

blowing from NW and may represent a channeling effect. 10:04 recent beaver cutting ^{willows} and activity on S side river. 10:06 Perate or Short Cut channel. Water in river 3' below channel bed. Temp 38°F. 10:11 across from Mud Creek. On concave side of river 300' beyond Mud Creek are 3 large cottonwood trees cut by beaver, one of which is downed and in water. 10:15 now at end of curve and trending SE. 4 fish surface - ing in water. Group 7 goldfinch and downy woodpecker. 10:30 Temp 40°F. 3 killdeers to right and recent beaver activity on island. 10:42 2 killdeers. 8 more flew up river. 10:45 approx 1500 redwings ^{flying} to S. Mass of birds does not undulate but individual birds do. 10:52 greater yellow legs. 10:00 leaving curve at high point of bank. Oaks on ridge to north mainly colored, some green, some yellowish-green, some golden and some brown. Temp now to 38°F. Conspicuous of cottonwoods where exposed to winds are free of leaves, the willows below still maintain greenish leaves. 11:08 tree island to left now with drawages becoming more separated. No nests of bank swallows where present last year. Kingfisher 11:15 beginning of large grove of cottonwood with 95% leaves of pop trees. 11:18 end of trees and beginning of ear barriers. 11:19 approx. 375 nests of bank swallows just before rock barrier. First indication of increase in height from W with low clouds moving E. Other clouds above excluding sun. Killdeer to left. Flock approx 75 redwing flying to S. Considerable sand on left side of river. 11:48 Temp 44°F. 11:38 Euclora bridge. Sands in different places than usual. Open area of low clouds now closing in from other low clouds from NW. 12:00 mouth Waharusa River. Kingfisher left mouth and flew N across river (Kaw), hovering twice enroute. 12:23 large cottonwood on right now down but junipers still on bank. There are no bank swallow nests on entire curve of the bend since Waharusa. 11:27 beginning of forested area on right. Sands in river beyond as usual but log jam now removed. Waves with occasional white-caps. 12:34 now on left side of river on lee side. Kingfisher. 5 crows feeding in sandbar to right. 2 cardinals in brush to