

MEAT CARE—DON'T SPOIL IT

by David Stalling, Rocky Mountain Elk Foundation

"Any marksman can kill game. But killing is merely a part of the hunting experience, perhaps the easiest. It's the difficulties between kill and kitchen that separate the shooter from the hunter. The finest chef can't undo damage wreaked by sloppy field handling."—Jack McCready, *Furred and Feathered Wild Game from Bullet to Table*

If you worry about how you're gonna get an elk out of the mountains before you shoot it, you won't be a good elk hunter. At least that's the advice I once got from an old-timer. A pretty tough old-timer. And there is some truth to it. But the first time I killed an elk in a jackstrawed spruce bottom several steep, doghaired miles from the trail, I questioned that wisdom. And with the early September sun quickly warming, I worried how my year's supply of meat would taste if I didn't cool it and get it out fast. I didn't. And lost some fine meat.

Not an uncommon experience. Too much wild game meat spoils through poor field handling. Why? Poor shots, where recovering game took a long time and meat rotted around bullet holes; failure to cool meat quickly and properly; not keeping meat free of dirt, pine needles, and flies; and aging meat too long. Not that you can't shoot an elk in some steep, dense basin far from roads and trails and still have fine meat—you just need to be prepared and know what kind of job you're in for.

Most hunters are fairly free with advice and opinions. And advice on field dressing elk and caring for meat varies nearly as much as opinions on what's the best cartridge for elk. But all agree on this: what you do the first several hours after killing an elk will affect the quality of meat you'll be eating the rest of the year. If cared for properly, nothing tastes as fine as elk; if not, it can be as savory and tender as an old hunting boot. While techniques for proper game care differ, there are some basic rules. The four major things that cause meat to spoil are dirt, hair, moisture and temperature. So the best way to ensure high-quality meat is to make a quick, clean kill, gut the elk immediately, cool the meat, keep it cool, and keep it clean. The more careful you are, the better the elk will taste.

THE KILL

Hasty shots often result in wounded, slow-dying elk...and long searches to find the carcass. An elk's chemical balance changes when it's shot—adrenaline and enzymes pumped into the bloodstream spoil meat. So does a shot to the guts. And the harder it is to find a dead elk, the longer the carcass will maintain heat and body fluids. We all strive for a quick, clean kill out of respect for the animals we hunt—but such kills also allow us to quickly gut an elk, cool the carcass, and ensure high-quality meat.



THE TOOLS

When you kill, the fun of the hunt is over and the work begins. So some folks say. And there's some truth to it, too. Few tasks are as intimidating as the prospect of getting a 600-pound elk out of the backcountry. By breaking the job down into small tasks, it becomes more manageable. And fun, too. Sort of.

Field dressing reduces a 600-pound elk to 400. Removing the

head and hide shaves another 50 pounds. And if you bone out all the meat, you'll only have about 170 pounds to carry—several trips with a strong back, a good pack-board, and a few really nice friends.

Like most jobs, it's much easier and more pleasant with proper tools. Here's a list of the basics: nylon cord, several sharp knives, steel or stone for sharpening knives, a folding saw or hatchet, a towel, game bags, a small bag for the heart and liver, and a flashlight with extra batteries—in case you're tracking and field dressing after dark. A light tarp, space blanket, or poncho comes in handy to keep meat out of the dirt.



BLEED IT?

If meat sits too long in blood, it will spoil. But hunters disagree on whether to bleed an elk, a common practice a generation ago. Some hunters say since a dead elk's heart no longer pumps blood, it's enough to gut the animal, drain blood from the chest cavity and wipe the cavity clean. Others say the network of small arteries and veins throughout the elk's body remains filled with blood, which can taint the meat. They favor cutting the elk's jugular—or other major veins or arteries if you're preserving the cape. Basically, it's a matter of preference.

FIELD DRESSING

Hunters also haggle over whether it's best to gut an elk from front to back, or back to front. No matter—as long as you remove the entrails as quickly as possible without puncturing them, and without getting hair and body fluids on the meat. Here's a common, straightforward approach:

1. Roll the elk on its back, tying the legs out of the way with cord or rope.
2. With your knife, make an incision through the elk's hide near the anus.
3. Lifting with a knife in one hand, while using the other hand to punch the intestines and stomach out of the way, cut through the hide all the way up to the breast bone. Do not puncture the internal organs.
4. Hold the entrails down with one hand, and keeping your knife along the rib cage, cut the diaphragm—a membrane separating the lung and heart area from the stomach, paunch, and intestines. The diaphragm attaches the internal organs to the rib cage and needs to be cut so the entrails can be removed.
5. Cut through the hide above the breast bone and continue cutting up the neck to the chin. (If you plan to mount the head or tan the hide, you need to skin and cape the animal before cutting along the neck.) Some hunters use a saw or hatchet to split the breast bone and open the carcass up even more. Cut the windpipe and esophagus at the upper neck and tie them off with cord. An elk's windpipe and esophagus sour quickly and will taint meat if not removed.
6. Keeping your knife close to the pelvic bone, cut a circle around the anus and tie off the intestines, keeping excrement from spilling on the meat. Some folks use a saw or hatchet to cut through the pelvic bone and open the animal

up even more.

- Reach up into the chest cavity and grab the windpipe and esophagus. Carefully work loose the internal organs and slide them out of the animal. It helps to have the rear of the animal facing downhill. If you like the heart and liver, cut them out before you slide the entrails into the dirt. Put them in a small bag to keep them clean and out of reach of birds and insects.
- Drain the body cavity, clean it, and dry it with a towel and prop it open with a stick. Some hunters leave their elk at this stage, to return later with help. But the carcass cools faster if you bone or quarter it.

TO SKIN OR NOT TO SKIN?

The thick hide of an elk can serve as the best game bag around, keeping meat clean and preventing spoilage. So a lot of hunters don't skin the carcass until they get home where conditions are cleaner. But skin can also seal heat in, preventing meat from cooling—particularly during warm, early hunting seasons. And it's easier to skin an elk while it's still warm. So what do you do?

It depends. If it's warm and you can keep the meat clean, go ahead and skin it. Otherwise, leave it on. The risks of getting hair, dirt, and pine needles all over the meat outweigh the benefits of cooling the elk quicker.

COOL IT—AND KEEP IT COOL

The best way to cool an elk is to cut it up and hang it in a cool place where air can circulate around it. How far you go in cutting the elk up depends on how you plan to pack it out. If close enough to a road, some folks drag their elk out whole—although dragging elk over rocks and logs can bruise a lot of meat. Quartering is the most common method.

To quarter an elk, split the carcass down the backbone with a saw or hatchet, then cut each length in half between the first and second ribs, counting in from the back. Cut the legs off at the joints, then hang the quarters in a shady spot. If you can't hang the elk, prop it up against a log or rock so air can circulate all around it.

With a little sweat and hard work, a healthy person can carry a quarter. But if you have a long hike ahead, it's best to cut the elk up even further. There's no sense in carrying a lot of bone. Be sure to spread the meat out and cool it before you throw it all in a bag. Elk meat has been ruined by hunters who boned the meat and immediately piled it all in a game bag without letting it cool. Even during late, cold November hunts, meat can spoil from internal body heat if an elk is not opened and cooled quickly enough.

KEEP IT CLEAN

As elk meat is cut and quartered, it should be placed in a breathable game bag to keep flies and birds from getting to it. Some old-timers carry a can of black pepper with them and sprinkle it on the meat to protect it from marauders. It works, but it's not necessary if you have good game bags. While cutting up elk, it's very important to keep meat clean and dry. Dirt introduces bacteria that sours meat. Moisture, including blood and water, enhances bacterial growth, speeding up spoilage. Where meat can air dry, it's all right to clean it with snow or water, but it shouldn't sit in constant contact with moisture. Bloodshot areas around bullet or arrow wounds should also be cut off and cleaned to prevent bacteria from spreading. Once they get their elk home, many hunters hang the meat and wipe it clean with a mixture of vinegar and water.

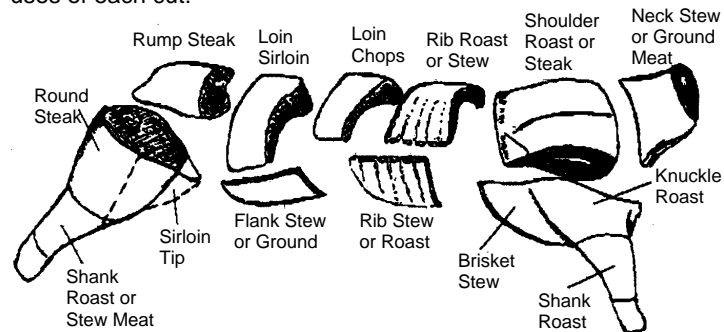
AGING

Aging an elk allows natural enzymes to tenderize the meat. Under ideal conditions where temperature and humidity are con-

stant—like in a meat-processing plant—elk can age for several weeks. But most elk are shot in less-than-ideal places, where dirt, hair, and heat take their toll. If bacteria has already begun to spoil meat, hanging it can make things worse. If temperatures can be kept constant at about 38 degrees, hang an elk for about 10 days, in a dry, cool place. If temperatures are below freezing, or much warmer than 40 degrees, it's best to get the meat into a controlled cooler.

BUTCHERING

Some hunters pay professional butchers to cut their meat. Other prefer to do it on their own. If you do it yourself, it helps to have the proper tools: a solid table or work bench, a good cutting board, several sharp knives, a meat saw, and a cleaver. As you cut up the meat, clean off clots of blood, hair, dirt, and damaged meat. A towel soaked in vinegar works well for this. Fat should also be trimmed, as it can make meat taste rancid. Meat that is chilled, but not frozen, is easier to cut than warm meat. The following chart shows basic cuts of an elk, and the most common uses of each cut:



FREEZING

Good freezer wrap is essential. As you wrap meat, force air out and wrap tightly to create an airtight seal. Double wrapping helps prevent freezer burn. Label and date each package and freeze it rapidly at about 10 degrees below zero—or the lowest setting on your freezer. Packages should be scattered, if possible, so each one cools and freezes quickly.

COOKING

Since elk meat is far leaner than domestic beef, many folks overcook it, leaving it parched and leathery. Adding bacon strips or fat while cooking elk can help keep it moist. Marinades, tenderizers, and seasoning enhance taste and moistness.

One of the more rewarding aspects of hunting is eating the meat you've brought home and prepared. For many of us, it's the closest and most personal way to partake of an older, more natural way of life. If you treat an elk carefully and properly after making a quick clean kill, you will end up with the finest tasting meat in the world.

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The Rocky Mountain Elk Foundation, headquartered in Missoula, Mont., is an international, nonprofit conservation organization whose mission is to ensure the future of elk, other wildlife and their habitat. RMEF members have conserved and enhanced more than 1.8 million acres of wildlife habitat. Several projects have been in the Black Hills. RMEF has South Dakota chapters in Spearfish, Rapid City, Custer, Aberdeen, Yankton, Sioux Falls, Chamberlain, Mitchell, Lead/Deadwood, Watertown and Pierre.