



**FACTS** to support the protecting of Fox and Coyote as natural predators to control Lyme disease in Harding Township



## Fact One

The white footed mouse harbors  
Lyme bacterium (*Borrelia  
burgdorferi*)

Supporting Data: The type of bacterium that causes  
Lyme disease has international consensus. This  
cause is indisputable and has gone unchallenged.



## Fact Two



On the eastern seaboard, and specifically Morris County, the predator of the white footed mouse is predominately fox and coyote.

Data Source: New Jersey Department of Health, US Center for Disease Control (CDC)

Other predators include raptors, like the owl, the hawk and the eagle. Mammals like opossum, raccoon and the otter.

However, not nearly at the level of the fox and coyote



## Fact Three



A recent study by a Drew University biologist has shown the white footed mouse is more numerous in Harding Township than in a neighboring community.

Note: Harding Township is uniquely located between a 7,800 acre Wildlife Refuge and a 1,300 acre National Park which exposes us to a level of potential tick related illnesses not found elsewhere.

*Based on an ongoing field live-trapping survey of small mammals by Tammy Windfelder, Ph.D., a Drew University Ecologist, individuals in the genus Peromyscus (White Footed Mouse, Deer Mouse, and hybrids between the two species) far exceed all other small mammals at her research site at the Great Swamp Watershed Association Conservation Management Area on Tiger Lily Lane in Harding Township. Also, individuals in the genus Peromyscus are at a higher density in Harding Township compared to a similarly-forested research site in Madison, NJ.*



## Fact Four



Lyme disease is an illness caused by infection with the spirochete bacterium *Borrelia burgdorferi*. This bacterium is carried by ticks and can cause a variety of symptoms, which left untreated can become severe.

Data Source: Center for Disease Control (CDC)



## Fact Five



- Lyme Disease is the most commonly reported vector borne illness in the United States, however the majority of its cases are concentrated in the Northeast and upper Midwest.
- NJ's incidence rate of 56.5 cases per 100,000 population remains far above the US 2016 incidence rate of 8.1 -NJSHAD- Complete Health Indicator Report-Lyme Disease
- New Jersey has the third highest rate of Lyme in the nation, Morris County has the highest incidence of the 21 counties.



## Fact Six



- The white-footed mouse is the undisputed primary reservoir of multiple pathogens, including *B. burgdorferi*, the cause of Lyme disease.
- If the population of white-footed mice in an area is allowed to grow uncontrolled, the risk of exposure to Lyme disease increases with that population.



## Fact Seven



Protecting the predator of the white footed mouse is a critical factor in reducing its population and keeping ticks from coming into contact with the major source of the Lyme bacterium.



## Fact Eight



A municipality has both the right and obligation to protect the safety and well-being of its residents.



## Fact Nine



- The discussion on this ordinance began in June when the Board of Health discussed the issue and subsequently prepared and sent a letter to the Township Committee.
- It has appeared on the front page of the Observer Tribune twice and once in the Daily Record and has been featured in the Harding Civic Association's Thumbnail several times as well.
- It has also been discussed at HOST and the Environmental Commission.
- A 45-minute slide presentation was made at the October Township Committee meeting, which resulted in a lively discussion.