

A Peruvian Quest

Tropical naturalists are a single-minded lot. They can wander about for weeks on end in pursuit of a rare species, subsisting on rice and beans and remaining undeterred by biting flies, army ants, the possibility of snakes, or the stifling humidity. For those most at home in nature, real misery derives not from pests and heat, but from a different source: never stepping into the wild at all when it is on your doorstep.

By the fifth and final day at the International Conservation Technology Conference at the Westin Hotel Convention Center in Lima, I regretted having budgeted no time to explore the natural wonders of Peru after so long a spell indoors. At least, I thought, I had visited Peru multiple times before and knew what I was missing. I once led a nature tour in the Napo region to the north and supported a jaguar-puma-peccary tracking study in the southeastern Amazon lowlands of Madre de Dios Province. Best of all was a visit to the display leks of the one-of-a-kind Andean Cock-of-the-Rock in the cloud forests above Manu National Park. The wild gyrations of the performing males triggered by the arrival of an interested female remains one of my most memorable experiences in nature. How could anything top that?



Male Andean-cock-of-the-rock at a display lek

Thankfully, the event organizers contracted with a local outfit, All Women Birders, to offer conference participants the option of a half-day birding tour in the Lima environs. Lona and Dante enthusiastically agreed to join me for a few hours in wild nature before we caught the red-eye home. Our early morning visit to an agricultural area and a fishing village near Lima could not compete with watching the wild antics of the male Andean Cock-of-the-Rock on their display leks (<https://www.youtube.com/watch?v=bmYkRMqKoJ0>). The promising list of avian species we might see, provided to us by All Women Birders, Inc., did include a “quest bird” for me—the Inca Tern. For those unfamiliar with the term “quest bird”, one of my birding mentors, Dr. Bruce Beehler, who wrote *Birds of New Guinea* and books on Birds-of-Paradise, described it as a species that haunts your existence, a bird that you must see before you die. The Inca Tern is unlike any of the 40 species in its sub-family. The distinct dark grey body (most terns are snowy white with black caps), red bills, red legs, and exaggerated white handlebar mustache plumes add uber-elegance to a family that already includes a species named the Elegant Tern. The Inca Tern is a more fitting name, however, than the Uber-Elegant Tern because the range of this bird maps to the coastal extent of the Inca Empire and it is found nowhere else in the world.



Inca Terns-Photo credit: Lona Stoll

How great, I thought, too, for us to go birding in Peru with a company run by women and to support them in their business. So it was to our surprise that at 5:15 am, we were met by our guide, Mariano. To compensate for being male, Mariano turned out to be an extraordinary, mostly self-taught birder with a passion for nature who has guided groups all over Peru. Before sunrise, we set off in our van.

Our first destination, about a half-hour from the hotel, was a walk along the Lurin River. I noted to Lona and Dante that birding in Peru was something special. As evidence, *A Field Guide to the Birds of Peru*, which I was lugging along with me, describes slightly more than 1,800 species. That extraordinary total places Peru second only to Colombia among the countries with the world's richest avifaunas. Mariano chimed in that there is a friendly competition between the two Andean nations as to which is *numero uno*, as, with new discoveries and range extensions, the countries have leapfrogged back-and-forth to claim this accolade. But the statistic even more valued than species richness is species endemism, that is, species restricted to a limited geographic range or habitat. And in that category as well, Peru ranks high with 117 endemic bird species, trailing only Australia, Philippines, Brazil, Indonesia, and Papua New Guinea.

None of the birds along the Lurin River were Peru endemics, but they were still eye-catching. First up to welcome us was the Peruvian Meadowlark, a member of the oriole family and closely related to our Eastern and Western Meadowlarks, the official greeters of the American prairies. Instead of a black "V" on the chest surrounded by yellow plumage



like our Eastern and Western Meadowlarks, the Peruvian is bright crimson on the breast and lacking the black chevron. Perhaps the most beautiful bird we encountered was the Red-crested Cardinal, a stunner that remarkably has no entry in the Field Guide to Birds of Peru. That omission is because it is a recent arrival, appearing after Birds of Peru was published, being introduced by some enthusiast from

the drylands of southern south America. With its blazing red "do," the Red-crested Cardinal is among the world's edgiest beauty birds. One commenter on a birding site even noted after seeing this species: "Punk isn't dead; it's avian." But here is a new dimension to the problem of introduced species: what do we do with them when they are as beautiful as the Red-crested Cardinal? Fortunately, the cardinal hangs out on the margins of city parks and farmlands, so it's probably little threat to the native avifauna.



Our observations of Snowy Egrets, sandpipers, and other migratory birds that winter in Peru but breed in the U.S.A. were interrupted by Mariano whispering excitedly, "I just heard

a Kestrel!" I started listening for the semi-crazed, "*kli-kli-kli-kli-kli-kli*" uttered by this small falcon, a lovely raptor also occurring in the U.S. but in decline across North America. I



looked around and spotted flying over us a bird with pointed wings but too large to be a Kestrel. "Peregrine!" I practically shouted. Lona, sharp-eyed, followed the large falcon and saw it land on a steep hillside in the distance. Without her keeping the falcon in sight, we would never have found the mostly grey falcon

resting against this all-grey background. We put the spotting scope on it. Peregrines are a marvel of nature, the world's fastest creature, stooping at speeds greater than 250 mph to strike a pigeon or mallard duck. In fact, another name for the Peregrine is the Duck Hawk, named after its favorite prey item. On a pond near the perching falcon were Mallards and Ruddy Ducks, but they seemed unaware of the danger. When I first began birding, it was triggered by learning of the plight of the Peregrine. In the early 1970s, the ban on DDT which caused eggshell thinning in some raptors, almost spelled the end of this species and it was listed as critically endangered. The catastrophic decline resulted in only 324 breeding pairs surviving in the U.S. in 1975 down from nearly 4,000 pairs. Today, there are between 140,000 and 240,000 breeding-age adults globally, a recovery attributable to the ban on use of DDT but also the growth of urban areas supporting massive pigeon populations, domestic and feral. Peregrines feast on pigeons and have adapted to use city structures such as roof tops, skyscrapers, bridges, and cathedral spires for nesting sites. Peregrines range so widely that they are one of four bird species—along with Mallards, Black-crowned Night Herons, and Barn Owls—that occur in almost every country on Earth. Part of this extensive distribution is the result of the wandering, migratory nature of the world's most widespread raptor. Some Peregrines, perhaps like the one in the scope, fly 10,000 miles one-way from the Yukon tundra to coastal Peru or even further south, and back north again in Spring to breed.

Nothing can top a Peregrine Falcon, so it was time to move to our second location. The fishing village of Pucusana is also a weekend getaway for wealthy residents of Lima. We beat the Saturday traffic streaming to the coast and arrived at the boat ramp. Nowhere in the brochure did it say anything about boarding watercraft, let alone a small vessel, or that we would be heading out into the Pacific Ocean. Mariano advised us as we stepped into our boat that this would be a three-hour tour. Any misgivings flew by the wayside as the first group of Inca Terns glided right past us! The quest bird, found before we left the harbor.

We chugged out of the cramped bay and out into open water but still hugging the coastline. Marine birding had begun.



Photo credit: Lona Stoll

If the Andean Cock-of-the-rock seems like out of a cartoon rather than a product of evolution, it had good company among marine birds. The Pacific Brown Pelicans are



comical looking but the Blue-footed Boobies and Blackish Oystercatchers are even more amusing to watch. The boobies, with their wild blue feet and clown-like faces, stood at attention next to crevices in the cliffside, perhaps preparing to breed. The Blackish Oystercatchers,

related to our American Oystercatchers of the eastern seaboard and Black Oystercatchers of the west coast, may look silly to the first-time observer. But these shore feeders are exquisitely



adapted to open oysters and clams by inserting their beaks to sever the adductor muscles of bivalves, which allows them to open the shells.

A few feet further up, we encountered a huddle of Humboldt's Penguins. Along with the Galápagos Penguins, they are the only two members of the 18 species-strong family that are tropical (although the Humboldt ranges south to Chile, essentially tracking the cold-water upwellings of the Humboldt Current). The cold-water upwellings provide a rich source of protein in the form of anchovies and sardines that feed the seabirds we encountered. For nesting, the Humboldt Penguins dig burrows into the thick guano deposits left by Guanay



Photo credit: Lona Stoll

Cormorants found on offshore islands.

Inca Terns were everywhere along the cliffs and landing all around our boat. To see a quest bird is a gift, but to be surrounded by your quest bird is a naturalist's dream. The distinctive long white facial plumes that resemble a handlebar moustache deserve some admiration. Found both in males and females, the plumes are absent in young birds but



appear as the juveniles mature. The longest moustaches belong to the most robust individuals and perhaps the most fecund breeders. I do not know if this trait of mustache length as a predictor of reproductive success carries over to male humans.

The terns were abundant and so were the other seabirds, but our local count missed the greater trend. Many species of sea-foraging birds—from Inca Terns to Humboldt's Penguins—are in decline because of climate change. El Niños, a regular climatic event accompanied by the warming of sea-surface temperatures and affecting normally cold ocean currents, has led to steep drops in the populations of anchovies and sardines, the mainstay of these seabirds. With more severe and more frequent El Niños predicted in this era of climate breakdown, many seabird species are in jeopardy.

Mariano was determined to show us a kind of seabird called a petrel, an undistinguished group of birds from an aesthetic perspective but of vital importance to what our colleagues

at Island Conservation called the Circular Seabird Economy (CSE). The CSE runs like this: remote islands without terrestrial predators often attract seabirds that prefer to nest colonially, and often in great numbers. Many of these species forage over vast areas far from the breeding colony, including the petrels, storm petrels, terns, albatrosses, gulls, and guillemots. These fish-eaters return to the colony and deposit their guano directly on the breeding grounds with more guano input coming from the hungry chicks they feed. The nutrients in the guano wash down into the sea during rainy periods, fertilizing the near-shore environment with this bouillabaisse of poop. The fertilization effect encourages growth of marine life that feeds the prey of the birds, thus completing this marine circle of life. The only things that disrupt this natural phenomenon are the vacillations of extreme El Niño events, the arrival of invasive mammals on these islands, or overfishing of the anchovies and sardines.



Photo credit: Lona Stoll

Mariano indicated that we would hopefully see the non-descript petrel on the water further out to sea or on this island he kept referring to somewhere out in the gathering mist. Our captain pointed the boat into the fog and off we went. Our birding experience shifted abruptly from crowded rows of birds perched on the cliffs to extreme scarcity on the open ocean. In the first thirty minutes we saw nothing but a few Belcher's Gulls. I didn't mind the fog and the swells so much but, at least for me, it

seemed less rewarding to be heading out into the ocean on a quest for a bird not high on my must-see list (In grad school my friends who studied petrels on islands and caught them in mist nets to weigh and band the birds commented how the first thing the petrels did upon being grabbed in the net by the researcher was to launch an explosive vomit of foul-smelling, partly digested fish at the handler as their defense mechanism. How charming).

My mind started to wander as the minutes passed by without a single bird sighting. I recalled that on the United flight from Houston to Lima, I watched for possibly the ninth time one of my favorite movies, Peter Weir's classic, *Master and Commander: The Far-Side of the World*. This mash-up of several Patrick O'Brian novels tells the story of "Lucky Jack" Aubrey (Russell Crowe's greatest role), Captain and Commander of the Royal Navy's *HMS Surprise*, and his close friend, the ship's doctor, pre-Darwinian naturalist (and secretly a spy and laudanum addict), Dr. Stephen Maturin (played by Paul Bethany). In one riveting scene in the film, the *Surprise* is caught off guard by a French privateer, the *Acheron*, that Aubrey had been chasing. The sea is becalmed and the faster French vessel is rapidly gaining on

them. Aubrey boldly orders the lifeboats to be dropped and the crew members aboard to row for the lives, towing the stalled *Surprise* into the safety of the dense fog. I remember the cheer that went up among the sailors of the *Surprise* as they escaped certain capture. “Huzzah for Lucky Jack!” they shouted.

Still no birds. We motored deeper into the fog. I began to wonder if either Lona or Dante was going to say something about turning around but they were too polite, I think, to propose a change in course. Mariano was determined that we find our petrel. My daydream shifted from the *HMS Surprise* to another vessel, less fortunate, the *SS Minnow*, piloted by the Skipper and assisted by his first mate, Gilligan. For those who remember the original or the reruns, *Gilligan’s Island* was a classic TV sit-com of a small group of passengers taking a pleasure cruise—a three-hour tour as the theme song described—that went a bit longer than advertised. Mariano’s promise of a three-hour tour came back into play. As our boat crested the swells, I began to think, what lay ahead? The Galápagos to the North, Hawaii or Rapa Nui (Easter Island) to the east? All we had to eat was the small bag of mixed nuts Lona thoughtfully brought along.

Perhaps sensing the mood on the boat or simply our time was running out, Mariano signaled the skipper to reverse direction and head back to the coast. Thankfully, the fog was dissipating as we ventured closer to shore. My concern was encountering a fishing boat failing to find us in the mist until it was too late.

Hundreds of Inca Terns were there to greet us as we re-entered the harbor. Among the rows of anchored fishing boats was a skiff covered by a tarp that had become the preferred roosting spot of dozens of Inca Terns mixed in with some Elegant and Sandwich Terns and Belcher’s Gulls. Together, they had created a Jackson Pollock of droppings on the protective tarp covering the whaler. Our three-hour tour was over and it was time to return to Lima and home.

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One aspect of becoming a birder and accepting the presence of a quest bird in your life is knowing that there will be others. The Inca Tern was so special because if you don't travel to coastal Peru or Northern Chile, you will never see one. But there are other stars of the Peruvian avifauna: the Andean Cock-of-the-Rock I observed long ago and the Hoatzin I have gazed at in the oxbow lakes of the Amazon. The Hoatzin is among the weirdest-looking birds, the only member of its family and you can see clearly the Jurassic Park connection. It is the only bird equipped with a crop which it uses to ferment vegetation, thus giving it the name "stinkbird." The Hoatzin's bright-orange "do" out-punks even the Red-crested Cardinal.



But there are two other Peruvian specialties I still must see. Of the 337 species of hummingbirds, about 120 occur in Peru and 14 are endemic. One of these endemics is the Marvelous Spatuletail, a hummingbird only found in the Rio Utcubamba Valley.



Another species, more widespread in the Andean cloud forests, is the Sword-billed Hummingbird, a tiny bird with a preposterously long bill.

The Marvelous Spatuletail for me is not just a quest bird but an Iconic one: in 2001, Tom Brooks of IUCN and Mike Parr, the CEO of the American Bird Conservancy, and I came up with the idea of the Alliance for Zero Extinction—a collaboration of biologists working together to map and protect the world's most threatened vertebrates and plants on the IUCN Red List—about 860 species in total—whose entire global distribution was limited to a single site. Plow it, cut it, or burn down its last bit of habitat and that species is gone forever. For me, the Marvelous Spatuletail was the flagship species of our efforts to save from extinction these single-population species. My hunger remains to marvel in the presence of a Spatuletail. Thankfully, the species still persists, now better protected in its only home on Earth. The Peruvian quest continues.