LYME DISEASE AND THE BIRDER

by Stauffer Miller

An expedition to Martha's Vineyard in the fall of 1987 in search of the Redbilled Tropicbird and the attendant walk through tall brush and grass made me start thinking about ticks. A little farther into the vegetation I extended this thinking to Lyme Disease and, finally, to Lyme Disease and birders.

Lyme Disease was first recognized in the mid-1970s in a group of children in Lyme. Connecticut, all of whom developed a form of juvenile rheumatoid arthritis, A Yale University physician, Dr. Allen Steere, a specialist from the Center for Disease Control, was the first to identify this as the outbreak of a disease and to look for a common causative agent. By 1979 the transmitting culprit was identified in the laboratory of Andrew Spielman at the Harvard School of Public Health as Ixodes dammini, the deer tick. This tiny tick is about half the size of the more prevalent and better known American dog tick. In New England it occurs principally in coastal areas and islands from the mid-Atlantic states (Assoteague and Chincoteague) to northern Massachusetts but is probably most abundant in and around Lyme, Connecticut, and in New London County in extreme southeastern Connecticut at the Rhode Island border. Although the tick numbers decrease as one goes north or south from this area, the disease that may result from the tick's bite has been reported from Martha's Vineyard, Nantucket, Cape Cod, and the North Shore of Massachusetts, 250 Massachusetts cases in recent years.

Other pockets of the tick and the disease exist in Wisconsin, in California, and in the Mississippi River valley. As a veterinarian, I know of cases of this disease in dogs in Connecticut and in a pony in Wisconsin. The dogs developed arthritis that lasted about a year, whereas the pony had both arthritis and ophthalmitis.

The deer tick, which has a two-year life cycle that includes a variety of hosts such as white-footed mouse and other animals, may be increasing because of the expanding population of New England deer. The tick carries a spirochaete (Borrelia burgdorfeii), which is the actual cause of Lyme Disease. Because immature ticks feed most actively in May, June, and July, at which season the nymphal ticks attach to vegetation and are transferred by direct contact to the skin of a passing animal or human, these are considered months of highest risk to humans.

So why is all this important to birders? As I walked through the brush to Gay Head in order to better look for the tropicbird, I realized that birders are in brushy areas along the coast about as much as anybody, especially during the

ticks' most active season. Consequently, you might say that Lyme Disease is an "occupational hazard" to birders.

Therefore, when walking through tick habitat, take a few precautions. Wear good shoes, tuck your pants into socks, and check yourself for ticks afterward. Remember, this is a very small tick (only one millimeter long -- about the size of a period on this page), so detection may be difficult. Even the engorged tick is no bigger than the head of a pin, but look for new freckles on your skin.

Although not all *Ixodes* ticks transmit Lyme Disease, people should not ignore the possibility of its occurrence. Although they are very hard to see, prompt removal of ticks will lessen your chances of getting sick, because at least eighteen to twenty-four hours are required for transmission of the spirochaete from an infected tick to a human. Although some people remain asymptomatic, the effects of such a bite will most often cause the victim to have an expanding red skin lesion within three to thirty-two days. A red ring around the bite is now recognized as a trademark of the disease. Other symptoms at this time might appear flulike and include mild headache, joint pain, and swollen glands. A physician should be consulted without delay. Antibiotic therapy, chiefly tetracycline, is curative in the early stages and can prevent years of suffering. If untreated, Lyme Disease may persist for years and lead to complications such as a chronic skin condition, arthritic, cardiac, or neurological disorders. People have died as a result of the effect on the heart or brain.

I wish birders success in chasing their "prey," but I also urge a little care regarding Lyme Disease. By the way, we had good luck on Martha's Vineyard - a great look at the tropicbird and no ticks!

REFERENCES

Habicht, G. S., G. Beck, and J. L. Benach. 1987. Lyme Disease. Scientific American 257 (1): 78-83.

Massachusetts Department of Public Health. 1987. Lyme Disease. Public Health Fact Sheet.

Rolbein, S. 1987. Little Vampires. Boston Magazine 79 (12): 144-149.

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