

# The ALPACA lifestyle

Alpaca Owning and Breeding from Topknot to Toenails

Magical Farms Inc.

Winter 2005



For the first time, on the eve of the sixth annual Breeder's Choice Auction, the weather was uncooperative. Wet leaves lay flat in the pastures, ignoring the brisk winds trying to elicit a playful response, and windshield wipers battled a cold and persistent October rain as trucks, trailers, and attendees rolled in on Friday night. Despite our best efforts throughout the weekend, there were some unavoidable soggy spots in the



Futurity and Vendor areas, and we thank everyone for their patience and sense of humor while we scurried about digging trenches and stacking sod to help divert the rivulets running through the farm. Somehow, though, the warm sounds of laughter and steel drums pierced the boggy, soggy, squishy setting and summoned everyone to the party.

Barn doors flung open wide to a festive scene of warm tropical colors, the enticing whir of margarita machines, springy

reggae rhythms, and the escapist lyrics of Jimmy Buffett. One step into the barn and Ohio's October melted away... welcome to Margaritaville!

Over eleven-hundred people gathered under slowly-twisting lime slices where they attended educational seminars, evaluated auction animals, and examined overflowing boxes of fleece. Breeders from across the country enjoyed each other's company over a margarita or a plate of desserts gilded with a trip to the bubbling chocolate fountain.



Sounds of rain tapping on the roof fell in sync with the singular ping of steel drums, and both Friday evening and Saturday morning sailed by with conversation and laughter mingled amongst glowing centerpieces and twinkling palm trees. Saturday afternoon, however, was a different story.

The scramble to reserve seats near the stage, or in a favorite ring man's section, made it clear that the breeders in attendance had come with intent. Lunch dishes were cleared, new linens were set, and the fashionably late



found themselves picking their way through standing room only. The house lights dimmed slowly, the stage lights blazed, and the auctioneers took the podium to a



short burst of feedback when the main microphones were switched on. Raindrops on the roof were no match for the hum created by flipping pages of auction catalogs and hundreds of hushed conversations... all eyes turned to the stage, and the 2006 Breeder's Choice Auction was underway!

**IN MEMORIAM**  
**RON KAVANAGH**  
1932-2005

A photograph of Ron Kavanagh speaking into a microphone.  
A photograph of Ron Kavanagh standing at a podium.

*Our Breeder's Choice Auctioneer for 6 years. He will be missed.*

2005  
**BREEDER'S CHOICE™**  
AUCTION & FUTURITY





**Eternal Flame**  
**\$361,000**



**Shaquille**  
**\$310,000**



**Emerald Cut**  
**\$180,000**



**Titanic**  
**\$180,000**



**Southern Belle**  
**\$165,000**



**Exactation**  
**\$102,000**

## Auction Results

Lot	Name/Owner	\$ Amount	Lot	Name/Owner	\$ Amount	Lot	Name/Owner	\$ Amount
1	Sachet <i>Nancy Johanson</i>	75,000	30	Arizona <i>O'Leary/Shields</i>	25,000	59	Stiletto <i>Linda Snook</i>	20,000
2	Lovelace <i>Daphne Aurness</i>	58,000	31	Crianna <i>Dan &amp; Patricia Hellwig</i>	25,000	60	Goldie-Locks <i>Gail Wassertein</i>	27,000
3	Endita <i>Donna &amp; Alan Pointer</i>	39,000	32	Black Beauty <i>Heather &amp; Bob Elliott</i>	40,000	61	Cottonella <i>Daphne Aurness</i>	88,000
4	Magicia <i>Mary &amp; Terry Blowers</i>	20,000	33	Garrison <i>Ley/Johnson</i>	39,000	62	Goldseeker <i>Mary &amp; Wayne England</i>	36,000
5	Silver Spring <i>Rod, Sandy &amp; Ryan Dickinson</i>	29,000	34	Quicksilver & Resi <i>Cindy Harris</i>	35,000	63	Liquid Silk <i>Chris &amp; Holly Boerger</i>	71,000
6	Lennura <i>Jeri &amp; Bruce Beatty</i>	28,000	35	Tauri <i>Brian Cole</i>	26,000	64	Misty Night <i>Bill &amp; Elizabeth Johnson</i>	45,000
7	Opportunity <i>Daphne Aurness</i>	30,000	36	Precious Jewel <i>Jim &amp; Sue King</i>	30,000	65	Gazella <i>Jackie Donaldson</i>	25,000
8	<b>Shaquille</b> <i>Hart/Gilman</i>	<b>310,000</b>	37	<b>Emerald Cut</b> <i>John &amp; Mary Bell</i>	<b>180,000</b>	66	Sharp Image <i>Ruth &amp; Mark Musselman</i>	31,000
9	Chinoia <i>Tammy &amp; Richard Maurer</i>	23,000	38	D. Girl's Delight <i>Brian Cole</i>	26,000	67	Alaska <i>Andrie, Arnold, Beaumon, Bowers, Spetrino</i>	59,000
10	Chara <i>Philip Mizrahie</i>	21,000	39	LeAnn <i>Ben &amp; Lynda Fisco</i>	42,000	68	Periwinkle <i>Joe &amp; Kathy Williams</i>	37,000
11	Fawna <i>Cooper &amp; Ken Smith</i>	48,000	40	Legacy's Lightning <i>Daphne Aurness</i>	85,000	69	Vanquish <i>Phil &amp; Allie Neas</i>	37,000
12	Maralago <i>Martin/Peters</i>	20,000	41	Emerald Fawn <i>Robert Sash</i>	25,000	70	Linguistics <i>Deborah &amp; Jim Baird</i>	30,000
13	Cashper <i>Donna &amp; Alan Pointer</i>	19,000	42	Peppermint's Patty <i>Carol Karsten</i>	20,000	71	Papaya <i>Bill &amp; Juanita Crake</i>	29,000
14	Serenity <i>Sam &amp; Odalis Groome</i>	37,000	43	Trina & Taboo <i>Michelle Alexander</i>	36,000	72	Garnet <i>Cindy &amp; Tim Lavan</i>	41,000
15	Gunsmove <i>Joy &amp; Michael Smith</i>	66,000	44	Jaguar <i>Jim &amp; Carol Roddy</i>	37,000	73	Oil Slick <i>Scott McNair</i>	31,000
16	Lotus <i>Gwen &amp; Tim Smith</i>	24,000	45	Summer Day <i>Daphne Aurness</i>	30,000	74	Rosita <i>Bill &amp; Valaen Clapsaddle</i>	37,000
17	Renee & Raggedy Ann <i>Scott McNair</i>	47,000	46	Misty Moon <i>Pritchard/Lance</i>	25,000	75	Carolanna <i>Jim &amp; Carol Roddy</i>	36,000
18	Excyter <i>Heather &amp; Bob Elliott</i>	19,000	47	China Silver <i>Jim &amp; Carol Roddy</i>	43,000	76	Rosalinda <i>Gabe &amp; Jess White</i>	37,000
19	Easy Street <i>Helwig/Graham</i>	60,000	48	Trixie <i>Jack &amp; Kelly Armstrong</i>	22,000	77	Blended Gold <i>Lonson/Wallace</i>	34,000
20	Talise <i>Stan Sheperd</i>	67,000	49	Lucky Arrival <i>Gwen &amp; Tim Smith</i>	28,000	78	Predator <i>McCarthy/England</i>	26,000
21	<b>Eternal Flame</b> <i>Amy &amp; Arlin McCroskie</i>	<b>361,000</b>	50	Bullet Proof <i>Amber &amp; Pam Peacock</i>	32,000	79	Trinket <i>Rebecca Black</i>	33,000
22	Lady Gracy <i>Robert Sash</i>	20,000	51	Swing Shift <i>Loren &amp; Judy Stevens</i>	22,000	80	Black Again <i>Lori &amp; Michael Fomich</i>	50,000
23	Captivation <i>Pete &amp; Judy Klein</i>	25,000	52	Tapioka <i>Katy &amp; Steve Spears</i>	37,000	81	<b>Southern Belle (sub)</b> <i>Ernest &amp; Barbara Kellogg</i>	<b>165,000</b>
24	Midnight Marvel <i>Gail Wasserstein</i>	42,000	53	<b>Exactation</b> <i>Gwen &amp; Tim Smith</i>	<b>102,000</b>	82	Masterplan <i>John &amp; Mary Bell</i>	24,000
25	Bombastina <i>John &amp; Mary Bell</i>	69,000	54	Pebbles <i>Daphne Aurness</i>	42,000	83	Piece of Eight <i>Brown/Webb</i>	61,000
26	<b>Titanic</b> <i>Bob Fish</i>	<b>180,000</b>	55	Silverbelle <i>Jim Seery</i>	46,000	84	Crater Lake <i>John &amp; Shannon Ellis</i>	36,000
27	Annabella <i>Michael Kovac</i>	22,000	56	Cessna <i>Terry Wissick</i>	32,000	<b>DONATION to AOPA by Magical Farms:</b>		
28	Perdita <i>Bob &amp; Nancy Danielson</i>	24,000	57	Faboulista <i>Brown/Webb</i>	45,000	85	Earthshaker	12,000
29	Chelsea <i>Dr. Delano &amp; Caroline Mixon</i>	25,000	58	Dessert <i>Charlotte &amp; Michael Goldston</i>	32,000	86	Luster	18,000

Names in RED denotes animals sold for over \$100,000 at the Breeder's Choice Auction.

# Futurity Results

## HUACAYA

Class Name/Owner

### Juvenile Grey

- 1 SBF Peruvian Maylano *Steve Hess*
- 2 A.L. Paca's Kissadee *Doug & Denise Caldwell*
- 3 IVF Gallant Nova *Bob & Leslie Gosnell*

### Yearling Grey

- 1 A of O Silver Celebration *Beth Kressin*
- 2 Stoney's Sir Devin *Chris & Lori Works and Arnold & Susan Brunner*
- 3 MFI Carolanna *Jim & Carol Roddy*

### Champion Grey

- C SBF Peruvian Maylano  
RC A of O Silver Celebration

### Yearling Multi-Color

- 1 Coffee Pot Peruvian Fancee *Kathleen Thompson*

### Champion Multi-Color

- C Coffee Pot Peruvian Fancee

### Juvenile Black

- 1 Sharp Image *Ruth & Mark Musselman*
- 2 Captivation *Pete & Judy Klein*

### Yearling Black Females

- 1 MFI Lennura *Al & Catherine Beatty*
- 2 MFI Black Again *Lori & Michael Fomich*
- 3 REAL'S Behold Peru. Esprit *Mary Hazelton*

### Yearling Black Males

- 1 PH Navigator's Commander *Linda & Bill Ley*
- 2 NA Lord Forrester *Dan & Bonnie Nash*
- 3 Our Peru. Midnight Man *Marquette & Coulter*

### Champion Black

- C PH Navigator's Commander  
RC MFI Lennura

### Juvenile Brown

- 1 MFI Dancing Girl's Delight *Brian Cole*
- 2 MFI Monica *Sam & Odalis Groome*
- 3 MFI King Henry the Eighth *Charlotte & Michael Goldston*

### Yearling Brown Females

- 1 MFI Fire Flower *Sam & Odalis Groome*
- 2 MFI Garnet *Tim & Cindy Lavan*
- 3 REAL's Behold Peru. Eclair *Mary Hazelton*

### Yearling Brown Males

- 1 MFI Peru. Goldseeker *Mary & Wayne England*
- 2 SSF Sinbad *Sharon Adams*

### Champion Black

- C MFI Dancing Girl's Delight  
RC MFI Peruvian Goldseeker

### Juvenile Dark Fawn & Med. Fawn

- 1 WHFNC Legendary Classico *Mary Bell*
- 2 MFI Scimitar's Mungo Jerry *Charlotte & Michael Goldston*
- 3 Benchmark's Peruvian Cupid's Arrow *Barrie Lynn Wood*

### Yearling Dark Fawn

- 1 MFI Magical's Misty Night *Bill Johnson*
- 2 MFI Dessert *Charlotte & Michael Goldston*
- 3 MFI Misty Moon *Lance & Pritchard*

### Yearling Med. Fawn M/F

- 1 KCF Peruvian Savvy *Chris & Lori Works*
- 2 Smokey *Mary & Terry Blowers*
- 3 MFI Peruvian Endita *Donna & Alan Pointer*

### Champion Dark/Med Fawn

- C KCF P Savvy  
RC Smokey

### Juvenile Light Fawn & Beige

- 1 Charles P. Atlas *Bob & Kathy Arnold*
- 2 OGA Wynn *Victor & Michelle Waling*
- 3 Ameripaca's Stiletto *Linda Snook*

### Yearling Light Fawn & Beige Females

- 1 Tuition Hope *Mary & Terry Blowers*
- 2 MFI Tapioka *Katy Spears*
- 3 Our Peruvian Serenity *Sam & Odalis Groome*

### Yearling Light Fawn & Beige Males

- 1 MFI Peru. Bullet Proof *Amber & Pam Peacock*
- 2 MFI Peru. Seabrook *Sam & Odalis Groome*
- 3 Starling Farm's Asteroid *Jackie & Joe Kraft*

### Champion Light Fawn & Beige

- C Charles P. Atlas  
RC MFI Peruvian Bullet Proof

### Juvenile White

- 1 RAL Titan's Mercury Rising *Rita Reinhardt*
- 2 MFI Peru. Lucky Arrival *Tim & Gwen Smith*
- 3 MFI Accoyo Exactation *Tim & Gwen Smith*

### Yearling White Males

- 1 MFI Legacy's Lightning *Daphne Aurness*
- 2 MFI Accoyo Peruvian Alaska *Andrie, Arnold, Beaumon, Bowers, Spetrin*
- 3 Coffee Pot Peru. Finn *Kathleen Thompson*

### Champion White

- C MFI Legacy's Lightning  
RC RAL Titan's Mercury Rising

## SURI

### Juvenile Grey

- 1 Pure Platinum *Mike & Steph Barnhart*
- 2 WHFNC Legendary Fiesta *Mary Bell*

### Yearling Grey

- 1 Ameripaca's Easy Street *Nancy & David Hellwig*
- 2 Ameripaca's Gustave *Barbara & Jerry DuVall*

### Champion Grey

- C Ameripaca's Easy Street  
RC Pure Platinum

### Juvenile Multi-Color

- 1 Boodielicious in Daisy Dukes *Mike & Kim Montjoy*

### Yearling Multi-Color

- 1 Torbio's Coracora *Joe & Kathy Williams*
- 2 Briar Rose's Destiny *Macqueline Cristini*

### Champion Multi-Color

- C Torbio's Coracora  
RC Boodielicious in Daisy Dukes

### Juvenile Black

- 1 Ameripaca's Lovelace *Daphne Aurness*
- 2 Ameripaca's Panther *John & Renee Petersam*

### Yearling Black

- 1 Ameripaca's Midnight Marvel *Daphne Aurness*
- 2 Briar Rose's Aurora *Barbara & Jerry DuVall*

### Champion Black

- C Ameripaca's Midnight Marvel  
RC Briar Rose's Aurora

### Juvenile Brown

- 1 Precious Jewel by Torbio *Jim & Sue King*

### Yearling Brown

- 1 Citadel *Mike & Steph Barnhart*
- 2 Freedom Rings by Torbio *Mike & Steph Barnhart*
- 3 MFI Swing Shift *Judy & Loren Stevens*

### Champion Brown

- C Citadel  
RC Precious Jewel by Torbio

### Juvenile Dark Fawn & Medium Fawn

- 1 Ameripaca's Accoyo Emerald Cut *Mary Bell*
- 2 St. Thomas *Donna Smith*
- 3 ATC The Czar by Torbio *Mike & Steph Barnhart*

### Yearling Dark Fawn & Medium Fawn

- 1 High Octane by Torbio *Mike & Steph Barnhart*
- 2 MFI Peruvian Luster *Jackie Donaldson*
- 3 Ameripaca's Chelsea *Caroline Mixon*

### Champion Dark Fawn & Medium Fawn

- C Ameripaca's Accoyo Emerald Cut  
RC St. Thomas

### Juvenile Light Fawn & Beige

- 1 Ameripaca's Periwinkle *Joe & Kathy Williams*
- 2 Ameripaca's LeAnn *Ben & Linda Fisco*
- 3 ATC Dulce De Leche *Mike & Steph Barnhart*

### Yearling Light Fawn & Beige

- 1 MFI Peruvian Rosita *Bill & Valaen Clapsaddle*
- 2 Lord Cicero McMatley *Clif Exley & Ernesto Matos Jr*
- 3 Ameripaca's Gazella *Jackie Donaldson*

### Champion Light Fawn/Beige

- C Ameripaca's Periwinkle  
RC MFI Peruvian Rosita

### Juvenile White

- 1 Benchmark's Accoyo Twisted Taffy *Barrie Lynn Wood*
- 2 Snowdrop *Marie & Sara Finan*
- 3 ATC Torbio's Sweetheart *Bill & Valaen Clapsaddle*

### Yearling White Females

- 1 Ameripaca's Opportunity *Daphne Aurness*
- 2 HCLA Pebbles *Daphne Aurness*
- 3 HCLA Summer Day *Daphne Aurness*

### Yearling White Males

- 1 ATC Magnum by Torbio *Mike & Steph Barnhart*
- 2 Torbiago *Barbara & Jerry DuVall*

### Champion White

- C Ameripaca's Opportunity  
RC HCLA Pebbles



As we enter the autumn months in North America, my thoughts drift to concerns for care and management of livestock during the often-harsh environmental conditions of winter. In general, llamas and alpacas are well suited to cooler temperatures. After all, winter in the Andes can be trying on the soul if one is not prepared for it. However, camelids are susceptible to extremes of environment, hot (hyperthermia) or cold (hypothermia). The highest risk animals on the farm are very young, very old, very thin, or diseased camelids.

Perhaps the biggest concern we have for hypothermia are newborn crias. Crias are born without the stores of fat needed from which to draw energy to maintain body temperature. Newborns are dependent on the dam's colostrum and milk to provide glucose, fat, and protein. Early and frequent access to these nutrients are critical for the cria to survive the first few days of life. Without the milk fat, crias have a limited ability to maintain body temperature and blood glucose, both of which are necessary to survival. When crias are exposed to extremes of temperature, they must burn energy at a much higher rate to maintain body temperature and the remainder of the body systems may become starved. At some point, the cria is unable to ingest adequate milk to survive and hypothermia begins. These crias are often found down in the pasture in a cushed position with the head and neck extended in front of them on the ground. This posture is designed to close off all areas where heat is lost: around the tail (perineum), between the legs (axilla and groin), the underside of the belly (ventral abdomen), and the base of the neck (sternum and thoracic inlet). At this point and if body heat and energy are not restored quickly, the cria will die from hypothermia and hypoglycemia (low blood glucose) within a few hours.

The veterinary community has spent considerable time and energy evaluating risk factors and developing prevention strategies for heat stress. This is time well spent but we must consider both sides of the coin. Several years ago, a new farm lost several alpacas to heat stress. The farm did not have adequate shade and had not sheared the alpacas. When the peak daytime temperatures rose above 90 F and humidity climbed to 80 %, the alpacas could no longer tolerate the extremes

and several died before intervention could be instituted. The most significant factor seemed to be that the night time temperature did not fall below around 80 F. Thus, the alpacas could not exhaust the heat build up from the day before. This is bad when you are wearing an alpaca sweater! The next year, the farm manager was determined not to succumb to the same problem and the alpacas were shorn in April of the next year. Unfortunately, a bitter cold spell including freezing temperatures and snowfall hit that area late in April. Eight alpacas were hospitalized for hypothermia and, fortunately, all were saved. I enjoyed watching them walk around with Ohio State sweatshirts on!

These lessons are simple: management and husbandry practices greatly influence an animal's ability to thrive. Consider your farm in light of the following tips for prevention of hypothermia:

**1. Shelter:** Camelids must be provided with a shelter from which they can seek protection from environmental extremes. These facilities should have sufficient width, length, and height to allow protection from wind. If three-sided shelters are used, a portion of the open side may be enclosed to provide a more effective windbreak. The orientation of the shelter should be such that the open side is not presented to prevailing winds (e.g. in Ohio, shelters face southeast to brace against northwesterly winds). Our research has shown that llamas and alpacas will "loaf" (referring to relaxed cushioning rather than seeking shelter for protection) in shelters that provide approximately 36 square feet per animal. During environmental extremes (e.g. cold below 20 F, high wind, hard rain, sleet/ice, heavy snow) llamas and alpacas will utilize shelters at a rate of 18 to 24 square feet per animal. Inadequate shelter space will cause animals to be "left out" without protection from the environment.

**A. Remember** - the single most important toll to prevent hypothermia is to stay DRY. The second most import is to protect against wind. WET + WIND = HYPOTHERMIA. Thin and young and old animals are the most susceptible to these effects.

**2. Bedding:** Bedding should be sufficient to help camelids close off their natural thermal windows. Remember, in summer we are trying to increase the thermal window. In winter, our goal is to decrease this thermal window. I prefer straw for

this purpose. Straw is inexpensive, clean enough to use for birthing areas, has adequate insulating features, and can be easily cleaned from the floor and fiber coat.

**3. Water:** Water is a critical nutrient in all seasons. Ingestion of water fluctuates with the temperature of the water. When water is near freezing or frozen, water intake is decreased. Insufficient water intake causes decreased feed intake and the ability to regulate body temperature becomes impaired. In lactating females, milk production suffers and crias will fail to gain weight or will loose weight. If passive waterers are used (e.g. buckets, troughs), the water should be refreshed daily or several times a day as needed. I prefer heated automatic waters to optimize access and decrease labor.

**4. Feed:** During extremes of cold, camelids have a vital need for energy. I am often asked to consult on farms during winter months because females are loosing weight, crias are not gaining weight, or hypothermia cases have been seen. Many of these problems can be tied to inadequate winter nutrition. Grain feeding may be increased to provide rapidly metabolizable energy sources, but this must be done cautiously. Over feeding of any grain source can cause acidosis in the fermentation chamber (C1) of the stomachs and this will exacerbate the problem. Corn is the "hottest" grain in that it provides the most readily fermentable carbohydrates of the cereal grains, but this also makes corn the most risky for causing acidosis. I prefer to add oats to a winter ration because this feed provides more fiber than corn and is less prone to acidosis. Example: if a herd is feeding a commercial camelid pellet ration at 0.5 lbs per head per day, oats may be added at 0.5 lbs per head per day to increase energy intake. The addition of the oats should occur slowly over two weeks to allow the flora of C1 to adapt to the change in diet. Hay should be analyzed before winter months. I prefer to test each new shipment of hay and make acceptance of the hay contingent upon this analysis. Total digestible nutrient content of the hay should exceed 55% and is most desirable to exceed 60% for winter forage. I recommend that every animal in every herd have a BCS (body condition score) done every month. Loss of body condition score should be addressed quickly unless it can be explained (e.g. females are expected to loose 1 to 1.5 BCS during the first 2 months of lactation).

**5. Feeding:** Providing adequate quality of feed is only one-half of the story. Providing adequate access to feed is the other. In regions where heavy snowfall occurs and in areas where ice storms are common, camelids must be able to gain access to feed. In these situations, I prefer to offer feed inside of the shelter so that animals are not required to walk to a different location to get feed. Camelids will opt for protection against environmental extremes rather than eat or may eat for fewer hours each day. For farms that have barns this is rarely an issue. Farms using three-sided shelters may have a more difficult time providing sheltered feed.

**6. Ventilation:** During summer months, high ventilation is desired. During winter months, ventilation remains important. When shelters are "battened down" for the winter, we must be careful not to over-insulate the interior. Camelids tend to urinate and defecate inside of shelters. Who can blame them - nobody likes a draft in the bathroom! If ventilation is too restricted in winter housing, ammonia and other gases from the dung pile buildup and can contribute to winter pneumonia and poor thriving crias. As always, hygiene is the key to success.

**7. Shearing:** Talking about shearing for winter seems strange at first, but what I am referring to here is 'when did you shear and how is your fiber growing'. Last year, I worked with a herd that had not been able to shear until late in July. Although nutrition was adequate, there was not much room to spare. The fiber coats had not grown well enough before winter to provide adequate protection from the wind. Examination of the herd revealed a suboptimal herd BCS (average 4 out of 10) and approximately 25% of the herd had subnormal rectal temperatures (average of hypothermic alpacas 98 F). Although this temperature was not acutely critical, the chronic environmental stress decreased immunity, decreased lactation, and caused weight loss. Nutrition and sheltering had to be addressed quickly and within a few weeks the problem had stabilized. Unfortunately, the affected alpacas required over 1 year to fully recover.

**8. Maternity:** Two important concerns for newborns are cleanliness and warmth. Females have been known to give birth in open fields in the snow when they do not have access to a clean shelter in which to birth. These crias are at high risk for hypothermia if shelter is not provided. In our research, females that had access to a 14 x 16 foot shelter rarely gave birth inside of that shelter in either winter or summer. We assume that the reason for this was the presence of a dung pile in the shelter and a perception by the female that the environmental stress was too

great. When females had access to a 25 x 60 foot shelter, the females always gave birth inside of the shelter despite the presence of two dunging areas within the shelter. We assume that the surface area of the shelter was large enough to allow criation and overcome the females concern for the presence of dung piles.

**9. Stocking densities:** Stocking density refers to the number of animals per unit area. I recommend that farm stocking density be no more than 5 llamas or 7 alpacas per acre of land for grazing to maximize forage utilization and minimize parasite burdens on pastures. In winter, grazing is not an issue for most farms because the animals will voluntarily congregate around hay feeders and shelters. Hygiene becomes a vital concern. Our research has shown that a minimum of 12 inches is required for bunker feeders to allow simultaneous feedings. However, this results in failure to feed by many of the submissive animals. Bunker space of 24 inches per head resulted in fewer submissive animals being excluded. Hay feeder space is equally important. Camelids may spend 8 hours or more feeding on hay each day. If limited feeder space is available, submissive animals will not be able to ingest enough hay to maintain weight and will be more prone to hypothermia.

**10. Parasites:** Often, winter is thought to provide a "reprieve" from parasites that can not survive the harsh cold and failure of eggs to hatch into infective larvae. This is true for most intestinal parasites. However, winter is fertile ground for transmission of some parasites (e.g. coccidia, whipworms, lice, mange, skin fungus) because of close animal-to-animal contact and diminished hygiene. Heavy parasite burdens cause stress to the animal and may decrease their ability to tolerate environmental extremes.

Treatment of hypothermia involves warmth, nutrition, and correction of underlying problems (e.g. milk supplements for crias whose dam is not lactating). Critical hypothermia occurs when core body temperature drops below 90 F. Consider the following treatments:

**1. Protection.** Get the animal into a well-insulated, preferably heated area.

**2. Warmth.** Wrap the animal in heated blankets. Using a heat lamp in a cold stall can be detrimental because the direct heat causes dilation of the surface blood vessels, which can exacerbate heat loss. By incubating the animal in a warm blanket, heat loss is prevented.

**3. Time.** Avoid too rapid heating. Warming a critically cold animal up too quickly can cause as much harm as the hypothermia because of altered blood flow and liberation of potassium

and organic acids that built up during the period of poor blood flow caused by hypothermia. These can cause the heart to stop!

**4. Energy.** Intravenous administration of electrolytes and glucose are most useful. If an IV line is not available, glucose or other carbohydrate syrups (e.g. honey, fructose, and maple syrup) may be fed orally or may be inserted into the rectum. Yes, that's right! Camelids can absorb glucose from the rectum if there is adequate blood flow. All liquid supplements should be warmed to approximately 95 to 100 F.

**5. Oxygen.** Always a useful supplement to debilitated animals, but particularly useful to critically hypothermic animals.

**6. Steroids.** This is controversial because of camelids sensitivity to glucocorticoids. Our research suggests that dexamethasone should not be used in camelids. Prednisone type steroids may be safely used for short periods at modest dosages (e.g. not exceeding 1 mg/kg twice daily for 2 days).

**7. Ulcers.** I recommend prophylactic use of antiulcer medications for high-risk camelids. I prefer omeprazole (2 to 4 mg/kg, orally, once or twice daily).

**8. Nutrition.** Encourage the camelid to eat themselves back to health.

**9. Stress.** Companion animals are always welcome! Treat any underlying disease, parasites, etc.

**10. Recovery.** The effects of damage from hypothermia may not be fully realized for a day or two. These animals must be kept under constant vigil for 3 to 5 days to be sure other complications will not be suffered (e.g. diarrhea, depression, etc.).

Although heat stress is of great concern to camelids residing in North America, cold stress is equally important. Forethought and preparation will help you keep your llamas and alpacas from being caught with their fur coat down!

This continuing education article is provided by the International Camelid Institute. Consider making a donation today by contacting Karen Longbrake at phone 614-688-8160, fax 614-292-7185, e-mail longbrake.1@osu.edu, or [www.internationalcamelidinstitute.org](http://www.internationalcamelidinstitute.org).

David E Anderson, DVM, MS, DACVS  
Head and Associate Professor of Farm Animal Surgery  
Director, International Camelid Initiative  
Ohio State University, College of Veterinary Medicine  
601 Vernon L Sharp Street, Columbus, Ohio 43210  
Phone 614-292-6661 Fax: 614-292-3530  
E-mail: [Anderson.670@osu.edu](mailto:Anderson.670@osu.edu)



**Magical Farms, Inc.**  
 5280 State Route 83  
 Litchfield, Ohio 44253  
 (330) 667-3233  
 www.alpacafarm.com  
 info@alpacafarm.com

Presorted  
 First Class  
 U.S. Postage  
 PAID  
 Permit No. 580  
 Manhattan, KS  
 66502

**Mark Your Calendars**  
**2006 BREEDER'S CHOICE™**  
 AUCTION & FUTURITY  
**Oct. 6, 7 & 8, 2006**



**Thank You for Your Generosity!**  
**\$22,200**



**HURRICANE KATRINA RELIEF DONATION**

The breedings to Magical Farms Jericho Lot A, any Ameripaca herdsire Lot B, and Magical Farms/Majestic Meadows Jeremiah Lot C in the 2005 Breeder's Choice Auction brought in \$22,200 which will be donated to the Deep South Alpacas Connection to assist southern breeders who were affected by the hurricane.