

## TICKS!

By Steven Nester

The Southern Berkshires seems to be experiencing an unprecedented increase in the tick population; and as pet owners and outdoor enthusiasts swap anecdotal evidence of their encounters, all want to know the causes, and what can be done to keep themselves and their pets safe from ticks and tick-borne diseases. As for an explanation for rise in population, and the number of ticks found on pets and humans this year, all seem to depend upon the vagaries of Mother Nature.

Fairview Hospital physician Alec Belman has noticed, "a much larger amount of dog ticks this year but not a larger than typical amount of deer ticks. It is important to know the difference as dog ticks – the larger ones with a shield-like pattern on their upper back – do not carry Lyme Disease, but do carry Anaplasmosis which is also quite common around here. It's hoped that by this time everyone can identify a deer tick when they see one; they're smaller with a solid Red or Black torso and carry both Lyme and Anaplasmosis."

Dr. Richard Ostfeld, a disease ecologist, directs The Tick Project at the Cary Institute of Ecosystems Studies in Dutchess County, New York. The goal of the study is to control tick populations and diseases with methods that can be adopted by local municipalities. The abundance of Blacklegged, or Deer Tick nymphs, which are responsible for the majority of cases of Lyme and other diseases, says Ostfeld, "is distinctly higher than average this year." The reason for the abundance, he says, is due to an increase in the population of white-footed mice, which can be predicted, based on the prior year's acorn production.

Local veterinarian Emily Newman Stanton, however, actually does not see a rise in the tick population this season. "I don't think there is a sharp rise outside the expected spike every springtime, peaking April through June, she says. "After not dealing with them as much during the earlier months," she adds, "it seems to always shock folks how many there are when they do get going." As a warning, she adds, "Ticks have been increasing steadily in the New England for many years, with seasonal and annual variations."

The ideal tick habitat (high grass or weeds, or a leafy ground cover) is well understood, but researchers sometimes have a difficult time explaining the huge differences between tick populations in certain locations during certain years. Studies have found targeted sites, just miles apart, can vary greatly from



larva nymph male  
Black Legged (Deer) Tick



larva nymph male  
American Dog (Wood) Tick

year to year. While tick-friendly environments should be avoided, people and their pets are ever increasingly entering these habitats, and this is perhaps the biggest source of tick-to-human/pet disease transmission. If entering a tick-infested area is a necessity, there are plenty of preventative measures one can take.

Wearing tight, light-colored clothing will keep ticks outside and enable one to see them more clearly than on dark clothing. Treating one's outdoor clothing with 0.5 percent permethrin solution is another, and perhaps more drastic action. For the pets, Dr. Newman Stanton recommends natural topicals containing aromatics such as garlic and cedar. Diatomaceous earth, the active ingredient in swimming pool filters has been bandied about for use on one's clothes, pets, and as a deterrent in one's yard, but it's one that Newman Stanton doesn't advise. On my dog, I use a commercial repellent, and dust her with diatomaceous earth once a week, with no apparent ill effects. Also, after every walk, I wrap packing tape around my hand (sticky side out) and dab my dog top to bottom, which has yielded ticks. Finally, a vigorous brushing before entering the house usually takes care of any determined parasites. Dr. Newman Stanton says she "supports my clients' decisions about what makes sense to them. There is no 'right answer' here." As vigilant as I am, I always seem to miss one or two.

According to the Massachusetts Public Health website, those bitten by a tick have a one-to-fifty percent chance of contracting a tick-borne disease. The tick must be attached to a host for twenty-four hours before any disease can be transferred. Those bitten by a tick should get tested immediately; if left untreated, Lyme can cause arthritis and meningitis, among other ailments. There is a plethora of tick removal devices, but perhaps the easiest and handiest is the tweezers one's medicine cabinet. If a tick is found inside the home, an energetic vacuuming is recommended in case there are more.

Says Dr. Ostfeld, "It does not seem possible to eradicate ticks in yards, or anywhere else. There are various tick-killing products – both chemical and biological control agents – that can reduce tick abundance somewhat, but so far, none has been shown to reduce human encounters with ticks or incidence of tick-borne disease. We have a lot of work left to do in this area." Ticks, it's safe to say, are here to stay.