

Cold Weather Management Tips for Camelids

By Stephen Hull, MS, PhD, and Tom Cameron, DVM

Winter will upon us. Here are some tips for handling the cold and some measures to prevent cold weather losses. Few of these tips cost any money. Above all, watch your weather forecasts for sudden drops in temperatures - especially those associated with wind. It is the change that is hardest.

First, watch out for any animal shivering. This is danger, danger, danger. Cold affects the rumen protozoa and they stop digesting forages. Consequently, the rumen shuts down, the alpaca or llama cannot generate heat, and death can be only hours away.

Dominant (alpha) animals will find the warmest areas and will push out younger or other less dominant animals. The alpha animals also hog the hay, will prevent other animals eating. Be especially careful of newly weaned yearlings as they are having troubles finding their way in the group. Each year, I often have to put yearling males in a stall in my girl's barn with heaters. Older animals also get pushed aside.

As we know, camelids can deal with cold, so long as there is little wind. So get some shelter (tarps, hay bales, etc.) up to protect them from the wind. Suris are especially susceptible to wind chill. But check all your animals' body scores as the fleece will hide a thin body frame. Those thin animals are especially vulnerable to the cold.

Another tip is to bring them hot water to drink. I fill two five gallon plastic pails half way up with steaming hot tap water and carry them (one in each hand) to the barn where I mix with some cold water resulting in about 100-degrees F water. Even though I have other electrically "heated" water buckets, the water in those is maybe 45-degrees F. I also put in 1/4 cup of dry Gatorade (mine love the lemon lime flavor) in a full five-gallon pail. The electrolytes in Gatorade assist with digestion, protozoa and rumen function. The animals line up to drink deep, long draughts. I do this several times a day in bitterly cold weather. The smiles they give you are one reward for your work.

To keep bucket water warm for a longer time, I wrapped the outside of the plastic five gallon buckets with aluminized bubble foil (aka "TecFoil") available at Home Depot/Lowes/etc. Secure it in place with metal foil tape (in hardware). The bottom gets insulated with two layers. Hot water stays warm for hours longer.

Males especially need extra warm water to flush out their urinary tract. In cold weather, camelids will not drink enough water and consequently do not have a full vigorous stream of expelled urine. The weaker stream allows urinary crystals (uroliths) to accumulate along the "S" shaped urinary urethra and they often get winter urinary tract blockages. More warm water allows them to flush out deposits that normally are swept away with urine flow.

Forget cleaning out the barn! Allow waste hay and droppings to accumulate. Spread out more hay on top as this provides a warm "bed" for them to lie on. Straw is actually a far better insulator compared to hay as it has more trapped air volume, but you may not have time to get it. Many



farms in Switzerland allow the accumulating composing heat from floor manure/bedding hay throughout the winter to keep their livestock warm. And they keep livestock in the lower levels of their houses! Quite a clean out in the spring ... ! Another more high-tech approach is to use those red electric heat lamps above bedding spots. Just be careful to put on the wire shield so an animal can't accidentally hit/touch it and get burned. Electric dog "whelping mats" (PetCo, PetsMart) provide a very toasty bedding place for cold animals. As with all electricity issues, take care with water, electricity, extension cords and the cold (brittle) wires. Remember urine has salts and this is a superb conductor of electricity.

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Put lots of jackets on young and older animals. The females that had crias this fall are especially vulnerable. They are lactating and that puts a huge energy demand on them. This cold adds yet another demand. Many are also rebred. One result of a sudden severe cold snap is abortion. Don't lose your pregnancies due to cold weather shock.



You don't need expensive jackets to keep your animals warm. Old wool sweaters, large ski jackets, etc. all work. Cut the sleeves off at the elbows and slip them on. Zippers go along their backbone. Recall leg warmers from the 80's? They fit on necks to keep them warm (and given away free at Goodwill). My females like the pink ones funny looking, but WHO cares. I often get the jacket/sweater rejects (frayed sleeves) at the local Goodwill store for nothing.

Don't double the daily pellet/grain ration. Increase it maybe 25-30%, but NOT more. Rather, POUR on the hay. Don't scrimp now. This would also be a great time to throw out some alfalfa hay (not pellets). Normally, alfalfa is too "hot" a forage with excess protein for the average camelid. But this sudden cold is not normal. The rumen heat of digesting rumen forage, especially from alfalfa, helps ruminants keep warm. Grains do not provide this digestive heat. Note: horses, without a rumen, do need more grain in the cold. About 2 -3 lbs of daily extra alfalfa forage per animal can be a life saver. And they love it. Two 70 lb. alfalfa bales (~ \$8 each) with ten animals should last you about a week.

Vet schools will be deluged with cold weather cases this year. Hypothermic stress causes ulcers, abortions - and a lot of deaths. I am not trying to cut off their revenue source, but rather helping you save some dollars and your animal's health! Vets would far prefer to not deal with cold stress as it is preventable.

Keep warm and PREVENT hypothermia as it is much less expensive (compared to treatment).

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