Homestead Poultry Butchering

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Photos by Michael Focazio

Butchering skills are almost essential for anyone serious about keeping an ongoing homestead flock. Whether you breed your own stock or buy day-olds straight run, you face a large surplus of males for whom there is no long-term place in the flock. Even if you keep a flock of hens only, they usually cease or greatly decline in egg production long before the end of their natural lives. Maintaining them “on welfare” is a fine but hardly a practical choice for those tending their flock as part of a productive homestead.

Flock keepers often try to find someone else to do their culling chores for a fee. Most people find, however, that individuals interested in providing such a service are few and far between. I expect there may be a growing number of small custom butchering services in the future—even “mobile processing units” that arrive on site and butcher, leaving neat packages for the freezer behind—but at the moment most homesteaders are stuck with doing their own butchering.

It is easiest to learn butchering skills working with someone more experienced. In lieu of that better option, I hope you will find the following guide useful. Read it thoroughly, study the pictures, and don’t be discouraged if there are points that do not make sense. When you have your bird on the butchering table, you will recognize key anatomical features from the pictures, and obscure points from the text will become clear. It can be helpful to work with a partner who assists with point-by-point reference to the guide, while you do the hands-on work. Good luck.

Some General Observations

Starving the birds

I strongly recommend isolating birds to be slaughtered overnight without feed. (Provide water free choice.) The brief starving of the birds clears the gastrointestinal tract, making for easier, less messy butchering.

Chill!

Be prepared to chill the carcasses as you complete them. You can ice them down in a cooler, or pop them into the refrigerator after each bird is finished, but do think of freshly dressed poultry as highly perishable.

Butchering waterfowl

This guide focuses on butchering chickens. Processing geese and ducks is anatomically quite similar, but there are thousands more feathers in these species. You pay your dues when you dress waterfowl!

Remember your pets

We believe that raw meat is excellent, health-promoting food for our dog Nyssa. I reserve the necks, hearts, gizzards, and lungs for her, making up little packages to freeze for future meals. (Yes, I know you’ve been cautioned never to feed chicken bones to dogs. That’s excellent advice, with reference to long bones [thigh bones, drumstick bones], cooked bones, and bones from commercial chicken generally [which are poorly mineralized, softer than homestead chicken bones, and apt to break into long dangerous splinters]. Raw chunky neck bones have never been the slightest problem for Nyssa. Chewing them helps keep her teeth and gums clean and healthy; and they are unmatched for promoting good bowel function.)

Packaging

If promptly chilled, freshly dressed poultry can be held up to a week in the refrigerator. If you do plan to keep it that long, though, do not keep it tightly wrapped in plastic. Instead, set it on a plate and loosely cover with wax paper or freezer paper. When packaging for the freezer, use zip-seal freezer bags or freezer paper, in either case expelling all the air you possibly can from inside the package. My preferred option is the use of a kitchen model heat sealer/vacuum packager, which eliminates air from the package entirely, and maximizes keeping time. When possible, I freeze birds whole, and cut them up after thawing. Not only do whole birds store better, they present fewer sharp edges of bone to puncture the wrapping.

Use it all

You honor the bird who has made such a contribution to your homestead by utilizing it to the maximum extent possible, minimizing the parts you define as “waste.” Learn to make stock from what I call the “spare parts.” Learn to love liver.

Set-up and Equipment

The key operations are: killing the bird, scalding, plucking, and eviscerating. Set-up requires at a minimum a scalding of some sort, a work table, cutting tools, and running water. You can work indoors if you like, but I prefer to work outside, setting my work table in the sun if the day is cool, and in the shade of a big white oak if it is hot. I use a 15-gallon fiberglass scalding tank heated by a thermostatically controlled electric element—just like in an electric water heater. (I encased it in 2-inch foam insulation for greater efficiency.) You can use instead a large enamelled canner (as shown in the “Dunking” picture) on stove top or portable burner. I also use a mechanical plucker featuring a drum driven by an electric motor, into which are set many...
stiff rubber “fingers” that “slap” the feathers off the bird as the drum rotates. The considerable expense of a mechanical plucker would likely only be justified if you process a lot of birds, but a plucker does speed up the operation considerably. (See sidebar, "Pick Your Plucker.")

You will be more comfortable using a table at a good working height. My father and I put mine together from scrap lumber, a double stainless steel sink donated by a friend, and a single stainless steel sink with drain board which I picked up at a junk yard for four bucks. (For use when friends join me for slaughter day, I put together insets for the sink wells to provide additional work surfaces. They are simply small synthetic cutting boards screwed onto wooden “feet.”) Note the supply hose hooked onto the leg of the table. The pistol-grip sprayer is just the thing for that quick splash of water whenever needed.

I like to have on hand a tray (for carrying dressed carcasses into the house for chilling in the refrigerator) and a stainless steel bowl with a lid to hold the usable “innards” until I get them inside. And of course, the homestead revolves around 5-gallon buckets. I use them under the table to catch the rinse water (so the area doesn’t become a muddy mess), and position them on either side of each work station, to catch feathers and offal.

**About Cutting Tools and Knife Technique**

Do yourself a favor and invest in good cutting tools. (Yes, the good ones are expensive.) One of my greatest frustrations in my butchering workshops is the wretched cutlery many students bring to do the work. Knives that are badly designed, or that will not take or hold a keen edge, are clumsy and fatiguing to use—and of course, a dull tool is always more dangerous than a sharp one, because of the greater force required to cut with it. You will of course discover your own preferences for cutting tools. I prefer two knives: One with a thin, flexible, 3-inch blade for more delicate cuts (e.g., around the crop); and the other with a stiff, heavier, 6-inch blade for more hefty, resistant cuts. I recommend a good pair of shears as well (for cutting off the neck). Poultry shears vary tremendously in quality, and I have broken at least half a dozen over the years. After eventually breaking the spring on the best model I ever found (the black-handled “Soft Touch” shears in the picture), I lost patience and bought a Felco No. 2 pruner (red handles). Don’t expect I’ll ever break that one.

Let me emphasize two points about knife technique, based on the most common mistakes I see beginners make. Never use the point of the knife when cutting. All the cuts you need to make are *slicing* cuts, some of them rather delicate (to avoid piercing the entrails), so always use the edge of the blade—and keep it sharp! You may have wondered about my preference for a stainless steel work surface, having expected a chopping-board surface designed for contact with the blade. Using my methods, *the blade need never come in contact with the work surface*. Either make downward cuts from above, so the carcass itself prevents contact of blade and work surface; or pull on the part to be cut, using the weight of the attached carcass to create tension, and make your cut against that tension (rather than sawing or chopping down onto the work surface, as when using a cutting board).

**Killing the Bird**

The killing of the bird is typically the most difficult part of the process, emotionally and psychologically. Naturally you will want to do the job as quickly and humanely as possible. I use three methods. (Please note that, whatever method you choose, *it is essential that the bird bleed out completely.* The dressed bird will not keep nearly as well, nor taste as good, if the blood remains in the muscle tissue.)

**The chopping block**

A solid, stable round from a log makes a good chopping block. Drive a couple of large nails into the block, between which the bird’s head can be positioned as you pull on the feet. Under such restraint, the bird is unlikely to continue struggling. Don’t be rushed—pull on the feet, stretching out the neck, take a breath, and steady yourself for a decisive blow of the hatchet that takes off the bird’s head with one whack. Hold it away from you and near the ground, so the blood will drain without spattering.

**Quality cutting tools are essential.**

**The killing cone**

A killing cone made of sheet metal is a useful accessory. Hang it on the side of an outbuilding or a tree. Insert the head through the hole at the bottom of the cone, pulling it to stretch out the neck and draw the wings and legs more tightly into the confinement of the cone. Use your sharpest knife to make a quick, decisive cut just below the “jaw.” It is important to note that you sever the jugular vein *only*, not the wind pipe (resulting in less stress for the bird). Allow the bird to bleed out thoroughly, guarding against a final spasm at the end that might flip it out of the cone.

**English method**

You can kill the bird by what I’ve seen referred to as the “English” method, if it
is young enough for you to break the head off the neck. (I find birds at the fryer-broiler stage, and most old hens, easy to kill with this method. I cannot break the necks of mature cocks, ducks, or geese, so for those birds I use the cone or the chopping block instead.) Holding the head of the bird in the clutched fist of your strong hand, and the feet in the other, brace the bird over one thigh, and pretend you are going to pull it apart. At the right point of tension (which you can only learn by experience), give a sharp twist-snap downward-outward, and the head will separate completely from the neck. Hold the bird out away from your body until its spasms subside. (You will likely find this method difficult the first time you try it, and mistakenly conclude you are not strong enough to make it work. Trust me: It is not a matter of brute strength, but of technique—that is, proper action in the wrist. The first time the head comes off—so easily, really, with a sort of liquid giving-way—will be something of a surprise.) An advantage of this method is that the bird does bleed out, but the blood is retained inside the skin of the neck—thus less messy. Note, however, it is essential that the head actually break away from the neck for this method to work—when that happens, the jugular vein is severed as well, and the bird bleeds out properly. It is possible to kill the bird simply through trauma to the spinal cord, but without breaking the jugular, resulting in a dead bird that has not properly bled out. Squeeze the skin of the neck between the head and the end of the neck: If you don’t feel a completely flacid, “empty balloon” space there at least big enough to insert three fingers, you have not properly broken off the head.

### About Using a Mask

If you find that your sinuses are heavily congested after slaughtering, especially during the night, use a good dust mask to filter out the poultry dander kicked loose during the killing phase (and the plucking phase as well, if you are using a mechanical plucker). The one I use is the Respro Sportsta Mask, extremely effective, and comfortable enough to wear for all dusty chores on the homestead.

### Scalding

The key to an easy pluck is a good scald. Note that scalding temperature is nowhere near the boiling point. I set my thermostatically controlled scalder to 145°F, and that is a good temperature to aim for if your scalding container is over a stove top or burner. However, it is not really necessary to use a thermometer to measure the temperature. Just stick in a finger. Can you immerse the finger without getting a burn, but you cannot hold the finger in for more than a second without burning? That’s proper scalding temperature. Note that overscalding (either through too high temperature or scalding too long) starts to cook the skin, which then tears when you pluck. Underscalding, on the other hand, fails to loosen the feathers sufficiently, and they are difficult to pluck. No exact formula can be given for scald time—how long to scald depends on the age of the bird, the species, the point in the plumage cycle, probably the phase of the moon.

### Dunking

You will learn only through experience when “enough is enough” in the scalder. Add a few drops of liquid soap to the scalder (to break the surface tension of the water and increase penetration to the skin). Put the bird into the hot water and use some sort of “poke” to agitate the bird up and down. After a minute or less use your poke (I use an old 3-prong cultivator missing one tine) to snag a leg. Pinch-squeeze the scaly covering of the shank: When that covering breaks loose from the skin of the leg, remove the bird from the scald, and dunk in cold water. (The dunk stops the skin from overheating from the residual heat in the water under the feathers.)

### Plucking

If you’ve scalded properly, it will be easy to remove the feathers in handfuls. It’s better to start with the largest feathers (wings and tail), since they are the ones that start resisting pulling out first as the follicles cool. If you process a lot of birds, a mechanical plucker like the one...
Cleaning the Feet

If you don’t save the feet, don’t ever tell anybody you learned butchering from me! Always save the feet. They are a valuable addition to the stockpot, yielding collagen, which is beneficial for the entire digestive tract. Remember how you used the scaly covering of the shank to test the scald? Simply continue with the same pinching-pulling action to pull the covering off leg and toes like a glove. Be sure to pinch tightly and pull the toenails as well, and the cuticles will pop off easily. The result is a pristine foot you will be proud to have in your stockpot.

Leg

This is the first point to take care to avoid sharp edges of cut bone, which could puncture the wrapping you use for freezing your bird. (If cooking it right away, of course, the point is moot, and you can cut leg or neck any way you like.) Therefore, you should not use your shears to cut through the joint at the hock (corresponding to our knee) to remove the leg. Instead, hold the foot and pretend you are going to break the leg sideways at the hock. The resulting tension on the joint makes it easy to slice through the skin and find the cartilage-padded interstice between thigh and leg bones. Once the edge of your blade has found that space, it is easy to continue cutting through skin, connective tissue, tendon—anything but bone—until the leg is cut away.

Crop, Windpipe & Esophagus

Start the evisceration at the skin where neck joins breast. Using your small knife, slice through the skin on the left side, and continue slicing through skin (only) to make a full circle around the neck. As you slice, you expose the crop, a semi-translucent membranous pouch (to the right of the bird’s neck) in which the bird stores its food for pre-processing, before passing it on to the gizzard. Because you wisely starved your slaughter birds overnight, the crop is empty and this step is not messy. If the crop is full, it is no great problem—the contents will spill over the top of the carcass and the

Head (Not pictured)

Unless you chopped off the head, at this point you will need to remove it. If you used “English” method, cut through that “empty balloon” segment of neck skin with a knife. If you used a killing cone the head will still be attached, so cut it off with your shears.

The head can also be reserved for the stockpot if you like. Pull off the feathers, rub the coating off the skin of comb and wattles, and pinch hard on the beak—the horny cuticle will pop off (as with the toenail cuticles earlier).
work surface, but a thorough rinse will whisk them away.

Force a thumb between the neck and everything attached to it—the crop (in the process pulling it free from the top of the breast meat), the esophagus, and the windpipe. Pull all that free of the neck. Separate the neck skin from the three tube-like elements and reserve it for the stockpot as well. Then pull on the tube-y things and cut them off as close as you can to where they enter the body cavity.

**Cutting the Neck**

Do not leave a “stub” when you cut off the neck—that would leave jagged edges of sheared bone that may poke through your wrapping later. Instead, force the blades of your shears around the neck but well up between the shoulders of the wings. After your cut, the sheared edges will be protected from the wrapping by the shoulders.

**Removing the Oil Gland**

If it remains on the carcass, the oil gland (which secretes oil the bird uses in preening its feathers) may affect the flavor of your cooked bird. To remove it, start slightly forward of the little nipple of the gland and simply slice down vertically until hitting bone. Then turn the edge of the blade toward the end of the tail and make a scooping cut to slice off the nipple and the two fatty lobes of the gland beneath.

**Opening the Body Cavity**

Lay the bird on its back and make a shallow slicing cut into the abdomen, just beyond the end of the keel (breastbone). Cut through skin and fascia (the translucent membrane surrounding the inner organs) only. Remember good knife technique: Avoid poking at the skin with the point of the knife—the bird’s intestines are millimeters below.

Sooner or later, you will have a slip of the knife and a nick of the intestine, spilling some of its contents into the body cavity. Do not despair—even with such a mishap, your home butchering is vastly more sanitary than the filthy conditions under which commercial poultry is processed. After eviscerating, simply do a more thorough rinse of the interior cavity than usual.

**Heart**

Reach as far as you can into the body cavity to find an organ that feels like a large grape—the heart. Hook two fingers around it and pull it out. Squeezing out the remaining coagulated blood, rinse it and set aside (I use the steel mixing bowl with lid which I mentioned), along with the neck and feet and other good things you will be saving.
**Liver**

Reach again into the body cavity, fingers and hand encircling the gastrointestinal tract. The fingernails lead the way, tight to the rib cage, finding the seam between the chest wall and the ropy tubes of the tract and other organs, the large purple-red ball of the gizzard filling your grasp like a slippery apple. Grip all and pull. The tract and the organs pull free in one mass—connected only at the base of the abdomen—which you allow to hang over your drain.

The liver is the large reddish organ beside the gizzard. The clear tissue connecting it to the other organs is easily torn away with the fingers to leave it attached at one point only—to a small, dark-green sack the shape and size of a caterpillar—the bile sack. The bile it contains is essential for the bird’s digestion of fats, but is extremely bitter. Sacrifice a bit of the liver as you pare it away from its connection to the bile sack with your small knife. If on occasion you do have a spillage of bile, rinse with more than usual thoroughness and proceed.

Incidentally, note the picture of this cut as an example of proper knife technique: The weight of the hanging gizzard is used to put a little tension on the connection between liver and bile sack, allowing the cut to be made against that tension, rather than against the steel work surface. Of course, the blade must be sharp, to enable cutting against such a tiny bit of tension.

The liver of a young, healthy bird (on the right in the comparative picture) is plump, dark red, glistening. Such a liver is extremely nutritious—rich in fat-soluble vitamins (especially A and D), antioxidants, and essential fatty acids—and most delicious if cooked quite rare. The liver of an old bird (on the left in the picture)—equally healthy, equally well fed—is usually pale brown, indicating longer service as the bird’s major metabolic filter. While I honor this liver for the good work it has done, I do not eat such livers.

**Gizzard**

The gizzard is a large, muscular organ with a tough interior pouch, filled with bits of rock. In lieu of chewing its food, the chicken processes it inside the gizzard, using the grinding stones and digestive enzymes. One tube goes in, one comes out. Cut off both, flush with the surface of the gizzard.

If you wish, you can cut through the muscle around the inner pouch, and peel the muscle mass away from the tough liner, leaving a butterfly-shaped cleaned gizzard. I usually prefer to cut away the muscle tissue in small bite-size pieces instead, keeping the blade’s edge away from the interior pouch and leaving it intact.

**Eggs and Fat Deposits**

If the bird you are butchering is a hen, you may well find inside a number of egg yolks of various sizes, or even a fully developed egg. (The one in the picture is a finished egg ready to be laid, but is still inside the oviduct.) These “unborn eggs,” as my wife Ellen calls them, are a real treat: We add the small yolks to soup or broth just before serving (so they are just warmed through), and use the completed eggs as we do any other eggs.

You will find numerous egg yolks, even fully formed eggs, in most hens.

Especially in a hen (and even more so in hens slaughtered in the fall), you will find a deposit of glistening, yellow fat at the lower end of the body cavity. This fat is easily rendered into high quality cooking fat. (Simply cut the fat into small pieces and heat in a heavy pan over low flame until the fat liquefies, strain, and store in small jars in refrigerator or freezer.)

A deposit of body fat is easily rendered into high quality cooking fat.

**Cutting Away the Entrails**

What a neat trick you’ve pulled off! You’ve drawn away all the interior struc-
Backyard Poultry

Popping out the lungs can be a bit tricky. and end with a slicing cut beneath the vent.

on the other side, between the vent and the sharp point of the pubic bone. Simply slice down until the blade hits bone. Now move the ropy stuff to the side of the vent where you just made your cut, and repeat the cut on the opposite side. Pull on the entrails, and slice under the vent itself, leaving it intact along with its connection to the end of the intestinal tract (the cloaca).

Lungs

Reach into the cavity one final time and remove the lungs. Again, lead with the fingernails as you follow the curve of the rib cage, finding the seam between rib and lung, and lift the spongy lung tissue free. This step takes some practice, and can be a bit tricky—it’s not unusual for the lungs to shred, and resist coming free easily. Don’t worry—leaving a little lung tissue is no problem. I like to remove them to make a neater carcass.

Congratulations!

Give a final rinse, inside and out, and admire the creature who has made so generous a contribution to your homestead, now ready to grace your table. Don’t forget to say “Thank you!”

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Text © Harvey Ussery; themodernhomestead.us.

Harvey Ussery and his wife Ellen live on 2-1/2 acres near the Blue Ridge in northern Virginia. They produce much of their own food—including all their eggs and dressed poultry from a mixed pastured flock—and offer their homestead as model and inspiration to others aspiring to the homesteading life. Visit his website at www.themodernhomestead.us.

Harvey is writing a book, The Modern Homestead Poultry Flock, to be published next year by Chelsea Green Publishing.

Ray Kreuziger
Wisconsin

Butchering chickens is not a pleasant task, as anyone who has tried it can tell you. And plucking the birds is a time-consuming chore. So before butchering season this fall, we decided it was time to get a mechanical feather plucker. After looking around for an inexpensive unit and trying to decide which of the different designs would work best, we decided to make our own. This is what we came up with.

Materials List:
1 electric fan motor single speed (1,550 rpm and matching metal fan)
1—2” x 8” x 18” board
1—3/4” x 3/4” x 4” wood
1—1/4” plywood 6” x 6”
1—1/4” plywood 6” x 7”
1—7-1/2” x 12” carpet
1—2” PVC outside cap
15 rubber plucking fingers
1 electric switch box
1 light switch
1 light switch cover
1—4’ electric cord with male end attached
2 wire nuts
1—1/2” threaded rod 2” long
2—1/2” nuts
14—1” deck screws
12—1/2” staples

We salvaged all of our materials from our we-might-need-this-someday pile of treasures, with the exception of the rubber plucking fingers.

The idea was a simple one: mount the motor to a solid surface and spin some rubber fingers in a circle to remove the feathers. It seems a lot of manufacturers want well over $100 for their versions of a feather plucker. This one cost $9.95 plus tax for the rubber fingers.

Assembling the Unit:
1. We laid the 2 x 8 board down and attached the carpet with 1/2” staples. This will help reduce the vibration from the fan motor.
2. The two 1/4” plywood pieces were cut to hold the motor and a 1-1/2” hole was drilled in the 6 x 6 piece. The four motor mounting bolt holes were also drilled at this time. Next the plywood
This small-scale chicken plucker can be made for about $10, using recycled materials.

On butchering day the plucker was put to the test (left) and came through with flying colors.

This simple homemade plucker was attached to the side of the 2 x 8, and we mounted the motor.

3. The 6 x 7 piece was cut at a 45 degree angle to serve as a gusset, and attached to the 2 x 8. The 3/4 x 3/4 piece was used to secure the two plywood pieces together.

4. The electrical box was mounted to the top of the 2 x 8 opposite the motor, and the motor, plug-in cord, and switch were wired together.

5. Fifteen 23/64" holes were drilled around the outside of the 2" PVC cap. We placed two rubber fingers side by side, then a space and one finger in the center. This pattern was evenly spaced all the way around, and the fingers pulled through each hole from the inside out.

6. A 1/2" hole was drilled in the end of the PVC cap, so it could be secured to the motor shaft.

7. The fan-to-motor mounting collar was cut off the fan blades, and the 1/2" threaded rod welded to one end of the collar.

8. The collar was mounted to the motor and the PVC cap fastened to the end with two 1/2" nuts.

This project took less time to assemble than it took to gather the materials!

This is only one example of a low-cost chicken plucker. With a little imagination you can build one, too.


If you slaughter a lot of birds, a mechanical plucker can speed the work considerably. Most models feature the same stiff rubber “fingers” (available from suppliers of poultry accessories) inset into a rotating plate or drum, which “slap” the feathers off the scalded bird.

The simplest homemade versions feature a small rotating head with the “fingers” inset, mounted on the shaft of a castoff electric motor or a shop drill. A good example is shown on page 63.

A good example of a purchased plucker for home use is my Pickwick HOM-PIK D, shown on page 59, which plucks one hand-held bird at a time.

You might prefer a tub style plucker if you frequently process large batches of birds: Just drop in four or more scalded birds, switch on the motor, and in a few seconds put the plucked carcasses on the worktable.

Mike Rininger’s homemade Whizbang plucker. (Photo by Harvey Ussery)

If you want to buy a tub style plucker, the best among the more affordable options is David Schafer’s Featherman Pro (http://featherman.net/pluckers.html#pro). At close to $1,000, it is a significant investment; but my correspondents in the American Pastured Poultry Producers Association (www.apppa.org) who use Featherman pluckers report that it is an effective and durable unit, even with heavy use to serve their broiler markets.

Should you join the growing ranks of small farmers serving local markets, you might want to step up to a top-of-the-line stainless steel plucker. Eli Reiff of Mifflinburg, Pennsylvania, sells a series of pluckers (and scalders) he designed to fit the needs of pastured poultry producers. See his Poultryman pluckers ($1260 to $3255) at http://chickenpickers.com/page10.html; or call Eli at 570-966-0769.