havana and also with Julie Craves of the Rouge River Bird Observatory in Michigan.

Avian highlights included Gundlach's Hawk at several sites, a calling Spotted Rail in the Zapata Swamp, point-blank looks at multiple Gray-fronted and Blue-headed quaildoves, Bare-legged Owl, multiple Bee Hummingbirds (the smallest bird in the world), crippling views of Cuban Trogon and Cuban Tody, Cuban Parrot, Giant Kingbird, Zapata Wren, three endemic warbler species and the outrageous Zapata Sparrow. While not exciting by North American standards, we located an Eastern Phoebe, the 6th country record for that species!

In summary, we recorded 48 avian families and 157 species total, including 21 endemic bird species of 25 possible endemics. We also found 2 mammal species, 6 reptile and amphibian species, and an additional 40 butterfly species, 2 moths, and 7 dragonflies. For the photographers out there, you will appreciate the fact that we burned a minimum of 500 gigabytes of wildlife and scenic images! A full trip report will be available on the NMOS website in the near future, as will the overall trip totals by location in a spreadsheet format.

## -- Dave Krueper, NMOS President





(L) Cuban Tody, (R) Cuban Trogon Photos: Dave Krueper

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## NMOS "PELAGIC" FIELD EXPEDITION TO ELEPHANT BUTTE LAKE, SIERRA COUNTY, NM

Continuing with the Field Expedition theme that we started at the Wind River Ranch in May 2012, nine intrepid birders braved the challenges of conducting a fall "pelagic" trip to one of the larger bodies of water in New Mexico. On 6 October 2012, Collin Adams, Janet Bair, Matt Baumann, Ashli Gorbet, Dave Krueper, Jerry Oldenettel, Nick Pederson, Janet Ruth, and Cole Wolf boarded a 22-foot rental pontoon boat and departed from the Rock Canyon Marina on Elephant Butte Lake to explore the entire body of water in search of fall migrants and waterbirds which might gather at usually inaccessible sites. Captain Matt kept us in the deeper waters (for the most part), allowing us to scan while we motored around the pond (lowest water levels in many years). For the 5+ hours on the lake, we tallied a total of 29 species. Some of the more interesting sightings (for this time of the year) included a total of 55 Canada Goose, 1200+ Western Grebe, 200+ Clark's Grebe, 298 American White Pelican, 4 Black-bellied Plover, 1 juvenile Sabine's Gull, 63 Ring-billed Gull, 1 presumed firstcycle Herring Gull, 1 probable third-cycle Lesser Black-backed Gull, and 1 Aplomado Falcon, which flew over the boat in the middle of the lake. Totals for all of the species have been submitted to the NM Bird Records Committee Secretary and will be reviewed to determine if numbers or dates were unusual (high/low, or early/late). The group had such a good time that another trip will be planned at either another season or in the fall when water levels are higher. Stay tuned.

## -- Dave Krueper, NMOS President





(L) Juvenile Sabine's Gull, Elephant Butte Lake, (R) Lesser Black-backed Gull, Elephant Butte Lake. Photos: Dave Krueper

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## SAVE THE DATE NMOS 51th ANNUAL MEETING - APRIL 27, 2013

The New Mexico Ornithological Society will hold its 51st Annual Meeting on Saturday April 27, 2013, at Western New Mexico University, Silver City, NM. This meeting will include an NMOS business meeting, an NMOS general science session, and an evening banquet. The keynote banquet speaker will be announced soon. Further details on the meeting, will be posted on the NMOS website (http://www.nmbirds.org) as they become available.

## NMOS 51th ANNUAL MEETING CALL FOR PAPERS NMOS GENERAL SCIENCE SESSION

Oral presentations for the NMOS General Science Session will be allotted 15 minutes, with an additional five-minute period for questions. Papers may range from technical reports of original research to more general presentations addressing science-related questions. Poster presentations are also encouraged; size should be no larger than 36" H X 48" W. Please submit abstracts for the General Science Session containing the following:

TITLE (in all capital letters) of no more than 20 words Names and addresses of author(s) in the following form:

- TITLE (in all capital letters) of no more than 20 words.
- Names and addresses of author(s) in the following form:

Bear, V. L. and C. Finch Dept. of Ornithology University of Central New Mexico Birdsville, NM 88666

- Body of abstract as one single-spaced paragraph, not to exceed 250 words.
- Include E-mail address and/or phone number of presenting author.

Please email your abstract, including the entire abstract in the body of the email, NOT as an attachment. This will prevent any problems with incompatible word processing formats. Please email your abstract to Martha Desmond at (mdesmond@nmsu.edu) AND Chuck Hayes (Chuck.Hayes@state.nm.us) by March 15, 2013. All abstract submissions will be acknowledged within a week of

receipt. If no acknowledgement is received, it is the submitter's responsibility to follow up with the Session Chair to ensure consideration.

The abstracts for the NMOS General Science Session will be distributed at the meeting and will be published in the NMOS Bulletin.

SESSION Chair: Martha Desmond 575-646-1217

BACKUP: Chuck Hayes 505-944-5477

#### RESEARCH GRANTS

NMOS offers two research grants each year to help support research on New Mexico birds. The *Ryan Beaulien Research Grant* for \$1000, is presented in memory of Ryan Beaulieu. Following the wishes of Ryan's family, this grant will support research projects that do not involve the collection of birds. For more information about Ryan Beaulieu and his bird research interests, see the *Audubon* magazine article, *Band of Brothers*, about Ryan and his friends Raymond VanBuskirk and Michael Hilchey and their Rosy-Finch project.

The NMOS Research Grant is also available for \$1000. The criteria for both grants are:

- The grant money must be spent while conducting research on birds in New Mexico;
- The recipient must either present a paper based on the research at an annual NMOS meeting or submit an article based on the research to the NMOS Bulletin; and
- Preference will be given to student applicants.

A short research proposal (2 pages maximum) must be submitted describing the nature of the project and how the allocated funds are to be spent (e.g., on gas, tape recording, specific equipment, etc.). Each proposal should state clearly whether the project does or does not involve collection of birds. Each proposal should include two letters of reference, one of which should be from a graduate advisor if the applicant is a graduate student. References should comment on the applicant's commitment to New Mexico ornithology and ability to design and carry out creative, independent research. All proposals will be evaluated together and up to two proposals will be awarded grants. The Ryan Beaulieu Research Grant will fund a project that does not involve the collection of birds; the NMOS Research Grant is open to all projects that meet the criteria above.

Please submit your electronic proposal, "NMOS Grant" in the subject line, to:

Dr. Janet Ruth
USGS Arid Lands Field Station
Albuquerque, NM (janet\_ruth@usgs.gov)

The deadline for 2013 Research Grant proposals is March 15, 2013. All applications will be acknowledged within a week of proposal receipt. If no acknowledgement is received, it is the applicant's responsibility to follow up with their submission to ensure consideration. Grant awards will b announced at the NMOS Annual Meeting.

#### **REVIEWERS FOR VOLUME 40**

The New Mexico Ornithological Society and the Editor of the *NMOS Bulletin* thank the following individuals who served as reviewers for manuscripts that appeared in Volume 40 of the *Bulletin*:

Gregory S. Butcher, William H. Howe, David J. Krueper, Brian M. Locke, Brian A. Millsap, Terrell D. Rich, Terry L. Root, Dale W. Stahlecker, Sartor O. Williams III.

#### MEMBERSHIP DUES REMINDER

Please take the opportunity now to pay your 2013 NMOS membership dues. To pay for membership, please download the membership form from our website (www.nmbirds.org), fill out, and mail to the following address, providing a check made out to "NMOS". Thank you!

New Mexico Ornithological Society P.O. Box 3068 Albuquerque, NM 87190-3068

## NEW MEXICO ORNITHOLOGICAL SOCIETY

— Founded 1962 —

The New Mexico Ornithological Society was organized to gather and disseminate accurate information concerning the bird life of New Mexico; to promote interest in and appreciation of the value of birds, both aesthetic and economic, to further effective conservation of the state's avifauna; to facilitate opportunity for acquaintance and fellowship among those interested in birds and nature; and to issue publications as a means of furthering these ends.

Membership and Subscriptions: Membership in the New Mexico Ornithological Society is open to anyone with an interest in birds. Memberships are for a calendar year and annual dues are payable 1 January. Dues are: Regular Membership \$20; Family \$30; Student \$10; Supporting \$50; Life \$500. Address for the New Mexico Ornithological Society: Post Office Box 3068, Albuquerque, NM 87190-3068.

## NMOS BULLETIN ISSN 2167-003X

The *Bulletin* is published quarterly; subscription is by membership in NMOS. The *Bulletin* serves two primary purposes: (1) to publish articles of scientific merit concerning the distribution, abundance, status, behavior, and ecology of the avifauna of New Mexico and its contiguous regions; and (2) to publish news and announcements deemed of interest to the New Mexico ornithological community.

NMOS members are encouraged to submit articles and news. Articles received are subject to review and editing. Published articles are noted in major abstracting services. Please submit articles in double-spaced electronic format, such as a Microsoft Word document, by e-mail to the Editor (see inside front cover). Refer to recent issues of the *Bulletin* for examples of style. News items may be submitted to the Editor by way of e-mail.

## www.nmbirds.org

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