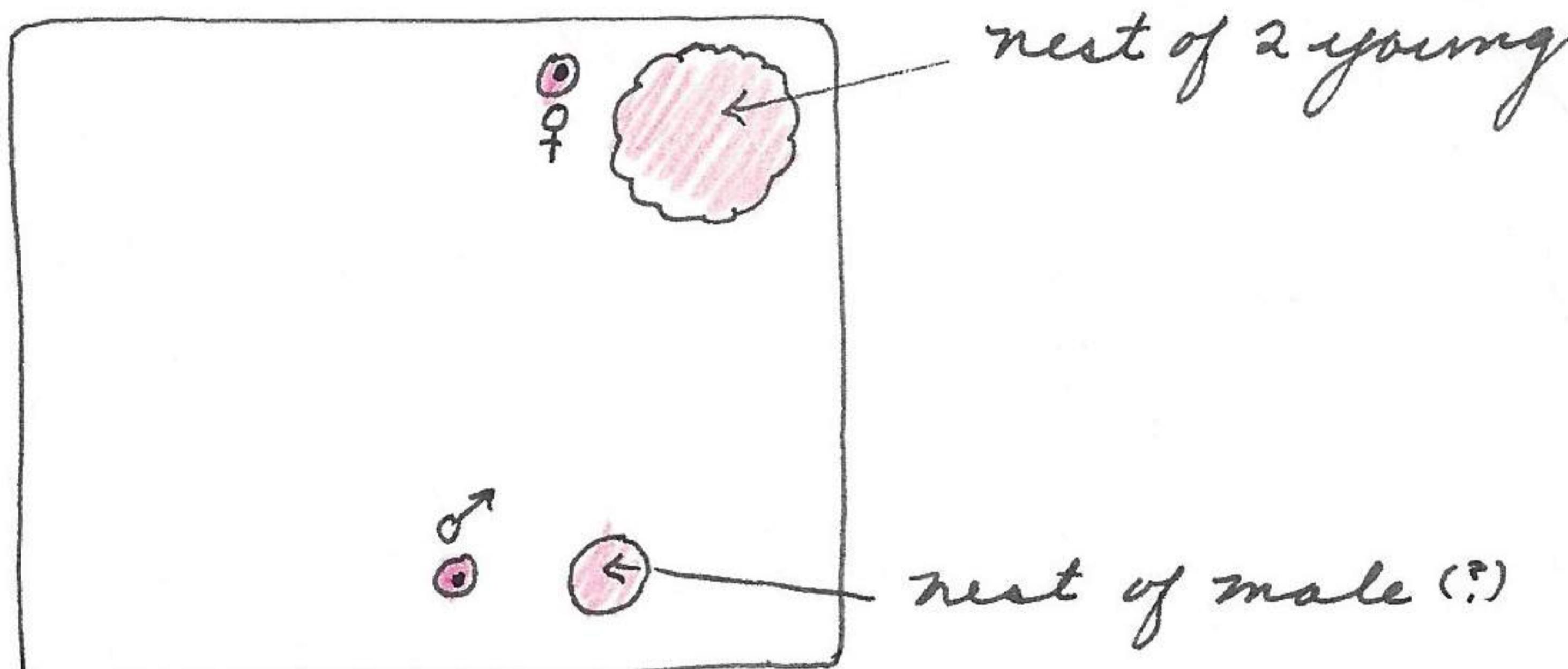


This morning collected 14 Lemmus and 1 Sorex cinereus from tundra about 200 feet south of Arctic Research Lake. Sorex no 520909-1 from tundra (*Arctophila fulva* dominant and only grass) about 30 feet from where the camp (A.R.L.) is located on pure gravel. The Sorex is fast when attempting to escape. Collected approx. 200 mm from a Lemmus runway. Lemmus common in area. Lemmus 520909-2 and 520909-3, young, from dry grass nest of about $1\frac{3}{4}$ gal. capacity under composition board. The ♀ 520909-4 was at nest. The male 520909-12 was 5 feet away near a nest of green *Arctophila* stems and nest not large but frail looking as if used as a resting nest.

The wood board



was a 5x5 composition board with 5 inch sides (double layer of board). All specimens in collection. A ♂ lemming 37 gms wt. was a

solitary individual and independent of family group. Lemmus family of 4, 520909-6 to 520909-9 from well insulated group nest with diameter of 12 x 12 inches without lining of grass. The young instinctively defend themselves. Umbilical scars present but eyes not open; mammae noticeable in ♀♀ but not in ♂♂. Lemmus 520909-10 ♀ of a family of 4. These were together with nest just large enough to accommodate the 4. Observed 5 other such age groups and always together (in groups of 3-4-3-4-4-3). There were many exceptions, however, in which smaller ones were found alone. As the animals attain red backs they leave family groups and are alone. Lemmus 520909-11, 520909-12, 520909-13 520909-14, 520909-15 and 520909-5 of general collection. Lemmus 520909-16 donated by Daniel Thompson. This animal was placed in a 2 x 4 enclosure with floor covered with 40 species of plants in sod form. The lemming had eaten all food except 1 or 2 lichen and a notable exception in *Cassiope tetragona*. Some mosses and all grasses were eaten. At 11 days it starved, made into skin. Autopsy revealed 12 pellets in lower digestive system. Largest interval between pellets 100 mm, closest 3 mm. Most of alimentary system appeared to be filled. It is evident that the crash in Lemming numbers is not due to lack of food as this animal had eaten all vegetation down to roots which never occurs in nature. Posterior body 3 mm above tail and about 8 mm in diameter