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First Record of the Gulf Coast Tick, *Amblyomma maculatum* Koch, from Lincoln's Sparrow, *Melospiza lincolnii* (Audubon), with a Review of Tick Parasitism of this Sparrow

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ABSTRACT

The Gulf Coast tick, *Amblyomma maculatum*, is reported from Lincoln's Sparrow, *Melospiza lincolnii*, for the first time. Additional tick species recorded from this sparrow are reviewed in the context of ectoparasite ecology.

INTRODUCTION

On 8 Apr 2006, we removed a single fully engorged ixodid tick from an adult Lincoln's Sparrow, *Melospiza lincolnii* (Audubon), of unknown sex, that had been mist-netted in a patch of old field dominated by goldenrod (*Solidago* spp.) on a small homestead in Marion County, TX (32°43'58" N 94°12'6" W). The specimen, which had attached about 1 cm below and behind the bird's left eye, was later shipped to Richard G. Robbins, who identified it as a nymph of *Amblyomma maculatum* Koch, the so-called Gulf Coast tick. As its common name implies, in North America *A. maculatum* is found chiefly along the Gulf Coast and in the southern Atlantic coastal states. Adults parasitize a

variety of large wild and domestic mammals (Keirans and Litwak 1989); immature stages (nymphs, larvae) feed on small- to medium-sized mammals, but also on ground-frequenting birds, sometimes accompanying the latter on migrations as far north as southern Canada (Keirans and Durden 1998). A thorough search of the literature and of the U.S. National Tick Collection has revealed that our specimen of *A. maculatum* is the first to have been recorded from *M. lincolnii*.

DISCUSSION

Lincoln's Sparrow strongly favors low willow cover with dense ground vegetation (Ammon 1995), so it is frequently parasitized by ticks, especially those specific to rodents and lagomorphs, its ecological associates. Thus, the rabbit tick *Haemaphysalis leporispalustris* (Packard) has been collected from *M. lincolnii* at localities as disparate as Massachusetts (Peters 1936), Nevada (Beck et al. 1963), and Minnesota and Wisconsin (Nicholls and Callister 1996). Additionally, nymphs of *Ixodes*

scapularis (Say) have been taken from Lincoln's Sparrow in southern Ontario (Scott et al. 2001), and a nymph and larva of *Ixodes spinipalpis* (Hadwen and Nuttall) were recovered from this sparrow in Utah (Johnson 1966); immatures of these tick species regularly feed on small rodents (e.g., deer mice, woodrats, squirrels) (Cooley and Kohls 1945).

Amblyomma maculatum commonly parasitizes a great diversity of ground-foraging birds, including the Northern Bobwhite (*Colinus virginianus*), Loggerhead Shrike (*Lanius ludovicianus*), Blue Jay (*Cyanocitta cristata*), wrens, Brown Thrasher (*Toxostoma rufum*), Eastern Towhee (*Pipilo erythrophthalmus*) and meadowlarks (Hixson 1940, Durden et al. 2001). However, with few exceptions (e.g., Teel et al. 1998), the seasonal dynamics of this tick on particular bird species have not been studied intensively. We hope that our new host record will help to stimulate in-depth investigations of the ectoparasites associated with North America's lesser-known avifauna.

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