

# The Eastern Trail and Ticks

February 16, 2020 – By: Garrett Bozek

## Introduction

Welcome new, current, past, and future members of the Eastern Trail Alliance. The Eastern Trail is a 60+ mile recreational trail that paths from Kittery, Maine all the way up to South Portland, Maine. With both on and off-road portions, the trail is great for any and all individuals that enjoy safe biking, running, dog walking, sightseeing and more outdoor recreational activities. A truly magnificent part of our southern Maine, the trail, and our state face some significant changes as the effects of climate change become more prevalent.

In 2016, The United States Environmental Protection Agency established a working document called Climate Change's Indicators in the United States. In this document's chapter, "What Climate Change Means for Maine", the EPA outlined several different effects that we should expect to hit our state. Effects such as increasing temperatures, changing precipitation patterns, sea level rise, wetland loss, coastal flooding, and impacts on human health.

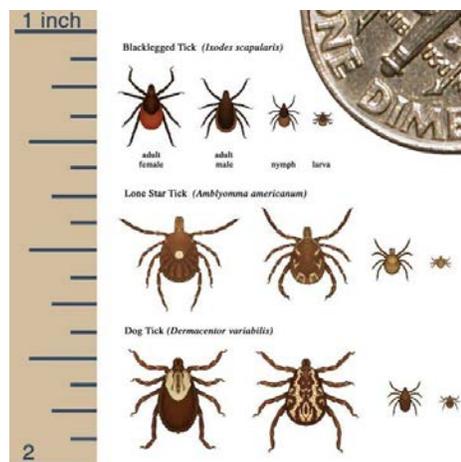
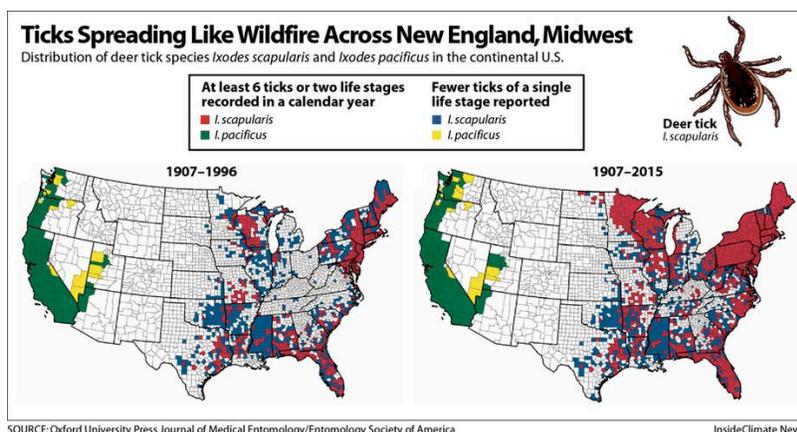
The impacts of human health can range from a variety of issues, but for the purpose of this memo is to highlight the increased presence of ticks and risk of Lyme Disease.

## On the Move Earlier!

Ticks are arthropods in the class of Arachnida that seek host species in order for them to maintain life. Using a technique called, "questing", ticks locate their potential

hosts by detecting movement and carbon dioxide. Ultimately, this is done to attach to a blood host.

Climate change is having an influence on the timing that these ticks, including the Lyme Disease carrying Black Legged Tick, "Deer Tick" (*Ixodes scapularis*). According to several reports done by federal and state agencies, climate change is allowing the intensifying of diseases carried by "vectors". The warmer winters and fewer below freezing days Maine is experiencing allows for ticks to be active earlier in the year. Thus, resulting in a higher risk of contracting illnesses associated with their bites for walkers, outdoorsman and outdoorswoman, and all other recreators.



## Lyme Disease

It is right to assume that with this increased number of ticks being active for longer parts of the year, the risk of contracting Lyme Disease and other tick-borne illnesses has risen.

Lyme Disease is an illness caused by the bacteria *Borrelia burgdorferi* (deer ticks are the main carrier of this bacteria). When bitten by an infected tick, the symptoms of Lyme have been described as:

Early Stages:

- A ring-like rash around the area of the tick bite
- Flu-like symptoms (i.e. fatigue, headache, fever and chills, muscle or joint soreness).

If Left Untreated:

- Arthritis, usually in one or more large joints
- Neurological problems (i.e. numbness, pain, facial paralysis, memory loss)
- Heart problems

With no vaccine, the chances of contracting Lyme when bitten by an infected tick is very high.

So...What Can I Do?

## KNOW THE RISK ZONES

Ticks of all species, including the Deer Tick, spend their time in areas of

- long grasses
- undergrowth
- marshes
- wooded shrubs.



## TAKE PREVENTATIVE MEASURES

- Stay on the main trail at all times when recreating
- Wearing lightly colored clothing can allow for easy spotting of ticks on a person's body.
- Long sleeves and pants are encouraged
- Tuck your pants into your socks and your shirt into your pants



## CONDUCT TICK CHECKS (ON YOUR PETS TOO!)

**Yourself** – between joints (behind the knees, elbows, armpits), behind your ears and anywhere covered in hair!

**Dogs or other critters** – inside of ears, between toes, under tail, in genital region, under eye lids, and under the collar

## References:

Factsheet for health professionals – Lyme borreliosis [website]. ECDC; 2010 ([http://www.ecdc.europa.eu/en/healthtopics/emerging\\_and\\_vector-borne\\_diseases/tick\\_borne\\_diseases/lyme\\_disease/factsheet-health-professionals/Pages/factsheet\\_health\\_professionals.aspx](http://www.ecdc.europa.eu/en/healthtopics/emerging_and_vector-borne_diseases/tick_borne_diseases/lyme_disease/factsheet-health-professionals/Pages/factsheet_health_professionals.aspx)).

Maine Center for Disease Control and Prevention:  
<https://www.maine.gov/dhhs/mecdc/infectious-disease/epi/vector-borne/lyme/>

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