

REPORT OF PROGRESS
ON
THE BAY COUNTY FOX CONTROL EXPERIMENT

The following report summarizes the progress of the Bay County fox control experiment to date, including both the actual control work and the game inventories that have been carried on to gauge the effect of the fox reduction measures thus far accomplished.

Plan of the experiment

The Bay County experiment was originally projected to determine (1) whether or not it is practicable to control the fox on a county-wide basis by the employment of one full-time Trapper-Instructor, who would utilize the assistance of sportsmen, farmers and others in carrying on all legal methods of control, such as den digging, trapping, and hunting, and (2) whether, if the fox can be adequately controlled by such means, the benefits to game would justify the effort and cost involved.

After due consideration of the many factors involved, Bay County was selected as the site for the project. In addition, a fringe of surrounding townships in Arenac, Gladwin, Midland, Saginaw, and Tuscola counties was added to form a "buffer" strip around the experimental county. This strip also is being intensively worked to eliminate influx of foxes from the outside. In order to determine the effect of the control work on game populations, Gratiot County, which is quite similar to Bay in habitat and in annual production of game, was selected as the check, or control county. Game surveys are being made in this county as well as in Bay County.

Large scale field operations were started after a public opinion survey had indicated that both the land-owners and the sportsmen of the county were in favor of such an experiment. A team of four Predatory Animal Control Officers (Trapper-Instructors) under Derrill H. Kniss was put into the field on April 26 to check all potential fox dens reported on the public opinion survey. This den survey was completed on May 9, but the officer in charge made a continuous effort during the following months to locate any additional dens.

Overall direction of control operations is under Harold Treat, Regional Supervisor for the Field Administration Division of this Department. D. F. Switzenberg, Game Biologist of the Game Division, is responsible for all game surveys and the final evaluation of the results of the experiment as they may affect the pheasant, cottontail rabbit, fox squirrel, and other game and fur-bearers.

In accordance with the previous plan, large-scale reduction work was suspended during the summer and early fall months from the start of the dog-training season to the end of the small game hunting season, to preclude the possibility of dogs getting caught in fox traps. However, Thomas Brooke, Predatory Animal Control Officer for the District in which Bay County is located, is continuing trapping on damage complaints and is keeping in touch with the various clubs and individuals interested.

Results of control work

The report of the Predatory Animal Control Officer in charge of field work shows that 136 foxes were eliminated from Bay County and the fringe of surrounding counties by all control methods between May 15 and August 15. Of this number 37 were adults, 95 juveniles, and 4 of undetermined age. Of the 97 foxes in which sexes were known, 43 were males and 54 were females. The total number of potential fox dens checked was 611. Of this number, 36 were in active use, most of them considered to be breeding dens. In 80 dens old fox signs were evident, and the dens may have been used in past years. Four hundred ninety-five dens showed no discernible use by foxes. It is probable that additional foxes not reported to the project leader were eliminated as a direct result of trapping instruction received.

At the present time foxes seem to have been reduced in Bay County as a result of the control work and natural factors to a point where they do not appear to be an important factor in the game situation. By a continued campaign to promote systematic trapping by fur and bounty trappers, and extensive hunting by the clubs, we hope to determine whether such measures will serve to hold the population at a low level.

Game surveys

A series of checks on fox, pheasant, and cottontail rabbit populations was made during the winter and spring months. Winter censuses were made by roadside track counts and cruising on foot over selected sample sections.

An average of two roadside track counts carried on simultaneously in Bay and in Gratiot counties by two different observers revealed one individual fox track per 5.9 miles in Bay County and one per 8.3 miles in Gratiot, the control county. Checks on sample areas selected for intensive study were inconclusive because of extremely difficult tracking conditions and because inclement weather resulted in almost total inactivity of game at the time the checks were made. While some difficulty was experienced in traveling through the two counties because of extreme snow conditions, it is hoped that weather conditions for this type of work will be more favorable this coming winter, and that censusing techniques may be perfected for the species under consideration.

During the pheasant crowing season, detailed crowing counts were made on several sample strips. Three checks were made simultaneously in the two counties between May 13 and June 6, on strips of equivalent length. The results of these indicated that pheasants were generally less abundant in Bay than in Gratiot, the control county. Thirty-five, or approximately 62 per cent of the cock birds recorded on crowing grounds were in Gratiot County while the remainder, or 38 per cent, were in Bay County.

Further data on game populations is being obtained from official Department hunting and trapping kill reports, from the results of state bounty records on the fox, and from rural mail carrier reports on pheasant broods. When the experiment has been ended, the effect of all control operations will be evaluated on the basis of these and other census methods. Probably a fair picture cannot be gained as to the value of the program until complete results of next fall's (1948-49) hunting and trapping reports are tabulated.

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