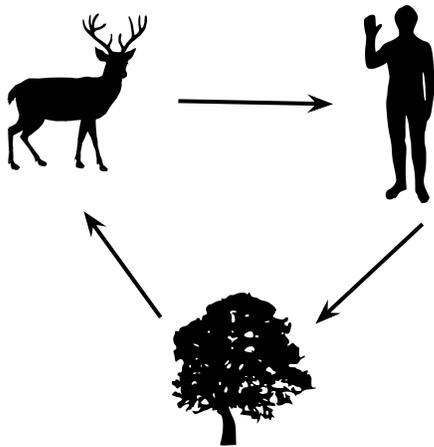


While some disease outbreaks may be “natural,” human behaviors and influences are adding additional pressure on wildlife and the landscape, and in the end, all of us – humans, wildlife, and the environment – are affected.

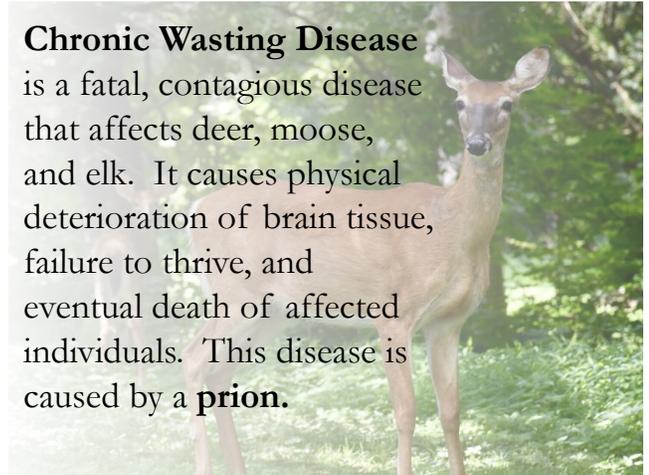
One Health is the concept that the health of animals, people, and the environment is equal, important, and connected. You cannot have one without the others.



Wildlife hospitals are often the first to see new or developing diseases in wild animals. Based on the cases coming through the hospital, as well as concerns reported by members of the public, wildlife veterinarians are able to identify wildlife health changes at the population level. Disease biologists and veterinarians study these changes and work to determine how problems with wildlife health and the health of the environment will impact humans. Human activities often contribute to the spread of these diseases when carrying contaminated materials like boots and tools from one area to another, directly moving wildlife from one area to another, and by increasing direct interactions between animals at feeding stations such as bird feeders.

Chronic Wasting Disease

is a fatal, contagious disease that affects deer, moose, and elk. It causes physical deterioration of brain tissue, failure to thrive, and eventual death of affected individuals. This disease is caused by a **prion**.



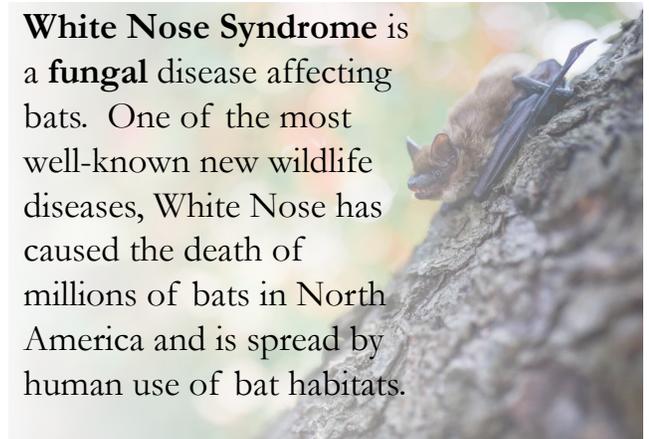
Snake Fungal Disease

is an emergent fungal infection identified commonly in the Eastern United States. The disease affects the skin of wild snake species and is considered a significant threat to wild populations.



White Nose Syndrome

is a **fungal** disease affecting bats. One of the most well-known new wildlife diseases, White Nose has caused the death of millions of bats in North America and is spread by human use of bat habitats.



These writing prompts are designed to inspire critical thinking and promote an understanding of One Health and the importance of understanding emerging wildlife diseases. Questions may require additional research and can be answered individually in writing, or discussed out loud in a group setting.

Many different types of professionals are involved in various aspects of monitoring and addressing wildlife disease concerns. Veterinarians, biologists, law makers, animal control officers, and others dedicate their entire careers to this effort. Why do you think the research and control of wildlife disease is so important to our society? What do you think would happen if we ignored these issues?

You are made aware of a neighbor who is regularly feeding a herd of deer in their backyard. They share with you that as many as ten deer at a time are seen each evening enjoying the corn he provides. Besides this being illegal in many states, what other issues may this activity lead to and how could it impact the overall deer population?

Surveillance surveys are an important part of monitoring and evaluating wildlife diseases. Scientists evaluate swabs and tissue samples from wildlife in the field or in wildlife hospitals in order to look for evidence not visible to the naked eye. Often, disease causing agents are found even in seemingly healthy individuals, indicating that some diseases present in the environment only cause a problem for wildlife when they are otherwise failing to thrive or confronted with limited resources. What human-related circumstances could contribute to wildlife becoming more susceptible to these diseases? Do you feel that humans are responsible for preventing these impacts when some of these diseases are a natural part of the ecosystem? Why or why not?

Your good friend is an avid spelunker and enjoys visiting and exploring caves throughout the United States. You have recently learned about a concerning disease called White Nose Syndrome. Write a note to your friend sharing what you know about the disease and making recommendations for measures they should take to make sure they are enjoying their hobby responsibly.

