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Field care of big game

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COLORADO STATE UNIVERSITY COOPERATIVE EXTENSION

Quick Facts

Proper care of big game in the field is essential for top-quality meat.

A game animal should be killed instantly, preferably in the head or neck area.

There is no danger of meat contamination by leaving the scent glands attached to the leg areas.

Evisceration should take place as soon after the kill as possible. The longer a hunter waits, the more difficult the animal will be to gut.

After evisceration, the body cavity should be wiped clean and the carcass hung in the shade to cool.

When transporting a carcass, the meat should be kept as clean and cool as possible.

The purpose of aging a carcass is to make the meat more tender. Aging time varies with the kind of animal and the temperature.

Big game hunting, in addition to providing many days of outdoor recreation, can be a source of top quality meat. Virtually all of the so-called "wild" or "gamey" taste in big game is because of poor processing by the hunter, not the intrinsic quality of the meat.

While processing big game in the field, it is impossible to duplicate exactly the procedure used by commercial slaughter houses. However, enough poor practices can be eliminated to make the difference negligible. The following recommended procedures should apply to all hoofed big game species in North America.

Equipment

A knife with a 5- to 6-inch (13-15-centimeter) blade, about 15 feet (4-6 meters) of nylon rope for dragging or hanging the animal, a plastic bag for the heart and liver, and about 2 feet (61 cm) of string (for tying the animal's anus and esophagus) should be carried with you while hunting.

If the animal is to be skinned in the field, carry enough cheese cloth or old sheets to cover the carcass. A meat saw or hatchet is desirable for cutting out the breast bone in larger animals, such as elk or moose.

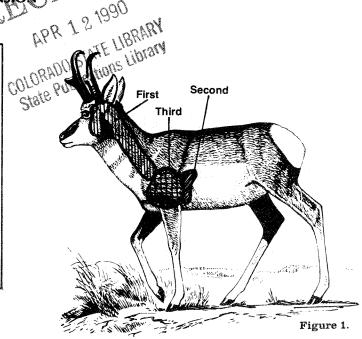
Killing

The animal should be killed instantly. The best locations are a head or neck shot (see Figure 1).

If the head is to be saved for mounting or if the head-neck region are hidden, place the shot in the heart-lung area just behind the front shoulder (Figure 1). Be sure to stay close to the shoulder and avoid the paunch region. A shot in that area will allow the animal to escape, only to die, perhaps days later.

A third choice is the middle of the shoulder. This is just as deadly as the second choice area although more meat will be ruined by the bullet. If these areas cannot be hit, don't shoot.

Hunters should practice before the beginning of each big game season to make sure they and their rifles function properly. Sights and scopes can be easily jarred out of alignment and, therefore, should be checked before each hunt.



Hunters should not take long or difficult shots. The best hunters try to stalk within easy range of the quarry and kill the animal instantly.

Scent Glands

Some hunters say that the animal's scent or musk glands should be removed soon after death as they will tend to taint the meat if left on. These glands are made conspicuous by the long tufts of hair surrounding their opening.

Most big game animals have these scent glands; one pair on the inside hind legs at the hock (tarsal glands) and one pair on the outside lower hind legs (metatarsal glands). The glands excrete a rather penetrating odor of musk and males frequently urinate on these glands during the breeding season. Therefore, an effort should be made to avoid touching these areas and then touching exposed meat. The best way to avoid doing this is to leave the glands on and then skin them off as you skin the entire hide.

There is no danger of contamination of the meat by leaving scent glands on as they are fully contained in the skin and have only one opening and that is to the outside.

Bleeding

If an animal has been hit in the heart or lung region by a modern rifle bullet, it normally will bleed internally. Opening the carcass and eviscerating it will get rid of the blood. If the shot was to the head or neck, the animal's main arteries and veins at the base of the neck should be cut. If in doubt whether to bleed or not, bleed the animal.

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If the head is to be mounted, bleed the animal by entering through the rib cage and severing the large veins and arteries connected to the heart.

Eviscerating

Evisceration should take place as soon after the kill as possible. Immediately after death, gas resulting from microbial action will begin to accumulate in the rumen. The longer the wait, the more difficult the animal is to gut and the less desirable it is for human consumption.

To eviscerate the animal, cut through the hide from the anus to the head. Begin between the legs by cutting down through the leg muscles to the pelvic bone. Turn the knife over and cut through the skin over the abdomen by using two fingers from the other hand to hold the viscera (intestines and stomach) away from the tip of the knife, as in Figure 2.



Figure 2.

Continue cutting up through breastbone and up the neck as far as possible. (Note: If the head is to be mounted, stop the cut between the legs at the base of the brisket). It will be easier, especially on larger animals, such as elk, to cut on either side of the breastbone or brisket (through the joints) as shown in Figure 3, rather than right up the middle.

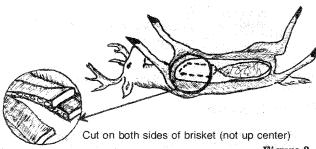


Figure 3.

Be sure to leave evidence of sex—either half of the mammary gland or a testicle—attached to the carcass to comply with state laws.

The windpipe and esophagus should be severed as close to the head as possible. Tie a string tightly around the esophagus to keep contents from contaminating the meat. Then cut around the anus and tie it with a string for the same reason. Next, cut the thin diaphragm muscle that separates the heartlung compartment from the main digestive tract away from the ribs, as shown in Figure 4.

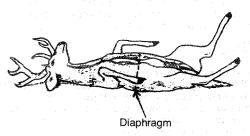


Figure 4.

Now is a good time to remove the heart and liver. They are excellent eating and should be kept in a plastic bag to keep them clean

Lay the animal on its side. All the contents should either fall out or be pulled out easily. A few cuts close to the backbone may be necessary to separate organs that remain attached.

The animal then should be hung in the shade to allow blood to drain from the body cavity and air to circulate around the body to cool it. Hang either with head or hind legs up. In the absence of a tree, fence or other object on which to hang the carcass, place logs or stones under it to keep it off the ground and thus allow heat to escape more easily. In either case, prop the body cavity open with a stick or two and wipe the body cavity clean. If the body cavity accidentally is soiled from digestive tract contents, wash it out with clean water. Water should not be used to wash the body cavity after the cavity has been dried and sealed.

Skinning

In most cases when a big game carcass is dragged to camp or to a vehicle and when it is being transported in a vehicle, it is desirable to leave the skin on to keep the meat clean. Also, leaving the hide attached will prevent the outer layer of meat from becoming dry during the aging process.

In warm weather, it is desirable that the carcass be taken to a cooler the day of the kill. If this is not possible, transport the carcass to camp or home. If the nighttime temperature is expected to be above freezing, the carcass should be skinned.

If skinning is necessary, the carcass should be covered with an old sheet or cheesecloth to protect it from insects and dirt. Sprinkling black pepper on exposed meat will help keep flies away.

Whether the carcass is skinned while it is hanging from its hind legs or head, or while it is on the ground, the main points to remember are to leave as much fat and connective tissue as possible with the carcass and keep the carcass free of hair and dirt.

Transportation

Transporting a big game carcass for a few hours is seldom a problem. The carcass should be kept as clean and cool as possible. For longer trips or in warm weather, it is advisable to place bags of **dry** ice in and around the carcass to keep it cool. For trips of several hundred miles, or under temperatures consistently above 70°F (21°C), the carcass should be butchered, frozen, packed in dry ice and driven or flown to its destination.

Aging

The purpose of aging is to make the meat more tender. If the entire carcass is to be processed into ground meat or stewing meat, there is no need to age it. It is advisable not to age the carcass longer than necessary, however, to eliminate excess carcass shrinkage and bacterial growth. The following aging recommendations are at 40°F (4.4°C): antelope—3 days; deer—7 days; cow elk—7 days; bull elk—14 days. No research data are available to make specific recommendations for other big game species, although it seems logical that periods of one to two weeks would be acceptable.

Temperatures warmer than 40°F (4.4°C) will shorten the recommended aging period. If the carcass is exposed to 60° or 70°F (15.6°-21°C) weather during the day, it should be butchered and frozen in a few days. A carcass always should be aged in the shade. If the hide has been removed, the aging time should be reduced to avoid drying out the carcass.

After aging, the carcass is ready for butchering and the freezer.

For information on cutting up a big game carcass, see Service in Action sheet 6.504.