The Alpaca Lifestyle

Alpaca Owning and Breeding from Topknot to Toenails

January/February, 2001

Hmmm...

Here I sit putting the final touches on this, the fifth edition of the Alpaca Lifestyle, on the chilly morning of January 4th. Though nothing looks particularly different, this is no ordinary day - astronomers tell me that today, at 9:00 GMT, the earth is the closest that it will get to the sun this year. Today spaceship earth flies past its perihelion.

A quick look across the snowy fencelines - where older alpacas enjoy hay in their shelters and crias bound through the snow testing the depth of drifts with a precipitous leap into the middle - would seem to refute this fact. The sun periodically peeks though intermittent holes in the low-hanging, pulpy clouds, but the cameo is too short to assist struggling water-tank heaters, or to thaw 'frost-free' faucets that have frozen in protest of -30 degree windchills. I can't say I blame them.

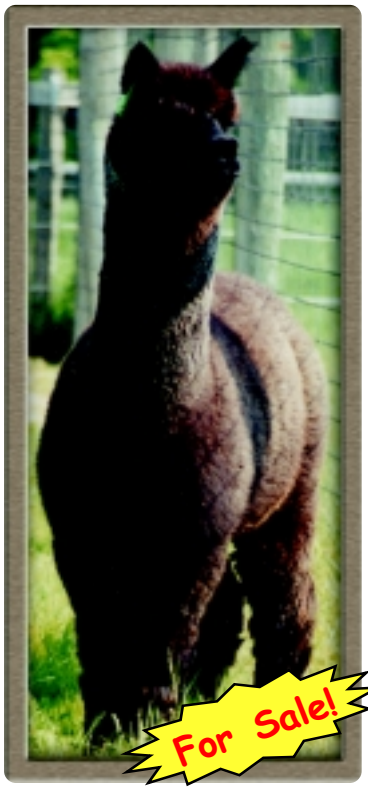
It is still early, so pondering anything astronomical is out of the question, but this immense piece of information (mixed with the immediate effects of a second cup of coffee) has actually spurred two thoughts.

First, as the earth sets off on another 365 day trip, so do we along with it. The cycle of the farm starts over and soon waterlines will thaw, snowplows will give way to lawnmowers, and the dense crimpy fleeces that were such assets to the alpacas through winter will become life-threatening liabilities if not removed before the heat settles in. Lucky for us, now that they are done with them, we can use them! We begin a new string of shows, we'll watch a new group of winter crias delight in their first taste of green grass, and we'll build trust and understanding with each and every animal as we provide their daily care. With alpacas come many responsibilities, but what a wonderful way to spend another 365 day vacation - I already look forward to looking back at this time next year.

What is the second thought? Well, perhaps that second cup of coffee hasn't yet kicked in, because all I can muster is this: Perihelion... what a great name for an alpaca! Happy New Year! -*Ty Forstner*

Herdsire Hall Of Fame

Matador!



4Peruvian Matador 6030

Peruvian Matador is a rare, black, full Peruvian herdsire with excellent conformation. His fleece is dense and crimpy with an excellent histogram of 20.4 micron, 4.3 SD, 21.1 CV, and only 3.1% fibers over 30.

Matador was chosen off the top of the import as an "owner animal", meaning that the importers chose him for themselves - one look at this male and his offspring will tell you why.

His crias are colorful and spectacular, with straight conformation and fleeces even better than his own! We often call Matador our "Grey in Disguise", as he has thrown rose grey and silver grey as consistently as black!

MATADOR will be offered for sale at the **2001 Breeder's Choice Auction & Customer Appreciation Futurity!** October 19-21, 2001 at Magical Farms

MFI Peruvian **Black Mesquite**

This young Matador son is a testament to his sire's phenomenal work. Perhaps you've seen him in the show ring? Mesquite's black fleece is fine, crimpy, and has outstanding character for a black -- the judges certainly agree!

First Place - 2000 All American Futurity

Color Champion - 2000 International Fleece Show - Red Deer, Alberta CA

MFI **Sapphire**

The beautiful rose grey fleece that Matador put on Sapphire, along with her perfect conformation and gentle disposition made many breeders look more than twice at the 2000 Breeder's Choice Auction. At sale time, she brought the well deserved price of **$32,500!**

So when you evaluate your breeding program this spring, and you plan to add **color** and **value** to your herd, the answer is simple...

Peruvian Matador

Reflections of a New Breeder

The year 2000 is coming to a close and there are many things to think back upon. Of course, by the time this is printed, we will be in 2001 and witness the arrival of the True Millennium (according to Purists). I began this year with very little working knowledge of alpacas and animal breeding. My professional background is in Hotels and restaurant management with a personal hobby of wine studies. 2000 has been a busy year as a new breeder and I am happy to share with you some of my thoughts and observations for what they may be worth.

Purchasing animals. I have purchased some animals this year on my own and in partnerships and I have learned that where you buy an animal is at least as important as the animal that you buy. Should a problem arise, it is important to know that the farm you purchase from will assist you in the resolution of the problem.

Breeding animals. I have had the privilege to see the results of many breedings this year and I can now say with a certainty that it pays to breed to the best you can find. As the quality levels continue to escalate in this country and around the world, it is extremely important to strive for the absolute best you can get when breeding your females. It will pay off in the long run.

Peruvian/Chilean. This was an interesting issue for me this year as a new breeder. I was looking at all varieties of crosses as well as the Peruvians and Chileans. What I ultimately determined is that, much like a very famous add, quality is job one. The show ring can't determine where an animal's parentage is from any more than you or I without looking at the papers. Even if the country of origin is known, some animals are simply better than others are and it has nothing to do with where the parents came from. This was proven to me in multiple shows and auctions this year including the Breeder's Choice Auction where the Chilean animals outsold the Peruvians.

Showing. Shows and showing animals was very new to me this year as I was never involved with 4H or FFA growing up. I had never been to an animal show until the All American Alpaca Futurity in April 2000. It was very exciting for me and the shows are great places to learn about animal quality as well as meet a lot of the breeders that you will be speaking to in the future. I find it is always nice to have a face to go along with the voice or the e-mail.

Industry Notes. I don't have a very long history in this industry so I will state my views based upon the year that I have seen. In watching as well as attending the shows, events, private sales and auctions this year I was witness to an expanding market. Many new world records were set and then reset this year alone. Prices have been stable based on the history of the animals in this country. AOBA has had a record year as far as new interest and I am very much looking forward to 2001. I am thrilled to be involved with alpacas and all the benefits that come with them. I can only say, I look forward to meeting more of you in 2001.

In the new year we will all continue to learn. I would be happy to assist anyone that would like to learn with us, and I would also like to offer the assistance of my family and staff here at Magical Farms. Please feel free to call, email, or visit anytime.

Happy New Year from all of us at Magical Farms, -*Tripp Forstner*

ANGULAR LIMB DEFORMITY

"Crooked legs in crias"

David E Anderson, DVM, MS, Diplomate ACVS, Associate Professor

Angular limb deformities (ALD) are common among llamas and alpacas. Veterinarians most commonly are asked to examine growing neonates for skeletal abnormalities, but these defects are not uncommon among adult llamas and alpacas. Owners may perceive that a mild angulation (< 5 degrees) in the forelimbs of adults is within the expected variation of normalcy. However, these angulations represent a skeletal defect and should not be encouraged as a "normal" phenotypic trait. ALD may be congenital or acquired. Congenital ALD most often is associated with prematurity. Premature neonates often have joint instability, presumably caused by immaturity of ligaments and surrounding muscle-tendon units. This results in altered weight bearing which causes eccentric loading of the physes of the limb. Physes respond to biomechanical loading by changing the growth rates within the physis. Thus, ALD worsens if the limbs do not achieve normal angulation within a few weeks of birth. If joint laxity does not progress to normal within 10 to 14 days of birth or if the angle is severe enough to interfere with ambulation, splints should be applied to the forelimbs to aid in establishing normal conformation (Figure 5). Splints are usually maintained for 7 to 10 days and removed. The cause of acquired ALD is probably multifactorial and may include hypovitaminosis D, micro- or macromineral imbalances (e.g. copper, calcium, phosphorus), trauma, genetics, or may be secondary to other musculoskeletal defects (e.g. injuries on one limb resulting in altered weight bearing on the remaining limbs). Van Saun et al (1996) found that young llamas and alpacas with hypophosphatemia and hypovitaminosis D had a high prevalence of skeletal defects including angulation to the limbs resulting from altered long bone growth. Thus, selection of an appropriate treatment is dependent upon the probable cause of the ALD. If multiple neonates on a given farm suffer ALD, then complete nutrition evaluation must be performed and should include determination of serum vitamin D concentration. Hypovitaminosis D is not uncommon in North America and may cause altered physeal growth and deviation of the long bones. Clinical experience suggests that the distal physisi of the ulna and radius are particularly susceptible to the effects of hypovitaminosis D, also referred to as hypophosphatemic rickets.

Clinical Evaluation - Llamas and alpacas have extensive hair growth on the limbs, often extending down to the foot. The presence of the hair may hide ALD from observation until later in life when the first shearing is done or until the owner begins to prepare the animals for exhibition. ALD is described by the joint most affected by the angulation and by the direction to which the limb distal to the angulation is deviated (valgus = lateral deviation, varus = medial deviation). Evaluation of the affected limbs should be done either after shearing of the limbs or by compressing the hair with bandage material wrapped firmly enough to see the contours of the limb. Paul-Murphy et al (1991) found that the mean age of llamas examined for angular limb deformity was 6.2 months (range, 2.5 to 11 months). Males and females were equally represented and both forelimbs were affected in all animals. Radiographic Evaluation - Radiographic examination of the limbs should be done to asses the severity of the angulation, determine if other skeletal defects are present such as absence or abnormal formation of bones within the affected joint, and to guide treatment option selection. The severity of angulation is determined by measur-

Libby's Healthful Hints

Cold weather, winter crias! Winter can be a time of stress for us as well as our alpaca friends. Any time the weather makes major changes, it can put crias and old alpacas at risk not only for items such as pneumonia and diarrhea, but also injuries because of ice and snow. We make certain that all crias have a barn or at least a three-sided shed for shelter. Newborns are kept in a barn, having access to outdoors, but able to get out of the elements immediately if necessary. If you bed on limestone or some other hard, cold surface, consider spreading some straw down for them to lay upon in below freezing weather. Our winters are cold with temperatures often rising above freezing and it's the fluctuation of warm to cold/cold to warm and the wet, cold rains that can cause problems. If you breed for winter crias, you must be prepared to watch late-pregnant females even more closely to protect newborns from freezing temperatures.

Crias need plenty of sunshine so don't lock them in for extended periods of time and consult with your vet regarding feed supplements. Most leg problems are a result of mineral/sunshine deficiencies and lack of sunshine should be a major concern for all growing crias. Consider a waterproof jacket for especially young crias under a week old until you are certain that they body temperatures are regulating properly. We do daily temperature and weight checks on crias until they are at least a week old. What do you watch for to determine how your cria is handling the wet, cold winter weather? Become familiar with what is "normal" for your cria. Temperature, activity level, body language and weight gain are critical indicators of good health. Watch for diarrhea and act fast consulting with your vet if any of these areas give you cause for concern. (I always prefer to check with my vet and apologize for bothering her than to have to call her and tell her that we should have sought help sooner.) Our winter crias are very healthy crias now that we've learned how to deal with the weather but it does require extra care and a watchful eye. If you have never dealt with winter crias and are concerned, talk with your vet or an experienced breeder and get ready! If you've never seen a new cria pawing excitedly at freshly-fallen snow, you're in for a treat! *-Libby*

ing the angle formed by the intersection of two lines draw along the central longitudinal axis of the affected bones using the dorsopalmar (-plantar) or craniocaudal views. Paul-Murphy et al (1991) reported a range of ALD of 6 to 25 degrees in 28 llamas with forelimb valgus. The point of intersection of lines drawn on the craniocaudal radiographic projection images was at the radial physis (33 out of 56), radial metaphysis (20 out of 56), or radial epiphysis (3 out of 56). Of 56 limbs examined, 14 had ALD of 5 to 10 degrees, 30 had ALD of 11 to 15 degrees, 6 had ALD of 16 to 20 degrees, and 6 had ALD of 21 to 25 degrees. Also, 58 % of affected radii had curvature of the radius present upon initial examination. Metaphyseal flaring at the distal radial physis and distal ulna physis was observed in 95 % of the limbs examined. Of 41 limbs in which the third and fourth metacarpal bones were evaluated, 95 % were found to have irregularities in the distal physis.

Treatment - This discussion will focus on carpal valgus originating at the level of the distal radius because this is the most common ALD requiring surgery and affecting llamas and alpacas. Congenital ALD is usually associated with laxity of the carpal joints and is usually self-correcting or managed successfully without surgery. Selection of the best surgical option for treatment of ALD is based on severity and age of the affected llama or alpaca. Surgical options include: hemicircumferential periosteal elevation ("periosteal stripping", HCP), transphyseal bridging (TPB), and corrective osteotomy (CO). Figure 1 outlines a decision flow-chart that the author uses for selection of the appropriate surgical method. Little data is available concerning rate of growth and age at closure of the distal physis of the radius in llamas and alpacas. However, phenotypic growth slows or plateaus at 18 months old. Llamas and alpacas are assumed to be similar to foals in that growth of the distal physis of the radius slows before 9 months old. Therefore, neonates < 3 months old are assumed to have sufficient growth potential such that HCP can be effective. HCP is performed on the distal lateral aspect of the radius when the animal is young and the ALD is mild (< 10 degrees). The author prefers to perform a partial (1-cm long) ulna ostectomy at the time of HCP to ensure that growth restriction by the ulna does not occur. A 5-cm long incision is begun immediately proximal to the distal physis of the ulna and continued proximally. The periosteum is elevated from the radius and ulna and a large bone rongeur is used to remove a 1-cm long segment of the ulna. The periosteal elevation is continued cranially and caudally hemicircumferentially around the radius and the periosteum is transected proximal and parallel to the distal physis of the radius. The periosteum is replaced against the radius and the skin is closed with an appositional suture pattern. A light pressure bandage is placed on the limb and maintained for 7 to 14 days. Skin sutures are removed 14 to 21 days after surgery. The ALD should be reevaluated 30 to 45 days after surgery to assess adequacy of correction. TPB is done when the ALD is severe (>10 degrees) or the animal is older (e.g. closer to the time of limited growth potential in the distal physis of the radius). I usually chose to perform TB in neonates > 3 months old. I prefer to place needles at the intended location for screw placement and obtain a craniocaudal radiograph of the surgery site. One cortical bone screw (2.7 mm or 3.5 mm diameter screws) is placed proximal and one distal to the medial aspect of the distal radial physis. The approximate location of the distal physis of the radius can be located by inserting an 18 gauge needle firmly into the bone at intervals of 1 to 2 mm beginning immediately proximal to the metaphyseal prominence of the radius and continuing distally until soft bone is encountered and the needle can be seated for 0.5 cm. This procedure is more difficult to successfully perform in older neonates. Then, the screw hole is drilled, tapped, and a screw inserted parallel to the physis until 0.5 cm of the screw is left protruding from the bone. Orthopedic wire (18 to 20 gauge) is placed around the two screws in a "figure 8" pattern and twisted until secure. Then, the screw is inserted until firmly against the bone. The skin is closed and a pressure bandaged applied. The pressure bandaged is removed in 7 to 10 days and skin sutures are removed after 14 to 21 days. The neonate must be examined daily to determine when the limbs are clinically straight because overcorrection is possible if the screws are not removed quickly enough after the limb is straight. The critical time period is determined by the age and growth rate of the neonate and the severity of the defect.

Corrective osteotomy maybe performed after closure of the distal radial physis and when the severity of angulation precludes a good quality of life for the animal. Closing wedge ostectomy is the procedure of choice because this is more stable than opening wedge osteotomy. An open wedge osteotomy is made by performing an osteotomy at the distal aspect of the curvature and rotating the proximal fragment until the angle is corrected. Thus, a wedge shaped gap remains on the concave side of the bone. A closing wedge ostectomy is performed by removing a wedge shaped piece of bone approximately the size of the angle formed by the curvature. For closing wedge ostectomy, the bone wedge to be excised is estimated by drawing a line along the central axis from each end of the radius. The acute angle formed by the intersection of these lines is the degree of the arc of the wedge. An angle gauge is then applied such that the point of the wedge is on the concave cortex of the radius and the arcis on the convex aspect of the radius. The length of the arc is measured in cm and this measurement used at surgery to estimate the size of the ostectomy. Squire et al (1991) reported bilateral wedge ostectomy for correction of bilateral carpal valgus exceeding 40 degrees in a 48-month-old llama. Each limb was operated 3 weeks apart and a closing wedge ostectomy performed. The radius was stabilized using an orthopaedic bone plate (T-plate). The author successfully has performed several closing wedge ostectomies in llamas and alpacas and used transfixation pin casting or external skeletal fixation to stabilize the affected bone.

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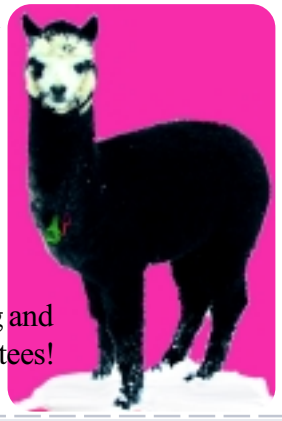
Remember, past editions of
The Alpaca Lifestyle

are available for download from our website. Visit the "News" section of www.alpacafarm.com!

Valentine's Day Sale Special! (guys, that's February 14th...)

We are proud to offer you **MFI Dark Dreama**, the beautiful daughter of **Peruvian Matador** and **Delicia's Sox**. Dreama's dam Delicia's Sox is a striking deep dark grey, she is a good milker and a great mom. Dreama's half brother on her dam's side, a silver grey named Mercury, took second place in the 2000 MAPACA Jubilee halter class - quite an accomplishment at the second largest show of the year! You can check the front page of this newsletter for more information on her famous sire Matador.

Dreama's crimpy dark grey fleece, strong color heritage, and endearing face make this girl the perfect addition to your herd - and the best Valentine's day gift around! Call or email us now!
info@alpacafarm.com (330)667-3233



MFI Dark Dreama
Female huacaya
Born 8/23/2000
ARI#821248
Price: $18,500
Includes Free Breeding and Magical Farms Guarantees!
financing is available

In This Issue:

Mark Your Calendar!

If you missed it last year, you won't want to miss it again...

The Breeder's Choice Auction & Customer Appreciation Futurity
October 19 - 21, 2001
at Magical Farms

Contact us at (330)667-3233 or info@alpacafarm.com for more info.