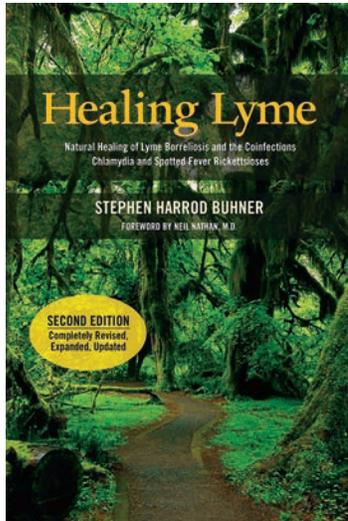


Understanding Lyme Disease from an Herbalist's Perspective



Healing Lyme: Natural Healing of Lyme Borreliosis and the Coinfections Chlamydia and Spotted Fever Rickettsiosis, Second Edition; Stephen Buhner; Raven Press; Revised, Expanded, Updated edition (December 7, 2015)

Unless you have Lyme disease, are a doctor treating patients with the disease, have friends or family with the disease, or have an interest in the ecology of disease, you are likely to find *Healing Lyme* to be way more

than you ever wanted to know about Lyme disease. However, those four categories cover a lot of people. Not all will be interested in the whole book, and the author encourages readers to choose sections according to their interests—for example, “If all you want is to know is how to treat your Lyme infection effectively, please . . . just skip ahead to Chapter Eight.”

Pesticides and You is not a medical journal, and although this review will not cover in depth the medical aspects of the book, I will say a few words here and there to put in context the aspects more directly relevant to *Beyond Pesticides*.

This review addresses the second edition of *Healing Lyme*, published in 2015, ten years after the first edition. The book almost doubled in size, as a result of the author's interactions with over 25,000 people with Lyme disease, and review of over 10,000 peer-reviewed journal articles. Stephen Buhner is a well-known herbalist, and like others in his field, is well-versed in plants—not just their medically-useful constituents, but also their ecology. He has a healthy respect for the wisdom of “lower organisms,” a label that many might apply to bacteria and plants.

The book addresses first misconceptions about Lyme disease. This topic is of importance to *Beyond Pesticides* because mistaken ideas lead to the use of toxic chemicals to avoid Lyme. A great deal of controversy exists concerning the rate of infection with Lyme disease (and related diseases), the vectors of the bacteria that cause the disease, the geographic distribution of the disease, and the effectiveness of the standard antibiotic treatment. The author concludes that rates of infection are much higher than generally accepted; that *Borrelia* spirochetes are present in and transmitted by a number of biting arthropods (including mosquitoes, mites,

fleas, and flies) and use many animals as hosts (not just mice, deer, and humans); that the disease is endemic to most states in the U.S.; and that although the standard antibiotic treatment works for many patients, it does not work for all.

The book examines the ecology of Lyme disease on two levels—macroecology and microecology. Both are necessary for understanding and avoiding the disease. On the macro level, it is important to understand that the ticks that serve as the primary (though not only) vectors for the disease organisms *Borrelia* spp. attach themselves to, and infect, many large and small animals from mice to deer to dogs to lizards to birds, to name a few. Birds, especially, carry the ticks and *Borrelia* spirochetes over long distances—including stops (and distribution) in urban areas. It is practically impossible to avoid Lyme disease by limiting your movements geographically. Lyme disease is also part of an evolving landscape, in which populations of some host species have been decimated or eradicated, provoking *Borrelia* to seek new hosts. The landscape has also changed in that some animals who remove the tick vectors during grooming—for instance, possums—have become less common.

On the micro level, *Borrelia* adapts to each new host it encounters. Every individual is different, and *Borrelia* is an obligatory parasite—meaning that it can only persist with resources from its host—so it must adapt. The presence of pharmaceuticals or phytochemicals from herbs in the bloodstream are factors to which the bacteria must adapt. Collagen is the source of the nutrients needed by *Borrelia*, so the author highlights this message, “The most important thing to understand about Lyme disease is that the bacteria have an affinity for collagenous tissues. This is at the root of every symptom they cause.”

Herbal Prevention and Treatment

Among the most useful herbs for treating Lyme disease is *Polygonum cuspidatum* (Japanese knotweed), which, although widely considered to be an “invasive” (and hence undesirable) plant, “tends to move into new regions about six months before Lyme disease becomes endemic there.” The fact that Lyme disease can be encountered just about anywhere may present a scary picture.

However, I will close with a couple of recommendations for avoiding the disease. First, the best defense against *Borrelia* is a healthy immune system, and the herb astragalus (*Astragalus propinquus*) is recommended as a good herb for protecting the immune system. The next best defense is avoidance of the disease vectors, and although it is not possible to avoid all possible arthropod carriers, a recipe for a natural tick repellent can be found on page 237.