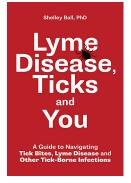
ENTOMOLOGY AND ARACHNOLOGY

Lyme Disease, Ticks and You: a Guide to Navigating Tick Bites, Lyme Disease and Other Tick-Borne Infections

By Shelley Ball. 2021. Firefly Books. 128 pages, 19.95 CAD, Paper.

Any naturalist or person who works outdoors in temperate North America, particularly in hotspots for ticks, is likely already aware of ticks and perhaps has even had Lyme Disease or knows someone who has had it. For those still unfamiliar with Lyme Disease, it is caused by the bacterium *Borrelia burgdorferi* as well as other species



within the genus *Borrelia* and is transmitted to humans via ticks such as black-legged ticks (*Ixodes* spp.). Once infected with *Borrelia* bacteria, humans can start to display a number of symptoms of Lyme Disease, including the iconic "bulls-eye rash" (*Erythema migrans* rash), fatigue, and flu-like symptoms. If *Borrelia* bacteria remain undetected or untreated in humans, then chronic symptoms may occur, although chronic Lyme Disease remains a contentious issue among medical professionals. Hotspots for ticks in Canada, and in North America as a whole, seem to be getting worse as the hotspots are expanding into new regions, and Lyme Disease is becoming more prevalent.

Lyme Disease, Ticks and You serves as an excellent overview for all aspects of Lyme Disease, including a history of Lyme Disease, the ecology of ticks and transmission of Lyme Disease, how to mitigate the risks of tick bites, what to do if you get a tick bite, and more information on the medical side related to acute and chronic Lyme Disease. This book serves as a really great crash course for anyone interested in many of the basics of Lyme Disease and ticks. Lyme Disease is not simple. It is transmitted to humans via tick species that have complex life cycles, including multiple host species at different life stages. Similarly, once Borrelia bacteria enter the blood stream of a human, the resulting symptoms are not necessarily predictable. Dr. Ball takes these relatively complex topics and describes them in a straightforward, logical fashion using fairly plain language. Readers with a basic understanding of science should find this book easy to digest and follow. Perhaps one of the most important take-home messages from this book is that ticks are becoming more common on the landscape and there is likely no way to remove this threat from the ecosystem. Rather than fearing the outdoors, we must learn to co-exist safely with ticks. This can be achieved through a number of simple steps, many of which are laid out in this book, including the use of repellants and tick checks (i.e., searching your body for ticks).

The author of this book is a biologist and educator. Dr. Ball lives in a hotspot for Black-legged Tick in Ontario, and she suffers from chronic Lyme Disease. Dr. Ball weaves together her expertise in ecology with her experience as someone who suffers from Lyme Disease to bring this book together. The preface is quite personal: it lays out Dr. Ball's history with Lyme Disease and describes why she thought it was necessary to write this book. One of the main goals of her book was to help educate people on Lyme Disease and its risks, and that goal has certainly been met. I highly recommend this book to any naturalist, student, or person getting into the outdoors for work or pleasure who does not know much about Lyme Disease and staying safe while in tick country.

WILLIAM D. HALLIDAY

Wildlife Conservation Society Canada, Whitehorse, YT, Canada and School of Earth and Ocean Sciences, University of Victoria, Victoria, BC, Canada

©The author. This work is freely available under the Creative Commons Attribution 4.0 International license (CC BY 4.0).