

CONNECTION

Summer 2022



What's Inside?

- * **EVENTS:** Calpaca Autumn Fleece Extravaganza, Gold Country Gathering
- * **HEALTH:** Barberpole Worm, Llama Antibodies, Valley Fever, Vital Signs and Exam Parameters
- * **MEMBERS:** Education, Events, Helpful Resources, In Every Issue
- * **SEASONAL:** Evacuation and Disaster Planning Resources, Heat Stress, Shearing, Wildfire



California Alpaca Breeders & Owners Association
Connecting members to Calpaca, the industry and each other

August 06, 2022



In California's tradition as a pioneer of progress, Calpaca was the first, and the oldest, regional alpaca

association in the Northern Hemisphere. Past and current members of Calpaca have been leaders in the American alpaca industry since 1989.

Calpaca represents alpaca owners, breeders, and enthusiasts in California and beyond. We promote the well-being of alpacas and education of the public about alpacas, alpaca fiber and alpaca products. We support each other through shared information and experiences. We host meetings, speakers and shows for the benefit of members and the public.

Calpaca membership meetings are held quarterly on the second Saturday of the month. *We invite you to join us!*

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VIRTUAL Quarterly Membership Meeting 08.13.2022

Information on accessing meeting will be sent prior to meeting date.

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Alpaca Research Foundation (ARF)

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info@calpacaboard.org

Calpaca Facebook

Facebook.com/groups/Calpaca

Message from the President

Greetings Calpaca Folks,

Here we are, entering the eighth month of 2022. Over one-half of the year is behind us. As a group, Calpaca folks have been having quite the year. I am enjoying seeing the pictures of the spring crias. So many hopes and dreams are represented in these births. Also, many of our Calpaca members have been experiencing a very successful show season. Congratulations to all.

The crazy hot weather, dwindling water supplies and early fires indicate summer is definitely here. Some of our members are experiencing water shortages or regulation. Many of us find ourselves keeping our emergency scanners active, listening for the sound of sirens, and scouring the horizon for signs of smoke. I don't know about you, but I would like to fast forward to fall.

Speaking of fall... Calpaca has two events instead of the usual Gold Country Gathering halter and fleece show on our event calendar. One of them is actually on the cusp of fall, and that is the new Calpaca Fall Fleece Extravaganza. This show is the result of separating the fleece show from the Gold Country Gathering Halter and Walking Fleece Show. A huge thank you to Karen Kelly of Arapaho Rose Alpacas for hosting the event. Karen volunteered to donate the use of her newly renovated barn for the show, saving us from the expense of renting a venue.

Our last major event of the year is the Gold Country Gathering Halter and Walking Fleece Show. Note: We have a new location. As beautiful as the Grass Valley Fairgrounds is, and as much as we enjoyed spending time among the pines and enjoying the fresh mountain air, we were faced with many challenges with the venue through the years. A couple of those challenges were the direct result of fires in the area. These challenges were completely outside the control of the venue and Calpaca, and resulted in the show being cancelled at the last minute. Basically, based on past experience, the board felt there was too much of a risk to continue keeping the show in Grass Valley. Many factors were taken into consideration, and a new venue was selected for our fall show.

We hope you will continue supporting Calpaca and the show by registering for the 2022 Gold Country Gathering being held at the Glenn County Fairgrounds in Orland, CA. Orland is on Interstate 5 approximately 100 miles north of Sacramento. The fairground is just a hop, skip and a jump from the Interstate.

We are looking forward to the upcoming events that will close out our 2022 show season.

In the meantime, stay cool and safe,



Dianna Jordan, 2022 Calpaca President
530-744-7474

president@calpacaboard.org

www.alpacasofsomersetfarm.com

CALPACA UPCOMING EVENTS

* See website for event details *

Date	Event	Host/Location
08.05	Tap Take-over	Pageo Lavender Farm, Turlock CA
08.05	Yoga with the Alpacas	Turlock CA
08.06	<i>Connection</i> Summer Issue Publication Online	Calpaca.org > Member Services
08.13	Quarterly Membership Meeting	Virtual Meeting
08.13	Alpaca Fleece Sale—LIVE	Facebook
08.21	Open Farm Days & Yarn Barn Gift Shop	Sierra Rose Alpacas, Grass Valley CA
08.26	Education with a Destination Auction	Crescent Moon Alpaca Ranch, Terrebonne OR
09.04	Open Farm Days & Yarn Barn Gift Shop	Sierra Rose Alpacas, Grass Valley CA
09.10	Arcata Natural Fiber Fair	Arcata Community Center, Arcata CA
09.10-11	Calpaca Autumn Fleece Extravaganza	Arapaho Rose Alpacas, Redding CA
09.15	Sierra NV Yarn Crawl Open Farm & Yarn Barn Gifts	Sierra Rose Alpacas, Grass Valley CA
09.24-25	National Alpaca Farm Days Farm Tours	Macedo's Mini Acre, Turlock CA
09.24-25	National Alpaca Farm Days	Menagerie Hill ranch, Vacaville CA
10.01-02	Annual Lambtown Festival	Dixon May Fair Grounds, Dixon CA
10.15-16	2022 Gold Country Gathering	Glenn County Fairgrounds, Orland CA
10.22	<i>Connection</i> Autumn Issue Submissions Due	editor@lillette.net
11.05	<i>Connection</i> Autumn Issue Publication Online	Calpaca.org > Member Services
11.12	Annual Business and Quarterly Membership Meeting	Virtual Meeting

New Show!

Calpaca Autumn Fleece Extravaganza

(Formerly part of the Gold Country Gathering)
Sept. 10th - 11th, 2022

Welcome to the Calpaca Autumn Fleece Extravaganza Show

Registration is Open!

Early Bird Reg. Closes: Aug. 8, 2022

Registration Closes: Sept. 1, 2022

Fleece Check in: Sept. 9, 2022

Location: Arapaho Rose Alpacas
10702 Arapaho Drive
Redding, CA 96003
www.arapahorose.com

Judge: Beverly Brehm

Superintendent: Cheri Seiler, 304-496-9946, show.super.seiler@gmail.com

Host: Karen Kelly, 530-949-2972, kskelly1@att.net

Event Manager: Russ Mello, 530-941-9871, russ.mello46@gmail.com

Register online through: www.Alpacareg.com

Additional Show Details: www.Calpaca.org





2022

HALTER AND WALKING FLEECE SHOW

October 15 & 16 (Check in October 14)

Same Show -- New Location

Glenn County Fairgrounds Orland, CA

221 E. Yolo St Orland, CA 95963

530-865-1168

JUDGES AND SUPERINTENDENTS

HALTER Judging 50% Fleece, 50% Conformation

Judge: Stephanie Glyptis

Full Fleece, Bred and Owned, Small Breeder with Championships and Judge's Choice (if minimums are met)

Group Classes: Get of Sire, Produce of Dam, Breeders Best Three

Superintendent: Cheri Seiler, 1-304-496-9946,

show.super.seiler@gmail.com

WALKING FLEECE

Judge: Diana Timmerman

Walking Fleece: with Color Championships (if minimums are met)

Superintendent: Harold Seiler, 1-304-496-9946,

show.super.seiler@gmail.com

Event Manager: Russ Mello: 1-530-941-9871, russ.mello46@gmail.com

Heat Stress in Camelids

What are you doing to cool your camelids; i.e., llamas, alpacas, vicunas, guanacos, or camels? Do you realize that heat stress is, quite literally, a too-frequent killer of camelids. Our heat and humidity combine to create a situation where the animals' internal thermostats can't handle the load and just quit. It's as if their body temperature continues to climb, but there's no shut-off. It's *critical* to keep them from reaching that point! Llamas and alpacas that go down with heat stress often die. These are our practices that have proved effective over the years.

SIGNS OF HEAT STRESS

If you notice these behaviors, *take action immediately. Call your vet!* Again, heat stress can be fatal! Symptoms include:

- Lethargic, depressed attitude
- Remaining in a kushed (sternal recumbent) position, unable or unwilling to get up
- Uncoordinated and/or stiff movements; trembling or shaking
- Elevated temperature over 104°F
- Heart rate over 90 beats per minute
- Flared nostrils, breathing more intensely than usual or over 40 breaths per minute
- Drooping lower lip; drooling or foaming
- Diminished interest in eating or drinking water
- Swelling of testicles ([image](#))

HOW TO PREVENT HEAT STRESS

It's always better to prevent it than treat it! Here at the Southwest Llama Rescue (SWLR) sanctuary in Kerville, Texas, we have several elderly llamas, some with injuries or other damage to their bodies, others who have been neglected. These are the ways we combat Texas' summer "death by heat stress":

- **Hosing:** Most llamas and alpacas *love* getting hosed off, but keep it on the belly, legs and underside of the throat. You may need do that more than once during the heat of the afternoon.
- **Wading Pools:** We put out wading pools and change/add water every couple of days. Some animals will sit in them, some will ignore them, and some will just get their feet wet. You can find these pools at grocery stores, Home Depot and Lowes, dollar stores, etc.

** Caution for herds with pregnant females:*
Don't put out wading pools! How terrible it would be to discover that a cria had been dropped into the pool during delivery, drowning in just a few inches of water.

- **Misters and sprinklers:** String pool/patio misters, like the ones you can get from Home Depot or Lowe's, along the fence line. Keep it in the shade and lower than belly height. (Consider being out in high temperatures wearing a buttoned-up wool coat!) Sprinklers set to low so they will reach only to belly are also great, as are sprinkler hoses.

Heat Stress in Camelids, cont.

We set hose timers to come on in the hottest part of the day, beginning at early afternoon, again mid-afternoon and again early evening; e.g., 1pm - 4pm - 7pm, running at least 15-20 minutes each time.

- **Fans:** Moving air is hugely helpful. If you have or can get electricity to your shelter or barn, big fans set to blow at body height can be run all day to keep the area cool and give the animals a place to cool off. Be sure you don't set the fans on the ground where hay or such can be sucked into the fan. Always be mindful of them spewing out pebbles, catching fire with debris caught in the motor, etc.
- Provide plenty of easy-access *fresh* water and include electrolytes in summer. You can get equine electrolytes at any livestock supply store. We use tank float valves in large rubber tubs. Since we change water at least every other day to prevent mosquito hatch, it's easy to add a scoop of electrolytes each time.

WHAT TO DO WHEN HEAT STRESS STRIKES

- A camelid that lies on its side for too long impacts the internal organs surprisingly quickly, and that, too, can be fatal. If the animal goes down on its side, roll in back up into the "kush" position—which is the usual sternal recumbent position they rest in—and put a bale of hay on either side to keep her propped up.
- Get her into shade, or put a sun shade over her—a 4x6' canopy, that you can find at

stores like Walmart or Target, is quick, easy, and relatively inexpensive. Just set it up over her to block as much sun as possible without blocking moving air.

- Your vet may instruct you to give Banamine, generally 3cc administered subcutaneously.
- It is very important to give fluids with electrolytes (equine electrolytes powder, Pedialyte or sugar-free Gatorade in a pinch) given by 60cc syringe several times during the day until she's drinking on her own.
- And get your prayer, holistic healing, white light and all-things-good circles activated!

It may seem like a lot, but with adequate precautions, you can hopefully avoid heat stress, or at least mitigate the damage and keep them alive. It's really that serious. You can find more information online by doing a "heat stress in llamas or alpacas" search. One of the best I've found is the International Llama Registry's brochure #11, [Heat Stress in Llamas](#). (See next page for a few I find instructive.)

Stay safe, be well, and enjoy your summer!



L'illette Vasquez, Director/Coordinator
Southwest Llama Rescue, Inc., Kerrville TX
SouthwestLlamaRescue.org | swlr@lillette.net

Southwest Llama Rescue, Inc. / Kerrville TX

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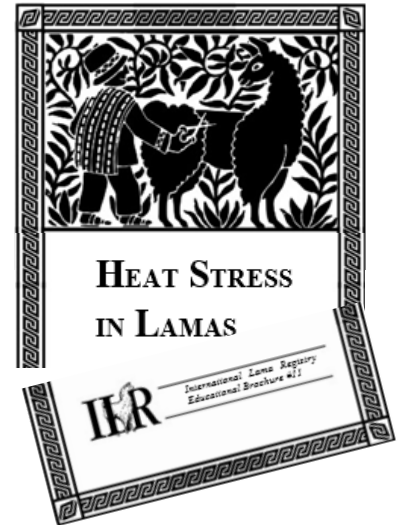
facebook: Southwest Llama Rescue, Inc. (SWLR)

or Camelid Rescue Coalition, Inc. (CRC)

SWLR non-profit 501(c)(3) EIN #20-1580766

Additional online resources:

- [Heat Stress | Yellow Wood Llamas, Inc. \(ywl.com\)](http://www.ywl.com)
- [Heat Stress \(shagbarkridge.com\)](http://shagbarkridge.com)
- [Heat Stress in Working Llamas -- initial research report by Gwen Ingram \(lostcreekllamas.com\)](http://lostcreekllamas.com)
- [Heat Stress in Camelids \(azllamarescue.org\)](http://azllamarescue.org)
- [Heat Stress | Yellow Wood Llamas, Inc. \(ywl.com\)](http://www.ywl.com)
- [Preventing Heat Stress in Llamas and Alpacas | Urban Livestock & Equine Veterinary Services \(urbanlivestockvet.com\)](http://urbanlivestockvet.com)



Fun Fridays by Steve Laube

10 quotes to lighten your day. None are original, so don't blame me!

- ◇ When everything's coming your way, you're in the wrong lane.
- ◇ It is not my fault that I never learned to accept responsibility!
- ◇ Sometimes I wake up grumpy; other times I let him sleep.
- ◇ Ham and eggs—a day's work for a chicken, a lifetime commitment for a pig.
- ◇ I don't deserve this award, but I have arthritis and I don't deserve that either.
- ◇ You have the right to remain silent. Anything you say will be misquoted, then used against you.
- ◇ Whoever said anything is possible never tried slamming a revolving door!
- ◇ "When I was a boy, the Dead Sea was only sick."
— George Burns
- ◇ "Light travels faster than sound. This is why some people appear bright until you hear them speak."
— Alan Dundes
- ◇ "I want my children to have all the things I couldn't afford. Then I want to move in with them."
—Phyllis Diller

Fun Fridays – July 22, 2022
The Steve Laube Agency

Barberpole Worms and Alpacas

An AOA Academy Article

By Lisa Williamson, DVM, MS, DACVIM
Associate Professor of Large Animal Medicine

Haemonchus contortus, also referred to as the ‘barberpole worm,’ is achieving notoriety as a major health threat to alpacas. In temperate parts of the world, *Haemonchus contortus* is a major killer of sheep, goats, llamas, and alpacas. This worm does three things extremely well: it drinks the host’s (alpaca’s) blood, it makes lots of eggs (females lay up to 500 eggs per worm per day), and it is highly adaptable in the face of challenge by dewormer treatments. Barberpole worms reside in the glandular aspect of the third compartment, where they are visible to the naked eye on necropsy. The female worms are responsible for the name, “barberpole worm,” as the white and red intertwined structures are the ovary and digestive tracts, respectively. The males are smaller and appear red.

A recent study conducted on privately owned alpacas in the southeastern United States showed that *Haemonchus contortus* was a common isolate on alpaca farms, but the amount of disease in the herd associated with its presence varied widely, from practically no recognizable disease among the herdmates, to observation of severe anemia, weight loss, and death among herd members. Those observations illustrate an important point: parasitism is a natural state, but disease from parasitism is not. Low-level burdens of most parasites are well tolerated by hosts such as alpacas. Inter-

vention is necessary when the burden is significant enough to cause recognizable health issues. The clinical disease caused by heavy *Haemonchus contortus* burdens is termed “haemonchosis.” Since this worm feeds on blood, the clinical sign that distinguishes it from other nematode infections is profound anemia (blood loss). Clinically, inner eyelid pallor is noticed in clinically compromised alpacas. Blood work reveals a low hematocrit, and reduced blood proteins. Weight loss/poor body condition also reflects a chronic health problem.

Risk factors associated with clinical disease include weather factors and management factors. Wet, warm conditions favor transmission of *Haemonchus contortus*. During periods of drought, transmission is low, and producers are often lulled into a sense of false security. In some herds that we followed for inclusion in the study for several years during a period of sustained drought, haemonchosis was not apparent until several weeks after a period of heavy rainfall.

That finding was not surprising. Water liberates infective larva from eggs in dry fecal pellets, and also disperses fecal material and larvae away from the communal dung piles, thereby contaminating large areas. In parts of the country where temperatures get into the freezing range for sustained periods, transmission declines significantly. The onset of cold weather triggers a decrease in egg production, and developing worms in the lining of the third compartment become dormant over the

cold winter months. Development to adult blood-feeding worms resumes in the spring.

Management factors associated with greater risk of clinical disease from haemonchosis include high pasture stocking rates, lax sanitation practices (dung pile are not being removed at regular intervals, and spreading feces on pastures), having pregnant/lactating females and young animals, feeding suboptimal dietary protein sources, and lack of biosecurity. You might say, well heck, we need to make babies to be profitable, and you will not get an argument from me! However, you need to realize that production needs to be accompanied by management practices that reduce risk of parasitism. In particular, I want to emphasize that moving animals from farm to farm without utilizing quarantine and testing/treatment protocols prior to allowing an alpaca into the herd is very risky, as resistant worms can be spread through this practice.

Our ability to kill these worms with dewormer agents is becoming increasingly more challenging. We term this phenomenon “**anthelmintic (dewormer) resistance**” (see page 14). As more and more of the worms in a given population become refractory to treatment, the level of resistance increases. Laboratory tests can detect resistance in a worm population when it is in relatively early stages, but by the time 50% or more of the worms are resistant to the dewormer, the producer will recognize the treatment failure based on poor response in the animals.

Multi-anthelmintic resistance (i.e, resistant to

more than one class of dewormers) in sheep and goat *Haemonchus contortus* isolates has reached critical levels in many parts of the world, including my backyard in north Georgia. Camelid *H. contortus* isolates are showing similar trends. Larval developmental assays were performed on *Haemonchus contortus* isolates harvested from 32 camelid farms in the southeastern United States by Dr Ray Kaplan’s laboratory at the University of Georgia College of Veterinary Medicine. This work was funded by the Morris Animal Foundation, and by the Alpaca Research Foundation.

The results were nothing short of alarming: dewormer resistance to the benzimidazoles (white dewormers like Safe-Guard®, Panacur®, Valbazen®), ivermectin, levamisole, and moxidectin was found on 100%, 88%, 22%, and 22% of the farms, respectively. Total anthelmintic resistance (resistance to all these dewormers) was identified on *one* camelid farm!

A “take home” message is that moxidectin would be a reasonable choice for treating an alpaca suffering with haemonchosis, whereas treatment with ivermectin or a white dewormer (benzimidazole) is less likely to be effective in situations where the dewormer sensitivity pattern is unknown. We currently recommend that moxidectin be given orally at a dose of 0.4 mg/kg, and that a product formulated for oral use be used, i.e., Cydectin Oral Sheep®, rather than a moxidectin product formulated for topical use.

Nonselective use of moxidectin on a whole-herd basis is strongly discouraged, as resistance to this

dewormer will be the end result! This is not a theoretical statement. The evolution of small ruminant *Haemonchus contortus* isolates from moxidectin-sensitivity to moxidectin-resistance has been documented, and it only took a couple of years of nonselective use of moxidectin to render it useless.

The reasons why the problem of dewormer resistance continues to emerge in *Haemonchus contortus* isolates goes back to basic biology: the process of natural (or in our case, unnatural) selection! Every time you “deworm” an alpaca, you place the worms in that alpaca under selection pressure.

The old practice of deworming all the alpacas on the farm at the same time for *Haemonchus contortus* control has been shown to be a very poor practice, as it rapidly eliminates all the susceptible worms, leaving only resistant worms to repopulate. Insult is added to injury by the recommendation of moving the newly treated herd to a “clean” pasture (field with little parasite contamination), as only resistant worms will contribute to the next generation of worms in that location. Believe me, you will not kill them all!

The currently recommended strategy for control of *Haemonchus contortus* revolves around the practice of frequent hands-on herd checks, and dewormer treatment ONLY of animals with signs of disease (not the whole herd). Selective use of an effective anthelmintic successfully reduces pasture contamination, alleviates disease, and does one more crucial thing: it preserves some worms

that are still susceptible to the dewormer. These worms will pass on this drug susceptibility to subsequent worm generations. These susceptible worms that were spared exposure to a dewormer are called “refugia.” The size of the refugia influences the rate at which dewormer resistance develops; the larger the refugia, the slower the evolution of dewormer resistance.

Selective deworming decisions are made on physical and/or laboratory observations. Since *Haemonchus contortus* is a voracious blood feeder, anemia is a key clinical sign. Additionally, body condition is a good indicator of overall health, including parasitic burdens. In a future issue, we will discuss how to physically assess the herd in more detail, and discuss laboratory parameters that are relevant to control of *Haemonchus contortus* in alpaca herds, including how to determine if a dewormer is still effective, or not.

© Lisa Williamson, DVM, MS, DACVIM

[AOA Academy Article](#)

Additional Information Online

- [Images of barber pole worms](#)
- [The Barber Pole Worm](#) on [HeftyGoatHollerFarm.com](#) by Kendra S. (2020)
- [Barber's Pole Worm in Alpacas](#) on [CRIAgenesis.com](#) by Jane Vaughan, BVSc, PhD, MACVSc
- [Barberpole Worm \(*Haemonchus contortus*\)](#) by [Shagbark Ridge Llamas](#)

Drug Resistant Worms [excerpt]:

Anthelmintic Resistance is a Growing Concern for Alpaca Owners

by Dr. Lisa Williamson, DVM | AlpacaResearch.org | *Alpacas Magazine, Autumn 2013*

Scientists from the University of Georgia College of Veterinary Medicine evaluated 32 privately owned camelid (16 alpaca and 16 llama) farms in the southeastern United States to determine if anthelmintic (dewormer) resistance was evident in the **Haemonchus contortus (barberpole worm)** populations on these farms. The Research was funded through the Alpaca Research Foundation and the Morris Animal Foundation. The researchers are grateful to these funding agencies, and in particular, to the wonderful alpaca and llama producers who allowed us to come to their farms and use their animals for the study.

Problems with drug-resistant *Haemonchus contortus* worms have been well documented on small ruminant farms, but prior to this study, it was unclear to what extent this problem existed in camelid herds. *Haemonchus contortus* is a virulent blood-feeding nematode capable of causing weight loss, weakness, anemia, hypoproteinemia (low blood proteins), dependent edema, diarrhea, and in extreme cases, death, in heavily parasitized, vulnerable animals. The camelid study revealed that *Haemonchus contortus* was the primary nematode parasite on all the farms studied, followed in prevalence by ***Trichostrongylus colubriformis***, and ***Nematodirus* spp.**

Larval developmental assays were performed on the *Haemonchus contortus* isolated from these 32 camelid farms to determine sensitivity or resistance to commonly used dewormers. The

larval developmental assay (LDA) is performed in a laboratory by isolating worm eggs from fecal samples, and by then hatching out the larvae within special test wells, to which varying concentrations of a dewormer have been added. The LDA specifically tests the efficacy of the 3 main classes of dewormers represented by levamisole, ivermectin, and thiabendazole. Resistance or sensitivity to moxidectin is deduced based on the ivermectin dose response. The results clearly showed that dewormer resistance was present to some degree on all the camelid farms tested.

In fact, all 32 (100 percent) of the farms had benzimidazole resistant *Haemonchus contortus*. Examples of benzimidazole drugs are fenbendazole (Panacur®, Safe-Guard®), and albendazole (Valbazen®). Ivermectin resistance was evident on 97 percent of the farms. Levamisole and moxidectin tested much more favorably; only 22 percent of the farms' resident *Haemonchus contortus* isolates were resistant to these two dewormers.

Of interest was the finding that 97 percent of the farms had resistance to more than one dewormer! Even more sobering was the finding that four farms had *Haemonchus contortus* that was resistant to ivermectin, levamisole and benzimidazoles. Moxidectin was the only dewormer that tested as still fully effective on those 4 farms.

[Continues [HERE](#)]

Valley Fever... It's in the Dirt!

By Sandy Schilling | First published on RMLA.com

Living in Phoenix, Arizona, all my life, I remember hearing about Valley Fever from only a few people as a kid. As an adult, I became extremely aware of Valley Fever because it affected my animals. Valley Fever is so common now that doctors say that if you have lived in Arizona for any length of time, you've probably had it and thought it was the flu or some other malady. Valley Fever became so prevalent in my family dogs that I could diagnose them before the blood test showed a positive result. Unfortunately, I had NO IDEA a llama could also be affected until I tragically lost two of the best llamas anyone could have. As a result of my emotional trauma and guilt, I felt compelled to talk to experts to answer some of the common questions that people have about Valley Fever and how it can affect our animals. This information must be shared – especially with Arizona llama owners.

Following are questions I asked Christine Staten, DVM, of the Adobe Veterinary Center in Tucson, Arizona, along with Lisa Shubitz, DVM, with the University of Arizona's Valley Fever Center for Excellence.

What is Valley Fever?

Also called coccidioidomycosis, Valley Fever is a fungal infection caused by the *Coccidioides* spp. fungi which are found in soil regionally in the southwestern United States (especially south-central Arizona and the central valley of California) and in parts of Central America and South America. The term "Valley Fever" refers to both the fungal infection and the range of symptoms

that it causes.



What states have Valley Fever?

Arizona, California, and Texas. A small number of cases are noted in Utah, Nevada, and New Mexico. Human cases have been documented in Washington and Colorado as well.

How do llamas and alpacas get Valley Fever?

Llamas and alpacas contract Valley Fever the same way other mammals can, by breathing in infectious spores that are found in the soil. These spores can be kicked up from the dirt or can be breathed in while they are blowing around in dust and in the wind.

Once the lungs have been exposed to the infectious fungal spores, the lifecycle of the *Coccidioides* fungus continues. The spores take root in the lungs where they grow, mature, and reproduce. If left untreated, they can spread, causing

painful symptoms and health problems throughout the body.

Most humans, and probably even most alpacas and llamas, successfully contain the fungus in the lungs at the beginning of infection and don't get sick.

Is Valley Fever contagious?

Valley Fever is not contagious. It is not spread between people or animals by coughing or any other way. Sometimes multiple animals or humans are affected in a household, but that is more an indication of their common environment.

What signs and symptoms should camelid owners watch for in their animals?

Alpacas are more likely to show few or no clinical signs, while the majority of llamas in one report showed signs of illness. Male llamas are statistically the most likely to get Valley Fever. Male and female alpacas are equally susceptible, though pregnancy may be related to worse outcomes in females.

When animals demonstrate illness, the most common signs are weight loss, coughing, decreased energy, and decreased appetite. Others include lameness, joint swelling, inability to stand or walk, fever, cardiac disease, non-healing skin lesions, brain or spinal cord symptoms, and reproductive issues. Abortions were reported for two alpacas, and five crias (four alpaca, one llama) who were born with Valley Fever from their mothers died. The dams were also usually euthanized or died.

Butkiewicz, Shubitz, *Transbound Emerg Dis*, 2019, Vol 66:807-812

Grayzel, et.al., *Medical Mycology*, 2021, Vol 59(6):571-577

Fernandez, et.al., *J Vet Diagn Investigation*, 2018; DOI:10.1177/ 1040638718777282

How is Valley Fever diagnosed?

Valley Fever is diagnosed by a blood test that checks for antibodies to the fungus. Other tests may also help to diagnose the disease. Tests include complete blood work, x-rays of lungs or affected limbs, aspirates of joints or draining lesions, and biopsies or fungal cultures.

Why are camelids so susceptible to Valley Fever?

The issue is not that they are necessarily more susceptible to Valley Fever, but that we are unable to manage/treat them well with the antifungal medications. Camelids may be more susceptible to spread of the disease throughout the body from the lungs if it is not controlled early. Unfortunately, another issue is that they seem to “hide” their disease until it is widespread, which is very difficult to diagnose and manage.

How is Valley Fever treated? Is the treatment successful?

In dogs and people, Valley Fever is treated or managed generally well with various antifungal medications. That is, unfortunately, not true for our camelids. Our own experiences, as well as the literature reported, suggest that over half of animals that are sick die despite treatment with antifungal medication.

The medications are altered in the forestomachs, making them less able to get into the bloodstream where they need to be to work. In the past, I have worked with Dr. Shubitz on some small trials where we tried to get the blood levels of the medication high enough to try to treat the Valley Fever, but we have not been able to find a consistent medication, dose, or way to give it that gets us what we need. In one of the trials, we used rectal suppositories with the medication to try to bypass the forestomachs. In another trial, we administered oral medications at high doses twice daily. Neither gave us the results we were hoping for. One of the big problems is that there is not a lot of money available to fund studies in camelids as the problem is regional, and there is a relatively small population of camelids in this small area.

A small study of fluconazole in alpacas performed by veterinarians at the Valley Fever Center for Excellence (University of Arizona, Tucson) showed that doses of 10-15 mg/kg/day produced blood concentrations high enough to potentially treat Valley Fever in about half of the animals. This was a pharmacokinetics study designed to understand doses of this drug that have the potential to make alpacas well, but there are currently no studies of the actual efficacy of this medication in alpacas or llamas.

For more details on the study and its results, follow this link to the Valley Fever Center for Excellence:

https://vfce.arizona.edu/sites/default/files/alpaca_for_website.pdf.

Butkiewicz, CD, Shubitz LF, Nix DE. A preliminary study of the plasma concentrations of orally administered fluconazole in alpacas (Vicugna pacos) *J Vet Pharmacol and Ther* 2021:

<https://onlinelibrary.wiley.com/doi/full/10.1111/jvp.12994>

Can the hay you buy cause Valley Fever? A lot of camelid owners buy their hay from out of Arizona to try to avoid Valley Fever.

Hay bought outside of the endemic areas is much less likely to have spores in it than hay grown in endemic areas. However, if your camelids live in the endemic area, feeding them hay from non-endemic areas will likely not reduce their chance of acquiring Valley Fever because they are already breathing it from the soil. The opposite is potentially more concerning: bringing feed grown in soil from endemic areas to an area without Valley Fever may potentially expose your alpacas and llamas to spores trapped in the dust of the hay.

What can camelid owners do to prevent Valley Fever?

Move the animals out of the endemic areas. Unfortunately, there is no vaccine and no way to control the spores in the environment.

For more information:

For a slide show presented by Dr. Lisa Shubitz at Calpaca symposium 2020, follow this link:

https://vfce.arizona.edu/sites/default/files/cocci_in_sacs_2020_for_web.pdf.

Shearing Multiple Years of Fleece Growth

by Cath Lukin | Braidwood Alpaca Farm | Larbert, New South Wales, Australia

We sometimes get the question, “Why do I need to have my alpacas shorn each year?” It is most concerning, of course, when new alpaca owners are asking! Shearing is a critical requirement of alpaca care.

Alpaca fibre retains twice the warmth of sheep wool. Would you wear wool jumpers, adding one atop the other for every year not shorn, throughout a hot—and in some locales, humid—summer? I’m guessing that is a “No!”

Shearing also reveals occasional skin conditions such as rain scald, eczema, fungal issues or abscesses. Shearing allows the skin to heal by exposing it to dry air and sunlight for vitamin A absorption. Sometimes, bits of wire discovered in the fleece have bored holes into the skin. And sadly, at an outside shearing job this year, a young alpaca had horrendous fly-strike in his leg and needed to be euthanised.



I’d like to share what it was like to shear the alpacas pictured here in their multiple years of fleece growth.



Before I relate their story, let me say that we were affected by Black Summer bushfires in New South Wales, Australia, which caused the delay in shearing. The owner did care for his alpacas and was so grateful I could fit him into my schedule.

I had to change my shearing style because the weight of the fleece was pulling the skin even when they were lying on the table.

Happily for these three alpacas, there were no abscesses or hidden wounds from sticks and barb wire digging into their flesh—as I expected to find in fleece not shorn for over two years.

It was a cool day shearing these three; but often, on a warm day, only the shearer experiences the heat leaving the fleece as it is being

Shearing Multiple Years of Fleece Growth, *cont.*

clipped. It is surprising how noticeable this is, but it is only felt by the shearer. This gust of heat reminds me every time how important it is to shear every year.

My reward every time I shear is to see the blissful relaxation of freshly shorn alpacas. Rolling in the grass, having a good scratch to relieve impossible-to-reach itches, and then followed by a good sunbake! Once out of the yards, these three couldn't be seen in the long grass as they enjoyed themselves.

Self-shedding is nonsense. Clumps of fleece that break off a multi-year fleece actually occur because of weak points in the fibre caused

by stresses such as weaning, overheating or illness. If the clumps are found along a fence, it is because of the discomfort the alpaca is experiencing and trying to relieve.

After 5000 years of selective breeding by humans, fibre production and shearing is a natural... and necessary... part of the domesticated alpaca's life. Your alpacas have used precious energy in our environment to produce fibre.

Alpacas must be shorn each year. This is not their natural environment. Honour their efforts by harvesting the fleece and making it into something useful, while also caring for your alpacas.

Cath has been a member of the Australian Alpaca Association since 2009. She breeds llamas and both Suri and Huacaya alpacas.



Another beautiful evening in New South Wales, Australia

Llama Antibodies Show “Significant Potential” as COVID-19 Treatment

Published on [Medical News Today](#) | Written by [Leigh Ann Green](#) on 09.27.2021 | Fact checked by Anna Guildford, Ph.D.

All data and statistics are based on publicly available data at the time of publication. Some information may be out of date. Visit our [coronavirus hub](#) for the most recent information on the COVID-19 pandem-

- **Although vaccines are highly effective in preventing COVID-19, scientists still need to identify better treatments for the disease.**
- **Some scientists are investigating whether llama-derived antibodies might be a useful treatment approach.**
- **A recent study has shown that so-called nanobodies that scientists harvested from a llama reduced SARS-CoV-2 viral load in Syrian hamsters.**

In the race to discover effective treatments for COVID-19, some scientists have turned to using antibodies from people who have recovered from COVID-19.

Although this approach has seen some success, these treatments tend to be [difficult to manufacture and expensive](#).

A recent study, which appears in the journal [Nature Communications](#), investigates a type of antibody derived from a llama. The authors hope that this approach will be simpler and more cost effective.

Targeted Nanobodies

Members of the camelid family, which includes camels, llamas, and alpacas, produce unique antibodies called nanobodies. [Nanobodies](#) are extremely small, robust, and stable molecules that bind to specific targets.

This targeted attachment makes nanobodies ideally suited to many forms of research, especially those involving the detection and neutralization of viruses.

The authors of the recent study investigated the nanobodies of a llama named Fifi.

The scientists injected Fifi with a purified bio-protein that did not cause illness but prompted her immune system to produce nanobodies. They then extracted these molecules from a small sample of Fifi’s blood.

The team isolated four different nanobodies and designated them as C5, F2, H3, and C1. Laboratory tests showed that each of these nanobodies bonds to distinct locations on the spike protein.

When the C5 nanobodies were configured in trimers — consisting of three C5’s in a row — the researchers observed a complete inhibition of viral infection.

They then tested the C5 trimer in 12 Syrian golden hamsters that had the SARS-CoV-2 infection. After 1 day, they treated six with an injection of the C5 trimer nanobody, while the remaining six — the controls — received no treatment.

All of the animals lost weight during the study. However, by day 7, the six hamsters in the nanobody-treated group had lost significantly

less weight. Indeed, as the authors explain, those that received the single dose of C5 nanobodies showed “minimal weight loss and very limited pulmonary infection.”

Further testing using the COVID-19 hamster model indicated that the nasal administration of nanobody treatment promoted a faster recovery from infection than administration by injection. The authors believe that this might be because it was easier for the nanobodies to reach the site of infection — the lungs.



Llama nanobodies may help scientists design better COVID-19 treatments. Don Mason/Getty Images

Study Summary and Future Steps

[Prof. James Naismith](#) is the director of the [Rosalind Franklin Institute](#), the United Kingdom’s national health research institute and one of the organizations that supported this study.

Prof. Naismith summarizes some of the potential benefits of the nanobody approach:

- These nanobodies appear to be potent against key strains of the SARS-CoV-2 virus.
- Due to their tiny size, the trimers are easy

to administer because it is possible to inhale them.

- Scientists can make the trimer cheaply in simple systems, such as yeast and *Escherichia coli*.

Speaking with *Medical News Today*, [Elitza Theel, Ph.D.](#), director of the Infectious Diseases Serology Laboratory at Mayo Clinic, Rochester, MN, said:

“It would be worthwhile to see the therapeutic effect of these nanoantibodies in nonhuman primates. [This study’s] findings on the use of intranasal administration of anti-[RBD](#) nanoantibodies are quite intriguing, as they show significant protection against disease similar to intraperitoneal injection in their Syrian [hamster] model.”

At a recent press conference, in response to a question about the next steps required to move these findings to human trials, [Prof. Raymond Owens](#), Protein Production U.K. principal scientist at the Nuffield Department of Medicine, responded:

“We are working with manufacturing organizations who can take our lab-scale process and scale it up so that we can produce sufficient quantities and quality of material. And then we need to understand a little bit more about the behavior of the molecule in animal models.”

For live updates on the latest developments regarding the novel coronavirus and COVID-19, click [here](#).

Behavior in Young Camelids: OK? or Not OK!

By Marty McGee Bennett, CAMELIDynamics

After answering some emails this week about behavior of young males, I thought that expanding on that subject might be a good idea. Most problematic behavior begins with a misunderstanding. We assume we know *why* an animal is doing something, and we respond based on that assumption. It is much safer to act on what you know, and not what you *think* you know!

I have written reams about this issue; and if you are new at camelids, I suggest you do some reading, as this is a complicated issue. Learn to read alpaca body language, as well as really understanding that camelids are not expressing "love" when they encroach into your personal space, but instead are asking questions about what is appropriate behavior around two-leggeds. Remember, too, that you are the source of valuable things like food, freedom, access to new pasture. Proximity to you is of value, and animals will compete with each other to have access to things of value. So while it is about you, it isn't really about some sort of intrinsic love for you. I am going to list interactions that are ok and interactions that are not. Perhaps you can see the pattern, which will help you with your babies.

- **Sitting on the grass out in the field:** A baby comes over and sniffs my feet —OK. A baby walks on my legs and rub its head on my back—NOT OK.
- **Mucking out the barn:** A baby comes over, watches me for awhile, and wanders off—

OK. A baby follows me around, pulls things out of my pocket, and stays with me instead of rejoining the herd—NOT OK.

- **Visitors hanging out in the pasture:** A baby or weanling wanders over and stands closely, sniffing gently by reaching out with his or her nose, and greeting the newcomers—OK. A baby runs over, skids to a stop, pokes its nose in the face of the newcomer, and when the newcomer steps back, baby steps forward—NOT OK.



This is okay!

What not to do:

- Pushing babies or weanlings away is not a good strategy. They push back and eventually will weigh as much or more than you do! You are teaching them to interact physically with you. Is this what you really want?

Behavior in Young Camelids, *cont.*

- Yelling, waving your arms around and spitting at your llamas or alpacas might work, but come on! Is this how you want to behave around your animals?
- I know that it is tempting, but it isn't ideal to use these kinds of animals as public relations animals. It is the worst possible job for these animals because you have no control over the public, and the public is *not* going to behave appropriately, and you are sending the wrong message to people who do not know about camelids.

What to do:

- Examine your behavior and see what you have done that gave the impression that you have no personal space, or what behavior you may be doing that puts the animals in a position to vie over who gets to be closest to you.
- If problems occur at feeding time, *change the way you feed*. Trying to deal with problem behavior when you are carrying grain or hay is not only impossible, but sends a very mixed message about appropriate proximity to you. It is a version of "Come here, come here, come here. Now go away, go away, go away."
- Most importantly, change *your* mind about the animal's behavior. You have probably

enjoyed it in the past and encouraged inappropriate behavior; so look inward and decide to set some boundaries, and then be consistent about it.

- Embrace *nonphysical* ways of catching and handling. Cornering, grabbing, holding to catch, and wrestling to trim toenails is the *worst* possible way to deal with these animals. It only says, "Yes, it is ok to be physical with me." Of course, all camelids benefit from nonforceful catching and handling, but the animals that demonstrate a lack of concern about getting physical are really at risk for learning dangerous behavior if you do handle them physically.



Keep the animals in barn; put their feed out; and *then* open the door to the food.

- If this is a male baby and the behavior is persistent and problematic, think about gelding... maybe even gelding earlier than you might ordinarily do so. I have gelded male alpacas and llamas as early as six to nine months old when my veterinarian thought the rewards offset the

risks. After all, other animals—dogs, horses, cats, goats, sheep—are gelded early. With this kind of behavioral issue, I think gelding is the safer choice for the longest and happy life. If you have a young male that is getting physical with you, and you want to keep him intact, be aware that this

behavior can manifest itself in dangerous ways when:

- You sell the animal to someone who is inexperienced.
- The animal turns three.
- The animal begins breeding.

You will always have to remain vigilant with these animals if they remain intact and are used for breeding. They may *always* be a management issue!

Editor's Note: Marty's newsletters contain a plethora of tips and invaluable info. Reap even greater value by joining her forum on CAMELIDynamics.com. If you can, attend one of her clinics next time she gets out your way!

About Marty McGee Bennett

Marty McGee Bennett, the founder of CAMELIDynamics, has traveled from the wilds of Patagonia to Peru and around the world studying llamas and alpacas, and teaching others to understand them. She has always been interested in animals and has a Bachelor of Science Degree in Animal Behavior.

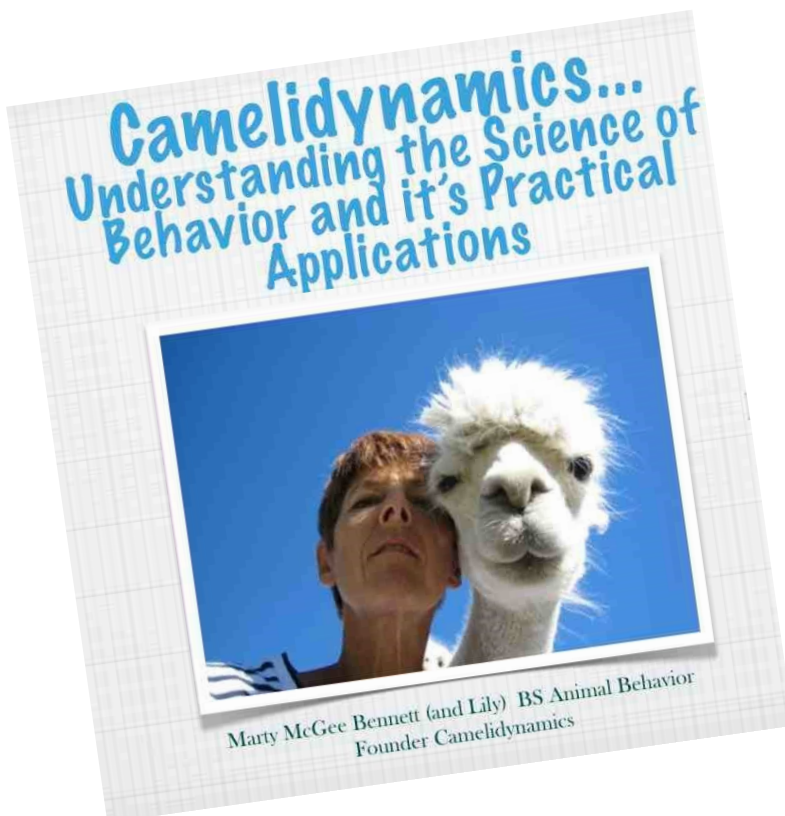
Marty has studied with some of the most influential animal trainers and teachers in the world Linda Tellington-Jones, Terry Ryan, Karen Pryor, Bob Bailey, Dr. Susan Friedman, Teresa McKeon, Dr. Susan Brown and others. She has created a constantly evolving method for understanding and working with camelids in a way that not only gets the job done, but enhances the human/animal bond.

Marty's clinics, books and videos have helped thousands of camelid owners more fully understand, appreciate and enjoy this magical animal. Marty's book, *The Camelid Companion*—published originally in 2001 and now in its fourth printing—has received rave reviews in publications worldwide.

Conducting hundreds of clinics in North America and around the world have kept Marty on the road for much of the past 30 years. Her work with camelids is popular with owners and veterinarians alike. She has taught the principles of animal handling to veterinarians and at veterinary schools around the world.

It is true that Marty works magic with alpacas and llamas, taming even the wildest ones in just a few minutes, but the real magic is that she can teach you to do it too!

Visit CAMELIDynamics.com to learn more!





Llama and Alpaca Normal Vital Signs...

- **Heart rate: 60—90 BPM.** Place stethoscope at fleece-free area under elbow.
- **Resting respiratory rate: 10—30 BPM.** Watch for rise and fall of chest/flank area.
- **Temperature: 99.5 - 102F.** (Neonates have a wider temperature range.)

...and Physical Examination Parameters

- **Body condition.** Ideally, you should be weighing your animals on a regular schedule. Fiber can hide conditions, so regular hands-on examination is advisable.
- **Conformation.** Pay attention to head and neck carriage. When weak, sick or depressed, the animal may hold its head differently.
- **Ears.** In a normal position, no “airplaning” with ear(s) held to side or drooping, and no odors.
- **Eyes.** Should be wide open and clear, without any squinting or tearing.
- **Gait.** Observe whether your animal is moving normally, without avoiding weight on one limb.
- **Mouth.** Unless the animal has been spitting or near spit spatter, the mouth should be closed, and no drool or swelling.
- **Mucus membranes and capillary refill time.** Non-pigmented areas of the gums should be light pink and moist. When pressed with the fingertip, color should return in one to two seconds.
- **Nose.** Because camelids are obligate nasal breathers, you should observe it breathing normally without unusual flaring of nostrils or sounds on inhale/exhale.
- **Temperament/attitude:** Be aware of “normal” behaviors of both individuals and within the herd dynamics; e.g., isolating, not competing for food, unusual lethargy, or any other significant behavior change.

Based on the article [“Llama and Alpaca Normal Vital Signs and Physical Examination Parameters”](#)
by Dr. Christi Garfinkel, DVM. Published 09.19.2021 on [Catmario4.org](#)

Note from editor: Because I was unable to get author’s permission in time for this issue, I summarized details from her article and added a few other things we know to watch for.



AlpacaGram 9.51 | Fiber Testing Date Extended and New Shipping Information

Escaping a Wildfire

By Nick Stone, Somerset CA

On the evening of Saturday, August 14, 2021, my wife and I were working in our vegetable garden when we saw a few local fire trucks headed east on Grizzly Flat Road toward the El Dorado National Forest. We live in Northern California and, like most places in the West, wildfires are a common problem this time of year. Our property borders a very large BLM parcel on the Middle Fork of the Consumnes River that is full of manzanita and chamise. Every time I hear sirens or see fire trucks this time of year, it gives me a slightly uneasy feeling.

A quick check on the Internet showed that a fire had started a few miles east of our place in the Middle Fork Consumnes Canyon near Caldor. Caldor was the name given to a town and mill that



no longer exist, that were built by the California Door Company in the early 1900s. The company used a narrow-gauge railroad to haul logs out of the mountains. I am very familiar with the area as I frequently take my llamas on training hikes along the old railroad grade.

A few hours later, the uneasy feeling in my gut went away as I saw a few fire trucks heading away from the fire back down Grizzly Flat Road. It appeared that crews had gotten it under control. Two weeks before the fire, I had reluctantly turned in a Nevada archery deer tag. We own llamas, horses, and cattle. We have a 17' stock trailer, and also a four-horse slant gooseneck trailer, yet currently only own one F-250. If I were to take the llamas on a hunting trip to Nevada, it would have left my wife with no means to haul animals in the event of an emergency. Originally, when I drew the tag, my plan was to rent a truck and leave my F-250 with my wife. My rental truck reservation got canceled due to the rental company giving preference to CalFire for trucks needed at several other fires that were currently burning around the state. I definitely wasn't happy about turning the tag back in, but it was the right thing to do.

My wife and I went about our regular business and went to work like we normally do for the next few days. The fire continued to burn, yet online reports seemed to show it was somewhat contained. On the evening of August 16, I was out in the garden and felt the wind shift direction and pick up speed. I went inside to check the fire status and noticed that the community of Grizzly Flats had been given an evacuation warning.

Escaping a Wildfire, *cont.*

The fire was still a few miles away from us. I talked to my wife, who suggested we hook up the four-horse trailer. I stayed up all night monitoring the fire and getting texts from concerned friends. From my place, I wasn't able to see any flames at that point due to the height of the trees; however, I was able to see a constant string of cars and trucks driving past our house as they evacuated.

I went to bed around 4:00 a.m., and at 4:30, my phone went off with a mandatory evacuation alert from the El Dorado County Sheriff's Office. I woke up my wife and updated her. She grabbed some personal belongings, clothes, important documents, loaded them into our F-250, and loaded the horses into the four-horse trailer. At the same time, I called my friend Jeff and let him know I was going to need help hauling the stock trailer with llamas. He showed up shortly after, and once we got my wife loaded and on her way, Jeff took the llamas and headed towards his place. Jeff had a set of pens and property where the llamas would be fine, and my wife had previously set up arrangements for boarding her horses in the event of an emergency.



I stayed behind and tried to do anything I could to make sure we would have a place to come home to. I take pride in how fire-safe our place is. We work hard to clear vegetation around our home, shop, and outbuildings. The majority of our siding is cement, and our roofs are metal. We have two wells, so I set up sprinklers on a wood deck and a few other areas to minimize impacts from embers. I parked my wife's Honda, my four-wheeler, and several other pieces of equipment in the horse field, as it's pretty much bare dirt. I made a point to park them several feet from each other so that in the event one caught fire, it would minimize the chance of something else catching fire.

None of my neighbors live very close to me, but I talk to all of them regularly. To the east of me lives a couple with a young son; I texted them to make sure they were aware of the situation and that they had already evacuated. To the north of me lives an 84-year old rancher. I called him; he was aware of what was happening and on his tractor cutting firebreaks around his ranch. He had no intention of leaving. Shortly after, my wife called and gave me an earful about not leaving; she also told me she was having some issues with a few feral llamas that we had recently rescued off a large ranch. I assured her I would be along shortly to help her.



Not a sunrise!

Our address was under a mandatory evacuation warning until September 3rd. It was a long 16 days. At that time, we were allowed to bring all of our animals back home. During the evacuation, we were blessed to have several good friends offer places for us and also our animals to stay. I'm pretty new to the llama community, and I was blown away by all of the offers of help, from people I've purchased animals from to people I've just casually met at llama events.

A few of the main things I think people should be aware of if they live in an area with the potential for wildfire are:

- **Fire-safe your property** to the best of your ability. Clear any ladder fuels, mow when appropriate; do anything you can to help out fire crews if they have to defend your place.
- **Transportation.** Make sure you have a truck and trailer, and your trailer is functioning. Make sure the tires aren't flat, the lights work, etc. When my wife first left, she called and told me about several people on horseback at an intersection down the road from our place. They did not own or have access to a trailer, so they rode their horses several miles down the road to evacuate.
- **Handle your animals.** The majority of our animals are very easily handled, with the exception of the feral ones we took in shortly before the fire. My main training goal after returning home was to work with them so that anybody could halter them and easily load them in the event I wasn't around. It just makes life easier for the animals and anybody working with them. While we were evacuated, a friend texted me photos of a llama covered in fire retardant asking if it was one of mine. Luckily, it was not. There are several groups in my area that help evacuate animals, but I'm guessing they don't have much experience gathering and loading feral llamas.
- **Evacuation animal facilities.** Try to set up a place to take your llamas in advance of being evacuated. Luckily, we had a ton of options.
- **Reach out to your neighbors and help them in any way you can.**



Returning home... safe!

Escaping a Wildfire, *cont.*



Note from Rachel Oman, CSU VTH when asked what to do if a llama or alpaca takes a direct hit from the retardant:

“I don't know specifically what effects would occur in a llama or what the exact fire retardant was. Generally, wild-fire retardants can be irritating to the eyes and skin. If there is direct contact, flush the eyes with water and wash the skin with water and a gentle soap if needed. Make an effort to prevent the animal from ingesting the retardant in any feed or water sources. In theory, the effects should be short-term, but there are reports of long-term negative effects in humans, including neurological signs and cancer. I suspect these would be unlikely with the shorter lifespan of the llama, but nobody knows.”

Alpaca Owners Association (AOA) Disaster Planning Articles

Available in the [Calpaca Connection, Autumn 2020](#)

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- [Upcoming Shows](#)
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Alpaca Education At Your Fingertips

Do you know the AOA website contains a section called the Alpaca Academy? The Alpaca Academy provides education and information for the entire alpaca community. Topics range from the most common questions about alpacas and the industry to in-depth articles on alpaca EPDs, genetics, and breeding. Alpaca Academy also provides information on the latest alpacas research and links to additional resources.

The following pages contain examples of the various topics available for those wanting to know more about alpacas and the industry.

One of the common themes I have found in reading about what alpaca owners breeders would like is the desire for more education. Perhaps many don't know that many of their questions have already been addressed in the Alpaca Academy. Take a few minutes to review the topics on the right. If you would like to learn more about the Alpaca Academy just follow [this link](#), and click on the topic.

ALPACA ACADEMY

- [About Alpacas](#)
- [Alpaca Fiber](#)
- [Alpaca Registry](#)
- [Alpaca Research](#)
- [Alpaca Shows](#)
- [Alpacas as a Business](#)
- [Disaster Preparedness](#)
- [Embryo Transfer](#)
- [EPDs](#)
- [Farm Management](#)
- [Genetics & Breeding](#)
- [Health & Husbandry](#)
- [Marketing](#)
- [Research Registered Alpacas](#)



Of General Interest

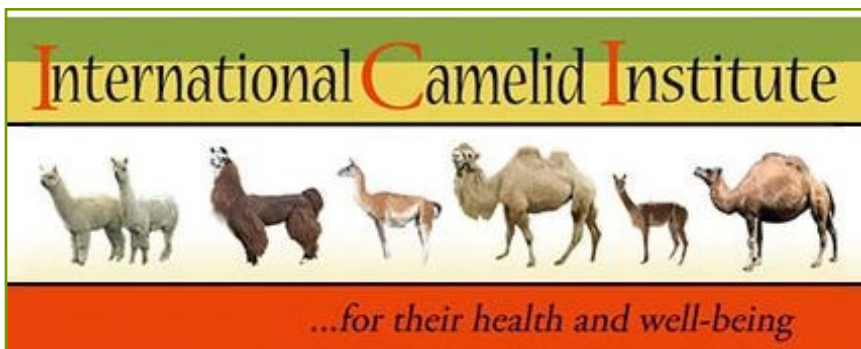
California Agritourism News

Agricultural tourism (agritourism) is a commercial enterprise at a working farm or ranch conducted for the enjoyment and education of visitors, and that generates supplemental income for the owner or operator.

The California Agritourism News e-newsletter, produced by the UC Sustainable Agriculture Research and Education Program (UC SAREP) Agritourism Program, is a chance for growers, agritourism operators, county staff, tourism professionals and everyone else involved in California agritourism to keep up with the latest information. Input and suggestions from readers are always welcome!

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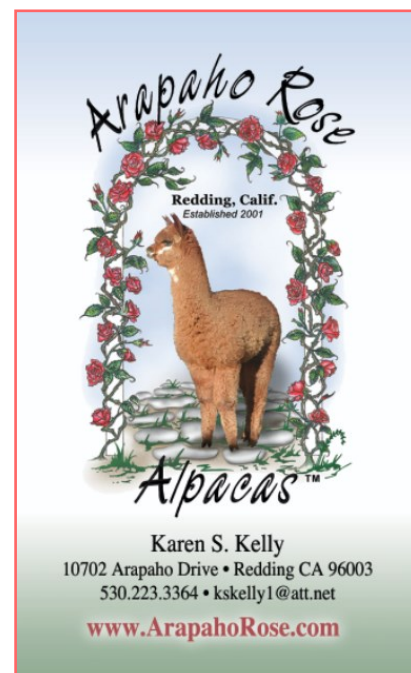
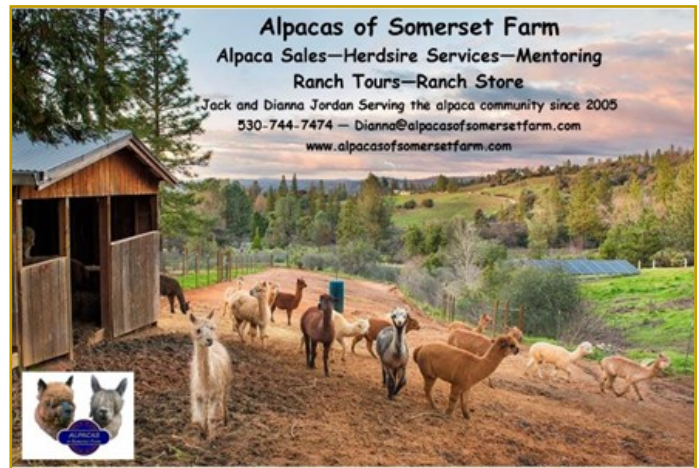


[International Camelid Institute \(ICI\) Video Series](#)

- [Assessing Your Camelid Before You Call Your Veterinarian](#)
- [Examine a Su Animal antes Llamar al Veterinario](#)
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- [How to Give an Injection](#)
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Calpaca Member Business Cards



Calpaca Member Business Cards, cont.

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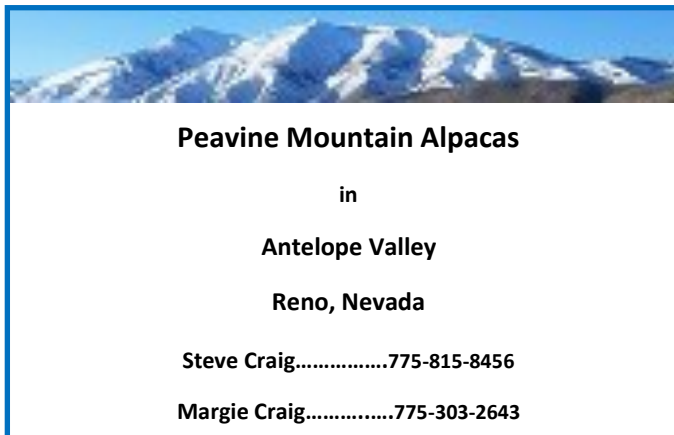
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LlamaRescue@lillette.net

Mission Statement
To provide safe refuge for unwanted, neglected or abandoned llamas through intervention, education and necessary support. To seek placement and lifelong care for all llamas entrusted to our care.

SouthwestLlamaRescue.org

Southwest Llama Rescue
SWLR—a 501 c3 non-profit organization

Calpaca Classified Ads

Agisting

Menagerie Hill Ranch is a full service, family run alpaca ranch offering **agisting, consulting, sales, support and alpaca fiber products**. Our agisting service includes quality feed/water, routine husbandry, vaccinations, birthing and other care. Cria born here receive basic halter training. Owners are welcome to visit any time by appointment, and we will help you learn how to care for your alpacas. Veterinary care, breeding, show training and other services are extra. Standard rate \$3.50 per day. We are located in the English Hills area of Vacaville, close to Hwy 505.

Deb Galway & Kirk Howard, Owners

www.menageriehillranch.com 707.290.7915

Farms / Ranches

Macedo's Mini Acre, Turlock, California Suri and Huacaya breeding program focused on performance (obstacle, pack and public relations) as well as fiber. Classes also offered in spinning, felting and fleece preparation. Wholesale dryer balls!

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Herdsires

Menagerie Hill Ranch is pleased to offer the stud services of **RR Gun's Kit Carson (KC)**. With **17 Championships** and **21 1st-Place** wins, it's no wonder that more than **10 of his offspring** are **Color Champion** winners! KC took his first championship at eight months of age. Since then, his fleece has maintained its length, fineness and uniformity, and he remains one of the best grey males in the country.

His kids still win big in the ring... including: 2016 Gold Country Gathering KC son 4-Sights Crawford won RCC behind RR Dizzy Gillespie in Grey Male; KC daughter 4-Sight's Centerfold won CC, grey female; and KC son RR Lancelot won Black CC. Centerfold also took CC at the 2016 ABI and the 2017 Futurity. And at the 2017 CA Classic, Lancelot won CC in both Halter and Walking Fleece. Most recently, MHAR Ebonni Carson won CC in Walking Fleece (Black) at the 2019 Gold Country Gathering!

Check out KC and his cria at:

<http://www.menageriehillranch.com/alpacas-for-sale/121347/rr-guns-kit-carson>

With gorgeous silver-gray fleece, excellent conformation and a perfect bite, we believe Kit Carson can make a big impact on our breeding program and yours!

He normally summers in Utah and will be leaving around May 1. Until then, he's available for hosted breedings at **\$3,000**, with **drive-byes at \$1500**. Reserve your breedings now and take advantage of his great genetics!

Deb Galway & Kirk Howard, Owners

www.menageriehillranch.com 707.290.7915

Calpaca Classified Ads

Herdsires, *cont.*

MHAR Blizzard by Justice is a beautiful, bright-white stud, with extremely uniform, dense, crimply fleece, full-body coverage, and excellent bite/conformation. At six years of age, his fleece still has a lovely, soft, buttery feel!

At the 2014 Gold Country Gathering, judge Kathy Klay said, “He’s the total package!” when awarding him First Place (no CC), noting his soft crimp style and density. Most recently, his 3rd fleece spin-off entry won Judges Choice! And his fourth fleece spin-off entry won 1st Place in the adult (D) class (of 8) at the 2017 AOA nationals, this in spite of being very dirty thanks to our very wet/muddy winter. His first cria are on the ground with more due next winter. We can’t wait to see them all!

To date, we haven’t used him as much as we should because we’ve been focusing on the SG/black colors. But he’s produced several lights/fawns; and now a gorgeous brown with amazing early crimp/bundling and density, plus staple length, brightness and handle that we’ll definitely be showing! So we’re focusing more on using Blizzard and hope you will too!

His stud fee is \$750 for Calpaca members, including 60 days agisting at **Menagerie Hill Ranch** in Vacaville for your girl. Reserve your breedings now, and take advantage of his great genetics at this special price!

Deb Galway & Kirk Howard, Owners

www.menageriehillranch.com | 707.290.7915

Alpaca Products & Instruction

Put that stockpiled huacaya alpaca fiber to good use, have a finished product to sell at Farm Days, Ranch Tours, Holidays, etc. Fiber should be a minimum of two inches in length, minimal guard hair results in better quality finished products.

Payment is based upon quantity of completed dyer balls, \$2.50 per dryer ball. Contact Larry Macedo for the form to use when submitting your fiber. Larry’s e-mail is macedo1ref@aol.com, phone number 209-648-2338

Alpaca batts, roving, pre-felt in natural and dyed colors. (We grow many of our own dyes.)
Dryer balls at wholesale pricing. Classes in skirting, felting, dyeing or spinning by appointment.

Macedo’s Mini Acre, Turlock California | Maureen & Larry Macedo
209-648-2338 or 209-648-2384 | macedosminiacre@gmail.com | www.macedosminiaces.com

See page ## for Advertising Rates and Submission/Publishing dates.

Calpaca Connection Newsletter 2022 Deadlines

CONNECTION DEADLINES ARE FIRM! Newsletter deadlines allow publication one week prior to each quarterly Calpaca Membership Meeting. Both advertising copy and articles must be received by the deadline or they will not be published until the following issue. Payments for advertising must be received by Calpaca Treasurer within seven days of submitting your ad via email, or if payment is mailed, included with the advertising copy.

<u>ISSUE</u>	<u>SUBMISSIONS DUE</u>	<u>PUBLICATION DATE</u>	<u>MEETING DATE</u>
Winter 2022	Jan. 22, 2022	Feb. 05, 2022	Feb. 12, 2022
Spring 2022	Apr. 23, 2022	May 07, 2022	May 14, 2022
Summer 2022	July 23, 2022	Aug. 06, 2022	Aug. 13, 2022
Autumn 2022	Oct. 22, 2022	Nov. 05, 2022	Nov. 12, 2022

To Pay for Your Advertising

Make checks payable to **CALPACA**. In the memo line, indicate what you are paying for.
Mail checks to: **Brandi Mello, Calpaca Treasurer**
16860 Hawthorne Ave
Anderson, CA 96007

To Submit Advertising & Articles

Email attachments to: Editor@lillette.net

Non-member Ad Rates

<u>Ad Type</u>	<u>Width x Height</u>	<u>Rate</u>
Business Card	3.5 x 2.0"	\$15
1/4-page horizontal	7.5 x 2.0"	\$24
1/4-page vertical	3.5 x 4.5"	\$24
Half-page	7.5 x 5.0"	\$48
Full-page	7.5 x 10"	\$78

Join Calpaca Today!

The **California Alpaca Breeders Association (Calpaca)** represents alpaca owners, breeders, and enthusiasts in California and beyond. We promote the well-being of alpacas and education of the public about alpacas, alpaca fiber, and alpaca products. We support each other through shared information and experiences, and host meetings, speakers and shows for the benefit of members and the public. We invite you to join us!

Calpaca Membership Meetings are held quarterly on the second Saturday of the second month of each quarter.

Calpaca Farm Membership - \$100/year (\$50 first year)

Benefits:

- Free marketing on Calpaca website (animals, fiber, store, services etc.)
- Educational quarterly Calpaca membership meetings
- Free advertising opportunity in the Connection newsletter
- Ability to link your Web site to a mobile device
- Ability to link your Web site to Facebook page
- Lobbying our State Legislature through— AG Day sponsorship
- Discounts at alpaca events
- Advertising opportunity to showcase your farm to over 3000 alpaca breeders
- Opportunity to run for a seat on the Calpaca Board of Directors and have a voice in the future
- Opportunity to host a Calpaca meeting and give your ranch and alpacas more exposure
- Two votes on Calpaca issues
- Connection newsletter that provides educational articles
- Ability to send email marketing items to members offering your animals, products and services
- Complimentary listing of your Openherd website on Calpaca's website – check out <http://www.calpaca.org/alpaca-farms/>

Calpaca Associate Membership - \$30/year

Benefits:

- Attend all Calpaca meetings and events
- Quarterly Calpaca *Connection* newsletter

Join Online

Keeping in Touch

Calpaca has three primary ways for members to send or receive information: by email, through the Calpaca Facebook page, and on the Calpaca website.

Email: info@CalpacaBoard.org

- To Email Calpaca Members: A member of the board of directors will forward your message to Calpaca members in a timely manner.
- To Email Board Members: Your board members encourage members to contact us with any comments, questions or concerns. We are here to serve you.

Note: This process helps prevent the scamming that occurred with the former member email distribution list.

Website: Calpaca.org

This is Calpaca's primary online presence, the "Internet face" of our organization. It's the place where existing, new, or potential alpaca owners can go to learn about

Calpaca. Who we are. What we offer. How we assist new and current alpaca owners. How we support the alpaca community through education. What events we offer. What support we offer.

Facebook Page: facebook.com/groups/Calpaca

Calpaca maintains an active Facebook page, **Calpaca-California Alpaca Association**, which serves as an extension of our website. The Calpaca Facebook page exists to promote and answer questions about raising alpacas, using alpaca fiber, husbandry issues; to share interesting news and ranch events; and to promote classes having to do with those issues. We are an open group and encourage people who are interested in alpacas to join the discussions; e.g., BOD announcements, alpacas in the news, emergency information, birth announcements, new purchases/acquisitions, Calpaca events, Calpaca farm member events, industry events, etc. This is a group for learning, sharing, and being supportive.

