



FLAAR
MESOAMÉRICA

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Howler Monkeys



**Present in
Alta Verapaz,
Izabal and Petén**

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FLAAR (USA) AND FLAAR MESOAMERICA (GUATEMALA)



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Alouatta pigra

Photo by: Erick Flores, FLAAR Mesoamerica, Aug. 18, 2018. El Caoba, Petén, Guatemala. Camera: Canon 1D X Mark II. Lens: Canon EF 300mm IS II USM. Settings: 1/1,600 sec; f/5,6; ISO 640.

PHOTO FROM TITLE PAGE

Alouatta pigra

Photo by: Erick Flores, FLAAR Mesoamerica, Aug. 18, 2018. El Caoba, Petén, Guatemala. Camera: Canon 1D X Mark II. Lens: Canon EF 300mm IS II USM. Settings: 1/1,600 sec; f/5,6; ISO 640.

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Introduction to Howler Monkeys of Guatemala

We are initiating a five-year project of cooperation and coordination with CONAP (Consejo Nacional de Áreas Protegidas) to study, photograph, and publish the flora, fauna, eco-systems. Also, this project will allow to discuss the importance of preservation of fragile bio-diverse areas and protection of endangered species. For howler monkeys, in addition to protecting them, it is essential to not cut down the trees that these monkeys need for food and shelter, and the trees they use as corridors to get from one seasonal tree species area to another.

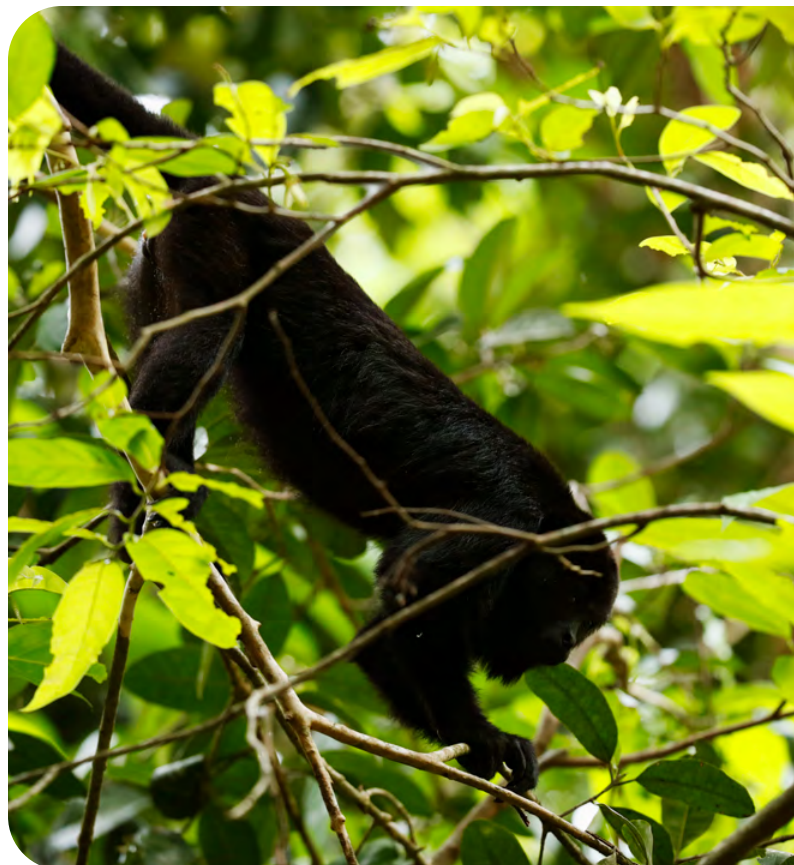
Our focus for August 2018 - July 2019 field work was flora and fauna of Parque Nacional Yaxha, Nakum y Naranjo (PNYNN). Our research area for May 2021 onward is this park but also the surrounding areas of the Reserva de la Biosfera Maya. But if you are a research professor in mammals or a student wanting to do a thesis or PhD dissertation on howler monkeys, it helps also to know where else these monkeys have been seen.

Howler monkey

Photo by: Erick Flores. FLAAR Mesoamerica, Aug. 17, 2018. Yaxha area of Parque Nacional Yaxha, Nakum y Naranjo, Petén, Guatemala. Camera: Canon 1D X Mark II. Settings: 1/400 sec; f/3,5; ISO 2,500.

So, the present FLAAR report is a list of each area in Guatemala where I have consistently heard howler monkeys or where I have seen and photographed them. We have:

- A separate report on howler monkeys of PNYNN
- A bibliography on howler monkeys so long it's a separate report
- A complete study report on what trees you should protect to provide food for howlers



My Personal Experience with Howler Monkeys in recent years

The first howler monkey I heard was in the rain forest a kilometer outside Teapa, Tabasco, México, in 1961. I explain in Appendix A how it was possible that I was hiking into a rain forest, at age 16, in 1961, by myself. Then I heard more howlers when I hiked to Bonampak in 1962 or 1963 as a student intern for INAH archaeology project. Lots of howler monkeys there.

Then plenty more during my visits to Tikal as a backpacker in 1963 for one week and 1964 for one week. Then 12 months at Tikal as student intern: howler monkeys almost every day (and spider monkeys also).

Then many-months-per-year several years mapping Yaxha, several field trips to map Nakum, and exploring Topoxté Island. Lots of howler monkeys in the 1970's there.

By the year 2013 I had better camera equipment to do photography of howler monkeys, so below I list the howler monkeys that I have photographed in the recent decade.

2013, Howler Monkeys around Posada el Caribe, Arroyo Petexbatún

The Arroyo Petexbatún goes from the Río la Pasión at Sayaxché upstream to Lake Petexbatún. The friendly family owned-and-operated hotel Hotel Ecológico Posada Caribe, where we stay in recent decades, is of Julian Mariona. Lots of howler monkeys because he and his family preserve the forest around the hotel.

Exmibal area, along highway parallel to Lake Izabal, 2014

Remarkable that despite all the deforestation caused by mining nickel, there are still howler monkeys up in the few remaining trees.



Howler monkeys love leaves and probably also flowers and other fresh parts of guarumo trees. These *Cecropia peltata* trees grow like weeds in areas that have recently been deforested. Dozens of birds also relish the food these trees provide.

Photo by: Nicholas Hellmuth. FLAAR
Mesoamerica, 2014. Guarumo tree,
Exmibal area, Izabal, Guatemala.
Camera: Canon 1D X Mark II.
Settings: 1/400 sec; f/3,5; ISO 2,500.

2015, Howler Monkeys El Estor, Izabal, and western Petén

If your property has trees with leaves that the howlers love to eat these monkeys will come next to your home (or hotel). But it helps to have a treetops passageway so they can use treetops to reach the edible leaves. Howlers prefer to walk on tree limbs and hang from branches; they don't like hiking along the ground (because dogs chase them; the ground level is not their preferred habitat).



Howler monkeys wander around harvesting and eating leaves from the trees on the property of the Hotel Ecologico Cabanas del Lago.

Photo by: Nicholas Hellmuth. FLAAR Mesoamerica, Dec. 10, 2015.
Eco Hotel, El Estor.

Camera: Nikon D810. Lens: Nikon AF-Micro-NIKKOR 200mm IF-ED Macro.
Settings: 1/80 sec; f/8; ISO 1,250.



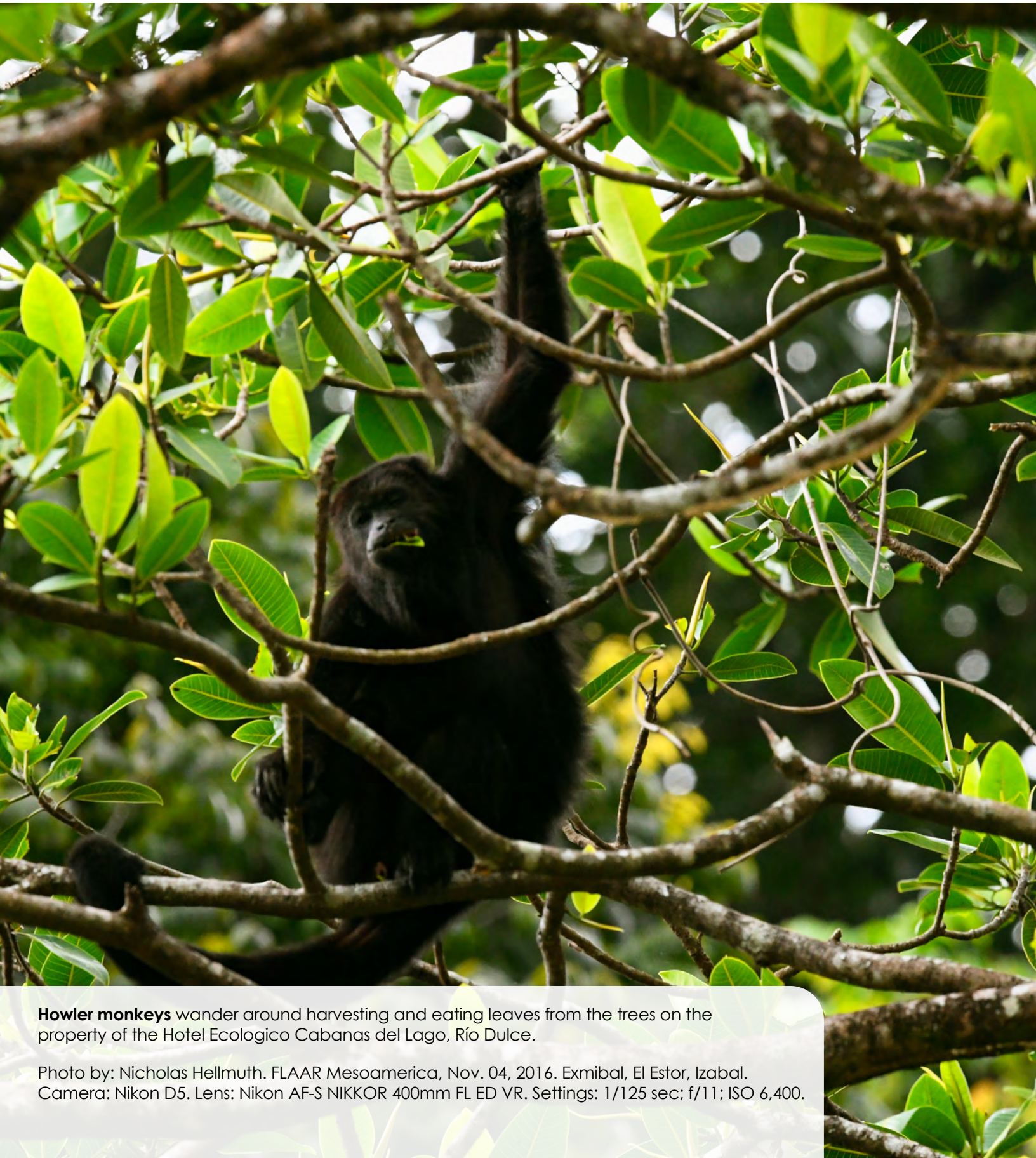
Nini Berger established a scarlet macaw research station decades ago. It is named Estación Biológica Las Guacamayas (EBG).

Drive from the Lake Petén Itza area towards Paso Caballos. Take a lancha to the lodge. There is a completely safe place to park your vehicle in the Q'eqchi' Mayan village of Paso Caballos. You can see and photograph crocodiles about every hundred meters. The banks of the river have Passiflora vines and lots of Pachira aquatica trees as you approach the lodge.

Monkeys howling overhead, chachalaca birds squawking their standard squawks each morning. I have enjoyed doing flora and fauna research here about eight times.

Photo by: Nicholas Hellmuth. FLAAR Mesoamerica, Oct. 03, 2015. Río San Pedro.
Camera: Nikon D810. Lens: Nikon AF-S NIKKOR 400mm FL ED VR. Settings: 1/640 sec; f/9; ISO 800.

2016, Howler Monkeys



Howler monkeys wander around harvesting and eating leaves from the trees on the property of the Hotel Ecologico Cabanas del Lago, Río Dulce.

Photo by: Nicholas Hellmuth. FLAAR Mesoamerica, Nov. 04, 2016. Exmibal, El Estor, Izabal.
Camera: Nikon D5. Lens: Nikon AF-S NIKKOR 400mm FL ED VR. Settings: 1/125 sec; f/11; ISO 6,400.

Don Chuz lives on the shore of Río Icbolay (the river has various spellings). Most of the nearby areas have been chopped down for commercial crops or maize fields for local people or destroyed by the river being dammed by a hydroelectric plant.

But seemingly all it takes is a small forest area to be preserved and the howlers establish themselves here.



Photo by: Nicholas Hellmuth. FLAAR Mesoamerica,
Mar. 01, 2016. Río Icbolay.
Camera: Nikon D810.
Lens: Nikon AF-S NIKKOR 400mm FL ED VR.
Settings: 1/250 sec; f/5,6; ISO 500.

Río Polochic, February 2018

Although we have not yet seen or heard any howler monkeys along Río Dulce, there are plenty of them further upstream (along Río Polochic, past far [west end of Lake Izabal](#)).



Howler monkey along Río Polochic, upstream from west end of Lake Izabal.

Photo by: Nicholas Hellmuth. FLAAR Mesoamerica, Feb. 11, 2018. Río Polochic.
Camera: Nikon D5. Lens: Nikon AF-S NIKKOR 600mm FL ED VR. Settings: 1/500 sec; f/7.1; ISO 1,000.

Here are synonyms for Howler Monkey

- *Alouatta villosa*
- *Alouatta villosa* subsp. *pigra*
- *Alouatta palliata* subsp. *pigra*

<https://enciclovida.mx/especies/34839-alouatta-villosa>

Local names for Howler Monkeys

Spanish:

Araguato De Guatemala, Mono aullador, Mono aullador negro, Saraguato, Saraguato Negro, Saraguato, yucateco, zaraguat.

English:

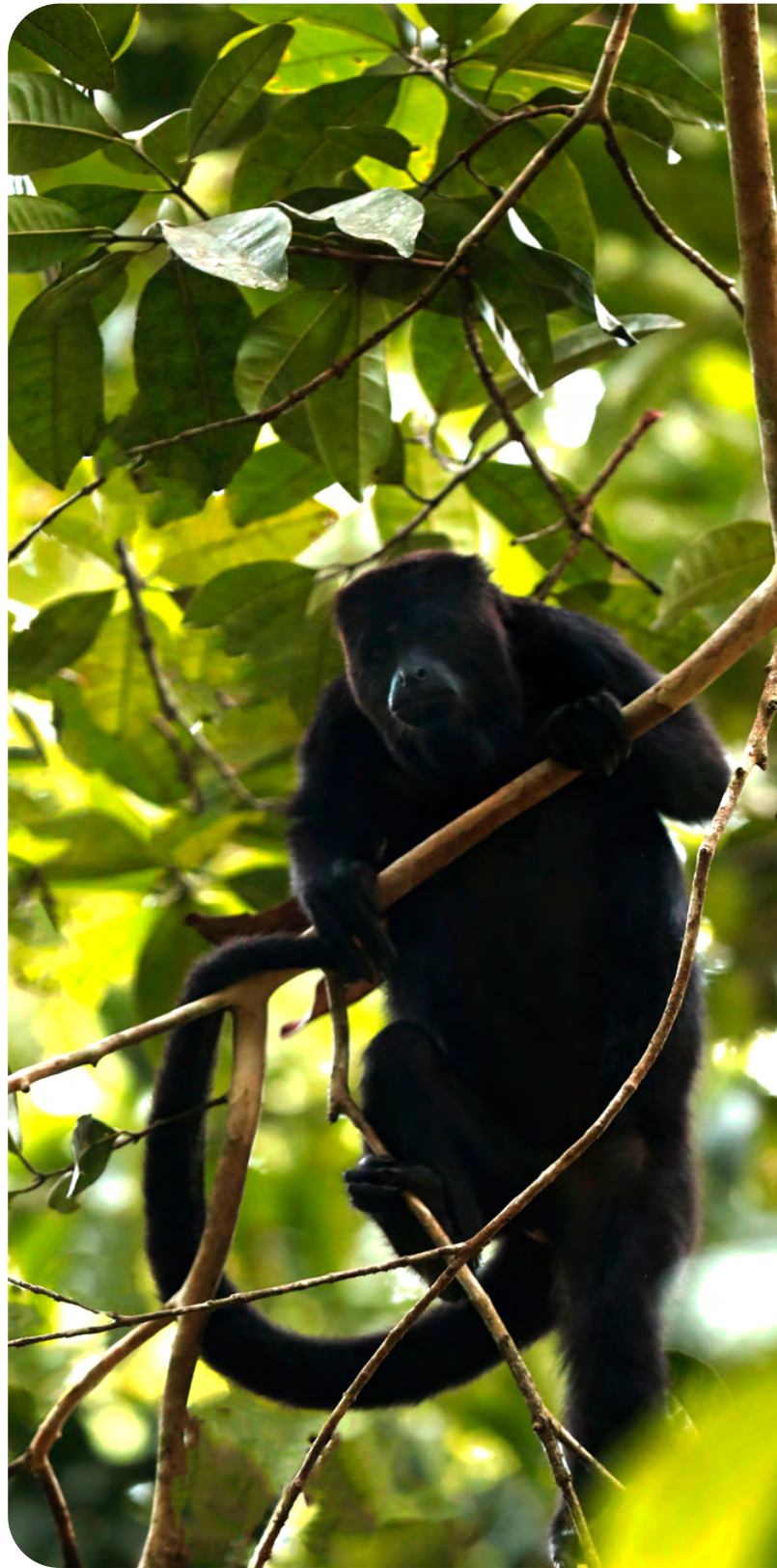
Guatemalan Black Howler Monkey, Guatemalan Howler, Guatemalan Howling Monkey, Guatemalan black howler, Lawrence's Howler Monkey, Mexican Black Howler Monkey, Yucatán Black Howler Monkey.

<https://enciclovida.mx/especies/34839-alouatta-villosa>

Mayan names for Howler Monkey

Ba'ats

<https://www.blogyucatan.com/2013/02/nombres-de-animales-en-maya.html>



Howler monkey

Photo by: Erick Flores. FLAAR Mesoamerica, Aug. 17, 2018. Yaxha area of Parque Nacional Yaxha, Nakum y Naranjo, Petén.
Camera: Canon 1D X Mark II.
Settings: 1/400 sec; f/3.5; ISO 2,500.

Habit of Howler Monkey

The black howler monkey is an arboreal and diurnal primate that is grouped in social and reproductive units called troops, which are made up of females and adult males, juveniles and infants, for what in ambient conditions preserved occupy home areas of between 10 to 60 hectares (Arguello, Serio and Pozo 2010: 02).

In what Ecosystem(s) can you find native Howler Monkeys?

It lives in the rainforests of lowlands, in gallery forests and in forests of primary and secondary vegetation. It is documented from 250 to 1000 meters of elevation (Ortega 2009: 14).

Close relative(s) of Howler Monkeys; how many other species of Howler Monkey are in Petén

Only the black howler monkey is in Petén in the current decades.

Howler monkey

Photo by: Nicholas Hellmuth. FLAAR Mesoamerica, Dec. 10, 2015. Eco Hotel, El Estor. Camera: Nikon D810. Lens: Nikon AF-Micro-NIKKOR 200mm IF-ED Macro. Settings: 1/80 sec; f/8; ISO 1,250.

World Range for Howler Monkeys

Its distribution includes the southeast of Mexico, Belize and east of Guatemala. In Mexico its location includes the south of the Yucatan peninsula, it is possible that also further north in Tabasco and south of Veracruz (Ortega 2009: 14).

Are Howler Monkeys registered for Parque Nacional Tikal?

Howler monkeys are well known at Tikal. Since this is a popular location, lots of zoologists think of this part as a good area to study. So, howler monkeys have been studied by zoologist at Parque Nacional Tikal in past decades.



Howler Monkeys in Izabal of Guatemala

No howler monkeys along the Amatique Bay coast of Izabal. If they are in the hills overlooking the coast we have not yet heard or seen them. Same with Canyon Río Dulce and El Golfete and all the rivers that go north and south. Evidently howler monkeys do not like swamps: perhaps the trees that grow in swamps don't have the fresh juicy leaves that howlers want. Would be worth learning why there are no howlers in the swamp trees that we visited for one week per month for 9 months.

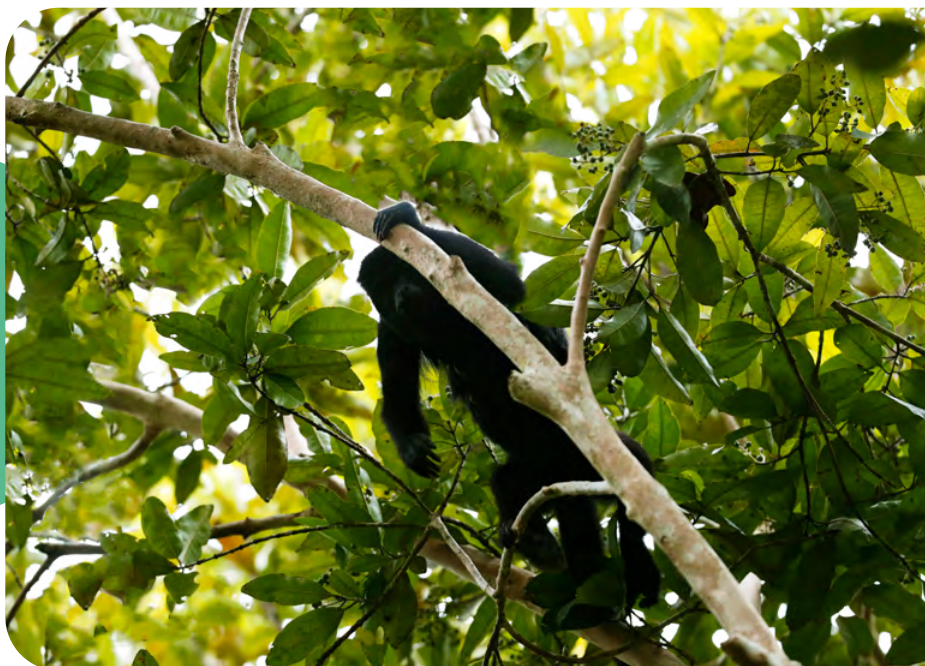
Yes, a few howlers are heard (about one every several months in hill forests). And the second species of howler, Mantled howler monkey, *Alouatta palliata* has been cited in Izabal. But I did not see or hear about the latter from any local person; and did not see enough of the black howlers during field trips in 2020 and 2021, so I don't have any photos.

Hacienda Tijax advertises presence of howler monkeys around their hotel.

If you are doing research and need to have more precise locational information, we suggest the report by Baumgarten Williamson 2007. They have comprehensive list of which zoologists have found which species in which area of eastern Guatemala. Below is one of many of their lists. So, howler monkeys do occur in Izabal and in the Municipio de Livingston but not like at Tikal, Yaxha, Las Guacamayas (Petén).

Howler monkey hanging from a pepper (pimienta gorda) tree.

Photo by: Erick Flores. FLAAR Mesoamerica, Aug. 17, 2018. Yaxha area of Parque Nacional Yaxha, Nakum y Naranjo.
Camera: Canon 1D X Mark II.
Settings: 1/400 sec; f/3,5; ISO 2,500.



Places (eastern Guatemala) where zoologists have registered Howler Monkeys.

SITE NO.	LOCALLY	PROTECTION STATUS	METHOD
1	Chelemá	Private Reserve	Sighting interview
2	Lowland south of Chichipate village	None	Sighting interview
4	Selich Village	None	Interview
6	Secacar village	None	Interview
7	Boquerón	None	Sighting
8	Sakitzul finca	Proposed private reserve	Interview
9	Guitarra village	None	Interview
14	Calajá village	None	Interview
15	Río Sarstún, Belize side	Sarstoon Temash Reserve	Sighting
16	Río Sarstún, Guatemala side	Río Sarstún Multiple Use Area	Sighting
17	Río Sarstún, Belize side	Sarstoon Temash Reserve	Sighting
18	Sarstún village	Río Sarstún Multiple Use Area	Sighting interview
19	Calix - Black Creek finca	None	Interview
20	Chocón Machacas scientific station	Chocón Machacas Biotope	Interview
21	Mario Dary Biotope	Mario Dary Biotope	Interview
22	Las Cabañas scientific station	Cote area SM BR	Sighting interview
24	Trail to Volcán Las Palomas	Cote area SM BR	Sighting
25	Alejandría finca	Multiple use zone SM BR	Sighting interview
26	Los Angeles village	Buffer zone SM BR	Interview
27	San Vicente II village	Buffer zone SM BR	Interview
28	Manguitos II village lowlands	None	Interview
30	Semuy II village lowlands	Bocas Polochic Wildlife Reserve	Interview
32	Selempín biological station	Bocas Polochic Wildlife Reserve	Sighting interview
33	Río Oscuro	Bocas Polochic Wildlife Reserve	Sighting
34	Lake Izabal shore	Bocas Polochic Wildlife Reserve	Sighting
35	Naranjal Yaxte village	None	Sighting interview

SM BR: sierra de las Minas Biosphere Reserve
Baumgarten Williamson 2007: Table 1



Howler monkey, zaraguate is one of its common name in Spanish.

Photo by: Nicholas Hellmuth. FLAAR Mesoamerica, Aug. 17, 2018.
Yaxha area of Parque Nacional Yaxha, Nakum y Naranjo.
Camera: Nikon D5. Lens: Nikon AF-S NIKKOR 400mm FL ED VR.
Settings: 1/125 sec; f/11; ISO 6,400.

Howler Monkeys in Mayan Areas of Mesoamérica

Our focus in 2018-2019 and 2021-2025 is flora and fauna of the Parque Nacional Yaxha, Nakum and Naranjo and now, also the rest of the north half of Petén. But each professor, each student seeking a thesis or dissertation topic on howler monkeys will want to learn about howler monkeys elsewhere in the rest of the adjacent Mayan areas. So I have prepared an introductory bibliography on peer-reviewed journal articles and comparable valid zoological reports on howler monkeys of the areas surrounding Petén: Chiapas, Tabasco, Campeche, Quintana Roo, and Belize. Also, examples of reports on howler monkeys of Tikal. In the 1970's Tikal was the most famous Maya-focused national park in Guatemala.

Howler Monkeys in Petén

COELHO, Anthony M. Jr., COELHO, L., BRAMBLETT Claud A., BRAMBLETT, Sharon S. and Larry B. QUICK

- 1976 Ecology, population characteristics, and sympatric associations in primates: A socioenergetic analysis of howler and spider monkeys in Tikal, Guatemala. Yearb. Phys. Anthropol. 20:96–135.

SCHLICHTE, Hans-Jörg

- 1978 A preliminary report on the habitat utilization of a group of Howler Monkeys (*Alouatta villosa pigra*) in the National Park of Tikal, Guatemala. pp 551–559, In: *The Ecology of arboreal Folivores* (G. Gene Montgomery, editor). Smithsonian Institution Press.

ORTEGA-Castro, Marlin Betzabé

- 2009 Etología del Mono Aullador (*Alouatta pigra*) en Vida Libre y en Cautiverio. Tesis de Grado de Medico Veterinario. Universidad de San Carlos de Guatemala. 66pp.

Howler Monkeys in Belize

We have found (so far) over a dozen reports on howler monkeys of Belize and only two on howler monkeys of Petén and zero on howler monkeys of Yaxha. This is why we (FLAAR in USA and FLAAR Mesoamerica in Guatemala) each year are asked by a different government entity to focus on flora and fauna of Guatemala:

- Parque Nacional Yaxha, Nakum and Naranjo, August 2018-July 2019
- Municipio de Livingston, Feb-Mar 2020, Oct-Nov-Dec 2020, and entire 2021
- Parque Nacional Yaxha, Nakum and Naranjo, all surrounding areas plus gradually the entire Reserva de la Biosfera Maya (the entire northern half of Petén area of Guatemala), May 2021 for the coming five years.

Studies of flora and fauna of Belize are helpful since much of Belize is adjacent to Petén. So, what you learn from zoological field work in Belize can assist knowing what to look for among howler monkeys in Petén.

There are surely lots more reports on howler monkeys of Belize, but the samples here will get you started. Vivian Hurtado, building upon our previous years of bibliographic research by university students who work at FLAAR Mesoamerica (as a kind of informal scholarship to cover their expenses while a student), together with Hellmuth, have together prepared a comprehensive bibliography on howler monkeys of Mesoamerica. But here we show a few that mention Belize in their titles. Obviously there are other reports that include Belize but don't mention the country name in their titles.

BEHIE, Alison M. and Mary S. M. PAVELKA

2005 The Short-Term Effects of a Hurricane on the Diet and Activity of Black Howlers (*Alouatta pigra*) in Monkey River, Belize. *Folia Primatol.*, 76: 1-9.

BOLIN, Inge

1981 Male Parental Behavior in Black Howler Monkeys (*Alouatta palliata pigra*) in Belize and Guatemala. *Primates* 22(3): 349-360.

BRIDGETT, G. R.

- 2006 The effects of fruit availability and abundance on the diet and ranging behavior of the black howler monkeys (*Alouatta pigra*) of Monkey River, Belize. MA thesis, University of Calgary, Calgary, Alberta.

DAHL, J. F.

- 1984 Primate survey in proposed reserve area in Belize. *IUCN/SSC Primate Specialist Group Newsletter* 4, 28.

DAHL, J. F.

- 1987 Conservation of primates in Belize, Central America. *Primate Conservation* 8, 119-121.

GAVAZZI, Anita J., CORNICK, Leslie A., MARKOWITZ, Tim M., GREEN, Deborah and Hal MARKOWITZ

- 2008 Density, distribution and home range of the black howler monkey (*Alouatta pigra*) at Lamanai, Belize. *Journal of Mammalogy*, 89(5):1105–1112, 2008.

HORWICH, Robert H.

- 1983a Breeding behaviors in black howler monkey (*Alouatta pigra*) of Belize. *Primates*, 24: 222-230.

LOUDON, James

- 2000 Diet, activity and ranging behavior of *Alouatta pigra* in Monkey River, Belize. MA thesis, University of Calgary, Calgary, Alberta.

MARSH, L. K.

- 1999 Ecological effect of the black howler monkey (*Alouatta pigra*) on fragmented forests in the Community Baboon Sanctuary, Belize. PhD dissertation, Washington University, St. Louis, Missouri.

OSTRO, Linde E. T., SILVER, Scott C., KOONTZ, Fred W. and Truman P. YOUNG

- 2000 Habitat selection by translocated black howler monkeys in Belize. *Animal Conservation* 3, 175–181.

SILVER, S. C., OSTRO, L. E. T., YEAGER, C. P. and R. H. HORWICH

1998 Feeding ecology of the black howler monkey (*Alouatta pigra*) in northern Belize. *Am J Primatol* 45:263–279.

TROLLET, Franck

2010 Ecology of the Belizean black howler monkey (*Alouatta pigra*): a comparison between two populations living in a riparian forest and on coastal limestone hills. MS Thesis, Université de Liege. 51 pages.

Howler Monkeys in Chiapas

Chiapas has been so destroyed by slash-and-burn milpa agriculture, logging, and commercial farming, that not too many pristine nature reserves remain other than near Palenque, around Yaxchilan, and a few areas in Lacandon locations. But there used to be more howler monkeys and there are nonetheless a thousand percent more reports on howler monkeys of Chiapas than on howler monkeys of monkey paradise Petén, Guatemala.

ALVAREZ del Toro, Miguel

1991 Los mamíferos de Chiapas. Gobierno del Estado de Chiapas, Consejo Estatal de Fomento a la Investigación y Difusión de la Cultura, DIF-Chiapas, Instituto Chiapaneco de Cultura, 133 pages.

COOK, Suzanne

2016 The Forest of the Lacandon Maya: An Ethnobotanical Guide. Springer, 379 pages.

ESTRADA, Alejandro, LUECKE, LeAndra, VAN BELLE, Sarie, FRENCH, Kirk, MUÑOZ, David, GARCÍA Yasminda, CASTELLANOS, Lucía and Adrián MENDOZA

2002a The Black Howler Monkey (*Alouatta pigra*) and Spider Monkey (*Ateles geoffroyi*) in the Mayan Site of Yaxchilán, Chiapas, Mexico: A Preliminary Survey. *Neotropical Primates* 10(2):89-95.

ESTRADA, Alejandro, MENDOZA, Adrián, CASTELLANOS, Lucía, PACHECO, Reyna, VAN BELLE, Sarie, GARCÍA, Yasminda and David MUÑOZ

2002b Population of the Black Howler Monkey (*Alouatta pigra*) in a Fragmented Landscape in Palenque, Chiapas, Mexico. *American Journal of Primatology* 58:45-55.

ESTRADA, Alejandro, LUECKE, LeAndra, VAN BELL, Sarie, BARRUETA, Emilio and Marleny ROSALES Meda

2004 Survey of black howler (*Alouatta pigra*) and spider (*Ateles geoffroyi*) monkeys in the Mayan sites of Calakmul and Yaxchilan, Mexico and Tikal, Guatemala. *Primates*, 45: 33-39.

SHEPSTON, Desseræe Kelly

2007 Evidence to Support the Successful Reintroduction of *Alouatta pigra* to the Naha Region of Chiapas, Mexico. Texas State University-San Marcos. 92 pages. It is nice to see a Master's thesis longer than 48 pages.

Howler Monkeys in Tabasco

Tabasco is where I first experienced the roar of howler monkeys, at age 16, in 1961. But all those forests were bulldozed down, chainsawed down, burned down in subsequent years. Nonetheless there are a few howlers left. Most interesting is howlers in a mangrove forest. Why are there none found or studied in mangrove forests of Guatemala?

ARGUELLO-Sánchez, Laura E., SERIO-Silva, Juan C. and Gilberto POZO-Montuy

2010 Comportamiento de Monos Aulladores Negros (*Alouatta pigra*) en un Hábitat Fragmentado de Balancán, Tabasco. *Herreriana Revista de divulgación científica*, VOLUMEN 6, NO 1. 2010

BRIDGEMAN, LeAndra Luecke

2012 The Feeding Ecology of Yucatán Black Howler Monkeys (*Alouatta pigra*) in Mangrove Forest, Tabasco, Mexico. PhD dissertation, Washington University. 203 pages.

MUÑOZ, David, ESTRADA, Alejandro, NARANJO, Eduardo and Susana OCHOA

2006 Foraging ecology of howler monkeys in a cacao (*Theobroma cacao*) plantation in Comalcalco, Mexico. *Am J Primatol* 68, 127-142.

Howler Monkeys in Campeche

Campeche is not as wet as Petén, Izabal or Alta Verapaz but there is an extensive nature reserve around the ruins of Calakmul (near the Campeche border with Petén).

ESTRADA, Alejandro, LUECKE, LeAndra, VAN BELL, Sarie, BARRUETA, Emilio and Marleny ROSALES Meda

2004 Survey of black howler (*Alouatta pigra*) and spider (*Ateles geoffroyi*) monkeys in the Mayan sites of Calakmul and Yaxchilan, Mexico and Tikal, Guatemala. *Primates*, 45: 33-39.

Howler Monkeys in Quintana Roo

Quintana Roo is north of Belize and there are several nature reserves here.

GONZALEZ-Kirchner, Juan Pedro

1998 Group Size and Population Density of the Black Howler Monkey (*Alouatta pigra*) in Muchukux Forest, Quintana Roo, Mexico. *Folia Primatol.*, 69: 260-265.

www.karger.com/Article/Pdf/21635

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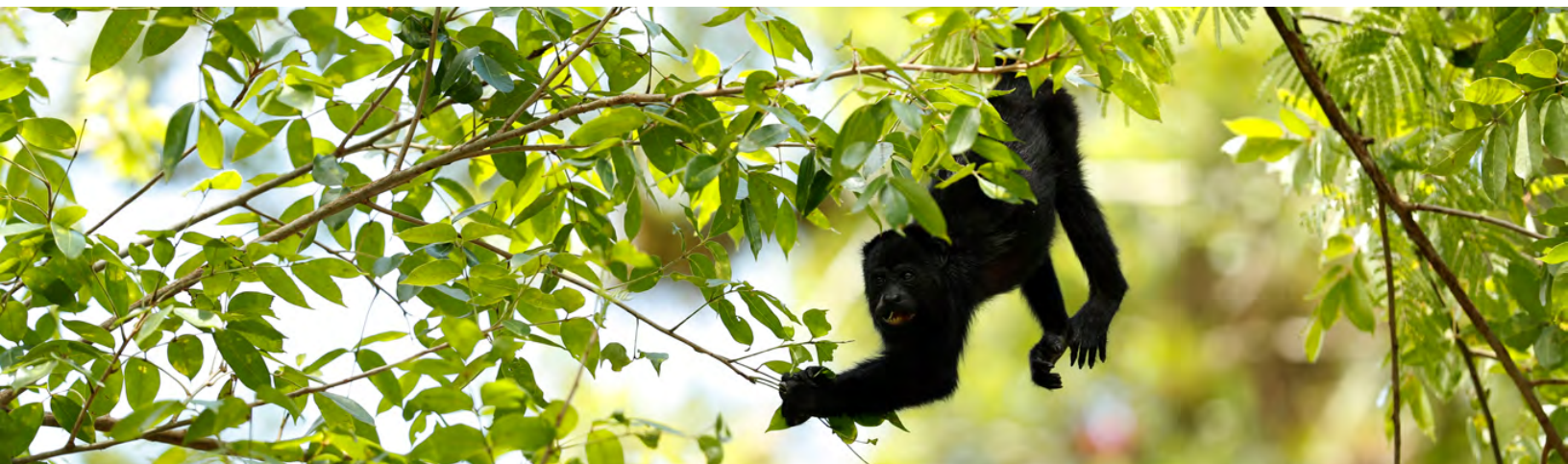
Do Howler Monkeys feed in trees near people's houses?

Howler monkeys feed in any tree that has the fresh leaves or other tree parts that they find delicious. In the [Chisec area of Alta Verapaz](#) the howler monkeys trumpet their noise from the karst hilltops (since these are the areas too steep for milpas, so the trees on top of karst rock hilltops are not chopped down). But to our knowledge no one or at most very few zoologists have studied howler monkeys anywhere around Chisec. Schlichte tried to study them near Cobán, Alta Verapaz, half a century ago. But the karst mountains were not realistic place to hike around.

In the lowland [Río Ixbolay](#) area (where the river is crossed by the highway) I saw and heard howler monkeys within a few meters of houses that were along the edge of the highway. So howler monkeys will come to eat their favorite leaves even if near people's houses (as long as no one bothers or attacks them).

In a hotel on the [shore of Lake Izabal](#), on the outskirts of [El Estor](#), howler monkeys ate leaves from trees within a few meters of the different bungalows and the restaurant area of the hotel.

Comparable at hotel [Ecolodge El Sombrero](#), a few meters outside the entrance to the Yaxha portion of [Parque Nacional Yaxha, Nakum and Naranjo](#). Howler monkeys that wander through the trees are overhead day and night (depending on which trees are producing the leaves they want in that month). So howler monkeys ignore people because they know that no one in the hotel will bother them.



Howler monkey, "Ba'ats" is its name on Mayan languages.

Photo by: Erick Flores. FLAAR Mesoamerica, Aug. 15, 2018.

Yaxha area of Parque Nacional Yaxha, Nakum y Naranjo.

Camera: Canon 1D X Mark II. Settings: 1/400 sec; f/3,5; ISO 2,500.



Howler monkey, *Alouatta pigra* it's its zoological name.

Photo by: Nicholas Hellmuth. FLAAR Mesoamerica, Aug. 17, 2018. Yaxha area of Parque Nacional Yaxha, Nakum y Naranjo. Camera: Nikon D5. Lens: Nikon AF-S NIKKOR 400mm FL ED VR. Settings: 1/125 sec; f/11; ISO 6,400.

Are any parts of Howler Monkeys edible?

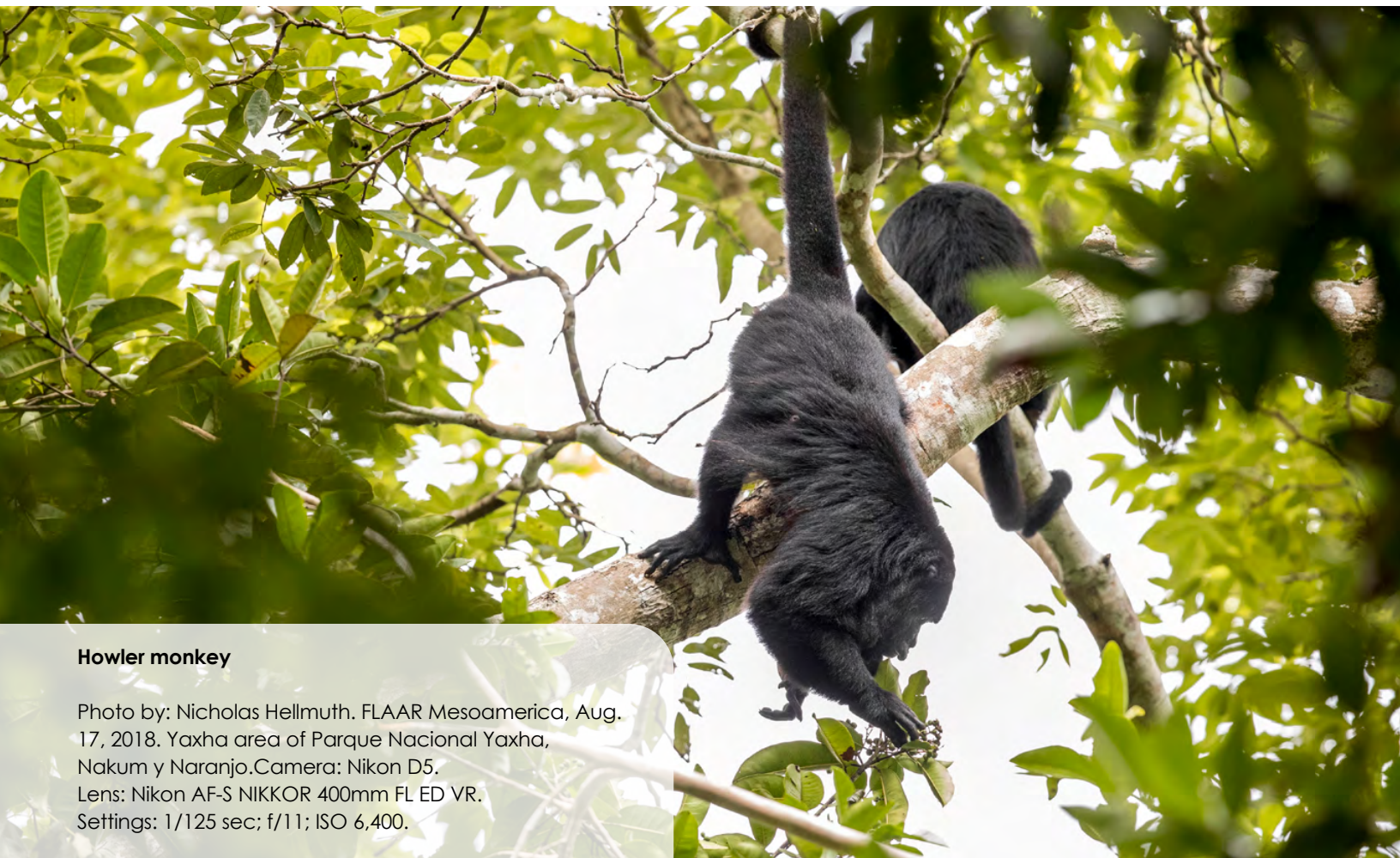
Howler monkeys have more flesh than spider monkeys so howlers are more likely to be shot, killed and eaten by chicleros (a half century ago).

Is there potential medicinal usage of Howler Monkeys by local people?

Yes (Baumgarten Williamson 2007: 15).

Are any parts of Howler Monkeys eaten by mammals?

I would assume that jaguars and other felines can sneak up trees to kill and eat howler monkeys. But often newborn baby monkeys are killed by the alpha male. Not eaten, just killed.



Howler monkey

Photo by: Nicholas Hellmuth. FLAAR Mesoamerica, Aug. 17, 2018. Yaxha area of Parque Nacional Yaxha, Nakum y Naranjo. Camera: Nikon D5. Lens: Nikon AF-S NIKKOR 400mm FL ED VR. Settings: 1/125 sec; f/11; ISO 6,400.

Concluding Discussion and Summary on Howler Monkeys

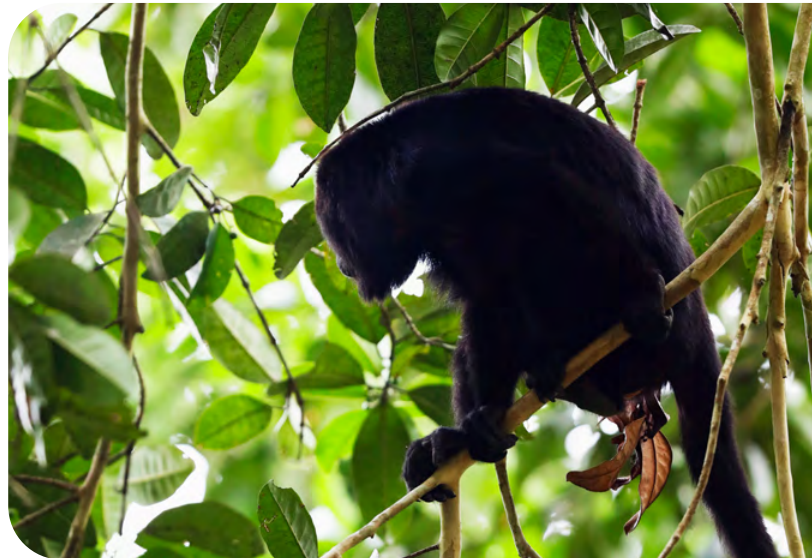
If your entire focus is just on monkeys, then you will find them in many areas of Guatemala. But for studying howlers, by far the easiest and most comfortable locations are in Petén:

- Parque Nacional Yaxha, Nakum y Naranjo (PNYNN).
- Parque Nacional Tikal.
- Sayaxche area, Arroyo Petexbatún, Hotel Ecologico Posada Caribe.
- Western Petén, Estación Biológica Las Guacamayas (EBG).

Now that CONAP has initiated a 5-year project of cooperation and coordination with FLAAR to study flora, fauna, and ecosystems of the entire Reserva de la Biosfera Maya, we will find, photograph, and publish lots more on Howler Monkeys during the present and coming years. We will be looking for howlers in [Bio Itzá](#), [Cerro Cahuí](#), [El Zotz](#) (west of Tikal), and in the lumber concession area of [Árbol Verde](#) (surrounding PNYNN).

Howler monkey

Photo by: Nicholas Hellmuth. FLAAR Mesoamerica,
Aug. 17, 2018. Yaxha area of
Parque Nacional Yaxha, Nakum y Naranjo.
Camera: Nikon D5. Lens: Nikon AF-S NIKKOR 400mm FL ED
VR. Settings: 1/125 sec; f/11; ISO 6,400.



Howler monkey

Photo by: Nicholas Hellmuth. FLAAR Mesoamerica,
Aug. 17, 2018. Yaxha area of
Parque Nacional Yaxha, Nakum y Naranjo.
Camera: Nikon D5.
Lens: Nikon AF-S NIKKOR 400mm FL ED VR.
Settings: 1/125 sec; f/11; ISO 6,400.

Howler monkey

Photo by: Nicholas Hellmuth. FLAAR Mesoamerica, Aug. 17, 2018. Yaxha area of Parque Nacional Yaxha, Nakum y Naranjo. Camera: Nikon D5. Lens: Nikon AF-S NIKKOR 400mm FL ED VR. Settings: 1/125 sec; f/11; ISO 6,400.

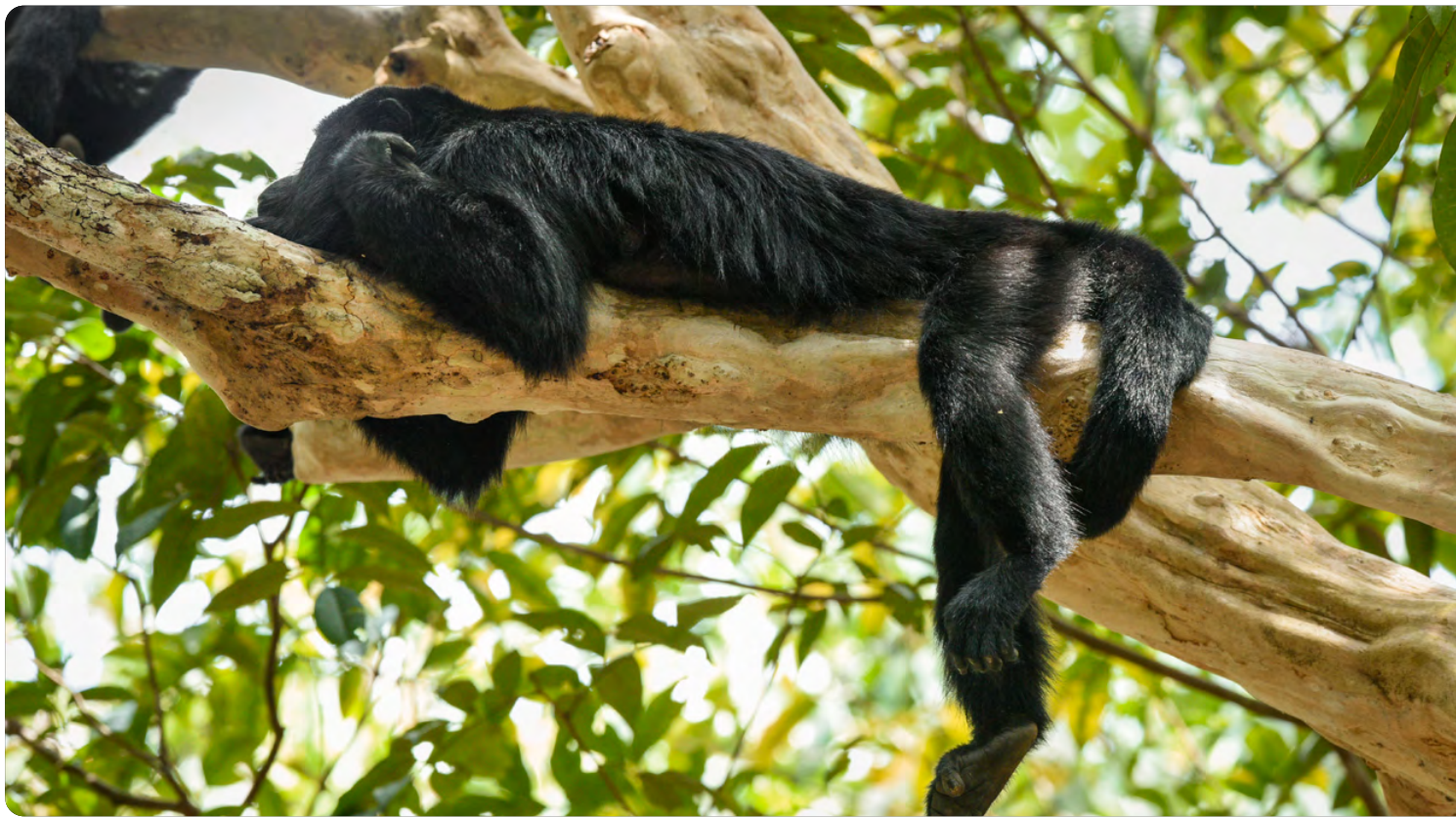




Howler monkey

Photo by: Nicholas Hellmuth. FLAAR Mesoamerica, Aug. 17, 2018. Yaxha area of Parque Nacional Yaxha, Nakum y Naranjo.

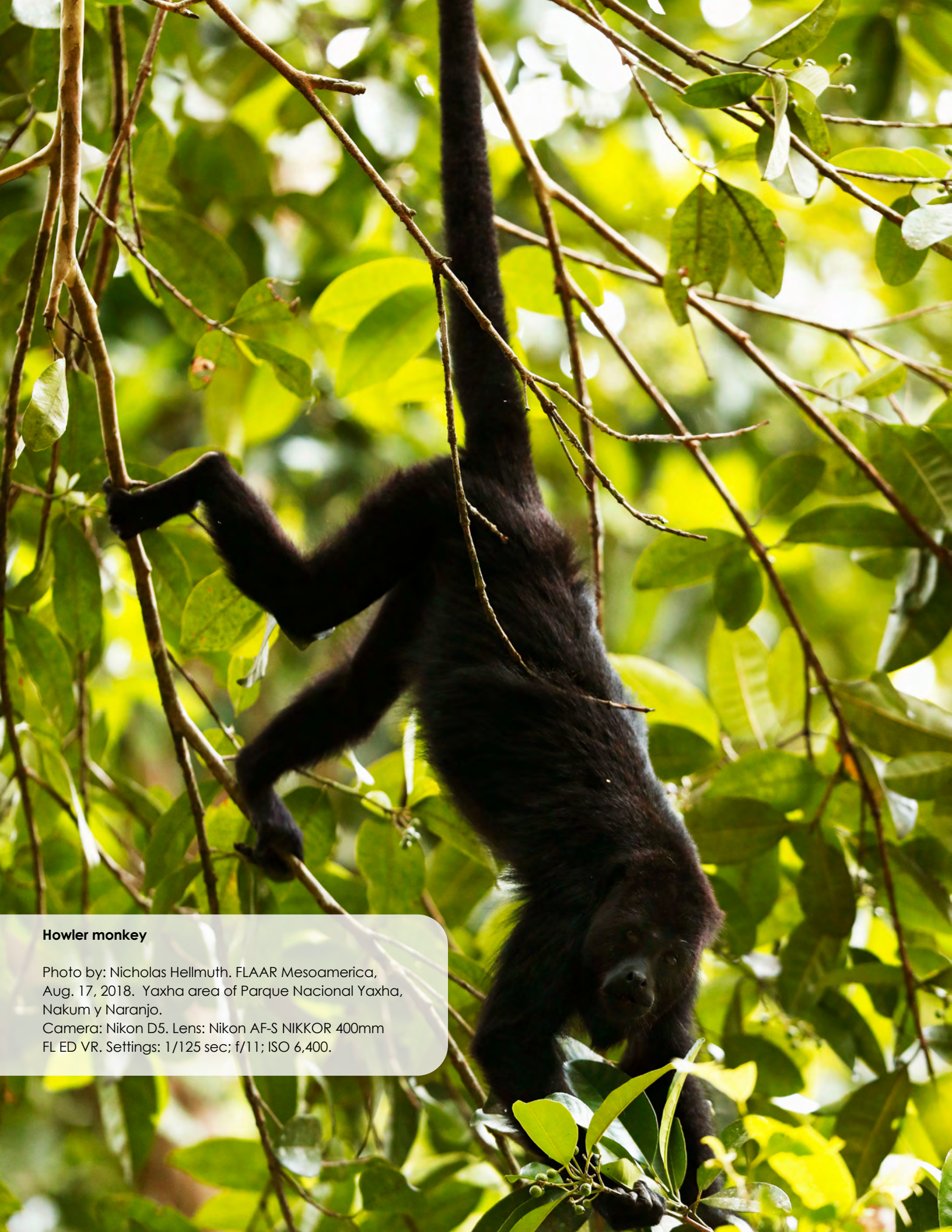
Camera: Nikon D5. Lens: Nikon AF-S NIKKOR 400mm FL ED VR. Settings: 1/125 sec; f/11; ISO 6,400.



Howler monkey

Photo by: Nicholas Hellmuth. FLAAR Mesoamerica, Aug. 17, 2018. Yaxha area of Parque Nacional Yaxha, Nakum y Naranjo.

Camera: Nikon D5. Lens: Nikon AF-S NIKKOR 400mm FL ED VR. Settings: 1/125 sec; f/11; ISO 6,400.



Howler monkey

Photo by: Nicholas Hellmuth, FLAAR Mesoamerica, Aug. 17, 2018. Yaxha area of Parque Nacional Yaxha, Nakum y Naranjo.

Camera: Nikon D5. Lens: Nikon AF-S NIKKOR 400mm FL ED VR. Settings: 1/125 sec; f/11; ISO 6,400.

Appendix A

How does a 16-year old high school student experience a Howler Monkey in 1961 in the rain forests of Tabasco?

The first howler monkey I heard was in the rain forest a kilometer outside Teapa, Tabasco, in 1961. I was studying Spanish in a school in Saltillo, north of Monterrey México, and I saw a poster showing a temple at Palenque with the rain forest behind it. I said to myself "I have never seen a rain forest, I wanna be there and see it."

So I wrote my parents and asked them if it was okay for me to leave the Spanish school early and go down to visit Palenque and then rush back far north to Saltillo before summer school ended (to drive back to USA with classmate Lynn Bealke). Since I knew my parents would say NO, I put the letter in a mailbox and left for southern México that same day.

First I went to Villahermosa, Tabasco, to visit the Olmec sculpture museum. I had a place to stay nearby since one of the teachers at the school in Saltillo had previously lived in Tabasco, so he arranged a free place for me to stay. In fact, it was this teacher who first got me keen to visit Tabasco (before I saw the poster about Palenque; Palenque is about a day from Tabasco in those years). The teacher told me that "when you ride a horse through the rain forest, your head brushes against the leafy branches of the trees that are on each side of the trail.

The teacher said, "if there is a pit viper on the leafy branch, you will never see the snake because of the leaves. But the snake will strike at the neck of the horseback rider and the person is "dead before he hits the ground". I thought, WOW, what a jungle. I gotta experience that (not experience being killed or seeing that, but seeing a rain forest that had such creatures). And then a week later I saw the photo of the 8th century Palenque Maya temple pyramid and learned it was not far from the Tabasco jungle-of-snakes.

So, I took a bus to México City, walked across the entire city at night because I had no money for a taxi. Got to the bus station for buses going south; took a bus towards Tabasco. Stayed in Villahermosa to learn about Olmec sculptures. Saw enough vultures to be impressed. Then missed my flight to Palenque because I did not know how to get to the airport by 2nd class bus (again, no money for taxi). The "airline" was a Cessna with seats for 3 passengers (as I found out in subsequent years when I would charter one to fly me around over the rain forests and down into the Canyon of Río Usumacinta).

So I had to take a train instead: Villahermosa to Teapa, Teapa to Palenque (no roads to Palenque from the north in 1961). Had a 4-hour wait-over between trains in Teapa, so I decided to hike down the train track since that was the only way to get into the rain forest (which in those years was on both sides of the track). After hiking a kilometer or so I met a local Mayan person on the same track and asked if he could take me into the rain forest. He kindly did, took me up and down trails and into a cave. Heard howler monkeys roar as we hiked. Then got back to the train track; thanked the super helpful local farmer, and I hiked back to Teapa, took the train to Palenque; road in back of a pickup truck from the train station to the village, stayed the night in a 50-cents a night hotel (toilet was a bowl under your bed). Visited Palenque; went back to Saltillo. Got the letter from my parents telling me not to leave summer school, drove back to St Louis with fellow student, and wrote my high school thesis on the Tabasco rain forest and Palenque Maya ruins.

It won first prize and that got me into Harvard not because I was not high in my class, but because I did unexpected things for a 16 year old I got into an Ivy League school (since most students played golf all summer or played tennis or went to the beach).

The entire rest of my life I have continued my interest in learning about rain forests. I am now age 76 years old and still hiking up steep hills and down ravines to find photogenic flowering Neotropical flowers or wild plants native to Guatemala that are edible (but no one still eats them today since everyone prefers sugar-puffed junk food).

Howler monkey

Photo by: Nicholas Hellmuth. FLAAR Mesoamerica, Aug. 17, 2018. Yaxha Park, Parque Nacional Yaxha, Nakum y Naranjo.
Camera: Nikon D5. Lens: Nikon AF-S NIKKOR 400mm FL ED VR. Settings: 1/125 sec; f/11; ISO 6,400.





Howler monkey

Photo by: Erick Flores. FLAAR Mesoamerica,
Aug. 15, 2018. Yaxha Park, Parque Nacional
Yaxha, Nakum y Naranjo.

Camera: Canon 1D X Mark II.

Settings: 1/400 sec; f/3,5; ISO 2,500.

References Cited

and Suggested Reading on Howler Monkeys

Most helpful monographs on this mammal:

There is no monograph on Howler Monkeys that we have yet found. These monkeys certainly deserve more attention in Guatemala and adjacent countries.

Most helpful article on this monkey:

BAUMGARTEN, Amrei and G. Bruce WILLIAMSON

2007 Distribution of the Black Howler Monkey (*Alouatta pigra*) and the Mantled Howler Monkey (*A. palliata*) in Their Contact Zone in Eastern Guatemala. Neotropical Primates, 14(1):11-18 (2007). Conservation International.

Essential reading if you need to learn details about where to find howler monkeys in Izabal and portions of Alta Verapaz, Guatemala.

Best angle of view of Howler Monkey:

www.youtube.com/watch?v=T7MIKCf5tQA.

It is rare that you yourself are high enough that you can look down on a howler. Even more rare that they are no leaves to hide the howler; and plenty of sunlight so the solid black body does not disappear. This video is by Knut Eisermann, Cayaya Birding.

BAUMGARTEN, Amrei and G. Bruce WILLIAMSON

2007 Distribution of the Black Howler Monkey (*Alouatta pigra*) and the Mantled Howler Monkey (*A. palliata*) in Their Contact Zone in Eastern Guatemala. Neotropical Primates, 14(1):11-18 (2007). Conservation International.

Essential reading if you need to learn details about where to find howler monkeys in Izabal and portions of Alta Verapaz, Guatemala.

Helpful download: <file:///Users/nicholashellmuth/Downloads/044.014.0103.pdf>

COOK, Suzanne

2016 The forest of the Lacandon Maya: an ethnobotanical guide. Springer. 334 pages.

Sold online: www.springer.com/la/book/9781461491101

Web pages specifically on Howler Monkeys of Guatemala and nearby

<https://www.monkeyworlds.com/es/mono-aullador/>

<https://nationalzoo.si.edu/animals/black-howler-monkey>

https://cites.org/esp/gallery/species/mammal/black_howler_monkey.html

<https://www.rainforest-alliance.org/species/howler-monkey>

Videos on Howler Monkeys

www.youtube.com/watch?v=CjxbiSDff40

Nice sound of feeding howlers, but no indication of where in Guatemala.

We try to find videos on Howler Monkeys of Guatemala or at least in adjacent countries in Mesoamérica (Central México down to northwestern Costa Rica; Mesoamérica is the área of the Americas either occupied by (México, Guatemala, Belize, western Honduras, western El Salvador) or influenced through long distance trade (down to northwestern Costa Rica) by the Olmecs, Teotihuacanos, Mayans, Toltecs, and then Aztecs.

www.youtube.com/watch?v=T7MIKCt5tQA

It is rare that you yourself are high enough that you can look down on a howler. Even more rare that they are no leaves to hide the howler; and plenty of sunlight so the solid black body does not disappear. This video is by Knut Eisermann, Cayaya Birding.

Base Camp Assistance in Parque Nacional Tikal

While doing field work in the Tikal national park about a decade ago we appreciate the house provided to us by the park administration. We also thank the Solis family, owners of the Jaguar Inn, for providing a place to stay when park facilities had other occupants. We also thank the Solis family for food in their Jaguar Inn restaurant.

Base Camp Assistance in PNYNN

We thank Biologist Lorena Lobos and both co-administrators of PNYNN (Arq. Jose Leonel Ziesse (IDAEH) and Ing. Jorge Mario Vazquez (CONAP) for providing a place to stay for the photographers, biologists, and assistants of the FLAAR Mesoamerica team of flora and fauna.

Ecolodge El Sombrero

I thank Gabriella Moretti, owner of Ecolodge El Sombrero, for providing hotel room and meals while we have been doing field work at Parque Nacional Yaxha, Nakum y Naranjo. We also appreciate the hospitality of her sons Sebastian de la Hoz and Juan Carlo de la Hoz. Every workday is exhausting because we are carrying and then using very heavy cameras, super-telephoto lenses, sturdy tripods, large gimbals or ball tripod heads. Thus it is crucial for my health to be able to rest and totally recuperate every night in order to be ready for the following day of botanical and zoological adventures in Parque Nacional Yaxha, Nakum y Naranjo.

Equally crucial is having a place to charge the batteries of the computers, or all the cameras, and of the cell phones. Solar power is great, but it lasts only an hour, or less, if you plug in multiple computers and cameras and flash batteries to charge. So a place with enough electricity to charge the entire mass of essential field work equipment is essential and thus very much appreciated.

Contact Info: +502 5460 2934, VentasElSombrero@gmail.com or WhatsApp.

www.elsombreroecolodge.com/en-us

This report can be cited in your preferred style.
Here is the basic information:

HELLMUTH, N. (2021)
Howler Monkeys. Present in Alta Verapaz, Izabal and
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All national parks, nature reserves, and comparable are welcome to have and use our reports at no cost.

To publish photographs

Hellmuth's photographs have been published by National Geographic, by Hasselblad Magazine, and used as front covers on books on Mayan topics around the world. His photos of cacao (cocoa) are in books on chocolate of the Maya and Aztec both by Dr Michael Coe (all three of editions) and another book on chocolate by Japanese specialist in Mayan languages and culture, Dr Yasugi. We naturally appreciate a contribution to help cover the costs our office expenses for all the cataloging, processing, and organization of the photos and the field trip data.

For your social media

You can post any of the FLAAR Mesoamerica PDFs about the Municipio of Livingston on your Social Media sites; you can send any of these PDFs to your friends and colleagues and family: no cost, no permission needed.

We hope to attract the attention of professors, botanical garden clubs, orchid and bromeliad societies, students, tourists, experts, explorers, photographers and nature lovers who want to get closer, to marvel at the species of flowering plants, mushrooms and lichen that FLAAR Mesoamerica finds during each field trip each month.

PHOTO FROM BACK COVER

Photo by: Nicholas Hellmuth. FLAAR Mesoamerica, Nov. 04, 2016. Exmibal.
Camera: Nikon D5. Lens: Nikon AF-S NIKKOR 400mm FL ED VR. Settings: 1/125 sec; f/11; ISO 6,400

ACKNOWLEDGEMENTS TO FLAAR MESOAMÉRICA

The reports are a joint production between the field trip team and the in-house office team. So here we wish to cite the full team:

Flor de María Setina is the office manager, overseeing all the diverse projects around the world (including FLAAR-REPORTS research on advanced wide-format digital inkjet printers, a worldwide project for over 20 years). We also utilize the inkjet prints to produce educational banners to donate to schools.

Vivian Díaz environmental engineer, is project manager for flora, fauna projects (field work and resulting reports at a level helpful for botanists, zoologists and ecologists, and for university students). Also coordinates activities at MayanToons, division where educational material for kids is prepared.

Victor Mendoza identifies plants, mushrooms, lichen, insects, and arachnids. When his university schedule allows, he also likes to participate in field trips on flora and fauna research.

Vivian Hurtado prepares the bibliography for each subject and downloads pertinent research material for our e-library on flora and fauna. All of us use both these downloads plus our in-house library on flora and fauna of Mesoamerica (Mexico through Guatemala into Costa Rica).

Sergio Jerez prepares the bibliography of each topic and download the pertinent research material for our electronic library on flora and fauna. We all use these two downloads plus our internal library on Mesoamerican flora and fauna (Mexico through Guatemala to Costa Rica).

Andrea de la Paz is a designer who helps prepare the master-plan for aspects of our publications. She is our editorial art director

Senaida Ba is photography assistant for many years. She knows the Canon, Nikon and is learning the two new Sony mirrorless cameras. She prepares, packs, sets-up, and helps the photographers before, during, and after each day's field trip.

Jaqueline González is a designer who puts together the text and photographs to create the actual report (we have several designers at work since we have multiple reports to produce).

Roxana Leal is Social Media Manager for flora and fauna research and publications, and MayanToons educational book projects

María Alejandra Gutiérrez is an experienced photographer, especially with the Canon EOS 1D X Mark II camera and 5x macro lens for photographing tiny insects, tiny flowers, and tiny mushrooms. Work during and after a field trip also includes sorting, naming, and processing. And then preparing reports in PDF format.

David Arrivillaga is an experienced photographer and is able to handle both Nikon and the newest Sony digital cameras. Work during and after a field trip also includes sorting, naming, and processing.

Juan Carlos Hernández takes the material that we write and places it into the pertinent modern Internet software to produce our web pages (total network is read by over half a million people around the world).

Paulo Núñez is a webmaster, overlooking the multitude of web sites. Internet SEO changes every year, so we work together to evolve the format of our web sites.

Valeria Áviles is an illustrator for MayanToons, the division in charge of educational materials for schools, especially the Q'eqchi' Mayan schools in Alta Verapaz, Q'eqchi' and Petén Itzá Maya in Petén, and the Q'eqchi' Mayan and Garifuna schools in the municipality of Livingston, Izabal.

Josefina Sequén is illustrator for MayanToons and also helps prepare illustrations for Social Media posts and for animated videos.

Rosa Sequén is also an illustrator for MayanToons and also helps prepare illustrations for Social Media posts and for animated videos.

Laura Morales is preparing animated videos in MayanToons style since animated videos are the best way to help school children how to protect the fragile ecosystems and endangered species

Heidy Alejandra Galindo Setina joined our design team in August 2020. She likes photography, drawing, painting, and design.

Maria José Rabanales she is part of the team for editing photographic reports and educational material of Flora and Fauna since September 2020. She works together with others of the team to prepare the finished pdf editions of the material of the Yaxha, Nakum and Naranjo Project.

Alejandra Valenzuela biology student is now part of Flora y Fauna's photographic report and educational material editing team since September 2020.

Alexander Gudiel designer who join the editorial design team on December 2020. He will combine the text, pictures and maps into the FLAAR Mesoamerica editorial criteria.

Cristina Ríos designer student who join the editorial design team on December 2020. He will combine the text, pictures and maps into the FLAAR Mesoamerica editorial criteria.

Carlos Marroquín is a USAC graphic design student who volunteered to do his professional practice with the Editorial Design Team. We are very grateful with people like him who join our team and bring his knowledge and work.

Other publications of the fauna of Guatemala



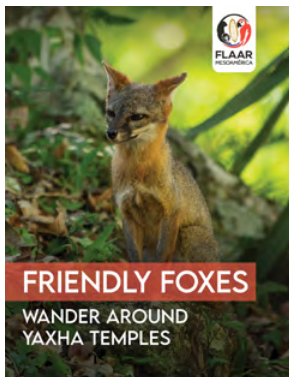
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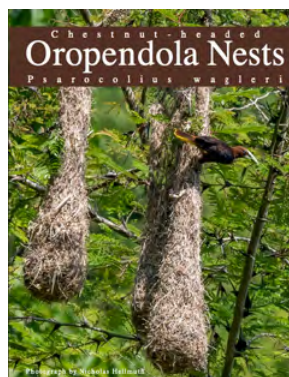
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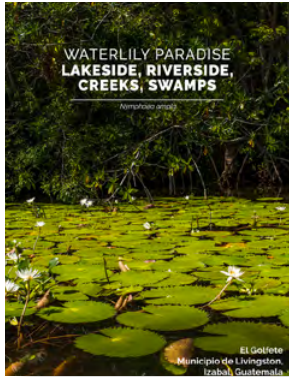
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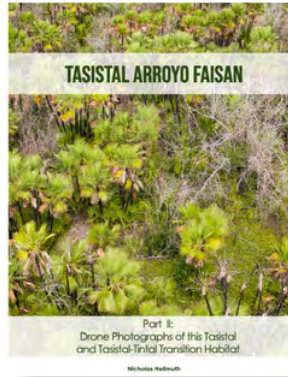
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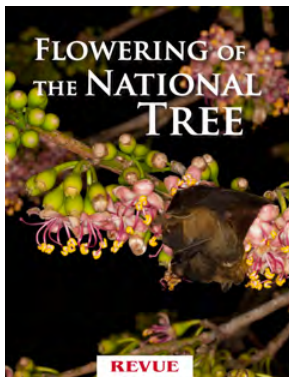
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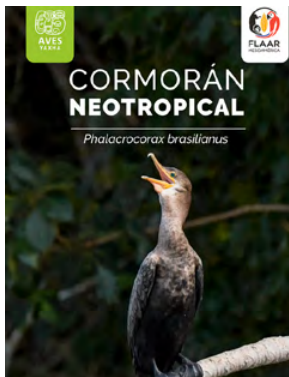
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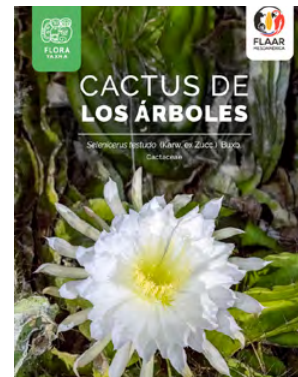
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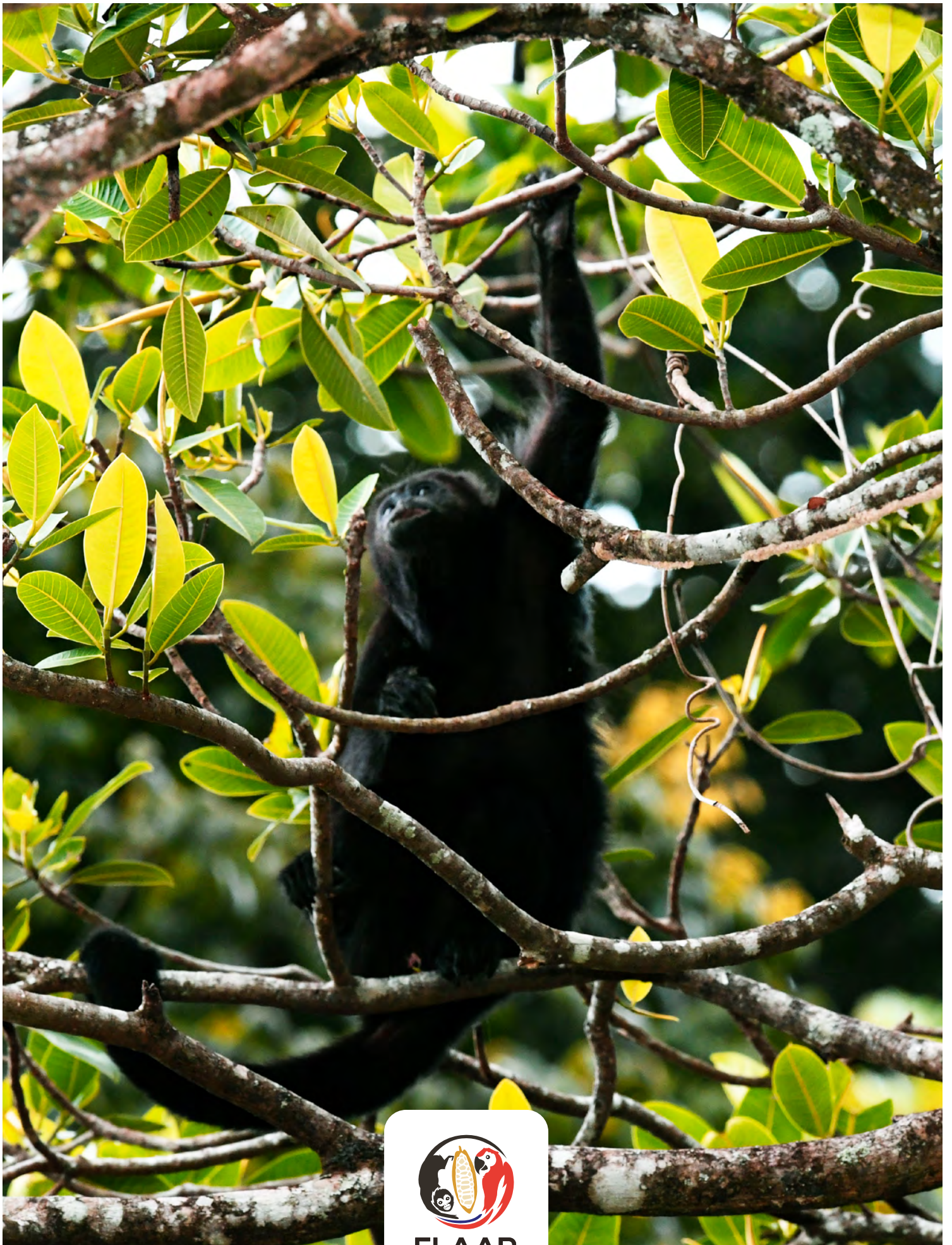


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