The University of Georgia College of Agricultural & Environmental Sciences Cooperative Extension Service

# Venison from Field to Table: Getting the Most Out of Your Deer

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**Be** Prepared Safety First Tagging the Deer **Field Dressing** Cleaning the Body Cavity **Refrigeration and Hanging Aging Venison** Skinning Hides Skinning the Trophy Head **Cleaning the Carcass** Processing the Venison for Home Use Handling the Shot Damaged Meat **Cutting the Carcass** Wrapping, Freezing, and Storing **Ground Venison** Venison Sausage **Cooking Tips Did You Know?** 

You sit quiet and motionless in your stand for several hours watching the sunrise, hearing the birds awaken to a new, active day. Several squirrels play tag in a nearby hickory. A fluffy red fox is nosing each tuft of grass as he moves through and upsets the squirrels' game. You watch the trail you have so carefully scouted that leads through the thicket of sweet gums and small pines by your stand to the heavily wooded area away from the soybean field. You watch and wait. It's 9:30 a.m., and you begin to feel the warmth of the morning sun on your cheek. Out of the corner of your eye, you detect movement. Your heart jumps. Deer! Slowly you turn your head to see him come into full view. He has surprised you from behind!

Your heart begins to pound! He is bigger than you expected. His dark coat blends his sleek body into the

background and makes him almost a part of the landscape. His full neck supports a uniform rack of six, maybe eight, points. He comes to an abrupt halt as he reaches your trail. Your heart races! Slowly you bring his shoulder into your sights and realize he is looking straight at you. You're gasping for air! You squeeze the trigger. Bang! He lunges forward into the brush! He stumbles, falls and then lies motionless.

You have just harvested your first deer this season.

#### **Be Prepared**

Don't let the enthusiasm of the hunt interfere with getting ready for handling your deer in the field. You should be prepared for the kill. Be sure to take along the following:

- 1. Eight to ten feet of quarter-inch rope to drag the deer from the woods.
- 2. A sharp hunting knife (four- to six-inch blade) to field dress the deer.
- 3. A yard of string to tag the deer and tie the bung.
- 4. A plastic bag to hold the heart and liver.
- 5. Several clean towels or cloths to clean out the excess blood or intestinal contents of the body cavity and dry your cold, wet hands.

#### Safety First

Strive for a quick, clean kill. Make sure you have a good shot before pulling the trigger. Then be sure your deer is dead. Don't walk up to the deer imme-diately because many a hunter has been caught off guard when the deer he thought was dead jumped up and ran off. Get in a position to observe the downed deer. Wait 15 to 20 minutes before approaching. If the deer gets up, you will be able to shoot him again. Even if you knock the deer down and he gets up and runs out of sight, wait the 20 minutes unless it's raining. If the deer is mortally wounded, he will most likely stop, bleed, lay down and die. If pursued, he may travel several miles and be lost. A deer is trailed by the blood droplets. Note the shape of each droplet to see the direction of travel.

Approach the downed deer with caution -- it still may not be dead. A second shot in a vital area will save you time and possible injury.

## **Tagging the Deer**

The first step is to tag the deer according to Georgia Fish and Game regulations. This information aids in deer management and harvest by supplying correct information on the location and number of deer.

The old advice of bleeding your deer by sticking or cutting the throat is not recommended unless the deer is shot in the head or the backbone is broken. Modern firearms ordinarily take care of the bleeding without additional cutting. Do not cut the throat if the head is to be mounted. If you think the deer needs additional bleeding, field dress the deer, then cut the main artery next to the backbone.

### **Field Dressing**

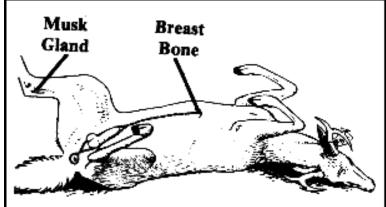
Use care when field dressing the deer. Contaminating the carcass with intestinal contents, getting hair all over the meat and getting soil, leaves and trash in the body cavity are some of the most common errors hunters make. Keep the carcass as clean as possible and follow these steps to produce the deli-cious venison meat you expect.

Drag the deer to a spot where you will have plenty of working room. Prop it on its back with a rock or limb. Cut around the anus, then draw it out and tie it off with a string. Be sure that it is cut free so that it will pull out with the intestines. Be sure at all times to cut from the inside of the hide to prevent loose hair from getting onto the meat. To make the first cut, lift the hide between the legs, insert the point of the knife and make a small opening. Then insert two fingers of your free hand into the opening and lift the hide. Then carefully cut the hide from the inside along the midline of the belly to the breast bone. Avoid cutting through the abdominal muscles and puncturing the intestines.

Next, cut along the opposite side of the genitals and remove them, cutting the penis off where it attaches to the pelvic bone. Make a small opening in the thin muscles of the lower abdomen just forward of the pelvic bone. Avoid puncturing the paunch or intestines by holding them back with the back of your hand and guiding the knife with your first two fingers - cutting edge up. Open the body cavity from the pelvis to the breast bone. (See Figure 1)

Roll the carcass onto its side. Draw the bung (anus) through the pelvic opening and roll the intestines out on to the ground. Cut the esophagus just forward of the paunch and remove the remaining viscera. Carefully lift the bladder, cut the ligaments around it and remove it.

Some hunters prefer not to cut the aitch bone (pelvic bone), remove the pluck or split the chest cavity until the deer is butchered or at least until they get back to camp where they can use a saw or hatchet. This helps keep the blow flies, yellow jackets and contamination out of the body cavity by minimizing the opening. This is





especially true if you have to drag the deer a long distance.

## **Cleaning the Body Cavity**

Once the abdominal cavity is open cut the diaphragm (membrane separating the upper and lower body cavity) away from the ribs. Reach in and cut the windpipe and esophagus forward of the lungs and remove the pluck (the heart, lungs and esophagus).

Next, cut the liver and heart from their attachments and put them in the plastic bags for transporting. The deer does not have a gall bladder so you can handle the liver without fear of rupture and contamination.

Tilt the carcass over and drain out any free blood or blood clots, then thoroughly wipe out the body cavity with a

clean, dry cloth. If the deer is gut shot, some trimming to remove any contamination adhering to the meat should be done. Most often what is referred to as a "gamey" taste is from flavors absorbed from the spilled intestinal contents. Do not use stream water to wash out the body cavity. Keeping the surfaces dry will help keep down spoilage.

The deer is now ready to drag to camp or to your vehicle. If you want the head for a trophy, be careful as you drag the deer out. A long drag can wear off the hair.

## **Refrigeration and Hanging**

Refrigerate the deer carcass as soon as possible for best quality. Be sure that it is refrigerated within three to four hours after killing if the air temperature is above 50 degrees, which is usually the case in Georgia. When air temperatures are below 40 degrees, the body cavity may be propped open with a stick and the carcass hung either head up or down, whichever you prefer, so it will chill rapidly.

The best advice for hanging the carcass with the head down is a gambrel or strong stick notched at both ends and in the middle. Skin the hind legs from just below the hock to about four inches above the hock. Place the notched stick between the tendon and leg and spread the legs apart. Tie a rope to the center of the stick and hang the carcass. After the deer is hung, the remaining dressing steps can be easily accomplished.

## **Aging Venison**

Many hunters like aged venison. To age a deer, leave the skin on to prevent drying and store the carcass for up to two weeks at 34 to 36 degrees. If you take the deer to a meat processor for cutting, wrapping and freezing, meat inspection rules require that the hide be removed before the carcass can enter the facility. This will result in excessive drying if the carcass is aged. The temperature during aging should be 40 degrees or below and only deer which have been properly handled, are clean and were not gut shot should be aged. Aging improves tenderness, but causes greater trimming losses due to dehydration of the exposed surfaces and spoilage in the gun shot area.

Aging venison is not a good idea because of the adverse conditions under which deer are dressed, the thin fat cover on the carcass, the requirements by meat inspectors that the hide be removed and the contamination often on the carcass. Processing should be done within three to four days after the kill.

# Skinning

Remove the front feet by cutting around the leg about one inch below the knee. You can snap off the leg at the break joint by bending it backward against your arm. Remove the back feet by cutting around the leg at the flat joint about one and one-half inch below the hock. Then, holding the hock firmly, press laterally against the foot and snap it off. Be careful not to cut the tendon above the hock because it is the only means you have for hanging the deer head down for skinning. (See Figure 2)

Many opinions exist about the musk gland, which is on the inside of each hind leg below the hock. Studies have

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shown that if these glands are not touched with the hands or knife, their removal is not necessary. Since these glands stop functioning after death, they will not affect the taste of the meat.

You are now ready to cut the hide to start skinning. Remember, only cut through the hide from the inside to reduce the amount of free hair which could get on the meat. Following the pattern shown in Figure 2, cut down the inside of each leg to the midline by inserting the knife and running it just beneath the hide. Then, cut along the underside of the brisket (chest) and continue up the underside of the neck to the base of the skull.

Next, work the skin away from each of the hind legs. Strong fingers with some assistance from a sharp knife work best. Once the legs are skinned, you can pull the tailbones out of the tail.

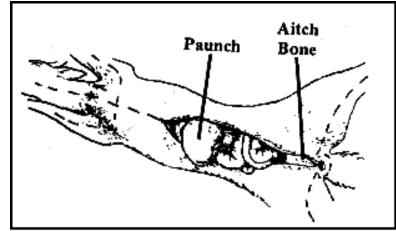


Figure 2.

Using deliberate strokes, skin the belly out to the flank and skin the brisket back to the front legs. Work the skin off the front legs.

Remove the hide from the body with strong downward pulls on the hide freed from the hind legs and rump region. This is easiest with two people, though it can be done by an individual alternating between the two sides. Pulling the hide with your hands is better than using a knife. The heel of the skinning knife and your fist will help in places where the body is difficult to separate from the hide.

If the flesh pulls off with the skin, stop pulling and try again after cutting the flesh back with the skinning knife. When the deer is skinned hung head up, it is less likely that the thin muscles will be pulled off with the hide.

The head can easily be removed at the atlas joint (the joint closest to the skull) before or after skinning. Cut the muscles on both sides of the neck and the ligaments in the throat area. Twist the head off and cut away any remaining tissue. Remove the tongue for use in sausage or for cooking. It is quite delicious.

## Hides

Deer hides may be salted and sold for tanning; however, because of the shot holes, most are only worth a few dollars. If you wish to tan your hide, check with your local taxidermist or contact a tannery.

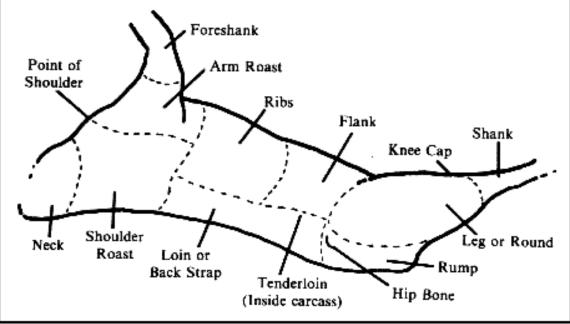
## **Skinning the Trophy Head**

If you want to mount the head for your trophy room, you need to take special care. Do not cut under the neck or in the brisket front. Cut the hide on the inside of the front legs. Skin out the chest area behind the front legs. Pull the full hide down over the shoulders then carefully skin out the brisket front. Continue to pull the hide down over the neck in front and back without making a cut in the hide. When the hide is forward of the shoulders, cut the neck off with a saw. Refrigerate the hide and head or freeze it if it will be several days before you can get it

to the taxidermist.

## Cleaning the Carcass

Before you refrigerate the carcass, carefully trim off any contamination or trash on the carcass or in the body cavity. This is the time to remove any stray hair that may still remain. If the deer was gut shot, thoroughly wash out the body cavity



with clean water and trim out Figure 3. The locations of the various cuts on the carcass. any contaminated areas. It is

not necessary to wash or wet a clean, dry carcass that has been handled properly.

#### **Processing the Venison for Home Use**

There are many local, independent meat processors who will cut, wrap and freeze your deer for \$25 to \$35. However, you may wish to avoid this expense by doing it yourself.

Cutting up your own deer in the past may have resulted in "hacking" the meat into pieces that only you could recognize. This task can be greatly simplified by following a few instructions to give you the personal satisfaction of doing the job yourself. The equipment you will need:

- Five-to Six-inch boning knife
- Eight-inch steak knife
- Sharpening stone
- Meat saw
- Clean table
- Several pans
- Freezer wrapping paper
- Marking pencil

The carcass is ready for processing when it has been thoroughly chilled to 40 degrees.

#### Handling the Shot Damaged Meat

Cut away all of the bloody flesh from each damaged cut. Many times, the shoulder may have to be boned and used for stew. When separating the bloody area, carefully remove the muscles separately because the blood clots

are most often embedded in the connective tissue between the muscles. These bloody areas can easily be removed with the membrane on the muscle. To remove any remaining blood, soak these pieces in salt water (1/2 cup per gallon of water) to draw out the blood. This soaked meat can then be used for stew.

#### **Cutting the Carcass**



Figure 4. Remove the front shoulder. Lift the front leg up from the chest and cut the meat attached to the rib cage. Work the knife against the ribs to cut the connective tissue attaching the meat to the ribs. The last cut will be made at the top of the shoulder blade where it attaches to the withers.



Figure 5. Cut the front shoulder into three parts — shoulder or blade roast, arm roast and shank.

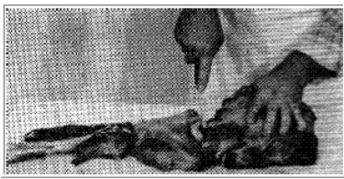


Figure 6. Remove the blade roast by severing the joint at the point of the shoulder. Locate the joint by moving the blade up and down. Cut through the joint and trim the roast to make a uniform piece of meat. Save the trimming for grinding. If steaks are preferred, the muscles on either side of the bony ridge can be removed. These can then be cut about 1/2 inch thick for frying.

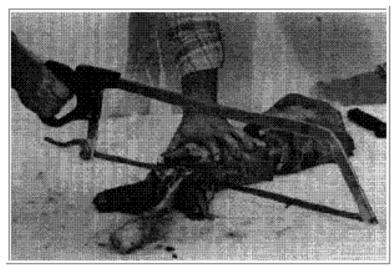


Figure 7. Separate the arm roast from the shank by cutting the meat and then sawing the bone close to the elbow joint. Trim the arm roast and it is ready for use. Bone out the shank and remove the heavy tendons and tissue from the meat. Use this for grinding. Remember to let the knife follow the bone when removing meat. This will keep from leaving many small scraps of meat on the bone, which have to be removed by scraping the bone with the knife.

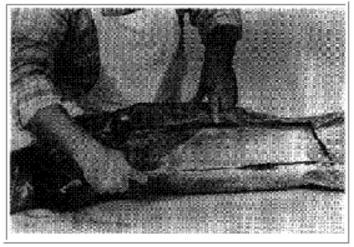


Figure 8. This view shows the cuts to be made in removing the boneless loin. Cut just in front of the hip bone at the front edge of the leg down to the backbone. Next, let the knife follow the vertical spine on the backbone as a guide and cut forward until you have reached the base of the neck. Third, make a cut directly over the point where the ribs curve down to join the backbone, about 4 inches away from the midline of the back as pointed out in the picture.

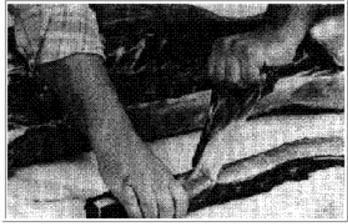


Figure 10. The fell, or heavy membrane and fat, should be removed from the loin. Lay the loin on the table. Start at the end and cut enough of the connective tissue away to get a good hand hold. Pull the connective tissue and fat from the loin. Remove the loosely attached meat for grinding or stew.



Figure 9. Lift one end of the loin and peel the loin muscle from the groove between the ribs and the vertical spines of the backbone. Remember to let the knife cut against the bone as a guide.

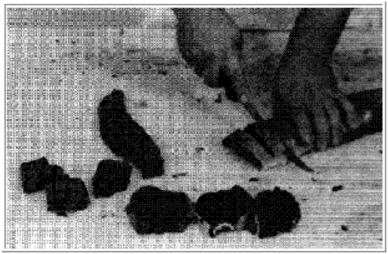


Figure 11. Cut the loin into steaks or butterfly chops as shown here.

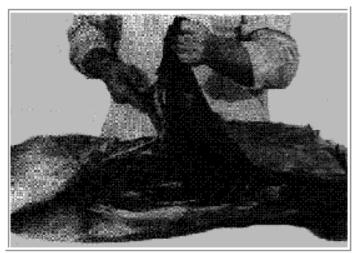


Figure 12. Remove the flank by cutting along the last rib and freeing the meat from the backbone. The back edge should have been cut in preparing to remove the loin.



Figure 14. Remove the neck by sawing the backbone off in front of the shoulder. The neck maybe boned out or cut into slices for stew. Used whole, it makes a good pot roast.

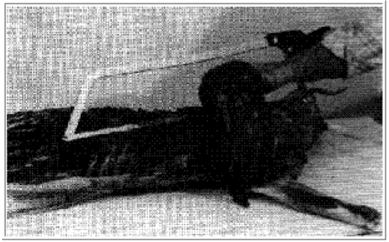


Figure 13. Remove the ribs from the backbone by sawing them off at the point where they curve to the backbone. Cut from the last rib all the way to the base of the neck.

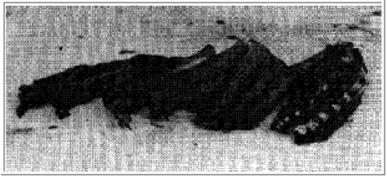


Figure 15. Cut the ribs into strips for barbecuing as shown here.

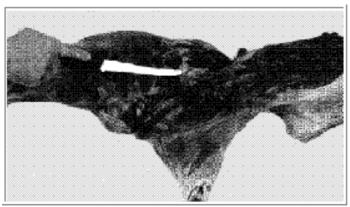


Figure 17. Because of the large amount of bone in the rump, the legs may be removed by starting at the aitch bone and cutting along the pelvic bone to the socket joint.



Figure 16. The ribs may be boned out and used for ground meat or sausage material. This is accomplished most easily by leaving the ribs attached to the backbone. Scribe each rib from the inside of the carcass. Cut the meat free on both ends of the rib. Cut close to the rib bone down far enough to get a hand hold. Then pull the plate meat free from the rib. Cut the plate meat off at the brisket. This is excellent for sausage or ground venison.



Figure 18. Open this joint and cut closely underneath the pelvic bone to remove the sirloin meat. Be careful to keep the knife tip against the bone on each stroke to prevent leaving much meat on the bone.



Figure 19. Carefully remove the tenderloin fromt he inside of the backbone by lifting and cutting it free. Don't overlook this excellent meat, which can make butterfly steaks. Two of these can be wrapped together with bacon and fastened with a toothpick to make a fillet. They are excellent broiled and basted with butter.

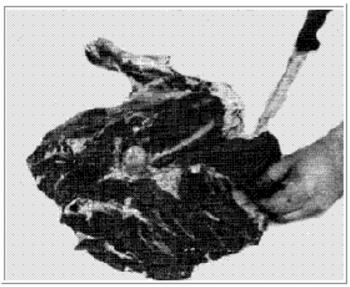


Figure 20. The leg now has the rump meat (sirloin) attached to the whole leg. The shank can be removed at this point by cutting through the knee joint. The leg can be used whole for barbecuing or, after further boning and cutting, for steaks or for roasting. Remove the sirloin tip from the leg. Locate the knee cap by moving the leg and finding the joint. Cut into the joint away from the shank. Cut under the knee cap and directly down to the large leg bone. Lay the leg flat on the table. Allow the knife to follow the leg bone when cutting off the sirloin tip. Keep the knife vertical and cut with smooth strokes.

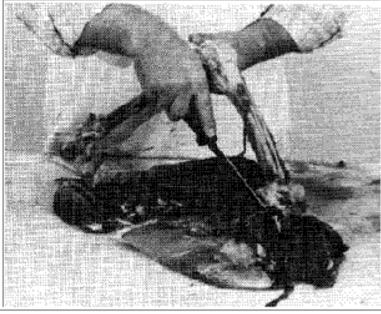


Figure 21. Next, remove the shank bone from the round. Start by cutting through the connective tissue that separates the shank from the round at the joint. Let the knife follow the bone and remove the leg bone from the meat.

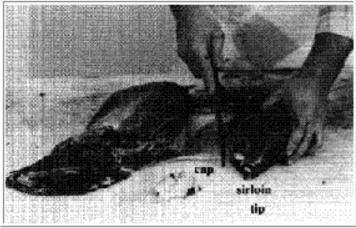


Figure 22. Remove the cap or connective tissue from the sirloin tip. Trim out the cap meat for use in grinding. Separate the sirloin from the sirloin tip.

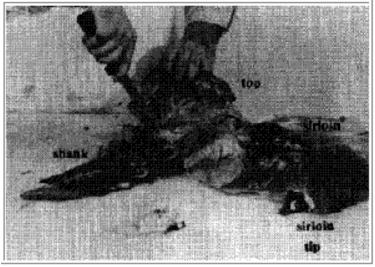


Figure 23. Separate the top and bottom muscles in the leg and remove the shank meat from the heel to use for grinding.

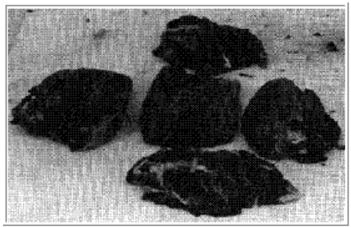


Figure 24. The pieces of the leg (round) are shown here. Clockwise: shank meat, sirloin tip, sirloin, top round, bottom round (center). These maybe used as roasts or cut into steaks for frying. The shank meat is used for grinding.

#### Wrapping, Freezing, and Storing

Wrap all packages in freezer paper or seal them in freezer bags. Always remove as much air as possible from the packages. To facilitate separating the frozen steaks, place wax paper between each of the steaks before wrapping. Label each package with the cut and date. Spread the packages out in the freezer to help freeze them quickly.

Use venison within nine to 12 months of freezing for best quality.

#### **Ground Venison**

Venison is usually very lean and relatively free of fat. The venison fat is similar to lamb fat and has a high melting point. This gives a different mouth feel than beef or pork fat when cooked. However, when beef fat cuts are added to the venison trimmings and then ground, the resulting product is much like ground beef. The normal mix is 50 percent venison and 50 percent beef plates for a regular hamburger mix. For a leaner product, reduce the amount of beef fat.

Because of venison's excellent natural leanness, many people prefer to just grind the venison and use it in making meat loafs, stews and other ground meat dishes to reduce calories.

## Venison Sausage

Venison also makes an excellent sausage material. Mix it with fresh pork trim (50 percent lean) or fresh pork bellies with pork sausage seasoning added to produce an excellent breakfast sausage.

#### Ingredients

25 lbs. Iean venison or trimmings
25 lbs. fat pork (jowls or fresh bellies)
(2 cups) 1 lb. salt
(15 Tbs.) 3 oz. black pepper
(5 Tbs.) 1 oz. ginger
(8 Tbs.) 1 oz. rubbed sage
(5 Tbs.) 1 oz. crushed red pepper
(5 Tbs.) 1 oz. ground red pepper

#### Procedure

Cut venison and pork into small pieces, add spices and mix. Grind twice through 1/8 inch or 3/16 inch plate. Sausage may be stuffed, pattied, smoked or used in bulk form.

For other sausage recipes and procedures, see Extension bulletin 865, *Sausage and Smoked Meat,* available through your county extension office.

## **Cooking Tips**

The key to cooking venison and to making it tender, moist and delicious is understanding that it has very little fat or fat cover. Remember, most of the flavor of meat is in the fat. By adding butter or cheese, or basting with other fats, the flavor of the venison can be altered to suit your taste. Secondly, without much fat cover, the meat tends to dry out and be chewy. Cook venison slowly using moist heat and baste often with a sauce or oil. Don't overcook. A roast may also be wrapped in aluminum foil after browning or covered in a roasting pan. Strips of bacon may be placed on a roast for self basting. When cooking venison, season lightly, cook slowly and use moist-heat cooking procedures such as braising, even for steaks. Venison can be substituted for meat in many recipes and makes an excellent variation from the menu.

For additional recipes for cooking venison, see Extension bulletin 648, *Wild Game from Field to Table*. It is available through your county extension office.

## Did You Know?

- About 145,000 deer are legally harvested in Georgia every year. This is about one-fourth of the state's deer population.
- Adult does (2-1/2 years and older) on good range are likely to give birth to twin fawns. Nearly half the deer population is probably less than one year old.
- Most bucks shed their antlers during January and February. Antler size depends upon genetics, age, and nutrition.
- Age is determined by examining teeth replacement and wear.

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- A deer eats about a ton of food a year.
- A piece of venison returned to the landowner who allowed you to hunt on his land may make you an especially welcomed guest the next hunting season.

#### **Good Hunting!**

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