Guanacos, the Forgotten Camelid

text and photos by Eric Hoffman

Guanacos may be the most under-appreciated and misunderstood of all the South American camelids. When I first talked to editors I've known for years about doing a story on guanacos their responses were less than encouraging. "Why?" asked one. "Guanaco. Isn't that a skinny looking llama with an attitude?" responded another. One thing was clear; these learned men didn't see what I saw in the guanaco. It is the toughest of all South American camelids, found in the greatest diversity of habitats with an ability to survive where other camelids would perish.

The guanaco is an animal whose peculiar behavior and territorial disputes intrigued Charles Darwin during his brief stay in Patagonia on his epic around the globe journey that resulted in the world-view shattering theories of "evolution", "natural selection" and "survival of the fittest." The guanaco may be one of the world's best living examples of Darwin's thought provoking ideas.

There is much to admire in the guanaco but most domestic camelid aficionados I know have never considered guanacos as a serious prospect for farming. When you mention that guanaco fiber sells among the highest priced of all specialty fibers on the world market, these same camelid owners are surprised or even incredulous.

This article is dedicated to understanding and appreciating the least understood of South America's four camelid species.

I consider myself lucky to have seen guanacos racing like the wind in so many settings around the world over the past 20 years. My first encounter was at an animal park in Ohio. I was conscripted to wrestle a guanaco into a restraining chute so it could be inoculated. It took four, six-foot, 200 lb men to accomplish this task. When we finished the guanaco immediately climbed out the top of the 5-foot chute, crashed to the ground, jumped to its feet and ran out of the barn to join its herd in a faraway pasture. We watched through binoculars to assess this spirited animal to see if it had been injured. It ran like the wind, gliding along effortlessly, rejoined its pasture mates and began grazing as if the aforementioned incident had never happened.

My next encounter was during my llama packing days in the 1980s. Tom Landis, a well-known llama packer, had a couple of pack-trained guanacos that performed very well, to the amazement of llama owners who assumed guanacos were too wild to train. These first encounters whetted my appetite to learn more about guanacos.

Writing the article "The Many Ways Guanacos Talk" in July of 1993 for International Wildlife gave me the opportunity to research guanacos in greater depth. The time I spent studying herds in the wild for this assignment left me with a deep appreciation of guanacos as social animals. Their intricate and predictable way of ensuring genetic soundness as well as providing a nurturing environment in the family group where the young are raised also garnered my respect.

I learned that "survival of the fittest" isn't limited to physical adaptation. It also includes instinctual behavioral patterns that are critical to species survival. I worked with guanaco expert Bill Franklin and German nature photographer Wolfgang Kaehler to put together a story that focused on the whole range of guanaco communication: body language, vocalizations, locomotion displays and scent.

The social design of guanacos with their vigilant territorial males acting as a gatekeeper to predators and lesser males was fascinating to watch. Female family groups have their own internal linear hierarchies. Studying their subtler communications and watching how they related to one another provided me a powerful camelid language lesson.

The importance of territoriality in the instinctual behavior of all male camelids, be they domestic or wild, is readily apparent when observing a wild territorial guanaco. He rules an area because he is the strongest, fastest and often most belligerent. He is fearless. As a result his genes are passed on while lesser males are relegated to onlooker roles in the safety of a bachelor herd.

The way in which a male displays itself to would-be interlopers is both predictable and fascinating to watch. When a strange male approaches the territorial male stands rigidly. His tail is held high, neck bent in a slight "s" shape, ears pinned back and nose tilted skyward, in what is termed a "broadside display" because the guanaco doing it often stands broadside to the animal he is trying to intimidate. From as far as a mile away, the territorial male can give the warning that violence awaits any intruding guanaco.

While the male spends his time patrolling the boundaries of his territory and advertising himself to predators and males attempting to get to his females, the behavior within the family group goes on with subtler gestures. Ear positions, body postures and gentle vocalizations steer the herd's progress through the day. Changes in ear positions by only a few degrees can telegraph alertness, contentment, or

displeasure. An aroused animal, showing an "alert stance," rotates its ears forward toward whatever has piqued its curiosity. A threatening animal uses a continuum of ear positions to keep an overanxious male at bay, warn a chulengo to take its playfulness elsewhere or put a nearby adult on notice that it is intruding into another animal's foraging space.

The manner in which females enforce their status on lesser females is constant. Occasionally there are confrontations in which neither female gives way for a feeding spot and a "stand off" occurs, with both animals standing their ground and assuming a rigid, nose tilted skyward stance that sometimes erupts into a spit fest before one animal backs down. Stand offs usually occur between two animals that haven't resolved where they are in the herd hierarchy.

In times of plentiful food, family groups are normally stable social environments for rearing young. The hierarchy only becomes cruel when food is scarce and the less dominant animals are shoved off their food by the strongest. The family groups usually stay close together relying on their many eyes and ears to detect a predator, which is often discovered by the constant patrolling of the territorial male who is the first to sound the "alarm call."

The "alarm call" is just one of many vocalizations. Zebras and other wild herbivores also make alarm calls. Some studies have indicated that the animal making the alarm call often attracts a predator's attention. So, though the alarm call is made in order to alert the herd of approaching danger, it is also altruistic in nature. It may not benefit the first animal to sound off, but sounding off may help those around him. Charles Darwin is probably the first English speaker to identify the "alarm call" which he called "a peculiar neighing."

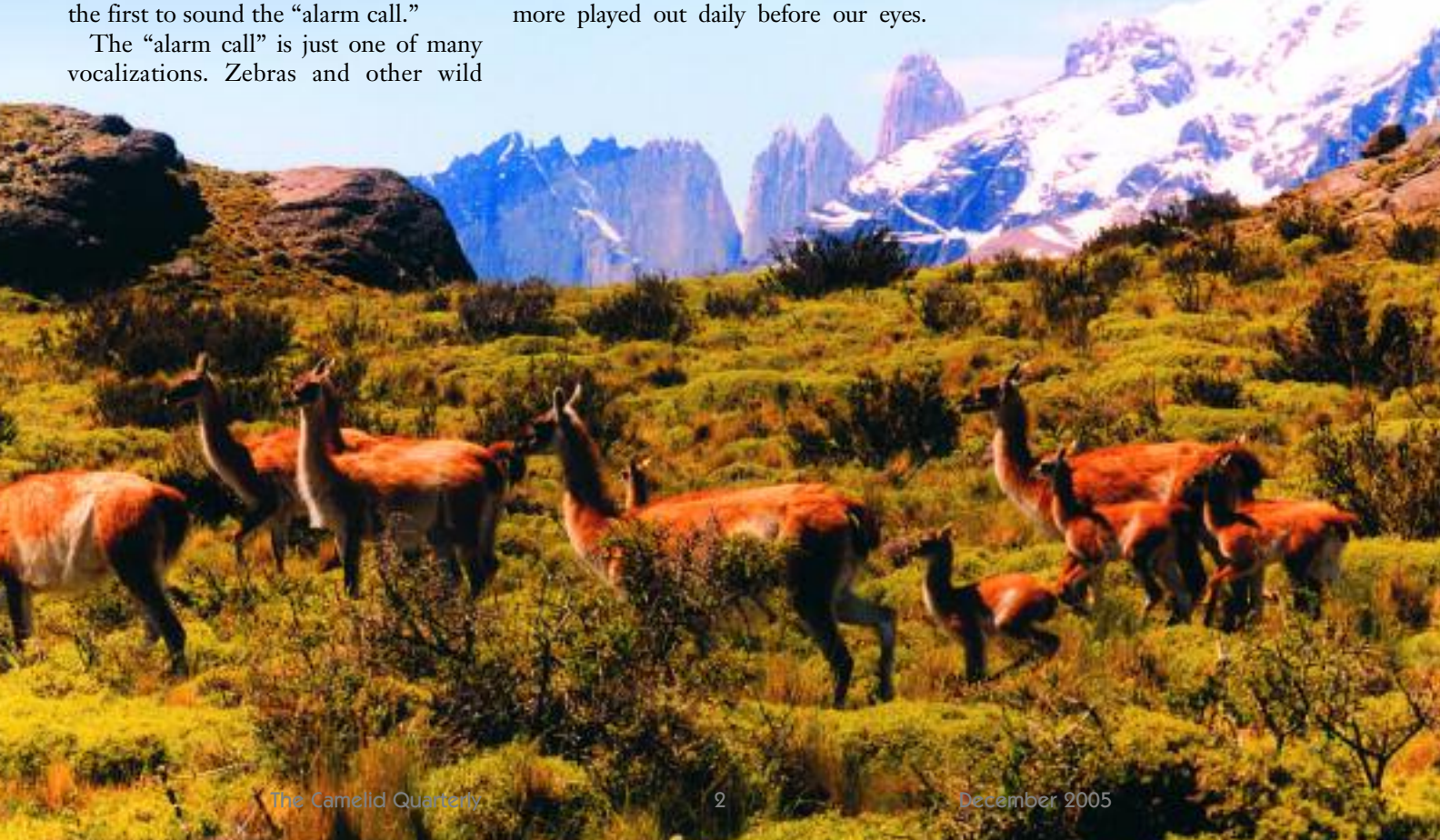
Humming is yet another and more constant noise heard in the family groups and its meanings depend upon the context in which it is used. Dr. Bill Franklin, who studied guanacos in South America for years, speculates that guanacos tailor inflections in humming to different situations. A low plaintive "contact hum" enables two individuals to stay in touch as between a dam and her cria. An "interrogative hum" with a high pitched ending, is the chulengo's way to demand nursing from its mother or simply to greet her if they have been separated.

In the late 1990s Canadians Margaret and Jim Brewster and I visited Torres del Paine National Park in southern Chile. Watching the interaction among the guanacos provided endless entertainment. All of the aforementioned behaviors and more played out daily before our eyes. Wild guanacos are predictable actors whose roles are well defined. Their behavior, however nonsensical appearing, is always related to species survival.

Both the guanaco and vicuna have very similar forms of communication and ways of interacting with their environment - all of these patterns have been passed on to their domestic cousins the llamas and alpacas. Learning about camelid behavior, by seeing it play out in the wild, should be a mandatory course for any domestic camelid owner. One quickly sees how this family of animals is designed to communicate with one another for the purpose of survival.

Watching them reveals the instinctual behavior patterns of a male running with females, a male who is part of a bachelor group, and the stabilizing influence of the herd on the development of young. It also shows us how camelid behavior works against weaker animals in time of drought or hardship. If you contemplate making this journey do so when the chulengos are just a couple of weeks old. The territorial males are working overtime then, breeding their females and repelling challengers.

My final lessons in appreciation of guanacos didn't happen until the late 1990s. While researching the prices of specialty fibers, such as cashmere,



mohair, yak, and all members of the camelid family, there was one final surprise. Vicunas are well known for their legendary 12 to 14 micron fleeces that are at the top of all specialty fiber charts for value – around $600 per kilogram. I expected cashmere or some other fiber-type to come in second.

The guanacos are a two-coated animal and must be dehaired to make proper use of their fine undercoat. To my surprise raw guanaco that has not been dehaired sells for around $200 a kilogram. Dehaired it sells for around $400 a kilogram. When I first retrieved this information from the Wool Record I wondered if there had been a typographical error.

Late term female guanacos in a birthing paddock.

Among North American camelid breeders the scuttlebutt about guanacos almost never mentioned their fiber. Why? I checked with fiber processors in Peru. They said guanaco fiber was second only to vicuna in predictable fineness with all of it ranging between 13 and 19 microns. It still seemed improbable to me. I guess this was to be a case of "touching is believing".

One of the Peruvian mills was producing a collection of scarves showcasing each of the four camelid fibers: vicuna, guanaco, alpaca and llama. Touching these scarves spoke volumes about their special qualities. The vicuna, followed closely by guanaco, had an unforgettably smooth handle. It was one of the guanaco scarves that made the perfect Christmas gift for my wife Sherry.

Peruvian processors told me their biggest problem in utilizing guanaco fiber was finding a reliable source. The subspecies of guanaco found in Peru is considered endangered consisting of about 3000 animals. While Peru is working commendably to protect their vicuna herds that were decimated by heavy poaching, they had ignored the guanaco. In the guanaco strongholds of Patagonia and Tierra del Fuego, there are an estimated 550,000 animals, but most are in remote wild areas, far outside of the reach of any fiber processing efforts.

Since guanacos are large, wild and challenging to handle I wondered, "Can they be managed for fiber collection and kept in a semi-domestic state?" I had my doubts but I was able to answer this question on a recent trip to England.

Upon completion of my business I drove to the tiny town of Fishguard on the coast of Wales. The next day I was up early, driving down a long mist-shrouded driveway lined with huge hedges on both sides. This roadway led me to Esgryn Farm where I met with second-generation guanaco farmer Ray Lerwill.

Ray showed me an impressive operation, well thought out, guanaco-friendly and a bona fide business. As we walked the lush green pastures I listened as Ray explained the government regulations involved in keeping guanacos, how he and his wife manage the animals and their concerns about the conservation of wild guanacos.

Unlike the domestic camelids whose international movements are regulated somewhat by quarantine procedures, the collection and movement of wild camelids involves international agreements involving the International Union for the Conservation of Nature (IUCN), the Europe Union (EU) and numerous other entities. Moving vicunas is strictly forbidden due to their endangered species status and moving guanacos is controlled almost as strictly.

We walked in light rain for about twenty minutes during which time I had seen nothing but a six-foot high perimeter fence separating the guanacos from another vast expanse of verdant green pasture dotted with sheep and, further away, the sea separating Wales from Ireland. Other than the faraway sea and cloud swollen sky, the vista was a composition in shades of green.

Suddenly there was a familiar sounding alarm call and a fast moving brown mass with white underbellies and black faces flashed into view and disappeared over a hill. We followed to see a herd of about 300 females glide up a hill, spin in unison, and stare at us from a safe distance. A lone female stepped forward, sounded the alarm call again and the herd moved off a little further but soon began to settle down. Ray explained to me the herd was being led by an old female. Eventually some of the more adventuresome animals came forward to inspect us, stopping before closing to within 50 yards. The animals respond much like their wild brethren in Patagonia.

We moved on to another huge pasture and found ourselves surrounded by mother and babies who were eating hay at a feeding station. We walked to within 10 feet of these animals who were nonplused by our presence. Much like the cria of domestic camelids the curious chulengos would approach from behind. After sniffing us they would bound back to the group, having made our presence into a game of sniff and run.

Where were the males? Ray pointed into a far away valley where I saw an immense bachelor group of more than 100 animals. Heads down they grazed contentedly, far from the nearest female. We visited the pens holding the males selected for breeding. Ray explained they usually select one to five breeding males a year, basing their selection on fiber, temperament and conformation.

The breeding males were large, proud animals with much more substantial coats than I had seen on wild guanacos in South America. " You can expect close to 750 grams of undercoat from many of our animals. The majority of the wild ones in South America have about 380

Three hundred guanacos grazing in Wales.

Ray Lerwill of Esgryn Farm, Wales.

grams. Diet and breeding account for the difference." Ray also explained that guanacos coarsen very slowly and that chulengos often have an undercoat near 13 microns.

Ray outlined his farm's reproduction program. "We breed them between 14 and 20 days after giving birth. We run them in a ratio of 30 females to one male." Birthing problems are minimal. "We had the British Camelid Veterinary Society here and found that many of the health issues they were dealing with in llamas and alpacas were foreign to us. Nature has made a pretty hardy animal in the guanaco."

Ray then took me to the shearing shed, which housed specially designed hydraulic squeezes. One was originally designed for red deer (the smallest type of elk) the other was a specially designed shearing table. The animals are shorn every two years, one at a time in a safe manner, aided by chutes that force the guanaco into a squeeze and on to a shearing table where is held firmly in place until the shearing is completed.

I ended my time with Ray Lerwill in his two-story stone farmhouse. He brought out Esgyrn's end product; a natural color guanaco scarf. Like so much else I have learned about these fascinating animals, this also surprised me. The scarf is a light fawn color, because guanaco undercoat is generally lighter than the outer coat.

Guanaco scarves with their exquisite handle retail for $450 in Italy and other European countries. How could I resist? Now I too have a guanaco scarf.

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About the Author

Eric Hoffman is the primary author of the Complete Alpaca Book, a 600 page textbook about all aspects of alpacas that has been favorably reviewed around the world. Eric was the founding two term President of AOBA, created the first DNA based camelid registry in the world, continues to work in South America as a screener for entities around the world, and has produced more than 150 articles on camelids, some appearing in the San Francisco Chronicle, Outside, International Wildlife, Animals, Living Planet, and Wildlife Conservation. He is past editor of The Alpaca Registry Journal and is a regular contributor to CQ Magazine.