

LYME DISEASE

According to the American Lyme Disease Foundation the disease is primarily contracted by people when they are bitten by an infected tick at its nymph stage of development.

The nymphs favorite hosts are small mammals, mostly the white footed mouse and birds, although they will settle for people and domestic pets. It is not until the nymph develops into an adult that it hosts on large mammals, i.e., horses, sheep, cattle, people, domestic pets and deer. "Few cases of Lyme Disease are acquired from adult tick bites" according to the Foundation.

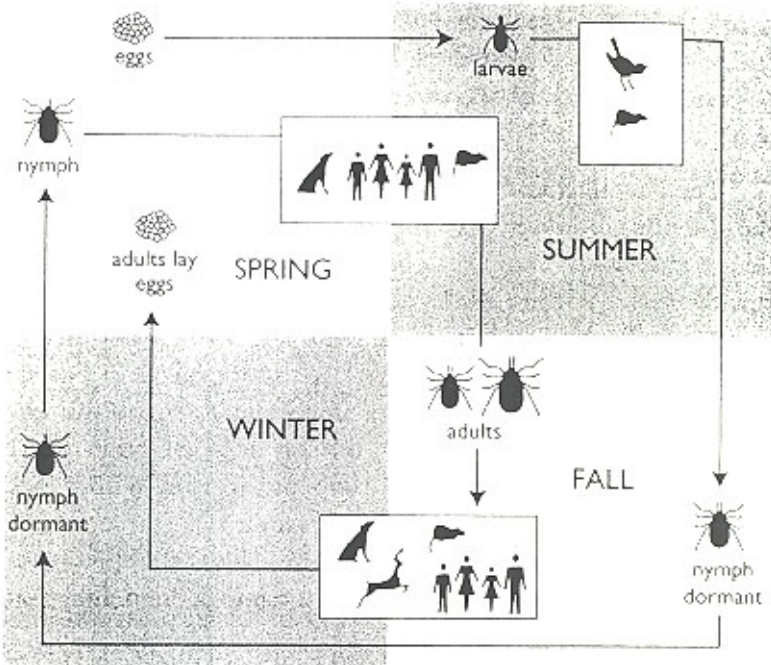
In some part of the United States the tick is known as the Cattle tick; in others the Sheep tick. In the mid-Atlantic States the tick is known as the Deer tick. Its real name is *Ixodes scapularis* or the black footed tick.

Environmental biologists know if one species of warm blooded creature is removed from the environment the tick will seek replacement hosts. In other words, if deer are removed the tick will latch on to more domestic pets and people.

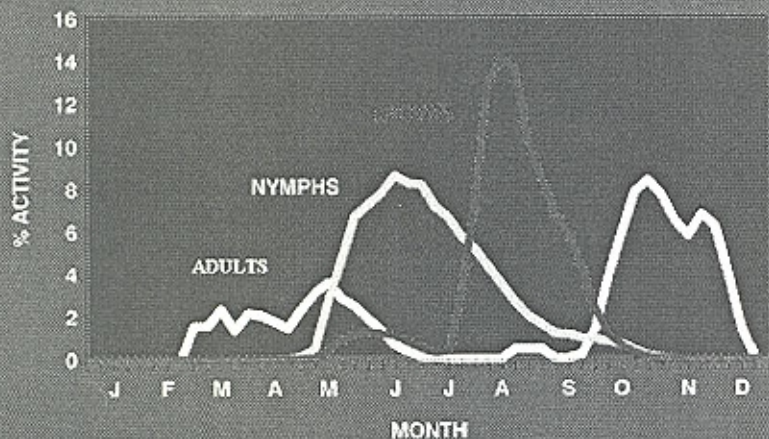
Removing deer from the environment will not reduce the number of cases of Lyme Disease. Treating mice for the disease with products like Damminix will have a greater beneficial effect. Damminix is a cardboard tube filled with cotton balls soaked in Permethrin insecticide. If the tubes are placed where field mice live, the mice will use the cotton to build their nests. The Permethrin in the cotton kills the ticks on the mice.

Damminix is available at many hardware stores. Permethrin spray is marketed under several brand names including Sawyer, Duranon, Permanone and is sold at the Sports Authority and Dicks Sporting Goods. A yard spray is also available.

2-Year Life Cycle of the Deer Tick



SEASONAL ACTIVITY OF *I. SCAPULARIS*



The above graph shows the host-seeking behavior of *I. scapularis* ticks according to life-stage and season. Larval activity peaks in August, nymphs are active during the summer months, and adults are active during the spring and fall. People primarily acquire *Borrelia burgdorferi* (the causative agent of Lyme disease) from infected nymphs because of their small size. Host-seeking larvae are not infected. Infected adults are large enough to be noticed and are usually removed by people before *B. burgdorferi* is transmitted. Consequently, very few Lyme disease cases are reported during spring and fall. Click [here](#) to learn about the probability of *B. burgdorferi* transmission according to how long an infected tick feeds on a person.