# The Trials of Alpaca Evaluation in the Most Remote Areas of Peru

By Eric Hoffman

Here we are in Ayaviri, a small town in the Peruvian highlands about 80 kilometers north of Juliaca. My partner for this trip is Pat Long, DVM, a veteran alpaca screener who has worked with me off and on since 1995 in many places in South America for various alpaca registries and private parties around the world. We walk slowly, having just arrived via airplane and long distance taxi. We have learned that acclimating to the altiplano, which ranges between 12,000' and 18,000' (4000 to 6500 meters) elevation, can go smoothly or become a nightmare involving severe headaches, nausea or even life-threatening cerebral edema. So far we both feel okay. We are hungry and walk through the town looking for a restaurant.

To many Peruvians involved with alpacas Ayaviri is thought of as the gateway pueblo to the puna humeda. Based primarily on climatic differences, the vast grasslands known as the puna is divided into two parts, the puna humeda and puna seco. The puna humeda is the prime alpaca growing area with the highest precipitation and highest natural stocking levels for alpacas in South America. The puna seco is drier with generally lower stocking levels and a more problematic environment for survival in times of drought. The headquarters of Rural Alianza, the 39,000 alpaca strong last-of-its kind cooperative, is in Ayaviri. The offices are behind a painted, corrugated iron gate and surrounded by a fortress-like thick adobe wall. The gate has a small opening so the security guard can check out visitors before they are allowed to enter. The region was victimized by the much feared Shining Path terrorists until the 1990s, but that threat to the local population has subsided for the time being. Inside this security barrier is a modest, two-story adobe brick building with a series of offices where the senior most managers of Rural Alianza keep their records and conduct business.

Eric Hoffman and Peppi

The town of Ayaviri isn't on the tourist track. It is a dusty place with plastered store fronts that are nondescript and timeless in appearance. Like most towns on the altiplano, the pueblo's centuries old, gigantic buttressed church is the dominating structure, casting a long shadow over the plaza. The plaza is the place of much commerce from dawn to dusk every day. At dawn the streets are filled with men negotiating the cobblestone streets peddling large cargo carrying tricycles capable of carrying 100 kilograms or more. These mobile merchants peddle en masse from all streets leading into the plaza and stake out a place where they roll out their goods for the day's trading. Everything from a myriad of varieties of potatoes, videos, batteries, rope, funky t-shirts, and thickly woven alpaca blankets can be purchased here. It's an economy for those without much. A successful merchant might make $US30.00 a day.

After wandering around the plaza, we settle on a tiny restaurant whose menu describes a dozen kinds of chicken dishes. We order our standard pollo y papas fritas (chicken and French fries) and we decide to try the soup (sopa del pollo). The soup is served first. "Do you think it's safe?" I ask Pat, appealing to his highly honed veterinarian's intuitive understanding of the plethora of harmful microbes that might be lurking in the soup. Pat studies the soup carefully, sniffs it and tentatively slurps down a spoonful. He declares, "I think It's okay" We take in a couple more spoonfuls and begin to enjoy our soup. But, our budding confidence ends abruptly. From the bottom of Pat's bowl comes a surprise, a chicken's foot, complete with the severed tendons, scaly skin, and grasping toe nails. We both stare at the birdless foot and put down our spoons. Pat smiles grimly, "I'd like to revise my assessment" he says as he pushes his bowl to the side of the table. We wait for our second course, half a chicken. Such are the culinary experiences on the altiplano.

The next day we are up early, but there is a delay that is never explained. We wait and we wait. We revert to reading. Suddenly a four door Toyota pickup pulls up to our modest plaza-side hotel and the driver motions us

towards his truck. We load our gear, tie a tarp over it and are off on our screening mission, first stop Macusani. It is less than 200 kilometers away but a half day's time on the dirt track that winds its way from the highway to this Rural Alianza breeding station where they keep their colored huacayas, thousands of them.

Peppi, a veterinarian and the head of herd production, is our host. He knows where the animals we must screen are located. We are told they are spread over a wide area and haven't been collected to a central place yet. We exchange pleasantries. Peppi delves into his newspaper while the driver does his best to maintain speed while dodging the largest pot holes and animals wandering across the roadway.

As we drive, one of the world's greatest natural pastures reveals itself. The vistas are always immense, ranging from gently rolling country to sharp, jagged escarpments with few trees, mostly clumps of non-native eucalyptus. The homes of the native Quechuas are spartan adobe or stone structures with corrugated iron roofs and concrete or dirt floors. In some places bundled straw has been woven over rafters to make a roof. What we see is stark and beautiful, but it's not a user friendly environment. It freezes more than 300 nights a year and these modest dirt floor living spaces often have no heat or must rely on a tiny fireplace. The land is in its second year of drought and is nutritionally depleted. For great distances the land is shades of yellow and brown with only a few patches of green in low areas. The dry, stubbly grasses have been nibbled over and over again by the llamas, alpacas, sheep, cows and horses that support the human population. When we comment on the dry landscape, Peppi lifts his head from the newspaper and explains that in the drier areas animals are dying for lack of food. He shakes his head disapprovingly and goes back to reading.

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Occasionally we pass by bofadeles, the last bastions of nutrition for animals in times of drought. These wet, swampy areas dot the landscape and contain green plants year round. However, in times of drought animals from the drier areas find their way to the bofadeles and over graze them. It's not uncommon to see vicuna herds and alpacas sharing the same bofadeles. We pass one large bofadeles where horses and cattle have waded into the watery areas to eat plants from the shallow bottom while camelids graze on green fringe along the banks. The reason vicuna (and to a lesser extents alpacas) incisors continue to grow as they are worn down by close-to the ground grazing is readily apparent. The animal with regenerating teeth has a distinct evolutionary advantage in times of drought. In times of drought wild and domestic camelid must literally scrape the ground to extract a diet.

Our Toyota follows the two track, dirt road as it twists forever upward. Eventually the tiny brick or stone homesteads are less frequent and then not at all. The land is vast and empty. The Toyota seems to be losing power and slows some, but we keep moving. We come to a mountain pass and start back down. Peppi explains the pass is a high one, more than 6,000 meters (about 17,500'). I feel drowsy, but am breathing well. Pat mentions he has a headache. There is a small herder's stone house just off the road. I contemplate what it must be like to live this high through the Andean winter. I think of how cold it must get at night with only a straw roof over head. I notice small children bundled in layers of clothing standing sentry over a small herd of alpacas.

Suddenly, just a few kilometers into the descent, a group of vicunas crosses the road directly in front of us. They move effortlessly and stop and stare at our dust plume making vehicle as it passes. The trailing animal is the male. His nostrils flare as if he is making an alarm call but our windows are tightly shut and we can't hear him. The vicunas look healthy and strong in an environment that looks hard-pressed to nourish a guinea pig. Besides the noise from our truck, the vicuna's world is a very quiet place. When we stop to stretch our legs, we hear only the wind, the pulse of our own bodies and nothing else.

By late afternoon we reach Macusani, a company town with a tiny, half finished plaza featuring rebar sticking out of concrete. We eat trout for dinner while school boys play soccer on the main street in front of us. We motor a few kilometers out of town to the workers' quarters where we'll spend the night before starting screening activities the next day. Pat and I see a large herd of a couple thousand alpacas descending from high pastures to a canchones (stone corral) where

they will spend the night. With a backdrop of a gargantuan, glacier-covered peak we see a photographic opportunity if we can get close enough to the animals to photograph them under the peak. We set off on foot. Just as we crest the slope to where the herd is being bedded down, we are greeted by a large guard dog that is running straight at us barking. We take a few pictures and quickly retreat. The dog stops at the crest and vigilantly stares

down at us growling and barking as we walk back to our sleeping quarters.

We are shown the outhouses about 50 meters from the sleeping quarters. There are no lights and many obstacles to trip over at night. We joke that visiting the outhouses at night could result in falling into a pit of raw sewage. As dark descends, so does intense cold. Our beds are layered in blankets. There is no heat. Our breath is visible. We elect to sleep in our clothes under the covers to ward off the cold. Throughout the night, dogs bark and fight outside our building. Negotiating a trip to the outhouse becomes a mute point. Just when there is a lull, another pair of the large guard dogs that have followed herds down the mountains to spend the night get into a snarling battle over turf. After our sleepless night, we rise with the sun, gulp down coffee and eat some bread for breakfast.

We have learned firsthand that large, fighting dogs outside one's house can cause the suspension of bodily functions in humans. None of us found it necessary to visit the outhouse for ten hours. We notice a half a dozen large dogs sleeping quietly around the area, acting as if nothing had occurred during the night. Some have fresh wounds and one limps badly as it joins its herd already climbing to the high pastures.

We are in the Toyota again. In thirty minutes we reach some weather worn mud brick holding pens. We lather our faces with sun block and don sunglasses and hats to combat the intense ultraviolet sun at this altitude. We set up a tripod with a hanging scale and begin weighing and screening alpacas. The screening goes slowly. Devising an aisle way to correctly assess leg conformation takes some time. We are working at above15,000' where the slightest exertion results in fatigue. One of Pat's chores is to check patellas, which requires that he bend over each animal and hold onto it while he rotates the patellas to check for soundness. Also, running a hand down a leg to check for polydactilism results in shortness of breath. At sea level these activities are easy to perform, but at this elevation it is exhaust-

ing. We also notice such tasks as writing down microchip numbers, filling out the four pages of paperwork per animal and putting fiber samples in plastic baggies becomes a chore requiring concentration. We work at half speed and pace ourselves. No matter what happens we are committed to moving slowly. There isn't much idle chatter. The words we choose are aimed at finishing the task and nothing more. It is a relief to learn that many of the animals have thin (2) or optimum (3) body scores, which means they are maintaining themselves during a time of significant nutritional stress.

In the time it takes us to screen about 25 animals a mass shearing commences and is finished near where we are working. About 200 dark brown huacayas are driven into a tight

mass surrounded by Quechua women and children. Quechua men work in two person teams, going into the tightly compacted herd and pulling out alpacas one by one. The Quechua shearers make us Westerners look like rank amateurs when it comes to shearing and handling alpacas. By grasping one rear leg and holding onto the neck, each alpaca is gently rolled to the ground and shorn with hand shears commonly used for sheep. Each team shears one side and then rolls the animal over and does the other side. The teams average about 8 to 10 minutes per animal. Each fleece remains entirely intact and is twisted into a tight bundle and neatly stacked. At the end of the shearing each team will be

paid based on the weight of the fleeces they have shorn. Many of the fleeces weigh 9 pounds (4.1 kilograms). The shearers speak and joke in their native Quechua, the language of the ancient Incas. "Llank'aymi hanpin wakcha kapypa k'irinti." (Good work heals the suffering of the poor.) or "Nas k' para chayamunqana Peru supaq" (Soon rain will shine upon Peru.). The Quechuas are friendly but intent on finishing their job.

We are back in the Toyota for a cross country trip to Rural Alianza's suri and white huacaya herds 80 kilometers away. These massive herds make up nearly 80 percent of their 39,000 alpaca population. Along the way we detour from the faint road and travel overland on no roads at all to lonely stock corrals where men have rounded up animals to be screened. As we work through a group of ten cantankerous males, we strip off our outer garments because the sun is so intense. We were freezing in the morning, but now we are overheating. Suddenly white blobs begin bouncing on the ground near us. My mind can't comprehend what this stuff is. After all, the sun is so intensely bright. I look skyward. To the north, near large snow-covered peaks, there are large ominous clouds collecting. We see lightning and hear thunder. Directly under the clouds a blizzard is swirling. We are on the edge of the rapidly changing conditions and scramble into the truck to stay ahead of the storm. No wonder the Incas and their predecessors believed deities lived in the mountains. According to the ancient legend, the all knowing Pachamama (mother earth) had loaned alpacas and llamas to people from high on her mountain top, but if the people treated the animals cruelly, she would take the animals back and people would disappear. The interrelationship between people and alpacas and llamas spelled out by Pachamama now made perfect sense.

We bump along for two hours and eventually pull into the yards of Rural Alianza. We must work fast in the fading light. Again, we are screening adult

males, many of them large and mature and not used to being handled. Many of them are impressive and proud animals. One proves to be an opportunist. He keeps jumping a low fence and mating females. As we work, Peppi mentions he is worried about the drought because Rural Alianza is expecting 12,000 new crias next month and the condition of the natural pastures will be important to the success of the year's cria crop.

There had been talk of making it to a hotel to clean up, but as the sun disappeared and the cold asserted itself once again, we had not finished. We would stay in yet another station where the suris are, explained Peppi. We arrived in the dark and ate alpaca stew and bread with the workers and their children. The children were shy and curious. One boy brought me an atlas and was fascinated when I showed him where we came from on a world map. The isolated station had its own school and medical facility. About 100 people live in the low, mud brick buildings. Our night is better than the night in Macasuni. There is a flush bathroom and most of all there are no fighting dogs to keep us awake all night. The cold convinces us to sleep in our clothes again. Tomorrow we will shower, somewhere!

Activity starts at sunrise. It is colder than the night before. The workers helping us wrap their faces entirely in alpaca scarves so only their eyes are exposed to the elements. Everyone wears thick woolen gloves and caps. With coffee still in hand we screen suris. As a breed they tend to be more vocal than the huacayas. We finish by nine o'clock, climb into the Toyota and turn on the heater. We head down a spectacular boulder strewn valley towards the town of Nunoa and eventually to Santa Rosa, Ayairi, Juliaca and home. But, along the way we stop eight times to screen small groups of animals. It becomes apparent we will miss our ticketed flight. We phone the airlines from Ayarivi to rebook on the last flight back to Lima. In Ayaviri we rent a single room to shower, clean up and organize our samples and paper. In an hour we are back on the road to Juliaca, where Rufino Quilla DVZ and other friends we've made over the years meet us. We eat dinner in the airport with our friends, trade old memories, and fly to Lima. Pat Long and I are so tired we sleep for most of the flight.

In the Lima airport we finish our paperwork and wait until 12:30 a.m. for our flight to Dallas. Again the plane becomes a conveyance for sleeping. I wake up on the descent into Dallas. Two days later, after Pat and I had parted company in Dallas, we catch up on the last details of the screening. Working at high altitude had taken its toll. We'd both slept for 12 to 15 hours after reaching home.

*Both the Alpaca Registry Inc. and the CLAA quit screening imports in l998, but Pat Long DVM, Eric Hoffman and some of the other screeners continue to work for entities around the world. The screening described here took place in 2003. Eric Hoffman is the primary author of The Complete Alpaca Book, which was recently published in a revised, second revision, which includes several additional authors and new research on camelid fiber.*