

that is so nicely represented in the picture. The Canyon itself is influenced by this structural overturn and the Canyon conforms to the east-west trend of the overturn axis. Cannot but help feel that the structural geology of the north side of this Canyon has more effect upon the floral growth than does exposure. Here the beds are highly dipping to the north and east and their outcroppings present a somewhat varied and more rocky type of hillside surface. The south side, in turn, are conforming to the bedding planes and are not influenced by so many different lithological types of rocks. Here the exposure & geology outweighs the effects of equal altitude and probably equal temperature. Rocks are mainly limestone & sandy limestones of the Mississippian and Pennsylvanian age. After setting up camp we took a short walk up the canyon for about one mile. Examined a recent badger digging among rocks and 15 feet up side hill on north side of canyon. On this short walk was forcefully presented to me the extreme overgrazed condition of the canyon in general. It was really a critical situation. At 6:20 the sun left the area around our station. At 7:45 the night hawks were observed flying about. Fourteen mourning doves flew up canyon at 7:50 P.M. while only 2 were observed to go down canyon. It would appear that the general movement is up canyon. Tonight at 8:00 P.M. set out 48 traps in my first established research area no. 4-8-2-39. This experiment was to determine the population and territorial range of the *Microtus* in a certain plot inside of fenced area some 300 feet below Rhodes Cabin. The plan was to mark off a square with 15 foot sides or 225 sq feet in the pasture land where the *Microtus* appeared to be congregated in abnormal numbers. The plot was placed in what appeared to represent an area of average activity of *Microtus*. The object of the experiment was to find out, if possible whether these *Microtus* that appeared to be infesting the field, had territories and if they did, to what extent. Their numbers were to be checked upon as well as their activity and hours of feeding. This abnormal congregation could not be explainable unless it was due to destruction of all *Microtus* habitat outside of the fence enclosure. The cattle wandered up and down the Canyon floor, using it as a cattle highway, which in turn had destroyed practically all *Microtus* habitats, that had not already been destroyed by the erosions of the canyon floor. These forms may have resorted to the little remaining grasses in this pasture or again the protection offered within the enclosure could account for their