2010 Cornell Sheep & Goat Symposium On-Farm Necropsies

Dr. Jessica McArt js448@cornell.edu

Items you'll need:

- Gloves
- +/- Sleeves
- Sharp knife or box cutter
- +/- Scale
- +/- Rib cutters (hoof trimmers work for young animals)
- Camera
- Method of record keeping

Record before you start:

- Date of death
- Circumstances of death if known
- ID, sex, age, weight
- If lamb/kid, dam and sire ID

Begin!

- Always place the animal with the left side down (its nose to your right and back end to your left with the feet pointing towards you).
- Make a stab incision under the right forelimb (armpit area) and continue the cut forward up the neck to the jaw. Remember that wool/hair/fiber is what dulls your knife, so always cut from inside out.
- Continue your cut towards the back end of the animal from the right forelimb, being careful not to enter the abdominal cavity; you are aiming for the right inguinal area (where the hindlimb meets the abdomen). Find the right hip joint and open it, then peel back the skin on the abdomen. When you are finished you should be able to flop both the right front and hind limbs away from you and have them stay there on their own.
- Make a cut just behind the last rib in order to enter the abdominal cavity. You may want to protect the intestines with your hand when cutting the abdominal muscles as you extend your cut towards the spine and then back towards the hind legs. These muscles can then be reflected down towards you so that you have a good view of the abdominal contents.
- Place your knife under the ribs and cut the diaphragm from sternum to spine. Listen while cutting for air to rush into the thoracic cavity.

- Find the junction where the ribs meet the cartilage of the sternum and cut all the ribs at this junction. After being cut you can push the ribs towards the spine, breaking them and allowing the thoracic cavity to be seen.
- Now that the hard part is over you can have fun! You can examine the animal in any order you would like, just make sure you don't miss any of the following, and remember to check both of the organs that come in pairs:
 - Lungs
 - Heart
 - Rumen/reticulum and contents (open last)
 - Abomasum/omasum and contents (check for milk, Haemonchus worms)
 - Small intestines
 - Large intestines
 - Liver
 - Kidneys
 - Bladder
 - Reproductive organs
 - Check the molar teeth if an older animal, by slitting the cheeks
 - Check for amount of body fat around the heart and kidneys and in the omentum (a layer that covers the intestines when you first open the animal)
- Take pictures! If anything looks odd and you aren't sure why, take a picture and show it to your vet or other support crew familiar with necropsies.
- Determine cause of death if possible and make note in your record keeping system.
- Appropriately dispose of animal.
 - Burial (at least 3 feet below ground surface)
 - Landfill
 - Composting Cornell Waste Management Institute (http://cwmi.css.cornell.edu)



Stillborn Nigerian Dwarf kid with abundant body fat

Photo courtesy of: Dr. Mary C. Smith

http://www.cvmbs.colostate.edu/ilm/proinfo/necropsy/notes/INDEX.HTML (good demo website)