

8 4/10 mi. W and 3 3/10 mi. S Topeka, 1000 ft. Shawnee Co., Kansas

4 September, 1950

The following two days spent in establishing part of a transect across the *Microtus o. heydenii* - *microtus o. ochrogaster* zone of intergradation with Lawrence, Kansas adequately represented established first collecting station at 8 4/10 mi. W and 3 3/10 mi. S Topeka, Shawnee Co., Kansas. This area is on the upland bench land south of the broad valley of Kaw River. The area is in the savanna-prairie zone but mainly cultivated prairie with the trees confined to the more favorable areas. The field chosen was one of about 5 fields examined in this area and represents about one out of perhaps 20 fields that could be used by these *Microtus*. In other words there are very few places outside of fence rows that these mammals can perpetuate themselves from year to year. In addition to requiring an undisturbed vegetation they require the community to be in a particular successional stage. The best areas are those of native grass in an unplowed ^{virgin} field which has been subjected to a moderate degree of grazing. If grazing is not permitted the climax vegetated condition is reached which becomes too dense and thus excluding the mammal. An ideal vegetation is an *Andropogon* or any other type of plant that is properly placed and which adds overhead protection to the understory mat grass. The mat grass can be dense but must not be too high, say from not less than 7 inches and not more than 14 inches.



If one or the other grass is excluded it must be the *Andropogon* but not the mat grass. Also the mat grass must be of the type that will offer green food ^{for} the period during the winter when the snows cover the ground. If the field is too closely grazed beyond the 7-inch height or thru the physical action of trampling the mice will not inhabit it. Again

if the field is allowed to grow without grazing the vegetation will soon choke out the *Microtus*. Set 200 traps at 8 4/10 mi. W and 3 3/10 miles S Topeka, approx 1000 ft., Shawnee Co., Kansas. The field is situated in the following relative position in respect to the Kaw River valley. It is above the river valley but near the edge. The general area is supported by approx 95%.

Cultivation with just an occasional field that is suitable for *Microtus ochrogaster*. The topography is undulating and soils indicate a part of the glacial tillate complex.

