


4:22 8 mallard to E over dam. measured dead shad 70 stand. length. Water 39°F, air 68°F at 4:30. Water moving N along shore in fracture leads at 1/2 foot every 6 sec.
 4:44 60 mallards to E. 4:46 18 mallards to E. 4:47 14 mallards to E. 4:48 2 mallards to E. Of the 2000 ducks in lake when first observed on survey, only about 20 ducks and 45 Canadian geese remain. Coyote track in mud measured 75 x 48, 83 x 50; another set 70 x 44, 80 x 52 rear and front respectively. Another mink skat at 24 measured 14 greatest width, ^(dia) 190 mm total length.
 5:05 gulls calling. at sta 1 & another mink scat 10* dia + 150 mm length.  block
 no deer tracks. Its peculiar that mud forms from otherwise rock environment. From my position at sta. 1 at 5:32 P.M. notice geese left center lake and flew E over dam gradually organizing formation. Sun about 1/2 before setting. Ducks generally leave around sundown but today started early and left gradually throughout afternoon. Car 5:40 P.M.

Bonner Springs, Kaw River, Wyandotte Co., Kansas

Feb. 18, 1981

Checked sand bar 1/10 mi. E Bonner ^{Spring} highway bridge, S side. more rocks here than in Lawrence area which is almost all sand and small gravel. Great Horned owl left from under bridge and flew N across river to alight in tree. Considerable noise on this bridge. Beaver tracks common and 4 places where they had left river, moved across sands to bank and returned. 21 other tracks on and off sands to 10' from water where there was considerable track imprints localized at put-in and take out. 8 dead shad, one 6 inches long. Collected:

810218-1 Fat (flint) scraper. may be early man. 72.1 mm greatest width

810218-2 Tarsal or metatarsal bone. 48 mm g.w.

810218-3 Productus fossil. 64.3 mm greatest width

402 Yorkshire Dr., Lawrence, Kansas

Feb. 20, 1981

There have been approx 6 pairs of Eng. sparrows males + females in pairs and 1 pair of starling competing for a nesting place in an 8 chambered martin house. I have not noticed any courtship among the species but today the starling have been singing or chattering. Cardinals have been singing the last week but especially the last 2 days.