

500727-12 *Microtus ochrogaster* 134-36-20-12-26 gms

500727-14 " " 142-36-21-12-37 gms ♂ Testis 10 mm.

Returned to camp N of Fort Pierre and organized to leave for Lawrence, Kansas.

Fort Pierre, Stanley Co., S Dakota

July 28, 1950

Departed early today and drove directly to Lawrence in Kansas. There are a few generalities that can be stated about the trip and its objectives. It was noticed that, although Iowa and S part of Minn are not too much different than Kansas, the number of Insectivora is immeasurably greater in numbers of individuals ^{here} than in Kansas. It is true, there is more surface water and is more permanent.

The Canadian influence ^{plant community} reaches down into the plains for a considerable distance especially in the Minnesota region and that as one passes W into the Dakotas, except the extreme north part of N. Dakota, the plant community changes from good Canadian type meadows to sparse vegetation in a rather dry environment.

It is not understood why there is an apparent lack of *Microtus ochrogaster* between the Missouri River and middle Minnesota. Old records show this form in the area but they seemed to have disappeared or made themselves extremely rarely and inconspicuous. At Bottineau, the type locality of *Microtus ochrogaster minor*, the animal does not seem, at present, to be in the area. With *Microtus ochrogaster haydeni* apparently confined to the west side of the Missouri, at least in N + S Dakota or the northern part of S. Dakota, it is very unlikely that this form of *haydeni* and *minor* do not come in contact at any point unless at the extreme SE limits of *M. o. minor* farther east. The difference between the community of *Microtus ochrogaster* ^{h.} and *M. o. minor* is one of sparse vegetation & dryness for *haydeni* and Canadian type grass & shrub meadows for *minor*. It would almost seem like *M. o. haydeni* developed in dry areas below the Pleistocene glaciers while *M. o. minor* developed in the glacial refugia of Canadian communities of the Pleistocene. It would be advisable, first, to subject *M. o. minor* serological tests, comparing this species with *M. o. haydeni* and then by checking chromosomes of hybrid offspring between the two species or (sub-species). This could be followed by regular systematic studies.