

Parque Nacional Lauca: Northern Chile's amazing camelid refuge

Once visited, never forgotten, says seasoned traveller Eric Hoffman.

Have you ever been overpowered by the majesty of nature in a way that etched it into your psyche for the rest of your life?

Perhaps you've seen a newly released Condor glide effortlessly over the Grand Canyon's North Rim at sunset, or herds of Bighorn sheep and elk moving down to the valleys after the first snow in the Canadian Rockies.

If you get a rush connecting with nature and are a llama or alpaca owner I'll wager that this special feeling awaits you in the highlands of northern Chile, at Parque Nacional Lauca (Lauca National Park). The park offers a mixture of vast puna grasslands interrupted by towering volcanoes, milk colored lakes, and salt pans. Massive house-sized boulder fields strewn about the landscape give testimony to a cataclysmically violent geological past. The park is home to a myriad of species adapted to life along the spine of the Andes. Parque Nacional Lauca represents the primeval Andes as well as the Serengeti represents life on the central Africa plains. In Parque Nacional Lauca the camelid family is the main attraction.

I first heard of this amazing place from Chileans living in the modern coastal city of Arica. They simply called it Lauca. Since 1995 I've visited Lauca six times and have never been disappointed.

High mountain environments have fickle personalities, bright, blue skies and fluffy clouds aloft one moment followed by rain squalls with dramatic lightening the next. At night it almost always freezes. In my more than 40 trips to the Andes, Lauca is the only place where I'm confident that I'll see all four species of camelids – guanacos, vicunas, llamas and alpacas – in close proximity to one another, sometimes with the wild and domestic species grazing side by side in vast bofadales (naturally occurring wet meadow areas common in the much of the Andes).

For me, the allure of Lauca is getting to experience the dramatic highlands ecology where camelids evolved. Here you can see both the physical and



Llamas search for life sustaining nutritional forage in the dry season in Lauca NP.



Shepherding alpacas



behavioural adaptations that have allowed this family of animals to thrive in the Andes. To the thoughtful observer there are lessons aplenty: how camelids use their nimble mouths to extract the most nutritious forages from their stingy environment, their use of subtle behavioural cues to enforce spatial distances within a herd while browsing or grazing, the amount of time they devote to rest and rumination, their reaction to threats, the dynamics within a family group, the role of males in defining a family group's territory, the timing of births to coincide with seasonal plant growth and much more.

A vast landscape

The Parque Nacional Lauca boundary starts at about 4000 metres (12,000ft) and climbs even higher. For much of the year the flat areas are mostly wet and

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green, covered in an assortment of bristly, tough, compact grasses that are the mainstay of the wild and domestic camelid herds in this region. Seasonally much of the landscape dries out. In some years animals are hard pressed to find adequate nutrition. This cycle repeats itself. Severe droughts are viewed as natural occurrences that cull the herds. But in Lauca the



LEFT: Flamingo are among the astounding amount of bird life in the area.



LEFT: Traditional herder family/ slaughter sequence employing ch'illa method **a.** incision **b.** pulling aorta, **c.** reverence – thanking the animal for sacrificing (coca leaves).



“It is said that Apu, the mightiest of Gods dwells on their slopes.”

another in the process.

As you enter the park the environment changes. You will come to the first bofadales that always have resident herds of vicunas in them. The green bofadales are a welcome contrast to the stark Atacama desert you had to cross to get here. The nearby vistas might also include alpaca herds with their shepherds from mud and tin roofed villages such as Cucayo, only a dozen kilometers inside the park. In almost any direction you look there will be family groups of vicunas vigilantly guarded by their territorial males. As you work your way through the park there is a constantly changing look at the world of the South American camelid.

A signpost declares the roadway to be 4700 metres (14,000ft). This cold frigid flat area is collectively known as the puna, but overshadowing its vastness are volcanoes that dominate the skyline in much of the northern Chilean Andes. In the native Aymara dialect the two most immediate towering snow-laden giants are known as the paychatas (two brothers), whose names are Parinacota and Pomerape. They stretch skyward to around 6500 metres (roughly 19,000ft). They have great religious significance. It is said that Apu, the mightiest of Gods dwells on their slopes. Along the icy slopes of the high trails are apachitas (markers) where Pachamama (mother earth and has lent alpacas and llamas to the people of the land) is worshipped. In accordance with the ancient belief systems, alpacas and llamas selected for sacrifice are sometimes dispatched by the ch'illa method, ie, holding the animal in a prone position, making an incision at the base of the rib cage, reaching in and pulling the aorta

vastness of the bofadales and the volume of constant water sources trickling across the landscape assures enough nutrition for great numbers of camelids in all but the driest years. This is a good as it gets in the Andes if you are a camelid.

Guanacos are usually found outside the park boundary on rugged land with a plant community that resembles the tedium of central Nevada, but is spread over a much more dramatic topography with plunging valleys, and twisted rock formations. When looking at the harsh dry land it would seem impossible that something as large as guanacos could survive; but they flourish here. Where you find them, and what they will eat makes it clear why many South American camelid experts consider guanacos the hardest of the South American camelids.

For reasons I've never understood the guanacos on the western boundary of the park are very slow to move off and excellent subjects for camera buffs. More than once I've stopped my car, climbed out and approached a herd that initially reacts with more curiosity than fear. Often the herds are young bachelor groups. Individuals will often strike classic broadside displays as you walk towards them and then lose their nerve when you get within 20 metres and plunge down a steep slope with great agility and speed – sometimes ramming one

LEFT: The rabbit sized chinchilla (sp) cousin is rare in much of the Andes but plentiful in Lauca NP.

away from the heart. This may sound gruesome to westerners used to buying their meat neatly packaged in a local market, but to the Aymaras the ch'illa does not spill blood on the land, and the entire process takes less than a minute. Thanks is given for the animal. Its sacrifice allows a family to live.

Extreme altitude

A sense of Lauca comes by getting out of your car and walking a bit. This should be done as slowly as possible due to the extreme altitude. By getting out you'll feel the frigid air, the sponge-like, sharp pointed grasses that dominate the bofadales and the interactions of the plentiful wildlife. You'll notice when you walk towards a family group of vicunas that the territorial male will suddenly appear and stand between you and his group. He may start alarm-calling before the group moves off. If you sit quietly the group may slowly lose interest in you and return to grazing.

One group moved away from me rapidly, only to reverse itself and come sprinting by me at breakneck speed. Behind them was a second territorial male screeching his anger for their trespass caused by me approaching and forcing the herd in his direction. Sitting quietly one can see a constant interaction between males who bluff and pose at one another advertising their respective territories. Alpacas inherited their behaviour patterns from vicunas.

But the camelids are only part of what you will see if you walk in this area. The amount of birdlife is astounding. The Andean Goose (*Chloephaga melanoptera*), a large white and black bird which is always found in close proximity to its mate, often shares pastures with camelids. They emit a piercing whistling sound when you approach too rapidly. There are also Andean ibis and an assortment of ducks wandering around in these wet pastures. Andean flamingos, looking every bit as pink as their counterparts living in more tropical places, is commonly seen around the briny salt lakes that also occur here.

If you keep an eye skyward you may get the treat of seeing kunturi, the Andean condor (*Vultur gryphus*) soaring on its immense three metre wingspan. There is even an over-sized hummingbird, named the Giant Hummingbird (*Patagonia gigas*). It too had to adapt to survive in an extreme environment. Nightly, to deal with the cold, it goes into a suspended state of torpor, with a heart beat so slow that it is a wonder it survives.

A varied environment

The area is vast and time is precious because most people only visit for the day because of the lack of accommodations in the park. There are three short walks that will allow you to experience and access a variety of environments.

The first begins in the vicinity of the small warden's house on the right side of the road, located just inside the park's western boundary. Park your car in front of the warden's house (who may or may not be in) and head west along huge boulders. There are pictographs on some of the boulders.



ABOVE: Female vicunas and young.



ABOVE: Llamas on their way to dry pastures above on slopes above wetter bofadales (photograph Arnold Lugenbuhl).

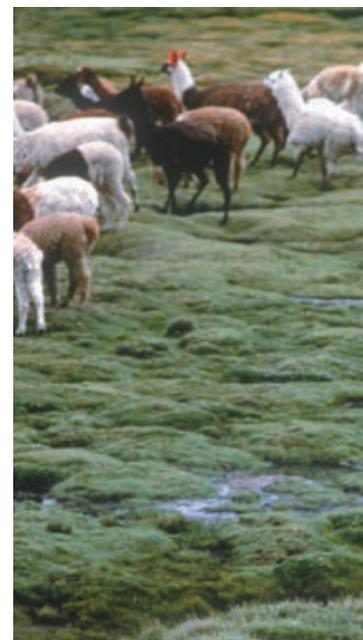


ABOVE: Immense bofadales

To your right you will see a colony of viscachas (*Chichillidae sp.*), the rabbit-sized chinchilla cousin that lives in the high Andes. These fine furred animals are not overly impressed with people and will often allow you to approach to within a couple of metres before scampering away to hide in a pile of boulders. Along the fringes of the grassy areas are stark boulder-strewn dry areas where there are botanical oddities like Laretta (*Azorella compacta*) which looks more like a giant sculpted sponge than a plant. No two Larettas are the

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RIGHT: Woman with drop spindle and child herding llamas, alpacas and huarizos.





(photograph Arnold Lugenbuhl)



same shape. They are curvaceous and compact and cling to boulders.

In a few hundred metres the path arrives at a plank walkway that spans a very wet bofadesles. Usually this area is also home to a few resident vicunas that rarely move off if you stay on the walkway. The walkway ends at the highway. Cross the highway and look for boulders outlining a path that heads north over a hill. This path is the beginning of a loop that will take you away from the highway, to large grassy areas with year-round streams. Bring binoculars and possibly a lunch and you can make use of a naturally occurring rock shelter decorated with pictographs from the time of prehistoric hunters. Knowing the rock shelter exists can become important if you are overtaken by a thunder and lightning storm, which happened to me once.

From the rock shelter you can watch the vicunas interact with one another. I counted five different family groups on one visit. To any camelid owner the behaviour will be familiar. The territorial male often picks high ground to intimidate his next closest rival. He will perform the familiar camelid broadside display. Often the nearest male will test the territorial male's resolve by deliberately entering his territory and then trotting away before the territorial males closes in on him. But testosterone sometimes trumps coyness. High speed chasing and screaming follows until the interloper retreats. The grace and speed of vicunas is astounding. Occasionally there are brief fights but since there are no fences, retreat is always an option.

The interaction between males is often at its peak during the breeding season March – June. The interaction within the herd is interesting. In a short time you will be able to identify the dominant females as well as the submissive animals. I enjoy watching the behaviour of these family groups. Occasionally alpaca herders will bring their herds through this area, which usually interrupts vicuna-to-vicuna behaviour momentarily.

There are some humorous exceptions. Once I saw a territorial vicuna continually displaying to a powerful male llama who was passing through as part of large herd. The llama began snorting and broadside displaying in return and soon took after the male vicuna who nimbly raced off ahead of the raging llama. The pair disappeared over a hill and returned about 30 minutes later. The vicuna was still staying just out of reach and had returned to his territory. The much bigger llama was thoroughly exhausted, sides heaving and mouth-breathing in an attempt to suck in enough oxygen. The llama slowly walked off in the direction of his herd. The vicuna looked and acted as if he'd never left.

Natural pastures

Two other walking areas are worth noting. A few miles inside the park there is a police station where all traffic must stop. There are salt pans and a small reservoir off to the left. Take the dirt road towards the reservoir and get out of your car when you reach it. Walk towards the white flat and watery area which are salt pans. Here you should find Andean flamingos. If you cross over the spillway in the opposite direction you will be treated

to one of the largest natural pastures I've seen in the high Andes. There will be domestic herds of alpacas, vicuna herds, and llamas dotting the vastness along with unexpected wildlife that suddenly announces its presence as you walk along.

One last destination is Chucayo, a small village off the highway to the left. The turn is clearly signposted. Here, along the roadside you'll find herds of alpacas from nearby villages. You can walk amongst them and will find great photographic possibilities because the park's two dominant volcanoes tower over you and offer a stunning backdrop. The animals may look unattended but rest assured a herder is watching you. The herders, which are often two women and their young children, often sit amongst boulders to shield themselves from the near constant wind.

If you continue driving towards Bolivia you'll come to Lake Chucayo and drier country. I've often seen large llama herds here, usually grazing on the drier harsher grasses that live on the slopes in the region.

Visiting Lauca is both easy and difficult. Located 147 kilometers inland from Arica, Chile's most northern city, you can visit Lauca in a day by renting a car. The drive one way usually takes about two hours. A two or three day visit would be ideal, there are no accomadations in the park. Putre, the nearest town outside the park's west entrance, has some pretty basic rooms for rent and a hostel for visitors. I have sometimes run into hardy young Europeans biking and tenting their way through the area.

There are a few hazards worth mentioning. You will travel from sea level to 4500 metres (13,600ft) in just two hours which can literally become a nauseating experience should you become victim to altitude sickness. Preparing in advance with a prescription of Diamomox or other physician recommended medications designed to cope with the rapid changes in altitude is worth careful consideration.

When visiting high elevations always drink plenty of water. Buy bottled water before leaving Arica. Once you reach the park there are only a few Aymara-owned mud and tin shops selling mostly woven goods and candies. Travel self-contained with bottled water, food for a day, and make sure your rental car's tank is topped off before heading inland. Petrol pumps are nearly nonexistent 30 kilometres from the coast. Turn around when your tank registers half-full.

The road can be treacherous. The road from Arica twists and turns, always climbing. After leaving the green Ulloa Valley the road climbs sharply through the chalk colored desert mountains of the Atacama Desert. There are steep drop offs, sharp turns and plenty of commerative crosses marking fatal accident sites. Most accidents occur on the downhill leg when speed and misjudging corners. The main hazard is the large heavy-laden trucks inching their way upward from the Chilean coast to neighboring Bolivia. Because Bolivia is landlocked, this single road is their primary link to commerce with the rest of the world. The road itself is mostly paved.

A visit to Lauca is worth the effort. You will never forget it.