

CARIBOU MONITORING VIDEO SCRIPT

VIDEO #3: ABNORMALITIES

00:02 (ON-SCREEN TEXT):

Common Diseases and Parasites in Caribou

Common Diseases and Parasites in Caribou.

Caribou are important and healthy sources of food for people around the North.

Although most caribou are healthy, sometimes hunters notice diseases and parasites in caribou that they hunt and want to know if the meat is safe to eat.

Many of the things that hunters observe are normal and have always been found in caribou.

In this video we will discuss some of the common diseases and parasites found in caribou, how caribou get these, and what it means to you.

00:47 (ON-SCREEN TEXT): Warbles

Warbles.

Warbles are very common in caribou and reindeer.

Warble larvae are found on the back of caribou under the skin during the winter and spring. In early summer, the larvae emerge, drop to the ground, and develop into an adult warble fly. Later in the summer, the adult fly will lay eggs on the hairs of the caribou's legs and lower body. The eggs hatch, and larvae will penetrate the skin, and travel under the skin to the caribou's back where they grow over the winter.

When laying their eggs, warble flies can harass caribou and interfere with their feeding. When the larvae migrate under the skin, they can cause some bruising and discoloration on top of the meat. Once the larvae are growing under the skin of the caribou, they do not appear to harm the caribou. Warbles do not affect people.

01:51 (ON-SCREEN TEXT): Warble Life Cycle

02:00 (ON-SCREEN TEXT): Nose Bots

Nose bots.

Nose bots are also quite common in caribou.

Nose bots are found in the nose and throat of caribou. You may see them when you cut off the head. Nose bot flies lay their larvae in the nose of caribou in the fall. These develop in the back of the nose and throat through the winter. In early summer, the larvae drop out and hatch into adult flies.

When laying their larvae, nose bot flies harass caribou and interfere with their feeding. The larvae may cause irritation and sneezing. Nose bots do not affect people.

02:49 (ON-SCREEN TEXT): Nose Bots Life Cycle

02:59:00 (ON-SCREEN TEXT): Liver Tapeworm Cysts

Liver tapeworm cysts.

You may see fluid filled cysts in or on the liver of caribou. These are the intermediate form of the tapeworm *Taenia hydatigena*, and are very common in caribou. The cysts may later cause white, star-like scars on the surface of the liver. Infected caribou will probably look healthy.

03:31 (ON-SCREEN: Liver Tapeworm Life Cycle)

If liver cysts are eaten by a carnivore such as wolves or dogs, they will develop into tapeworms that live in their intestines. These tapeworms will lay eggs that come out in the wolf's or dog's droppings, and contaminate plants that will be eaten by caribou.

Cooking or freezing the liver kills the cysts. The liver tapeworm cysts do not affect people.

04:00 (ON-SCREEN TEXT: Liver Tapeworm Life Cycle)

04:12:00 (ON-SCREEN TEXT): Muscle Tapeworm Cysts

Muscle tapeworm cysts.

Muscle tapeworm cysts are very common in caribou. Cysts are generally found in the heart and meat. These are tapeworm cysts in the muscle of a caribou. They are the size of rice grains, round or oval and whitish or yellowish. The muscles around the cysts usually look normal, and the caribou will probably look healthy.

04:49 (ON-SCREEN: Muscle Tapeworm Life Cycle)

The cysts are the intermediate stage of a two-host tapeworm, called *Taenia krabbei*. If the muscle cysts are eaten by a carnivore like a wolf or a dog, they will develop into tapeworms that live in their intestines. Infected wolves and dogs, will shed tapeworm eggs in their droppings. Caribou get infected by eating the eggs.

Cooking or freezing the meat kills the cysts. The muscle tapeworm cysts do not affect people.

05:28 (ON-SCREEN TEXT: Muscle Tapeworm Life Cycle)

05:39:00 (ON-SCREEN TEXT): Hydatid Disease

Hydatid Disease.

Some caribou may have large cysts in their lungs. The cysts have thick walls, and are filled with a clear watery liquid and hundreds of small granules. Cysts can be the size of your finger-nail to the size of a baseball. These cysts generally don't hurt the caribou. Infected caribou will probably look healthy.

If hydatid cysts are eaten by a carnivore such as wolves or dogs, they will develop into tapeworms that live in their intestines.

06:18 (ON-SCREEN: Hydatid Disease Life Cycle)

These tapeworms will lay eggs that come out in the wolf's or dog's droppings, and contaminate plants that may be eaten by caribou. The tapeworm eggs can also infect people. It is very important not to feed infected lungs to dogs. It is also important not to handle wolf, dog or fox droppings without gloves.

06:50 (ON-SCREEN TEXT: Hydatid Disease Life Cycle)

07:30:00 (ON-SCREEN TEXT): Lungworms

Lungworms.

When cutting into the lungs, you may find adult worms within the windpipe or airways inside the lungs. Lungworms are usually white, threadlike worms that may be as long as your finger.

Lungworms may also cause small round grey lumps of dead tissue.

Animals infected with lungworms often appear healthy, With severe infections they may become sick. Lungworms can cause caribou to cough and have difficulty breathing, especially after running. They can also make caribou thin.

07:56 (ON-SCREEN TEXT: Lungworm Life Cycle)

08:09 (ON-SCREEN TEXT): Besnoitia

Besnoitia.

Besnoitia is a common parasite found in caribou. Many healthy caribou carry this parasite without any signs of disease. In heavily infected animals, this parasite can cause hair loss on the lower legs and face. The skin may look thick and crusty. Hunters can sometimes feel the parasite when they are skinning the caribou, usually when taking the skin off the lower legs.

The cysts are hard and feel rough like sandpaper over the bones and skin. Cysts are sometimes visible to the naked eye. They look like very small clear to white grains on the surface of bones, muscle, skin or on the whites of the eye.

Besnoitia do not affect people.

09:08 (ON-SCREEN TEXT): Abscesses

Abscesses.

Caribou will sometimes have abscesses, or pockets of pus, in different parts of their body.

Abscesses are usually caused when a wound becomes infected. They can be found anywhere on the body in muscle or other tissues. Hunters usually find abscesses while butchering. They look like swollen areas filled with thick fluid that is white or green.

Depending on where an abscess is and how bad it is, a caribou may or may not appear sick.

If you find an abscess, be careful not to cut into it. The portion of the meat containing the abscess should not be eaten, but the rest of the caribou can still be used. If a caribou has many abscesses it may not be good to eat. Contact your wildlife office for advice.

If you cut into an abscess by accident, wash your knife and hands.

10:16 (ON-SCREEN TEXT): Foot Rot

Caribou can sometimes have infections of their hooves and lower legs. This is called 'foot rot', and is caused by naturally occurring bacteria. Foot rot occurs when the ground is unusually wet. It can also occur when rough damages the caribou's feet and allows bacteria to get in. Caribou with foot rot may have swollen hooves, discharge, and may be lame. The infection can spread deep in the foot and leg. In severe cases, the bacteria may spread to other parts of the body and cause abscesses in different body organs. This can make the caribou sick.

11:08 (ON-SCREEN TEXT): Brucellosis

Brucellosis.

Caribou can carry a disease caused Brucellosis. Brucellosis usually affects the reproductive organs and leg joints of caribou, and can cause lameness and abortion. Brucellosis is spread among caribou in the afterbirth and fluids during calving.

Caribou with brucellosis may have swollen leg joints causing limping or lameness, particularly in the front legs. In males, the testicles may be large and swollen. When butchering, you may find pus-filled swelling under the skin, in the meat or in the internal organs.

Brucellosis can also affect people. You could be exposed by handling contaminated parts, or by eating infected meat that has not been fully cooked. If you think a caribou has brucellosis, you should take some Simple precautions. Wear gloves when butchering the animal. Do not cut into diseased parts such as swollen joints or testicles. Do not spill fluid from the womb onto the meat. Wash your hands and knives with hot soapy water after handling the animal. You should also report your findings to your nearest wildlife office.

12:38 (ON-SCREEN TEXT): **Conclusion**

In this video we have discussed a number of different parasites and diseases that you might see in caribou.

Some of these diseases and parasites can infect people. It is important to wear gloves whenever you suspect something a caribou might be sick.

If you do notice something unusual you can collect it and submit it to your local wildlife office. When collecting samples, be careful not to cut into an abscess or unusual swelling. Put the sample into a bag, keep it away from the healthy meat, and freeze it as soon as possible. Clean your hands and knives after butchering the animal.

Although we have talked about many different parasites and diseases in this video, it is important to remember that most caribou are healthy and are an excellent source of food.

If you have any questions about this video or caribou health please contact your local wildlife officer, biologist, a wildlife veterinarian or the Canadian Cooperative Wildlife Health Centre.

CREDITS