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Lyme Disease Study

Borrelia burgdorferi Sensu Lato Spirochetes in Wild Birds in Northwestern California: Associations with Ecological Factors, Bird Behavior and Tick Infestation. E.A. Newman, L. Eisen, R.J. Eisen, N. Fedorova, J.M. Hasty, C. Vaughn, and R.S. Lane. 2015. *PloS ONE* 10(2): e0118146. Doi:10.1371/journal.pone.0118146.(This study found that birds are a more important host and reservoir for the Lyme Disease-causing bacteria in California than previously thought. From 623 birds in 53 species captured, mostly passerines, 100 (16.1%) carried the Lyme disease tick *Ixodes pacificus*, the Western Black-legged Tick. Of those 100 birds, 57 carried the bacteria, representing 23 species. A number of infected birds are common suburban birds, such as American Robin (*Turdus migratorius*), Oak Titmouse (*Baeolophus inornatus*), Dark-eyed Junco (*Junco hyemalis*), Lesser Goldfinch (*Spinus psaltria*), and Bewick's Wren (*Thryomanes bewickii*). The Golden-crowned Sparrow (*Zonotrichia atricapilla*) had the highest infection rate. Tick-infested birds were found in all habitats studied, ranging from chaparral, savannah, and oak woodland. Besides being an under appreciated reservoir of Lyme Disease, birds can more readily disperse the spirochaete to other habitats.

Walter Sakai