

Water temp 60°F, air 72°F. 2:33 passing under utility line. Kingfisher, 2 large Carp surfaced, jumping completely out of water. There has been an unusual amount of Carp activity compared to practically no activity Nov. 12. Grad wind at our backs. 2:35 small drainage bridge for railway. 2:40 leaving RR and now to SE; redtail, good swallow cliffs. 2:44 drainage from N. 2:53 redtail hawk (rock pile in middle of river. 3:06 ten minute rest, left 3:16. 3:21 stream to right. A single redwing blackbird in shrubs at edge of river, the second one noted today. 3:23 R.R. bridge along side of river. 3:39 east bend & now to N. Wind from SW. 3:45 2 redtail hawks. 3:48 2 more red-tail hawks. All hawks circling. There is considerable character to the surface of the water. With high winds the waves are present over deep water but end where shallow water crosses sand bars, although with out wind the water appears to be the same. Under windless conditions the edge of submerged sand bars are identified by a surface line of disturbed surface with agitated waters beyond. 3:48 2 crows near redtails. 3:53 Mouth creek. 3:57 Contact with RR slope at bend of river. 2 Kingfishers. Temp 67°F, water 60°F. The water temp is unusually high for this time of year. 4:05 redtail hawk and Kingfisher. Live hornet flew by, white cabbage butterfly in water. Sun now obscured by overcast clouds moving in from W. Wind almost simultaneously decreased. At 4:15 air temp 64°F. 4:23 a Kingfisher caught a fish 1 foot from bank. 4:30 Sun-flower Ordance intake gates. 2 sparrow hawks concerned with eaves of the building. 4:36 good beaver house on bank on N side river. Redtail hawk circling. 4:52 Kingfisher. Arrived De Soto 4:55. Kingfisher at bridge. Temp 68°F and water still 60°F even though sun behind clouds. The usual birds noted in riparian growth including Harris sparrows, slate-colored juncos, song sparrows, cardinals, blue jays, gold-finches, Eng sparrows, yellow throated flickers, black capped chickadees, tree sparrows. Remained at bridge until late twilight 6:00 PM and did not see any activity on water below. D.H. Owl called E of bridge at 5:45 P.M. Summary of large birds:

American merganser 1-1
 Kingfisher 1-2-1-1-1-1-2-1-1-1-1
 sparrow hawk 2
 red-tail hawk 1-1-1-1-2-2-1-1
 crows . 2

pelicans 2
 great horned owl 1-4
 great blue heron 2-4
 hooded merganser 1-
 Franklin gull 1
 killdeer 1-1
 lesser yellowlegs 1
 bald eagle 1
 greater yellowlegs 1

