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12:09 3 wooducks left river and called on leaving. They flew down river for about 100' and then angled almost 45° to fly out of river channel and above tree tops by at least 50'. 12:13 3 more wooducks. More leaves in lower reaches of the Wakarusa and occur from bank to bank except where wind entrals channel. Leaves about 40 per sq. yard. 12:16 3 chickadees. 12:20 2 chickadees. 12:22 Eudora bridge N of village water level about 1 foot below old bridge piling and piling cracked perpendicularly with age. A butterfly flew across the river and was larger than a white or yellow cabbage butterfly and was color with the same shade of green as the luna moth. This same kind of butterfly was noted on the Kaw yesterday. 12:30 drainage to right and entrance of sewer from Eudora. Detergent soap bubbles flowing up stream from wind blowing up river. Great horned owl, 2 bluejays & redbellied woodpecker in area. Beaver cutting trees 8" in diameter. 12:35 2 yellow-shafted flickers. 12:36 beaver house on bank to left. 12:37 red-bellied woodpecker, fox squirrel. 12:40 Carolina wren singing. Great blue heron flew from right side of bank to left directly across river and alighted in small tree 8' above water and after 10 seconds flew down river into the Kaw River. At mouth of Wakarusa took temp 100' up channel of Wakarusa as 45°F. Arrived Kaw 12:47. Temp of Kaw just beyond mouth of Wakarusa 50°F or 5° difference between the two rivers. Air temp 68°F. Wind blown clouds now in sky and are 20° covering. Sky blue. End of complete riparian census. From here will keep census of waterbirds and birds associated with river and sandbars. Just below convergence of Wakarusa and Kaw, noted a small natrix (15" long) with tail in water and body on damp clay at edge of river. Action torpid. Crow left sandbar. 1:16 old tree now in water. Great blue heron left from here. Continued slowly along lone curve of bank to beginning of large trees. Water now mainly on left side of channel. From here (1:56) counted 172 killdeers and 3 semipalmated plovers, feeding on broad, damp to muddy flat associated with sand bar. These birds were within an area of 200 x 300 feet, and acted as one large group. These are the first killdeer since leaving mouth of Wakarusa River. 2:05 marsh hawk