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Population Densities of Small Mammals in Representative Vegetation  
Types and Procurement of Experimental Red-backed Mice

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The primary objective of this year's research was to obtain live red-backed mice (Clethrionomys gapperi galei), and other microtine mice if possible, for use in metabolism experiments at the University of Illinois. The short time available precluded any population density studies. However, for purposes of comparison of fluctuations, the first trapping was done in an area of lodgepole pine forest near Turpin Meadow Ranch which had been studied in 1953 and again trapped in 1954. The results follow:

<u>Year</u>	<u>Month</u>	<u>Nights trapped</u>	<u>Red-backed Mice</u>
1953	October	3	23
1954	August	2	0
1955	August	3	2

Three other areas were trapped. All were beside the highway up to Togwotee Pass; one was about one mile down from the Pass, and the other two were adjacent areas  $1\frac{1}{2}$  miles up from the Turpin Meadow turnoff.

Greater success in obtaining red-backed mice was achieved than might otherwise have been expected by making two variations in the procedure used in previous years. The first of these was the inspection of traps after dark as well as in the morning. This was done at the suggestion of Dr. Olwen Williams. It is thought that this is more important on cold nights and results in saving animals which, caught early, might not survive the night in the traps. The other practice resorted to was that of transporting all white-footed mice (Peromyscus maniculatus) captured to points several miles away, thus leaving traps available to red-backed mice. When this was done, the number of red-backed mice taken the third and fourth nights was greater than would otherwise be expected. In all, 22 live red-backed mice were taken to Illinois. No other microtines were trapped.

It is thought that the mice obtained this year will be sufficient to provide the remaining data necessary for completion of the metabolism studies.

The information collected this summer together with the results of studies previously made are to be submitted soon to the University of Illinois in partial fulfillment for the Ph. D. degree.