

Prince Edward Island

Lyme disease vector, *Ixodes dammini* (the northern deer tick), identified in Prince Edward Island

Three adult ticks submitted to the Diagnostic Parasitology Laboratory, Atlantic Veterinary College, University of Prince Edward Island for identification, have been confirmed as *Ixodes dammini*, the northern deer tick. The ticks were identified by Drs. E. E. Lindquist and K. W. Wu at the Biosystematic Research Institute, Central Experimental Farm, Ottawa, Ontario. The first tick submitted was sent to the Smithsonian Institute in Washington D.C. for confirmation of identification. There was no attempt to isolate the causative spirochete, *Borrelia burgdorferi*, from these ticks.

The first tick was submitted at the end of June, 1989 by a Charlottetown veterinarian. This tick was removed from a local cat which had not been absent from the immediate vicinity of its home in Charlottetown. An adult tick was removed from a four-month-old kitten in the Kensington area 40 km west of Charlottetown, and submitted by the veterinarian in the last week of October, 1989. This cat had no history of travel but was in contact with a dog from Nova Scotia in the week preceding the discovery of the tick. The other adult tick was removed from a dog in the

Charlottetown area during the first week of November, 1989. This dog had not travelled from home prior to the discovery of the tick. The owner of the dog had recently returned from a trip to Connecticut.

Serum samples were collected from the two cats at two months (first case) and one week (second case) following the removal of the ticks. These samples were submitted to Dr H. Artsob (currently: Head, Zoonotic Diseases, Laboratory Center for Disease Control, Tunney's Pasture, Ottawa, Ontario) who tested them for antibodies to *B. burgdorferi*. Both samples had IFA titers of less than 1:32. There has been a recent report of an *Ixodes dammini* tick removed from a boy in Summerside, PEI (1). The ticks may have arrived on PEI via migratory birds. We are uncertain whether, in the absence of wild white-tailed deer on PEI, the ticks are able to complete their life cycle and establish on the island.

Reference

1. Bollegraf E. Lyme disease in Canada. Canada Dis Weekly Report 1988; 14-22: 95-97.

Rick J. Cawthorn, Barbara S. Horney, Robert Maloney, Department of Pathology and Microbiology, Atlantic Veterinary College, 550 University Avenue, Charlottetown, P.E.I. C1A 4P3.

Saskatchewan

Salinomycin toxicity in turkeys

On March 31, 1989, birds in a flock of 6,000 12-week-old turkeys that were housed in three separate barns began to die acutely. These birds had been normal prior to the addition of a new lot of feed supplied two days earlier by a local feed mill. Turkeys from two barns had direct access to the new feed. The mortality rate increased during the first few days and then decreased during the next two weeks. In all, 2,000 turkeys died. **Clinically affected turkeys were cyanotic, depressed, lost weight, and lay in sternal recumbency with one or both legs extended. Characteristically, dead turkeys had both legs extended.**

Necropsy revealed cyanosis of skeletal muscles, with edema and light to purple-red bands of discoloration in the thigh muscles. Medial muscles of the thigh were most severely affected. The heart was swollen and light brown. The most severe histological lesions were found in medial muscles of the thigh and varied from mild hyaline degeneration to necrosis, and generalized fibrosis. Pectoral muscles and heart had only mild degenerative changes. Analysis of feed samples from

the farm revealed salinomycin at levels of 16 to 64 mg/kg. Pooled crop contents had 1.67 to 1.94 mg salinomycin/kg. Pooled fat, liver, kidney, muscle and skin from dead turkeys had no detectable salinomycin.

The operator of the feed mill was unaware that, because of its toxicity for turkeys (1,2), salinomycin should not be fed to this species, and mixed the product in the feed for the control of coccidiosis, as requested by the producer. At the time of slaughter, surviving turkeys were 1-2 kg lower in weight than normal and there were only 56% grade A carcasses compared with a normal of 80%. The producer was compensated fully by the operator of the feed mill.

References

1. Halvorson DA, Van Dijk C, Brown P. Ionophore toxicity in turkey breeders. Avian Dis 1982; 26: 634-639.
2. Stuart JC. Salinomycin poisoning in turkeys. Vet Rec 1983; 113: 597.

Choon W. Yong, Provincial Veterinary Laboratory, 4840 Wascana Parkway, Regina, Saskatchewan S4S 0B1.