



S.P.E.C.I.E.S.



CARNIVORE CONNECTION

June
2018

This month, travel with us to Trinidad and Palawan Island



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Trinidad

The Trinidad Ocelot Project



A female ocelot that we regularly detect at Asa Wright Nature Centre. She has become something of a celebrity; so much so, we are hoping to host a local naming contest soon.

The ocelot is one of 13 species of wild cat native to the western hemisphere, and one of 10 felids inhabiting Latin America. The ocelot occurs from the lower Rio Grande Valley of extreme south Texas and the Sky Islands of southern Arizona at the northern end of its range, south to northern Argentina's Atlantic Forest ecoregion.

The history of the ocelot on Trinidad is unique for several reasons. For one, nowhere else did the ocelot evolve in the absence of large mammalian carnivores such as jaguars and pumas. On Trinidad, it is the largest predatory mammal. Trinidad hosts the only population of ocelots on a continental island, making it the most geographically isolated of all ocelot

populations. Because Trinidad has been isolated from the mainland for approximately 11,000 years, much of its biodiversity is unique; many vertebrates and invertebrates on the island are genetically distinct enough to be different species or subspecies.

Among Neotropical small felids, the ocelot is second only to the jaguarundi in distribution expanse, and is classified by the IUCN as a species of "Least Concern", the lowest priority for conservation among the world's threatened and endangered species. But on Trinidad, there is anecdotal evidence to suggest the ocelot population may be declining, and its future may be threatened by human activities.

FEATURE STORY: The Trinidad Ocelot Project



Our project is the first comprehensive effort to study the ecology of Trinidad's ocelot population, define its place in the evolutionary history of the ocelot as a species, and develop an integrative plan for its long-term conservation.

We are investigating the impacts of deforestation, illegal hunting, urbanization, and different types of agricultural land use and intensity on ocelot habitat suitability, population density, and the diversity of prey species available to the predator. We are also collaborating with local institutions to promote greater awareness of the ocelot's needs among the public of Trinidad & Tobago, build individual capacity and organizational capacity to monitor ocelots, and develop an island strategy for habitat connectivity and conservation across based on the needs of the species. If we can better understand the ecological needs of ocelots, we can more

precisely define the types and intensity of human activities that are compatible with an increasing or stable ocelot population.

Recently, S.P.E.C.I.E.S. has been working with partners Asa Wright and the University of the West Indies to conduct multiple surveys across the island

nation. The project surveys encompass three separate study sites: Arena Recreational Forest, Asa Wright Nature Center, and Nariva Swamp. These study sites represent some of the most important potential ocelot habitat on the island. The Arena and Asa Wright locations both include dense, higher elevation forests, while the Nariva site consists of an estuarine swamp.

This project has allowed S.P.E.C.I.E.S. to develop new opportunities for graduate students. Students are now conducting research on species such as agouti (an important prey species for ocelots), possums, nine-banded armadillos, and pacas, all of which will enhance our understanding of wildlife populations in Trinidad.

S.P.E.C.I.E.S. was also able to contribute cameras and other resources and equipment

for a recent "bioblitz", led by the University of the West Indies. The goal of a bioblitz is to observe as many species as possible in a set amount of time. The bioblitz lasted four to six weeks, and covered all the major habitats of Trinidad.

It resulted in some of the first population data on ocelots and other wildlife of Trinidad.

Additionally, incoming data from regions such as Arena Recreational Forest has shown that agouti, which is a main prey item for the ocelot, are showing strong population numbers. This seems to indicate that, although agouti is one of the three most targeted bush meat species, hunting does not seem to be affecting the overall population numbers. Thus, agouti bush meat hunting seems unlikely to impact ocelot populations.

The success of the Trinidad Ocelot Project has not gone unnoticed. Recently, S.P.E.C.I.E.S. was asked by the Environmental Management Authority (EMA) of Trinidad & Tobago to contribute to a larger ocelot strategy and management plan. This will include everything from more explicit surveys to opening up new areas of the island for ocelot research, thus enabling the conservation of the species across all natural and human-impacted landscapes. This new development is, according to S.P.E.C.I.E.S. director Anthony Giordano, "more than we could have hoped for".



Adventure Trail at Asa Wright Centre, where long-term camera-trapping efforts continue.



Volunteers helping with the conducting of vegetation transect surveys, as part of the Trinidad Ocelot Project.

To Track a Binturong:

Following the Elusive Bearcat



Developing a waterproof casing for the radio collar batteries.

This process only serves to illustrate the importance of collecting data from bearcats in the wild – the measurements for the collar were obtained from a captive Palawan bearcat from an American zoo, which clearly differed from those in the wild on Palawan Island.

Fortunately, this setback is an easy fix, and with all of the electronics working well, our team is set for a follow up test. As soon as the radio collars are ready, the team can begin radio tracking wild binturong across Palawan Island.

In addition to collecting data, a major goal of this project is to share this knowledge with the public. By raising awareness of the binturong and its plight through educational workshops and conferences, we hope to promote the binturong's public image and increase participation in their conservation. Indeed, ABConservation has already succeeded in one major outreach achievement: launching World Binturong Day, every second Saturday of May.



Researchers take measurements on an anesthetized bearcat on Palawan Island.

Until now, very few studies have been done on the bearcat. In particular, very little is known on their biology and ecology within their natural habitats in Southeast Asia, as most available data is collected from captive, rather than wild, animals. What is known, however, is that over the past 18 years, the wild bearcat population has decreased by at least 30%, due to pressures from deforestation and illegal trafficking and poaching.

SPECIES has been working with ABConservation to develop a research program on the bearcat's ecology and behavior in Palawan Island. The bearcat is endemic to Palawan, and this island is the only one within the Philippines where the bearcat is found. As such, the Palawan bearcat is considered its own subspecies.

The Bearcat Study Program aims to improve overall knowledge on the bearcat. The project includes both camera-trapping and radio-tracking in order to gather data on the bearcat's use of its territory, as well as to obtain pure behavioral observation (such as feeding habits, social interactions, and

reproduction). Basic ecological and behavioral data is necessary in order to develop a conservation program that is adapted and suited for the bearcat. This information can then also be used to update its IUCN status, if necessary.

In the first stage of the project, the BearcatStudyProgram team conducted scouting trips and set up camera traps in order to gather baseline information on the binturong on Palawan Island. In addition, researchers met with local chiefs and captains in order to establish potential partnerships.

This spring, the bearcat team has embarked on stage two: radio tracking. Fitting radio collars on wild bearcats, however, can be a tricky feat! For instance, the team had to first macgyver a waterproof casing for the radio's batteries to keep them protected while on the radio collar. Next, the team conducted a prototype test on an anesthetized bearcat.

Unfortunately, the test did not go quite as planned; the collar turned out to be too large, and fell off the bearcat after only a few hours!



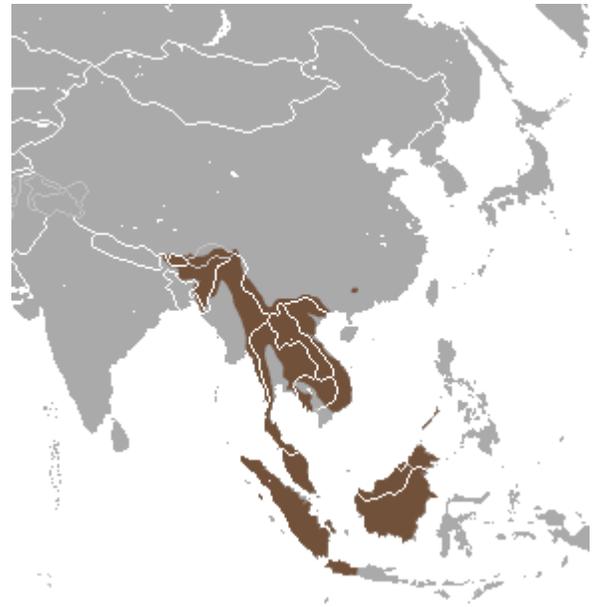
The Binturong

The binturong (*Artictis binturong*) is summed up by its nickname; the bearcat. With long cat-like whiskers, a long bushy tail, a thick coarse coat and a penchant for living in trees, the species is quite unique. Despite having a fairly wide distribution (the binturong is found in Borneo, Nepal, Java, Northeast India, Bangladesh, Vietnam, Laos, and Thailand), it is rare across its range.

Very little is known about the binturong. It is an omnivorous species and will eat just about anything, although it is said to have a particular affinity for the strangler fig. Their love of the strangler fig also plays an important role for the wider ecosystem as they disperse the seeds, allowing important regrowth. Their long tail can act as a fifth limb, allowing them to move easily through their forest habitat. This strong and sturdy tail is also important as the species is said to mate high up in the trees. But as for its other behaviour and its wider role in the ecosystem, little else is known.

Across its range, the binturong is threatened by loss of its habitat due to agricultural expansion, and hunting for the pet market, traditional medicine, and as a food source.

S.P.E.C.I.E.S is currently working to conserve the binturong, and it is one of our focal carnivore species. Information is being gathered on the species to fill in important gaps in our knowledge. Key questions such as how the binturong is affected by the expansion of agriculture and the loss of primary forest, and which areas within its range may act as strongholds for the species, are currently trying to be answered.



Distribution data from IUCN Red List. Image by Chermundy

Carnivore Corner

News Curated from the Carnivore World

Restoring flagging oil palm plantations to forest may benefit clouded leopards, study finds

April 24 2018
Mongabay

Tracking four clouded leopards in Malaysian Borneo with satellite collars, biologists found that the cats preferred areas with canopy cover and avoided land that was cleared for palm oil. Thus, the researchers predict that returning plantations to forest cover would benefit the clouded leopard population.



Image © Danau Girang Field Centre



Image: US Fish and Wildlife Service

First Yellowstone Grizzly Hunt in 40 Years Will Take Place This Fall

May 23, 2018
Kate Keller
Smithsonian.com

A controversial ruling by the Wyoming Game and Fish Commission will allow a hunt for grizzlies this coming fall. This is the first legal hunt of grizzly bears in Yellowstone in 40 years, and comes a year after the grizzly bear Yellowstone population was removed from the endangered species list.

8 Years Until Red Wolf Extinction?

May 21 2018
John R. Platt
Scientific American

The red wolf is the world's rarest wolf, with only 40 animals left in the wild, down from 120 in 2013, and about 220 in captivity. With the recent birth of three new pups at the Museum of Life and Science in Durham, NC, it may be that captive breeding is the last hope for the survival of these wolves.



Keeping up with S.P.E.C.I.E.S.

Our Activities

Wildlife Conservation Network Spring Expo Redwood City, CA

On April 21, SPECIES staff attended the WCN Spring Expo in Redwood City, CA. It was the biggest expo yet, with over 500 participants with which we were able to share our stories about protecting endangered wildlife.

Read more about the event [here](#).



Woodland Park Zoo Seattle, WA

On May 3, SPECIES' director and founder Anthony Giordano spoke at the Woodland Park Zoo, a previous multi-year supporter of the Chaco Jaguar Conservation Project. The event was standing room only, as about 100 people turned out to hear about the project and the importance of the WPZ as a partner!



Upcoming Events



Happy Hollow Park & Zoo San Jose, CA

On June 14th, Anthony Giordano will be giving a talk at the Happy Hollow Park & Zoo in San Jose entitled "Discover Conservation: Jaguars". The Happy Hollow Park & Zoo is another major supporter of the Chaco Jaguar Conservation Project.

This event is open to the public! Find out more [here](#)

CONNECT WITH US!



S.P.E.C.I.E.S.

"To ensure the viability, diversity, and integrity of the world's threatened, endangered, and declining native carnivore populations and communities, mitigate threats to their future survival, and restore their part to the healthy functioning of the planet's ecosystems"