

# AGRICULTURAL GUIDE

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Deer  
Processing

## Deer—From field to table

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One of the problems facing a deer hunter is what to do with the deer after it is killed. Most hunters want a trophy as well as the meat. Deer meat, or venison, is nutritious and as versatile as beef; however, the eating quality or acceptability is greatly influenced by the hunter's actions immediately after the deer is killed. The hunter needs a sharp hunting knife with at least a four-inch blade, some strong twine or string, and a nylon or other strong rope for hanging or transporting the carcass.

### Field Dressing

Bleed the animal as soon as possible after death. Approach a downed animal with care, making sure that it is dead before handling. Follow the illustrated outline inside this guide for proper field dressing.

If clean water is available, rinse out the inside of the carcass. If no suitable water is available, wipe the inside of the carcass with a clean cloth to remove blood and dirt. The problem of finding scent glands can be eliminated by skinning the hind legs, beginning from above the hock and pulling down over the achilles tendon, and remove the hind legs below the hock. (See Figure 2.) *Do not skin the animal in the field.*

### Transporting the Carcass

As soon as convenient, move the carcass to a camp, home, or a commercial meat processing establishment. If the weather is above 50° F, refrigerate the carcass as rapidly as possible (within 12 hours after killing).

If the carcass has to be dragged to an auto, place the carcass on its back and take necessary precautions to keep it clean. When the carcass is transported in a car or truck, place it in a clean area where it will be cool—not on the hood. Deer may be hung in a 34 to 40° F room or outside building for 4 to 6 days before being processed. Processing may be done at home if you have proper facilities and equipment, or you may take the carcass to a commercial processing plant that handles game.

### Processing the Carcass

Hang the carcass from the hock tendons for removing the skin. Begin removing the skin by starting on the hind legs and working toward the front of the carcass. Try to keep the skin in one piece, being careful to keep the hair side away from the skinned surface. Generally, the skin will pull fairly easily with minimum cutting. The skin may be tanned for use in leather products or for a trophy rug.

After skinning, trim any bruises or bullet wounds and wash the carcass. After dripping dry, the carcass is ready to be cut, unless further aging is desired. Four to six days after

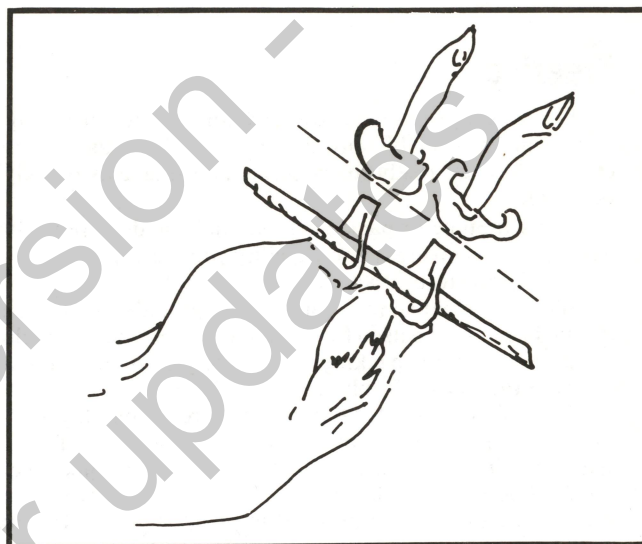


Figure 1. Remove hind legs below the hock.

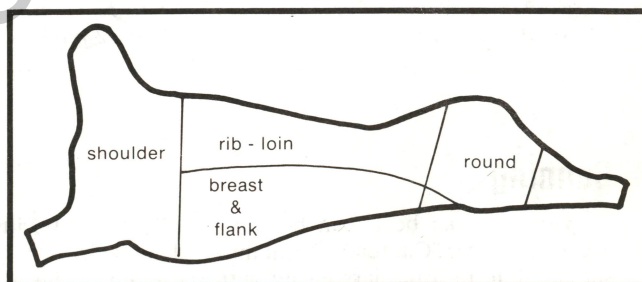


Figure 2. Suggested cutting of deer carcass.

kill is sufficient aging time.

The following tools are needed for home cutting: hand saw, cutting board, and boning knife.

There are several methods for cutting the carcass. One that is popular is the boneless method; all the bone is removed and the muscles are separated into steak, roast, stew, and grinding meat. Another method is similar to one used to cut up a beef carcass. Cuts with the bone left in, such as T-bones, chuck, etc., are made using this method. Combinations of the two methods may be used. Regardless of the method selected, splitting the carcass by cutting down the center of the backbone is usually best.

Using the beef method, start at the front end of the side of deer and remove the shoulder by cutting between the fifth and sixth ribs perpendicular to the backbone. (See Figure 2.) The



neck and fore shank should be removed, boned, and used for grinding. The remaining part of the shoulder may be cut in two pieces, boned, and tied, or it may be used whole, depending on the size of deer and size of roast desired. Make the next cut at the point of the hip to separate the rib-loin portion from the leg or round. The breast and flank should be removed and used for grinding. The loin-rib section may be cut into chops or steaks if a power saw is available. Otherwise, remove the backbone and ribs and cut the steaks with a knife. The easiest way to process the round is to remove the pelvic and leg bones and make boneless roast or steak. All cuts should be trimmed closely, using the lean trim for grinding. Removing all the fat before cooking is not necessary; remove it before serving.

Venison may be preserved for use later by freezing, canning, brining, or drying.

## Freezing

Freezing preserves palatability and is the ideal way to have venison available any time of year. Trim and clean the cuts so they are ready for cooking, and freeze as quickly as possible.

Use wrapping or packaging materials made expressly for freezer use to insure a good quality product. The wrapping should be moisture-, vapor-, and air-proof.

Wrap the meat so that you have a tight, air-free package. Plastic bags may be used for ground meat. Be sure to exclude all air possible by packing meat firmly into the bags and pressing the plastic firmly against the meat.

Seal, label, and date all packages. Freeze quickly at 0° F. Freeze no more than four pounds per cubic foot of freezer space within a 24-hour period. If space in the home freezer does not permit spreading the packages out, we advise taking the wrapped meat to a processing plant for quick freezing.

Recommended Frozen Storage Time:

<i>Ground meat</i> . . . . .	<i>.2 to 3 months</i>
<i>Roasts</i> . . . . .	<i>.8 to 12 months</i>
<i>Steaks</i> . . . . .	<i>.8 to 12 months</i>

## Canning

Venison, like beef, can be successfully canned with a pressure canner. Cut tender meat into jar length strips. Strips should slide into the jars easily with the grain of the meat running the length of the container. Less tender meat may be cut into chunks or small pieces suitable for stew meat. Put meat into a shallow pan. Add just enough water to keep meat from sticking. Cover pan. Cook until pink color is no longer visible in center of meat. Stir occasionally so meat heats evenly.

Pack hot meat loosely in jar, leaving one inch of space at top of jar. Add salt if desired: one teaspoon per quart. Cover meat with boiling meat juice; add boiling water if needed. Leave one inch of space at top of jars. Remove air bubbles with blunt knife. Wipe top of jar. Adjust lids. Process in a pressure canner at 10 pounds pressure: pint jars, 75 minutes; quart jars, 90 minutes.

Ground meat may be made into patties that fit into jars. Precook patties until medium well done. Do not use fat in canning. Pack into jars leaving one inch head space above meat. Cover with boiling meat juice or water. Adjust jar lids. Process in pressure canner at 10 pounds pressure: pints, 75 minutes; quarts, 90 minutes.

## Brining or Curing

Trim meat into pieces as nearly uniform as possible. Chill the pieces to a temperature between 34 and 40 degrees before curing. Keep the meat and brine solution at this temperature throughout the curing process. Higher temperatures will result in spoilage; lower temperatures will retard the curing. Fit the pieces of meat into a clean *non-metal* container (such as a wooden barrel or crock). The top layer of meat should be placed so that the outside or skinned side of the pieces are up. Cover with the chilled brine.

Brine:

- salt . . . . .four pounds  
(Use coarse salt—not iodized.)
- sugar . . . . .one pound  
(Use brown or white sugar or honey.)
- saltpeter . . . . .one ounce
- water . . . . .2¼ gallons

Heat the water; add the curing ingredients; stir until dissolved. Cool the water to 40° F before pouring over the packed meat. Keep covered with the same mixture. Curing time for the thicker, larger pieces is about two days per pound. Curing should be done at a temperature range of 34 to 40° F. The product should not be allowed to freeze.

## Smoking

All kinds of cured meat may be smoked for better keeping and improved flavor. When the curing time is ended, soak the cured meat for two hours in cold water and scrub well with a stiff brush. This will produce a better color and milder flavor. Hang the chunks in the smokehouse so they do not touch, and let them drip until the surface is dry before starting the smoke. Use nonresinous wood (preferably peeled) to produce a light fog or smoke, no hotter than 100° F. This is called a cold smoke.

Keep the smoke area ventilated at first to let the moisture escape. Smoke for two or three days for a good flavor and rich color. An improvised smokehouse may be made by using an old refrigerator, large barrel or packing case, or in some cases, a small shed that can be covered with tar paper to keep the smoke in and on the meat.

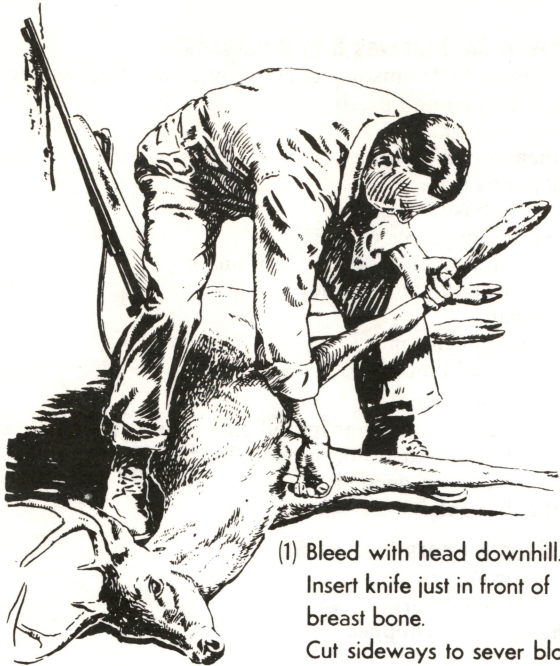
## Salting or Drying (Jerky)

Jerked venison or "jerky" is thin strips of venison salted and dried in the sun. It is still used by some hunters. There are a number of ways to make jerky. One is to cut the meat with the grain into strips one inch wide, ½ inch thick, and 6 to 12 inches in length. Place the strips in a salt brine (prepared by dissolving two pounds of salt in six quarts of water) and leave for two days. Remove the meat from the brine. Wipe it dry and hang in the sun to dry. This may be done by threading the meat onto a heavy twine or wire, spreading the pieces apart so that the sun and air can complete the drying process. A loose covering of cheese cloth will keep the flies off while the meat is drying. When the meat is dry, simply store the pieces in a dry, cool place protected from dust and insects.

## Cooking Methods

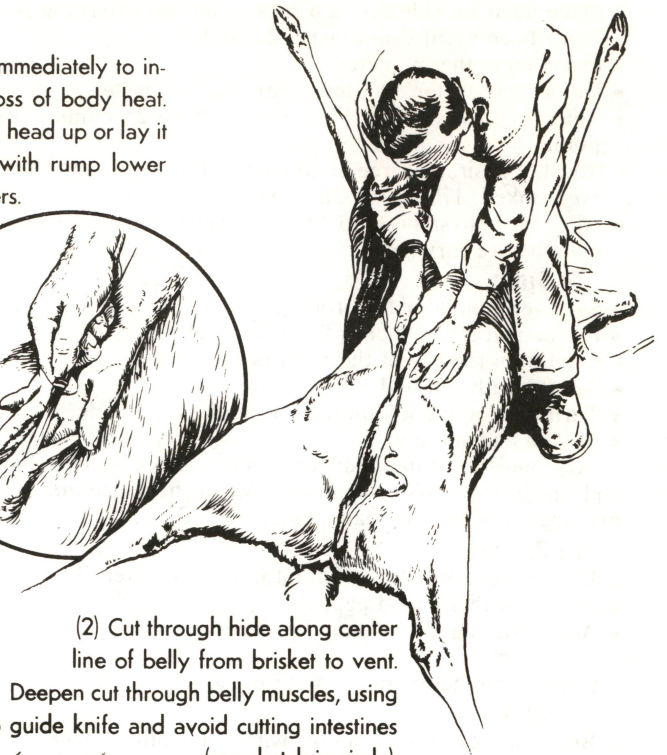
Venison and beef are similar in carcass structure. Each, however, has its own distinctive flavor. Venison has less fat distributed in the muscle fiber, and the fat outer covering is limited or extremely thin. Venison also may be coarser or more stringy in texture. Favorite methods of preparing beef might be used on similar cuts of venison. Use dry heat for tender cuts—sirloin, back, ribs, round, and shoulder steaks from young animals. Dry heat methods are roasting, broiling, and pan broiling.





(1) Bleed with head downhill. Insert knife just in front of breast bone. Cut sideways to sever blood vessels.

Dress deer immediately to insure rapid loss of body heat. Hang animal head up or lay it on a slope with rump lower than shoulders.



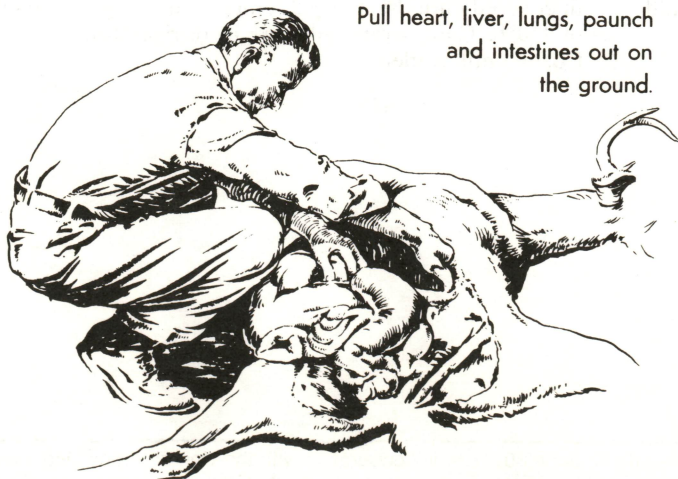
(2) Cut through hide along center line of belly from brisket to vent. Deepen cut through belly muscles, using fingers to guide knife and avoid cutting intestines (see sketch in circle).



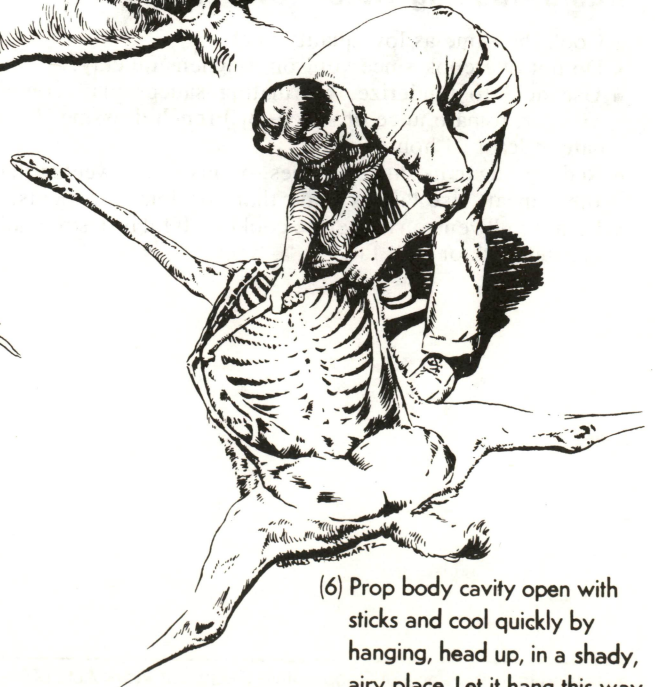
(4) Open chest cavity, front to back, through breast bone. Split muscle (diaphragm) separating chest from stomach cavity.



(3) Cut deeply around anus. Remove it with intestines. separate hind quarters by splitting pelvic bone with sharp, heavy knife or hand-axe.



(5) Sever gullet and windpipe as far forward as possible. Pull heart, liver, lungs, paunch and intestines out on the ground.



(6) Prop body cavity open with sticks and cool quickly by hanging, head up, in a shady, airy place. Let it hang this way for about an hour before moving it to camp or car.

(from Missouri Department of Conservation)



### To Roast:

- Season with salt and pepper.
- Place meat fat side up on a rack in an open roasting pan. Place bacon strips on roast if desired.
- Insert meat thermometer.
- Do not add water. Do not cover. Do not baste.
- Roast in slow oven 300° to 325° F 20 to 25 minutes per pound.
- Roast to desired degree of doneness. It is more moist if not overcooked. 170° F is well done.
- Allow meat to stand 15 to 20 minutes after removal from the oven before carving.

### To Broil:

- Set oven regulator for broiling.
  - Place meat 3 to 5 inches from the heat.
  - Broil until the top of the meat is brown.
  - Season with salt and pepper.
  - Turn meat and cook until done on the other side.
  - Season and serve at once.
- Use moist heat methods for shoulder, neck, shank, flank, and meat from older animals. Moist heat methods are braising, stewing, and pan frying.

### To Braise:

- Brown meat on all sides in fat in a heavy utensil.
- Season with salt and pepper.
- Add small amount of liquid if necessary.
- Cover tightly.
- Cook at low temperature until tender.

### To Stew:

- Brown meat on both sides in own fat or in other fat when this is desirable.
- Season with salt and pepper.
- Cover with liquid. Cover kettle. Cook below boiling point until tender.
- Add vegetables just long enough before serving to be cooked.

## Basic Cooking Rules for Venison

- Cook the same as low quality beef.
- Do not overcook since venison toughens quickly.
- Use acid to tenderize. Marinating sauces may contain vinegar, tomato juice or sauce, or French dressing. Marinate at least 24 hours.
- Reduce sugar in sauce recipes. Venison is sweeter than other meat. Use ¼ less sugar than for domestic meats.
- Remove all venison fat before cooking. If fat is desired, add ground pork or beef fat.

## Basic Recipes for Using Ground Venison:

### Venison Chili (serves 6 to 8 persons):

- 2¾ pounds cooked venison, cubed (ground or cubed raw meat may be browned and used)
- 2 tablespoons fat  
1 cup meat stock or water  
2½ teaspoons salt  
pinch sweet basil  
1 tablespoon tarragon vinegar  
¼ can (small) pimento pepper (optional)  
⅜ to ¾ teaspoon chili powder  
Pinch oregano  
1 small can mushrooms  
3 medium sized onions
1. Brown meat in fat.
  2. Add water and all other ingredients. Simmer for 1 hour.
  3. Thicken with 1 to 2 tablespoons flour. Note: More water may be added if needed.
  4. Add chili beans.

### Venison Burgers (serves 6):

- 2 pounds ground venison  
¼ pound ground pork  
1 medium onion, chopped  
⅛ teaspoon black pepper  
¼ teaspoon marjoram  
¼ teaspoon thyme  
¼ teaspoon monosodium glutamate (optional)  
2 eggs, beaten  
2 tablespoons melted fat  
¼ cup sweet cider

Blend venison, pork, and chopped onion together. Add seasonings and beaten egg. Blend well. Form into small patties, about ¾ inch thick. Brown hamburgers on both sides in fat. Cover, reduce heat to low, and simmer for 10 minutes. Turn hamburgers. Add cider, cover, and simmer 10 minutes more. Serve immediately.

### Summer Sausage:

- 5 pounds ground meat—may use 4 lbs. venison, 1 lb. ground beef
- 5 teaspoons commercial meat cure  
2½ tablespoons mustard seed  
2½ teaspoons garlic salt  
1 tablespoon hickory smoke salt

Combine all ingredients, cover, and let set in refrigerator; stir each day. On the 4th day, form into four rolls, place rolls on rack in shallow pan (like a jelly roll pan), bake at 250° F uncovered until the internal temperature reaches a minimum of 150° F. Cool, wrap and store in refrigerator. Can be kept frozen until needed.