

Recent Establishment of an Isolated Population of *Ixodes Scapularis*, the Vector of *Lyme Borreliosis*, at Point Pelee National Park, Ontario

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Long Point, Ontario, was until recently the only Canadian locality known to be endemic for the black-legged tick, Ixodes scapularis, the vector of Lyme borreliosis. We report here the establishment of this tick at Point Pelee National Park (PPNP). Prior to 1990, I. scapularis was not detected by standard sampling protocols at PPNP. Between October 1994 and October 1996 a few adult I. scapularis were reported on dogs or people who had visited PPNP. In 1996 and 1997, surveys of small mammals were carried out to re-evaluate the status of I. scapularis. In July 1996, a single larva was found on 1/54 P. leucopus. In June 1997, 1/55 P. leucopus was infested with a single larva. However, on 7 August, 1997, after the expected hatch date of tick egg masses, 19/56 P. leucopus were infested with larval I. scapularis. In 1998, prevalence of immature I. scapularis varied from 0/31 mice in September to 10/34 mice in May, reflecting seasonal tick activity. Over 100 adult I. scapularis and 11 nymphs were collected by dragging at PPNP in 1997 and 1998. The presence of all stages of I. scapularis confirms that PPNP has an endemic population. The increase in numbers of larvae in summer 1997 suggests that the population has expanded from a narrow base, probably ticks translocated by migratory birds in the early-mid 1990s. There is very limited evidence that Borrelia burgdorferi is present in the host-vector system at PPNP, based on serologic surveys in small mammals, culture or PCR of the tissues of 165 Peromyscus and PCR on ticks (36 nymphs and 97 adults negative; only 1/19 partially fed larvae removed from mice positive). Surveys of small mammals within 10 km of PPNP have failed to reveal I. scapularis, suggesting that the tick population is highly localized.

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