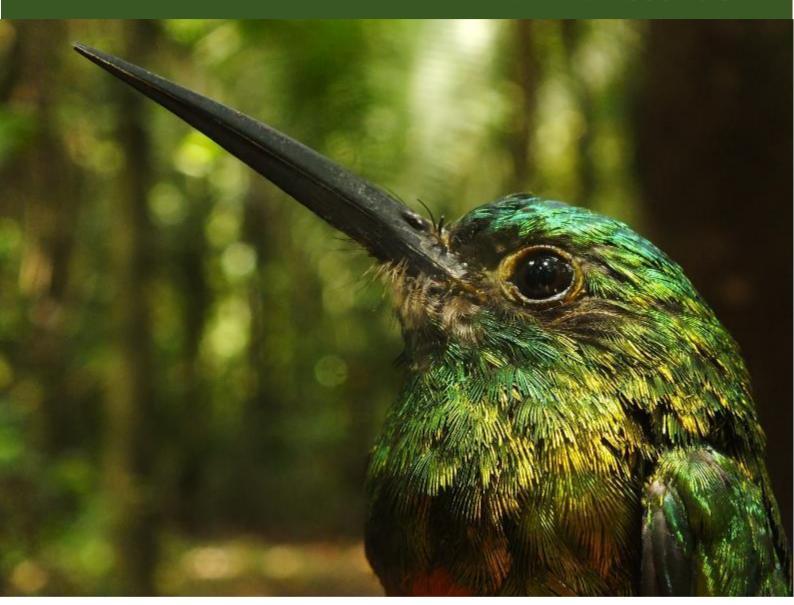
ECOLOGICAL REPORT

MAY 2017 ITA-INKATERRA ASOCIACIÓN







I. POINT COUNTS REPORT

1.1 SAMPLING AREA: Inkaterra Guides Field Station – Vegetable garden.

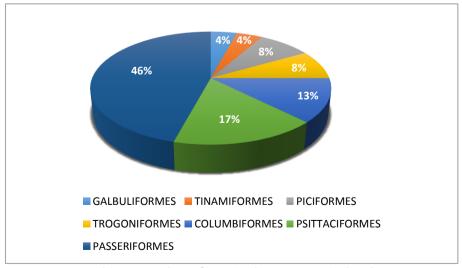
1.2 DATE: May 6th, 2017

1.3 BEGINNING HOUR: 5:45 am ENDING HOUR: 6:50 am

1.4 PARTICIPANTS: Noe Huaraca and Andreina Méndez

1.5 OBJECTIVES:

- 1.5.1. To complement the Inkaterra Guides Field Station's underbrush birds diversity list.
- 1.5.2. To establish the registered bird species' abundances parameters patterns.
- 1.5.3. To understand the differences between bird wildlife compositions according by its habitat.
- **1.6 METHODOLOGY:** The Point Count method (Ralph et al., 1995; Ralph, 1996; MINAM, 2015) was employed, which consists in staying at a point station for 10 minutes, while recording all the birds seen and heard. The distance between points is 150 meters. To identify the captured species the book Birds of Peru (Schulenberg, et al. 2007) and the List of Birds from Peru (Plenge, 2016) were utilized.
- **1.7 RESULTS:** 4 Point stations were evaluated, where 24 species belonging to 14 families and 7 orders were registered. The richest order was Passeriformes, with 11 species, followed by Psittaciformes with 4 species, Columbiformes with 3 species, Trogoniformes and Piciformes both with 2 species each, and Tinamiformes and Galbuliformes con 1 species each.



Graphic 1. Number of species by Taxonomical order

It is important to point out that only two species were registered both by spotting and listening. These species were the *Monasa nigrifons* or Black fronted Nunbird" and the *Ramphocelus nigrogularis* or Masked crimson Tanager. Many bird species were listened at the underbrush in point station 4, due to its proximity to an area dominated by a "cecropia" tree. Among those most relatively abundant species were the *Brotogeris cyanoptera* or Cobalt winged Parakeet (N=5); the *Ramphocelus nigrogularis* or Masked crimson Tanager (N=3) and the *Amazona ochrocephala* or Yellow crowned Parrot (N=2). Finally, all species are listed as Least Concern according to the IUCN (International Union for Conservation of Nature).

Chart 1. Taxonomical Classification of the species registered by Point counts

ORDER	FAMILY	NAME	SPECIES	REGISTRY
	Columbidae	Plumbeous Pigeon	Patagioenas plumbea	L
COLUMBIFORMES		Ruddy Pigeon	Patagioenas subvinacea	L
		Scaled Pigeon	Patagioenas speciosa	L
GALBULIFORMES	Bucconidae	Black fronted Nunbird	Monasa nigrifrons	S
	Cotingidae	Sreaming Piha	Lipaugus vociferans	L
	Formicariidae	Black faced Antthrush	Formicarius analis	L
	Icteridae	Orange backed Troupial	Icterus croconotus	L
PASSERIFORMES	Thamnophilidae	Plumbeous Antbird	Myrmeciza hyperythra	L
		Rufous fronted	Formicarius rufifrons	L
		Antthrush		
		Black spotted Bare-eye	Plegopsis negromaculata	L
		Black throated Antbird	Myrmophylax atrothorax	L
		Plain winged Antshrike	Thamnophilus schistaceus	L
	Thraupidae	Masked Crimson	Ramphocelus nigrogularis	S
		Tanager		
	Troglodytidae	Trush like Wren	Campylorhynchus turdinus	L
	Tyrannidae	Bright rumped Attila	Attila spadiceus	L
PICIFORMES	Capitonidae	Eubucco richardsoni	Lemon throated Barbet	L
	Picidae	Lineated Woodpecker	Dryocopus lineatus	L
	Psittacidae	Cobalt winged Parakeet	Brotogeris cyanoptera	L
PSITTACIFORMES		Yellow crowned Parrot	Amazona ochrocephala	L
		Blue headed Macaw	Primolius couloni	L
		Blue headed Parrot	Pionus menstruus	L
TINAMIFORMES	Tinamidae	Cinereous Tinamou	Crypturellus cinereus	L
TROGONIFORMES	Trogonidae	Black tailed Trogon	Trogon melanuros	L
		Violaceous Trogon	Trogon violaceus	L

Type of registy: L (listened), S (spotted).

II. BIRD BANDING REPORT

2.1 SAMPLING AREA: Inkaterra Guides Field Station - Palmetum

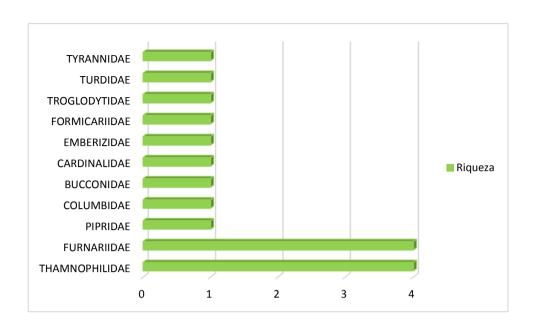
2.2 DATE: 22nd to 26th, April 2017

2.3 PARTICIPANTS: Noe Huaraca y Andreina Méndez

2.4 OBJECTIVES:

- **2.4.1** To complement the Inkaterra Guides Field Station's birds list with species from canopy and underbrush.
- **2.4.2** To establish the registered bird species' abundances parameters patterns.
- **2.4.3** To understand the different bird species' migration tactics.
- 2.5 METHODOLOGY: 12 Mist Nets were employed for this activity, all 12 meters long and 2.5 meters width. The nets were placed at the surroundings of the Palmetum area. Field work started at 5:30 am. At 11:00, all nets were closed and then reopened from 2:30 pm to 5:00 pm. The nets were checked every 30 minutes. After recover the captured birds from the net, they were transported to the processing area in cloth bags, and then the birds were ringed and biometrically evaluated. To identify the captured species the book Birds from Peru (Schulenberg, et al. 2007) and the List of Birds from Peru (Plenge, 2016) were utilized.
- 2.6 RESULTS: 17 species were captured, all of them belonging to 11 families and 3 orders. 18 species were new captures (64.3%) and 10 species were re-captures (35.7%). Families Thamnophilidae and Furnariidae shown the highest richness rate with 4 species each, while other families only got one species captured for each one of them. Likewise, the highest relative abundant families were Thamnophilidae and Pipridae with 7 subjects captured for each one of them. The species Pipra fasciicauda or Band Tailed Manakin was the most abundant one, with 5 new captures and 2 re-captures. This indicates us the species' preference for the Palmetum and its wide distribution range over all the IGFS station.

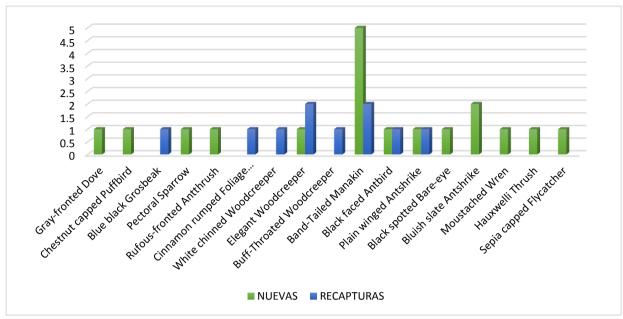
Finally, all captured species are listed as Least Concern according with the IUCN "International Union for Conservation of Nature".



Graphic 2. Total bird number by Taxonomical family

Chart 2. Taxonomical classification bird species captured by Mist Nets

ORDER	FAMILY	NAME	SPECIES	
COLUMBIFORMES	Columbidae	Gray-fronted Dove	Leptotila rufaxilla	
GALBULIFORMES	Bucconidae	Chestnut capped Puffbird	Bucco macrodactylus	
	Cardinalidae	Blue black Grosbeak	Cyanocompsa cyanoides	
PASSERIFORMES	Emberizidae	Pectoral Sparrow	Arremon taciturnus	
	Formicariidae	Rufous-fronted Antthrush	Formicarius rufifrons	
	Furnariidae	Cinnamon rumped Foliage gleaner	Phylidor phyrrodes	
		White chinned Woodcreeper	Dendrocincla merula	
		Elegant Woodcreeper	Xiphorhynchus elegans	
		Buff-Throated Woodcreeper	Xiphorhynchus guttatus	
	Pipridae	Band-Tailed Manakin	Pipra fasciicauda	
	Thamnophilidae	Black faced Antbird	Myrmoborus myotherinus	
		Plain winged Antshrike	Thamnophilus schistaceus	
		Black spotted Bare-eye	PhLegopsis nigromaculata	
		Bluish slate Antshrike	Thamnomanes schistogynus	
	Troglodytidae	Moustached Wren	Pheugopedius genibarbis	
	Turdidae	Hauxwelli Thrush	Turdus hauxwelli	
	Tyrannidae	Sepia capped Flycatcher	Leptopogon amaurocephalus	



Graphic 3. Number of new captured and re-captured subjects by species

2.7 PHOTO GALLERY



Photo 1. Moustached Wren



Photo 2. Pectoral Sparrow





Photo 3. Elegant Woodcreeper



Photo 4. Black faced Antbird



Photo 5. Chestnut capped Puffbird Gleaner



Photo 6. Cinnamon rumped Foliage



Project: Wildlife monitoring

III. TRAP CAMERAS REPORT

Data analysis from the 1st to the 30th, April 2017 is hereby submitted.

3.1 SITE:

The camera is currently monitoring and artificial salt lick, located at the following UTM coordinates: Zone 19L, X: 494873 Y: 8614535, 286 meters from IGFS.



Image Nº 01: Salt lick map area - CAM ITA 03

3.2 METHODOLOGY:

Data was obtained through the use of trap cameras. Bushnell Nature View cameras were employed for this task, all programmed in hybrid mode (photo shooting and video recording), 24 hours a day with infrared light on. The cameras were located at the artificial salt lick area, alongside a tuna oil-bait, for monitoring the wildlife activity near the surroundings of the IGFS.

3.3 RESULTS

After a 30 days of sampling activities (720 hours – camera), 679 photos were obtained. 322 of those photos are useful (47.72% of effectiveness). The rest are pictures that show no wildlife presence at all (the cameras were triggered by falling leaves, the wind, nearby plants, or others).

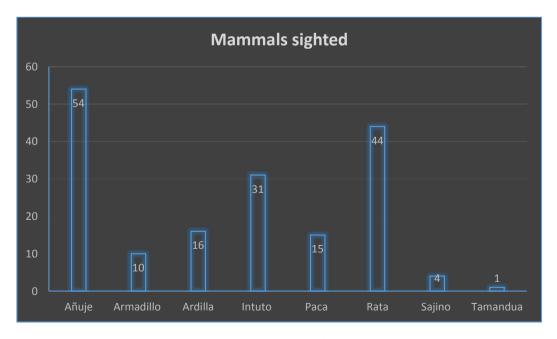
194 subjects were registered, all belonging to 8 mammals species. 37 subjects registered for 12 bird species and 4 subjects registered for one unidentified species. 2 subjects for 2 species of reptiles were also registered.



Chart 3. April 2017 registry

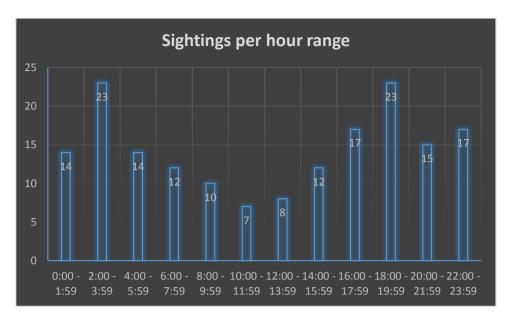
	Res	sumen de registros - Abril 201	7					
Nº Càmara	Nombre comùn	Nombre cientifico	Familia	Registros	Horario			
	Mamìferos							
	Añuje	Dasyprocta variegata	Dasyproctidae	54	5:33-17:34			
	Armadillo	Dasypus sp.	Dasypodidae	10	07:08-04:57			
	Ardilla	Sciurus spadiceus	Sciuridae	16	7:45-16:13			
	Intuto	Didelphus sp.	Diselphidae	31	17:53-03:25			
CAM-ITA 03	Paca	Agouti paca	Cuniculidae	15	18:08-01:50			
	Rata	NN	NN	44	18:18-04:46			
	Sajino	Pecari tajacu	Tayassuidae	4	06:25-12:18			
	Tamandua	Tamandua tetradactyla	Myrmecophagidae	1	6:26			
	Aves							
	Ave NN	NN	NN	7	07:23-12:19			
	Gallito-Hormiguero de cara negra	Formicarius analis	Formicariidae	7	7:17-16:35			
	Gorrion de pectoral	Arremon taciturnus	Embereizidae	1	13:25			
	Jejenero de garganta ceniza	Conopophaga peruaviana	Conopophagidae	1	10:55			
	Lechuza	NN	Strigidae	1	17:51			
	Paloma	NN	Columbidae	1	8:59			
	Paloma	Geotrygon sp.	Columbidae	1	7:47			
	Paloma	Leptotila sp.	Columbidae	1	13:41			
	Perdiz	Tinamus sp.	Tinamidae	2	05:55-15:43			
	Perdiz grande	Tinamus major	Tinamidae	9	06:11-17:13			
	Pucacunga	Penelope jacquacu	Cracidae	3	06:07-08:04			
	Trompetero de ala blanca	Psophia leucoptera	Psophiidae	3	10:01-16:42			
	Reptiles							
	Motelo	Chelonoidis denticulata	Testudinidae	1	17:06			
	Iguano	Tupinanbis sp.	Teiidae	1	13:24			

3.3.1 Mammals:



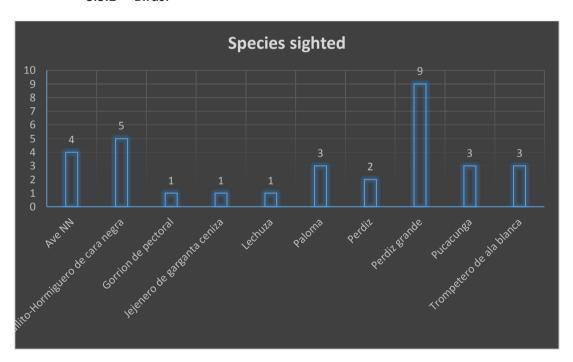
Graphic 4. Monthly abundance of mammals sighted





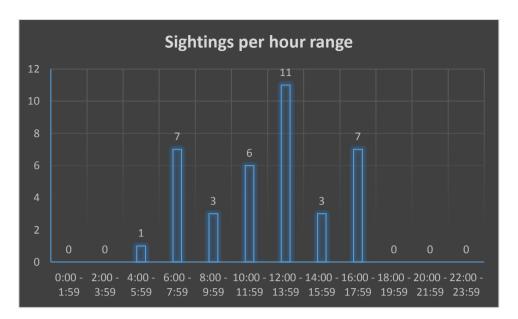
Graphic 5. Mammals' sightings per hour range

3.3.2 Birds:



Graphic 6. Monthly abundance of birds sighted





Graphic 7. Birds sighted per hour range

Chart 3 indicates a total of 214 subjects registered, all belonging to 22 species: 8 mammals, 12 birds and 2 reptiles, all distributed in 16 families. This data was obtained after 30 days of monitoring.

Graphic 4 shows that rats, agoutis and opossums compose the 73% of sighted mammals, but Armadillos and Tamaduas are relevant. In accordance to graphic 5, sightings were higher before dawn, between the 2:00 and 4:00 hours. They diminished during noon and increased again at dusk, during 18:00 and 20:00 hours, when the sightings of mammals reached their peak once again.

Graphic 6 and 7 indicate that the 54% of bird sightings shown the black-faced antthrush, the great tinamou, the spix's guan and the pale-winged trumpeter. The 40% of the sightings only contained the last three aforementioned birds, something very particular due to the fact that those are big-size birds that prefer being at terrain's level, and therefore, are not usually registered by other means at the Station. An increase or decrease trend of sightings during certain hours is not shown through the data obtained; however, bird wildlife was very lively during noon hours, and at dawn and dusk.



Photo Gallery:



Photo Nº 01: Spix's Guan - Penelope jacquacu



Photo Nº 02: Agouti - Dasyprocta variegata





Photo Nº 03: Collared peccary - Tayassu tajacu



Photo N° 04: Armadillo - *Dasypus sp*.





Photo N° 05: Red squirrel - Sciurus spadiceus



Photo N° 06: Lowland paca - Agouti paca





Photo Nº 07: Yellow-footed tortoise - Chelonoidis denticulata



Photo N° 08: Iguana - Tupinanbis sp.





Photo Nº 09: Pucacunga - Penelope jacquacu



Photo $N^{\rm o}$ 10: Tamandua $\,$ - $\it Tamandua \,\, tetradactyla$





Photo N° 10: Great tinamou - Tinamus major



Photo N° 11: Great tinamou - *Tinamus major*





Photo N° 12: Pale-winged trumpeter - Psophia leucoptera



Photo Nº 13: Armadillo – Dasypus sp.





Photo N° 14: Lowland paca – Agouti paca



Photo Nº 15: Red squirrel- Sciurus spadiceus