LITERATURE CITED

Grice, D., and J.P. Rogers, 1965. The Wood Duck in Massachusetts. Massachusetts Div. of Fisheries and Game, Boston.

Hester, E.F., 1962. Survival, Renesting, and Return of Adult Wood Ducks to Previously Used Nest Boxes. Southeastern Assoc. of Game and Fish Commissioners 16:67-70;

Odom, R.R., 1969. Nest Box Production and Brood Survival of Wood Ducks on the Piedmont National Wildlife Refuge. Proc. Southeastern Assoc. of Game and Fish Commissioners, 24:108-116.

Saucier, Roger T. 1970. Origin of the St. Francis Sunk Lands, Ark. and Missouri. Geological Society of America Bulletin, v. 81pp. 2847-2854.

THE STATUS OF ELK TRANSPLANTS IN EASTERN OKLAHOMA

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ABSTRACT

Between 1969 and 1972 335 elk *(Cervus canadensis)* were transplanted from Wichita Mountains National Wildlife Refuge to eastern Oklahoma. Three releases (151 elk) were in the oak-hickory forest type in northeastern Oklahoma, and five releases (184 elk) were in the oak-pine forest type in the southeastern part of the state.

Cumulative known mortality in the northeastern releases (December 31, 1971) was 31 animals while known cumulative calf crop was 33 animals. Minimum population size at this time (reliable sightings) was 148 for the Northeast. Cumulative known mortality in the southeastern releases (December 31, 1971) was 24 animals while known calf crop was 39 animals. Minimum population size at this time (reliable sightings) was 117 for the Southeast. Due to terrain and elk behavior, population estimates for the Northeast are thought to be reasonably accurate while Southeast estimates are probably significantly lower than actual population size.

Primary cause of known mortality (85%) was illegal kills. *Parelaphostrongylus tenuis* was either confirmed or suspected in 9% of reported mortality. Road kills or unknowns accounted for the remaining losses. Individual releases have had varying annual productivity rates ranging from 0 to 48 calves per 100 cows.

In general northeastern releases have remained discrete with the majority of the animals tied closely to deer refuges where they were released. Crop depredation has been a problem with these releases as the refuges are mostly surrounded by small private land holdings with agricultural interests. Most illegal kills have been reported from northeastern Oklahoma.

One of the southeastern releases has disappeared completely, and two others have almost completely disappeared. Emigration is the apparent cause of these disappearances. Dispersion from southeastern release sites has been considerable which makes evaluation of the success of transplants difficult. Two Oklahoma elk have been reported in Arkansas. One of these had moved 150 linear miles from its release site. Crop depredation and illegal kills have not been as severe in this region as in the Northeast. Potential elk range in the Southeast is considerable (Ouachita National Forest, Weyerhaeuser holdings, state lands and large private ranches) while this is not the case in the Northeast.

Although it will be five or ten years before degree of success can be better verified, it appears that elk are biologically adaptable to eastern Oklahoma. A limited hunt is tentatively planned for 1973. If illegal kills can be reduced, the future of elk as a significant big game species in eastern Oklahoma will be enhanced. Elk will possibly be limited to refuges and public hunting areas in northeastern Oklahoma, but they have potential for occupying much of the southeastern part of the state. At present it seems feasible that Oklahoma hunters will be harvesting elk far eastward from traditional western United States elk range.

A SPATIAL ANALYSIS OF PUBLIC ATTITUDES TOWARD HUNTING AND FIREARM USAGE IN MIDDLE TENNESSEE

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It has generally been accepted that the public attitude toward ownership and usage of firearms has undergone considerable change as the American population has become more urbanized. This study examines the attitudes of Middle Tennesseans toward hunting and the use and control of firearms (non-pistol) by individuals. An areal analysis was conducted to determine differences of opinion within the population according to the type of residence — rural, town or city.

A random sample was conducted during October 1971 by personal questionnaire in a city of approximately 450,000, a town of 17,000, and from rural dwellers of Middle Tennessee. The sample was confined to adult males because of the traditional masculine nature of hunting and the use of guns. The total sample consisted of 270 individuals; 55 from rural, areas, 72 from small towns and 143 from the city.

In an analysis of Table 1, differences between the three groups become readily apparent. The number of adult males who consider themselves hunters changes from 70% for the rural man to 44% for those living in small towns to 30% for the city resident. The greater opportunity offered the non-urban person probably accounts for this difference, but the fact that competitive recreational pursuits are fewer in the country might also be a contributing factor.

The differences in opinion either favoring or opposing all hunting is relatively consistent throughout the region. Nearly 90% of rural dwellers favored hunting while 71% of both town and city persons felt likewise.

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