

Haemal Lymph Nodes in Alberta



A. Boucher



Common name

hemal lymph node,
haemolymph node,
haemal gland,
haemolymph gland

Scientific name

[not applicable]

What's Bugging Wild Critters?

Fact sheet #32 :
Haemal Lymph Nodes

Significance

Haemal lymph nodes are normal components of the anatomy of many species. Hunters sometimes see these in elk, moose, and deer and wonder what they are. There is no cause for concern.

What? Where? How?

Lymph nodes are normal anatomical structures that help protect against infection and foreign bodies that may occur in an animal. They are scattered throughout the body so they can quickly collect and remove particles before they damage the delicate inner balance of a healthy animal.

Lymph nodes are essential elements of the immune system. They filter and clean the fluids that bathe all cells in the body. The nodes are packed with lymphocytes, the white blood cells that trap and remove foreign particles circulating in the tissue fluids.

Most lymph nodes occur in some shade of gray, yellow, or brown. They are firm, oval, or elongated masses of tissue often buried within a fat depot. Lymph nodes can vary a lot in size depending on how active they have been. Some can get quite large - for example, axillary lymph nodes in the shoulder of a moose can be 8 to 10 cm long (nearly 4 inches).

The most likely place to see lymph nodes is in the fat on the shoulders, the inner side of the back leg, or associated with various organs in the body cavity. If you cut into a lymph node, the cut surface reveals a mass of relatively firm, often dark yellow/brown tissue. A small amount of clear or pale yellow fluid (serum) may leak out.

Haemal lymph nodes

Haemal lymph nodes are a subset of lymph nodes that occur within blood vessels. As a result, they are filled with dark red blood instead of clear lymph fluid.

Haemal lymph nodes look like small round or oval dark red/maroon/black masses. They often look like blood clots but unlike clots, they are enclosed within a surrounding capsule. Haemal lymphs can range from a few millimeters to pea-sized or larger.

The best place to find haemal lymph nodes is in the fat and connective tissues of the neck, close to the trachea (windpipe) and oesophagus. Another good place to look for them is in the fat around the large blood vessels that leave the heart, particularly the aorta, and the major blood vessel inside the body cavity directly below the backbone. Haemal lymphs also can occur scattered in fat associated with the kidneys, urinary bladder, intestines, and tenderloins.

Unlike other organs, there is no set number of haemal lymph nodes. Even within the same species, some individuals seem to have a lot and others may have few or perhaps even none. Many hunters with years of experience looking inside harvested game may never see these nodes.

Haemal Lymph Nodes

Distribution in Alberta

Haemal lymph nodes occur in many wild mammals but are most often seen in cervids (members of the deer family), particularly elk and moose but also white-tails and mule deer. Other ruminants such as cattle and sheep also have good numbers of haemal lymph nodes.

They also occur in carnivores, particularly canids, and thus are sometimes seen in wolves, coyotes, foxes, and dogs. However, in these species the number of haemal lymph nodes is low and most often they are completely overlooked by casual observers.

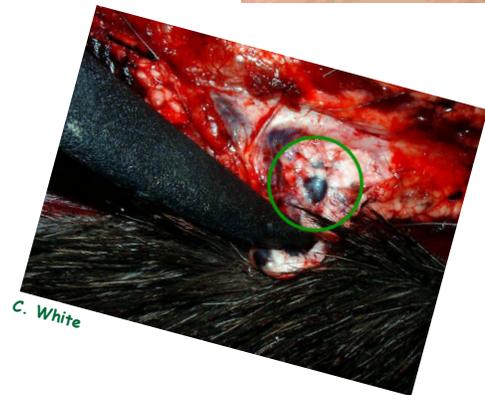
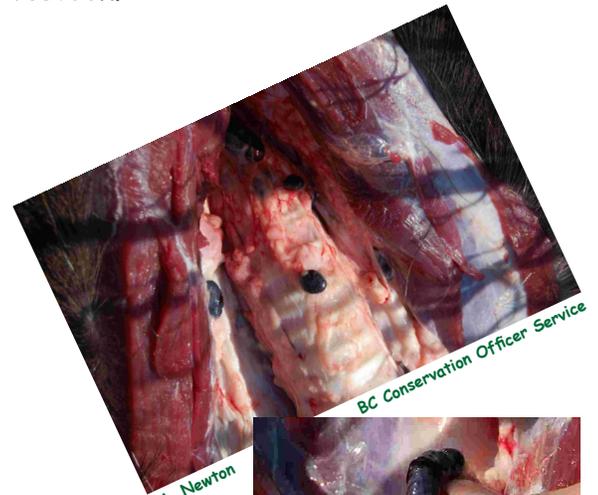
Importance for Wildlife Management

Those who have never seen haemal lymph nodes, and occasionally the larger common lymph nodes, can misinterpret them as being something abnormal. This may cause some hunters concern and each year the Fish and Wildlife Division receives questions about what a hunter or trapper has found. The worst situation would be if a hunter discarded the carcass under the misunderstanding that there was something wrong with the animal. There is nothing abnormal about an animal having lymph nodes. And of course it is illegal to abandon a perfectly normal big game carcass.

Anyone who has concerns about anything seen in harvested wildlife should retain the carcass or meat and then get in touch with Fish and Wildlife staff. In the case of lymph nodes, or haemal lymph nodes, staff can reassure you that the tissue is a normal part of your harvested animal.

Public Significance

Lymph nodes and haemal lymph nodes do not pose any human health risk. They are part of the normal anatomy of the animal and do not pose any concerns for people, pets, or livestock.



Summary

Haemal lymph nodes, and lymph nodes in general, are normal. There is no reason for concern if you find these nodes in the fat of your harvested wildlife.

Additional Information

Michigan Department of Natural Resources

http://www.michigan.gov/dnr/0,4570,7-153-10363_10856_10905-32311--,00.html