

Kenai Roadkill Moose Samples



Insert this completed form in a Ziplock and submit with required samples

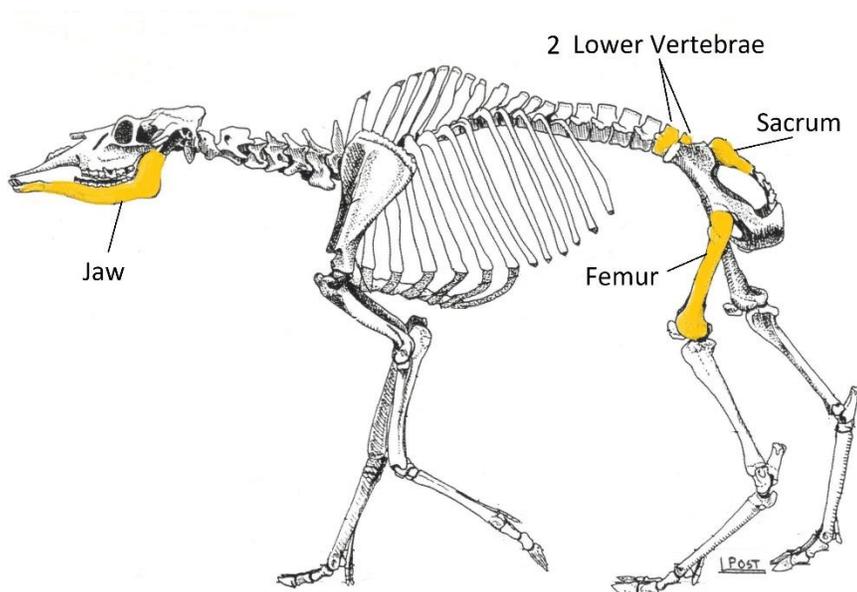
Date moose was killed _____

Detailed location of kill _____

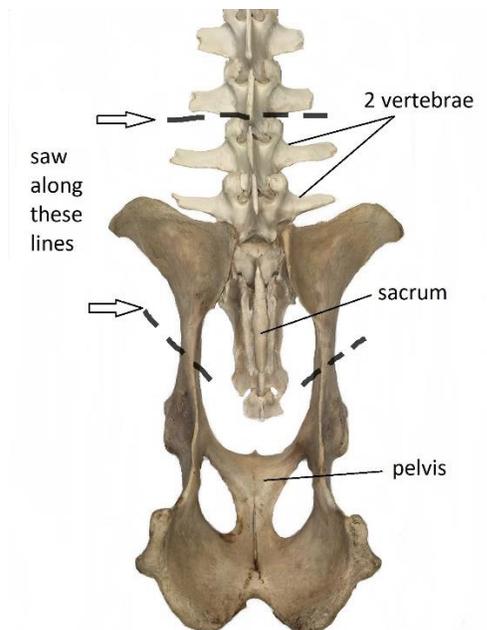
Samples submitted by _____ contact phone _____

Moose gender (circle): male female moose age (circle): calf adult

- Samples required:
1. entire uncut femur (thigh bone)
 2. if an adult, the entire head; if a calf, the entire head or uncut jaw
 3. if an adult, the sacrum with 2 attached vertebrae (see images below)



Birdseye view of pelvis, sacrum, and lower vertebrae showing ideal lines where to saw.



Questions?

Call, text, or email ADF&G biologist Thomas McDonough (907-435-7736, thomas.mcdonough@alaska.gov)
(revised June2021)

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Why does Fish & Game need your help?

For several years we have requested samples from roadkill moose on the western Kenai Peninsula. From these samples, we can assess the health, size, and age of the moose. Along with a femur and head, we are requesting the 2 lower vertebrae and sacrum. These samples help us understand our moose population.

- Health can be assessed by measuring the amount of fat in the bone marrow which is the last fat store metabolized. Low bone marrow fat indicates chronic malnutrition.
- We can index the body size of a moose by measuring landmarks on whole femur and jaw bones. This index can provide information on the quality of the moose habitat.
- We can determine the exact age of a moose by analyzing a tooth. The age structure of all the moose that die from vehicle collisions can inform us about the stability of the whole population.
- We have documented a high incidence of osteoarthritis in the lower vertebrae of moose. We want to assess the prevalence of this ailment by collecting more samples.

Sample collection tips

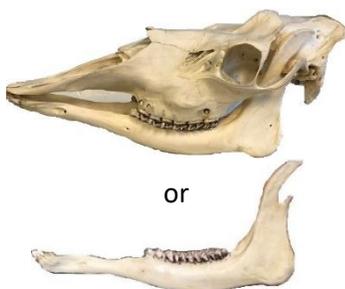
Submitting just the front part of the jaw prevents us from inspecting the molars for wear and disease or from measuring the jaw as an index of body size. While other bones have marrow, sampling the femur allows for consistent comparisons. Cutting through the femur compromises the quality of the marrow sample and prevents a whole bone measurement. Therefore, both the jaw and femur need to be whole and uncut.

The sacrum is difficult to remove from the pelvis so ideal areas to saw are shown below. After processing your moose meat, the 3 required samples should be frozen until they can be delivered to the Soldotna or Homer Fish & Game office.

3 required samples for each moose



1. entire uncut femur
(thigh bone)



2. entire head (adult)
or uncut jaw (calf)



3. sacrum and lower 2 vertebrae
(ideal cut locations shown)

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