



Skinning & Boning Big Game

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Agricultural Experiment Station • August 2003 • B-884R

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This bulletin will show a hunter how to skin and make boneless cuts of game meat. A cow elk is shown in the pictures, but the steps shown apply to elk, moose, deer, antelope, and other big-game animals.

Skinning

Before a field-dressed carcass is hung, skin around the hock and remove the hind shank at the flat joint on the lower part of the hock. The hind shank can also be removed with a saw. Make an opening between the tendon and hock and hang the carcass by one or both hind legs. Put the tip of the knife under the skin on the inside of the hind leg near the pelvic region and make a cut from the inside out up to the hock. Pull the skin away from the meat so that hair does not contaminate the skinned surface (*Figure 1*).

After both hind legs are skinned, skin the carcass from the brisket to the pelvic region by cutting, pulling, and fisting the skin from the sides. Fisting is pushing one's knuckles and fist between the hide and the meat. Pull the skin from the back. Some cutting of the membrane which holds the skin to a carcass is necessary (*Figure 2*).

When the skin is pulled down to the shoulders, put the tip of the knife under the skin and make a cut along the rear of the front legs. Skin the legs (*Figure 3*) and then pull the skin down the neck to the head and remove the head at the atlas joint (first joint).



Fig. 1. Pull the skin back away from the meat.



Fig. 2. Pull the skin from the back after skinning the sides.



Fig. 3. Make a cut down the front legs and skin the legs.

Making boneless cuts

Carefully trim all hair and contamination from a hanging carcass before starting to make cuts. Some people burn the hair from a skinned carcass with a torch. Remove the shoulder by cutting between the shoulder blade and the rib cage along the natural seam (*Figure 4*). This region often has bloodshot areas which need to be trimmed.

A boneless shoulder roast is made by cutting next to the bones along the line shown (*Figure 5*). Small blade roasts are also removed, and the remainder of the meat is boned and ground or cut into pieces for stew meat (*Figure 6*).

Locate the front part of the hipbone which separates the thicker leg from the thinner loin. Cut next to the bone and down the back. Remove the loin muscle by cutting as close to the bones as possible (*Figures 7 and 8*).

Trim excess fat and connective tissue from the muscle and make individual or butterfly steaks (*Figures 9 and 10*). Cut next to the ribs to remove the remainder of the meat from the forequarter (*Figure 11*) and use it for ground game, stew meat, or sausage. To reduce microbial growth, freeze the trimmings along with the steaks and roasts the day they are removed from a carcass. If necessary, frozen trimming can be thawed in a refrigerator or in plastic bags submerged in cold water and processed at a later date.



Fig. 4. Remove the shoulder.



Fig. 5. The line shows where the boneless shoulder roast is removed.



Fig. 6. Blade roasts are removed.

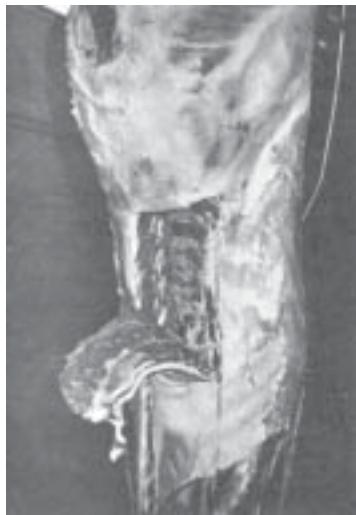


Fig. 7. Cut next to the hipbone and down the back.



Fig. 8. Cut close to the bone.



Fig. 9. Trim fat and connective tissue.

Trim the flank and neck meat. Contamination consisting of viscera contents, dirt, and leaves on the inside of a carcass can be avoided by cutting next to the rib bones on the outside of the body cavity (*Figure 12*). If inside contamination is not excessive, the two tenderloins can be removed to make small butterfly steaks or medallions for game tips. Cuts from the hind leg should be made last. For a large carcass a step ladder will be needed, or a suspended carcass will need to be lowered. The front of the femur should be exposed as the sirloin tip is removed (*Figures 13 and 14*).

The sirloin tip can be made into roasts or steaks. Remember to cut across the grain when making steaks. When the sirloin butt is removed, it can be cut into

steaks or roasts (*Figure 15*). After removing both sirloin butts, one leg can be dropped and the other left hanging to make it easier to remove the inside round muscles. Cut next to the pelvic bone and follow the seam between the muscles when making this cut (*Figure 16*). Make the top-round muscle into roast or steaks. After the top round is removed, remove the eye of the round and bottom-round muscles from the femur (*Figure 17*).

The remaining muscle to which the tendon is attached is a heel of round roast. This roast is generally quite tough and can best be utilized in ground game or sausage. When it is removed, the skeleton will fall, so make sure that all remaining edible meat is trimmed first (*Figure 18*).

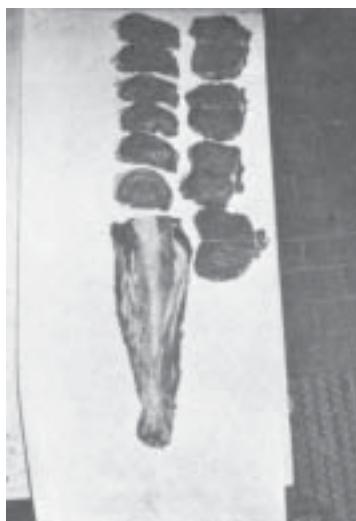


Fig. 10. Make individual steaks (left) or butterfly steaks (right).



Fig. 11. Cut next to the ribs.

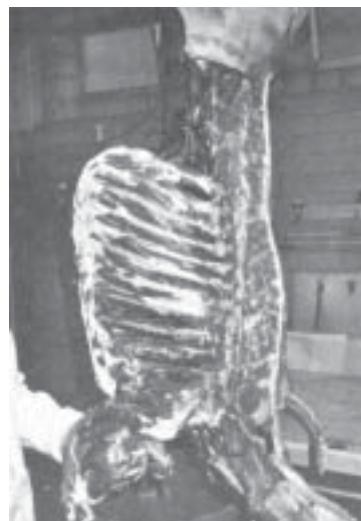


Fig. 12. Contamination on the inside can be avoided.



Fig. 13. The sirloin tip is removed.



Fig. 14. The front of the femur is exposed.



Fig. 15. The sirloin butt is removed.

From a fat cow elk carcass with a field-dressed weight of 349 pounds, this method of cutting produced 73 pounds of lean trim and 75 pounds of roasts and steaks for a total of 148 pounds of boneless meat (*Figure 19*).

Cuts from the round (from left to right) are (1) bottom-round steaks, (2) top-round roast, (3) bottom-round roast, (4) sirloin butt steaks, (5) heel or round roasts, and (6) sirloin-tip roasts with cap off (*Figure 20*).

When making game roasts, one may want to add pork backfat. This avoids drying during cooking and improves juiciness and flavor. Pork backfat can be wrapped around the outside of roasts (*Figure 20*), or for some rolled roasts pieces of pork can be placed inside. Strips of bacon can be used at the time of cooking if pork backfat is not added. It is recommended that 15 percent beef or pork fat be added to ground game and that 35 percent pork fat be added to fresh game sausage.



Fig. 16. Remove the top round at the seam.



Fig. 17. Remove the rest of the muscles from the femur.



Fig. 19. Cuts and lean trim.



Fig. 20. Cuts from the round.

Boneless cuts of big game are recommended because they are easier to trim, easier to wrap, and they require less freezer space. Boneless cutting also avoids sawing through the spinal cord where the agent associated with chronic wasting disease (CWD) is located. Therefore, deboning is recommended as a way to reduce potential exposure to the CWD agent (*Journal of Wildlife Management* 66: 551-563). Removal of major lymph nodes like the prescapular at the point of the shoulder, the preformal at the flank and round junction, and the popliteus embedded in the seam fat between the major round muscles also reduces exposure to the CWD agent. The preceding precautions are recommended even though CWD has not been linked to any human illness.

Consult the following publications for more information: *You and Your Wild Game*, B-613R; *Nutritional Content of Game Meat*, B-920; *The Pronghorn Antelope Carcass*, B-565R; *The Mule Deer Carcass*, B-589R; *The Elk Carcass*, B-594R; *Deer and Antelope Yield*, AS-102; and *Aging Big Game*, B-513R. To obtain these publications, phone the UW CES Resource Center at 307-766-2115 or go online at www.uwyo.edu/ces/ansci.htm to view the bulletins free of charge.



Fig. 18. Trimmed skeleton with one tendon left intact to hang the carcass.

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