

me to pass within 10'. 2 cardinals, Carolina wren calling. Phoebe. Injured mallard left water for down stream. It will swim ahead until approached within approx 100'. 2 redbellied woodpeckers, 6 crows. 6:10 great horned owl left, followed by the 6 crows above. Redbellied woodpecker, cardinal, 2 robins. 6:18 drainage left (1 gal per 2 seconds). Song sparrow, 2 cardinals, 2 redbellied woodpeckers, muskrat, 2 beavers left from debris on edge of water (both large adults), 16 slate colored juncos, 32 redwing blackbirds, 2 blue jays. 6:25 injured mallard left water for down stream. A great horned owl foraging. 2 redbellied woodpeckers. 6:30 Arrived Half Mound bridge (approx. 4 1/2 miles from Arrington.) 6 robins, Eng. sparrows (5), 4 chickadees, flicker, 3 cardinals, 3 crows, redtail. 6:40 great horned owl, 6:42 18 ♂ redwing blackbirds. 3 crows. 6:45 Cardinal. 6:48 3 bluejays, 2 cardinals. 6:52⁽²⁾ redbellied woodpeckers, 8 slate-colored juncos. 6:56 2 cardinals. 7:00 arrived Camp at approx. 1 1/10 mi ^{directly} S of Half mound. at a point 890 ft S of the NW corner of sec 2, T8S, R17E. Pulled canoe up to top of bank and organized for the night. Used half sphere rings on canoe for support of plastic. This arrangement is perfect for camping - stable, easily installed, rain proof, good visibility thru plastic for both observation and in letting in light. Wood stove on outside of canoe provided heat for canoe tent. In late evening before rain noted a great horned owl foraging on S side of river.

Delaware River, 1 1/10 mi. S Half mound, Jefferson Co., Kansas

April 24, 1969

Rained sporadically all night with dark clouds and cloud fronts passing thru area. Camp shelter accommodation as near perfect as any tent used. At 3:00 A.M. a flock of geese (probably blues & snows) flew N and called. At 6:00 A.M. a flock of 320 flew N. They were in long V formations and flying fast. I would estimate the composition was 60% blue and 40% snow. Photos 690404-1 and 690404-2 of canoe and shelter. Left camp at 8:00 A.M. Cardinal first to call this A.M. Other birds at camp were, chickadees 6, redtail 1, great horned owl 1, 2 redbellied woodpeckers and 1 titmouse. Was surprised that with all of the rain last night, the river rose only about 1 inch. 8:08 bend with shale outcropping. There is a zone of rocks directly above this shale and silt and sands above this layer. Some rather interesting nodules of hard shale are in clay below the shale. Water from