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Boning Out Your Deer

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Venison can be delicious meat. A great deal of your family's acceptance and enjoyment of venison will depend on how it is cut up and cooked.

This bulletin illustrates and describes a good method of cutting up a deer. It serves as a guide, and in the back are tips on using, cooking, and storing venison. These tips supplement the steps of cutting up a deer and are important in serving delicious venison.

The deer-processing method described here is basically one of boning. It has long been used by our Northwest Indians and many other people who enjoy eating venison.

If you do not especially like your venison now, try this boning method and the tips in the back of the bulletin. You might be pleasantly surprised to find what a difference boning makes in enhancing the eating qualities especially the round in the hind quarters.

Boning a deer is neither impossible nor particularly difficult. It just looks that way. Once learned, it is an easy and convenient way to take care of venison. It may take some extra courage and a sense of adventure to try it the first time.

Boning can be done in the field, garage, kitchen, basement, or butcher shop. All the equipment needed is a counter or table top, a meat saw, a sharp narrow-bladed knife, and a place to put the meat and scraps. Because most people have tables, the cutting illustrations are shown on a flat surface. However, the best position for boning a deer is when it is hanging from a gambrel by both hind legs. If placed on a flat surface, the animal can either be quartered, halved, or left whole. The basic principles of boning will apply in any case. Elk can be boned in the same way. This is a favorite method used by many veteran elk hunters.

Boning has several advantages over the conventional methods of cutting up deer. It separates the choice pieces of venison from tough connective tissue, tendons, off-grained meat, and excessive fat. Also, dirt, hair, and bloodshot muscle are removed easily. The bone dust and marrow from the meat saw is avoided, and packages for freezing are boneless, compact, smooth, and easy to wrap tightly. Venison from the boned animal takes up less space in the cold storage locker or freezer.

For the uninitiated, the first step in boning out a deer is to study the Venison Boning Chart. Locate the major parts to be boned out and after you have them fairly well in mind, muster up the courage to pick up the knife and begin. It is not necessary to follow the exact order of the steps shown in this bulletin, but it is a good way to proceed.

FIGURE 1. The first cut is to remove a front shoulder. Lift the front leg up from the chest and cut the meat attaching it to the side of the ribs. Then work the knife back and forth to cut the connective tissue between the leg and the rib cage. The last cut to be made will be at the top of the shoulder blade where it is attached to the withers.
FIGURE 2. Cut the front leg into three parts—shoulder or blade roast, arm roast, and shank. (See Figures 3 through 6.)

FIGURE 3. Remove the shoulder roast from the leg by severing at the joint. Locate the joint by moving the shoulder blade up and down and then cut through it. Cut as shown in Figure 4.

FIGURE 4. The shoulder blade roast is removed from the leg. Notice that the cut has been made through the joint. Trim the roast to make a neat-looking piece of meat. For roasting, the bone is not removed. The trimmings are good for hamburger and other uses. Also, for those who prefer steak, the muscles on each side of the bony ridge on the shoulder blade can be removed. These should be cut ¼ to ½ inch thick for frying.

FIGURE 5. To separate the arm roast from the shank, prepare to saw the leg bone by cutting the meat down to it.

FIGURE 6. Saw the bone in two. This is one of the few places where sawing is done close to meat. Trim the arm roast and it is ready for cooking or storing. Trim out the meat from the heavy tendons and tissue of the shank. This meat is good for grinding.

FIGURE 7. The back view of the whole deer with the outline of the preliminary cuts that are made in removing the loin or backstrap from along one side of the backbone. Three basic cuts are made. First, cut the flank loose just in front of the hind leg and extend the cut all the way to the backbone. This is the cut shown on the left in the picture. Second, use the vertical spines of the backbone as a guide and cut forward along these until you reach the base of the neck. Third, make the side-of-rib cut directly over the point where the ribs curve down to join the backbone. The position of the knife is shown in the third cut in the picture.

FIGURE 8. The loin lies in the groove between the junction of the ribs and the vertical spines of the backbone. Make the sides-of-the-rib cut directly over the point where the ribs curve down to join the backbone (Figure 7). Remove the loin by cutting it loose from the ribs. Lift the loin and start cutting and peeling it from the groove, continuing forward until loin meat ends or the base of the neck is reached.

FIGURE 9. This photograph illustrates the use of the vertical spines of the backbone as a guide in cutting forward to the base of the neck. Cut down to the backbone until the junction with the ribs is reached.
FIGURE 10. One of the two loins from a large deer. It is ready to be trimmed. Lay the loin on the table and prepare to pull off fat, odd-grained meat, and tough tissue by starting at one end. Cut enough of the connecting strands to allow a good hand hold.

FIGURE 11. Pull and rip the layer of fat and connective tissue from the loin. The loin meat will still be encased in thin connective tissue. Remove the loosely attached meat near the neck end of the loin. This meat is good for stews, ground meat, or other uses, but it detracts from the tenderness of good steaks.

FIGURE 12. Cut the trimmed loin into family-sized chunks or pieces and freeze whole. By freezing the chunks whole, moisture and flavors are preserved and packaging is easier. Wait until you are ready to cook them before cutting the steaks. Cut them ¾ to 1 inch thick. Loins are not very big, but have no connective tissue, off-grained meat, fat, or bone.

FIGURE 13. Remove the flank by cutting it free from the backbone and the adjoining ribs. The other side nearest the hind leg should have been cut loose when making the first cut in preparing to remove the loin.
FIGURE 14. Remove the neck by sawing the backbone off just in front of the point of the shoulder. The neck meat makes excellent mince-meat, stew, or grinding meat. It can also be roasted whole.

FIGURE 15. Remove the side of the rib from the backbone. Use the saw and cut the rib loose at the point where they curve en route to connecting with the backbone. Cut all the way to the base of the neck. Good luck!

FIGURE 16. A side of rib that has been removed from the deer is shown here. You can either cut it up at this point or turn the deer over and start boning out the remaining side.

FIGURE 17. Here a side of rib is being cut into plates. Notice the layer of meat covering the ribs. It is usually left as shown, but the layer of meat can be removed and used for jerky, grinding meat, stew meat, or tiny steaks. Enough meat will be left between the ribs for barbecueing.
FIGURE 18. Plates of ribs can be barbecued whole or separated into two or three ribs per piece. If you prefer, ribs can be cut into short pieces and used in stew.

FIGURE 19. Remove the tenderloin by lifting and cutting it free from the backbone. The two tenderloins are located on each side of the backbone and just forward of the pelvic area. Each tenderloin is only about one and one half inches in diameter and a foot long. These are the most tender pieces of meat in the deer and they are excellent for steak meat. To make the steaks larger in diameter, butterfly them. A butterfly steak consists of two steaks lying side by side and connected by the same tissue on the edge. These steaks are made by cutting the first steak almost completely off and cutting the next one completely off. Then, they are folded edge to edge at the point of connection and laid flat in the frying pan.

FIGURE 20. Saw the backbone off just in front of the hind legs. It can be cut into sections and used in making soup stocks, or the scraps of meat can be picked off and used in mince-meat, head cheese, ground meat, or for other uses.

FIGURE 21. The two hind legs are ready to be separated by sawing through the middle of the backbone.

FIGURE 22. Use the spinal cord in the backbone as a guide in making the cut with the meat saw. Each hind leg is cut into a rump roast, a sirloin tip, the round, and the shank.
FIGURE 23. To cut up the hind leg, first remove the rump roast. To do this, locate the ball and socket joint which connects the pelvic bones of the rump roast with the large leg bone. Feel for the joint as you raise and lower the rump roast. Once located, cut as shown in Figure 24.

FIGURE 24. In removing the rump roast, cut down to the ball-and-socket joint and work the knife through it as shown above. Make the cut as vertical as possible, and yet leave enough meat on the rump roast for a meal. Separating with a knife instead of sawing avoids spreading bone marrow and dust.
FIGURE 25. The rump roast as shown from the top side. Remove the fat and sharp projections of pelvic bone before cooking or freezing. If you prefer other cuts to roasts, the meat can be removed and cut into small steaks or used for grinding meat or stew meat.

FIGURE 26. Next, cut the sirloin tip from the remainder of the hind leg. First, set the leg in a vertical position. Remove the knee cap by cutting it loose from the under side. If it is not easy to get the knife under the knee cap, cut directly down to the large leg bone which is shown in Figure 27.

FIGURE 27. Lay the hind leg flat on the table and remove the sirloin tip by using the leg bone to guide the knife while cutting off the large chunk of meat. Notice the large white bone in the meat. Start at the knee cap and keep the knife in a vertical plane against it, and cut the meat away from the bone with short strokes.

FIGURE 28. Once the sirloin tip has been cut from the leg, remove the connective tissue and extra meat surrounding it. The remaining chunk of sirloin-tip meat will be enclosed in a thin connective tissue and will resemble an undersized football.

FIGURE 29. The sirloin tip is excellent as a roast or it can be cut into thin steaks. The steaks should be thin if they are to be fried. Make them not over $\frac{1}{4}$ to $\frac{3}{8}$ inches thick. The meat is good for hamburger, stew, or other uses.

FIGURE 30. In removing the bone from the round, start by cutting the connective tissue that separates the shank from the round and the bone. Cut the tendon and proceed as shown in Figure 31.

FIGURE 31. Shave and cut the meat loose from the leg bone. This will take a little maneuvering around the joints, but keep cutting what comes naturally.

FIGURE 32. In this photograph, the leg bone has been separated from the large chunk of round. The next step is to separate the round into its individual muscles, each of which is enclosed in its individual envelope of connective tissue.
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FIGURE 33. Divide or separate the large leg muscles in the round by cutting the connective tissue holding them together. Avoid cutting into the meat as much as you can. Notice the large ball of muscles held in the right hand. This does not make good steak meat—it is too tough. Remove it and trim out the meat for grinding or other uses.

When you encounter bloodshot meat, most of it can be saved by soaking in cold salt water. Put about a gallon of water in a 3 or 4 gallon bucket or dishpan, add 3 or 4 handfuls of salt and put the bloodshot meat into the solution. Let it soak for an hour or two, then wash and scrub the blood off the pieces and use according to the cut of meat. If the blood impregnates the muscles of the meat, trim it out and throw it in the scrap box.

The boning process described and illustrated in this bulletin favors getting lots of steak meat from the deer or elk. A venison steak is not like a beefsteak. A venison steak is smaller in diameter, without bone or much fat, and can be cut from most of the larger muscles. In other words, the loin, tenderloin, and round are not the only sources of steaks from a deer. Muscles from the shoulder blade, rump roast, arm roast, and on the rib cage can be isolated and cut into thin venison steaks.

Tips on Using Venison

They are small, but delicious, and are favorite breakfast meat for many families.

Venison steaks from a boned deer are cut differently than domestic meat. Cut all venison steaks thin, except those coming from the loin and tenderloin. Steaks from tenderloin and loin can be cut either thick or thin, depending on your preferences. A thin venison steak is about ⅛ inch thick and a thick one is about ⅜ inch thick. The diameter of small steaks can be enlarged by butterfly- ing them. A butterflied steak consists of two steaks laid side by side but connected by tissue on one edge.

The chunks of round from the hind leg make excellent steaks when cut thin. Have the chunk partially thawed by dinner time but cut it into ⅛- to ⅜-inch steaks just before frying. Fry in a hot skillet or frying pan. The frying time is about 90 seconds on a side for a steak cut ¼ inch thick. Fry steaks just enough to brown the outside but leave the center
Freezing chunks of venison whole helps to preserve moisture and flavor in the meat. Also, it saves time in cutting and wrapping and gives the cook a choice of ways to prepare the meat for the table.

Keep all air out of packages and double wrap them with suitable paper or seal tightly in special plastics or freezer bags. The best way to freeze meat is to have it quick-frozen at extremely cold temperatures and then stored at 0 °F or below. Whatever method of wrapping you use, be sure to label and date the packages for later identification.

Ground venison can be mixed with other meats to make excellent meatballs, sausage, weiners, and bologna. Most parts of the deer will make excellent jerky. Dicing venison into small pieces and canning it is still an old favorite. Good smoked meat can be made from trimmings and by cutting the ribs into short pieces.

If you don't care to bone your own deer but would like to try cooking and eating venison from a boned deer, ask your butcher to help you. If he does not already bone out deer, show him this bulletin as an example of the way you would like to have your deer processed. You may get excellent cooperation because, each fall, many commercial meat cutters make a genuine effort to help hunters with their deer. Besides the usual service of processing deer, some meat cutters have even cut up deer and put all the parts in a box for the hunter to take home and finish trimming, wrapping, marking, and freezing. This method gives you a chance to trim the pieces according to your personal preferences and to package the cuts to suit your family's needs.

Although it is popular to cut as many venison steaks as possible from a deer, venison can be prepared in a variety of ways. See Extension Bulletin 800, Treats with Venison. This bulletin contains proven recipes and numerous ideas for using all the venison and getting the most eating pleasure from it. If you like smoked venison, get a copy of Extension Bulletin 788, A Smoke House for The Sportsman and Hobbyist.

Information on field dressing, skinning, and handling of big game may be found in Extension Bulletin 790, Game Foods. All of these bulletins are available from your local County Extension office or from the Bulletin Clerk at Oregon State University in Corvallis. Also, a 16 mm colored sound movie, “Care of Big Game Meat” and an accompanying leaflet with the same title are available from the Portland headquarters and regional offices of the Oregon State Game Commission.
You will be interested in these bulletins too--

- **Game Foods** tells about ways to clean, preserve, and cook game, fowl, and fish. It is designed to help the novice and to serve as a handy reference for the veteran sportsman.

- **Treats with Venison** presents a variety of useful recipes for preparing venison. It is a guide to delicious eating throughout the year.

Get these bulletins from your County Extension Agent or from Oregon State University.

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