# SECTION G, CONSERVATION

## Notes on Wintering Populations of the Bald Eagle on the Wichita Mountains Wildlife Refuge

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The bald eagle (Haliacetus leucocephalus) winters on the Wichita Mountains Wildlife Refuge in northwesters Comanche County, Oklahoma. Arrival and departure dates, peak numbers, and adult-subadult ratios have been observed for the period 1954 to 1959 and are herein recorded.

The ecology, geology, and history of the Wichita Refuge has been outlined by Halloran and Glass (1959).

Refuge eagle concentrations center about the dead oak trees at the eastern end of Comanche Lake and at the north shore of Grama Lake. Both of these roosting sites are in the restricted area where little anthropic disturbance occurs.

To the tabular data may be added several observations. The April 15, 1958 spring departure date was for a mature bird. This is a late departure for this latitude. The early 1958 fall record was also of a single adult. The 26 birds seen during the course of the National Audubon Society Christmas bird census on December 29, 1958 is the highest singleday count of record. In Table III the birds listed as mature had white heads and tails. All others were recorded as immature. The table indicates that these nonbreeding winter populations are made up largely of immature birds.

#### TABLE I Spring Departure and Fall Arrival Dates

Year	Last spring date	First fall date
1954		11/8 (mature)
1955	3/10 (2 immature)	10/25 (mature)
1956	2/28 (immature)	11/2 (mature)
1957	3/15 (mature)	11/15 (3 immature, 1 mature)
1958	4/15 (mature)	10/2 (mature)
1959	. 4/3 (3 immature)	10/26 (1 immature, 1 mature)
Extremes	4/15	10/2

#### TABLE II Peak Numbers

Year	Date	Number
1954	12/23	11
1955	2/24	9
1956	1/12	7
1957	1/12	8
1958	12/29	26
1959	2/26	10

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Date	Mature	Immature	Total
12/23/54	2	9	11
2/24/55	ĩ	8	9
12/22/55	2	4	6
1/12/56	2	5	7
11/ 9/56	1	3	4
1/11/57	1	7	8
11/24/57	1	7	8
1/31/58	1	10	11
12/ 5/58	5	12	17
2/26/59	1	9	10
Totals	17	74	91
Average	1.7	7.4	9.1

### TABLE III Selected Observations

#### LITERATURE CITED

Halloran, A. F., and B. P. Glass. 1959. The carnivores and ungulates of the Wichita Mountains Wildlife Refuge, Oklahoma. Jour. Mamm., 40(3): 360-370.

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