mounds do not supply adequate overhead protection either because of overgrozing or because of a natural low in plant development. On the basis of 180 square meters trapped, each lemming occupied 36 square meters. In instance did I trap more than 1 lemming per mound. Here is case where one can postulate the area requirement for mantenance of one lemming at this season a period of fluctuation. The smallest area occupied by one lemming was 4 x 4 meters or 16 sq. meters. The largest lemming no 510908-5 from approx 5 x 5 meters or 25 square meters. (see photograph 510908-7). Photo 510908-6 of Barrick Eskimo camp, established to collect eider and other ducks as they fly across this part of peninsula. Hundreds of thousands of water fowl fly over at this spot. These flights may have been a factor in the original choice of the old Barrick ploplus. The last 50 mile wind from the north blew down all tents and forced water practically across the sand and gravel peninsula. According to the Eskimos the eider fly directly over Barrick mounds in foggy weather and just about 1 block east when clear. Photo 510908-7 of one of the elevated mounds showing extent of green grass associated with oils of excavation and the grasses used by Lemmus. Area beyond the mounds not used by Lemmus, at least, as evidenced by runway development. I believe lemming spend entire existence on these maunds. It would be interesting to live trap these mounds and determine the extent of movement beyond the limits of the mound and particularly communication between lemming of various mounds. Photo 510908-8 of an excavated mound of well developed grasses from oil which have flowed from mound on to tundra as result of organic remain became unthawed and oil liberated. These grasses (Arctophila fulva) supported well established runways of lemming. These trails did not extend beyond confines of high grasses. There is another factor which might explain lemming on these mounds, which is the elevation of these mounds above the influence of periodic inundation or supersaturation of the ground. High grasses is the more likely explanation. The yellowish brown grasses in foreground do not have lemming trails. The grasses supplied by oils have retained their chlorophyll long beyond the time the other tundra grasses have undergone the seasonal changes of green to yellow to brown. Fluctuation in numbers of lemming may be caused by overpopulation in winter when snow allows lemming to go beyond areas of overhead protection and then when snow leaves ground in spring the retraction