Bald Eagle Nesting Activity in Kansas - 1995

by
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INTRODUCTION

Three documented Bald Eagle (Haliaeetus leucocephalus) nests in Kansas successfully fledged five juvenile eagles in 1995. This was a decrease from 1994 when 12 eaglets were fledged from five nests (Watkins et. al., 1994). Two other 1995 nests with incubating adults were destroyed by inclement weather and one nest destroyed by a storm in 1994 was rebuilt in 1995 but not productive. Since documentation of the first Bald Eagle nest in 1989, 39 eaglets have been fledged.

NEST SITES

Clinton Lake.--In 1989, a pair of Bald Eagles established the first documented successful nest in Kansas (Schwilling, et. al., 1989). A pair of eagles has returned to use the nest every year (Watkins, et. al., 1994). In 1995, the eagles, including the previously captured male with purple visual identification band E, began displaying incubation behavior on 29 January, the earliest recorded date for such behavior in Kansas. The eggs hatched on 8 March (Table 1). The two male eaglets were banded by the U.S. Fish and Wildlife Service and the U.S. Army Corps of Engineers on 14 April with purple visual identification bands 2E and 2G. The juveniles fledged on 25 May.

The adults and juveniles were last seen in the nesting territory on 4 July. On 27 July the partial remains of eagle 2E were found among high water drift debris south of the nest tree. The cause of death could not be determined. This was the first verified death of a Bald Eagle hatched and fledged in Kansas. The adults returned to winter in the area on or about 3 October.

Hodgeman County.--The Hodgeman County nest fledged ten eaglets between 1990 and 1994 (Watkins, et. al., 1994). On or about 2 June 1994, a storm dislodged the nest and it fell to the ground (ibid). A pair of Bald Eagles returned to the territory in 1995 and constructed a new nest approximately 300 m northwest of the original site in the same riparian corridor. The replacement nest was constructed approximately 12 m high in a live Cottonwood (Populus deltoides) tree and was larger than the original. The pair remained in the nesting territory throughout the spring and into the summer but no incubation behavior was observed.

Hillsdale Lake.--The same pair of eagles returned to the Hillsdale nest for the third year. Both adults were individually identified by leg bands. The male with purple visual identification band B was banded from the Clinton Lake nest site in 1989. The female with white visual identification band E-27 was hacked from Eufaula Lake, Oklahoma in 1990 (Watkins, et. al., 1994). They began incubating 10 February and the eggs hatched on 16 March (Table 1). The two juveniles fledged on 4 June. The eagles were last documented in the nesting territory on 11 July, but the adults returned for the winter on or about 10 October. The adults have fledged five young since 1993.
TABLE 1. BALD EAGLE NESTING DATA, 1995

<table>
<thead>
<tr>
<th>EAGLE ACTIVITIES</th>
<th>CLINTON LAKE</th>
<th>HILLSDALE LAKE</th>
<th>WOLF CREEK LAKE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incubation begins</td>
<td>Jan. 29</td>
<td>Feb. 10</td>
<td>March 12</td>
</tr>
<tr>
<td>Eggs hatch</td>
<td>March 08</td>
<td>March 17</td>
<td>April 17</td>
</tr>
<tr>
<td>Days of observed incubation behavior</td>
<td>38</td>
<td>35</td>
<td>36</td>
</tr>
<tr>
<td>Date eaglets fledged</td>
<td>May 25</td>
<td>June 04</td>
<td>July 12</td>
</tr>
<tr>
<td>No. of young fledged</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Fledgling age (days)</td>
<td>78</td>
<td>79</td>
<td>86</td>
</tr>
<tr>
<td>Banding dates</td>
<td>April 14</td>
<td>-</td>
<td>June 03</td>
</tr>
<tr>
<td>No. of eaglets banded</td>
<td>2*</td>
<td>-</td>
<td>1*</td>
</tr>
<tr>
<td>Band identification used</td>
<td>2E, 2G</td>
<td>-</td>
<td>2H</td>
</tr>
<tr>
<td>Last observation within nesting territory</td>
<td>July 04</td>
<td>July 11</td>
<td>S.A.Y</td>
</tr>
</tbody>
</table>

* S.A.Y. Stayed All Year

PERRY LAKE.—A pair of Bald Eagles including a male with purple visual identification band A, which originally fledged from the Clinton Lake nest site in 1989, remained in the nesting territory throughout 1994 (Watkins, et. al., 1994). During February and March 1995 they refurbished the original inverted cone shaped nest (Stalmaster 1987) and expanded a secondary disk shaped nest (ibid) approximately 1.1 km northeast and across the cove from the 1994 nest site. The secondary disk shaped nest had been constructed in 1994 and used as a roost beginning three days after the young fledged. This secondary nest was constructed approximately 18 m above the ground in a dead, decaying tree which could not be identified to species. The tree was located 3 m landward from the edge of the normal lake elevation. The pair began incubating in the disk shaped nest on 14 April 1995. On or about 23 May a storm dislodged and destroyed the nest while the adults were still incubating.

The adults occupied the territory during the remainder of the spring and summer. In August, the pair began building a new nest in a tree 150 m south of the secondary disk shaped nest which was destroyed by the spring storm. By mid September the adults had constructed two nests in the same Northern Red Oak (Quercus rubra) tree. The lower bowl shaped nest (ibid) is approximately 13 m above the ground and is 0.8 m deep. The second inverted cone shaped nest is approximately 2 m above the lower nest and 0.9 m deep. The tree was located approximately 5 m landward of the normal lake elevation. The adults were observed working on the upper nest on several occasions during the month of September.

During October the pair constructed a third bowl shaped nest in a tree approximately 120 m southeast of the 1994 nest site. This dead, Black Walnut (Juglans nigra) tree was flooded when the lake was originally impounded and is the only nest over water. The inverted cone shaped nest is approximately 11 m above the water and approximately 0.8 m deep. The pair now has four similar size nests to choose from for any subsequent nesting.
Craig Birrell sits in the nest tree at Clinton Lake, 1993. Photo by Michael A. Watkins

**WOLF CREEK.** A pair of eagles remained in the vicinity of the Wolf Creek Lake throughout 1994 (Watkins, et al., 1994). On 04 February 1995 they began incubating at the original nest site, but abandoned the effort approximately 3 days later. Subsequently, they constructed a second nest in flooded timber in the upper end of the main lake, approximately 1.6 km northeast of the original nest site. The nest was constructed approximately 5 m above the water in a dead Black Locust (Robinia pseudoacacia) tree. The pair began incubating on 12 March and a single egg hatched on 17 April (Table 1). The female eaglet was fitted with visual identification band 2H and it fledged on 3 June. The eagles were sighted in the area throughout 1995.

**STAFFORD COUNTY.** A pair of Bald Eagles established a nest site along the North Fork of the Ninnescah River in 1994. The nest was constructed approximately 20 m high in an American Sycamore (Platanus occidentalis) tree. The pair exhibited incubation behavior for approximately two weeks before abandoning the nesting attempt. A pair of eagles returned and began incubating in the same nest during the second week of April in 1995. After approximately 35 days of incubation, the nest was destroyed by a severe hail storm. One third of the nest was knocked to the ground while the remaining two thirds were left hanging precariously from the tree. Eggshell fragments were found among the nesting material at the base of the tree (M. Blair, pers. comm.). The fate of the adults is unknown.

**UNIQUE SIGHTINGS**

**CLINTON LAKE.** On 25 March 1995, a pair of mature Bald Eagles was observed in and around a nest in the Wakarusa arm of Clinton Lake approximately 3.1 km northwest of the Rock Creek nest. The nest was constructed 16 m high in a dead American Elm (Ulmus americana) tree approximately 5 meters landward of the normal lake elevation. The nest was expanded from an abandoned Red-tailed Hawk (Buteo jamaicensis) nest. One adult had an orange patagial tag on it's right wing and
The female at Clinton Lake returns to the nest in 1991. Photo by Michael A. Watkins

a light blue tag on its left wing, but no identifying numbers were observed. This eagle was released between 1988 and 1990 as part of the Missouri Department of Conservation's Bald Eagle reintroduction program. The other adult had no identifying markings. The pair remained in the nesting territory throughout the spring and early summer, but no incubation behavior was observed.

CITY OF LAWRENCE—On 3 August 1995, a juvenile Bald Eagle was observed perched in a Black Walnut (Juglans nigra) tree in the back yard of a residence in northwest Lawrence. The tree was approximately 4 m from the back porch of the home in a developing neighborhood. The eagle was sitting approximately 18 to 20 m off the ground and was observed between 17:00 and 21:00 hours. The eagle had a patagial tag on its left wing. The tag was white with a dark green perimeter and contained the reddish-orange, alpha-numerical character D-1. The eagle was hatched and raised at the Ohio Zoo in Columbus. It was obtained by the Tennessee Wildlife Resources Agency and hatched from Douglas Lake near Knoxville, TN on 21 June 1995.

METHODS

Periodic observations of nest sites began in January. When eagle activity increased around the nest site, monitoring efforts also intensified. As critical nesting events approached, weekly visits were increased to daily observations. Beginning incubation dates were established by observing eagles setting low and tight on the nest, switching on the nest and/or rolling eggs. Hatch dates were determined by the adults setting high on the nest, the existence of feeding behavior and/or voids leaving the nest. Fledging dates were established when juveniles were observed flying or perched in adjacent trees. All dates are assumed to be plus or minus 2 days.
DISCUSSION
The Hillsdale female's place of origin, Florida, distinguishes her as a member of the southern subspecies of Bald Eagle (*H. l. leucocephalus*) (Watkins, et. al., 1994). The Clinton adults, which produced the Hillsdale and Perry males had been presumed to be the northern subspecies (*H. l. alascanus*). Tail length and wing chord measurements from the adult male and four fledglings from the Clinton nest were compared with a plumage correlation graph of both northern and southern subspecies birds (Stalmaster 1987). The data indicates it is highly likely that the Clinton eagles and their offspring are the northern subspecies (*H. l. alascanus* (M. Lockhart, pers. comm.).

In most but not all instances, Bald Eagles will have more than one nest in their breeding territory (Stalmaster 1987). Several theories have been developed to explain the multiple nests: 1) Bald eagles are programmed to build or refurbish their nests as part of a sequence of breeding events; 2) alternate nests may serve as insurance if the occupied nest is destroyed or rendered undesirable for some reason; 3) changing nests from year to year may be a way of avoiding parasites; and 4) the additional nests may be a way of marking breeding territories to warn other potential nesting pairs to stay away (ibid). These hypotheses would not explain the construction of two nests in the same tree during the same year as occurred at Perry Lake.

ACKNOWLEDGEMENTS
We thank the personnel of the U.S. Army Corps of Engineers at Clinton, Hillsdale, and Perry Lakes, and the staff at the Wolf Creek Generating Station for their assistance and dedication in gathering critical nesting data. We appreciate the documentation of significant eagle activities provided by Mike Blair and Manuel Torrez, Kansas Department of Wildlife and Parks and Cal Karlin of Lawrence, Kansas. We thank Craig Birrell who climbed the nest trees in 1995. We also thank Mike Lockhart U.S. Fish and Wildlife Service for reviewing this manuscript.

LITERATURE CITED

U.S. Army Corps of Engineers, Attn: (CO-TR), 700 Federal Building, Kansas City, Missouri, 641061; U.S. Fish and Wildlife Service, 315 Houston St. Suite E, Manhattan, Kansas, 665022, 5140 SW 33rd St., Topeka, Kansas, 666143.

First Gray Partridge in Kansas. Three Gray Partridge, *Perdix perdix*, were found in a native grass pasture with a few scattered small trees and brush in Section 31, T1S, R3E, Washington County, on 5 April, 1996. This location is 10 km south of the Nebraska state line in an area of predominately native grass pasture, CRP, and a small amount of cropland. Gray Partridge have been expanding their range southward since the 1970's (Vander Zouwen, W. J. 1990. Recent status of the Gray Partridge in North America. In K. E. Church, R.E. Warner, and S. J. Brady, Eds., Perdix V: Gray Partridge and Ring-necked Pheasant Workshop, pp, 21-40. Kansas Dept. Wildlife and Parks, Emporia, KS). In 1995, Gray Partridge were known to be present in Gage and Pawnee Counties, Nebraska, within 11 km of the Kansas state line (S. Traylor, Nebraska Game and Parks Comm., pers. comm., 31 August 1995). It is not known at present whether these birds are destined to become an established component of Kansas avifauna. Any records or observations of Gray Partridge are appreciated and may be forwarded to the first author. This report is a
contribution of Federal Aid to Wildlife Restoration Project W-39-R.

Roger D. Applegate, Kansas Department of Wildlife and Parks, P. O. Box 1525, Emporia, KS 66801, and Brad D. Odle, Kansas Department of Wildlife and Parks, Tuttle Creek Wildlife Area, 5020-B Tuttle Creek Blvd., Manhattan, KS 66502

1995 REPORT OF THE KANSAS BIRD RECORDS COMMITTEE

This report summarizes records received and evaluated by the Committee for the calendar year 1995, as well as any decisions pending from previous years. A total of 38 submissions were received by the Committee in 1995 and 24 were circulated for evaluation.

Record submissions are assigned a sequential number in the order in which they are received with the year (of receipt) as a prefix. Not all submissions that receive a number are circulated. Birds are listed in phylogenetic order under each of two categories: Records Accepted and Records Rejected. Taxonomy and nomenclature follow the American Ornithologists' Union Checklist of North American Birds, 6th Edition (1983) and all subsequent supplements.

The KBRC record number follows the scientific name, with the number of individuals seen, date(s) of observation, locality, observer(s) documenting the record, any supporting physical evidence, and any significant change in status. Rejected records have the observer(s) names omitted and a brief explanation as to the reason for rejection.

RECORDS ACCEPTED


**Magnificent Frigatebird** (*Fregata magnificens*); 95-36; 1; 12 October 1995; Manhattan, Riley Co. Ted Cable. Fourth record.

**Glossy Ibis** (*Plegadis falcinellus*); 95-28; 1; 6 August 1995; Quivira NWR, Stafford Co. Christopher Hobbs and Sebastian Patti. Second record.

**Glossy Ibis** (*Plegadis falcinellus*); 95-30; 1; 19 August 1995; Quivira NWR, Stafford Co. Christopher Hobbs. Third record.

**Glossy Ibis** (*Plegadis falcinellus*); 95-31 & 95-32; 2; 18 August 1995; near Cheyenne Bottoms, Barton Co; Mark Robbins and Mick McHugh. Fourth record.

**Glossy Ibis** (*Plegadis falcinellus*); 95-33; 1; 13 September 1995; Cheyenne Bottoms, Barton Co. John Rakestraw. Fifth record.

**Brant** (*Branta bernicla*); 95-03; 1; 26 November - 4 December 1994; near Junction City, Geary Co. Dan LaShelle.

**Eurasian Wigeon** (*Anas penelope*); 95-16; 1; 10 March 1995; Elkhart sewage ponds, Morton Co. Lawrence Smith. Seventh record.

**Wilson's Plover** (*Charadrius wilsonia*); 95-18; 1; 29 March 1995; Pittsburg, Crawford Co. Mark Stafford. *First state record, added to the KOS Checklist as hypothetical.*


**White-winged Dove** (*Zenaida asiatica*); 95-38; 1; 15-18 November 1995; Elkhart, Morton Co; Ruth and Lawrence Smith; Photo. *Sixth record, first record verified with physical evidence. Hypothetical status removed.*


Connecticut Warbler (*Oporornis agilis*); 95-25; 1; 26 May 1995; Marias des Cygnes
wildlife Area, Linn Co. David Seibel. Tenth record.

*Pyrruloxia* (*Cardinalis sinuatus*); 95-15; 1; 2 February 1995; Wichita, Sedgwick Co.

*Pyrruloxia* (*Cardinalis sinuatus*); 95-17 & 95-23; 1; 1-22 April 1995; near Marias des
Cygnes Wildlife Area, Linn Co; Mick McHugh, Greg Griffith, and Lloyd
Moore. Fifth record.

Golden-crowned Sparrow (*Zonotrichia atricapilla*); 95-09; 1; 3 January 1995; Melvern
Lake, Osage Co. Joanne Brier. 12th record.

**RECORDS REJECTED**

*American Flamingo* (*Phoenicopterus ruber*); 95-37; 1; 7 November 1995; near
Princeton, Franklin Co. Identification questionable; insufficient details to
eliminate similar species; bird of questionable origin.

*Tufted Duck* (*Anas fuligula*); 95-12; 1; 22 December 1994; Overbrook sewage ponds,
Osage Co. Identification questionable; insufficient details to eliminate sim-
ilar species.

*Gyrfalcon* (*Falco rusticolus*); 95-06; 1; 21 December 1994; Geary Co. Identification
questionable; insufficient details to eliminate similar species.

*Iceland Gull* (*Larus glaucoides*); 95-08; 1; 11-13 December 1994; near Wichita,
Sedgwick Co. Identification questionable; insufficient details to eliminate
Thayer's Gull.

*Lesser Black-backed Gull* (*Larus fuscus*); 95-04; 1; 8 January 1995; Hillsdale Lake,
Miami Co. Identification questionable; insufficient details to eliminate
Herring Gull.

*Northern Wheatear* (*Oenanthe oenanthe*); 95-35; 1; 7 Nov 1995; Ottawa Co.
Identification questionable; insufficient details to eliminate similar species.

*Sage Sparrow* (*Amphispiza belli*); 95-02; 2; 2 January 1995; near Liberal, Seward Co;
Identification questionable; insufficient details to eliminate similar species.

The following is a list of the members and alternates of the KBRC for the period
covered by this report:

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