



Map by J.L.H.

## BIRDING IN PERU, PART II: CUSCO AND THE PUNA

by Bruce A. Sorrie

Having gotten the feet wet, so to speak, along the coast of Peru with its abundance of maritime birds and oasis species (read "Birding in Peru, Part I: The Southern Coast," *Bird Observer*, August 1985, 13: 176-182), one is naturally tempted to venture inland to sample less familiar genera. But where? The vast Andean chain stands as a barrier, a complex uplift that in Peru rises to 6768 meters (22,205 feet), supports an awesome diversity of habitats, and cannot be easily known. Few good roads ascend its flanks, and none of them is fast by U.S. standards.

**Acclimatizing at Cusco.** Fortunately, one can fly right to the heart of the Peruvian Andes, to Cusco (also spelled Cuzco but pronounced "koos'koh"). In a flight that lasts only an hour, one's surroundings are magically transformed from the barren landscape of the desert coast to the fertile Apurimac Valley, for centuries the center of Inca civilization. At 3475 meters (11,400 feet), Cusco takes some getting used to. Don't worry about missing a day of birding: it's better to miss getting altitude sickness. So stroll around the plazas at a slow pace, see old Inca foundations with their marvelously fitted cut stone blocks, tour the Spanish colonial cathedrals, check out the museums, and barter for alpaca sweaters ("chompas"). Do nothing strenuous for twenty-four hours. Cusco is a major city in terms of Peru's economy, and you will quickly see why -- tourism. Besides the attractions in the city, there are major Inca ruins just uphill at Sacsayhuaman and Kenko, as well as nearby Pisac and Ollantaytambo. And Cusco is the starting point for most visitors to Machu Picchu, an absolute "must" visit. So there is plenty to see and do, plus dining that is not bad by birders' standards.

**Birds of the Cusco area.** Once having gotten your mountain lungs, the urge to bird grows strong. By then, however, you will have already added substantially to your Peru list. Andean Lapwings and Andean Gulls usually frequent the airport grass and adjacent stony river bars. Greenish Yellow-Finches and the ever-present Rufous-collared Sparrows may be seen in plazas and gardens and on roofs. Andean Swifts and Brown-bellied Swallows course the rarified air. Walking around the ruins above the city will yield several other species, especially in shrubby thickets: Spot-winged Pigeon, Eared Dove, Sparkling Violetear, Bar-winged Cinclodes, Rusty-fronted Canastero, Rufous-naped Ground-Tyrant, House Wren, Chiguanco Thrush, Blue-and-yellow Tanager, Band-tailed Sierra-Finch, and Cinereous Conebill. The more you get away from roads and into farmyards, brushy draws, and gardens, the more you will see. However, the Eucalyptus groves of tall trees are dull for birding.

Due to its position and elevation, Cusco supports a mix of west slope, east slope, and true puna-zone species. Persistence (and proper seasonal timing, in some cases) will produce Andean Tinamou, Andean Hillstar, Giant Hummingbird, Green-tailed Trainbearer, Andean Flicker, Black-billed Shrike-Tyrant, Pied-crested Tit-Tyrant, White-browed Chat-Tyrant, Black-throated Flower Piercer (*Diglossa brunneiventris*, now distinct from Carbonated), Bright-rumped Yellow-Finch, Gray-hooded Sierra-Finch, Hooded Siskin, and Chestnut-breasted Mountain-Finch. Unfortunately, due to the expanding human population and subsequent loss of woody vegetation, birding in the vicinity of Cusco is not very exciting, and most people tire of it after a couple of days.

**Urpicancha ponds.** Before leaving Cusco, be sure to bird the Urpicancha Ponds in Huacarpay for a taste of puna wetland species. Only half an hour from Cusco on the main road to Urcos, this small complex of marshes and ponds offers easy viewing from a dirt road that encircles most of the wetland. A couple of stops at farm fields and woodland patches along the way will yield Puna Hawk, American Kestrel, Bare-faced Ground-Dove, Giant Hummingbird, Shining Sunbeam, Mourning Sierra-Finch, Golden-billed Saltator, and other species of general occurrence in the Cusco area. The wetlands and adjacent streamside meadows offer a fair diversity of habitats for White-tufted Grebe, Puna Ibis, Speckled, Puna, and Cinnamon teal, Yellow-billed Pintail, Andean Ruddy Duck, Plumbeous Rail, Common Moorhen, Slate-colored Coot, Andean Lapwing, Baird's Sandpiper (and other North American migrants), Andean Gull, Wren-like Rushbird, the diminutive but spectacular Many-colored Rush-Tyrant, and the locally distributed Yellow-winged Blackbird. Adjacent rocky, bushy slopes support an assortment of ovenbirds (canasteros, thistle-tails, etc.), chat-tyrants, sierra-finches, and others. Drive down the dirt road that skirts the east side of the large open pond. At the southeast corner are many tobacco bushes that attract the Bearded Mountaineer, a hummingbird known to occur in only two departments (states) of Peru.

**To Puno and Lake Titicaca by road or rail.** The Urpicancha Ponds are split by the two land routes to Puno and Lake Titicaca: the auto road and the railroad. The former is a grueling, bumpy, ten-hour drive. The latter (an eight-hour ride scheduled every other day) is one of the great train rides of the Andes. The pastoral landscapes coupled with views of snow-capped peaks (especially at and just south of Abra La Raya, 4300 meters or 14,150 feet) make the journey a real delight. Go first class, catch up on your reading, and have your binoculars and camera ready. The many pools and streams along the route have most of the same species as the Urpicancha Ponds plus Silvery Grebe, Neotropical Cormorant, Black-crowned Night-Heron, Mountain Caracara, Aplomado Falcon, Spot-winged Pigeon, Burrowing Owl, and Andean Flicker. Also watch

for herds of domestic llamas and alpacas. Warning: thieves may work the train, especially by boarding at stations south of the pass (Abra La Raya).

**Lago Umayo for better birding.** Once in Puno, a scruffy but economically important border town, rent a car or driver and drive about to gain a view of magnificent Lake Titicaca, an enormous body of water straddling the Bolivian border and home to many endemic fish, frogs, and other aquatics. However, the lake offers little for the birder, whose time is best spent at Lago Umayo located right beside an excellent road that leaves the main highway several kilometers north of Puno. Here one can expect to see at close range pairs of Short-winged Grebes, endemic to the Titicaca-Poopó basin (Poopó is a lake in Bolivia). The Urpicancha waterbirds will all be here plus Andean Swallow, Puna Yellow-Finch, Andean Parakeet -- a wonderful sight to see in a new dusting of snow at 4000 meters (13,100 feet) -- Black Siskin, Black-winged Ground-Dove, Wilson's Phalarope, Plain-breasted Earthcreeper, and other puna-zone species. In June of 1986, my tour group had an extraordinary sight -- Chilean Flamingos in a roadside pond created by the overflowing Lake Titicaca. Nice as this experience is, however, to see the true puna zone and its special avifauna, you must travel westward.

**Puno-Mazo Cruz-Moquegua.** I've taken two routes, one from Puno to Moquegua via Mazo Cruz, the other from Puno to Arequipa via Juliaca. The former is very rugged, with many kilometers between settlements and *only one gas station* -- actually just a few fifty-five-gallon drums in a shop in Mazo Cruz. Fortunately, the proprietor will dispense gasoline at practically any hour. And the route passes through some lovely snow-capped scenery, beside jewel-like lakes full of three species of flamingos and puna waterfowl, through puna "bogs" where Diademed Plovers (sometimes called Diademed Sandpiper-Plover) and Rufous-bellied Seedsnipe pass days at a time without seeing humans, and through sandy, stony wastes where Puna Rheas eke out a living.

**The Puno-Juliaca-Arequipa road,** on the other hand, is a main thoroughfare, populated particularly by Bolivian truckers, so it is best to take this one in case of breakdown or other problems. Before leaving Juliaca, spend some time shopping for alpaca goods in the central square, for the prices are low. The drive from Juliaca to Arequipa takes about eight hours without birding. There are no gas stations beyond Santa Lucia and there are no hotels on the way, but one may camp almost anywhere off the road. Be prepared for cold. We spent two nights tenting in June, when temperatures dropped as low as ten to twenty degrees F. The appearance of the sun above the hills in the morning signals a rapid rise in temperature so that by 9:00 A.M. a sweater and light jacket are comfortable.

**Westward into puna scrub.** Driving westward, the road slowly climbs. Cinereous Harriers ply the rangeland and Aplomado Falcons survey the



*Vicuñas*

*Photo by Bruce A. Sorrie*

bunchgrass slopes from telephone poles. The landscape looks like parts of Wyoming or the Great Basin of the western United States but at an elevation 2450 meters (8000 feet) higher. Just past Santa Lucia, look for D'Orbigny's Chat-Tyrant on the big rock slope. Ahead lie the deep blue waters of Laguna Saracocha. All around its margin Giant Coots busily add fresh greenery to their ponderous nests while Slate-colored Coots, only half the bulk, tip for pondweeds. Silvery Grebes raft farther out with Puna Teal. Andean Geese, relatives of the Kelp Goose of Patagonia, keep wary watch here and at adjacent Laguna Lagunillas. Crested Duck, a large high-altitude species with a dark ocular patch and a low, short crest, occurs here as well. The dry grassy slopes are dotted with yellow-flowering shrubs with scalelike leaves. These "tola" bushes give this widespread plant community its name, "tola scrub" or simply, "tola." This habitat harbors more puna specialists: Ornate Tinamou, Common and Puna miners, Bar-winged and White-winged cinclodes, Plain-breasted Earthcreeper, Streak-backed and Cordilleran canasteros. All of these species except the tinamou belong to the ovenbird family (Furnariidae), members of which are prevalent in the puna along with flycatchers and finches. Check cultivated plots for Rufous-naped and Cinereous Ground-tyrants (now separated from Plain-capped), Bare-faced and Golden-spotted Ground-Doves. Puna Tinamou, big, wary, and good eating, calls early in the morning but is hard to see.

**Flora and fauna of the puna desert.** It is difficult to describe the beauty of the puna's broad expanses of rolling, hilly terrain, vegetated primarily by clumped bunchgrasses called "ichu" and punctuated by distant "nevados" (snow peaks). Some see it as a dry wasteland, and indeed it is a high elevation desert that gets dryer as one progresses westward.

There is much to be seen by the alert observer. Vicuñas, wild relatives of domestic llamas and alpacas, may be seen anywhere in small bands grazing on the ichu's softer green shoots. They are smaller and more delicate than the other camelids, are a soft *café au lait* color, and are supremely graceful. Thanks to rigorous protection by the Peruvian government, one can now view these lovely animals over much of the puna. (The only other wild camelid in South America, the Guanaco, found at lower grassland elevations, is extremely rare and local in Peru.) Viscachas are larger relatives of chinchillas and inhabit stony canyons and boulder slopes. They like to sun themselves atop boulders (often accompanied by Andean Flickers), looking like short-eared rabbits with squirrellike tails. Gray-breasted Seedsnipe also use rocks to call from. These plump quaillike birds are actually highly modified shorebirds that feed on seeds and small fruit. Their flight, swift and twisting, affirms their relationship. White-throated Sierra-Finches and Golden-spotted Ground-Doves, rare north of this latitude, are characteristic species of the dry puna of the central Andes. Spot-billed Ground-Tyrant is one of several migratory species of these upright, ground-dwelling flycatchers that move north from the southern Andes and Patagonia and spend their nonbreeding season at middle latitudes.

**Up to the heights: 15,500 feet.** At Alto Toroya the road reaches its highest point, 4725 meters (15,500 feet). At a nearby puna bog we were amazed to find several butterflies, and there were frogs in the icy streamlets. It must be remembered that temperatures fall below freezing nearly every night of the year here, yet poikilothermic animals, including lizards, have successfully adapted to the rigors. Take a moment to listen -- to silence. Save for the occasional bird note, it is absolute. The puna is easily the most quiet and serene place that I have experienced.

Several kilometers westward the road flattens out and passes by a slope with bright green, rounded rocks -- or so they seem. Actually, they are yareta plants, members of the carrot family (Umbelliferae) that are so tough the dried plants are used as firewood. The bleaker the habitat the more yareta dot the ground in company with other highly adapted species of cushion plants. Even the cacti here look like inverted bowls.

**The Diademed Plover.** Farther on, the road descends abruptly to Pati. At the kilometer 166 marker above the village is a large puna bog. Puna bogs develop where seepage water emerges from several points along a slope and collects into loosely braided streamlets. The prominent vegetation is a very short, compact, supertough member of the rush family Juncaceae, genus *Distichia*. It is so firm that walking on it hardly leaves footprints. Here, in this unlikely and rather forbidding habitat, lives one of the most highly prized members of the avian world, the Diademed Plover. Even today little is known of the distribution and life history of this unusually plumaged shorebird, but my

observations indicate that one pair occupies and defends one large bog or perhaps a few smaller ones. The birds are wary, yet reluctant to fly, only moving just out of camera range. Trying to get close photos is a good way to find out how acclimated to the altitude you have become. The call is a weak "fee-eu," the quality reminiscent of a distant oystercatcher. Most bogs don't have Diademed Plovers, despite seemingly ideal conditions.

Other denizens of these unique wetlands are Crested Duck, Speckled Teal, Puna Snipe, Andean Lapwing, Bright-rumped Yellow-Finch, and White-winged Diuca-Finch, which looks similar to White-throated Sierra-Finch and which some claim is the world's highest nesting bird.

Also found here are Rufous-bellied Seedsnipe, slow moving, beautifully camouflaged, football-sized birds that resemble ptarmigan in shape and that explode like grouse, rocketing away with such controlled power as to make snipe and other shorebirds look like lumbering buteos.

**Laguna Salinas and three flamingo species.** Now, finally, you are ready for Salinas. Most birders "do" Laguna Salinas backwards. That is, after a frantic and dusty drive along the tortuous road from Arequipa, trying to bird on the way but really wishing they were at the lake instead, they arrive at noon or later when the birds are quietly snoozing and the birders are suffering excruciating, death-wish headaches from too much activity at high altitude. My alternative? Take a leisurely pace and camp out beside the lake. Then you can awaken from a rest or a night's sleep to a silvery mirror turned pink by the reflected bodies of thousands of flamingos. "Salinas" means salt lake, and this shallow basin normally has broad expanses of drying salt flats. During cycles of higher



*Yareta*

*Photo by Oliver Komar*

precipitation, the basin fills up, apparently leading to a dramatically increased production of zooplankton and this in turn attracts more flamingos. Chilean Flamingos are by far the most numerous, followed distantly by the James' or Puna species and then the Andean Flamingo. Over seventy-five thousand birds paraded in front of us in June 1986, truly a spectacle!

And flamingos are not the whole birding story. There is much more: Andean Avocet, Andean Goose, Yellow-billed Pintail, Wilson's Phalarope, Baird's Sandpiper, Puna Plover, Andean Gull, and Rufous-backed Negrito (a neat little flycatcher). Foraging in nearby barren slopes and ichu grassland are Ornate Tinamou, Gray-breasted Seedsnipe, Cordilleran Canastero, Slender-billed and Common miners, and other standard puna fare.

The ride down to Arequipa is unpleasant at best. However, magnificent views of El Misti and other volcanos help ease the strain, as does the somewhat sparse but interesting avifauna of the arid Andean west slope. Around the kilometer 88 and 89 markers, look for White-throated Earthcreeper, Andean Tit-Spintail, Andean Hillstar, Yellow-billed Tit-Tyrant, Black-hooded Sierra-Finch, and Tamarugo Conebill in and around the *Polylepis* thickets. Farther below, cactus slopes and canyons yield Black Metaltail (a hummingbird), Canyon Canastero, Thick-billed Miner, Streaked Tit-Spintail, Blue-and-white Swallow, Cinereous Conebill, and Blue-and-yellow Tanager.

**Arequipa and leavetaking.** Peru's second city, is a delightful experience and a great place to unwind. Be sure to visit the Santa Catalina Monastery, recently opened to the public for the first time in over four hundred years. If you have time, you can drive from Arequipa down to the coast at Camaná and bird your way north along the coast to Lima, but it is a long trip (described in "Birding in Peru, Part I"). If your stay in Peru does not permit this, you can fly from the major airport directly to Lima for departure from Peru. Or fly back to Cusco if you haven't yet visited Machu Picchu on the wetter eastern slope of the Andes. A few days exploring this remarkable area will acquaint you with numerous species of the humid subtropical zone (altitude: six to eight thousand feet).

**BRUCE A. SORRIE** is best known for his work as program botanist for the Natural Heritage Program in Massachusetts. A field botanist of national reputation, Bruce has rediscovered nearly 80 percent of the rare plant species of the state. He has also done research at the bird observatories at Point Reyes and Manomet, has led birding tours throughout the neotropics, and since 1978-79, after he spent five months in Amazonian Peru and in the high Andes, has been interested in that country's natural history. He has returned to Peru several times, primarily to study bird distribution in the puna zone. He has promised *Bird Observer* a third article on Peru to introduce our readers to Amazonia.