

Well-planned barns and pastures, and innovative use of high- and low-tech gadgets can make life on the farm much easier. If you have any helpful "husbandry hints," *Alpacas Magazine* would love to hear from you.

■ Alpaca Barn Interior Designs

The article "Alpaca Barns, Pens, and Pastures" in the Autumn 2006 issue of *Alpacas Magazine* discussed general considerations for developing an alpaca ranch or expanding an existing facility. This article will discuss the specifics of designing alpaca barn interiors and relating those designs to a general layout.

There are as many different designs for alpaca barns as there are alpaca ranchers. No one design can serve the specific needs of each and every alpaca owner. We have tried to generalize the features of three barn setups – one for a small-sized herd, a design for the medium-size alpaca herd, and another for a large alpaca herd.

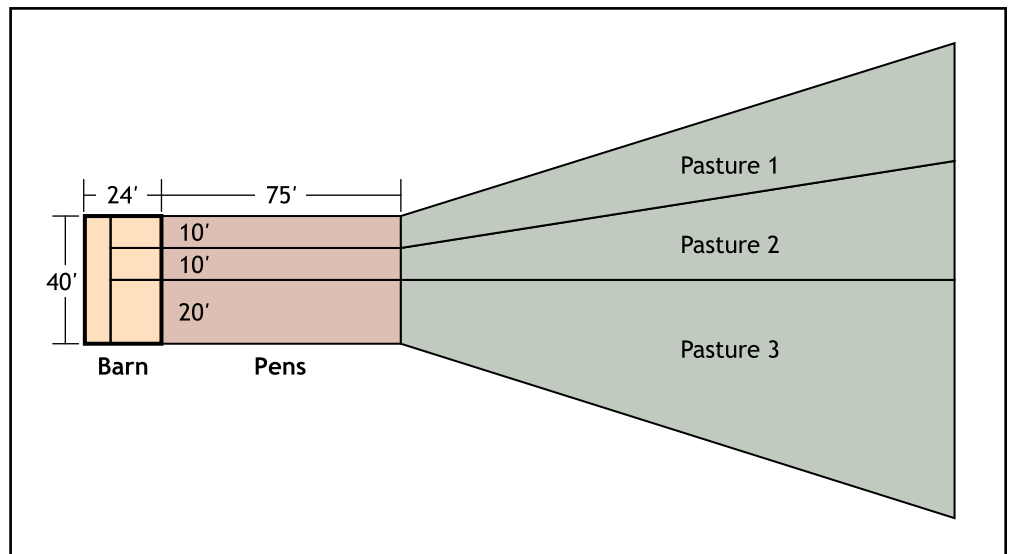
Small-Size Herd Facility

The small-herd facility serves alpaca ranchers with two to twelve alpacas and has the capacity to house one or two herd sires, one to five juvenile males, and one to five breeding females. It is a simple building with divided pens and storage space on one end for small equipment, feed, and hay. It includes the following features:

1. Insulated roof.
2. High ceiling to allow for air flow in warmer-climate areas.
3. Open shed area for loafing alpacas. These animals like to have an open-air area that is shaded.
4. Access door for people – thirty-six inch door



A "short pen area" should be provided for each separate run and have an area with rock or limestone screening surfacing that extends about seventy-five feet from the barn. Install a cross fence and gate to hold the alpacas out of the pasture when needed.



Small-Herd Facility Layout – The small-herd facility for alpaca ranchers with two to twelve alpacas should have the capacity to house one or two herd sires, one to five juvenile males, and one to five breeding females. It can be as simple as a three-sided shed with divided pens and storage space on one end.



- widths are best to allow for wheel barrows, carrying supplies, leading alpacas through, etc.
5. Space allocated for the alpaca owners to handle alpacas out of the weather. Used for feeding and tending to the herd for everyday chores, monthly shots, weighing, and special care.
 6. Access for alpacas. Door openings should be large enough to allow the alpacas easy access into the barn, yet allow for capability to close up the barn (not required with open sided buildings, but nice to have that option.)
 7. Access for large farm equipment – overhead door clearance or open side access tall enough to allow motorized equipment such as a tractor or skid-steer to access the barn and loafing shed areas for maintenance and cleanup.
 8. Utilities – i.e., water and electricity.
 9. The open side of the barn should be positioned down wind from prevailing winter winds.
 10. Doors, windows, or seasonal openings to allow for adequate air flow in warm weather.

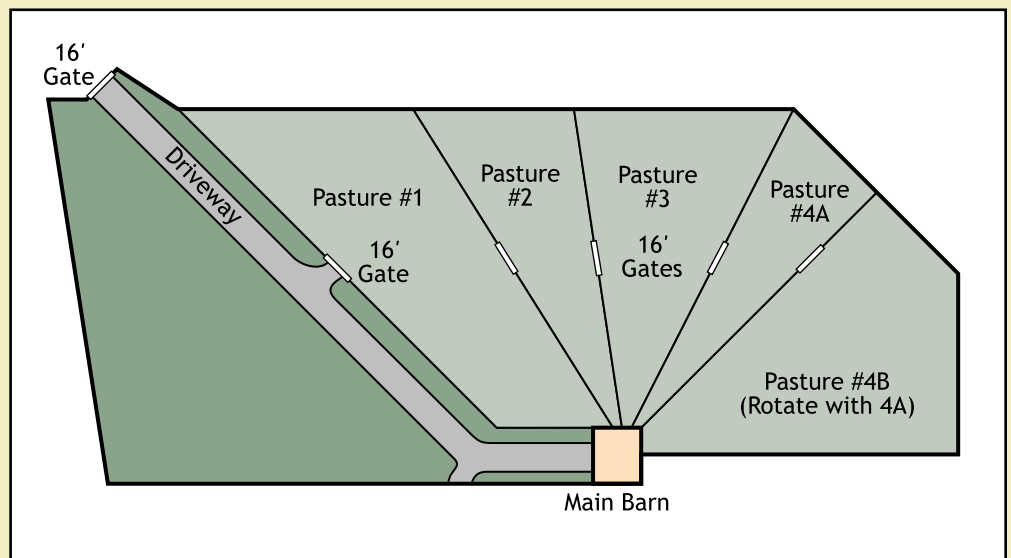
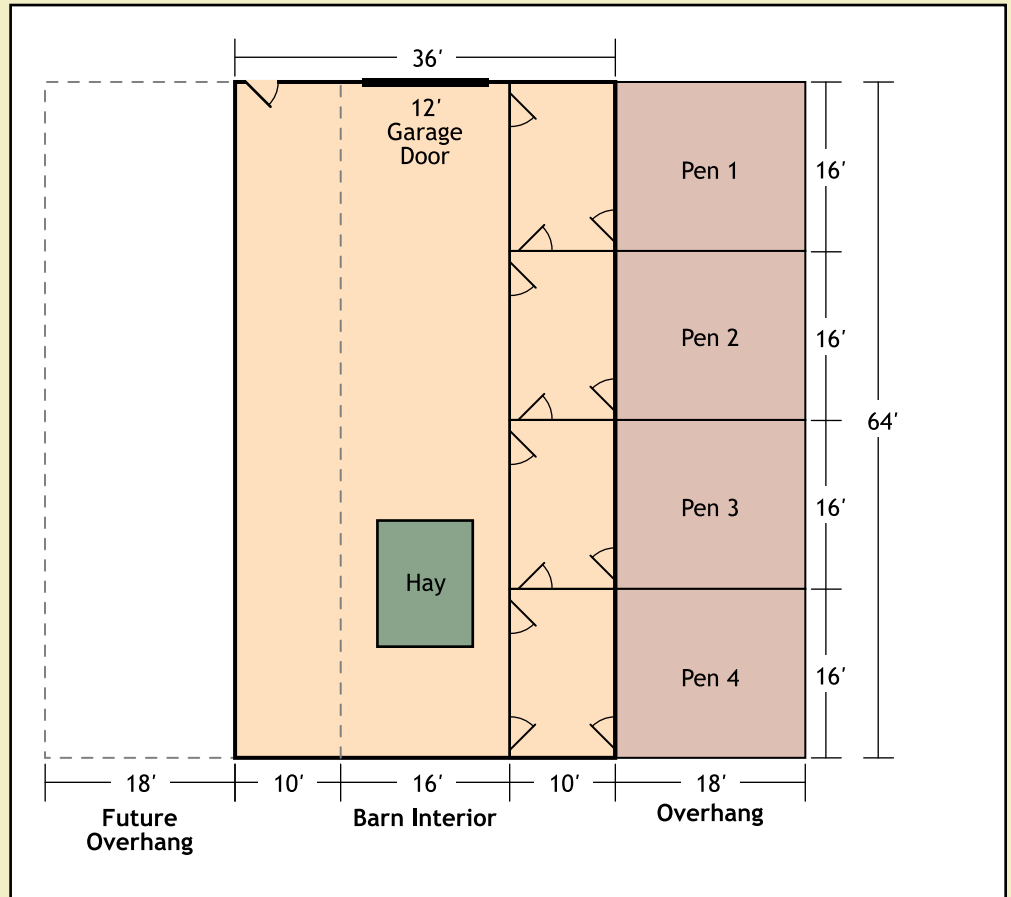
11. Fencing and a gate at the drip line of the roof overhang – this allows the alpaca owner to “lock” the alpacas under the roof in cases of severe weather.
12. “Short pen area” – should be provided for each separate run and have an area with rock or limestone screening surfacing that extends about seventy-five feet from the barn. Install a cross fence and gate to hold the alpacas out of the pasture when needed.
13. Interior fencing panels – these can be the traditional green steel alpaca panels, the newer pipe conduit panels, or custom-designed wooden boards attached to wood posts with wood screws. Be sure to carefully include doors or gates at all of those points needed to move people or alpacas. Widths vary by manufacturer, so decide on a panel type to use and design your pens accordingly. Custom panels can be made to fit any space.

(continued)

Husbandry Hints

Medium-Size Herd Facility Layout

An alpaca barn for a medium-size herd of twelve to twenty-four alpacas should have a number of pens to separate herd sires, dams, dams with crias, juvenile males, and others. The design should provide all the features for people, equipment storage, hay storage, shearing and marketing. A key consideration in designing a medium-sized alpaca barn is to plan ahead. Try to incorporate those things you need for the current sized herd and also include those items that will allow you to add more pens without major expense at a later time. This can be done relatively easily.





Tom Martin and Lew Cornelius catch up on some record keeping in the office/veterinary room at Starlight Alpaca Ranch. This room includes some desk-height counters for conducting office-type functions.

Medium-Size Herd Facility

An alpaca barn for a medium-size herd of 12 to 24 alpacas includes all of the basic elements mentioned above. It is a much larger barn with potential for future expansion. It has larger pens for more herd sires, dams, and juvenile males. Most importantly, it is basically the large-size barn described below without the added features. The barn structure is similar, but has not been “finished out” with all the potential features incorporated. The medium-size barn can include any of the features of the large-size barn as you see a need and can work into your budget.

Large-Size Herd Facility

For herds from 24-40 alpacas, the large-size herd barn is designed for efficiently handling a large number of alpacas for shots, toenail trimming, worming, veterinary procedures, etc. It also includes all of the basic elements mentioned for the small-size barn, but includes an office/vet room, climate-controlled stall, shearing area, breeding pen, etc.

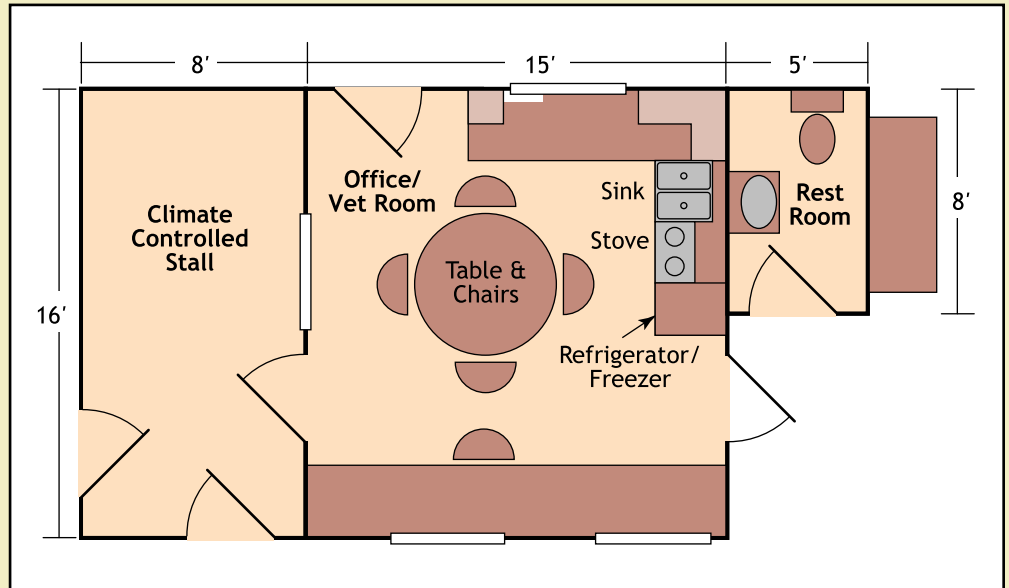
The design provides equipment storage and hay storage. Features include:

1. The office/vet room – This room should have an inviting exterior door and attract visitors to enter the barn at this point. Cabinets for storing supplies and equipment should be numerous. A table and chairs, kitchen-height countertops for working standing up, and desk-height counters for conducting office functions should be included in the design. A refrigerator/freezer for vet supplies should be included. Windows to the climate-controlled stall, barn interior, and to the outside will all serve to allow you to work in the office and still keep an eye on other alpaca activities.
2. Restrooms – for you and your customers.
3. Climate-controlled stall – this really comes in handy. It is designed so you can see into it from the vet room. It efficiently uses the same utility and heating and air conditioning systems. (See *Alpacas Magazine*, Winter 2005 issue, “Alpaca Climate-Controlled Alpaca Stall.”)

Husbandry Hints

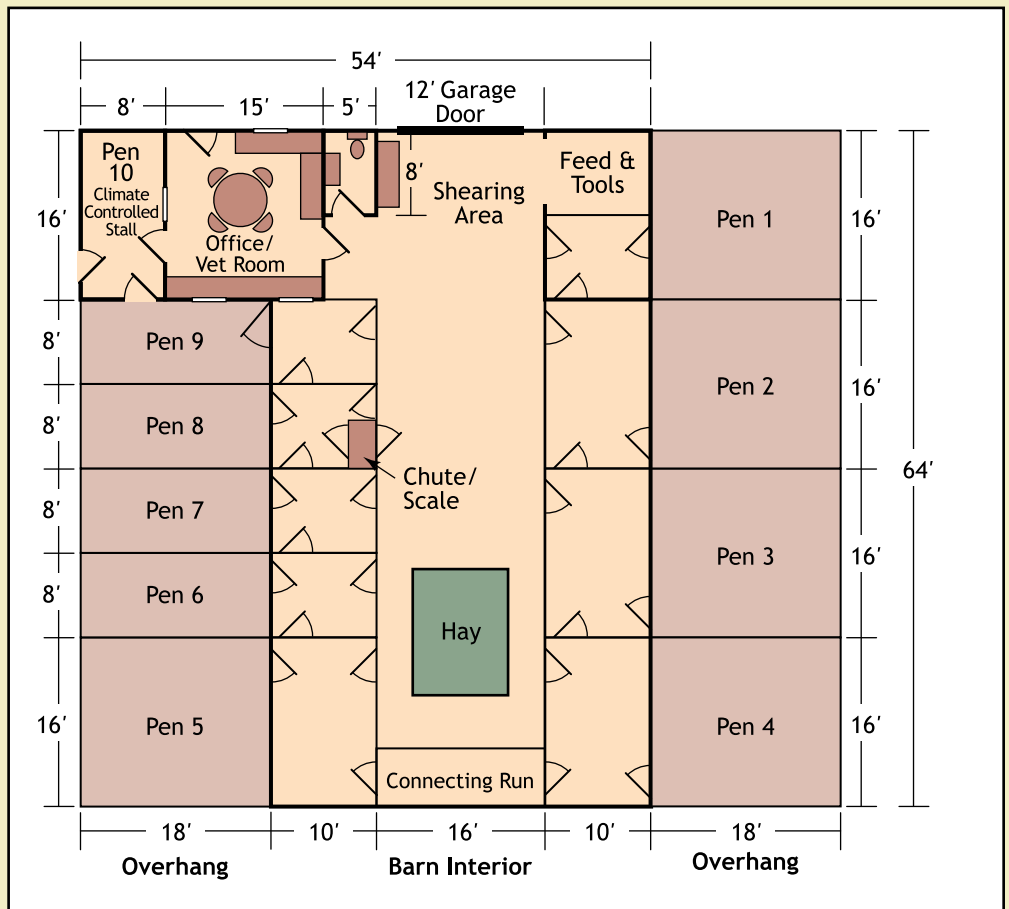
Office, Vet Room, Climate-Controlled Stall Unit

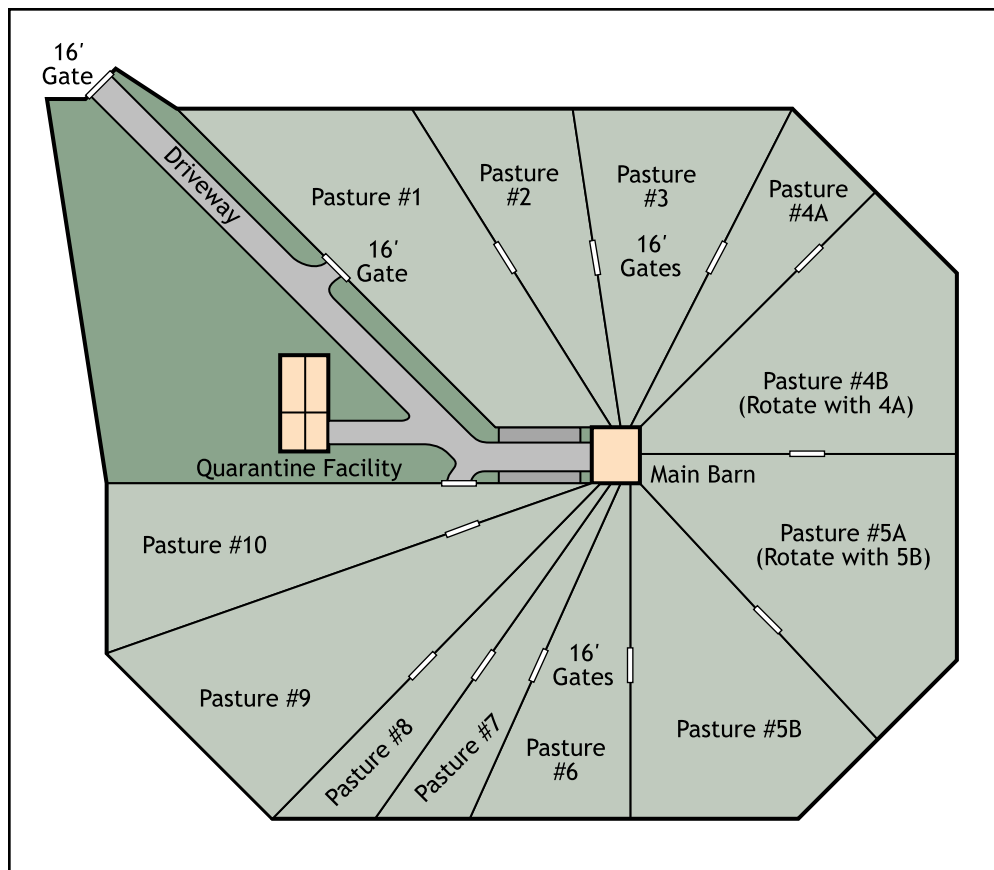
This area is best designed as a functional unit. Heating and/or cooling and water, sewer, and electricity are all needed for the three rooms of this zone.



Large-Size Herd Facility Layout

The interior of the barn for a large-size alpaca facility can also include all of the 'extras' that you want to incorporate into the design.





A large-size herd facility layout needs to allow for easy movement of alpacas for handling purposes.

4. Individual alpaca pens – for herd sires, finicky eaters, or separation for observations.
5. Larger-group alpaca pens – group dams, dams with crias, and junior herd sires each in their separate larger group alpaca pens.
6. Chute and scales – the chute is up near the office/vet room. It saves you steps and helps keep your vet from having to walk all through your barn. All pens in the barn have connectivity to the chute/scale area by routing through a series of gates, pens, and runs. By carefully designing connectivity into the setup, handling alpacas can be done in a very efficient manner. (See *Alpacas Magazine*, Spring 2004 issue, “Chutes for Alpacas.”)
7. Hay storage – large quantities of hay should not be stored in main alpaca barns. Spontaneous combustion from moisture in hay that is harvested with too high of a moisture content can start a barn fire. Store dry, cured, hay in small quantities in the alpaca barn.
8. Feed storage – an area or room is set up to store bagged feed. It should be kept cool, dry, and free from rodent infestation.
9. Fleece handling area – shearing is a huge event and it deserves to have an efficient plan in place. The shearing area can be used as multiuse space at other times of the year, but at shearing time, it needs to be dedicated to the needs of shearing

alpacas and handling fleeces. The area is large enough to allow for a shearing table or floor gym mats, a skirting table, another large table for handling fleeces and space for people assisting the shearer.

Super-Size Herd Facility

For herds larger than 40 alpacas, several factors drive rationale for breaking the large herd into separate units with separate barns, pens and pastures that serve specific functions. These separated barns and pens should be connected with fenced runs for easily moving those herds of alpacas to the central facility when needed. For instance, any combination or all of these separate units could be considered:

- Junior herd sire barn, pens, and pastures
- Production females
- Herd sires
- Agisted alpacas
- Alpacas for sale

These separate units can each be designed similar to the small- or medium-size herd set-up, as described earlier in this article, and then can be connected to the “large central barn” by using long narrow fenced runs. This way all alpacas can be handled in the central barn facility as needed. (Exception: quarantined alpacas.)

The alpaca barn should be designed the way that you want it to function for your particular opera-

Husbandry Hints

Chute and scales
Position the chute up near the office/vet room. It will save you and your veterinarian lots of extra steps. All pens in the barn should have connectivity to the chute/scale area by routing through a series of pens or runs. By carefully designing the chute into the setup, handling alpacas can be done in a very efficient manner.



tion. Try to incorporate all of those amenities that you need to start with and include consideration for those that you want to add in the future. By building the barn building or shell as large as you can afford, you will be able to easily add features as you grow your herd.

Bill and Sherri Duey operate Southern Iowa Alpacas, located in the hills of southern Iowa, 60 miles southeast of Des Moines. They specialize in raising Accoyo huacaya alpacas. They have incorporated innovative features into their alpaca ranch and conduct seminars on business planning, animal selection, and ranch setup for new alpaca ranchers. They also enjoy helping existing ranchers learn about new products and techniques for fine tuning their operation. You may view their website at <http://www.southerniowaalpacas.com> or contact them directly at alpacas@southerniowaalpacas.com.

Duey's original barn layout drawings converted to CAD by Thomas Van Skike.

Interior fence panels can be traditional green panel, pipe conduit, or in this case, customized wooden 2' x 6" fence and gates.

