

Jean Tsao

Reduce the risk of tick-bites and enjoy your quiet adventures!



Who wants to come home from their quiet adventure and find a tick attached to them or their furry companion? NO ONE! Ticks love Michigan, too, and unfortunately, the risk of tick-borne diseases is increasing. Come learn how to make tick prevention a habit – like wearing sunscreen, a life jacket and a bicycling helmet – so that you can continue to enjoy your quiet adventures, be they remote or right around your home!

With more than 300,000 human cases estimated a year, Lyme disease is the leading vector-borne disease in the United States and the risk of tick-borne diseases (there are others!) continues to increase not only in Michigan, but across the US. As a professor at Michigan State University in the Department of Fisheries & Wildlife and the Department of Large Animal Clinical sciences, I have more than twenty years of experience studying the ecology of ticks and tick-borne pathogens using an approach that integrates field, laboratory, and modeling approaches. I have focused mainly on studying the ecology and prevention of the tick and pathogen that causes Lyme disease. Given the complex nature of emerging diseases, I collaborate with scientists and professionals in academia, agencies, non-profit organizations and industry. I have served as an associate editor for the international journal *Ticks and Tick-borne Diseases*.

I have helped improve medical practice guidelines and national research policies to reduce tick-borne disease through updating the Infectious Disease Society of America's Guidelines for the Prevention, Diagnosis, and Treatment of Lyme disease, and serving as a member of the 2018 Subcommittee for Disease Vectors, Surveillance, and Prevention for the US Department of Health and Human Services' Tickborne Disease Working Group. Since 2017, I have been part of the CDC-funded Midwest Center of Excellence for Vector-Borne Disease, through which my lab and I have improved the understanding of the spatial distribution of invasive ticks in Michigan and started conducting research on interventions to reduce the risk of contact with ticks and tick-borne pathogens.

I have helped expand capacity in disease ecology and public health entomology by training college and graduate students as well as those who already are in the public health force. Graduate students who have trained with me have gone onto positions in academia, agencies, and non-profit organizations. The prevention of tick-borne disease requires improved communication and collaboration among many researchers, public health workers, health practitioners, patients, and the public in order to better reduce tick-borne disease; therefore, I eagerly try to engage with stakeholders to better understand concerns; clarify understanding and identify knowledge gaps; and devise solutions to improve prevention of tick-borne disease.



Be sure to check out the MSU booth to check out the ticks and see if you can find the hidden ones!