

areas by the flooding water, made the following observations along the route:

- Phoebe nest of 3 fresh eggs under Hasbell bridge.
- Purple martin: 2 birds
- Song sparrow. 8 individuals in fresh pile.
- Titmouse: female vibrating wings in presence of male.
- Myrtle warbler: ♂ + ♀.
- Warbling vireo: one individual and associated with the titmouse. Heard several others singing.
- Redbellied woodpecker. 4 called.
- Cardinal: 5 birds
- Blue wing teal: in flooded fields on S side river. One group of 8 females only.

striped skunk and cat (feral) at old refuge pile of Hasbell. The skunk slowly and systematically search area among rocks, metal containers and general refuse.

Thomomys: along water line and except of Rana pipiens was the only animal effected by rising waters. It immediately turn toward the water.

Peromyscus. ♀ and 5 young (see opposite page for measurement)  
 Made the following photographs of river;

- 690427-1 from Hasbell bridge to NE.
- 690427-2 showing flooded field to S.
- 690427-3 skunk at Hasbell Institute Refuge area. Wakarusa (rejected) beyond.
- 690427-4 upright elm and vine (320 mm circum vine)
- 690427-5 tree silhouette with Wakarusa in background
- 690427-6 " " " " " "
- 690427-7 convergence or divergence two channels of Wakarusa.
- 690427-8

Water raised 3 inches in 1 1/2 hr. Water in drainage channel (gates) in Hasbell bottoms about 4 1/2 lower than Wakarusa. Flooding of Hasbell Bottoms mainly from surface waters. Water on road at E end of county road.

Kaw River, Lawrence, Douglas Co., Kansas  
 April 27, 1969

Photo 690427-20 photo at bridge. Island inundated except top of small willow. The higher the river, the less turbulence below the dam. Logs generally reappear 20'-30' beyond first turbulence and would then move toward (counterflow current) to dam and again disappear.