

WILD HEALTH: Detailed description of moose sampling

Thank you for taking part in the **Wildhealth** project. The aim of the project is to understand the variation in skin/lung and gut microbiota in mammals living in different environmental conditions, and to correlate health (body condition and parasitism), microbiota and living environment. The microbiota (skin, lung, fecal) should be sampled as clean as possible to avoid contamination by microbiota from human skin or environmental bacteria. Please always wear clean gloves (provided).

INSTRUCTIONS

DATE: date the animal was shot

LOCALITY: name of the locality where the hunting took place

GPS: GPS coordinate of the place where the moose was shot

ID N°: Animal identification number: Initial of the name head of hunting team and a running number. For instance for Frederick Stenbacka's team, the numbers will be FS1, FS2... The same number will be on all samples from the same animal. Tubes are provided, they contain a DNA preservative. Note that numbers are already written on the tube. **The same number should be on the form and tubes for the same moose.**

TIME SHOT: time when the animal went down

TIME SAMPLE: time when the samples were taken

AMMUNITION USED: lead, copper or other type of ammunition

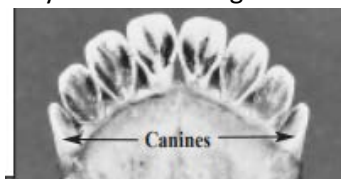
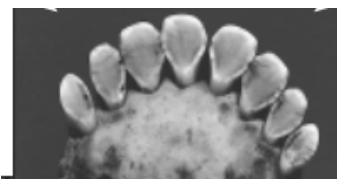
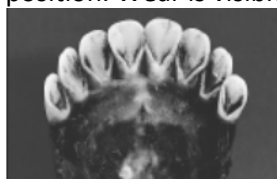
SEX: M for male, F for female

AGE:

Adult: all incisors in their final position. Wear is visible.

Calf: with only incisors, no canines

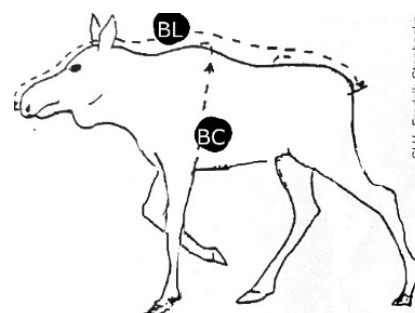
Juvenile (Yearling) canine and incisors. Canine teeth may still be rotating



<https://www.all-about-moose.com/support-files/aging-moose-by-teeth.pdf>

TOTAL BODY LENGTH (BL): body length from the tip of the nose to the tail

BODY CIRCUMFERENCE (BC): after the foreleg, at thorax level. It is possible to measure the half body circumference and multiply per 2.



SLU, Fredrik Stenbacka

SAMPLES

LUNG SAMPLE: Since the lung is the cleanest organ, it is good to start here. Sample a small piece of the lung with clean gloves and a clean scalpel. Since the tissue is elastic, you can grab one side of the lung with a handed glove and cut carefully around. Tick the box when the sample is taken. Take the sample **far away from the bullet trajectory** if the shot hit the thorax. The aim is to study the lung microbiota.

LIVER: No clean gloves needed, you can use the same scalpel than the one used for the lung. Tick the box when the sample is taken. We will perform toxicological analysis from the liver.

SKIN: Swab **the armpit skin thoroughly**. Break the stick and put the swab in the small tube that contains conservative. Sample with **clean gloves**. Tick the box when the sample is taken. The aim is to collect the skin from the skin microbiota.

BLOOD: Sample the heart clot with clean gloves. If you are planning to keep the heart, you can use the blood from the thorax. Tick the box when the sample is taken. We will identify pathogens from the blood sample.

FECAL SAMPLE: Sample half a pellet (1 entire if the pellet is small) from the rectum with clean gloves. Tick the box when the sample is taken. The aim is to study the gut microbiota.

OTHERS

SKIN PARASITES: ticks, fleas, mite, moose flies and lice. Please, circle the most appropriate answer:

- 1: no parasite,
- 2: 0-12% of the skin is infested by parasites,
- 3: 12-25% of the skin is infested by parasites,
- 4: 25-50% of the skin is infested with parasites,
- 5: more than 50% of the body is infested with parasite



<https://www.cbc.ca/news/canada/montreal/moose-killing-winter-tick-population-growing-in-quebec-1.2787755>

GUT/LIVER PARASITES: circle the most appropriate answer 1 (no parasite) to 5 (massive parasitism: you can see parasite from all cuts, after 5 random gut/liver cuts)

BODY CONDITION circle the most appropriate answer: 1: skinny moose, 3: normal moose, 5: fat moose

COMMENTS

All observations on health or parasitism: Fibroma, papilloma or other tumours, injuries, massive hair loss, abnormal behaviour