

UNUSUAL "EARLESS" DEER MICE

by **Ralph D. Morris**, Prairie Migratory Bird Research Centre, Saskatoon

The deer mouse (*Peromyscus maniculatus osgoodi* Mearns) represents one of the most common rodent species on the Saskatchewan prairies (W. H. Beck. 1958. A guide to Saskatchewan mammals). Normally found in low brush areas and immature poplar stands, deer mice are infrequently seen during daylight hours as they become active at dusk and return to their underground burrows at dawn.

In order to determine the effects of a commercial insecticide on the breeding biology of *Peromyscus*, experiments are being conducted with a laboratory population of 150 animals housed in the animal room of the Prairie Migratory Bird Research Centre in Saskatoon. On August 13, 1966 two untreated wild adults pro-

duced a litter of two males and two females. These animals, now ten months of age, exhibit the expected morphological and behavioural characteristics of normal *Peromyscus*. All four, however, lack the large pinnae or external ears normally found in mice of this genus (W. H. Burt and R. P. Grossenheider. 1952. A field guide to the mammals). No portion of the outer vibration collecting appendage is present. Examination of the "earless" mice has confirmed that the absence of ears resulted from growth failure and not from physical damage.

Subsequent to the birth of the "earless" mice, the original parents have produced two litters. Five young born on November 5, 1966 and six young



Photo by D. J. Andrews

Figure 1. Normal appearance of *Peromyscus* showing large ear development.



Photo by D. J. Andrews

Figure 2. Abnormal "earless" *Peromyscus*.

born on April 5, 1967 all showed normal ear development.

To date, crosses among "earless" litter mates have produced seven young, all with normal ears. These breeding data suggest that the unusual ear development of the "earless" animals has resulted from a physiological abnormality of the female parent during pregnancy; however further breeding is being continued to discover whether the observed abnormality is genetic.

During the summer of 1966, more than 200 *Peromyscus* were captured in live traps from the same general region which produced the parents of the "earless" animals. All had normal ear development. As deer mice are an important food source for many avian and mammalian predators, they are dependent for survival on acute visual and auditory reception. Animals which lack normal ear development would

therefore be more susceptible to predation and would be unlikely to survive to breeding maturity under field conditions.

BLACK BEAR AT ROCANVILLE

by Mrs. D. Sutton, Rocanville

In early May this year a large bear was seen several times about two and a half miles east of Rocanville. Ray Birkenshaw said that the animal was black. Ernest Holland, who saw it at close range on the grid-road allowance, called it brown "at least the hairs had a brown tinge at the ends".

Bears have been reported periodically in this district but previously they were closer to the Qu'Appelle Valley. The bear seen here this year was not far from the garbage dump so probably he had been rummaging there.