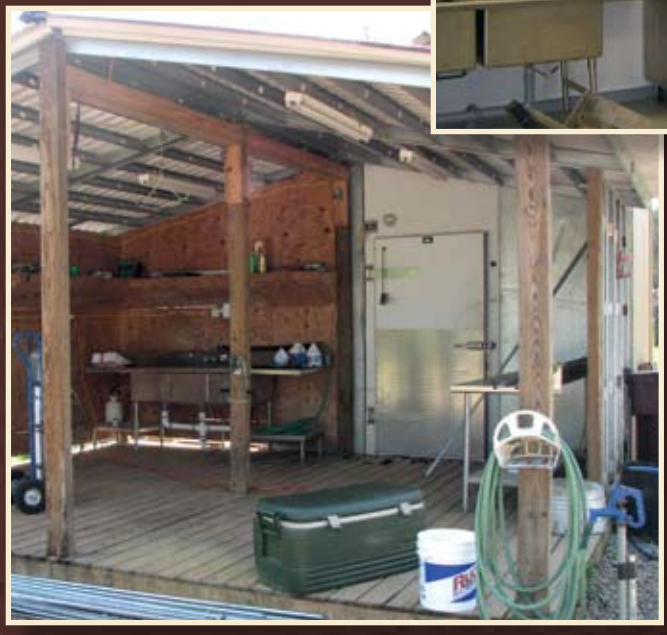
Evolution of the Skinning Shed

Whether Basic,

Space-Age,

or in Between,



...a well-planned skinning shed will lead to better *Herd Monitoring* for your QDM program.

By Rans Thomas

My first introduction to skinning a deer was in the barn on our family farm when I was a kid. My father attached a block-and-tackle hoist to a foundation beam inside the barn. He would back his pickup truck under the hoist and winch his deer up off the truck. I never shied away from the barn when Dad brought in a deer since, like most kids, I was very intrigued by the process. I had no idea how many hours I would spend under a skinning shed later in my career as a wildlife biologist. Not only have I used skinning sheds, I have looked for ways that hunters and wildlife managers are improving the standard designs of their skinning sheds, ideas that make my task of data-collection easier.

Skinning-shed facilities have been around for a long time, but traditionally they were mostly found only on commercial hunting lands and state Wildlife Management Areas (WMAs). These days I find some form of skinning shed on almost every private hunting property I visit. Some are very simple with just a covered hoist and gambrel; others would pass inspection for a commercial meat-processing plant. Since the days of the old hoist

in the barn, deer managers have made major improvements in shed designs. A well-designed and well-supplied skinning shed means that deer processing and data collection are easier and more convenient. Not only does this result in hunters being more likely to collect harvest data, it also helps them collect this data more consistently and accurately. I'd like to share some of the best ideas I have seen for designing an efficient and convenient skinning shed. Hopefully these ideas will help you improve your data collection, also known as Herd Monitoring – one of the four Cornerstones of QDM.

Late Nights With a Skinning Knife

Many nights I have been at the skinning shed at 8 p.m. when the afternoon's hunt is over. Several does are down and a lot of happy hunters are patting each other on the back, pleased that they have done their part for the QDM effort. But in moments, as a biologist, I sometimes find myself alone and responsible for collecting all of the harvest data from a cooler full of stiffening deer while the hunters are kicking back by a fire somewhere. It didn't take long for me to start looking for easier ways to accomplish this task by looking for flaws in the way I was doing it.

The first flaw I found was in the free-line gambrel system. You've been there before – trying to skin a deer that is spinning. I turned to a shed design that I was very familiar with. For me, the "Skinning Shed" will always be the one at the Copeland's house in Screven, Georgia. Kenny Copeland and friends built the shed and put in the cooler behind his house back in the 1980s. Kenny is a family friend and a hunting buddy, so we take our deer to his shed when we are hunting at our family farm. He designed a locking gambrel system to prevent the deer from spinning. The gambrel is welded to stainless steel tubing that fits in a slightly larger sleeve of tubing. Once it is in position, a metal pin can be put through a set of holes drilled through both tubes. This locks the gambrel in place. There are holes drilled at different heights so you can raise or lower the deer as needed using a boat winch.

Your skinning shed should contain a separate but convenient data-collection area to ensure that all hunters find it easy to assist with Herd Monitoring efforts. Data will not only be collected, it is more likely to be accurate and consistent.

Based on Kenny's design, I created another type of locking gambrel system that uses square tubing so that a locking pin is not necessary. I have recently been involved in designing an enclosed skinning shed for a client. We are using gambrels welded to flat metal plating. The flat metal plating is formed like a hook that fits over a square beam. The weight of the animal keeps the gambrel locked in place. With this design you can hang the deer a bit faster than with the tube design; however, you are left with only a few options for the height you can hang your deer. I have found that for most whitetails and most average-sized hunters, it is best to have your local welder design your gambrel so that it can be raised and locked at between 7 to 8 feet from the hooks to the floor. You may need to go higher for the larger-bodied deer of the Midwest and Canada.

The gambrel is just half of the hoisting mechanism. There is also the cable or rope and hoisting system by which the gambrel

Continued.

Equipment for your Data-Collection Station:

A good data-collection station should be equipped with the following tools and items, most of which are available from QDMA.

- Observation and Harvest Data collection sheets or log books
- Pens, pencils and waterproof paper
- Metal tags or permanent markers to number jawbones
- A filing cabinet or desktop file container
- Management posters and illustrations
- Past harvest photos
- Pre-season "Shoot/Don't Shoot" trail-camera photos
- Fetal scale
- Antler-scoring tape
- Disposable camera

Equipment for your Skinning Shed:

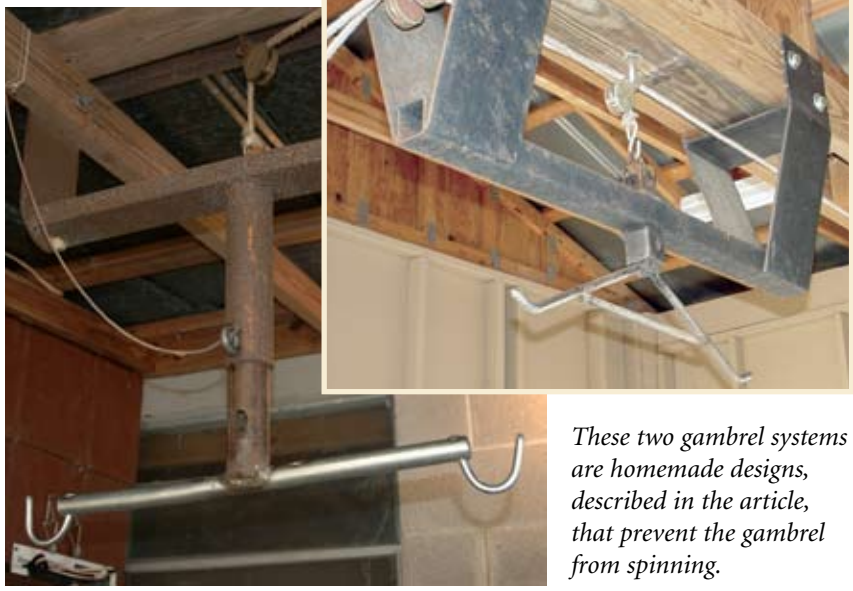
- A pair of limb shears for extracting jawbones, busting the brisket, and breaking bones
- Jawbone extractor
- A meat saw, or an 18-volt, rechargeable handsaw (shown here). With the all-purpose blade you can saw through bones quickly. These can be purchased at home centers for around $50 to $60 (If you live in an area where CWD has been found, it is best not to saw through bones when butchering deer).
- Knives and a knife sharpener
- Rubber aprons and boots
- Rubber surgical gloves
- Cleaning agents for hands and tools
- Shop towels
- 1 gallon plastic, sealable bags with labels (for storing rumen content, fetuses, etc., for later analysis)
- Siphoning screens for rumen-content analysis
- Plastic drums with the top half or quarter removed. These last longer than aluminum "gut buckets"

Design Features for a Top-Notch Skinning Shed:

- Stainless steel sinks and work tables
- Hot water heater
- High pressure water hose
- 4-inch floor pipe drain with removable screen or above-ground concrete channel for draining the work area
- Fluorescent lighting inside the shed and spotlights outside at loading and unloading areas
- Bare concrete floors – interior and exterior paints can harbor bacteria
- Walk-in-cooler (see page 36)

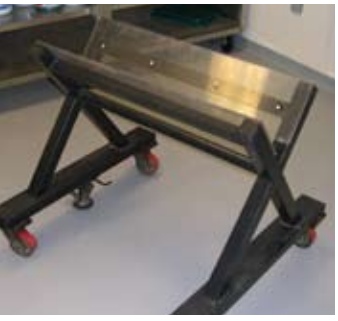
and deer are lifted. A common, economical and effective tool for this is a hand-crank boat trailer winch. These can be found at most sporting goods or boat supply stores for around $20 to $30. The winch can be bolted to a corner beam or wall stud and positioned so that the rope or cable comes off the spool angling upward toward a pulley or system of pulleys. For a locking system, the pulleys route the rope through the metal tubing that secures the gambrel, as seen in the photos on the right.

Another system that is becoming more and more popular at sheds is an electric motorized winch. Bob Moore, the president of the hunting club at the Bushhog Test Farm near Selma, Alabama, and his hunt club members installed an 800-lb. electric winch from Chicago Electric Power Tool in their shed. It is mounted on a rail system that slides to the door of the walk-in cooler. You can also find 500- to 880-lb. electric winch packages at Bass Pro Shops' or Cabela's online catalog. These units run from $75 to $100 depending on power. That's not a bad price to get away from the old "knuckle buster" hand cranks. The electric winch can be attached directly above the floor and run from a control wired to the device. You can also mount the winch off to the side like a hand-crank winch and use it with a pulley system.



These two gambrel systems are homemade designs, described in the article, that prevent the gambrel from spinning.

A tool I see a lot in South Carolina that is starting to spread in popularity is a skinning table. The table is made of wood or metal. The height of the table is about three feet or just above waist level. The deer is laid on the table on its back. In this position the legs are readily accessible and are skinned down to the body. The body skin is peeled from the belly and chest down to the table edge leaving the skin attached only to the deer's back and neck. The chest cavity is also opened using a saw or shears. All of these steps are much easier when the deer is in this position. The gambrel is then attached, the deer is hoisted, and the process completed. Someone who really knows how to use a skinning table can process a deer in half the time it takes most of us using a gambrel and hoist.



Skinning table.

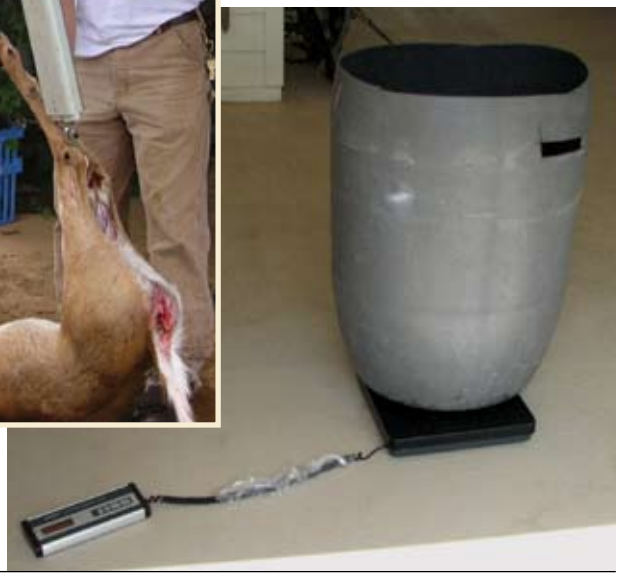
Getting the Weight Right

Once I quit chasing my tail, banging up my knuckles, and wearing out my shoulders, I began looking for other parts of the process that were taking too much time. One very important piece of information that should be collected is deer body weight. "Dressed" body weight may be best because whole body weights, or "live" weights, can differ due to varying levels of rumen content among bucks due to rut-related activity and perhaps to the presence of developing fetuses in early bred does taken late in the season. The dressed weight is a truer and more accurate monitor of herd health and management gains or losses.

I gathered dressed weights the only way I knew how. I would hoist the deer, draw the organs from the body cavity, lower the deer, attach a spring weight scale with a choke chain or hook, hoist the deer, record the weight, lower the deer, re-attach the gambrel, and hoist again for skinning and quartering. There had to be a better way! A friend of mine who was managing a Georgia WMA told me he had started using a floor scale he found in an old cotton gin to weigh the deer that came through the check station. Now this was the idea I was looking for!

I learned that a "floor scale" is actually called a "platform scale." After searching the Internet I settled on an electronic platform scale with a 15x15-inch metal platform. These scales are very accurate and consistent. A digital weight reading is generated in a few seconds. The one I use is rechargeable, so you don't need electricity on site and there are no "hot" wires to worry about with so much fluid on the floor. To place the deer on the platform I first tried using a sheet of plywood but finally settled on using

Dressed body weights are critical data. When using a spring scale (left) to collect weights, use an object with a known weight to regularly check the scale's zero calibration. A digital platform scale like the one below is more expensive but much more accurate.



a plastic 55-gallon drum with the top quarter cut off. You simply lower the deer, buck or doe, into the drum sitting on the scale. The drum weighs 15 pounds, but you simply "tare" that weight to zero on the digital scale before you begin. This method is more efficient and even more accurate, but at around $250 for a good platform scale, you may choose to stay with a spring scale.

In my opinion, the most common inconsistency in harvest data comes from uninformed jawbone aging and an improperly used and maintained spring scale. I work with a property that harvested 175 does in one season. Amazingly, the average body weights per age class rose 20 pounds from October to January! Of course, I thought this was due to my consulting work, but the truth is that when I checked the spring scale they were using, the indicator was resting on 20 pounds. It had worked its way off true zero over the course of the season.

The zero on a spring scale should be checked often, if not with each deer weighed. It only takes a second to check and re-calibrate if the scale is off. You should also zero the scale with the gambrel or choke chain included if you use either. The scales should be oiled regularly with a heavy weight, long-lasting oil, *not* WD-40. Check the scale against a known weight like exercise free weights. If you use a gambrel to hook the deer on the scale, then use it every time. Whenever you are collecting any form of harvest data, do everything the same way every time and your yearly trend data will tell a much more accurate management story.

Data-Collection Station

A necessary addition to your skinning shed is a data-collection station. This is an area where you will keep your data safe and secure. It also provides you with a place to record and analyze data and keep the tools needed for data extraction. Make sure the station is conveniently located and easy to access so that hunters will make use of it, but be sure that it is not in the line of fire of the water hose. You should have cabinets to store paperwork. This is also the area where you post your trail-camera pictures, QDMA educational posters, hunting pictures, and even yearly data summary graphs and charts showing the past and current status of your management gains and your future goals.

If you are serious about QDM, evaluating your progress by monitoring the response of the deer herd to your efforts is crucial. There is data-collection software available that will analyze and summarize your data. You can also look to private wildlife consultants or state wildlife agency personnel and programs for help. No matter how you use the data at the end of the season, if it is not collected accurately and consistently, the integrity of the data can be greatly compromised. The first step in ensuring good data is properly equipping and designing your skinning shed, making data collection much easier. I'm sure that smarter wildlife managers than me will continue to come up with improvements to skinning sheds, but for now these design ideas should help you create your new shed or improve an existing one.

About the Author: *Rans Thomas is a wildlife biologist and the Consulting Services manager for Tecomate Wildlife Systems, and he has more than 15 years experience managing private hunting lands. He received his associate's degree in wildlife and forest management from Abraham Baldwin Agricultural College and his bachelor's in wildlife management from The University of Georgia.*