

to E; cardinal; at beginning of heavy timber between  
 Wakarusa River and hill, examined marsh grass among  
 trees; this area may support *Synaptomyza* or *Petymys*; main  
 trail heavily used by raccoons; 12:37 cardinal singing;  
 hairy woodpecker; 12:40 3 juncos (state colored); 3 titmice;  
 2 cardinals; 5 tree sparrows & 2 golden crowned kinglets;  
 12:43 2 cardinals; 8 juncos; 12:45 cardinal singing; flicker  
 calling; 4 juncos; 12:47 cardinal calling; 12:48 red-bellied  
 woodpecker; 12:50 3 blue jays, one of which called like  
 a red-tailed hawk; 2 cardinals; 7 juncos; 12:54 2  
 cardinals, 2 blue jay, 1 red bellied woodpecker; since  
 entering the timber along base of hill (from last pond) have  
 counted 12 runways of either or both the woodrat or  
 more likely the cottontail rabbit crossing the trail  
 at right angles or going from sidehill to Wakarusa River;  
 2 jays, 1 yellowthroated flicker; Coyote tracks in trail  
 unusually rare, predominantly raccoon; trails wet and  
 muddy but on a base of frozen soil beneath; the dry  
 leaves have come thru winter much in the same  
 condition as in fall, having had no compacting snow  
 to flatten them out. 12:57 beginning of old clearing  
 nearing mouth of canyon; area growing into shrubs and  
 small trees; 3 juncos; ~~12:00~~ 1:00 P.M. 2 song  
 sparrows; 1:05 mouth of canyon and crossing meander-  
 ing stream, water flowing and no ice. no snow in  
 any exposure; 8 Harris sparrow and 12 juncos here; 2  
 downy woodpeckers, 5 black capped chickadees; Wakarusa  
 River 95% open with occasional ice mass across water;  
 4 juncos, 3 chickadees; 1:12 20 tree sparrows; 10 tree  
 sparrow; 4 juncos, 4 chickadees; 1 red-bellied wood-  
 pecker, 3 titmice; 1:15 crossing mouth second creek;  
 water flowing and some ice; 4 juncos, 2 titmice, 4  
 chickadees; 1:20 3 chickadees; 1 downy woodpecker;  
 1:23 25 juncos; 1:27 first spring area along trail; near  
 beginning of ridge; 1:28 first rabbit; 8 juncos; second  
 damp area along trail; 1:30 2 cardinals; 8 chickadees;  
 1 cardinal; 1:31 four titmice; 3 chickadees; 1 cardinal;  
 1:33 mouth of canyon & trail now to left; checked *Synaptomyza*  
<sup>bog</sup> ~~moat~~ here and found no good evidence of microtines as  
 cattle had trampled grasses & sedges. very little overhead  
 protection, considerable sphagnum moss in bog area of