

ECOLOGICAL REPORT

**FEBRUARY 2017
INKATERRA ASOCIACIÓN**



1. PROJECT VEGETABLE GARDEN: CONSERVATION OF LOCAL CROPS

1.1. Manager: Noe Huaracca

1.2. **Objective:** Growing Amazonian-native-vegetables for their conservation.

1.3. ACTIVITIES PERFORMED

Through this year the project's objectives have been reformulated. At first, the project aimed to grow different vegetables, such as lettuces, tomatoes and cabbage. However, it failed due to the constant assailing of many plagues that affected the vegetables.

Currently, the focus is to rescue many different native crops by growing them. Searching and collecting of the species to grow started in December and January.

The task was difficult, mainly because the population no longer use the species we were looking for, and they are very hard to find at the local markets. We have decided to start recovering and conserving native crops by growing the following species:

- Sacha culantro (*Eryngium foetidum*); it was chosen due to its popularity in the Amazonian gastronomy.
- Sweet Corn Root (*Calathea allouia*), Amazonian tuber rich in iron and riboflavin.
- Arrowleaf elephant ear (*Xanthosoma sagittifolium*), Amazonian tuber rich in carbohydrates.
- Purple yam (*Dioscorea trifida*), Amazonian tuber rich in essential amino-acids.
- Sacha Inchi / Inca-peanut (*Plukenetia volubilis*), which are rich in Omega-3.
- Many varieties of Amazonian peppers.

Image 1. Sacha inchi ready to be sown



Image 2. Sweet corn root plant



Image.3 Sacha culantro plant



Image.4 Purple potato plants



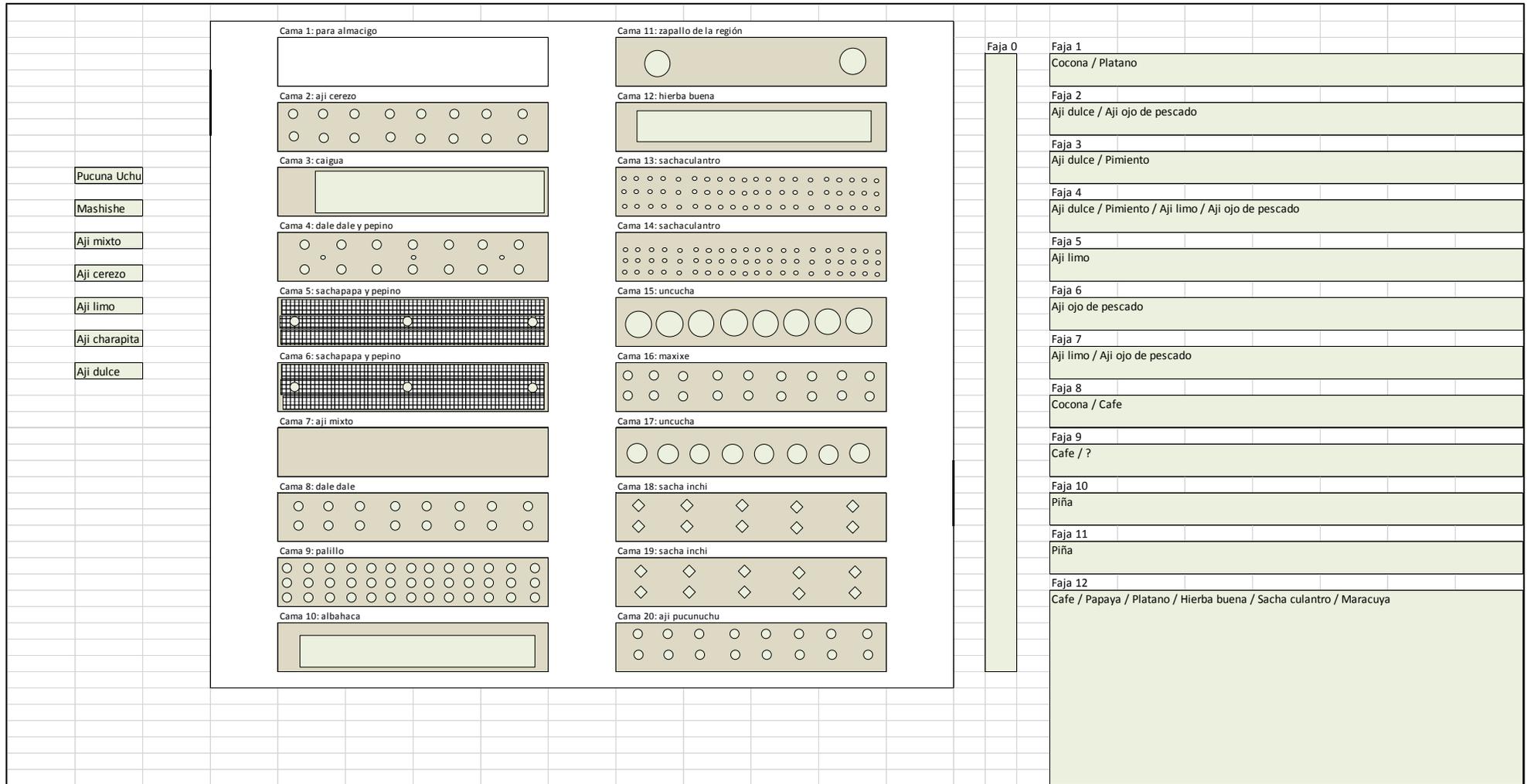
Image.5 Curcuma plants



Image.6 Arrowleaf elephant ear plant



Image.7. Garden map



2. TRAP CAMERA REPORT

2.1. **DATE:** 01 January to 29 January.

2.2. **PLACE:** The camera is monitoring a natural saltlick that is located 150 meters from the IGFS premises, at the following UTM coordinates: 494865 m E ; 8614529 m S / Zone 19L.

2.3. **METHODOLOGY:** All data was registered by trap camera, by employing Bushnell cameras, all of them programmed in hybrid mode. The cameras were deployed at the IGFS pathway system in order to monitor wildlife activity in the surroundings of IGFS premises.

2.4. RESULTS:

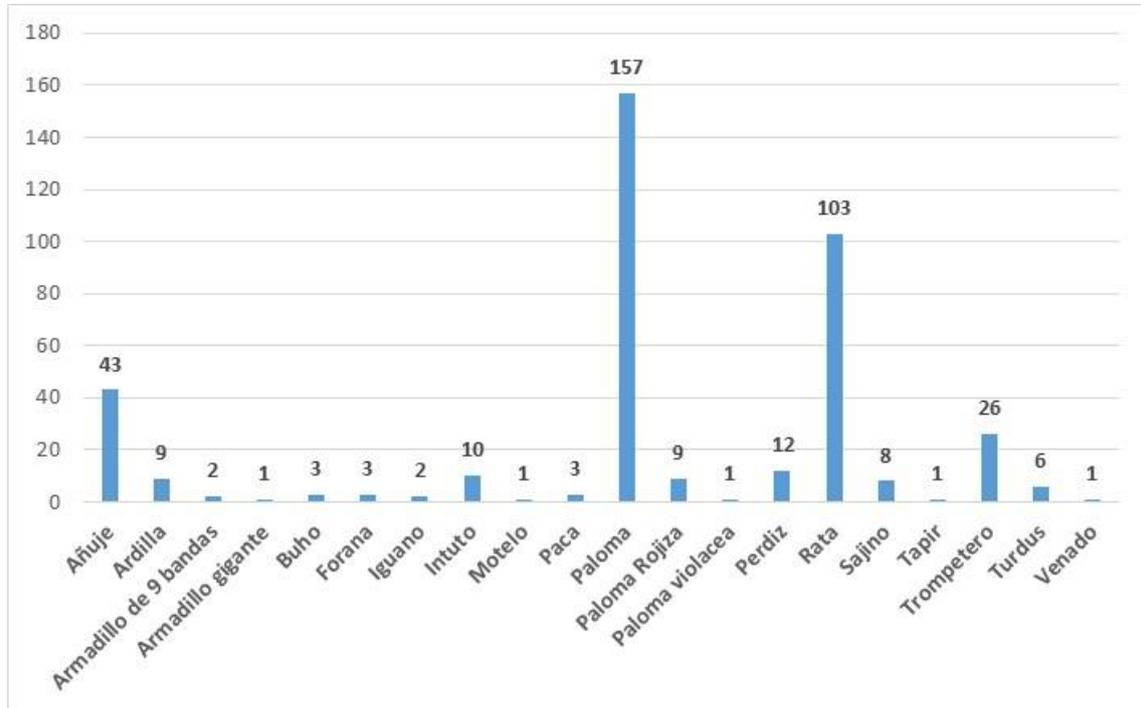
2142 pictures were obtained, from which 57 are of birds, 87 of mammals, 3 of reptiles, and 267 pictures are of non-identified species, ranging from birds to small mammals.

Chart 1. Registered species that visit and use the natural saltlick.

COMMON NAME	SCIENTIFIC NAME	HOUR	Nº SIGHTINGS
MAMMALS			
Agouti	<i>Dasyprocta variegata</i>	6:51 - 17:44	48
Squirrel	<i>Sciurus sp.</i>	6:20 - 14:37	9
Nine-banded armadillo	<i>Dasypus novemcinctus</i>	19:05 - 19:53	2
Giant armadillo	<i>Priodontes maximus</i>	20:59	1
American opossum	<i>Didelphis sp.</i>	19:10 - 2:05	10
Lowland paca	<i>Cuniculus paca</i>	19:41 - 0:39	3
Rat	<i>Unknown</i>	18:22 - 4:17	109
Collared peccary	<i>Pecari tajacu</i>	8:13 -17:34	10
South American tapir	<i>Tapirus terrestris</i>	1:20	1
Brocket deer	<i>Mazama sp.</i>	4:11	1
TOTAL			194
Birds			
Owl	Desconocido	18:12 - 23:18	3
Black-faced antthrush	<i>Formicarius analis</i>	7:06 - 16:19	3
Pigeon	Unknown	5:19 - 17:29	161
Ruddy quail-dove	<i>Geotrygon montana</i>	9:11 - 14:15	9
Grey-fronted dove	<i>Leptotila rufaxila</i>	9:10	1
Tinamou	Tinamidae	5:28 - 17:37	12
Pale-winged trumpeter	<i>Psophia leucoptera</i>	6:00 - 16:33	36
Hauxwell's Thrush	<i>Turdus hauxwelli</i>	6:27 - 15:02	6
TOTAL			231
REPTILES			
Tegu	<i>Tupinambis sp.</i>	9:58 - 11:33	2
Yellow-footed tortoise	<i>Chelonoidis denticulata</i>	17:17	1
TOTAL			3

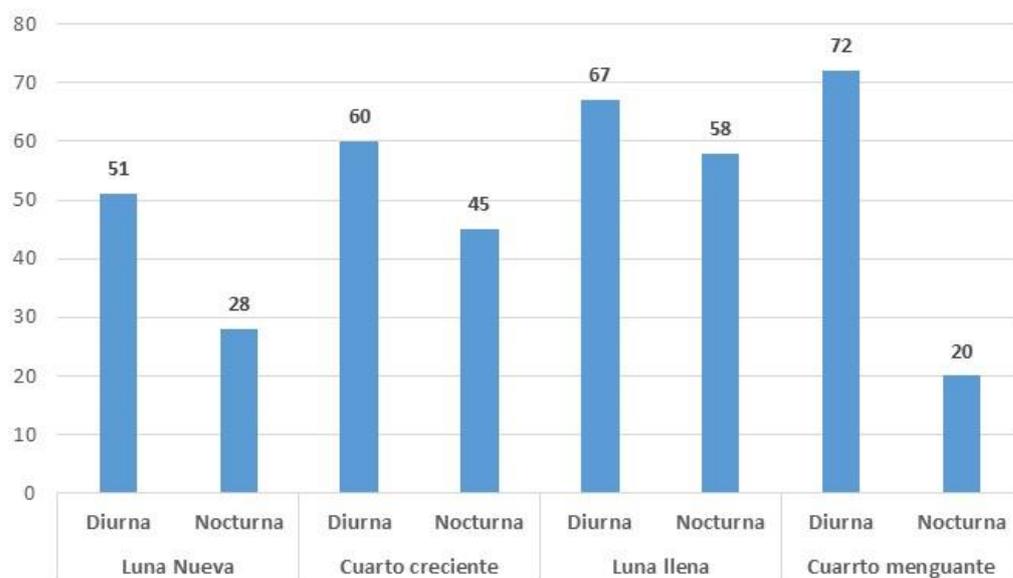
10 different mammal species that visit and use the natural saltlick near to IGFS premises were registered. The most frequent mammal spotted was the Agouti (*Dasyprocta variegata*), counting 48 subjects. Furthermore, 8 bird species were registered, being the most numerous a pigeon-like one that could not be identified. Plus, 2 species of reptiles were also registered.

Graphic 1. Successful wildlife detected registries using the saltlick near IGFS premises



Graphic 2. shows how wildlife activity during the night increases, as the moon enters its full-moon phase.

Graphic 2. Wildlife activity registered during the different lunar phases



Pictures 1, 2, 3, 4. Trumpeters (*Psophia leucoptera*), using the saltlick



Pictures 5,6, Collared peccary (*Pecari tajacu*) using the saltlick



Picture 7. Nine-bande armadillo (*Dasypus*



Picture 8. Giant armadillo (*Prionomys maximus*), using the saltlick



Picture 9. Ruddy quail-dove (*Geotrygon montana*)



Picture 10. Lowland Paca (*Cuniculus paca*)



Picture 11. Yellow-footed tortoise (*Chelonis denticulata*)



Picture 12. American opossum (*Didelphis* sp)



Picture 13, 14. Agoutis (*Dasyprocta variegata*) using the saltlick



Picture 15. Tapir (*Tapirus terrestres*)



Picture 16. Owl sp. Unknown



Picture 17. Rat sp. Unknown



3. Palmetum

3.1. Manager: Helmut Rengifo

3.2. **Objective:** Conserve the most representative native palm species.

3.3. Activities Performed

This month we had the support of the National Agrarian University La Molina's forest brigade. They were in charge of making progress in the following projects: the plant nursery management, the creation of a Royal Palms-lot, the making of strips for growing of Huasai and Pona palms, the re-measurement of trees and palms that were previously tagged in order to define the dynamics of the forest and to register new subjects. This year, the inventory will not include natural-regenerative palms. The brigade also performed phenology tasks in the area.

Image 8. Layout of the Palmetum plant nursery.

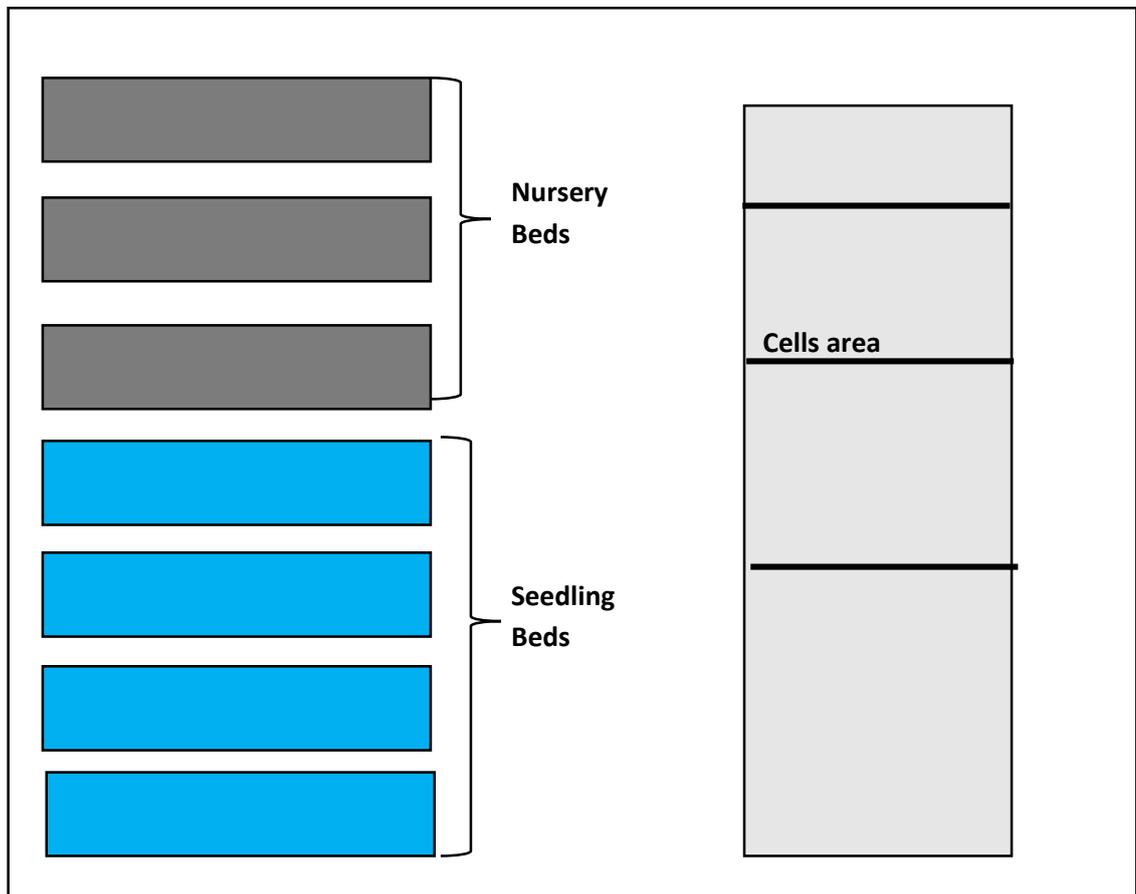


Image 18. Volunteers working at the Palmetum nursery.



Image 19. Volunteers planting royal palm seedlings in growing strips.



Image 20. Volunteers sowing Pona palm seedlings in growing strips.



Image 21. Aguaje seedlings ready for planting.



Image 22. Huasai seedlings planted in the growing strips.



Image 23. Royal palm seedling planted at the royal palm lot.



4. PROYECTO AVES: POINT COUNTING

Sampling Area: Palmetum

Date: February 8th, 2017

Methodology: Point Counting. This method involves staying in one point while counting every species and individuals that are listened or sighted during a 10-minutes-period. The distance between spots was of 200 meters.

Results: A total of 37 individuals were registered, belonging to 25 species, all divided in 19 Families and 9 Orders. Passeriformes was the richest order (R=10), while the most relatively abundant species was the Cobalt-winged Parakeet, counting 6 subjects sighted while flying. The Silver-beaked Tanager and the Dusky-headed Parakeet counted 3 individuals, each of them sighted at the canopy area.

Point 1 registered the highest richness (R=10), probably due to its nearness to the river and the high abundance of bird wildlife. In addition, most of the individuals' data was obtained by listening; only 23.1% of the individuals were also sighted.

Graphic 3. Species counted by Families

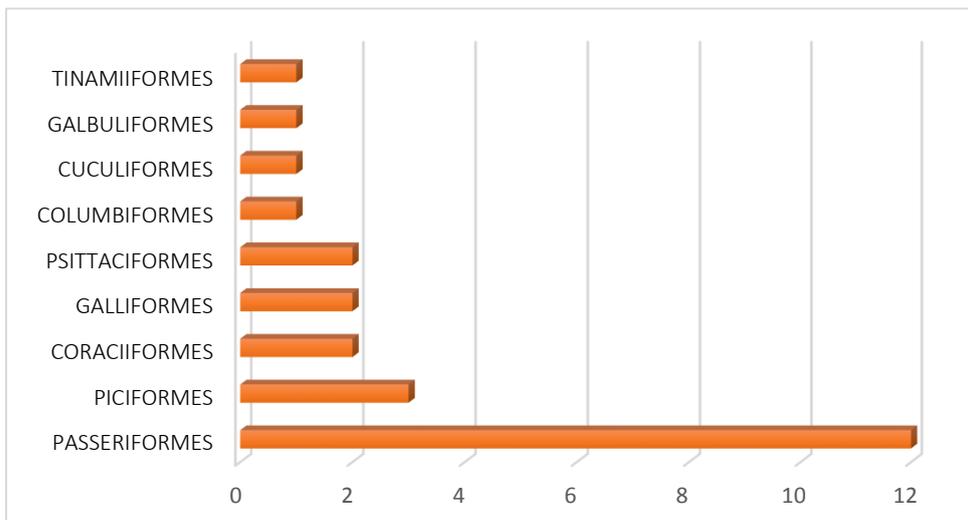


Chart 2. Point counting registered species taxonomical classification

POINT	HOUR	ORDER	FAMILY	SPECIES	NAME	REGISTRY
1	05:50 am	Passeriformes	Thraupidae	<i>Ramphocelus carbo</i>	Silver-Beaked Tanager	S, L
		Psittaciformes	Psittacidae	<i>Aratinga wagleri</i>	Dusky-headed Parakeet	S, L
		Passeriformes	Incertae	<i>Saltator maximus</i>	Buff-throated Saltator	L
		Passeriformes	Formicariidae	<i>Formicarius analis</i>	Black-faced Antrush	L
		Galliformes	Cracidae	<i>Ortalis guttata</i>	Speckled Chachalaca	L
		Galbuliformes	Galbulidae	<i>Galbua cyanescens</i>	Bluish fronted Jacamar	L
		Coraciiformes	Momotidae	<i>Momotus momota</i>	Blue-crowned Motmot	L
		Coraciiformes	Alcedinidae	<i>Megaceryle torquata</i>	Ringed Kingfisher	L
		Passeriformes	Icteridae	<i>Psarocolius angustifrons</i>	Russet-backed Oropendola	S, L
		Tinamiiformes	Tinamidae	<i>Crypturellus undulatus</i>	Undulated Tinamou	L
2	06:03 am	Galliformes	Cracidae	<i>Penelope jacquacu</i>	Spix's Guan	L
		Columbiformes	Columbidae	<i>Patagioenas plumbea</i>	Plumbeous Pigeon	L
		Psittaciformes	Psittacidae	<i>Brotogeris cyanopectera</i>	Cobalt-winged Parakeet	L
		Passeriformes	Furnariidae	<i>Dendrocolaptes certhia</i>	Amazonian Barre-Woodcreeper	L
3	06:16 am	Passeriformes	Troglodytidae	<i>Campylorhynchus turdinus</i>	Thrush-Like Wren	L
		Piciformes	Picidae	<i>Piculus chrysochloros</i>	Golden-green Woodpecker	L
		Passeriformes	Furnariidae	<i>Xiphorhynchus guttatus</i>	Buff-Throated Woodcreeper	S, L
4	06:31 am	Piciformes	Capitonidae	<i>Capito auratus</i>	Gilded Barbet	S, L
		Passeriformes	Contingidae	<i>Querula purpurata</i>	Purple throated Fruitcrow	L
5	06:45 am	Passeriformes	Formicariidae	<i>Formicarius rufifrons</i>	Rufous-fronted Antthrush	L
		Piciformes	Picidae	<i>Celeus flavus</i>	Cream-colored Woodpecker	L
		Columbiformes	Columbidae	<i>Patagioenas plumbea</i>	Plumbeous Pigeon	L
6	07:02 am	Passeriformes	Cotingidae	<i>Lipaugus vociferans</i>	Screaming Piha	L
		Passeriformes	Icteridae	<i>Cacicus solitarius</i>	Solitary Black Cacique	L
		Passeriformes	Turdidae	<i>Turdus albicollis</i>	White-necked Thrush	L
		Cuculiformes	Cuculidae	<i>Crotophaga major</i>	Greater Ani	S, L

Type of registry: L (listened), S (sighted)