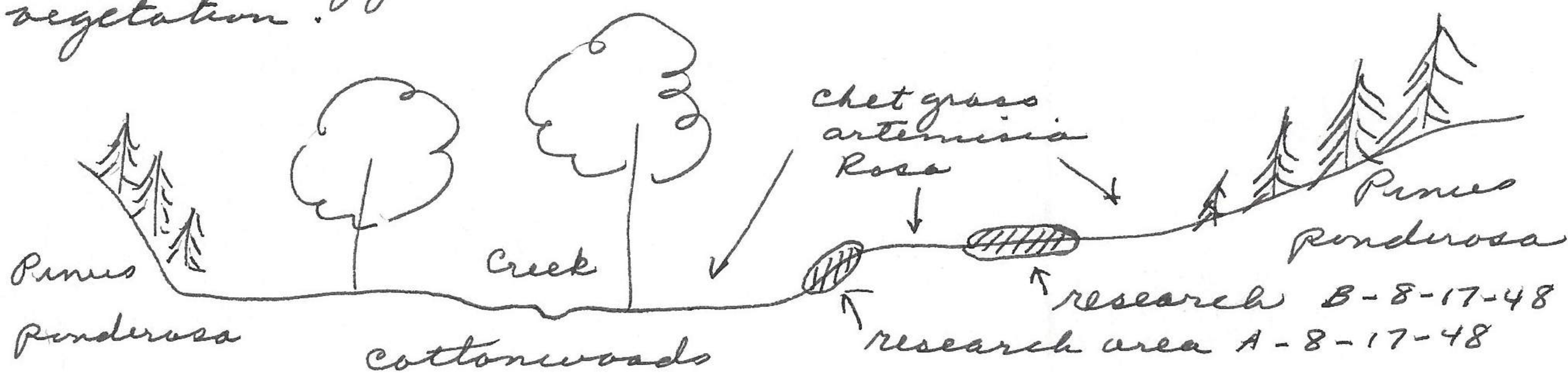


Grasses associated with *Microtus pennsylvanicus* and immediately adjacent to *Microtus ochrogaster* with some runways penetrating are:

16(1)-8-17-48

16(2)-8-17-48

Returned to base camp. In evening set traps at camp at 4 1/2 mi. W and 1 mi. S Buffalo, 5420 ft. Research area A-8-17-48 in *Microtus ochrogaster* runways in a restricted area of 20 x 30 ft from the bank of the eroded benchland of gravel and poorly developed soils and vegetation.



Area in successional stage of development and very xeric. Presence of *Microtus ochrogaster* suggests new invasion into area and occupying the unused niche. *Microtus pennsylvanicus longicaudus* only other microtine in area and not in competition with *ochrogaster*. It is interesting that there is so few *M. ochrogaster* in these areas and that they are using such dry areas of sparse vegetation. In Kansas (eastern) they are more commonly found in grasses and sedges in damp situations. This condition in Kansas, however, may be the result of overgrazing and cultivation of native grass and the forcing of the vole into wet areas that support overhead protection. Also established research area B-8-17-48 in same area but on flatter section of benchland which was dry and dominated by rose in large patches with *artemisia* subdominant. Chet grass, blue grass of coarse consistency. Traps 11-60 10 feet apart. From here went to 5 1/2 mi. W and 1 1/2 mi. S Buffalo, 5520 ft and established research area C-8-17-48 at edge of creek in canyon floor. Water level stabilized by artificial ponds. Sedges and grasses among riverside growth of cottonwoods, gooseberry, chokeberry, rose and willows. *Cactar canadensis* in ponds and cutting trees. All traps (58) placed on island of above types of