

## PARTIAL PARALYSIS IN A YELLOW-RUMPED WARBLER MAY HAVE BEEN CAUSED BY A TICK

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**Abstract.**—A Yellow-rumped Warbler (*Dendroica coronata*) was found with an engorged female bird tick (*Ixodes [Ixodes] brunneus*) attached to the neck. The bird was lethargic and unable to fly. The warbler was captured, the tick removed, and the bird released. Several minutes after release the bird became active and 5 min after release was able to fly.

### GARRAPATA, PUDO HABER CAUSADO PARALISIS PARCIAL A INDIVIDUO DE *DENDROICA CORONATA*

**Sinopsis.**—Se encontró una garrapata hembra (*Ixodes [Ixodes] brunneus*) pegada al pescuezo de un individuo de *Dendroica coronata*. El ave estaba letárgica y no podía volar. Se capturó al ave, se le removió el ácaro y se dejó nuevamente en libertad. Minutos despues el ave se mostró activa y a los 5 min, levantó vuelo.

On 30 December 1978, while participating in the Audubon Christmas Count on Bodie Island, Dare County, North Carolina, an after hatching year male Yellow-rumped Warbler (*Dendroica coronata*) was found near the Bodie Island Lighthouse. An engorged female tick was attached to the left front half of the warbler's neck. Daniel E. Sonenshine of Old Dominion University, Norfolk, Virginia identified the tick as *Ixodes (Ixodes) brunneus*. *Ixodes brunneus* has been recorded from North Carolina, and from the Yellow-rumped Warbler by Sonenshine and Stout (1970).

The warbler was lethargic, unable to fly and was easily captured. The tick was removed from the bird, measured (8.9 mm) and preserved for later identification. Upon release the bird moved to some bayberry shrubs (*Myrica cerifera*). Within a minute or so of release, the bird became active and ascended to the lower branches of the shrubs. After 5 min the bird was able to fly and when approached flew 150 m across open ground.

K. C. Binnington and D. H. Kemp (1980) state that paralysis is "The most important form of tick toxicosis . . ." In 1978 Murnaghan and O'Rourke reported 31 species of hard ticks (ixodids) and six species of soft ticks (argasids) associated with paralysis (Binnington and Kemp 1980). F. C. Bishopp and H. L. Trembley (1945) and J. K. Miller (1947) have reported engorged female *I. brunneus* ticks attached to the heads and necks of wild birds that were found dead or unable to fly. J. D. Gregson (1973) reports two species of wild birds that were ". . . paralyzed by *I. brunneus* . . ." *Ixodes brunneus* has also been suspected as a reservoir of Rocky Mountain Spotted Fever and of various viruses (Clifford et al. 1969, Sonenshine and Clifford 1973).

The warbler may have been stunned by collision with the lighthouse, however the bird was 15–20 m from the structure and showed no evidence

of such an accident. The day was clear, visibility good, and no other disabled or dead birds were found.

There is a lack of information in the ornithological literature on the incidence of tick infestation and its effect on birds. Individuals spending time in the field should examine for ticks any birds that are found dead or that are easily captured.

#### LITERATURE CITED

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#### NOTES AND NEWS

The **Hawk Mountain Sanctuary Association** is accepting applications for its eleventh annual award for raptor research. To apply for the \$750 award, a student applicant should submit a brief description of his or her research program (five pages maximum), a *curriculum vitae*, and two letters of recommendation to STANLEY E. SENNER, *Executive Director, Hawk Mountain Sanctuary Association, Rte. 2, Kempton, Pennsylvania 19529*. The deadline for applications is **October 15, 1987**. The Association's board of directors will make a final decision early in 1988. Only students in degree-granting institutions may apply. The award will be granted on the basis of a project's potential to improve understanding of raptor biology and its ultimate relevance to the conservation of North American raptor populations.