

MICHIGAN DEPARTMENT OF CONSERVATION

Game Division

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Report of an Unusual Muskrat Population
at the Maple River Wildlife Flooding
Fall and Winter of 1961-62

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It became evident in the fall of 1961 that the muskrat population in the Maple River flooding (Sec. 28, T 9 N, R 2 W) was very high. Feeding platforms, feeding shelters, and muskrat houses were dense over the entire marsh. A combination of stable high water levels, and a high muskrat population had created highly desirable openings for waterfowl in the dense cattails. Dozier, (Muskrat Production and Management) reported that a population of 30-35 muskrats per acre had eaten out the best areas of a 3,000 acre cattail marsh in one season. With this in mind, we decided to attempt to determine the total take of muskrats (by trappers) and the fall population.

The known trappers (6) were contacted by mail to find out total catch of mink and muskrats and also the number of "kits" in the total catch. Information as to the number of "kits" was so vague that it was discarded. We have assumed that the total catch as reported is correct. The totals reported were 2,805 muskrats, 8 mink, 1 raccoon. The largest individual "take" was 1,200 muskrats; the smallest, 143 muskrats. This is an approximate harvest of 14 muskrats per acre. Surprisingly few mink were caught. Of the 8 mink taken, 2 appeared to be "ranch mink" which possibly escaped from nearby mink ranch. Three of the trappers volunteered the information that the muskrats taken were of high quality compared to the catch of other marshes.

The fall population was determined by making a sample count of the number of muskrat houses. The marsh was divided in five equal portions from east to west. Four transects were made on the ice and all houses were counted in a one-chain wide strip. Only those houses that were higher than 18" and greater than 2' in diameter were considered as houses. (Trippensee Wildlife Management, Vol. II). Several of the mounds smaller than the above-mentioned size were opened and found to be feeding stations. The number of houses thus counted were considered to have a fall population of 5 muskrats per house (Trippensee, Dozier).

A total of 16.72 acres were censused and found to have 81 houses or 4.8 houses per acre. There are 233 acres within the dikes. Of these, 200 acres were considered to be muskrat habitat. At 5 muskrats per house, there were 24 muskrats per acre or 4,800 in the 200-acre marsh. Thus the trappers harvested 59 per cent of the total fall population.

Spring observations indicate that the muskrat population could have sustained a heavier harvest. Many muskrats (100+) were killed on US-27 this spring. In addition many muskrats could be observed in the marsh during spring thaw.

At an average price of 85 cents per pelt, the muskrats brought a total of \$2,384.25 to the trappers. If they sold the carcass for 25 cents each, an additional \$670.00 would be realized. Eight mink were trapped and sold for an average of \$10.00 each, totalling \$80.00. Thus, a grand total of \$3,134.25 or \$16.75 per acre was harvested this trapping season.