

below falls and reappeared in middle of pool, then circulated to left and returned to edge of falls and disappeared again to reappear and move to right hand circulation of pool to move to edge of falls. Water arriving at edge of falls is forcefully churned into general agitation of water directly below falls. White water to beyond first pool. Counted number of maple seeds passing over falls. They passed by at all points but mainly in center and on a frequency of 16 in first 5 min; 23 in next 5 min. and 12 in third 5 min. Wind perhaps 1 or 2 miles per hour. The only bird to pass thru Percy Channel was a Louisiana waterthrush (at 2:50 and flew upstream). 2 Cardinals flew higher thru area. One group 5 bluejays passed N up old abandon segment of river. The steep sides of the pool below falls prohibits passing of raccoon, or terrestrial mammals. There was no sign of muskrat or beaver concerned with the immediate area. Measurements of Percy on 2 pages back and these can be compared to changes made on future erosion from major flood periods. It is recommended that a fish station should be placed across the Wakarusa to determine movement of different kinds of fish. Left 4:10 P.M. 4:12 fox squirrel. 4:15 cardinal, 2 great crested flycatcher, downy. In this area there is a broad slope from west to east and populated with some rather old and very large trees. 4:25 titmouse. 4:28 a titmouse was calling from top of tree in a modified 3 note call. It called from same stationary position without even turning body for a period of at least 5 minutes. Movement below this bird did not distract it. 4:30 turkey vulture. 4:32 base hell and now on trail. 4:33 Swanson thrush engaging with characteristic ascending call. 2 bluejays. male ~~titmouse~~ <sup>summer</sup> tanager gave three calls. 4:38 main drainage, cardinal, deer tracks moving E. 4:40 rocky pt. 4:43 cardinal, 3 bluejays. 4:46 crossing log jam. Large stump with center splinter on W side. Northern waterthrush here. Continued to field, thence along an elevated and abandoned drainage system of Elk Creek, thence to car, arriving 5:10 P.M. Left at mileage 60.8. passing by bridge at 61.2, cardinal. 61.5 lark sparrow. 62.0 8 Harris sparrows. 62.1 now along Wakarusa, cardinal. 62.13 now E, savanna sparrow. 62.5 horned lark. 62.7 small bridge, cardinal. Valley slope to S in good native grass and apparently being rotated with heavily grazed slope to east. 63.0 horned lark.