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WINTER GOBBLING IN WILD TURKEYS

by

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The purpose of this paper is to point out that the literature on wild turkeys (*Meleagris gallopavo*) fails to discuss fall or winter gobbling activity and this tends to leave the uninitiated with the idea that "pure wild" turkeys only gobble in the spring.

Domestic turkeys are known to gobble at all seasons, whereas wild turkeys gobble most frequently during the spring. This raises the question that wild turkeys heard gobbling in the fall or winter have at least some domestic ancestors. Turkey biologists presumably know that wild turkeys sometime gobble in the fall and winter but most written statements on gobbling activity describe gobbling only in connection with mating in spring (Mosby and Handley 1943, Wheeler 1948, Schorger 1966, Bailey 1967). McIlhenny (1914:172) states that in the fall and winter turkeys are in flocks and "do not gobble." Audubon (1967:43) mentions only that wild turkeys sometime gobble in October. Leopold (1944:158) said that the peak of gobbling activity in offspring of crosses between wild and domestic strains is slightly earlier in the spring but he does not mention fall or winter gobbling of such "hybrids." Thus the question of whether "wild" turkeys gobble in fall and winter.

Over the past 17 years I have heard wild turkeys gobbling in fall and winter on at least 50 occasions: 38 times in northern Florida during November or December and 12 times in conjunction with a radio telemetry study of wild turkeys in Putnam County, Georgia (Eichholz 1974: 79). According to Lovette E. Williams, Jr. (personal communication) of the Florida Game and Fresh Water Fish Commission, turkey populations in northern Florida are of pure wild strain. Georgia turkeys were progeny of restocked wildtrapped birds and are also "pure wild."

Most gobbling occurs when subadult gobblers (younger than two years) are separated from their flock and respond by gobbling at the calling of an unseen turkey or a turkey call imitated by the observer. Separation of a flock, unseasonably warm weather, and a lack of human activity tend to increase a turkey's susceptibility to the stimuli that initiate gobbling. Gobbling at sounds other than turkeys seemed to be a spontaneous or "excited" response.

It is probably true that "hybrid" strains are more prone to gobble year around; however, my observations indicate that completely wild turkeys also sometime gobble in the fall or winter and this is not necessarily associated with mating.

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TELEPHONE SURVEY OF DOVE HUNTING IN THE EASTERN MANAGEMENT UNIT

by

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ABSTRACT

A telephone survey of mourning dove hunting in the Eastern Management Unit covering eight seasons (1966-1973) was carried out for the Southeastern Cooperative Dove Study. The sampling frame, the survey procedures, and the precision of the results are described, and certain comparisons are made with mail surveys. Of the 210,000 randomly selected households, approximately 85 percent were contacted and information on about 12,800 dove hunters was obtained. The number of dove hunters in Management Unit households having listed telephones, the number of their trips and their harvest of doves were estimated with seasonal percentage standard errors ranging between 4.0 and 8.8. For the same number of persons contacted, a telephone survey of dove hunting seems to yield less precise estimates than does a mail survey based on license files, at least partly because only a small fraction of those households reached by telephone include dove hunters.

INTRODUCTION

When we had the task of planning and executing a large-scale telephone survey of dove hunting we found few published accounts of the practical problems. We therefore place on record what we learned, to help others who may wish to use the telephone survey, which has unique advantages for certain applications in wildlife investigations.

Need for this survey arose in 1966 when most of the mourning dove hunting states of the Eastern Management Unit (E. M. U.)¹ joined with the Bureau of Sports Fisheries and Wildlife in a program of cooperative research to evaluate the effects of a change in hunting regulations. As one phase of this research, certain states agreed to support the survey to measure the numbers of dove hunters, hunting trips and the harvest of doves. This survey was conducted for eight years (1966-1973), five as part of the research program and three years more as a monitoring effort. The survey covered the 16 states of the E. M. U. that had established hunting seasons for the mourning dove. While the survey design allowed responses to be expanded on the basis of the telephone system to provide statewide estimates and even district estimates within a state, the prime objective was to obtain research precision only for the estimated total over the E. M. U.

We appreciate the assistance of Southern Bell Telephone Company personnel in providing information for frame construction and most of the telephone directories. Particularly valuable was the earlier work of W. Scott Overton in cooperation with game personnel from Louisiana and Tennessee in adapting the telephone survey method to the study of dove hunting.

Here we describe the methods of this survey in sufficient detail that they may be adapted by others, and we draw some conclusions about the characteristics and potential application of the telephone survey method in fish and game work.

MATERIALS AND METHODS

Some of the methods were originally devised in 1960 by the Institute of Statistics in cooperation with Louisiana and Tennessee, and then intensively developed on a statewide basis with Louisiana. We have refined and modified the original sampling design and operational procedures under the direction of Don W. Hayne.²

Our sampling plan was based upon the telephone system using the subscriber listings in the regular published directories. Fortunately for our purposes, most telephone systems are limited by state boundaries, though within any state it is difficult if not impossible to define the exact boundaries of

¹ The Eastern Management Unit included the 16 dove hunting states: Alabama, Delaware, Florida, Georgia, Illinois, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Pennsylvania, Rhode Island, South Carolina, Tennessee, Virginia, West Virginia.

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