

ALPACA FARMING - RYEGRASS STAGGERS

If you're new to alpaca farming or just looking into purchasing alpacas, you may be wondering what type of hay to feed alpacas. The answer to this may not be as easy as it seems.

First you need to find out what's available in your area. Second, you need to be sure it's quality. Alpacas do well on most types of grass hay. We use orchard grass and mix alfalfa in with it sometimes.

One type of grass you'll want to be careful of is ryegrass. It can cause a problem called ryegrass staggers. It seems that alpacas are even more susceptible to ryegrass staggers than other livestock. Young alpacas especially. Females in early pregnancy can abort.

What causes the problem is an endophyte (which is a fungus) that concentrates in the seedhead and lower stem of ryegrass.

Commercial producers of ryegrass seeds deliberately infect the seeds with the endophytes. Why? The endophyte gets nutrients from the grass and in return, they release toxins that protect the grass from insect attacks.

These toxins that the endophyte release to protect the plant can be toxic to livestock, including alpacas. The toxins affect the brain and central nervous system of animals.

As stated before, the endophytes concentrate in seed heads and at the base of the stem. Alpacas grazing on seed heads or pastures with ryegrass that have been heavily grazed, are the ones that tend to be affected.

A large part of alpaca farming is managing your pastures. Don't let ryegrass go to seed and don't let alpacas graze on ryegrass that is less than four inches tall.

The perennial ryegrass seems to have higher amounts of endophytes. Although this is the better growing crop, get the annual ryegrass instead. You can, also, look for endophyte free seeds. If you're purchasing ryegrass from someone else, ask if it's from endophyte free seeds.

Something else to think about...most lawn grass seeds have endophytes, so you shouldn't let your alpacas graze on your lawn.

Recognizing Ryegrass Staggers

The first sign of ryegrass staggers is a head tremor. If an animal is stressed, ryegrass staggers will be even more pronounced. Have your animal stand still. The head tremor will be noticeable when they are still. A more severely affected alpaca may have a stiff walk, be uncoordinated, fall, have a saw horse stance, and/or sway back and forth.

Treatment

If you notice these symptoms and you have ryegrass, calmly, but immediately, remove the alpaca from a pasture with ryegrass to a pasture without. Give them water and good quality non-ryegrass hay. If you've caught it early, your alpaca has a good chance to recover. If you did not catch it early, the damage will likely be permanent.

Mycosorb is a product that binds mycotoxins in the gut without affecting other needed bacteria. It doesn't bind vitamins and amino acids. The mycotoxin is excreted without harm to the animal. It might be a good thing to have on your farm if you have ryegrass in your pastures.

VP note: 1 tspn brewers yeast in 1 tspn Nutrimol in 20mls water orally daily.

Can also give VitB1 (thiamine). I crush up 50mg tablets and give orally in water.

Conclusion

In alpaca farming, prevention is the best way to manage problems including ryegrass staggers. Do not have endophyte ryegrasses in your pasture. If you choose to have ryegrass, then use the annual type and find endophyte free ryegrass seeds. If you have endophyte ryegrass, then avoid seed head creation and don't let your alpacas graze on ryegrass if it is well eaten down.

Miscellaneous info:

...: Rye Grass Staggers :...

Rye Grass Staggers is a condition that affects most livestock, including cattle, sheep, horses, and, of course alpacas. It is very random in its attack, as sometimes only 1 or 2 animals in a herd may be affected, while the rest do not appear to suffer any ill effects at all. It is more prevalent in young stock, and if a young alpaca reaches 2 years of age without being affected, it is likely it will never suffer an attack. There is no cure but prompt treatment can alleviate symptoms. Affected animals will show an improvement after being removed from rye grass pasture, but symptoms will quickly return if the animal is returned to its pasture.

Most farmers consider rye grass as the pasture of choice for traditional livestock, and there are few farms or sub-divided blocks of land that have not at some time been sown with rye grass. Rye grass is very high in protein, and ideal for fattening stock for the meat market, and for this reason there often seems to be a rather blasé attitude to animals being affected by rye grass staggers, as affected animals are likely to be headed to the meat works soon – but it is an unpleasant affliction and you should take every precaution to prevent your alpaca being a victim.

One of the drawbacks of sowing rye grass is a pest called the Argentinean rye grass weevil, which eats out the roots of the rye grass, leaving pasture with large bare patches. In an effort to prevent this, the grass seed is deliberately "infected" with an endophyte which "preys" on the weevil. This endophyte unfortunately produces a toxin which poisons the nervous system of grazing animals, causing lack of co-ordination in the affected animal.

The endophyte normally lives at the base of the grass, near the earth line, and is therefore not a problem to grazing animals nipping off the top of the grass. However, in periods of rapid grass growth, it is dragged up the stem of the grass, making it accessible to grazing animals. As a result, rye grass staggers are most often seen in spring or autumn. Periods of drought in summer are also a problem, as animals nip the grass down near the earth line.

Symptoms of rye grass staggers include the head wobbling, stumbling and falling. Symptoms are increased when the animal is under stress, including herding or any unusual circumstance. Grass staggers is rarely fatal, but the affected animal is more prone to accidents because of its lack of co-ordination, and because they startle easily.

As stated earlier – there is no cure for rye grass staggers, although fortunately symptoms disappear if the animal is removed from rye grass pasture. If you observe symptoms of rye grass staggers in your alpaca, you will need to pen him (with a companion) and feed them hay and a few stock food nuts until he recovers. The faster you are at identifying the syndrome and removing the animal from pasture, the less severe the symptoms will become. He cannot be returned to rye grass pasture as symptoms will quickly return, but can be turned out onto pasture that does not contain rye grass. An animal once affected by rye grass staggers will always be susceptible to it, and you must ensure that during "danger" periods he does not have access to rye grass. (Hay made from rye grass is safe to feed as the endophyte is destroyed during the drying process).

Rye grass is not the pasture of choice for alpacas! As mentioned before, it is high in protein – and it is high protein levels that will coarsen your alpaca's fleece. Alpacas do best on a variety of pasture grasses and herbs that do not include rye grass. There is now an endophyte-free rye grass

that has been developed – do not accept advice from seed merchants that this may be suitable for your alpacas – it will not give them grass staggers, but it is still too high in protein, and under irrigation may even give them diarrhoea.

The best cure for rye grass staggers is prevention, and if your property has a high proportion of rye grass, then your best solution, both for your alpacas health and the quality of your fleece, is to re-sow your paddocks with a more suitable mix for alpacas. If this seems an expensive option, take heart – you can re-sow 1 or 2 fields a year until your property no longer comprises rye grass paddocks.

From <http://www.thealpacaplace.co.nz/ryegrass.shtml> on 22 Jan 2009.

Vit D stuff:

1. Alpacas get rickets - either low in vitamin D or low in phosphate or both.
 2. Crias are more likely to show the bent legs first.
 3. Adult female alpacas get rickets in late pregnancy/early nursing.
 4. ANAEMIA is the warning sign in a female, besides lameness and loss of condition. This is a phosphate deficient anaemia NOT an iron deficient one.
 5. Colour - blacks at allifestages are twice as likely as whites to be affected.
 6. Maintenance program ofvit D needs to take into account your local season/climate; and your colour mix of alpacas - blacks need more.
 7. Older sources of vitamin D such as Richtasol contain very high levels of vit A and little vit D. Switch to a brand which has more D and less A.
 8. Alpacas under stress, eg weaning/showing/moving/pregnancy/lactation, are the ones most likely to show rickets,
 9. Other problems such as ulcers/fatty liver/worms/coccidia. If you have an alpaca with one of these issues, start looking back for the initial problem.
 10. Sudden bad weather can precipitate a crisis - heat stress or cold snap.
 11. An alpaca sitting down, very anaemic, not eating is highly stressed, and in desperate trouble, even though it may look as though not much is wrong. Crias can be carried to the barn. Adults should not be made to get up, further stress/noise can kill at this stage. It is better to treat it with a good dose of phosphate on the spot to re mineralise it first to see if it will get up on its own, then walk it slowly to the barn to continue treatment. Alpacas with rickets should not be transported anywhere lntil they have had at least some phosphate.
 12. Black alpacas are most likely colour to show skin rashes, add vit D to treatments.
 13. Fully grown males are least likely to show symptoms of rickets, although wethers can sometimes present with the problem.
 14. Blood Sampling - must be processed within an hour of being taken for phosphate levels, otherwise spin down blood and take serum off.
 15. PEM -lack of thiamine - Vitamin B1 - need immediate and continuous doses of B 1. May go blind/circling/need help with eating/drinking.
 16. Grass Tetany - 'goose stepping", falling over but head held steady unlike ryegrass staggers. May go into convulsions and die at slightest stimulus like loud noise/sight of strangers etc. Because of this may need to be kept alone, and away from bustle of farm. Need magnesium supplements and careful, very quiet, one on one nursing as nervous system outraged.
 17. Joint Ill- bacterial infection which affects young crias with temperature and swollenjoints; almost always fatal.
 18. Have minerals and vitamins on hand before you need them, most tabs can be bought cheaply at supermarket, most injectables can be ordered by phone/online from Equine Supplies/petessentials.com.au or feed stores.
 19. Vitamin D is not an optional extra for alpacas, but an essential part of a healthy existence.
- Drops of oil from 5 capsules Blackmores Pure D3 caps, break open or bite the ends off. Squeeze drops into drench. Gives 4-5000 IV or so vit D orally, which I think works faster

than injectable.

1 good dollop plain yoghurt (any flavour, no pips) or bottle of Yakult or teaspoon Protexin - to take up the DCP (insoluble in water) and gives extra probiotics.

Put all into pop top plastic bottle and drench slowly, usually no problem with adults once you get the pop top into the cheek pocket! corner of the mouth, it runs down and they sort of gargle it. I don't force it in, they are already under stress.

(Can give VAM injection or add VAM paste to drench if available, adds a few other things, but I only use it once at a time, just in case the copper builds up.)

Day 2

Repeat the drench and phos injection.

Day 3 Repeat injection.

By this time, the membranes should be starting to colour up again.

For well grown cria over 8 months old, treat as adult.

For 6 mth old cria half of everything

For baby cria drops from 2 vit D3 capsules and pinkie fmgemail blob of Cophos paste