

## DISTRIBUTION AND ABUNDANCE OF THE MISSISSIPPI KITE IN THE TEXAS PANHANDLE

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Although the occurrence of the Mississippi Kite (*Ictinia mississippiensis*) in the Texas Panhandle has been reported from time to time, no systematic attempt has been made, to our knowledge, to describe its recent distribution there. Strecker (1910) noted its occurrence near the head of Rush Creek, Armstrong County, and stated that eggs were taken in Palo Duro Canyon by J. M. Carroll in 1905. Bent (1937:69) listed Tascosa, Oldham County, and Lipscomb, Lipscomb County, as places of record for the Mississippi Kite. Stevenson (1942:109) reported it from Palo Duro Canyon and cited several other locations attributed to the senior author of this paper.

The kite, as indicated on the map (fig. 29), differs somewhat in its spatial distribution in Texas from that reported by Sutton (1939) in Oklahoma. Here, instead of being rather generally distributed, it is confined almost entirely to wooded river bottoms. Wherever there are groves of tall cottonwoods (*Populus texana*) in the eastern and central Panhandle, one may expect kites. Ranging out from the groves, they course over the adjoining land, but probably seldom range more than a mile. In fact, recorded observations on 169 kites and general observations on many others indicate a radius of territory not greater than one-half mile.

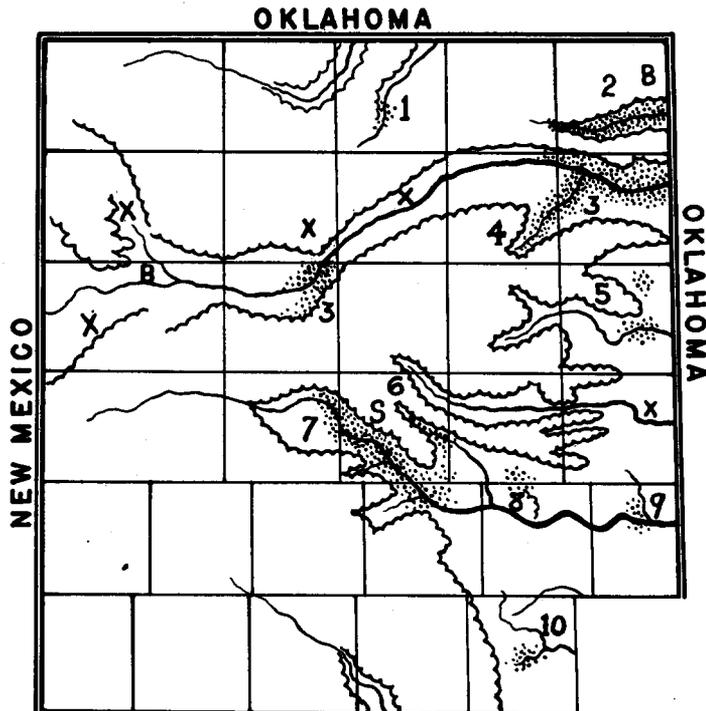


Fig. 29. Distribution of the Mississippi Kite in the Texas Panhandle. Stippling indicates areas where kites have been observed. 1, Palo Duro Creek; 2, Wolf Creek; 3, Canadian River; 4, Red Deer Creek; 5, McClellan Creek; 6, Rush Creek; 7, Palo Duro Canyon; 8, Lelia Lake; 9, Prairie Dog Town Fork of Red River; 10, Pease River; B, recorded by Bent; S, recorded by Strecker; X, counties in which kites may occur.

Ordinarily the habitats on either side of the groves are such as to produce an abundance of insects and reptiles; and here, we presume, the kites find much of their food. Sandhills border the Canadian River and some of its tributaries. These are covered with sage (*Artemisia filifolia*), tall bunch grasses (*Andropogon furcatus*), wild plum (*Prunus angustifolia*), and three-leaf sumac (*Rhus trilobata*), or oak shinners (*Quercus* sp.). Grasshoppers, cicadas and several species of lizards, small snakes and rodents abound in the sandhills. Other localities support a flora of short to middle-height grasses (*Buchloë dactyloides*, *Bouteloua gracilis*, *Sporobolus cryptandrus*). The rocky escarpments usually bordering Mississippi Kite habitat are rich in invertebrate and lower vertebrate forms (fig. 30).



Fig. 30. Typical habitat of the Mississippi Kite in Potter County, Texas.

On June 2, 1938, two nests were found, one of which contained two eggs and a fresh cottonwood twig. This nest was situated in Woodward County, Oklahoma. It was about 40 feet up in a cottonwood. The second nest was found in Ochiltree County, Texas, about two miles west of the Lipscomb County line. The nest could not be reached, for it was on an overhanging limb about 60 feet from the ground in a large cottonwood. A year-old bird, judging from published descriptions of plumage, sat beside this nest, while 4 adults were seen within 200-300 yards. On July 4, 1938, a nest was found in a small cottonwood in Palo Duro Canyon, Armstrong County. This nest was empty. Four kites were seen near by.

Generally, the Mississippi Kite arrives in the Panhandle during the middle to latter part of May. Our earliest recorded date was May 4, 1939, when three were seen in Lipscomb County. Our observations agree with those of Sutton and others that the kites move in small flocks. We often noted them in groups of 3 to 9, and on May 28, 1939, we saw a flock of 23 at the Canadian River bridge, Potter County. Subsequent observations at the same place revealed that most of them had moved on, for we recorded 2, 1, and 3 there on June 3, July 21, and August 1, 1939, respectively. Kites depart late in August and early in September. Our latest fall observation was September 25, 1939, when 3 were seen in Hemphill County.

Mississippi Kites seem to reach their greatest abundance along the Canadian River, principally in Hemphill County. They are abundant also in Ochiltree County along Wolf Creek. Kites are common in Potter, Lipscomb, Armstrong and Briscoe counties. Small numbers were seen in Roberts, Randall, Donley, Motley, Wheeler and Childress counties, while a single bird was seen in Hansford County along Palo Duro Creek (not Palo Duro Canyon). They should be watched for along the Dry Cimarron in Union County and the Canadian River in Quay County, New Mexico—a state from which they have not been reported.

Most of our observations on kites were made as a part of a highway hawk census (Allan and Sime, 1943). A considerable percentage of our travels was outside of Mississippi Kite habitat, but for comparative purposes the data presented in the table show the relation of birds seen to the miles traveled both within their habitat and in all the Panhandle. Under the assumption that the radius of territory is about one-half mile, there is at least one, and probably a pair of kites per 2.0 square miles of suitable habitat in the Panhandle, but in optimum habitat there may be a pair or more to the square mile. We never saw any evidence of antagonism between neighboring pairs and the only pursuit observed consisted apparently of play; it occurred at a long distance from any possible nest site and long after the nesting season.

Year	Relative Abundance of Mississippi Kites, 1939-1941				
	Number seen	Miles <sup>1</sup>	Rate <sup>2</sup>	Total miles <sup>3</sup>	Rate <sup>4</sup>
1939	117	221	1.8	6604	56.4
1940	29	56	1.9	585	20.1
1941	23	66	2.9	1617	70.3
Total	169	343	2.0	8806	52.1

<sup>1</sup> Miles traveled within kite habitat. <sup>2</sup> Miles per bird seen.

<sup>3</sup> Total miles traveled during period (both within and outside of kite habitat). <sup>4</sup> Miles per bird seen in all travel.

Farmers and ranchers with whom we talked designated this kite as a "Blue Hawk," if they recognized the bird at all. None of them considered the Mississippi Kite harmful, and therefore, we presume, they do not shoot it. However, since hawk shooting is a prevalent practice in the Texas Panhandle, this bird undoubtedly receives attention as a target along with the other twelve or more beneficial native falconiform birds.

**Summary.**—The Mississippi Kite (*Ictinia mississippiensis*) occurs rarely or abundantly in at least thirteen counties of the Texas Panhandle and has been reported from one additional county (Oldham). The kite probably occurs in five other counties.

2. It is a bird of wooded river bottoms, principally, seldom ranging more than a half mile from its nesting area.

3. Although a few appear early in May, the majority of kites arrive in the latter part of that month, usually in small flocks. Fall migration probably starts in mid-August and ends in the latter part of September.

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