
History of the Wichita Mountains Wildlife Refuge Elk Herd

ARTHUR F. HALLORAN, Wichita Mts. Wildlife Refuge, Cache

Halloran and Glass (1959) briefly outlined the history of the elk on the Wichita Mts. Wildlife Refuge. However, the recent hunt of off-refuge elk and their progeny derived from the Wichita herd has revived interest in the origin and status of these reintroduced animals and has led to this historical sketch. The early administrative history of this 59,000-acre area, now known as the Wichita Mts. Wildlife Refuge, included a period as The Wichita National Forest and Game Preserve (Forest Service, 1928). This national wildlife refuge, located in Comanche County, Oklahoma, is now administered by the Bureau of Sport Fisheries and Wildlife, U.S. Fish & Wildlife Service in the Department of the Interior.

The interest and encouragement of Refuge Manager Julian A. Howard in the assembling of local game records has been both appreciated and helpful. Muriel H. Wright, editor of *The Chronicles of Oklahoma*, supplied a needed reference from her encyclopedic knowledge of Oklahoma history.

Captain R. B. Marcy reported elk in the Wichitas in 1852 (Bailey, 1905). An early elk hunt in the Wichita Mountains was recorded by De B. Randolph Keim (1891), a newspaper correspondent and writer, who was with General P. H. Sheridan on a February 1869 elk hunt in the Wichitas. Five elk were bagged during a two-day hunt based near Mt. Sheridan. This mountain now forms part of the northern boundary of the Wichita Refuge. The notation of 1881 for the Sheridan hunt (Halloran & Glass, 1959) is apparently in error. James H. Gaut, a biologist for the U.S. Biological Survey (predecessor agency of the U.S. Fish & Wildlife Service), visited the Wichita Mountains from March 11 to May 28, 1904, and left handwritten notes of his visit. These notes were secured from the Washington, D.C. office of the Fish & Wildlife Service. A copy of these records is now deposited in the Wichita Refuge office. I cite Mr. Gaut's notations on elk.

"Mr. A. T. Hopkins of Lawton killed an elk in 1881 on Rainny Mountain (about forty miles west of Lawton). As nearly as I could ascertain this is the last specimen recorded from that region. Several antlers have been picked up within the last few years on Elk Mountain (a high ridge about twelve miles west of Mount Scott) and Mr. E. F. Morrissey the forest ranger of that reserve informed me he very frequently ran across elk antlers while on his rides through the reserve."

Mr. E. F. Morrissey was the supervisor of the Wichita Forest & Game Reserve at the time of Mr. Gaut's visit (Loring, 1906). The "Rainny Mountain" referred to is doubtless Rainey Mountain in the western Wichitas north of Cooperton in Kiowa County. Elk Mountain is situated just southwest of the present headquarters of the Wichita Refuge. It appears, then, that 1881 marks the last record of indigenous elk in the Wichita Mountains region. The subspecies that was present can only be assumed as no specimens are known. Hall and Kelson (1959) have mapped the subspecies as Merriam's elk (*Cervus canadensis merriami*).

With one possible exception, the elk introduced on the Wichita Refuge were from the Jackson Hole herd. The first introduced elk was a bull presented by the City of Wichita, Kansas in 1908. The origin of this animal is unknown. In 1911 one bull and four cows were received from St. Anthony, Idaho. These animals were from an initial experimental shipment of 12 from Jackson, Wyoming via Teton Pass to Idaho by E. A. Preble and D. C. Nowlin of the U.S. Biological Survey. The other seven animals in this consignment were sent to the National Bison Range in Montana. In 1912 Forest Supervisor Frank Rush of the Wichita National Forest and Game Preserve secured 15 more elk (3 bulls and 12 cows) from Jackson Hole via the railhead at St. Anthony. These 21 animals constitute the origin of the Wichita herd, which is therefore largely, if not wholly, *Cervus canadensis nelsoni* (Murie, 1951).

The first calves, three in number, were born on the Oklahoma range in 1913. Official records state that by the end of 1913 the population was 24. This included the original bull from Wichita, Kansas.

By 1925, the population was estimated at 300. The first sale of 11 animals (2 bulls, 9 cows) was held in that year. At the termination of Forest Service administration in 1935, a total of 153 animals had been harvested, and a sight count netted 222 animals. In 1936, the U.S. Biological Survey estimated elk numbers at 245. Sales and donations that year consisted of 13 elk. A shipment of special interest (4 bulls and 14 cows) was made in March 1941 to the Sierra del Carmen in Mexico immediately south of the Big Bend area of Texas. During the period 1936 through January 1962, 505 bulls and 583 cows were removed from the herd. These figures include animals sold as meat, plus live sales and donations. They do not include known natural, accidental, and poaching losses, which averaged 12 per year from 1925 to 1956, inclusive. Population estimates of selected years are listed below.

Elk Population Estimates

Year	Number
1912	21
1922	125
1925	300
1935	222
1945	214
1955	190
1957	251
1958	345
1960	480
1962	349

Elk numbers were fairly stable between 1936 and 1957; annual disposals averaged 33 with extremes of 2 and 82. Recent helicopter counts, begun in 1955, indicated rapid increases with a peak of 480 in 1960. Annual disposals were sharply increased to 121 in 1960. This harvest effectively reduced these cervids to about 350 at the beginning of 1962. Annual disposals are now planned to maintain the herd at approximately this level.

Over a period of many years elk have left the refuge and wandered onto rangelands to the north and west. As early as 1955 these fugitive elk were estimated to number 40 head. Crop damage was reported (Anon, 1962). A few (15) of these nuisance elk were eliminated by Conservation Department personnel in 1961. During the period November 21 to 25, 1962, the first state-authorized elk hunt in Oklahoma was held by the Oklahoma Department of Wildlife Conservation. Forty-two elk (16 bulls, 12 cows, 8 bull calves, 6 cow calves) were taken in Comanche and Kiowa counties.

The few Wichita elk that have been weighed appear to be lighter than the heaviest animals from Jackson Hole (Murie, 1951). The following weight data are derived from the refuge disposal program. It is entirely possible that in years of exceptionally good feed certain individuals would exceed the weights herein cited. Of 28 mature bulls live-weighed during the period October 5 to November 11, 1959, 8 had entire weights of over 600 pounds. The average of these 8 was 621 pounds; the heaviest, 660 pounds. The dressed weight of the heaviest was 381 pounds; the average dressed weight of the 8 was 335 pounds. One of these bulls with an entire weight of 610 pounds also was measured. Standard measurements in inches were 98½-5-25-8¼ (not.). This mature animal had five antler points on one side and six on the other, and stood 62 inches at the shoulder. The heaviest elk taken during the 1962 open season was a bull having a reported entire weight of 825 pounds. Whether or not this trophy-sized kill was actually weighed is not known.

Wichita elk antler beam lengths, based upon a small series of measurements taken from 1959 to the present, do not exceed 48 inches. This is smaller than record heads from Wyoming where trophy animals of the top 20 have 49 to better than 61-inch beam lengths (Webb, et al, 1952).

Of 10 mature cow elk weighed during the fall of 1959, 4 had entire weights of more than 400 pounds. The average was 434 with the heaviest weighing 465 pounds. The dressed weight of these 4 animals averaged 244, the heaviest being 268 pounds.

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