Shelters for Large Farm Animals.

That subject came to mind this morning when I noticed the cattle and horses lining up to take in the morning sun.

On any cold, clear morning they will stand with their side toward the sun in order to warm themselves, Typically the optimal time for that is about an hour after sunrise. By then the sun is above the trees and is delivering enough warmth to make it worthwhile.

The animals seem to be perfectly relaxed and calm. Cattle and horses exhibit the same behavior. They remind me of sunbathers on a Mexican beach.

Now, about barns and animal shelters.

First, I will make a couple of general statements.

- 1. Large animals are always healthier outside.
- 2. Enclosed barns are primarily for the benefit of the farmer.
- 3. Ruminants, like cattle and bison and to some extent horses, produce heat as a by-product of digestion. That means they need hay all the time to stay warm in cold weather. If they are out of hay, they are not only starving, they are also freezing.

Horses and cattle, although different in so many ways, do have about the same needs for shelter. If allowed to live outside, they naturally grow excellent winter coats. Those coats are entirely adequate to keep them warm on the coldest Minnesota nights as long as they have plenty of hay and are out of the wind. Either trees or the wall of a shed can be an adequate wind break.

The coldest time for the animals is actually late fall and early spring when they can be exposed to cold rain or wet snow. The cold-wet disables the insulating effect of their winter coats. For those occasions we have a shed. Open on three sides but with a good cover to keep them dry. Otherwise they seldom use the sheds.

For summer shade, trees are best, with the exception that on days when the gnats are aggressive, the horses seek shelter under a shed. For reasons known only to gnats, they will not bother animals or humans in a confined or covered space.

Hogs are different. They do not grow a good winter coat. Nor do they produce heat like ruminants. They do have a fat layer that provides some warmth. If we were to keep hogs over the winter, which we do not, I would need to provide deep straw and a three sided shelter.

For hogs summer shade is not really adequate. They need cool wet ground to burrow into. A hog wallow.

If the dirt is wet enough they can get a nice mud layer all over their bodies and that protects them from sun burn. Sun burn, although not an issue for other large animals, can be a problem for hogs. Especially those with white skin and thin wispy hair.

For our small herds, we use a garden sprinkler to wet a sufficient area of their pasture and to provide a cool mist.

Last summer, because of the many hot days, the hog wallows actually became large bowl shaped depressions. Tons of dirt had been carried out of the wet areas as mud packs on the hog's skin.

Bison are incredibly rugged and have no use for shelter of any kind. They are profoundly oblivious to extreme cold or heat.

They seem to make an effort to show a distain for weather.

They will always stand with their faces into a blizzard.

They will always spend the hottest days lounging on a south-facing slope. They seem to have no concept of "shade". On a hot day, cattle and horses will seek shade. Bison, never.

The pasture where I winter the bison herd has trees to break the wind. I think that is a good idea.

I am not sure the bison care.

If you have specific requests, tell me and I'll write about those sometime. See many of you next Saturday.

Best regards.

Tom