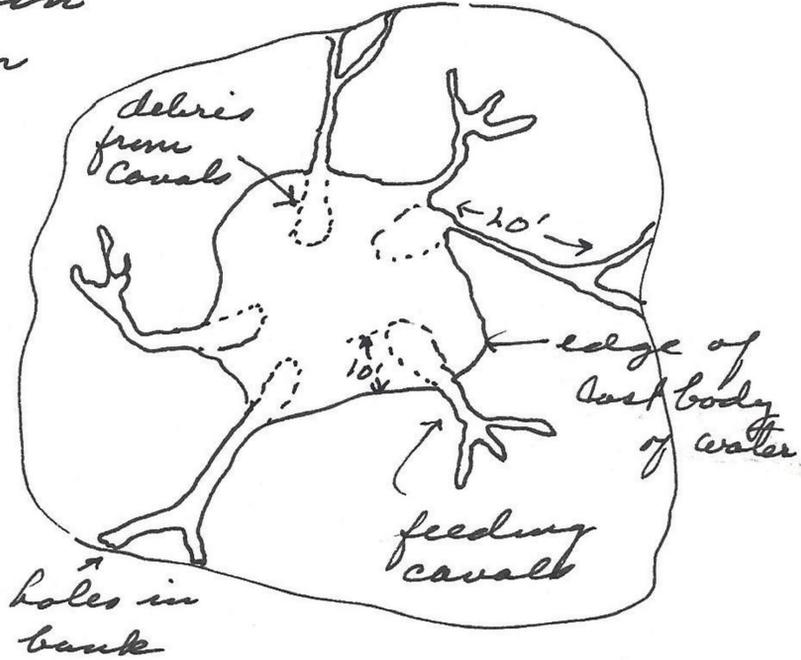


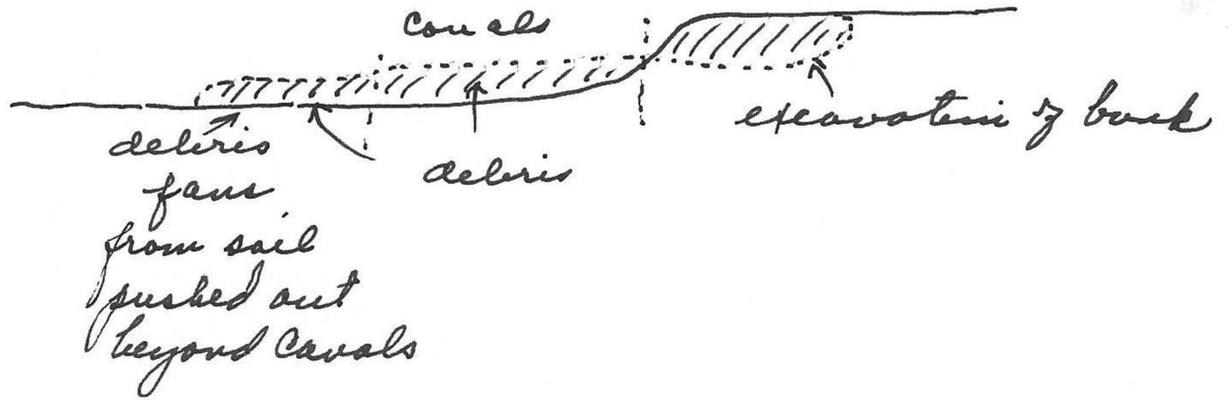
Sandpits, NE Lawrence, Douglas Co., Kansas

Nov. 11, 1966

Checked area between 4 and 6 P.M. Water low and broad flats between vegetation and dwindling water in ponds. Noted the following birds: 1 golden plover, 5 killdeer, 8 tree sparrows, 3 wilson snipes, 2 meadowlarks and 2 muskrats. Flocks of red-wing blackbirds passed at about sundown, some were startling and would estimate 2,000 blackbirds in all. Two ducks (sp?) arrived 20 min after sundown. The muskrats are active at sundown. In ponds that have dried one can determine the extent of reaction between the muskrat and the floor of the pond. There is a decided accumulation and rearrangement of the floor of the pond. Canals are maintained from the bank holes or feeding areas to the center or deeper parts of the lake and as the lake dries these canals and debris accumulations are shifted about and reworked.



I would estimate that 7/10 or more of the sediment in the ponds, especially around the edges, has been produced by the activity of muskrats. These animals contribute more to sedimentation of ponds than any other natural force and, in addition move progressively the bank of the pond landward.



Kansas River (Lawrence to De Soto), Douglas Co., Leavenworth Co., and Johnson Co., Kansas

Nov. 12, 1966

Son James Robert and I made canoe trip from Lawrence bridge to De Soto bridge on the Kansas River, leaving at 9:30 A.M. with day clear (no clouds), no wind, air temp 41°, water temp in shade of canoe (2 inches deep) 40°F. Forecast for clear warm day. At base of dam noted 4 killdeer and approx 400 pigeons on rock island below dam. It is planned to keep a complete record of ^{all large} birds and mammals in river channel, ^{and elsewhere} and general