

NATURAL HISTORY

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ON
EARTH

Selva Central

One of Peru's hidden gems

Peruvians often divide their country into three broad regions: *Costa*, *Sierra*, and *Selva*. The *Costa* is where the Pacific Ocean meets parched deserts and ancient spiny forests growing along dry riverbeds. The *Sierra*—the Andean mountain range, or cordillera—includes cloud forests, high-elevation puna grasslands, and sky-scraping slopes that rise to glacier-topped peaks. The *Selva* (Spanish for “jungle”) refers to the huge, sweltering megadiverse Amazonian lowland forests to the east, which hold some of the biologically richest ecosystems of the planet. Some of the area’s well-publicized inhabitants are the flocks of colorful parrots that come

to the clay licks of Madre de Dios, or pink dolphins and anacondas that dwell in the Amazon River as it flows through Loreto, a federal department of northern Peru, which is larger than the entire country of Ecuador.

Loreto sits on the border with Colombia, while Madre de Dios is far to the south, facing Bolivia. But between these two extremes is a far less known region, the *Selva Central*. Shared among the departments of Huánuco, Pasco, Junín, and Ucayali, its richness can hardly be described in a few pages. But one of its gems is undoubtedly the Cordillera Yanachaga.

Not so long ago, the region was a hotbed of terrorism and very difficult



to access. That is no longer true. From Lima, Peru’s desert capital, it is now a ten-hour drive, crawling up nearly 5,000 meters of elevation and down

One of the more pristine sections of a brook (quebrada in Spanish) as it exits Huancabamba Canyon at the northern end of the Yanachaga-Chemillén National Park.



the other side, to Oxapampa. This charming provincial capital of fewer than 15,000 people sports Tyrolean houses with red, sloped roofs and German street names—evidence of the Austrians and Germans who made a pact with the government and settled in the area a century and a half ago. Oxapampa sits in a verdant valley between the main Andean chain and the Yanachaga (“black rock” in the Yanesha’ language). This isolated cordillera is no mere hill: its highest point is still not exactly known, but it is somewhere between 3,600 and 4,000 meters above sea level. However, intrepid explorers, having cleared its eastern foothills, will not encounter another significant rise until they reach the Atlantic, having crossed the entire Amazonian basin. Much of the cordillera is protected as part of the Yanachaga-Chemillén National Park, which together with several nearby reserves, forms the Oxapampa-Asháninka-Yanesha Biosphere Reserve, for a combined total of 1.8 million protected hectares.

With a sturdy 4x4 vehicle, the National Park can be reached in a half hour from Oxapampa. Crystal clear streams regularly cross the path as it weaves its way uphill, under the canopy of trees covered in mosses, epiphytic ferns, and orchids. As is often the case in the tropics, the forest can seem rather quiet, until suddenly a wave of birds appears out of nowhere. These mixed foraging flocks are a fundamental component of the Andean cloud forests, and these multicolored, feathered, chattering multitudes can comprise over twenty bird species. Foremost among them are the tanagers, small restless birds that display



A juvenile gray woolly monkey (Lagothrix cana), the most common species of primate in the Park, found from the Amazonian lowlands up to nearly 3,000 meters above sea level, but always in primary forest

a gaudy combination of colors. And in defiance of all codes of fashion, each one is more stunning than the last. They are often accompanied by barbets, fruiteaters, or becards, all of them frugivores that play an essential role in dispersing the seeds of many trees and shrubs of the forest. Meanwhile, more discreet ovenbirds and flycatchers hunt the myriad insects that dwell amidst the vegetation, while hummingbirds fight

where the trees give way to bamboo thickets, the dense mists occasionally part for a minute, revealing the city below—only a few hours’ hike away, but seemingly a different world altogether.

To the north is Huancabamba Canyon. For fifteen kilometers, the rushing river has carved its way through the northern foothills of the cordillera, and today the waters flow through sheer rock walls, hundreds of meters high, and covered in lush vegetation. Most years, after the torrential downpours of the rainy season, cataclysmic landslides will bury the narrow road that was cut into the near-vertical slopes. And the two small towns that lie to the northern end of the canyon are often cut off from the rest of the world for weeks at a time. In summer, however, it is a heavenly place, the tall trees along the trails providing welcome shade from the blazing sun. Every day at dawn and at dusk, a chorus of loud, froglike croaks erupts from a specific spot in the forest, audible even over the ever-present roar of the river. However, there is no pond,



A terrestrial orchid in the Telipogon genus, one of over half a dozen members of that genus (some still undescribed) that can be found in the cloud forests of the Yanachaga cordillera

over the tubular flowers of wild fuchsias and other vines, until all come together to chase away a pit viper, hidden in a mass of dead leaves. Further up on the exposed ridges of San Alberto,



A young broad-headed tree frog (*Osteocephalus cf. mimeticus*) clinging to a fern leaf in the premontane forest of Huancabamba Canyon

no swamp at that spot. And as you get closer, you realize that this strange chorus comes from the trees. Indeed, there are no frogs; this is the singing of the Andean cocks-of-the-rock (*Rupicola peruvianus*), the national bird of Peru. Sporting feathers of a bright traffic-cone orange, set off by gray-and-black wings, and a broad crest that can form a near-perfect semicircle, the males of this preposterous creature gather every day at their lek. On this collective display ground, males spend hours calling away and performing a bizarre up-and-down display, lifting their wings over their head, and vying for the best spots. Eventually, a female shows up, much more discreet in ruddy brown tones, and inspects the performing males, as the lek erupts into pandemonium. If one of them is to her liking, she will mate with him, and be on her way. After this brief encounter, males will take no further part in the raising of the next generation. This unusual system is only made possible because these birds are frugivores, living mostly off berries, which are available in abundance in the forests they inhabit. A single mother can find enough food for herself and feed her chicks—she will also capture a number of frogs and small lizards for her growing babies without relying on the assistance of a male partner.

old-fashioned motors are deftly maneuvered by local boatmen. And that is only if the river is feeling cooperative. When it swells after heavy rains, the treacherous rapids become impassable, and more than one wrecked boat on the rocky banks is testimony to what befell those who braved the angry waters. The only humans for miles around are the rangers who maintain the station at the entrance to the Park and their families who dwell in small houses built on stilts by the river. While it is only twenty-five kilometers from the heights of San Alberto, this is an entirely different ecosystem. At dawn, the yelps of white-throated toucans (*Ramphastos tucanus*) echo from the tall trees by the crystalline river,

The most remote sector of the National Park is El Paujil. This is where the last foothills come down to the Amazonian lowlands. The only access is via the Iscozacín River, riding on peque-peques, narrow wooden canoes whose

while otters (*Lontra longicaudis*) dart in and out of the water. In the forest, poison dart frogs (*Ameerega trivittata*) dressed in striking black and green hop underfoot, often with a tadpole carefully stuck to their back. Troops of gray woolly monkeys (*Lagothrix cana*) move through the canopy, the various members keeping in touch through a complex repertoire of yelps and barks. These are some of the largest primates in the New World, with long, slender limbs, and a thick, glossy fur. Their curious faces peer down at observers who move quietly enough not to startle them. At night, under the spectacular starry skies, porcupines and pacaranas (*Dinomys branickii*), a rare and poorly known animal somewhat reminiscent of a spotted beaver and the last extant member of a family that included the largest known rodents, come out to forage, while the haunting calls of nocturnal birds echo among the trees, and myriads of moths congregate around the lights of the station, some stunningly colorful, others masterfully camouflaged, others so bizarre in appearance that they are hardly recognizable as moths.

These are only some of the wonders of the Yanachaga. Every visit is differ-



As is done every summer, a farmer near Oxapampa is setting a fire in his field. Such fires regularly cause disastrous wildfires.



The grass-green tanager (Chlorornis riefferii) is one of over fifty species of tanagers found in the area.

ent and yields something new, be it an orchid with three-meter-long flowering spikes or a neon yellow mushroom peeking through the leaf litter. But the area is not without its troubles. On the Andean side, there is hardly any forest left on the lower slopes, having all been converted to fields where small landholders grow granadilla (passionfruit), a profitable cash crop that has undergone a boom in recent years. Regularly, fires set to burn back old growth and fertilize fields get out of control, and more of the remaining forest patches outside the National Park go up in flames. At certain times of the year, several spectacled bears (*Tremarctos ornatus*) come down the mountain and can be seen eating cultivated avocados, to the delight of visitors. However, this is in fact aberrant behavior for these usually solitary and extremely skittish animals—an act of desperation, as their favored habitat is being encroached upon and they struggle to find their usual food sources.

The area has definitely been put on the map in recent years. Plots of land

are rapidly being bought up around Oxapampa by wealthy Limeños, and more and more people come here to escape the heat of the coast, taking advantage of a direct bus line. Prices quadruple during the Easter celebrations of Semana Santa, as the town is overrun with holiday-makers. While economic development is unavoidable, and will be welcomed by many of the region's inhabitants, there is also a tremendous opportunity to educate them about the mind-boggling diversity that sits literally on their doorstep. The Missouri Botanical Garden has been a major presence in this area. It has operated a satellite in Peru for decades, which has been based in Oxapampa for nearly twenty years. In that amount of time, its staff has tripled the number of plant species known for the flora of the region, and described dozens of new species. In 2010, the Garden was instrumental in creating the Biosphere Reserve, while providing education, training, and accommodations for dozens of researchers and Park staff.

Over the past few years, multiple species of amphibians have been described, all of them known only from the Yanachaga cordillera. At least fifteen of Peru's endemic birds have been found within the National Park, and its total bird list is over 600 species, which is nearly a third of the country's total—in an area less than 1 percent of the national territory. In sum, this is one of the most remarkable areas in a country rightly famed for its biodiversity. Up until now, the area has remained relatively unspoiled, away from the attention of most. As it becomes better known, the perils it will face are as great as the riches it harbors. What its future will look like is entirely up to its people.

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