

to left, 5 to right and calling almost constantly and chasing of one bird by another. Pairs are participating in special behaviours. On some trips killdeer seldom call. 11:25 passing over log barrier parallel with river and water dropping 5 inches. Kingfisher. Temp inside canoe in sun 65°F. 11:30 2 killdeer to left. Beaver activity & paths on bank to left. Considerable fish activity. 11:36 5 killdeer to right. Ring-billed gull bathing. <sup>One dead one (first year) measured 17 1/2 inches total length.</sup> Temp in sun on cloth surface 80°F. Air in shade 56°F. 11:48 5 killdeers to right. These birds occur all along the way but are in groups. 11:52 2 killdeers to left. 11:57 5 killdeers to right. 2 to left. 1 pair of killdeers performing by expanding tails and tilting bodies either up or down, then assuming feeding but still concerned with each other at 10-12 inches, and calling. 12:02 18 killdeers generally distributed. 19 pigeons alighted on sands and in 3 minutes had dispersed to 30 or so feet separations. 3 crows arrived and joined pigeons. Few white clouds to N. Now light breeze from E. 12:10 4 killdeers to right. Canoe now on N side of river. Song sparrow singing and 18 slate-colored juncos. Carp sucking on foam on lee of log jam. 12:17 6 killdeer to right. 12:20 first large cottonwoods to left across from a high point of hill (S side). Black and predominant yellow wasps on S exposure of bank. They are searching holes in bank and are about every yard. 12:24 4 killdeers to right, 3 crows flying up river. Single cricket frog calling, and only one heard so far. 12:30 10 killdeers to left, and characterized by calling and chasing one another at edge of sands at water edge. One seldom sees them on dry sands removed from water. 12:32 Kingfisher left perch, flew 30' down stream and then returned and allowed canoe to pass within 20'. Ordinarily they are not so confiding. Can hear blue jays and a red-headed woodpecker on bank. First butterfly <sup>flying</sup> across river. 12:38 2 killdeers to left. The large climax type cottonwoods along river here are 80% in leaves, and dominantly yellow with seldom a green color. 12 killdeers to right. Not all exposures of sand (S exposures) are used by wasps. 12:50 5 killdeers to right. Snapping turtle 10" carapace on stump and is weary. Back exposed to sun. 12:55 Now river now leaving hill on S side river. Wind from E and slight.