This edition of the Alpaca Lifestyle is different in that, unfortunately, I’m not really sure where to begin. This column is usually a cheerful reflection on the past couple months, peppered with some whimsical observations of our Ohio alpaca farm as it progresses through the seasons and its natural cycles. Powerful spring storms, soft summer pastures underfoot, autumn leaves swirling by, winter constellations overhead, and, of course, romping crias and content alpacas have all been fair game and truly enjoyable to observe and write about.

These last months since late February, for many farms in Ohio and Magical Farms included, have not been full of much cheer or whimsy. On February 28th, 2003 a large batch of alpaca feed was mixed at a Land O’Lakes plant in Massillon, Ohio, that was heavily tainted with an ionophore drug additive called salinomycin. This family of drugs, in the proper proportions, serve as antimicrobials for poultry, pigs, and cattle, and it is routinely mixed in their feed. It is poisonous and deadly to alpacas, horses, and several other species (see the article written by Dr. David Anderson regarding ionophore poisoning in the following pages.)

This batch of tainted feed was distributed through the regular channels to many farms throughout Ohio, and has had a truly devastating effect. It is estimated that well over 100 alpacas in Ohio have been killed by this poison, and over 1000 have been affected in some way. Ninety (90) alpacas have died at Magical Farms alone, and some smaller farms throughout the area have been put completely out of business. More information and regular updates regarding this incident are posted in the “news” section of our website. To this point, Land O’ Lakes has been less than model corporate citizens regarding this incident, and have made no amends for this tragedy.

On a positive note, the incredible support from the alpaca industry as well as the many other livestock industries that use Land O’ Lakes feed and are following this incident closely, has been heartwarming and truly appreciated. We thank you all."
MORE ABOUT ACCOYO PERUVIAN DRACULA

One page simply isn’t enough!

Here at Magical Farms, we owe a major portion of our progress with the quality of our fleeces to males such as accoyo Peruvian Dracula! There’s no mistaking that a simple generation of accoyo Dracula’s genetics in the background of our alpacas has added a tremendous amount of density and elite fleece qualities to each and every offspring. We can always, ALWAYS count on accoyo Peruvian Dracula to greatly improve the quality of his offspring’s fleeces.

Shortly after we went into partnership with Jim and Nel Vickers on some alpacas back in the late 90’s, Jim confided in us about an incredible male he had chosen for the importers while in Peru. This male, Jim said, had a phenomenal fleece that was the best he had ever seen. That male turned out to be accoyo Peruvian Dracula. He has the most dense fleece we have ever seen and he packs both density and outstanding, ELITE fleece character onto his crias. We soon contracted with Phil Mizrahie to bring Dracula to stand stud at Magical Farms. The effect this accoyo male has had on the quality of our breeding program has been outstanding! Between our other accoyo males and Dracula, our program moved forward both quickly and dramatically. Jim was absolutely correct about Dracula and it was Dracula’s crias that a couple years later led us to partner with Phil Mizrahie in the ownership of accoyo Peruvian Dracula. Phil Mizrahie has been a wonderful partner and has taught us a lot over the years. We're fortunate to have been Phil's partner in Dracula and proud to join Phil in offering this incredible male in our 2003 Breeder’s Choice Auction.

There are only a handful of the original accoyo males left in the United States. Many have been sold to Australia; others have passed away. We are convinced of this... only a couple of years breeding with incredible males such as Dracula has moved our breeding program light-years ahead of where it was before we began. Like accoyo Peruvian Augusto and accoyo Peruvian Mr. President who sold at Breeder’s Choice auctions before him, these are the males that can "make" a farm’s breeding program and take it to the top. Here is an opportunity to purchase one of the elite cornerstones of the industry... accoyo Peruvian Dracula!!

Accoyo Peruvian Dracula's future crias will be eligible to compete in Magical Farms & Ameripaca Customer Appreciation Futurities, giving your farm yet another marketing advantage. Dracula sells with Magical Farms/Pet Center's full farm guarantees. His purchase can be financed for up to four (4) years at only 1% over prime with only 25% down.

Don’t miss your chance to own this incredible male!

Pictured below are two of Dracula’s show-stopping offspring, Accoyo Peruvian Devlin and Peruvian Tesoro - a shining testament to the unmistakeable quality that Dracula passes on.
In an all out effort to jump start the economy, the Bush administration has implemented one of the greatest tax packages in modern time. It does not last forever; however, while it is in place alpaca breeders everywhere should be seizing this opportunity and stocking up. Look at some examples:

- **Section 179 of the tax code** has been changed from an immediate deduction of $25,000 to a deduction of $100,000. This is an awesome tax break for all of us and I urge you to talk to your accountant and make sure you comply. Added to things that come under the break are trucks over 6,000 pounds and single purpose farm buildings. If you have been in need of a new set of wheels to pull your trailer, now is the time.

- **The bonus first year depreciation** that was initiated in “The economic recovery act of 9-11-2001” has been changed from 25% to 50%. Oh my! This is only in effect through December of 2004, but is a way to get a lot of money back on your taxes today, which of course is the idea - the Bush administration wants you to have money in your pocket to keep you spending and get the economy moving forward. Don’t let our president down.

- The capital gains rate was reduced from 20% to 15%, which is great if you are selling breeding stock that you have held for over one year.

- Tax brackets in general have been reduced by substantial margins.

Below is a quick example of how this can help you, but please remember that each of us is in a different tax situation so you must consult your accountant...

You purchase $200,000 dollars of alpaca and finance them with 25% down, which is a $50,000 cash outlay.

You deduct from your income:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section 179</td>
<td>$100,000.00</td>
</tr>
<tr>
<td>50% on balance of $100,000.00</td>
<td>$50,000.00</td>
</tr>
<tr>
<td>Depending on time of year that you purchase you deduct up to 20% on balance of $50,000.00</td>
<td>$10,000.00</td>
</tr>
</tbody>
</table>

**Total**

$160,000.00

Your $50,000 dollar investment has now earned you a deduction of up to $160,000. If you don’t have that much income you can get back income taxes that you have paid in the past. If your combined state and federal taxes are 40%, this represents an approximate $64,000 in tax savings on an investment of $50,000. How is that for a great return! Don’t take my word, talk to your accountant today.
BEEN SEARCHING FOR HIGH END GREYS?

MFI Simply Awesome  
MFI Pollyanna  
MFI Calandria  
Ameripaca’s Nadia  
MFI Magnesia  
MFI Peruvian Ariola

FIND THEM HERE!

2003 BREEDER’S CHOICE™
Auction & Futurity

OCTOBER 10-12!

MORE INFORMATION ON THESE AND OTHER INCREDIBLE AUCTION ANIMALS AT:
WWW.ALPACAARM.COM AND WWW.AMERIPACA.COM
HOW ABOUT FULL ACCOYO BLOODLINES?

Accoyo Peruvian Manaska

Accoyo Peruvian Emma

FIND THEM HERE!

Accoyo Peruvian Dracula 6016

more information on these and other incredible alpaca action animals at:
WWW.ALPACAFAIR.COM and WWW.AMERIPACA.COM

OCTOBER 10-12!

Accoyo Desire's Diva

Accoyo Peruvian Moonshins
Ionophore toxicity in Camelds: Understanding the Salinomycin Death Outbreak in Alpacas in Ohio

WHAT ARE IONOPHORES?
Ionophores are a class of naturally occurring antimicrobial drugs having a wide range of activity. These drugs are widely used to control or prevent coccidial parasite infestation in the intestinal tracts of poultry, cattle, and pigs. Ionophores have a beneficial side-effect of helping to maintain balance in the intestinal bacterial populations during periods of high volume concentrate (e.g. corn, grain) feeding. This effect results in a more efficient feed to body weight gain ratio (e.g. greater rate of gain per unit dry matter intake of feed). Greater feed efficiency translates to improved economic returns for the meat producer.

WHY IONOPHORE?
These drugs are referred to as ionophores because their mechanism of action involves interference with ion exchanges at the cell membrane. Specifically, these drugs are open chained oxygenated heterocyclic rings with terminal carboxyl groups. This structure allows the drugs to form lipid soluble complexes with ions such as calcium, potassium, sodium, and magnesium. These complexes cause ion fluxes independent of ion channels and membrane potentials causing decreased ATP (the most basic cell energy form) production, increased ATP utilization, and eventually cell death. These drugs have a particular predilection for striated muscle cells because of the high concentration of calcium ions and extreme activity involving movement of ions. Thus, overdosage of ionophores causes clinical signs associated with skeletal muscle dysfunction and myocardial dysfunction.

WHAT SPECIES CAN BE INTOXICATED?
Intoxication with ionophores through accidental overdosage in feed products has been reported in a variety of species. Differential species sensitivity to ionophores has been recognized and this sensitivity varies with each ionophore. The ionophores most commonly involved in accidental toxicosis are monensin, lasalosid, and salinomycin.

WHAT CLINICAL SIGNS CAN BE SEEN?
Clinical signs of ionophore toxicity vary among species affected. Clinical signs result from the dominant organ system involved in each species. Abortion or early embryonic may be seen in pregnant females, but teratogenic effects (congenital defects) have not been seen in offspring.

HOW LONG AFTER EXPOSURE TO TOXIC DOSAGES WILL WE SEE CLINICAL SIGNS OR DEATHS?

CATTLE
In an outbreak of toxicity in cattle, death occurred beginning 3 days after ingestion, 95% of deaths had occurred by day 12, but death was seen in one steer 21 days after ingestion of the toxin. A group of 350 dairy calves 2 to 4 months old were accidentally fed a diet contaminated with between 1010 to 1700 ppm lasalosid. Calf losses began 3 days after introduction of the feed and continued for 14 days (feed removed on day 5). Deaths have been seen in cattle weeks after exposure to monensin and lasalosid. 13 out of 46 Simmental heifers died 9 days after ingestion of a coccidial premix containing 6% salinomycin. 39 of 380 cattle being fed a ration over a period of 11 weeks and containing salinomycin developed clinical signs of cardiovascular disease. Of these 39 cattle, 8 died.

HORSES
Exposure to monensin contaminated feed resulted in 26 deaths out of the 150 horses ingesting the feed. Deaths occurred for up to 2 months after ingestion of the monensin. Although monensin toxicity usually is fatal to horses, chronic effects of monensin have been documented. In one such exposure, 32 horses were examined because of poor performance several months after a known monensin exposure. Cardiac abnormalities were diagnosed in 8 horses, suspected in 4 horses, and 6 horses had evidence of circulatory failure at necropsy.

DROMEDARY CAMELS
A group of 120 Dromedary camels were fed 2 to 4 kg each of a diet containing 138.9 ppm salinomycin. This translates to a dosage of salinomycin between 0.7 and 1.4 mg/kg body weight. Within 24 hours, 25 camels had weakness and incoordination. After 48 hours, 50 camels were effected. Over a period of 10 weeks, all 120 camels showed clinical signs and 58 died.

ALPACAS
Several farms of alpacas, Huacaya and Suri breeds, were fed a diet that had been accidentally contaminated with salinomycin at a concentration of 60 to 90 ppm (that equates to 60 to 90 mg of salinomycin in each 1 kg of feed). Alpacas had been offered the diet at a rate of approximately 0.25 to 0.5 Kg per head per day for 3 to 5 days (daily dosage approximately 0.5 to 1.5 mg/kg body weight; accumulated dosage approximately 1.5 to 7 mg/kg body weight). Alpacas demonstrated weak tail tone, incoordination, and difficulty urinating beginning on day 3 of feeding. By day 4, acute deaths were noted and deaths continued for at least 21 days after discontinuation of contaminated feed. We expect to continue to see sporadic deaths up to 3 months, possibly longer.

HOW IS IONOPHORE TOXICITY DIAGNOSED?
Diagnosis of ionophore toxicity is based on clinical signs, historical data, clinical pathology data, necropsy data, and analysis of feed. Ionophore drugs can not be reliably found in body tissues, blood, intestinal contents, or feces. Occasionally, analysis of rumen content or feces yields positive tests, but diagnosis is most consistently made by analysis of suspect feed. Other causes of clinical signs should not be dismissed until a definitive diagnosis is made. In many acute cases of ionophore toxicosis, creatine kinase (CK) enzyme activity in serum is extremely elevated, often exceeding 100,000 units/ml serum. Aspartate transaminase enzyme activity increases lag behind CK increases by 24 to 72 hours. Liver specific enzymes may increase because of ionophore effects on liver cells or because of secondary metabolic hepatopathy. I must stress that no blood test identifies all exposed animals, and no blood test will predict which animals will die and which ones will not. Blood tests are useful to guide treatment decisions, but are of little prognostic value.

CAN IONOPHORE TOXICITY BE TREATED?
Treatment of ionophore toxicosis is difficult because no specific antidote exists. The first principle of treatment is to remove all sources of contaminated feedstuffs. Enteral treatments aimed to decrease absorption of drugs from the gastrointestinal system may be administered (e.g. mineral oil, activated charcoal, cathartics), but efficacy is questionable because of rapid absorption of the drug. Symptomatic treatments may be administered as supportive care when economically feasible (e.g. intravenous fluids, electrolytes as needed, etc.). When severe rhabdomyolysis is present, muscle relaxants (e.g. methocarbamol) and anxiolytic drugs (e.g. acepromazine) may be administered. Intravenous fluids are administered to prevent renal tubular damage from myoglobin depletion of oxygen. If
clinical signs of pulmonary edema (seen as increased breathing effort) are present, diuretics (e.g. furosemide) and bronchodilator (e.g. aminophylline) may be used to ease cardiopulmonary strain.

**DO AFFECTED ANIMALS POSE A RISK TO OTHER ANIMALS?**

Environmental impact of ionophores is not well described. Ionophores are absorbed rapidly from the gastrointestinal tract and quickly metabolized by the liver and GIT. Elimination half-life is approximately 2 to 3 hours and over 90% of the drug is excreted in the feces within 48 to 72 hours of ingestion. Salinomycin breaks down in feces over a period of 21 days. Ingestion of contaminated feces in amounts required to intoxicate an animal is extraordinarily unlikely.

**WHAT ARE THE LONG-TERM HEALTH EFFECTS OF SALINOMYCIN POISONING?**

The truth is that we do not know. We expect to see chronic fatigue, sporadic deaths, and ill effects in animals with significant heart muscle damage. We expect to see some abortions and temporary sterility in some males and perhaps females. The clinical significance of the salinomycin damage in long-term setting of health and fertility will be determined over the next 6 to 12 months.

The preceeding article was provided by:

David E Anderson, DVM, MS, DACVS
Director, International Camelid Initiative (www.icinfo.org)
Coordinator, Camelid Health and Research Programs
College of Veterinary Medicine
Ohio State University

During the death outbreaks resulting from the Land O’ Lakes salinomycin poisoning, our veterinarian Dr. Denise Stoll along with Dr. David Anderson and his team at Ohio State spent countless hours working with us and farms across Ohio that were experiencing the same losses. We thank them all for their incredible hard work and expertise.
Preparations for the Magical Farms & Ameripaca Breeder’s Choice Auction Futurity are in full swing!
The schedule of events can be seen here, the catalog and futurity information will be arriving in mailboxes in early September, and be sure to visit:

alpacafarm.com
&
ameripaca.com

for auction animal sneak previews and a wealth of additional information.

If you are planning to attend, we request that you please register by either using our on-line sign up sheet available on our websites, or by calling either Magical Farms or Ameripaca. The seminars and meals are complimentary, but we need an accurate headcount for the tables and caterers.

**Friday, October 10th, 2003**

12:00noon - 5:00pm  Futurity Alpaca Check in and set-up
10am, 1:00 & 3:00pm  Seminar: "Investing in and Marketing Alpacas" - Jerry Forstner
6:00pm  Cocktails and activities in the main barn
7:00pm  Welcome Dinner

**Saturday, October 11th, 2003**

8:00 - 10:00am  Full Menu Breakfast and Auction Animal Viewing
9:00 - 10:00am  Seminar: "Investing in and Marketing Alpacas" - Jerry Forstner
10:00am  Free Alpaca Health Seminar - Speaker to Be Announced
12:30am  Lunch
1:00 - 3:30pm  Auction Animal Viewing continues
2:00pm  Wine Tasting with sommelier Tripp Forstner
3:00pm  Auction Intro - "Humor in Raising Livestock" - Dr. David Pugh
4:00pm  BREEDER'S CHOICE AUCTION BEGINS!
8:00pm  Complimentary Dinner and entertainment

**Sunday, October 12th, 2003**

8:00am  Full Menu Breakfast
8:30am  Exhibitor's Meeting
9:30 am - 1:00pm  Customer Appreciation Futurity Begins!
1:00 - 2:00pm  Lunch
2:00pm  Futurity Continues plus Championship Classes