



Epizootic Hemorrhagic Disease (EHD) Prevalent During Drought

By Jackie Nix

The record-setting heat and drought are setting the stage for a significant outbreak of Epizootic Hemorrhagic Disease (EHD) in whitetail deer this year. This deadly viral disease of white tail deer and other wild ruminants is spread by biting midges (a.k.a. sand gnats, sand flies or no-see-ums). While EHD deaths are common and occur annually, this year deaths have been confirmed much earlier than normal and in a greater number of areas. Confirmed cases have already been reported in Alabama, Indiana, Kentucky, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia and West Virginia for 2007. Because deer that survive are immune for life, enhancing a herd's immune status through nutritional supplementation is a smart wildlife management tool to help herds not only survive but to also thrive.

What is EHD?

Epizootic Hemorrhagic Disease is a viral, blood-borne disease that is common in wild ruminants and usually occurs in late summer and early fall. The virus that causes EHD is closely related to the one that causes Blue Tongue in domestic livestock and both have similar symptoms. EHD produces a high fever leading animals to seek water. Scarce water and feed resources this summer and fall are causing deer to come in closer contact with one another, thus further encouraging transmission of the disease.

Symptoms of EHD

The severity of an EHD outbreak will be directly related to collective herd immunity. Some deer infected by EHD exhibit no symptoms while others exhibit symptoms within 7 days including extensive hemorrhaging and sudden death.

Other EHD Symptoms Include:

- * Sick and dead animals found near water
- * Swelling of face, tongue, neck and eyelids (see Figure 1)
- * Bloody discharges
- * Lameness/ Cracked, overgrown hooves (see Figure 2)
- * Extensive hemorrhaging in many tissues
- * Ulcers in mouth tongue and stomachs

An outbreak of EHD can kill up to 25% of the total herd. Fortunately, there are no known instances of whole herds being wiped out. Deer who survive infection are immune for life and does can pass this immunity on to their fawns.

Are EHD Infected Deer Safe to Eat?

EHD does not affect humans and eating meat from infected deer is not dangerous. However, infected deer may suffer from secondary infections that can taint the meat. Never consume meat from a deer that is visibly sick.

What Can I Do to Prevent EHD in my Local Deer Herd?

Because EHD is endemic, we cannot prevent outbreaks of EHD. However, through proper nutritional supplementation, we can give deer the building blocks needed to mount a successful immune response, thus improving their odds of survival.

How Does Nutrition Affect Immunity?

The immune system is a complex network of organs, tissues and cells that work together to protect the animal from viruses, bacteria, other microorganisms and toxins. These critical organs and tissues require adequate intake of essential nutrients in order to function optimally. There is no question that well-nourished deer are healthier and better able to cope with disease challenges than poorly nourished deer. Overall nutrition is important for health. Deer need adequate intake of protein and calories to maintain their body's defenses. Protein or calorie malnutrition, such as occurs with prolonged starvation, robs the body of its defensive capabilities, depleting white blood cells as well as crucial immune system proteins. Additionally, several micronutrients such as selenium, vitamin A, vitamin E, copper and zinc have been shown to play important roles in immune response.

Providing Proper Nutrition.

Due to the excessive heat and drought in many parts of the country, natural feedstuffs will likely be in short supply this fall. The late frost that hit many areas this past spring may also affect the availability of fruits and nuts normally consumed by deer in early to late fall. Also, because of dry conditions, even cultivated food plots may not provide adequate nutrition this fall. For all of these reasons, nutritional supplements may literally mean the difference between life and death for some deer this fall and winter.

Summary

In summary, a significant outbreak of EHD is underway in many of the drought-stricken eastern states. EHD is a deadly, viral disease of deer and other wild ruminants that is spread by biting midges. While there is no way to prevent exposure to EHD, well-nourished deer have much better odds of surviving the disease than malnourished ones. For this reason, it makes good sense to provide deer with nutritional supplementation. Sweetlix[®] offers several self-fed block and mineral supplement options to provide nutrients needed by deer to mount an effective immune response.

The Sweetlix[®] Deer Supplements available include:

- Sweetlix[®] Cornlix Block
- Sweetlix[®] Buck & Doe Block
- Sweetlix[®] Rack Deer Block
- Sweetlix[®] Rack Deer Mineral

For additional information about Sweetlix® deer supplement products or how to properly utilize them, please visit www.sweetlix.com or call 187SWEETLIX or visit your local Sweetlix® dealer.



Figure 1. A EHD infected deer. Note the reddened, swollen eyes and nose.



Figure 2. Deer who survive at least a month after infection may have fever rings or cracked or sloughing hooves.