

The American Alligator (*Alligator mississippiensis*) in Oklahoma with Two New Early Records

Berlin A. Heck

109 Kaye Drive, Broken Bow, OK 74728

The American alligator (*Alligator mississippiensis*) presently occurs in small numbers in remote areas of rivers, streams, and small lakes and ponds in southeastern Oklahoma. The question of an historic native population has been a subject of speculation, due partly to the lack of any known records prior to 1909, and the release of "pet" alligators into wetlands in the state. This paper includes two new reports of alligators in Oklahoma dated from the late 1800s, which indicate that a historic population of alligators occurred in Oklahoma. The 2005 discovery of a successful alligator nest in extreme southeastern Oklahoma indicates that climatic conditions are suitable for a viable population of alligators in Oklahoma. © 2006 Oklahoma Academy of Sciences.

INTRODUCTION

The American alligator (*Alligator mississippiensis*) presently occurs in southeastern Oklahoma, an area of sparse human population and abundant aquatic habitat including large areas of protected bottomland hardwood habitat, and moderate climate. However, there have been no conclusive records that alligators occurred historically in Oklahoma, excluding fossil alligators dated from the Pliocene epoch (Woodburne 1959). Possible sources of current alligator populations are considered, along with the significance of two new, very early records, and a recent first successful nesting of an alligator reported in Oklahoma.

METHODS

Records of alligators, including anecdotal data, were gathered during several years to determine the historic and current status of alligators in Oklahoma.

RESULTS AND DISCUSSION

In 2004, I located a book by Ruby Harris (Harris undated)¹ that references a diary

¹ The book is undated but according to Ailean Harris (pers comm 2006) the book was published in 1995.

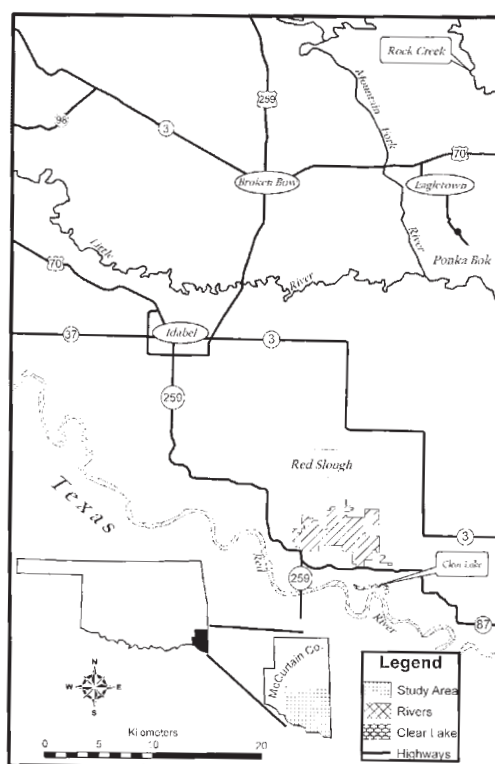


Fig. 1. Map of southeastern McCurtain County, Oklahoma.

written by her grandfather, Henry Harris (Harris 1866). Henry Harris lived near Clear Lake which is near the Red River (Fig. 1) and wrote that a major flood occurred on the Red River in May 1886. His diary entry

for 9 May 1866 stated that during the flood he killed an alligator:

Returned on the mornig of the 9 & left my famly at Little John, Willy & myself swam the B L Sloo and reched Home. Sent our Horses out by freedman. Kill one alagater.

William Welge, Research Division, Oklahoma Historical Society (pers comm 2005), provided another early reference to alligators in Oklahoma by O. H. Todd (1899). Todd in the late 1880s was one of several people hired to survey the Chickasaw Nation in what is now Johnston County, Oklahoma. He wrote of his observations while surveying along the Washita River (which he erroneously referred to as "Wichita River") during August 1871:

Lazy alligators, with upper jaw thrown back, floated down the river, occasionally bringing their jaws together with a snap to imprison and swallow the accumulated flies and mosquitos.

Todd's report is not precise about where on the Washita River the alligators were observed, but he states that his camp was about 8.0 km from the Washita River where he saw the alligators, and about 1.6 km from a spring on Pennington Creek. Today, this spring is located 8.8 km NNW of the town of Tishomingo, Johnston County, which sits by the Washita River. The river near Tishomingo is where Todd saw the alligators, because it is the only area where the Washita River loops within 10 km from the spring and Todd's camp.

Subsequent to the records of Harris (1886) and Todd (1899), the next record of an alligator in Oklahoma was a report by Lane (1909) of a 1.4 m female alligator captured in 1909 from a lake or bayou near the South Canadian River, approximately 8.0 km from Norman (Cleveland County). Lane stated that this alligator had been seen by several persons for at least three years prior to its

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capture by a farmer, who presented it to the University of Oklahoma, where its skeleton was preserved in the university museum. Christina Wolfe, Collection Manager, Herpetology, Sam Noble Oklahoma Museum of Natural History (pers comm 2006), searched for records of this specimen and found a booklet entitled, "A History of the Stovall Museum of Science and History at the University of Oklahoma" which stated, "There was . . . one four-and-one-half foot alligator. The latter was taken from Lake Norman, once a small body of water southwest of town, but which has long since disappeared with the periodic overflowing of the Canadian River." This alligator specimen has no further record, but was probably among museum specimens destroyed in a fire in 1918. Snider (1917) stated; "A few small alligators have ascended the rivers as far as the central portion of Oklahoma." In June and July of 1925, Ortenburger (1927a) led a trip to collect reptiles, amphibians and fish in southeastern Oklahoma. His collection report for the University of Oklahoma Museum did not include the alligator. Ortenburger (1927 b) also published a list of amphibians and reptiles of Oklahoma, but the alligator was not listed. Ortenburger (1929) again led a collecting trip into southeastern Oklahoma in the summer of 1927 and reported no alligators. Charles C. Carpenter, Professor Emeritus of Zoology, University of Oklahoma (pers comm 2004) wrote:

I remember talking to both Dr. Ortenburger (in the 1950s) and later with Bob Webb about alligators in Oklahoma. They told me that they could never confirm that any had been seen, taken, or killed in Oklahoma, except by Lane (1909) and Blair (1950). In later years, in talking with people in southern Oklahoma (35 years at the University of Oklahoma Biological Station), I found no one who could confirm alligators in Oklahoma. There were records of alligators released in local farm ponds.

Blair (1950) had reported a 4.5 m alligator shot in Rock Creek (Fig 1), 11.2 km east of Eagletown, McCurtain County, by E. M. Wagnon in July 1949. Blair examined the tanned hide and skull of this alligator, and Wagnon had a photograph of the dead alligator. In 2005, L. Wagnon, a descendant of E. M. Wagnon, stated that all he had was a bill-fold made from the hide and did not know the location of the skull or photograph.

Hibbard (1960) reported alligators ranging west in the Red River to south-central Oklahoma:

The distribution of the alligator extended farther north than now at the time the country was settled. But its range has been greatly restricted because of the cultivation and drainage of the land, as well as by intensive killing of it for its hide. The alligator at one time ranged northwest up the Red River which forms the boundary between northeastern Texas and Oklahoma as far as Grayson County, Texas. The available records for this area are from the Denison Dam (elevation 550') on the Red River in Grayson County, for a period of 12 years prior to 1953.

In 1996, I interviewed 4 elderly residents of southern McCurtain County, Eugene C. Gregory, Raymond B. Carter, James L. Jones, and Virgil L. Bailey, all now deceased, who had fished intensively in local waters beginning in the early 1930s. None was aware of any alligators in the area until about 1950. Jones said that in about 1955 a friend brought several small alligators from Louisiana and released them into the Mountain Fork River, 11 km east of Broken Bow, McCurtain County (Fig. 1). Coolidge C. Laster, Eagletown, McCurtain County, (pers comm 2005) said that in the late 1930s, Ben Tucker had an alligator hide, estimated to be 4 m long, hanging in his smoke house at Ponka Bok, McCurtain County, 10 km southeast of Eagletown (Fig 1). This alligator had been taken from Little River. Laster also said that

during a flood on the Little River in the late 1940s, he was on a bluff overlooking the river and saw an alligator that he estimated to be 2.5 m long floating downstream in the river, the first live one he ever saw.

Webb (1970) reported that vagrant alligators are occasional in extreme southeastern Oklahoma, and that baby "alligators" bought in pet stores that escape or are liberated may be subsequently recovered in Oklahoma. He specifically mentions that the pet store "alligators" are often the spectacled caiman (*Caiman sclerops*), a neotropical crocodylian that is not native to the United States. I have found no evidence of the caiman in southeastern Oklahoma, but the cold winters would likely prove too harsh for survival of a neotropical species such as the caiman.

Today, there is a small population of alligators in southeastern Oklahoma, many of which probably resulted from the release of pets. An Arkansas Game and Fish Commission (AGFC) leaflet entitled, "The American Alligator" by Barkley (1998), states that from 1972 to 1984, AGFC released 2,800 sub-adult alligators in suitable habitat to reestablish the species in its historic range in Arkansas. The released alligators were procured from Rockefeller State Wildlife Area in Cameron Parish, Louisiana (Sam Barkley, pers comm 2004). Some of these alligators could have traveled into Oklahoma through the rivers and many streams flowing between Arkansas and Oklahoma. Also, Grassy Lake, a large, private wetland area along the Little River in Arkansas, has a large, protected alligator population. The Little River flows from southeastern Oklahoma into Arkansas, and Grassy Lake is approximately 60 km (direct line) from the state line, offering easy access for alligators from Grassy Lake to migrate into Oklahoma. Dellinger and Black (1938) stated:

Alligators occur in considerable numbers in the Red River area. Doctor P. L. Carrigan, in a letter of May 12, 1938, informs us that Grassy Lake,

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near McNab, Hempstead County, is well populated and contains the largest alligators in the south.

Records at Little River National Wildlife Refuge, Broken Bow, McCurtain County, show that four alligators were captured in the surrounding area from 1989 to 1993. These alligators, including one measuring 3.0 m, were released into the Refuge oxbow lakes along the Little River. From 2001 to 2004, there have been six nuisance or donated alligators released into Red Slough Wetland Management Area (Red Slough WMA), a large, shallow wetland owned by the U.S. Forest Service located 9.5 km south of Haworth, McCurtain County, Oklahoma (Fig. 1). The released alligators were usually about 1 m in length, but one alligator released in 2004 was 2.7 m in length (R. Bastarache pers comm 2004). In May 2005, I observed a basking alligator near this area that I estimated to measure 2.5 m. Christina A. Wolfe (pers comm 2006) described three large alligators recently received from southeastern Oklahoma by the museum:

Alligator skeleton, OMNH 42315; Illegally shot August 1999; Approximately 2.8 m and 65 kg. 6.4 km north of Hwy 70, at McCurtain/Choctaw County line, OK.

Alligator skeleton, OMNH 42314; Vehicle kill 6 June 2005; Approximately 3.0 m and 113 kg. Near Tom, McCurtain County, OK

Alligator mount, OMNH 42313; Legally shot as nuisance, 11 November 2005; Approximately 3.5 m and 272 kg. Eagletown, McCurtain County, OK

Arbour and Bastarache (2006) reported an alligator nest that Arbour found 28 July 2005, at Red Slough WMA (Fig. 1). On 1 September 2005, the nest was open and 19 young alligators were observed nearby, guarded by an adult estimated to be 1.5 m

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long. This nest is the first record for Oklahoma.

The successful alligator nest indicates that climatic conditions are suitable to support a viable alligator population in southeastern Oklahoma. The two new historical records by Harris (1886) and Lane (1909) indicate that American alligators were native to southeastern and south central Oklahoma, but were probably extirpated, at the time of early settlement during the late 1800's. The current alligator population in southeastern Oklahoma is probably the result of both immigration from Arkansas and Louisiana, and released pet alligators.

ACKNOWLEDGMENTS

I thank William A. Carter for his help in obtaining references; William Welge for furnishing a new early reference for alligators in Oklahoma; William Welge and Ailean Harris for their help in locating the Harris diary which mentioned the alligator; Christina Wolfe for her help in providing information on museum specimens of alligators; and Clark L. Ovrebo for his invaluable assistance in editing the manuscript. Thanks also go to Russell Otis (USFS) for his help with a map. I appreciate the suggestions for improvement made by two anonymous reviewers.

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Received: April 26, 2006; Accepted November 9, 2006.