Reservoir competence of native North American birds for the lyme

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- *From*: "georgia" <jwissmille@xxxxxxx>
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".....Engorged larvae drop from birds abundantly during
daylight, so the abundance of these bird species in the peridomestic
environment suggests that they might contribute infected ticks to lawns

and gardens....."

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*Reservoir competence of native North American birds for the lyme
disease spirochete, Borrelia burgdorfieri.*

*Ginsberg HS, Buckley PA, Balmforth MG, Zhioua E, Mitra S, Buckley
FG.*

U.S. Geological Survey Patuxent Wildlife Research Center, Coastal
Field Station, Woodward Hall−PLS, University of Rhode Island, Kingston,

RI 02881, USA.

Reservoir competence for the Lyme disease spirochete, Borrelia
burgdorferi, was tested for six species of native North American birds:

American robin, gray catbird, brown thrasher, eastern towhee, song
sparrow, and northern cardinal. Wild birds collected by mist netting on

Fire Island, NY, were held in a field laboratory in cages over water
and
locally collected larval ticks were placed on the birds, harvested from

the water after engorgement, and tested for infection by direct
fluorescentantibody staining after molting to the nymphal stage.
American robins were competent reservoirs, infecting 16.1% of larvae
applied to wild−caught birds, compared with 0% of control ticks placed
on uninfected laboratory mice. Robins that were previously infected in
the laboratory by nymphal feeding infected 81.8% of applied larvae.

Wild−caught song sparrows infected 4.8% of applied larvae and 21.1% when
infected by nymphal feeding. Results suggest moderate levels of reservoir competence for northern cardinals, lower levels for gray catbirds, and little evidence of reservoir competence for eastern towhees or brown thrashers. Lower infection rates in larvae applied to wild−caught birds compared with birds infected in the laboratory suggest
that infected birds display temporal variability in infectiousness to larval ticks. Engorged larvae drop from birds abundantly during daylight, so the abundance of these bird species in the peridomestic environment suggests that they might contribute infected ticks to lawns

and gardens.

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