Cutting up a big game carcass

John L. Schmidt and Delwin E. Benson

Deciding whether to cut up a big game animal yourself or to pay a professional butcher for the service can be a difficult decision, especially for the novice. Locker plants have the advantage of cold storage facilities for cooling and aging the carcass. Rates range from $30 to $40 for having a deer, antelope or similar sized animal skinned and wrapped, and $50 to $75 for an animal the size of an elk.

An unheated garage, porch or shed, where the carcass can hang in cool weather (near freezing or below at night), is required for home-aging. Aging can be omitted, but the result will be a slight loss in tenderness.

Advantages in butchering a big game yourself include saving money; cutting, wrapping and labeling exactly as desired; and learning more about the anatomy of the animal which will in turn make you a better hunter and teach you how to better care for the kill. A person should expect to spend one or two evenings completing the job of skinning, cutting and wrapping the carcass.

Equipment

Required equipment for butchering meat includes a sharp knife, a sharpening stone and steel to keep it sharp, freezer wrapping paper, freezer tape and a freezer marking pen. Desirable equipment includes a large cutting board, two containers—one for bones and meat scraps and one for burger or stew meat (plastic pails, roasters, or cardboard boxes lined with freezer wrapping paper work well)—and a butcher saw.

Skinning

If cool weather allows, postpone skinning until immediately prior to butchering. The hide will help keep the meat moist and clean.

The carcass should be hanging either by the hocks (Figure 1) or head (Figure 2) for ease and cleanliness during the skinning process. Cut the skin around the neck just below the head and around each leg above the hoof, then up the inside of each leg to the center cut, as shown in Figure 2.

Then working from top to bottom, separate the hide from the carcass. Leave as much fat, connective tissue and muscle fibers with the carcass as possible. Avoid getting hair and dirt on the carcass or cutting holes in the hide.

Trimming

Remove the head by cutting through the muscles at the base of the head between the skull and the first neck vertebra, then twist the head off.

The meatless lower legs can be removed with a saw or by cutting through the ligaments and cartilage at joints and twisting them off.

Cutting

Cutting can be either simple or complex. Many hunters simply cut all the meat off the skeleton and have it ground for use as hamburger, sausage, salami, etc. Others use the boneless meat for jerky or as stew meat. Still others cut up a big game carcass as one would cut up beef, making several kinds of steaks and roasts as well as ribs and hamburger.

The decision on how to cut up a big game carcass should be based on the family's preferences for meats and to some extent on the size of the carcass. For example, if it is a small antelope or deer and the family uses ground meat frequently, grinding the meat would be a good idea. On the other hand, a large elk or moose could be processed into a variety of cuts to avoid boredom on the menu.

Table 1 shows estimates of the expected yield and losses from some typical big game animals.

Yields and losses will vary, depending on the size of the animal and where it was shot. An animal shot in the head will be a slight loss in tenderness.
have a higher yield than average, while an animal with single or multiple wounds in the legs, shoulders or loin will have a lower yield. Also, a carcass butchered without aging or with less than two weeks of aging will have proportionately higher yields.

The following procedures will provide a variety of cuts, including steaks, roasts and ground meat. As mentioned earlier, this can be varied to personal preference. This procedure assumes that the carcass is hanging by its hocks, the most standard position. If the carcass is hanging by its head or laying on a table, however, the method can be changed accordingly.

It will be easiest to work with one part at a time while leaving the rest of the carcass hanging in a cool location. Figure 3 may be useful in referring to the cuts.

Remove one of the front legs and shoulders from the rib cage. No saw is necessary. The muscles of the shoulder can be separated and made into steaks or roasts. The shank should be ground or cut for stew meat. Remove the other front leg and shoulder and treat it in a similar fashion.

Remove the boneless flanks by cutting along the last rib down to the loin, then along the loin to the leg then down the leg. This can be used for ground meat or jerky. On larger animals, this portion is thick enough to be used as a steak.

Next, remove each loin. Cut along the entire length of the backbone next to the dorsal spines. Then cut along the lateral spines of the backbone the length of the backbone. Sever the loin where it is still attached at the small of the back. Remove the loosely attached meat near the neck end of the loin. This meat is good for stews, ground meat or other uses, but distracts from the tenderness of steaks. The loin is most suitable for steaks. Cut crossways 1/4 to 1-inch (1.9 to 2.5 centimeters) thick for steaks.

On loins from smaller animals, such as deer, make butterfly steaks by cutting sections about 2 inches (5.1 cm) thick, then cutting those almost in half but leaving enough connective tissue to hold both halves together, as shown in Figure 4.

Remove the backbone just in front of the hind legs. Separate the two hind legs by sawing through the middle of the backbone. Remove the rump roast by cutting off the upper end of the leg as shown (Figure 3). This cut should go through the ball and socket joint.

The sirloin tip is the football-shaped muscle at the front of the hind leg. Remove it next. It makes an excellent roast. Separate the large muscles of the round (upper part) of the leg. These can either be cooked whole as roasts or cut into steaks.

The shank of the hind leg, like that of the foreleg, contains considerable connective tissue and probably is best for ground or stew meat.

The bones remaining also can be used. The backbone can be cut into sections and used in making soup. Bones also may be used as dog food.

**Figure 3.**

**Figure 4.**

Trim as much meat as possible from the neck. It makes excellent mincemeat, stew or ground meat.

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**Ground Meat and Jerky**

If a meat grinder is not available, many commercial locker plants will grind meat at a nominal cost. Big game meat is not nearly as fat as beef and most people find it desirable to add about 20 percent beef suit. For making breakfast sausage, add 30 to 35 percent pork fat.

In addition to using the ground meat for breakfast sausage and hamburger, there are several other tasty items one can make with the ground meat. Many locker plants make excellent salami by using big game meat. It is often available as Polish, Italian or German sausage.

Jerky is another taste treat. A few locker plants will prepare it, although it's a very simple process and can easily be made at home. For more information on making jerky, see Service in Action sheet 9.311.

**Wrapping, Labeling and Freezing**

All fat should be trimmed off meat before wrapping. Meat should be wrapped in special freezer wrapping paper designed for that purpose. It can be purchased at most grocery stores. Double wrapping is recommended if meat is to be frozen for several months. Steaks can be divided with two pieces of freezer paper between to allow easy separation prior to thawing.

All packages should be labeled as to contents and date. Knowing the contents will be useful in evaluating cutting procedures. Be precise in labeling. Loin steaks should be labeled differently than round steaks, for example. Dating is particularly important if there is more than one carcass in the same storage unit or if meat is stored for a long period of time.

After wrapping, packages should be quick frozen at 0°F (-17°C) or colder. Packages should be spread out on freezer shelves until frozen solid, after which time they may be stacked or placed in freezer drawers. Meat should be eaten within six months.

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<th>Losses (pounds)</th>
<th>Losses (pounds)</th>
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<td>Elk, female</td>
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</table>

*Source: Agricultural Experiment Station, University of Wyoming.

Weight includes eviscerated carcass with head and hide, but with legs cut off at lower knees and hocks.

*To convert to metrics, use the following conversions: 1 pound = 0.45 kilogram.

Table 1: Average yields and weight losses from various big game animals.