

maintaining the extensive shallow wetland base required by Pintail breeding in the prairie pothole region.

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Ticks as a factor in the 1975 nesting failure of Texas Brown Pelicans.—Fewer than 100 Brown Pelicans (*Pelecanus occidentalis*) remain on the Texas Coast from a population that once numbered 5000 birds. Only a small proportion of these have nested in recent years and most attempts have not been successful (King et al., Southwest. Nat. 21: in press). Pesticides were responsible for mortality of Louisiana pelicans in 1975 (Winn, Audubon Mag. 77:127–129, 1975), but nest failure in Texas was attributed to natural causes. Seven pairs of Brown Pelicans nested on a low-lying island near Aransas National Wildlife Refuge in April, but all deserted their nests before the eggs hatched. The cause of desertion was either storm tides that nearly inundated the island, or more likely, an infestation of nest parasites. A later nesting attempt at Pelican Island in Corpus Christi Bay ultimately produced 9 young.

Adults were first seen building nests near Aransas Refuge on 14 April. On 24 April, 6 nests containing 16 eggs were still active. A 7th had failed, probably due to wave action that partially buried the nest and its single egg. Eight days later, all nests were found deserted. When the eggs were collected on 7 May, an unusually heavy infestation of ticks was noted in and around the nests. On 25 May, 3 nests were collected which yielded a total of 2389 adult and nymphal ticks. Many thousand larvae were also present.

All ticks were identified as *Ornithodoros capensis* by personnel of Naval Medical Research Unit-3 (NAMRU-3) Cairo, Egypt, and United States Public Health Service, Rocky Mountain Laboratory, Hamilton, Montana. *O. capensis* is a common argasid tick infesting many species of aquatic birds in tropical, subtropical, and south temperate climates (Kohls et al., Ann. Entomol. Soc. Am. 58:331–364, 1965; Hoogstraal, in Viruses and Invertebrates, A. J. Gibbs (ed.), American Elsevier Publishing Co. Inc., New York, 1973; Hoogstraal et al., J. Med. Entomol. 12:703–704, 1976). Although *O. capensis* is found in many areas of the Old World, its occurrence in continental United States has been reported only once. Twelve specimens were taken from a Roseate Spoonbill (*Ajaia ajaja*) collected on an unnamed island off the coast of Texas in 1940 (Kohls et al., op. cit.). Closely related specimens in the *O. capensis* group, but not true *O. capensis*, have been recorded in Oregon (Clifford et al., J. Med. Entomol. 7:438–445, 1970), California (Radovsky et al., J. Parasitol. 53:890–892, 1967), and Florida (Kohls et al., Ann. Entomol. Soc. Am. 58:331–364, 1965).

Infestations of *O. capensis* have caused nest desertion and perhaps the death of nestlings through the transmission of a lethal arbovirus in some sea-bird colonies. Converse et al., (Am. J. Trop. Med. Hyg. 24:1010–1018, 1975) and Feare (Ibis 118:112–115, 1976) documented the abandonment of 5000 Sooty Tern (*Sterna fuscata*) nests containing eggs and young in a colony of 400,000 pairs on Bird Island in the Seychelles. They found numerous ticks in the deserted portion of the colony but few or none in adjacent areas where reproduction was normal. Not only did the ticks cause desertion, they remained so abundant the following year that the terns did not reoccupy the area. Marshall (Wilson Bull. 54:25–31, 1942) reported nest abandonment of incubating Common Terns (*Sterna*

hirundo) at night and their return to the sites during the day. The cause of night desertion was not identified but it may have been related to a heavy infestation of ticks such as *O. capensis*.

A Soldado-like virus was isolated from our Texas tick samples sent to Rocky Mountain Laboratory. When *O. capensis* ticks collected from sick Sooty Terns on Bird Island were allowed to feed on young domestic chickens, they transmitted a Soldado virus that caused the death of their host (Converse et al., op. cit.). Feare (op. cit.) found an unusually high number of dead young terns and felt the Soldado virus transmitted by the ticks may have contributed to the die-off.

In our study the occurrence of a spring storm 30 April within the period of desertion (24 April–2 May) complicated defining the cause of nest abandonment. Winds reaching 38 knots and rainfall of 0.41 cm were recorded at the nearest National Weather Service station in Victoria (63 km). However, the 6 nests which had been active on 24 April showed no sign of damage by wind or high water when they were examined on 7 May. We therefore concluded that the infestation of ticks was the probable cause of nest desertion.

In contrast to the complete failure of the Brown Pelican's first nesting attempt, the later nesting on Pelican Island produced young; 9 fledged from 11 nests. We found no *Ornithodoros* ticks associated with the young pelicans, their nests, or in the soil and litter beneath the nests on Pelican Island.

Distribution of *O. capensis* is influenced by bird movements. Our preliminary investigations reveal the occurrence of *O. capensis* in several heronries on the central Texas Coast. Host species noted so far include the Brown Pelican, Roseate Spoonbill, Cattle Egret (*Bubulcus ibis*), Reddish Egret (*Dichromanassa rufescens*), Black-crowned Night Heron (*Nycticorax nycticorax*), Laughing Gull (*Larus atricilla*), and Black Skimmer (*Rynchops nigra*). The long-term effects of ticks on pelicans and other colonial nesting birds remain to be determined.—KIRKE A. KING, U. S. Fish and Wildlife Service, Patuxent Wildlife Research Center, Gulf Coast Field Station, P. O. Box 2506, Victoria, TX 77901; DAVID R. BLANKINSHIP and RICHARD T. PAUL, National Audubon Society, 115 Indian Mound Trail, Tavernier, FL 33070; ROBIN C. A. RICE, Dept. of Entomology, Univ. of Hawaii, 2500 Dole Street, Room 28, Honolulu 96822. Accepted 13 July 1976.

Prairie Warbler feeds from spider web.—A note in the March 1976 Wilson Bulletin described an incident of feeding from a spider web by a Cedar Waxwing (*Bombycilla cedrorum*) (Burtt et al., Wilson Bull. 88:157–158, 1976). It was believed that this represented the first account of such behavior in a passerine.

I observed a somewhat similar incident involving an adult male Prairie Warbler (*Dendroica discolor*) in Everglades National Park, Monroe Co., Florida, on the afternoon of 3 July 1971. The bird was perched low in mangroves about 20 cm from the vertically-oriented web of a golden silk spider (*Nephila clavipes*). Three times during a 30-sec period he flew briefly to the web and each time picked an insect from it with his bill. Upon alighting on his perch, he swallowed each insect and then wiped his bill against a branch as if cleaning silk from it. No spider was seen on the web.

Prairie Warblers are known to eat spiders and to use spider silk in nest-construction (Wetmore, U. S. Dept. Agr. Bull. 326:1–133, 1916; Bent, U. S. Natl. Mus. Bull. 203:1–734, 1953). Webs of *Nephila clavipes* often persist for relatively long periods of time