

CARIBOU MONITORING VIDEO SCRIPT

VIDEO #1: LEVEL ONE

00:02 (ON-SCREEN TEXT): MONITORING CARIBOU

00:04 (ON-SCREEN TEXT): A CircumArctic Rangifer Monitoring and Assessment (CARMA) Network Initiative

00:09 (ON-SCREEN TEXT): GETTING INVOLVED

Across the north, people are concerned about how the caribou are doing, and how global changes are affecting the herds.

To help answer these questions, hunters can get involved by collecting samples while they are harvesting caribou for food.

This contributes to a better understanding of caribou and helps to ensure that there will be healthy caribou populations for generations to come.

In this video, veterinarian Susan Kutz and hunters from communities of the Northwest Territories, will show you how to collect information and samples from caribou that you harvest.

This is important so that we can compare health and body condition of the caribou across the north.

For example, when hunters record how fat caribou are, the information from all the communities using that herd can be put together to determine the body condition of the herd for that year.

By recording the same measurements each year, changes to the herd can be related to other changes, like snow conditions, climate, and the amount and types of plants that caribou eat.

Hunters and field workers can use information in this video and use the monitoring protocols to contribute to their own studies or to a regional monitoring program.

02:18 (ON-SCREEN TEXT): LEVEL ONE MONITORING

This video shows hunters how they can do Level One basic monitoring of the caribou. This includes the collection of information on age, fat, and body size.

Pre-labelled sampling kits are provided.

You will be given two tags for each caribou that you harvest.

(ON-SCREEN: JAW TAG)

The first tag is for the jaw. It has writing on the front, and the back.

(ON-SCREEN: "front" and "back" circled)

FRONT

(YOUR HERD) JAW COLLECTION

ID: 001 HUNTER: (optional) DATE: LOCATION:

Return to: (agency/office location, phone number)

BACK

SEX: Male Female

PREGNANT?: Yes or No NURSING?: Yes or No

CONDITION: Skinny Not so bad Fat Really Fat

DEPTH OF BACKFAT: _____cm

2 4 6 8

The second tag is for the leg bone.

(ON-SCREEN: LEG BONE TAG):

(YOUR HERD)

LOWER LEG BONE COLLECTION

ID: 001 HUNTER: (optional) DATE: LOCATION:

Return to: (agency/office location, phone number) (ON-SCREEN: "Lower Leg Bone" circled)

When samples are collected, all vital information should be recorded on the front of the tag including:

(ON-SCREEN: Tag being circled)

- the name of the herd
- the collection number
- your name
- the date
- and the location of the harvest

On the other side of the tag you should record:

- the sex of the caribou – circle male or female
- if the caribou is pregnant – circle yes or no
- and if the caribou is nursing – circle yes or no

You should also record

- The condition of the caribou and the back fat.

We will talk about this in a few minutes, but first we will describe how to remove the jaw.

04:14 (ON-SCREEN TEXT): Jaw Collection

Jaw Collection.

We can learn much from a caribou jaw.

We can determine the exact age of the caribou by using specialized lab equipment to 'count the rings' in the incisor teeth, just as you would count rings on a tree.

Collecting the whole jaw is useful for measurements of body size.

Changes in body size can be a sign of changes in overall health of the caribou.

Bone marrow from the whole jaw may be used for measurement of body fat, which is another indicator of overall health of the caribou.

The jaw can be removed by cutting away the tongue and the muscles that are attached to the jaw bone.

Once these muscles are cut away you should be able to pull the jaw backwards and remove it.

If you cannot provide the whole jaw, at least get the front part, called the incisor bar. It must be collected so the age of the caribou can be determined.

The incisor bar may be cut from the jaw with a saw or a sturdy knife.

Note that it is always better to submit the whole jaw.

The next thing that you need to record on the tag is backfat.

(ON-SCREEN: Tag with arrow to backfat line)

06:23 (ON-SCREEN TEXT): Measure Backfat

Measure Backfat.

Backfat is measured along the rump.

Be careful when you are skinning the caribou in this area to make sure that you don't remove fat with the skin.

The back fat measurement is done about 5 centimeters in front of the base of the tail and about 5 centimeters to the side of the backbone.

(On-screen voice: "Two fingers in front of the tail, and two fingers over")

You can use the width of two fingers to estimate this distance.

Make a cut straight down through the fat.

You can use a regular ruler or the ruler along the edge of the jaw tag, to measure the depth of the fat.

(On-screen: tag with arrow pointing to ruler edge)

Insert the tag, or a ruler at the deepest point along the cut and measure the depth of fat from the top of the muscle to the top of the fat.

You may wish to measure backfat before skinning the caribou.

Use the same measurements to locate the place to cut and measure the depth from the top of the muscle to the bottom of the skin.

(On screen voice: “5.3 centimeters”)

Record the depth of the fat on the jaw tag.

(On-screen: tag with circle at “depth of backfat” line, “ 5.3”)

You can also mark the depth on the scale bar on the tag.

(On-screen: tag with line marked on ruler)

08:14 (ON-SCREEN TEXT): Blood Samples

Blood Samples.

To collect the freshest and cleanest blood samples, wait until you cut the hind leg.

Collect this blood on sets of filter paper strips that are provided in the envelope in your kit.

Each set of strips looks like a comb, with strips on it.

Soak the strips in clean fresh blood so that both sides are covered in blood all the way down to where the strips widen.

When handling filter paper strips, try not to touch the part with the blood on it.

Once the filter papers are soaked with blood, put them back into the envelope, then into a ziplock bag.

Keep the blood strips frozen.

The blood on the filter paper may be used to check for diseases, pregnancy, vitamins and minerals, as well as other measures of the caribou health.

Continue to butcher the animal.

09:38 (ON-SCREEN TEXT): Lower Leg Collection

Lower Leg Bone.

The last sample that you will collect is the lower leg bone.

Cut this from the left hind leg.

We can learn a lot about the caribou from the lower leg bone.

The marrow in the lower leg bone can be used as an indicator of overall body fat.

The skin on the lower leg bone can be used to look at the genetics on the caribou.

The skin can also be used to test for two parasites, *Besnoitia* and *Onchocerca*.

The lower leg bone can be used as an indicator of body size.

Remove the left lower leg bone with the skin and hoof attached.

(On-Screen voice: “And so we take this long bone here, as well as the hoof”)

(ON-SCREEN: Tag with arrows to lines to be filled in)

Be sure to fill in the information about the herd, the date, the location and attach the tag to the bone immediately. You can also record the hunter’s name on the tag.

11:10 (ON-SCREEN TEXT): Condition of Caribou

Once you have finished butchering your caribou you need to assess the condition of the caribou.

You should record the condition of the caribou based on amount of fat on the back and around the gut and kidneys, and based on the color and consistency of bone marrow.

Record fatness on the jaw tag by circling one of the descriptions:

(ON-SCREEN: Tag being circled)

- skinny
- not so bad – in other words, not too skinny
- fat
- very fat

Once you have completely filled out the jaw tag you can attach it securely to the jaw.

12:27 (ON-SCREEN TEXT): Conclusion

The jaw and legbone samples should be put into a bag to make sure the tags are protected.

Keep these frozen until they can be examined.

Keep the blood strips frozen.

You are now finished sampling the caribou.

CREDITS