

to fall. ^{there is} no sign of autumn except the dry grasses that are mixed in among the artemisia and Symphoricarpos and certain brown patches of low brush or weed on east side of mahogany ridge. The east side of mahogany ridge has Abies concolor and probably Pseudotsuga on the upper half of exposure. Aspen, mahogany and oak are found on top while below line of conifers is found brush down to canyon floor where the aspen again become dominant. On several horizontal shelves are small patches of aspen. While watching from this point observed an *Catherpes umbrinus* in top of oak tree only a short distance away. It was in upper most branch and called vigorously. At every sharp call the tail flipped over back with a quick jerk. When these umbrinus are approached they leave tree and scurry up through brush.

8:25 Six Green-tail Towhees in loose flock working along side hill. up to this point have not seen any evidence of *Citellus armatus* while on the trip of 5/21/38 recorded many *Citellus* from these open flats.

8:26 Three Grey-headed Junco, 2 G-Tail Towhee and 4 Chipping Sparrow. Have not been able to record all birds nor recognize many of the varied calls heard.

Flock of Pine siskin flew by. ^{Flutter calling}
8:27 Four siskin flew by. Three G.H. James flew from aspen to aspen calling continuously. Two sets of fresh deer tracks in trail and probably made sometime this morning.

8:31 Run into flock of about 1,500 Pine siskin among the aspen covered hillside in terminal moraine area. One flock of 600 was chasing a red-tail hawk that was flying above the resting area of siskin. This flock did not appear to actually attack the circling hawk but ~~followed~~ followed it in its spiral ascent. Whirling & circling in mass formation they followed it until out of range where upon they all left simultaneously and returned to chatter with other members of one larger flock in aspen. The area covered by these siskin was about one acre in extent with the tree top literally leaved with them. The most favorite places were the tall dead aspen where flocks of 50 or a hundred would gather and register their social calls. To preen their feathers or chase each other appeared to be their favorite pastime. There was always considerable movement among the flock and the most apparent feature was the continuous chatter produced by the thousands of calls. Practically all birds conformed to upper green branches of aspen trees. Their calls were two in numbers; one a drawn out call while the other a drawn normal siskin chirp. Near this area was a