

# INTO THE

Behind the closed doors of a game processing facility

# MEAT LOCKER

BY TOM DICKSON

PHOTOS BY ERIK PETERSEN

Like many big game hunters, I butcher the wild animals I kill. It started simply as a way to learn how they were put together. Then I realized I preferred maintaining full control and supervision of my harvest from field to freezer. I'd heard horror stories of deer carcasses piled outside game processors during peak season, or how you could never be sure the elk you'd so carefully dressed and cooled down in the field was the same animal you picked up as a bag of white packages a few weeks later. My venison was too precious to let strangers handle.

That's not to say I haven't been tempted. Many of my friends have their antelope, deer, and elk commercially processed. And there are times, especially when I'm dragging the third whitetail doe of the season across a field to my vehicle, when the idea of dropping it off at a game processing facility then picking up 40 pounds of perfectly trimmed meat a few weeks later sounds appealing.

Still, I wondered: Were professional facilities up to my high standards of cleanliness? Would I get back the same meat I brought in? Was the convenience worth the cost? I decided to find out. >>

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## INTO COLD STORAGE

It's mid-December, and late-season hunters are bringing their deer and elk to Happel's Clean-Cut Meats, a game processing facility a few miles west of Bozeman. As a pickup pulls in with a cow elk in the bed, owner Lyle Happel takes me and photographer Erik Petersen through the entire game processing procedure.

Casey Martin, a member of Happel's crew, hooks the animal directly from the truck bed and hoists and weighs it, then moves the elk into a 35-degree cooler, where it ages for 7 to 14 days. Securely attached to the carcass is a card indicating the name of the hunter and what particular meat products he requested. Today only a dozen or so elk and deer hang in cold storage. Happel (who prefers the term "wild game processor" rather than "butcher"), says that during peak time—the last week of November and first week of December—his cooler space holds up to 140 deer and 40 elk.

The carcasses, which hang on meat hooks attached to trolley rollers on a ceiling-mounted rail system, can be quickly moved from room to room. Happel says the carcasses should never touch the floor. "If you pull into a game processor and see a pile of deer on the ground, turn around and walk out," he warns (Happel is secretary-treasurer

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**COOL GUY** After attaching a tag with the owner's name, Casey Martin transfers a cow elk into a storage cooler, where it will age for 7 to 14 days.

of the Montana Meat Processors Association). "If there are piles, and yours gets to the bottom, it's getting 'marinated' down there, and that's a marinade you don't want to taste."

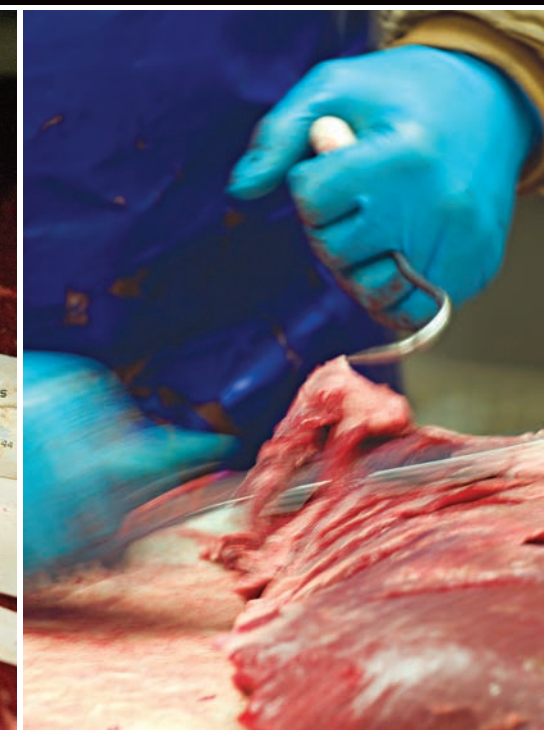
After aging, the elk is skinned and then a torch is used to singe stray hairs. (Hides are sold to a local buyer for a few dollars each.) The next step is called "breaking down." In one hand Happel holds a large hook to maneuver the carcass, then uses a knife in the other to trim fat, stomach contents, and other contaminants. "I tell people I've gotten so good with this hook I can scratch my eye with it," he says. With a reciprocating saw, he cuts off the lower portion of the ribs, leaving enough for chops. At this stage, the meat is still in large chunks and partially attached to the carcass.

The carcass is conveyed to the cutting area, which looks like any grocery store meat

department. A cutter checks the tag to see what has been requested, slices major muscles off the skeleton, and trims the meat to create uniformly shaped pieces. These large cuts, called primals, are flash-frozen for several hours before being cut with a bandsaw into perfectly uniform steak portions. The final step is to wrap the steaks in plastic and butcher paper, then tape and label them with the hunter's name and precise cut. "There's no such thing as a generic 'elk steak,'" Happel explains. "Each cut comes from a particular part of the animal, and we label them that way." Happel says that the four most tender cuts, besides the tenderloin, are the ribeye, the top loin or New York strip, the top sirloin, and the top round. The highest-quality cuts are on the rear part of the spine. "Then the meat gets tougher as you go farther up the spine toward the head or down into the legs," he says.

It's important to know the cut in order to use the appropriate cooking technique. For instance, tender cuts such as the ribeye taste best cooked quickly over high, dry heat,

**DONE IN HALF AN HOUR** It takes Happel's crew just 30 minutes to process an elk, not counting cooler and freezer time. Above left: Martin skins an elk with just a few well-practiced strokes of the knife. Above right: After cutting away stomach contents, bloodshot meat, and other contaminants from a deer carcass, Happel uses a torch to remove stray hairs. Below right: Carcasses are transferred into the cutting room on meat hooks attached to trolley rollers on a ceiling-mounted rail system. This way, they can be moved without touching the floor. "If you go into a facility and see deer on the floor or ground, turn around and walk out," advises Happel, secretary-treasurer of the Montana Meat Processors Association. Below: A cutter uses a meat hook to maneuver a "primal" as he removes excess fat and trims the large portion of meat into a uniform shape. Below left: From beginning to end of the butchering process, the FWP tag required for lawful possession stays with each hunter's game animal.



such as by sautéing or grilling. Shoulder blade roasts and other tough cuts are best cooked slowly over low, moist heat, such as by braising and stewing.

#### NO MIXING

Like most game processors, Happel's prides itself on fresh ground meats and jerky. Happel says his clients receive hamburger and fresh sausage from meat trimmed only off the animals they bring in. "There's none

of that 'throwing into the pot' stuff here," he says. He advises hunters concerned about the possibility of "meat mixing" at the facility they visit to always ask beforehand.

Happel's staff makes a basic venison hamburger with 7 to 10 percent suet (beef fat), but they'll add pork fat or use no fat if requested. In an industrial grinder that can hold up to 150 pounds of meat, staff member Brad Flategraff also makes bratwurst, beerwurst, and Italian and Polish sausages using

casings made of hog intestines—the same as you'd find at a grocery store. In a back room fragrant with spicy smoked meat, Lyle's 86-year-old father, company founder Fred Happel, still slices venison meat by hand and seasons strips with a secret recipe to make jerky, sausage sticks, and summer sausage.

While impressed with the speed and cleanliness of the operation, I'm disappointed that a fair amount of meat goes into waste buckets. It takes me six hours to butcher a deer,

because I try to retain as much meat as possible. Sometimes that means painstakingly filleting out small slivers of meat. Happel's crew finishes an entire deer in 20 minutes, an elk in 30 minutes. With that speed comes a greater loss in the amount of meat they retain, known as "yield." "We don't want to be wasteful and try to give as good a yield as possible," says Happel. "But time is money, so we can't spend all day on an animal." He admits some customers are disappointed in the amount of meat their animals produce. "But we document it all. We rate an animal upon completion from 1 to 10, with 10 being the best potential for yield, and we tell the

hunters what the yield is at pickup time. Some animals come in shot in all four quarters, and there's just not much meat left."

Happel says most 350-pound field-dressed elk are reduced to 140 pounds of trimmed, frozen, wrapped, and boxed portions. A 40 percent yield is average, he says, and 50 percent is considered very good. I called a few other Montana game processors, and they quoted the same yields.

I continue to derive great pleasure from processing my kill from field to table, and for now I'll keep butchering my own big game. But if I ever decide to hand over the deer, elk, or antelope I kill to a game processor as clean and efficient as Happel's, I'll know it's in good hands. 🐾



**IN GOOD HANDS** Packages are labeled with the hunter's name and the cut of meat.



**THE FINAL TOUCHES** Clockwise from top left: Trimming primals before flash freezing; cutting a frozen loin into uniform steaks; labels for each cut of meat; company founder Fred Happel, 86, continues to help by making jerky strips with his secret seasoning recipe; grinding hamburger; Brad Flategraff puts fresh sausage meat into casings before trimming; wrapping trimmed steaks in plastic and butcher paper.



## Game Processor Gets Hot Discussing Improper Cooling

Want to get Lyle Happel's blood pressure up? Bring him an elk that hasn't been cooled properly in the field. "A lot of the bulls we got in this fall had green meat, especially in that thick area around the neck and shoulders," he says. "We had to throw all that away. What a waste."

It doesn't have to be that way. Happel says that even in warm weather, big game animals can be cooled down to save the meat. The key is to cut open to air circulation all thick sections—neck, shoulders, and hips—and then get the animal up off the ground as soon as possible. "An elk starts out at 102 degrees," says Happel. "You've got five or six hours to get that down to 50 degrees or lower. But you also don't want to trap that heat by freezing the animal rapidly. You have to open the thicker parts so the heat escapes."

After gutting the animal, remove the trachea (windpipe) and esophagus. "Bacteria in the partially digested food can contaminate the neck meat," Happel says. Use thick sticks to keep the ribs and brisket spread apart and the body cavity open to air. Next, raise the animal off the ground by hanging it or dragging it over logs. Create air space between the carcass and the ground, even if it's just a few inches.

Use several gallons of water to clean and cool the carcass. "When it's warm, the water evaporates. That cools the meat and it also dries the wet environment where bacteria can grow. When it's cooler outside, you don't want to use much water. And never wash a cooled carcass or meat," Happel says, because that just invites bacterial growth.

The next step is to "butterfly" the spine. "This is not something most hunters do, but they should," Happel says. Splitting the spine lengthwise opens up the thick vertebrae and sur-

rounding meat to cooling air. Cut the spine from the inside, down through the bone but not through the hide, using a small hatchet and hammer. Place the hatchet blade on the spine and rap the back with the hammer to break the bone. A buck saw also works. "You don't need to do the entire animal, just from where you cut the head off down to about where the tenderloins start," Happel says. "This is the way you save the neck, shoulders, and a lot of the forward loin."

The final step is to expose both hip sockets to air. "The thigh bone is thick and retains the animal's heat, so you need to expose it to ambient air so the heat will dissipate," Happel says. Skinning cools the outside of the animal, he explains, but does little to cool the portions deep in the muscles. Happel makes a cut along the inside of the main leg bone from the stifle joint (the knee equivalent) through the thick part of the thigh to the ball-and-socket joint in the pelvis. He then uses two stout sticks to keep the deep incision open to air.

Once the elk is dragged or hauled to the vehicle, Happel suggests placing it on pallets in the truck bed so the rushing air during the drive gets under and through the animal. Then get it to a game processor as soon as possible. If you take it home, he says, hang the animal with the hide on. "A lot of guys think taking the hide off will cool the animal, and that's true to a degree, but it's far more important to cool the inside of the animal than the outside," he says. "And you want to keep the hide on to retain moisture and keep the meat from drying out."

Just getting the elk out of the field to a processor doesn't mean it will be okay if the carcass hasn't begun cooling down in the field. "I've had bull elk sour even when they were in my cooler because they stayed too warm for too long beforehand," Happel says.

Even if a hunter follows all of Happel's advice on cooling a carcass, some days are just too warm—or the distance from the kill site to the vehicle is too far—to prevent spoilage. "That's something you've got to consider before you pull the trigger or release that arrow," he says. "It pains me to see an elk that's sour. That animal sacrificed its life for you, and now it deserves the most respect a hunter can give it." ■



This elk carcass has been "butterflied" by having the spine split lengthwise from the inside, opening the thick, warm bone to cool air.

COURTESY: HAPPEL'S CLEAN-CUT MEATS