An ornithological survey of the southern Cordillera del Cóndor including the first record of Jocotoco Antpitta (*Grallaria ridgelyi*) for Peru

[Una evaluación ornitológica en la parte sur de la Cordillera del Cóndor, incluyendo el primer registro del Tororoi Jocotoco (*Grallaria ridgelyi*) para el Perú]

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ABSTRACT

Most of the Cordillera del Cóndor runs in a north-south direction and marks the border between Peru and Ecuador, but at approximately 04°54'S/78°53'W the border turns west and the foothills of the Condor continue towards the south, penetrating into Peruvian territory. The north of the range has been inventoried multiple times, resulting in five species of birds new to Peru. In contrast, little information is available about the avifauna of the southern sector of the cordillera. The objective of our work was to deepen the knowledge of the birds of the southern sector of Cordillera del Cóndor in Peru. After a month and a half of fieldwork in the area we documented a rich avifauna characteristic of the lower subtropical montane forest between 800 and 1800m, the cloud forest between 2250 and 2900m, and a few species of upper montane shrublands on the higher mountaintops. We documented the presence of Cordillera Real endemics including *Pyrrhura albipectus*, *Dysithamnus occidentalis*, *Xenerpestes singularis* and the first records of *Grallaria ridgelyi* for Peru.

KEYWORDS: Cordillera del Cóndor, *Grallaria ridgelyi*, *Pyrrhura albipectus*, ornithological survey

RESUMEN

La mayor parte de la Cordillera del Cóndor corre en dirección norte-sur y marca la frontera entre Perú y Ecuador. Sin embargo, aproximadamente en los 04°54‘S/78°53’W la frontera gira hacia el oeste y las estribaciones del Cóndor continúan hacia el sur, internándose en territorio peruano. El norte de la cordillera ha sido sujeto de varios inventarios, durante los cuales se logró encontrar cinco especies de aves nuevas para el Perú. En cambio, existe muy poca información sobre la avifauna del sector sur de la cordillera. El objetivo de nuestro trabajo fue realizar un inventario de las aves de un sector sur de la Cordillera del Cóndor, en Perú. Luego de casi un mes y medio de trabajo de campo, documentamos la presencia de una rica avifauna de bosque montano subtropical entre 800 y 1800 m, de bosque nublado entre 2250 y 2900 m y algunas especies de matorrales montanos en las cumbres más altas. Documentamos la presencia de especies endémicas de la Cordillera Real, incluyendo *Pyrrhura albipectus*, *Dysithamnus occidentalis*, *Xenerpestes singularis* y los primeros registros de *Grallaria ridgelyi* para Perú.

PALABRAS CLAVE: Cordillera del Cóndor, *Grallaria ridgelyi*, *Pyrrhura albipectus*, estudio ornitológico.

INTRODUCTION

The montane forests on the eastern slope of the Andes, at the border between Peru and Ecuador, are among the most diverse yet least explored regions in the world. In spite of the region’s remoteness, ornithological exploration of the area during the past sixty years has resulted in the discovery of a remarkable number of new bird species (Lowery & O’Neill 1964; Fitzpatrick *et al*. 1977; Fitzpatrick, Williard & Terborg 1979; Fitzpatrick & O’Neill 1979; Graves 1980; Fitzpatrick & O’Neill 1986; Krabbe & Schulenberg 1997; Krabbe *et al*. 1999; Coopmans & Krabbe 2000), as well as novel distribution extensions and new country records (Parker *et al*. 1985; Robbins *et al*. 1987; Marín *et al*. 1992; Krabbe & Sornoza-Molina 1994; Schulenberg *et al*. 1997; Navarrete *et al*. 2004; Brooks *et al*. 2009; Krabbe & Ahlman 2009; Freile *et al*. 2011; Montalvo 2012; Freile *et al*. 2014). Many of these important discoveries have come from the Cordillera del Cóndor, an outlying mountain range along the Peru/Ecuador border.

The Cordillera del Cóndor generally runs north to south and straddles the Peru/Ecuador border, but at approximately 04°53’44’’S/78°53’32’W (2430 m), the border takes a turn to the west with the ridges of the Cóndor continuing south into Peru. Topographically, the Condor is comprised of a complex system of ridges and unique flat-topped, Tepui-like mountain tops, and is approximately bounded by the Rio Nangaritza, Rio Zamora and Rio Chinchipe valleys to the west, the Rio Santiago valley to the north and east, and the Rio Marañón valley to the south (Fig. 1).

The portion of the Peruvian Cordillera del Condor along the upper Rio Cenepa was visited by a Rapid Assessment Program (RAP) team sponsored by Conservation International (Schulenberg *et al*. 1997). However, the group spent only about three weeks in the area due to logistical difficulties, and they were only able to spend about four days at high elevations (Cerro Machinaza, ca. 2400 m). Mainly because Cerro Machinaza had land mines placed on it in early 1995 during the short Cenepa War between Peru and Ecuador, so it was deemed unsafe to visit. After consulting maps and satellite images, O’Neill (Fig. 2) was confident that the southernmost part of the range in the department of Cajamarca could be reached

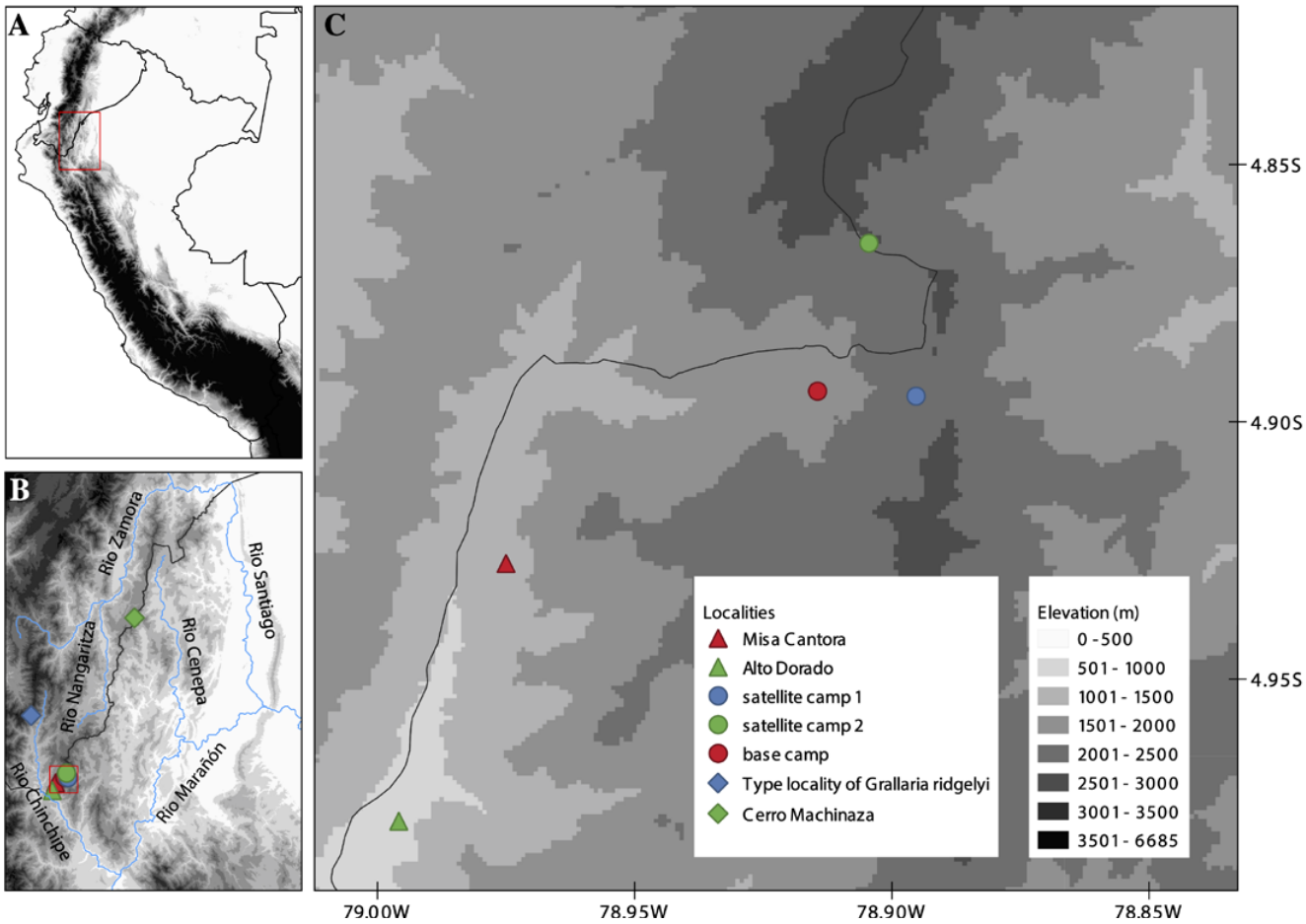

Figure 1. Map of our study sites in the Cordillera del Cóndor. Panel A shows the approximate location the Cordillera del Cóndor (red rectangle) in western South America. Panel B shows the area highlighted by the red rectangle in Panel A and illustrates the major rivers bounding the Cordillera del Cóndor. Panel C represents the area highlighted by the red square in Panel B and shows the Peru-Ecuador border relative to our study sites.

Figure 2. John O'Neill on the ride leaving the study area (Photo by S. Claramunt).

without helicopter support, and he began planning to reach the ridges south of the Peru/Ecuador border.

This section of the Cordillera del Condor is nearly connected to the main Andean Cordillera but separated by the semi-arid Rio Chinchipe drainage. Our goal in this paper is to present the results of a preliminary scouting trip to the region in 2005 and a two-month expedition in 2006 to help deepen the knowledge of the birds of the southern sector of Cordillera del Cóndor in Peru.

METHODS

In 2005, TM visited the area to check out the logistics for reaching a 3,000-meter area some 25 km north of the intended destination. On June 15, 2006, part of the team arrived in the north-Peruvian town of Jaen, in Cajamarca. The following day they crossed the Río Chinchipe via a raft, and arrived in the town of Siete de Agosto, in the District of San José de Lourdes (San Ignacio Province). From Siete de Agosto the journey was by modified 4 x 4 vehicles to the village of Misa Cantora where the road ended and all travel north and east would be via mule or on foot, along Quebrada San Francisco (Fig. 3) and parallel to the Ecuadorian border. Lands along the trail were mostly occupied by shade-grown coffee family farms.

Rains, often heavy, plagued the entire expedition throughout. It made getting to the desired location, bird observation and recording extremely difficult. It was decided to make base camp at the end of the mule trail approximately an hour past the village of Nazareth de la Cumbre, in the Quebrada San Francisco area. There was a suitable area to establish a base camp approximately 2 km WSW Hito (border marker) Jesús.

All work at higher elevations would be in small satellite camps. By 26 June, a small camp was set up along the existing trail headed in roughly an easterly direction; this site was located approximately 1 km S. Hito Jesús. At this site, there was a small quebrada (ravine) with a steep slope above and stands of Chusquea bamboo. With the incessant rains, everything was extremely wet, and trails were deep in mud. In contrast to the northern sectors of Cordillera del Condor, mountaintops were in the shape of narrow ridges, not tabletops. The wind blew nearly constantly from the East, bringing clouds and moisture from the Amazon basin. We also observed in situ cloud formation along the ridges.

On June 30, the remainder of the field crew arrived. The group in the upper camp was continuing their daily task of extending the trail northward along the ridge with the goal of reaching the 3000-meter area some 12-15 km away. As they advanced, they went higher in elevation and the weather was at its worst, with very few periods in which it was not raining or misting and very few times when the wind was not blowing. On July 22, a second satellite camp was established from which the highest portions of the ridge were explored.

Figure 3. View of Quebrada San Francisco and the ridge-top from near La Cumbre (Photo by S. Claramunt).

Birds were surveyed by direct observation, mistnetting, tape-recording and collecting with guns. A series of mistnetting stations were deployed long the trails. This allowed for birds to be sampled over almost all of the elevational gradient from 1800 meters to the highest point reached, approximately 2950 meters. Aside from the information on birds netted at the upper elevations, the data collected by DCS, CGS, and SC was essentially all that we would get from the upper areas. SC and BW did some tape recording (Marantz PMD201 and Sony TCM 5000 respectively, both with Sennheiser ME66 directional microphones), but even this was minimal because of the rainy conditions and BW's recordings were lost on the return journey to Jaen – an important loss. Tape recordings by SC are deposited in the Macaulay Library, Cornell Lab of Ornithology, Ithaca, New York. Shotguns were used to collect species not normally captured in mist nets. Specimens were deposited in Museo de Historia Natural Universidad Nacional Mayor de San Marcos (MUSM) and Louisiana State University Museum of Natural Science (LSUMZ).

Sites

1. Misa Cantora (4°55'39"S/78°58'30"W, 1260 m). A small village surrounded by small shade-coffee plantations (mostly under Inga trees) and patches of tall forests where JPO and SC conducted casual observations during a logistic stay between June 17 & 20.

2. Alto Dorado (4°58'39"S/78°59'45"W, 860 m). BW recorded birds along the road from this town to the base camp on July 8th & 19th.

3. Base camp (Fig. 4) (4°53'40"S/78°54'54"W 1800 m), ca. 2 km WSW Hito Jesús. A mosaic of tall humid subtropical forest and clearings with pastures and cattle. Bird surveys were conducted from June 21st to July 29th.

4. Satellite camp 1 (Fig. 5) (4°53'42"S/78°53'43"W, 2250 m), ca. 1 km S Hito Jesús. Very humid cloud forest, stream, Chusquea bamboo, elfin forest on ridge tops. Drizzling or raining most of the time.

5. Hito Jesús (Fig. 6) (4°53'11"S/78°53'28"W, 2550 m). Boundary marker on the ridge top along which a set of mist nets were deployed covering elevations from 2500 to 2600 m.

6. Satellite camp 2 (Fig. 7) (4°51'52"S/78°54'11"W, 2530 m), 2.5 km NNW Hito Jesús. Satellite camp and mistnetting station on the ridge top.

7. Mountaintop 1 (4°51'20"S/78°54'40"W, 2875 m), 4.5 km NNW Hito Jesús. Covered by elfin forest and moss except for a clearing made by mining prospections several years ago.

8. Mountaintop 2 (Fig. 8) (4°49'55"S/78°53'45"W, 2950 m), ca. 7 km NNE Hito Jesús. Covered by a mix of shrubs and tall grass, patches of terrestrial bromeliads and elfin forest.

RESULTS

During a month and a half of fieldwork in the area we documented a rich avifauna characteristic of the lower subtropical montane forest between 800 and 1800m, the cloud forest between 2250 and 2900m, and a few species of upper montane shrublands on the higher mountaintops. Important records are mentioned below, and a complete list of species is presented (Appendix 1).

Figure 4. Preparation of *Grallaria ridgelyi* specimen at base camp (Photo by C. Gregory Schmitt).

Figure 5. Satellite camp 1 (Photo by S. Kadur).

Figure 6. Top of ridge ca. 7 km NNE Hito Jesús (2950 m, Mountaintop 2) with *Asthenes griseomurina* habitat (Photo by S. Claramunt).

Figure 7. Bamboo and tall cloud forest habitat 1km S of Hito Jesús (2250 m) near Satellite Camp 1 where *Grallaria ridgelyi* was collected (Photo by S. Claramunt).

Figure 8. View from Hito Jesús, on the mountain ridge, to the east, showing the incredible forests of the southern sector of the Cordillera del Cóndor (Photo by S. Claramunt).

Camps.	1 & 2	3	4	5 & 6	7	8
Altitude	800-1700	1700-1900	2250	2500-2600	2500	2850-2950
TINAMIDAE						
Crypturellus tataupa	o					
CRACIDAE						
Chamapetes goudotii *		o	o			
Penelope barbata			o			
Aburria aburri	o					
Ortalis guttata	o					
COLUMBIDAE						
Columba livia	o					
*Patagioenas fasciata**	o	o	o			
*Patagioenas subvinacea**	o	o	o			
*Geotrygon frenata**	o	o		o		
Leptotila verreauxi	o					
CUCULIDAE						
Tapera naevia	o					
*Piaya cayana**	o	o				
STEATORNITHIDAE						
*Steatornis caripensis**			o		o	o
CAPRIMULGIDAE						
Systellura longirostris		o				
*Nyctidromus albicollis**		o				
*Uropsalis segmentata**		o	o			o
APODIDAE						
Cypseloides rutila	o		o			
Streptoprocne zonaris	o		o			
Aeronautes montivagus	o					
TROCHILIDAE						
*Eutoxeres aquila**		o	o	o	o	
*Phaethornis syrmatophorus**		o	o			
*Doryfera ludovicae**			o	o	o	
*Schistes geoffroyi**		o		o		
*Colibri cyanotus**					o	
Heliangelus amethysticollis *			o	o	o	o
*Heliangelus micraster**			o	o	o	o
*Adelomyia melanogenys**		o	o	o		
*Aglaiocercus kingi**		o	o	o		
*Chalcostigma ruficeps**			o			
*Metallura tyrianthina**		o		o		
*Haplophaedia aureliae**			o	o		
*Eriocnemis vestita**				o	o	
*Coeligena torquata**			o	o	o	o

*Coeligena coeligena**		o	o			
*Coeligena lutetiae**				o		
*Boissonneaua matthewsii**			o		o	o
*Heliodoxa leadbeateri**		o	o	o		
*Heliodoxa rubinoides**					o	
*Uranomitra franciae**	o	o				
CATHARTIDAE						
Coragyps atratus	o					
Cathartes aura	o					
ACCIPITRIDAE						
Elanoides forficatus	o	o				
*Accipiter bicolor**		o				
Rupornis magnirostris		o				
*Parabuteo leucorrhous**	o	o				
STRIGIDAE						
*Megascops albogularis**						o
Pulsatrix melanota		o				
Glaucidium sp.		o			o	o
*Glaucidium jardinii**			o	o		
TROGONIDAE						
*Pharomachrus auriceps**			o			
Pharomachrus antisianus			o			
*Trogon personatus**		o	o			
BUCCONIDAE						
*Malacoptila fulvogularis**		o				
CAPITONIDAE						
*Eubucco bourcieri**	o	o				
RAMPHASTIDAE						
Ramphastos ambiguus	o					
*Aulacorhynchus prasinus cyanolaemus**	o	o				
Aulacorhynchus derbianus	o					
*Andigena nigrirostris**		o	o			
PICIDAE						
*Melanerpes cruentatus**	o					
*Picoides fumigatus**		o				
*Dryobates nigriceps**				o		
*Campephilus pollens**			o			
*Campephilus haematogaster**		o				
Dryocopus lineatus	o					
*Piculus rubiginosus**		o	o			
*Piculus rivolii**			o		o	

FALCONIDAE						
Falco sparverius	o					
PSITTACIDAE						
Bolborhynchus lineola			o	o		
*Pionus sordidus**	o	s	o	o		
*Amazona mercenarius**		s	o	o	o	
*Pyrrhura albipectus**		s				
*Psitticara leucophthalmus**	o	o	o			
THAMNOPHILIDAE						
Thamnophilus doliatus	o					
Thamnophilus tenuepunctatus	o					
*Thamnophilus unicolor**		o				
*Dysithamnus mentalis**		o	o			
*Dysithamnus occidentalis**		o	o			
Myrmotherula longicauda	o					
*Myrmotherula schisticolor**		o	o			
Herpsilochmus axillaris		o				
*Drymophila striaticeps**		o	o			
Cercomacrcroides nigrescens	o					
*Pyriglena maura**	**o**	o				
CONOPOPHAGIDAE						
*Conopophaga castaneiceps**		o		o		
GRALLARIIDAE						
*Grallaria squamigera**				o		
*Grallaria ridgelyi**			o			
Grallaria nuchalis			o	o	o	o
Grallaria hypoleuca			o			
*Grallaria saturata**			o	o		
*Grallaricula flavirostris**		o	o		o	
*Grallaricula nana**		o	o	o	o	
RHINOCRYPTIDAE						
Acropternis orthonyx			o			
Myornis senilis			o			
*Scytalopus latrans**			o			
Scytalopus micropterus		o	o			
Scytalopus atratus		o				
*Scytalopus parkeri**		o	o			
FORMICARIIDAE						
*Chamaeza mollissima**			o	o		
FURNARIIDAE						
Sittasomus griseicapillus	**o**	o				
Deconychura longicauda		o				
*Dendrocincla tyrannina**					o	

Glyphorhynchus spirurus		o				
*Xiphorhynchus triangularis**	o	o	o	o		
*Lepidocolaptes lacrymiger**		o	o			
*Xenops rutilans**	o	o				
*Psudocolaptes boissonneautii**			o		o	
*Premnornis guttuliger**			o			
Philydor erythrocercum		o				
*Anabacerthia striaticollis**			o			
*Syndactyla rufosuperciliata**		o	o			
*Syndactyla subalaris**			o			
*Thripadectes flammulatus**			o	o		
*Thripadectes melanorhynchus**	o					
*Premnoplex brunnescens**		o	o	o		
*Margarornis squamiger**		o	o	o		
Phacellodomus rufifrons	o					
Hellmayrea gularis *					o	o
*Asthenes griseomurina**			o	o	o	o
*Xenerpestes singularis**	o	s				
*Cranioleuca curtata**	o	o				
Synallaxis stictothorax chinchipensis	o					
*Synallaxis azarae**	o	o				
*Synallaxis unirufa**			o	o		
PIPRIDAE						
*Chloropipo unicolor**		o				
*Masius chrysopterus**	o	o				
COTINGIDAE						
*Pipreola riefferii**		o	o	o		
*Pipreola arcuata**						o
*Pipreola frontalis**		o				
Ampelion rufaxila	o	o				
Rupicola peruviana	o	o				
*Snowornis cryptolophus**		o	o			
*Lipaugus fuscocinereus**			o			
TITYRIDAE						
Tityra semifasciata	o					
*Schiffornis aenea**		o				
Pachyramphus viridis xanthogenys						
Pachyramphus versicolor *		o				
*Pachyramphus albogriseus**	o	o				
ONYCHORHYNCHIDAE						
*Myiobius villosus**						
TYRANNIDAE						
Piprites chloris	o					
*Platyrhinchus mystaceus**		o				
*Pseudotriccus ruficeps**			o	o		

*Pseudotriccus pelzelni**		o	o		o	
*Phylloscartes ophthalmicus**		o				
*Mionectes striaticollis**	o	o	o	o		
*Mionectes olivaceus**	o	o				
*Mionectes oleagineous**		o				
*Leptopogon superciliariis**		o				
*Leptopogo rufipectus**	o	o				
*Rhynchocyclus fulvipectus**		o				
*Lophotriccus pileatus**		o				
*Hemitriccus granadenseis**			o	o		
Hemitriccus cinnamomeipectus		o				
*Hemitriccus rufigularis**			o			
*Poecilotriccus ruficeps**		o	o	o		
*Todirostrum cinereum**	o	o				
*Nephelomyias lintoni**				o	o	o
*Pyrrhomias cinnamomea**		o	o	o		
*Zimmerius chrysops**	o	o	o			
Camptostoma obsoletum	o					
Elaenia flavogaster	o					
Elaenia albiceps	o					
*Phyllomyias nigrocapillus**			o			
Phyllomyias plumbeiceps		o				
*Phyllomyias uropygialis**				o		
Pitangus sulphuratus	o					
*Myiodynastes chrysocephalus**	o	o				
Myiozetetes similis	o					
*Conopias cinchoneti**		o				
*Tyrannus melancholicus**	o	o				
*Myiarchus tuberculifer**		o				
*Myiarchus cephalotes**		0				
*Colonia colonus**	o	o				
Myiophobus cryptoxanthus	o					
*Ochthoeca diadema**		o	o	o		
*Ochthoeca cinnamomeiventris thoracica**			o	o		
*Ochthoeca rufipectoralis**		o		o		
*Ochthoeca leucophrys**						
Pyrocephlus rubinus	o					
*Myiotheretes fumigatus**				o		
Sayornis nigricans	o					
*Contopus fumigatus**	o	o	o			
VIREONIDAE						
Cyclarhis gujanensis	o	o				
Vireolanius leucotis	o					
*Vireo leucophrys**		o				
*Vireo olivaceous chivi**	o					
CORVIDAE						
*Cyanolyca turcosa**			o	o	o	
*Cyanocorax yncas**	o	o	o			

HIRUNDINIDAE						
Pygochelidon cyanoleuca	o	o				
Stelgidopteryx ruficollis	o					
Progne chalybea	o					
TROGLODYTIDAE						
*Troglodytes aedon**		o				
*Troglodytes solstitalis**			o	o	o	
*Pheugopedius euophrys**		o	o			
Pheugopedius sclateri	o					
Cinnycerthia olivascens				o		
*Cinnycerthia unirufa **			o	o	o	o
*Henicorhina leucophrys**		o				
*Cyphorhinus thoracicus**			o			
TURDIDAE						
*Myadestes ralloides**		o				
Catharus fuscater		o	o			
*Catharus dryas maculatus**		o	o			
*Turdus leucops**			o			
Turdus maranonicus						
*Turdus fulviventris**		o				
*Turdus serranus**		o	o			o
FRINGILLIDAE						
Spinus psaltria	o					
*Chlorophonia cyanea**		o				
Euphonia chlorotica	o					
*Euophonia mesochrysa**		o				
*Euphonia xanthogaster**		o	o			
PASSERELLIDAE						
Chlorospingus flavigularus				o		
*Chlorospingus parvirosris**	o	o				
*Chlorospingus canigularis**	o	o				
*Chlorospingus flavopectus**		o	o			
Ammodramus aurifrons	o					
Arremon abeillei	o					
*Arremon brunneinucha**		o		o		
*Atlapetes latinuchus**				o	o	o
ICTERIDAE						
*Amblycercus holocericus**			o	o		
*Psarocolius angustifrons**	o	o				
*Cacicus uropygialis**		o				
Molothrus oryzivorus	o					
PARULIDAE						
Geothlypis aequinoctialis auricularis	o					

*Setophaga pitiayumi**	o	o				
Myiothlypis luteoviridis			o	o		
*Myiothlypis nigrocristata**				o	o	
*Myiothlypis coronatus**		o	o	o		
*Basileuterus tristriatus**		o	o			
*Myioborus miniatus**	o	o	o			
*Myioborus melanocephalus**		o	o	o		o
CARDINALIDAE						
*Piranga leucoptera**		o				
Chlorothraupis carmioli	o					
THRAUPIDAE						
*Serricossypha albocristata**		o	o			
Hemithraupis guira	o					
*Catamblyrhynchus diadema**				o		o
*Iridophanes pulcherrimus**		o				
*Conirostrum sitticolor**				o		
*Geospizopsis unicolor**						o
*Catamenia inornata**						o
*Diglossa lafresnayii**			o	o	o	o
*Diglossa humeralis**						
*Diglossa albilatera**				o		
*Diglossa caerulescens**				o	o	o
*Diglossa cyanea**			o	o	o	o
*Haplospiza rustica**		o	o		o	
Volatinia jacarina	o	o				
*Conothraupis speculigera**		o				
*Creurgops verticalis**		o				
Tachyphonus rufus	o					
*Ramphocelus carbo**	o					
Dacnis lineata	o					
Dacnis cayana	o					
Sporophila simplex	o					
Sporphila angolensis	o					
Saltator maximus	o					
Saltator striatipectus	o					
*Saltator cinctus**			o			
*Cnemoscopus rubrirostris**			o	o		
*Kleinothraupis atropileus**			o	o		
Sphenopsis frontalis		o				
Sphenopsis melanotis			o			
Thypopsis inornata	o					
Thlypopsis superciliaris			o	o		
Coereba flaveola	o					
Asemospiza obscura	o					
*Chlorochrysa calliparaea**		o				
*Iridosornis rufivertex**			o	o		o
*Iridosornis analis**			o			
*Dubusia taeniata**			o	o		

*Anisognathus lacrymosus**		o	o	o	o	o
Anisognathus igniventris						o
*Anisognathus somptuosus**		o	o			
*Buthraupis montana**			o	o		
*Chlorornis riefferii**			o	o		
*Chalcothraupis ruficervix**		o				
*Stilpnia viridicollis**		o				
*Stilpnia nigrocincta**			o			
*Stilpnia cyanicollis**	o	o	o			
*Tangara vassorii**			o	o	o	
*Tangara nigroviridis**		o	o			
*Tangaralabradorides**		o				
*Tangara cyanotis**		o				
*Tangara chilensis**	o	o	o			
*Tangara gyrola**		o				
*Tangara chrysotis**		o				
*Tangara xanthocephala**		o	o			
Tangara parzudakii		o	o			
*Tangara arthus**		o				
Thraupis episcopus	o	o				
Thraupis palmarum	o					
*Ixothraupis punctata**		o				

Appendix 1
List of the birds found at camps, localities, and areas in the region: Cordillera del Cóndor, Department of Cajamarca, Peru 17 June – 2 August, 2006. * = Specimen.

SPECIES ACCOUNTS

***Parabuteo leucorrhous* – White-rumped Hawk.** Seen regularly at 1700-1900 m. An individual observed and photographed on July 2 had a bat in its talons, and a specimen collected (MUSM) had mammal hair in its stomach. Very little information is available regarding the diet of this species. It is known to take reptiles, frogs, insects, and small rodents (Bierregaard *et al*. 2020).

***Nyctidromus albicollis* – Common Pauraque.** One specimen collected (MUSM) at the base camp (1800m) was an adult female. The specimen is smaller and darker than lowland specimens, similar in this regard to a female from Quebrada el Sauce, near San Ignacio (MUSM 26389, 5°10.8'S/79°9.5'W, 1567 m).

***Coeligena torquata* – Collared Inca.** Common above 2000 m. Specimens collected are similar to those from other sites in Cajamarca. They show a short blue-violet crown stripe like in nominate torquata but usually with an additional (separated) small frontal spot of the same color that is rare among nominate specimens. Out of nine males collected, five had the stripe and the frontal spot, two had only one or two feathers as frontal spot, and two lacked the frontal spot altogether. In addition, the iridescent on the throat was bluer and more extensive than in nominate specimens. *C. torquata margaretae* from SE of the Marañon, has a wide and green crown stripe with a light-blue to greenish frontal spot which in most specimens is not separated by black feathers like in the Cajamarca specimens (see also Zimmer 1948).

Some specimens from Quebrada Lanchal have a greenish crown stripe but not as green as in *margaretae*. Overall, the specimens collected are more similar to the nominal form, confirming the presence of this taxon in Cajamarca, but show some variation that can be interpreted as transitional with the southern *margaretae*.

***Pyrrhura albipectus* – White-breasted Parakeet**. (Fig 9 & 10) This previously Ecuadorian endemic has been recently known from Peru on the basis of sight records only (Navarrete 2003). In the forest around base camp (1800m), we observed small groups (4-8) of *Pyrrhura* parakeets flying through the canopy in the quick and twisting flight so characteristic of the genus. On July 10, two specimens were secured by S. Claramunt (specimens at LSUMZ and MUSM), the first for Peru and the southernmost records for the species. Another flock of five birds was seen later on July 17 (BW) in the same area.

***Dysithamnus occidentalis* – Bicolored Antvireo.** (Fig 11 & 12) A pair was mist netted at satellite camp 2 (2530m, specimens at LSUMZ and MUSM). This species is rare and poorly documented in Peru. The status of this species in Peru will be discussed at length elsewhere (S. Crespo *et al*., in prep)

***Grallaria ridgelyi* – Jocotoco Antpitta.** (Fig. 13) When TM had scouted the area in 2005, he saw and tape-recorded on May 5th (XC6974) near satellite camp 1, Jocotoco Antpitta *Grallaria ridgelyi* a species new for Peru, on a bamboo covered slope near a small ravine at 2250 meters. This large and striking antpitta was only described in 1999 and was previously known only from southern Ecuador (Krabbe, *et al*., 1999). We observed, heard, and collected 2 specimens of the antpitta which are the first records for Peru. Recorded exclusively on both slopes ca. 1km S of Hito Jesús (2250m). SC collected a specimen on July 7th, 2006 (LSUMZ 179012), found on a trail on the eastern slope leading to the Sábanas valley.

The site was a mix of medium height cloud forest with small clearing with Chusquea bamboo (probably an old landslide). BW called in and observed two different individuals and collected one with AU on the afternoon of July 14. TM returned to the site in December 2006 and a bird responded to playback, indicating that the species persisted in the area. The species was known from only two areas in Ecuador on the eastern slopes of the main Andean range. Our records are the first for Peru and the first for Cordillera del Condor and suggests that the species is more widespread in the region.

***Xenerpestes singularis* – Equatorial Graytail**. One of the hoped-for species, the Equatorial Graytail, (*X. singularis*), is a small member of the family Furnariidae. Although previously known only from the Cordillera Real range, including Cordillera del Condor (Schulenberg *et al*. 1997, Freile *et al*. 2014), it has now been found south of the Marañon valley, in Amazonas and San Martín regions of Peru. The young female collected at 1800m near base camp represents and an altitudinal record for the species. Fairly common at Base Camp in species flocks.

***Asthenes griseomurina* – Mouse-colored Thistletail.** The species was found in dense vegetation including tall grass and shrubs (1-2m) on the mountaintop 7 km NNE Hito Jesús (2950m). The species is poorly documented but widespread along Cordillera del Condor (Schulenberg *et al*. 1996, Freile *et al*. 2014), with specimens also collected farther south (Picorana) and farther north (Cerro Machinaza, MUSM 17061), but probably restricted to small and isolated patches of shrubby vegetation on the highest ridges and mountaintops. Specimens from Cordillera del Condor showed reduced white around the eye and

Figure 9. White-breasted Parakeet (*Pyrrhura albipectus*) LSUMZ specimen. Photo by D. Lane.

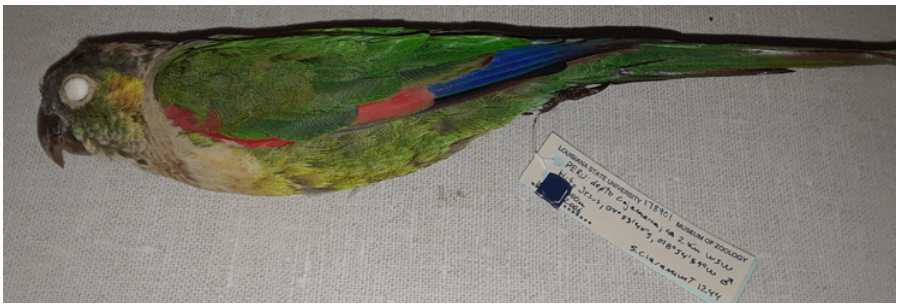

Figure 10. White-breasted Parakeet (*Pyrrhura albipectus*) LSUMZ specimen. Photo by D. Lane.

Figure 11. Bicolored Antvireo (*Dysithamnus occidentalis*) male. Photo by S. Claramunt.

Figure 12. Bicolored Antvireo (*Dysithamnus occidentalis*) female. Photo by S. Claramunt.

Figure 13. Jocotoco Antpitta (*Grallaria ridgelyi*) LSUMZ specimen and tag. Photo by D. Lane.

never showed a complete ring of periocular white feathers like the birds from the main Andean cordilleras. Whether this variation deserves taxonomic recognition remains to be studied.

***Scytalopus parkeri* – Chusquea Tapaculo.** BW found this species at 1800m (but mostly at 2250m in dense cloud and elfin forest, which are the first specimens from Cordillera de Condor. The species was previously tape-recorded further north in Cerro Plateado, in Ecuador (Freile *et al.* 2014).

***Cinnycerthia unirufa/olivascens* – Rufous/ Sharpe's Wren.** Most specimens collected correspond to *unirufa* but are darker than birds from the western cordillera (Cerro Chinguela, Quebrada Lanchal, and the small series of *unirufa* at MUSM). Birds from Picorana are also dark like Quebrada San Antonio birds. One specimen (MS 3784 at MUSM) was assigned to *olivascens* because it is slightly less rufescent than other adult males and has well marked black barring on flight feathers. *C. olivascens*: MS 3784 (B56074) 1.5 km N Hito Jesus, 2600 m, July 14th, 2006, 30.7 g, skull 100% oss., testes 1x2 mm.

DISCUSSION

Our surveys revealed the rich avifauna of the cloud forests of the southern portions of Cordillera del Condor. As expected, many of the species found are characteristic or endemics of the Eastern Cordillera Real ecoregion, encompassing the eastern slopes of the Andes in Southern Colombia, Ecuador, and northern Peru. Some of these species such as *Pyrrhura albipectus*, and *Dysithamnus occidentalis*, were poorly documented in northern Peru, and for *Grallaria ridgelyi*, in particular, we obtained the first records for the country.

For several species already known from the main Andean cordilleras, our records represent the first for the entire Cordillera del Condor (*Coeligena lutetiae*, *Acropternis orthonyx*, C*innycerthia unirufa*, G*eospizopsis unicolor*, *Catamenia inornata*) or for the Peruvian sector of this range (*Xenerpestes singularis*). This was mostly the result of our ability to survey the high ridges, while previous surveys concentrated on medium to low elevations of the Condor.

There were a number of species that were either very uncommon or missing from the higher elevations. We do not know if we were not finding them because of the severe weather and the relatively short time we had for sampling, or if they were truly absent from this particular ridge system.

CONSERVATION

From a conservation standpoint, it is obvious that protection of the Peruvian population of *G. ridgelyi* is important. We found three pairs within a small area but elucidating the details of the species habitat and distribution in Peru is a priority for future work. We suspect that the species is widely scattered over the ridges of the area in the proper habitat. TM returned to the area in December of 2006 and reported that a bird responded from the same spot where an individual of the species was collected in July. In that short period, the territory had been filled with a second pair. From the second satellite camp (2350 m) the view towards the north and east is essentially unbroken and almost pristine forest (Fig 14). Our field observations as well as satellite imagery indicated vast expanses of essentially unbroken and almost virgin forest on the higher slopes of Cordillera del Condor. The Sábanas valley on the eastern slopes of our study area was under local evaluation as a place for colonization and coffee growing, however the land is presently titled to the Awajún people, and they decide if they will allow colonists to come in and clear the area for coffee. Probably, the most important feature from a conservation standpoint is that the region still supports a fairly large area of untouched forest in the lower elevational range (900-1500 m), and this forest is continuous with the intact ridges above.

An effort should be made to at least conserve the ridgetops for their watershed value, but also the lower elevation forest for its natural history value. There are very few large areas of lower elevation Andean forest still intact and so some form of protection is highly desirable. The region is vast, and we only scratched the surface as far as understanding the entire avifauna. There is a great deal left to do, but access to sites and the inclement weather will always be a major factor in trying to carry out additional studies.

When TM made his second trip to the region in December of 2006, he was accompanied by C. Aucca of the NGO ECOAN. Aucca knows the importance of this area and had plans to get local communities involved in conserving forest, especially at the lower elevations and in the range of the Jocotoco Antpitta. In the 14-year interim, until the preparation of this article, no progress in this matter has been made as far as the authors are aware; besides, how far colonization and planting of coffee has advanced and what the environmental impact is today remains unknown.

Figure 14. Forests of the Sábanas valley, eastern slope (Photo by S. Claramunt).

ACKNOWLEDGMENTS

Financial support was forthcoming from the National Geographic Society's Committee for Research and Exploration, as well as from Paul Dickson, a friend and supporter of the LSU Museum of Natural Science. We would like to thank all other members of the expedition: Olivio Diaz, Jove Graham, Demetrio Huachaca, Samuel Huaylla, Marta Sanchez, Walter Vargas Campos, Ruben Chasquero Quispe from La Cumbre, Pedro Villanueva Fernandez from Misa Cantora, Yhonny from Siete de Agosto and Agosto and Jose Severino Olivera from Jaen. We thank Irma Franke (UNMSM) for her support with specimen safe keeping and export paperwork. Photos of LSUMZ specimens and comments from Dan Lane were especially useful. Thanks to Jose Tello, Manuel Plenge and Fernando Angulo for reviewing the manuscript.

We dedicate this article to Abraham Urbay (Fig. 15) who sadly passed away on June 1st, 2020. Abraham participated on many ornithological expeditions including this one to the Cordillera del Condor, and we all learned a lot from this quiet gentle man.

Figure 15. The late Abraham Urbay (Photo by C. Gregory Schmitt).

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Artículo recibido: 31/12/2020
Artículo aceptado: 30/05/2021
Artículo publicado: 07/06/2021