

systems. It is interesting to note that in <sup>the thrust or</sup> displacement, the worm trails or burrows were between the displaced edges but in no instance above the variegated mud-sand zone. Temp along cliffs 62°F and 3 degrees warmer than elsewhere. At a point approx 1/10 mi up stream from end of cliff at high cottonwood trees, found a <sup>shells 67412-1a (front) 67112-1b (back)</sup> Leptodea in black muds 2 feet above water. About 8 feet <sup>67112-1</sup> of the same kind of muds & sands above the shell. This series makes perpendicular cliffs to water edge. Left 2:45. Beaver trail up steep cliff to corn field (no trees in area). 3:02 at big log jam. 3:15 ♀ + ♂ greenwing along edge of river among willow partially obscuring beach. They were loathe to leave and swam down river under protection of willows. 3:23 at bend & across from arched R.R. bridge. ♂ & ♀ mallard resting on log in river. 3:52 good beaver house. 4:00 mouth creek from left and approaching R.R. tracks at bend. 4:08 passing by old pilings (metal). 4:22 song sparrow? left edge of water and flew up a beaver runway up slope. 4:25 3 killdeer. 4:32 greater yellowlegs feeding with killdeer. 4:45 sunflower water gate. Artificial barrier of \*--\*--\* effective in trapping tree trunks & roots but not sands. 4:53 2 kingfishers acting exactly like those witnessed today at 2:20. Sundown at 5:10 P.M. Arrived De Soto 5:20 P.M. a male ruddy duck fed on a riffle about 100' upstream from bridge. Distance covered approx. 2 1/4 miles in 8 hrs + 35 min

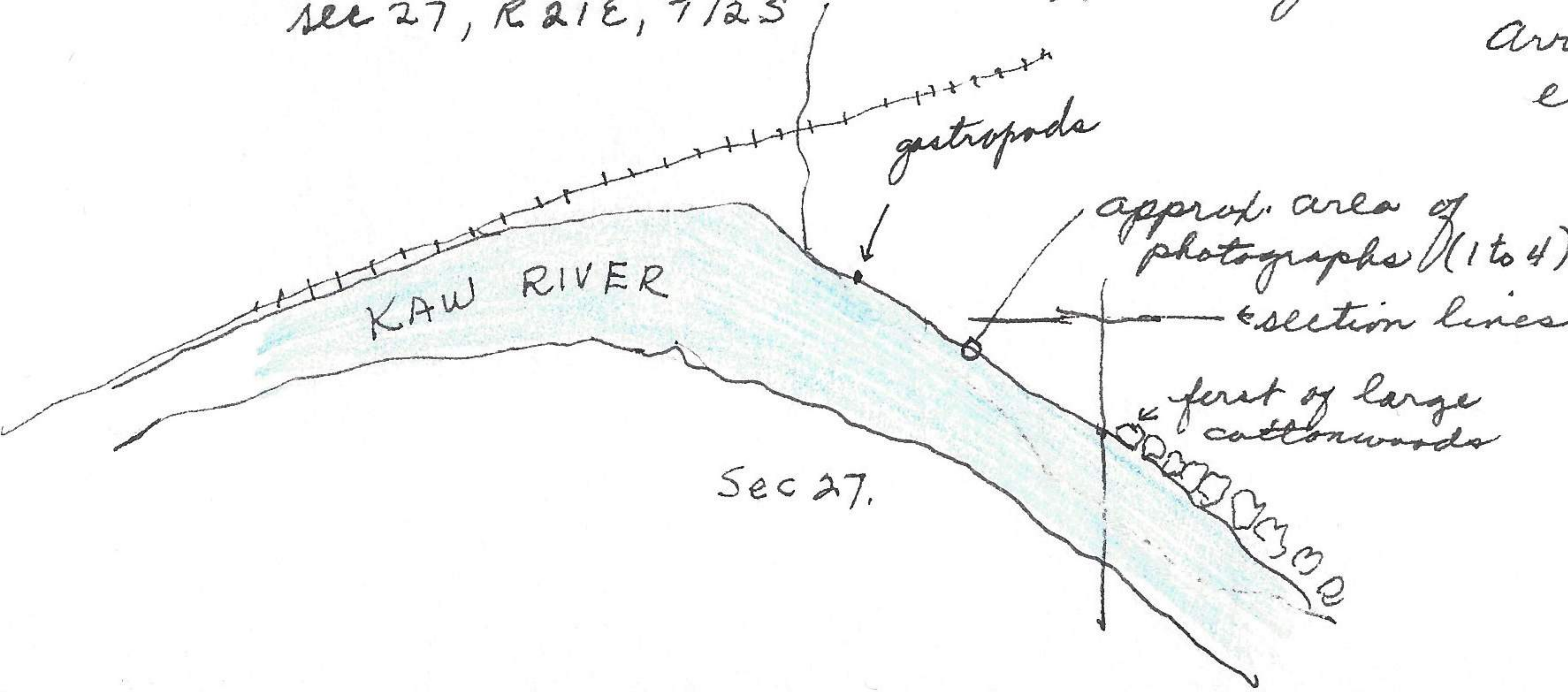
Kaw River, Leavenworth Co., Kansas

Nov. 14, 1967

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Annette P and I made canoe run from first bend beyond Eudora to 2nd N bend <sup>(Stranger Creek)</sup> with the objective of photographing structures within sand cliffs along river at approx NE corner sec 27, R. 21E, T12S

Arrive river 3:20 P.M.  
 end river trip 4:50  
 return to car 6:00  
 return to Stranger Creek 6:20  
 Home by 7:00 P.M.



Length of canoe trip approx 4 miles noted 2 killdeer, 4 mallards, 1 marsh hawk & 2 redtails.