



Coastal Jaguar Conservation

Annual Achievement Report Season 2019



Our main goal

Increase the current knowledge of jaguars (*Panthera onca*), other wild cats and their prey species in Tortuguero National Park, and surrounding areas, in order to promote conservation and management actions that will enhance their long-term survival



Our main achievements

Successfully monitored the predator-prey interaction
between the jaguar and the local population
of marine turtles that nest in
Tortuguero National Park, Costa Rica



#1



This predator-prey interaction has been monitored **since 2005!**



Our results suggest that jaguar predation **does not represent a threat** to the population of green turtles that nest in the Tortuguero National Park, and is not the main reason for the population decline of leatherback turtles



It is important to **continue with our monitoring efforts** to understand how this interaction will evolve in the future, information necessary to effectively manage both the local jaguar and marine turtle populations

Field work



Our main achievements

Successfully monitored the local jaguar population,
other wild cats and their prey species in
Tortuguero National Park, Costa Rica



#2

Thanks to our
camera trap efforts
we have **documented**
over 30 species,
including mammals, birds,
amphibians and reptiles



Red Brocket Deer (*Mazama americana*)

Photo by Ian Thomson



Jaguar (*Panthera onca*)



Photo by Ian Thomson

This year we have documented **four species of wild cats!**



Puma (*Puma concolor*)



Photo by Ian Thomson

This year we have documented **four species of wild cats!**

Ocelot (*Leopardus pardalis*)



Photo by CJC

This year we have documented **four species of wild cats!**

Margay (*Leopardus wiedii*)



Photo by CJC

This year we have documented **four species of wild cats!**

Our main achievements

Successfully conducted biological monitoring surveys of the proposed site (known as ‘Trocha’) for the construction of a road through Tortuguero National Park



#3



Our main achievements

Updated our 'Protocols of Conduct:
What to do in case of a jaguar encounter in
Tortuguero National Park, Costa Rica?



#4

PROTOCOL OF CONDUCT

What to do in case of a jaguar encounter in Tortuguero National Park, Costa Rica?



Our main achievements

Established a new partnership with Ecology Project International & Panthera-Costa Rica to monitor the wildlife in Pacuare Nature Reserve



#5



ECOLOGY PROJECT INTERNATIONAL COSTA RICA



Our main achievements

Supported biologist Luis Fonseca and his monitoring efforts to better understand the predator-prey interaction between the jaguar and the local population of marine turtles that nest in Playa Naranjo and Playa Nancite, Costa Rica



#6



Our main achievements

A new scientific publication!



#7

First confirmed record of margay in Tortuguero National Park, Costa Rica

Information regarding the margay *Leopardus wiedii* is very scarce in Costa Rica, with most studies targeting the larger species of wild cats. Through a long-term monitoring camera trap programme, we confirmed the presence of the species in Tortuguero National Park. Thus, constituting the fourth species of felids documented in the park in addition to the jaguar *Panthera onca*, the puma *Puma concolor* and the ocelot *Leopardus pardalis*.

The margay is a neotropical spotted cat with a geographic distribution ranging from Mexico to Northern Argentina and Uruguay

(Fernández et al. 2012). Although it is strongly associated with forest habitats, it can also be found in disturbed areas (de Oliveira

1998, Wilson & Mittermeier 2009, Fernández et al. 2012), primarily at elevations below 1,200 m (Eisenberg 1989), although rare sightings have been documented between 1,200 m and 3,000 m (Aranda 2005, Wainwright 2007). According to the IUCN Red List of Threatened Species, the margay has been categorised as a Near Threatened species. Illegal animal trade as well as habitat loss and fragmentation are considered to be the main threats to the species across its geographic range (Wainwright 2007, de Oliveira et al. 2015).

In Tortuguero National Park the presence of three out of the six species of wild cats inhabiting Costa Rica has previously been recorded, including the jaguar, the puma and the ocelot (Arroyo-Arce & Salom-Pérez 2014, Arroyo-Arce et al. 2014, Coastal Jaguar Conservation, unpub.) with currently no confirmed records of the remaining species (margay, jaguarundi *Herpailurus yagouaroundi* and northern tiger cat *Leopardus tigrinus*). Therefore, herein we document the first evidence of the presence of a margay in Tortuguero National Park, Costa Rica. Tortuguero National Park is located on the North Caribbean coast of Costa Rica (10°32'28" N / 83°30'08" W; Fig. 1). Tropical Wet Forest is the predominant Life Zone (Holdridge 1996), with elevation ranges from sea level up to 311 m. Average temperature ranges from 25°C to 30°C, with a mean annual precipitation of 6,000 mm (Bermúdez & Hernández 2004).

In 2018, while conducting surveys using remote camera traps, we documented a video of a small feline later identified as a margay (Fig. 2). Species identification was based on distinctive features that differentiate the species from other felines such as body

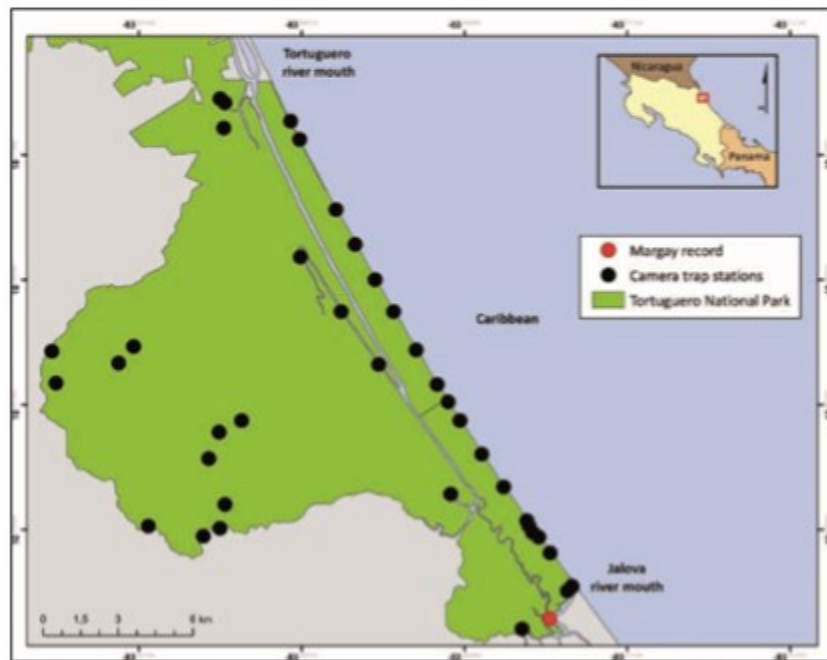


Fig. 1. Study area of Tortuguero National Park, Costa Rica. The location of all camera trap

Our main achievements

Successfully disseminated the information of our project with key stakeholders



#8



2019年虎豹跨境保护国际研讨会

THE INTERNATIONAL FORUM ON TIGER AND LEOPARD TRANSBOUNDARY CONSERVATION
МЕЖДУНАРОДНЫЙ ФОРУМ ПО ТРАНСГРАНИЧНОМУ СОХРАНЕНИЮ ТИГРА И ЛЕОПАРДА

主办方 Organizers

国家林业和草原局

National Forestry and Grassland Administration

承办方 Hosted by



协办方 Supported by



Special thanks to:



Special thanks to:



THEGVITRUST

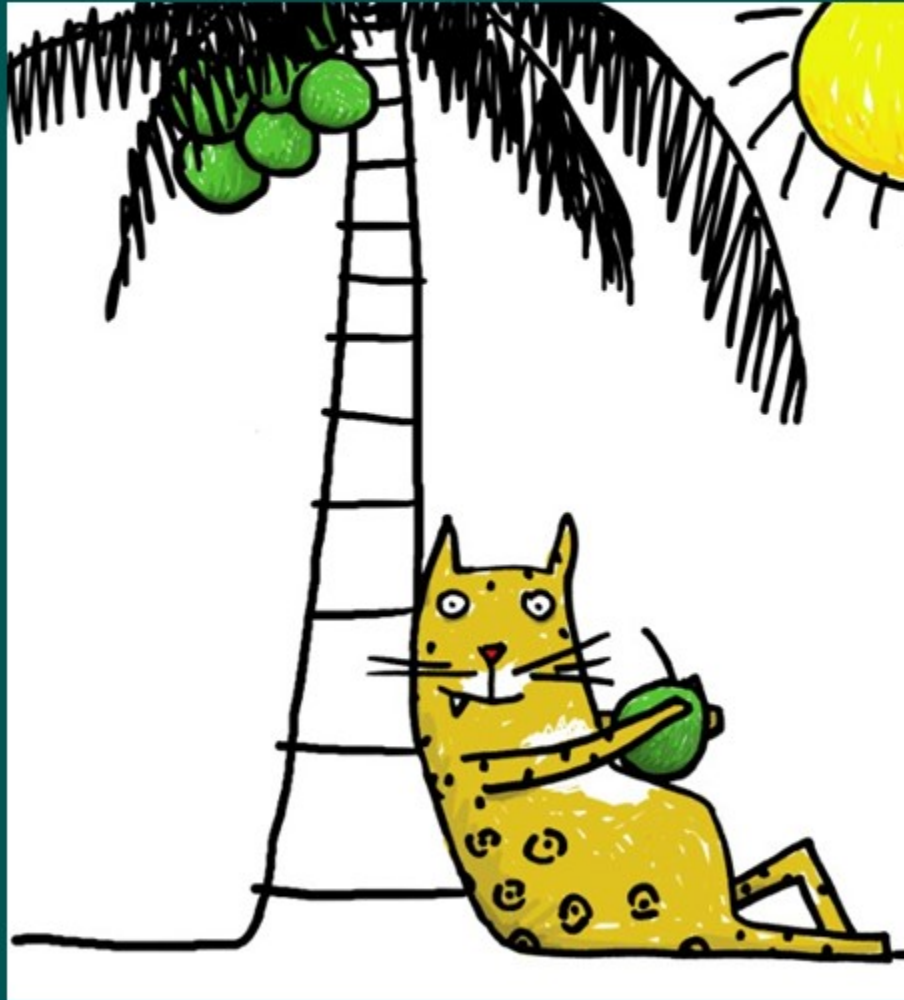
Special thanks to:





See you in 2020!

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