

Herpetofauna of Miazi (A. Almendáriz)

The Miazi military post is located on the left bank of the Río Nangaritza. At this site we worked for a period of six days. The forest immediately surrounding the post is disturbed, although on the slopes the forest still is in good condition.

Collections were made on established trails within the forest and along the banks of the Nangaritza and Chumbiritza rivers. While staying at this site, we had the opportunity to visit the Shaimi military post. A specimen of dendrobatid frog (*Colostethus*) was collected here, which is included in the list of specimens obtained at Miazi.

The herpetofauna, especially of the hylid frogs, found at Miazi is typical of the Amazonian lowlands. Southern range extensions were obtained of some species, such as the leptodactylids *Eleutherodactylus trachyblepharis* and *Phyllonastes lochites*. This last species previously was known only from elevations above 1500 m in the provinces of Morona-Santiago and Napo, and was considered rare. Our material consists of three specimens, suggesting that the species may be more common at Miazi. Likewise, the microhylid *Syncope antenori* was known from the provinces of Napo and Pastaza in Ecuador, and from the Department of Loreto in Perú; hence, its presence in the province of Zamora, documented with our specimens, was expected. Another distributional record was of the recently described dendrobatid *Colostethus cevallosi* (Morales and Schulte 1993), previously known only from material from the Province of Pastaza.

Diurnal amphibians were comparatively scarce at Miazi. In contrast, nocturnal amphibians, such as *Hyla boans* and *H. geographica*, had relatively large populations.

Amphibians and reptiles of the upper Río Comainas, Cordillera del Cóndor (R. P. Reynolds and J. Icochea M.)

Introduction

Available information on the herpetofauna of the Cordillera del Cóndor in Peru is extremely limit-

ed and the fauna is poorly known. Prior to the 1994 RAP expedition, no dedicated herpetological surveys had been conducted there. The Harvard Peruvian Expedition of 1916 (Barbour and Noble 1920) surveyed the herpetofauna of northwestern Peru in the departments of Piura, Cajamarca, and Lambayeque. While this survey included the arid valleys of the Chinchipe and Marañón rivers, it did not ascend into the Cordillera del Cóndor. More recently, Duellman and Wild (1993) reported on the extensive anuran collections from the Cordillera de Huancambamba in northern Peru made by field parties from the University of Kansas and Louisiana State University. In 1987, scientists from the Museo de Historia Natural in Lima visited the Cordillera del Cóndor and collected four species of snakes and five species of anurans at Falso Paquisha (= Puesto Vigilancia 22) along the upper Río Comainas, Departamento de Amazonas, Peru. This visit, however, was not directed at surveying herps and the specimens collected were incidental to other work.

In 1972, John E. Simmons accompanied a botanical expedition to the Cordillera del Cóndor in Morona-Santiago Province, Ecuador. During a five day period in the Cordillera del Cóndor, Simmons made a collection at 1800 m elevation of 18 species of anurans, six of which were previously undescribed (Duellman and Simmons 1988; Duellman and Lynch 1988). Duellman and Lynch (1988) tabulated the 18 anuran species collected by Simmons in 1972. Additional specimens collected between 830-1910 m elevation during this visit included 12 species of anurans, 1 species of caecilian, and 16 species of reptiles. In Appendix 11, we present a combined list of species from Simmons' 1972 trip; for anurans as presented in Duellman and Lynch (1988); and for additional anurans, caecilians, and reptiles collected between 830-1910 m from records at the Museum of Natural History, University of Kansas, kindly provided to us by John E. Simmons.

Ana Almendáriz surveyed amphibians and reptiles at three sites in the Cordillera del Cóndor of Ecuador during the 1993 RAP expedition (see above).

32 species of
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Methods

During the 1994 RAP expedition to the Cordillera del Cóndor in Peru, herpetological surveys were conducted by Reynolds and Icochea at two sites, and by Reynolds at one site, all along the upper Río Comainas. These sites, from highest to lowest elevation, were: 1) base of Cerro Machinaza (1750 m, 03°53'S 78°25'W); 2) Alfonso Ugarte (=Puesto Vigilancia 3, 1138 m, 03°54'S 78°25'W); and 3) Puesto Vigilancia Comainas (665 m, 04°06'S 78°23'W). In addition, a small collection of amphibians and reptiles was made at Falso Paquisha (850 m, 04°01'S 78°24'W) by Hernan Ortega and Walter Wust incidental to their fish and bird survey work.

Reynolds and Icochea surveyed herps at Alfonso Ugarte during 14-16 and 21-27 July, and at the base of Cerro Machinaza during 17-20 July. Amphibians and reptiles were collected primarily during night surveys by searching vegetation along established trails in the forest as well as along the shores of the Río Comainas at Alfonso Ugarte. A total of eight nights were spent surveying herps at Alfonso Ugarte, and four nights at the base of Cerro Machinaza. Additional specimens were collected opportunistically around camp and during diurnal reconnaissance along trails. The survey work at Puesto Vigilancia Comainas was done by Reynolds for a total of eight nights during 28 July-6 August. Night surveys were done on the floodplain and forest trail south of Puesto Vigilancia Comainas along the west bank of the Río Comainas.

Results

A total of 256 amphibian and reptile specimens representing 32 species of anurans and 21 species of reptiles were collected at four sites between 665-1750 m during the 1994 RAP expedition to the Peruvian Cordillera del Cóndor (Appendix 12). The voucher specimens are deposited at the Museo de Historia Natural, Universidad Nacional Mayor de San Marcos in Lima, Peru, and at the United States National Museum, Washington, D.C.

Our field work did not coincide with the steady rains necessary for heightened anuran breeding

activity. Therefore, the anuran species recorded from our work must be considered just a sample of the total fauna present. Nevertheless, the total number of amphibian species recorded by us and by Simmons (32 vs. 31) is very similar (Appendices 11 and 12).

There was a striking difference in the pattern of elevational distribution for the frog families Hylidae and Leptodactylidae recorded from our sites. Eleven hylid species were collected at the low elevation site of Comainas whereas only two hylid species were found at Alfonso Ugarte and none at Cerro Machinaza. Conversely, we recorded ten leptodactylid species from the high elevation sites of Alfonso Ugarte and Cerro Machinaza, versus four species at Comainas.

The *Rhamphophryne festae* from Cerro Machinaza and the *Hemiphractus bubalus* from Alfonso Ugarte represent new country records for Peru. Neither species was reported in the recent lists of the amphibians of Peru by Rodriguez et al. (1993) and Morales (1995). Both species, however, are known from Morona-Santiago, Ecuador: *Hemiphractus bubalus* from the Cordillera del Cóndor and *Rhamphophryne festae* from the Cordillera de Cutucú (Duellman and Lynch 1988).

A total of 58 species, 35 amphibians and 23 reptiles, were recorded from the eastern side of the Cordillera del Cóndor by the 1987 expedition of the Museo de Historia Natural and the 1994 RAP expedition (Appendix 12). On the western side of the Cordillera, Simmons collected a total of 47 species, 31 amphibians and 16 reptiles (Appendix 11). Combining the two lists results in a total of 88 species broken down as follows: 54 anurans; 1 caecilian; 12 lizards; 1 amphisbaenian; and 20 snakes. Only 13 species (15%) are common to both lists. The 24 anuran species collected at the higher elevation cloud forest sites probably represents a moderately complete representation of the total fauna based on comparisons with other reasonably well studied cloud forest sites, which have recorded between 20-39 species (Duellman 1988). These figures should be viewed cautiously, however, because of the weather-related sampling bias mentioned above, and because of the tentative identifications of the 1994 RAP material (especially of *Eleutherodactylus*). The totals just

presented will undoubtedly change as specimen identifications are refined.

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Simmons' Herpetological Collection from the Western Slopes of the Cordillera del Cóndor

Robert P. Reynolds

This list is based on specimens collected by John E. Simmons in 1972. It was compiled from Duellman and Lynch (1988), and from records at the Museum of Natural History, University of Kansas.

ANURA

Bufonidae

Atelopus Boulengeri

Bufo sp.

Bufo poeppigii

Dendrobatidae

Colostethus exasperatus

Colostethus marchesianus

Colostethus mystax

Colostethus shuar

Hylidae

Gastrotheca weinlandii

Hemiphractus bubalus

Hemiphractus scutatus

Hyla sp.

Hyla calcarata

Hyla lanciformis

Hyla rhodopepla

Osteocephalus buckleyi

Osteocephalus taurinus

Phyllomedusa tomopterna

Scinax garbei

Leptodactylidae

Eleutherodactylus acuminatus

Eleutherodactylus bromeliaceus

Eleutherodactylus condor

Eleutherodactylus galdi

Eleutherodactylus pecki

Eleutherodactylus peruvianus

Eleutherodactylus proserpens

Eleutherodactylus quaquaversus

Eleutherodactylus spinosus

Ischnocnema simmonsii

Leptodactylus wagneri

Phyllonastes lochites

GYMNOPHIONA

Caeciliidae

Caecilia abitaguae

SAURIA

Iguanidae

Enyalioides oshaughnessyi

Enyalioides praestabilis

Teiidae

Alopoglossus buckleyi

Kentropyx pelviceps

Proctoporus sp.

AMPHISBAENIA

Amphisbaenidae

Amphisbaena fuliginosa

SERPENTES

Boidae

Epicrates cenchria

Colubridae

Atractus sp.

Chironius scurrulus

Dipsas latifrontalis

Dipsas pavonina

Imantodes cenchria

Liophis reginae

Oxyrhopus melanogenys

Elapidae

Micrurus steindachneri

Viperidae

Lachesis muta

Amphibian and Reptile Species of the Upper Río Comainas, Cordillera del Cóndor

Robert P. Reynolds and Javier Icochea M.

Based on specimens collected during the 1994 RAP expedition, and those obtained on the 1987 expedition of the Museo de Historia Natural, Universidad Nacional Mayor de San Marcos, Lima.

*Specimens collected during 1987 expedition of the Museo de Historia Natural, Lima.

	BASE OF MACHINAZA	A. UGARTE PV3	F. Paquisha PV22	COMAINAS
ANURA				
Bufo nidae				
<i>Atelopus spumarius</i>			X	
<i>Bufo</i> sp.				X
<i>Bufo marinus</i>		X		X
<i>Rhombophryne festae</i>	X			
Centrolenidae				
<i>Cochranella</i> sp.				X
Dendrobatidae				
<i>Colostethus</i> cf. <i>nexipus</i>			X*	
Dendrobatid sp.			X*	
Hylidae				
<i>Hemiphractus bubalus</i>		X		
<i>Hyla boans</i>			X	X
<i>Hyla calcarata</i>		X		X
<i>Hyla granosa</i>				X
<i>Hyla lanciformis</i>				X
<i>Hyla minuta</i>				X
<i>Hyla sarayacuensis</i>				X
<i>Osteocephalus buckleyi</i>				X
<i>Osteocephalus leprieuri</i>				X
<i>Osteocephalus taurinus</i>				X
<i>Phyllomedusa vaillanti</i>				X
<i>Scinax rubra</i>				X
Leptodactylidae				
<i>Adenomera</i> sp.				X
<i>Eleutherodactylus condor</i>	X			

	BASE OF MACHINAZA	A. UGARTE PV3	F. Paquisha PV22	COMAINAS
<i>Eleutherodactylus peruvianus</i>		X		X
<i>Eleutherodactylus</i> sp.			X*	
<i>Eleutherodactylus</i> sp. 1				X
<i>Eleutherodactylus</i> sp. 2	X	X		
<i>Eleutherodactylus</i> sp. 3	X	X		
<i>Eleutherodactylus</i> sp. 4	X			
<i>Eleutherodactylus</i> sp. 5		X		
<i>Eleutherodactylus</i> sp. 6		X		
<i>Eleutherodactylus</i> sp. 7	X			
<i>Eleutherodactylus</i> sp. 8		X		
<i>Leptodactylus wagneri</i>			X*	X
<i>Leptodactylus stenodema</i>			X	
<i>Lithodytes lineatus</i>			X*	X
<i>Phyllonastes</i> sp.		X		
SAURIA				
Iguanidae				
<i>Anolis</i> sp.	X			
<i>Anolis fuscoauratus</i>		X		
<i>Enyalioides</i> sp.		X		
Teiidae				
<i>Alopoglossus</i> sp.	X			
<i>Kentropix pelviceps</i>				X
<i>Neusticurus ecleopus</i>		X		X
<i>Neusticurus strangulatus</i>		X		
<i>Prionodactylus argulus</i>		X	X	
SERPENTES				
Boidae				
<i>Epicrates cenchrria</i>			X*	X
Colubridae				
<i>Chironius fuscus</i>				X
<i>Chironius monticola</i>	X			
Dipsadine		X		
<i>Dipsas</i> sp.			X	
<i>Dipsas catesbyi</i>				X

	BASE OF MACHINAZA	A. UGARTE PV3	F. Paquisha PV22	COMAINAS
<i>Dipsas indica</i>		X		
<i>Imantodes cenchoa</i>				X
<i>Leptodeira annulata</i>		X	X*	
<i>Liophis festae</i>		X		
<i>Oxyrhopus melanogenys</i>		X		
<i>Oxyrhopus petola</i>		X		
<i>Xenodon severus</i>			X*	
Viperidae				
<i>Bothriopsis taeniata</i>				X
<i>Bothrops atrox</i>			X*	