

Socio-Ecological Dimensions of Tick-Borne Disease Risk in Acadia National Park

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Vector-Borne Disease in the 21st Century

Mosquitoes in Maine test positive for West Nile virus



Yellow Fever Encroaches Megacities, Straining Global Vaccine Supply

GLOBO

Dengue se alastra e Rio já tem 45 casos por hora

Especialista diz que há epidemia desde janeiro; para Cesar, já acabou

CHIKUNGUNYA



AbledALERT™

Global

OUTBREAK: 'Contorted With Pain' Virus

Greece bans blood donations in 12 districts over malaria - reports

© 21 August 2016



WEST NILE VIRUS ALERT



DEVELOPING STORY

ZIKA VIRUS "SPREADING EXPLOSIVELY" ACROSS AMERICAS

4:51 AMPT

RIGHT NOW INDIANAPOLIS 36° MEMPHIS 49° NEW ORLEANS 55° NEW DAY

#KILLERVIRUSES

Forbidding Forecast For Lyme Disease In The Northeast

March 6, 2017 · 5:00 AM ET

Heard on Morning Edition

npr

Tick researchers found Powassan virus in these Maine towns

April 26, 2017

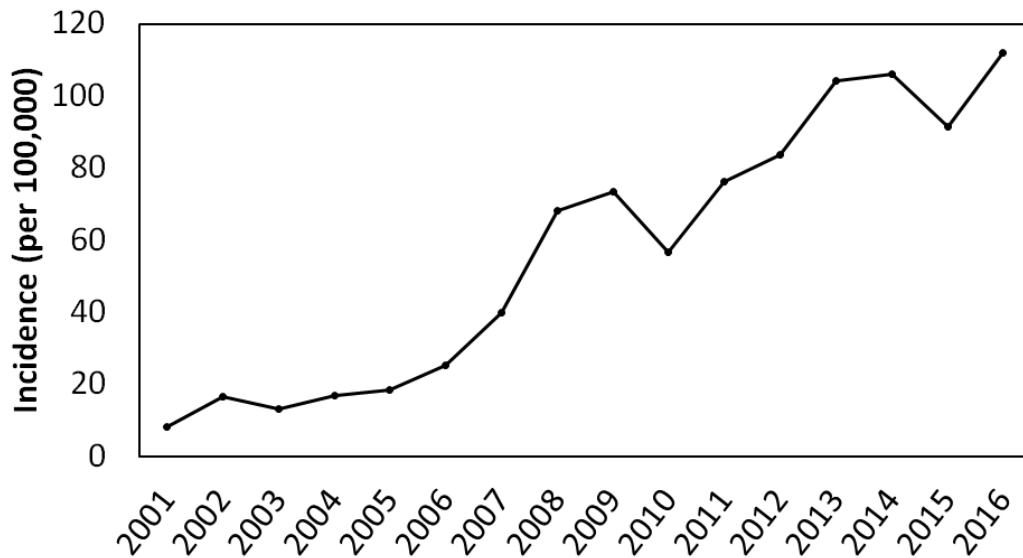
Home, public health

By Jackie Farwell

BDN BANGOR DAILY NEWS

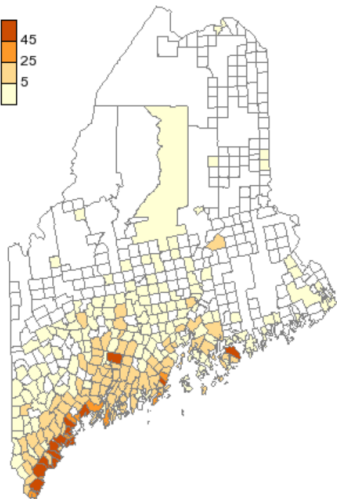


The spread of Lyme disease in Maine



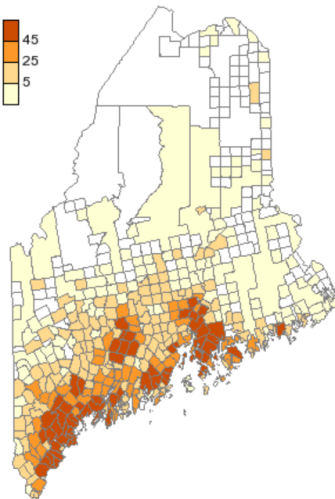
Number of Deer Tick Submissions
by Town, Maine 1989-2000

Number



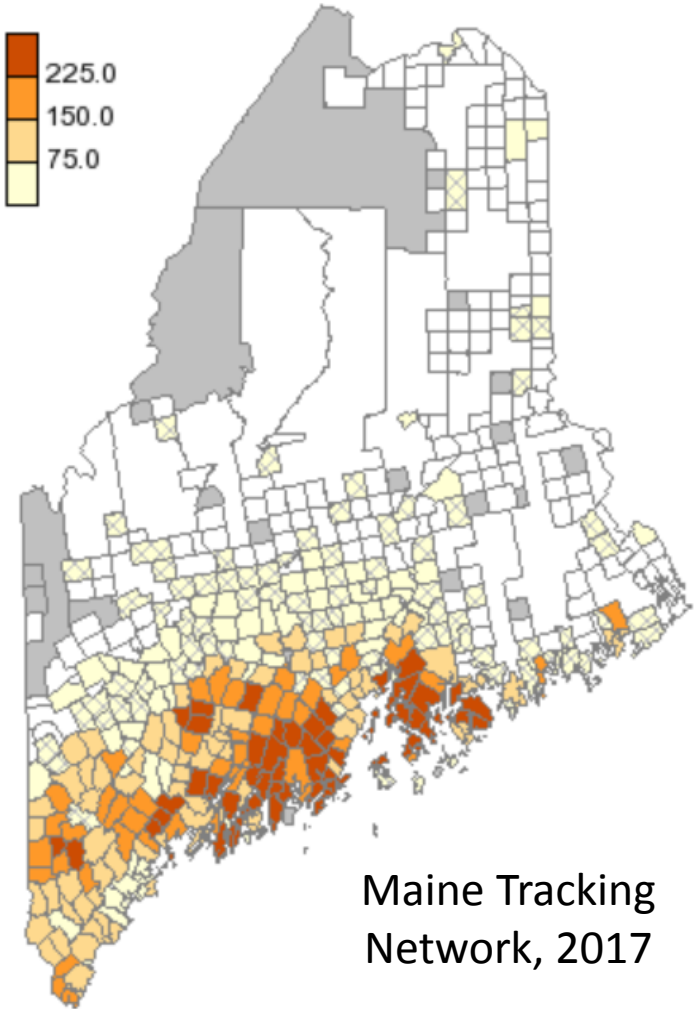
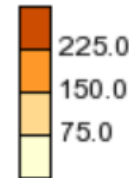
Number of Deer Tick Submissions
by Town, Maine 2001-2013

Number



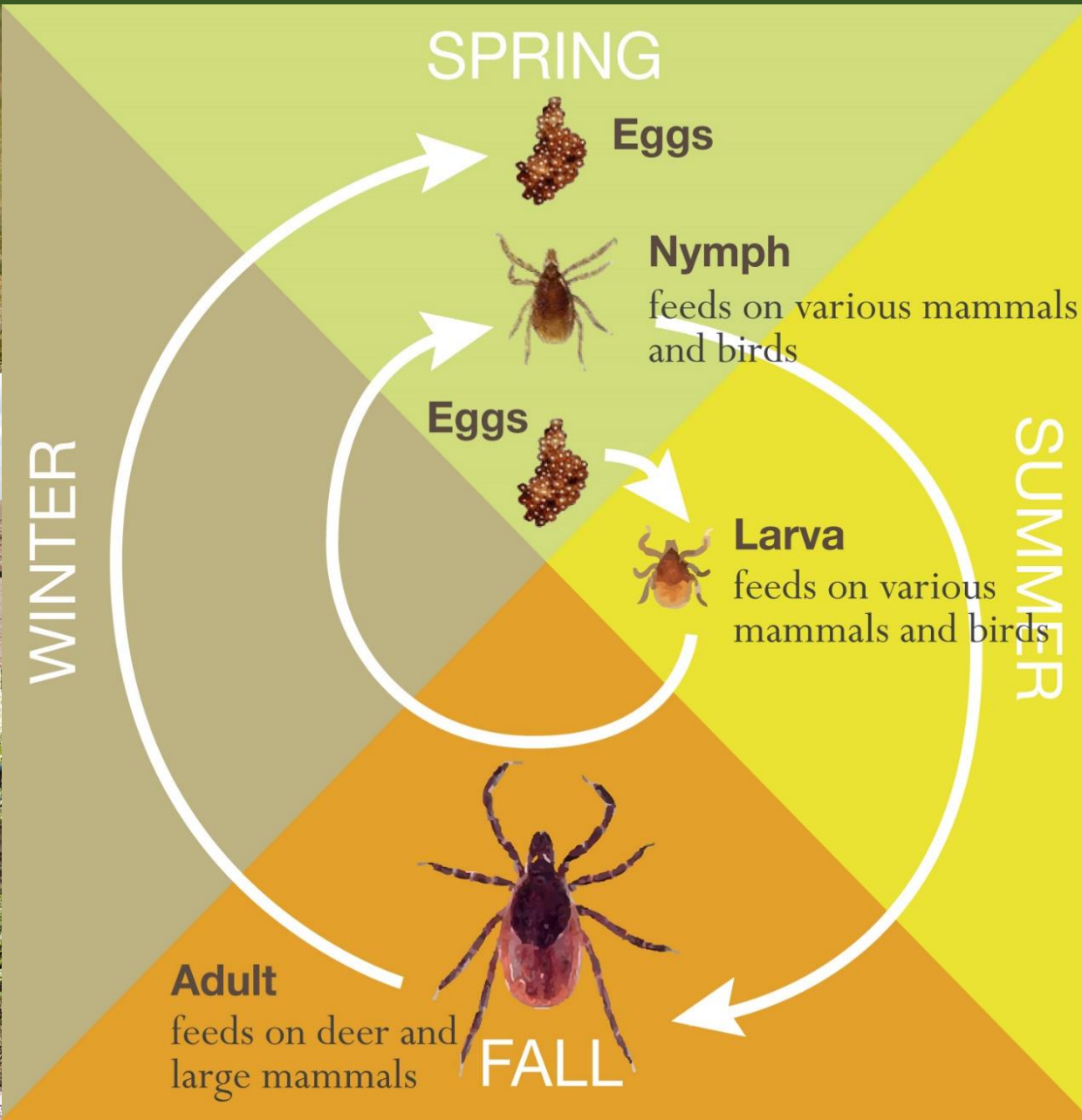
Rate of Lyme Disease
by Town, Maine 2012-2016

Rate per 100,000



Maine Tracking
Network, 2017

Ecology of the blacklegged tick & Lyme disease



Ecology of the blacklegged tick & Lyme disease

Risk of exposure to disease is strongly influenced by environmental conditions and management decisions...



large mammals

FALL

Tick-Borne Disease Risk Assessment in Acadia

Goal #1: Explore the patterns and ecological mechanisms underlying **entomological** risk of exposure to tick-borne disease in Acadia

Sara McBride



Lucy Guarnieri

Collaborators in De Urioste-Stone group

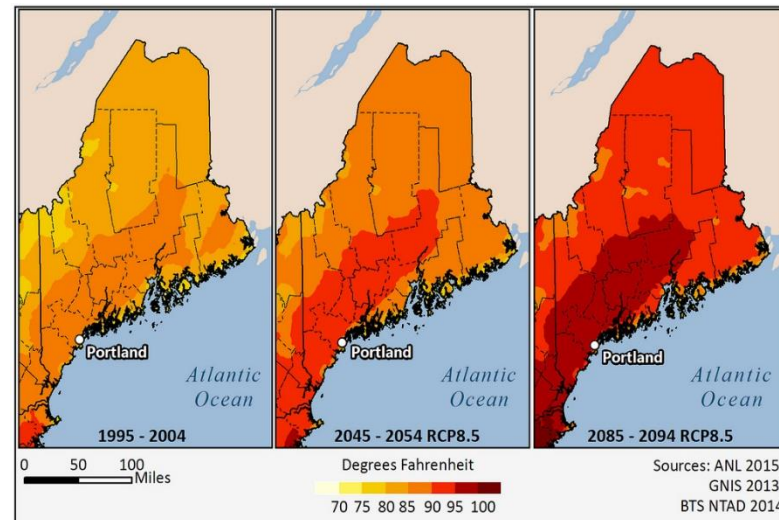
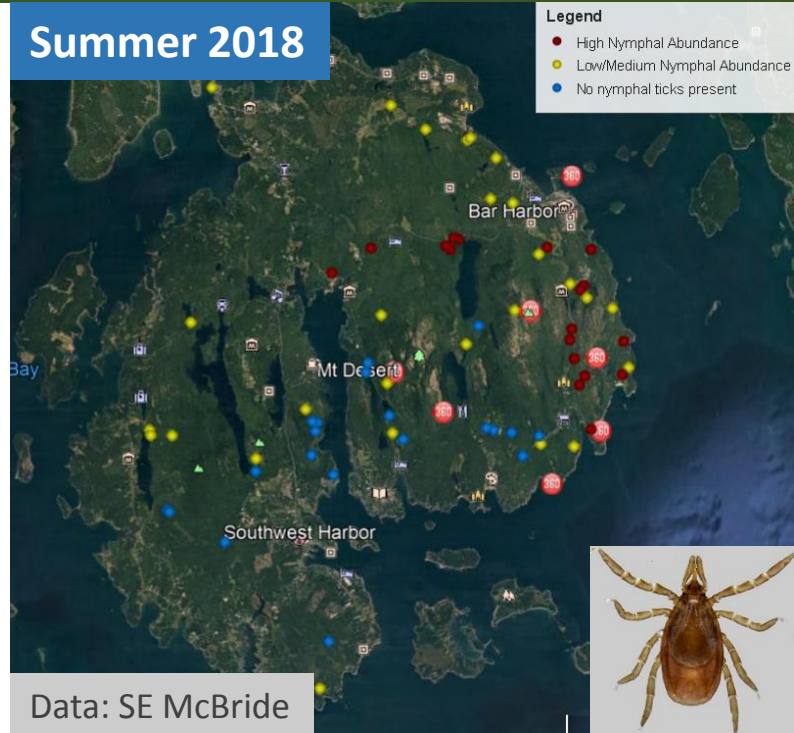


Goal #2: Collaborate with social scientists to understand how human behaviors interact with ecological conditions to determine risk of exposure to tick-borne disease

Tick-Borne Disease Risk Assessment in Acadia

Knowledge to Action Goals:

- Document *spatial and temporal patterns* of entomological and human behavioral risk of exposure to tick-borne disease in Acadia NP
- Understand the *causal socio-ecological mechanisms* that explain this landscape of risk
- Forecast *future tick-borne disease risk* in light of climate change impacts
- Develop *ecologically safe and sustainable management strategies* to inhibit tick-borne disease transmission



Acknowledgments

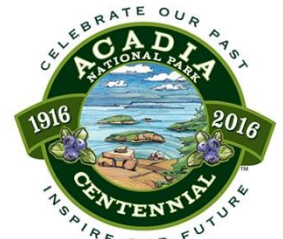
Students

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