project **REPORT**

the dhole project 2019

THE DHOLE PROJECT

SAVING THE LAST OF ASIA'S WILD DOGS

project **OBJECTIVES**

The Dhole Project was launched in **2016**. The aim of the project is to conduct research work on the **endangered dhole** (Asiatic wild dog) to better understand the species' requirements, and formulate **science-based strategies** to conserve its populations. The project is being implemented in **India**. But the scientific outputs from the project are designed to benefit dhole conservation globally.

Our work relies on a **combination of methods** and approaches, each of which provides a different and unique understanding of dhole ecology and conservation needs. The project involves generating information that links dhole **individuals**, **packs**, **populations** and **meta-populations** across the species' range.

The overall objective of the project is to help wildlife managers, conservationists and governments better **manage** and **conserve** dhole populations across **300,000 sq. km** of their geographic range.

In **2019**, we set out with the following objectives:

- Understand where and why dholes are going locally extinct in India's Western Ghats

- Develop genetic tools to identify individual dholes using DNA from their scats (poop!)

- Conduct field surveys to find out how many dholes exist in India's Western Ghats

- Collaborate with government and non-government institutions for research and monitoring of dhole populations

- Initiate collaborations with conservation biologists within and outside India

- Train citizen volunteers and interns in scientific conservation research and outreach

# project **ACTIVITIES**

iucn **MEETING | GLOBAL**

In **February** this year, **40** experts including wildlife scientists, conservationists, park managers, students and zoo personnel met in Khao Yai National Park, **Thailand** as part of the **IUCN Dhole Working Group**.

The experts assessed **viability** of current dhole populations, and forged local and trans-national **collaborations** to undertake dhole conservation efforts.

Members of The Dhole Project participated in the meeting to create an updated **global status** assessment for dholes, and also set the background for creating **country-specific** conservation plans.

dhole **DATABASE | GLOBAL**
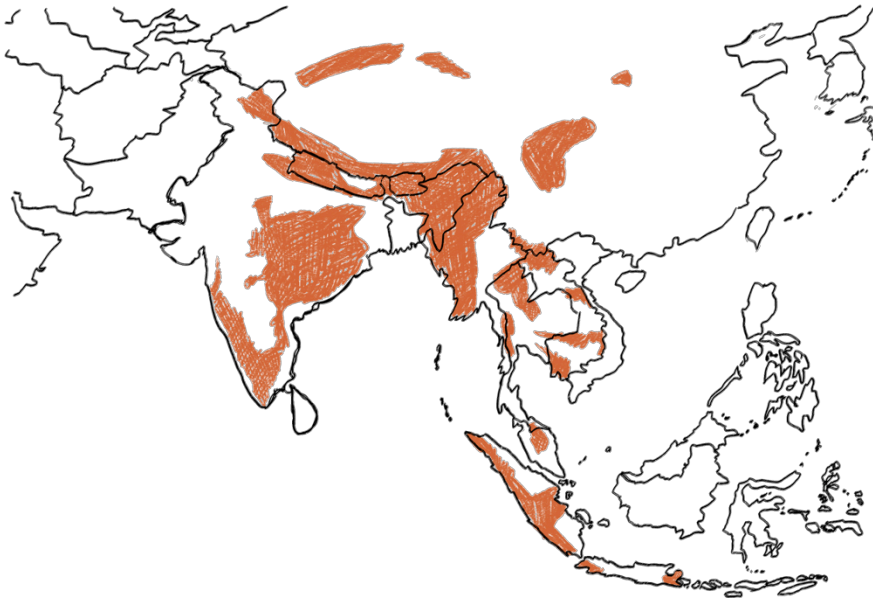
Over the past year, we searched through almost all online and offline sources to **compile** and create a **master database** of all published literature about dholes, from **1874** to **2019**. We plan on using this as a **blueprint** for future directions in research and conservation.

conservation **PLAN | INDIA**

Creating a country-specific **conservation plan** requires knowledge about distribution and population status, detailed assessment of human-induced threats, identifying administrative **capacity and likelihood**, and finding out which areas to target for action plans. We are now working with information on distribution, threats, socio-economic and administrative data.


These efforts will allow us to **prioritize areas** for dhole conservation, determine what **actions** are to be taken, and also set a vision for how **future monitoring** and conservation actions need to be designed.
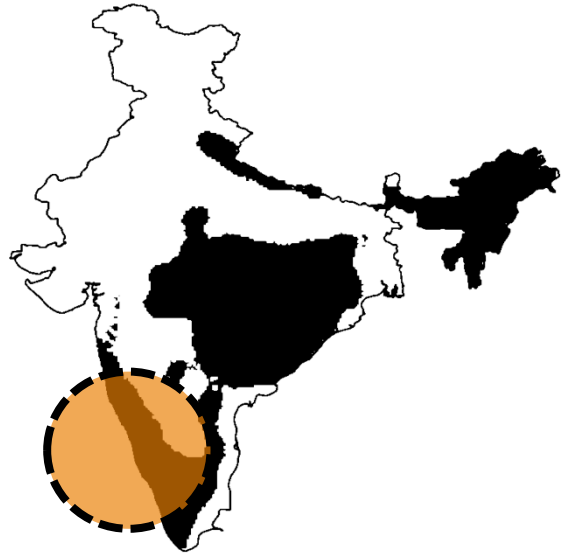
connectivity **MAPS | INDIA**
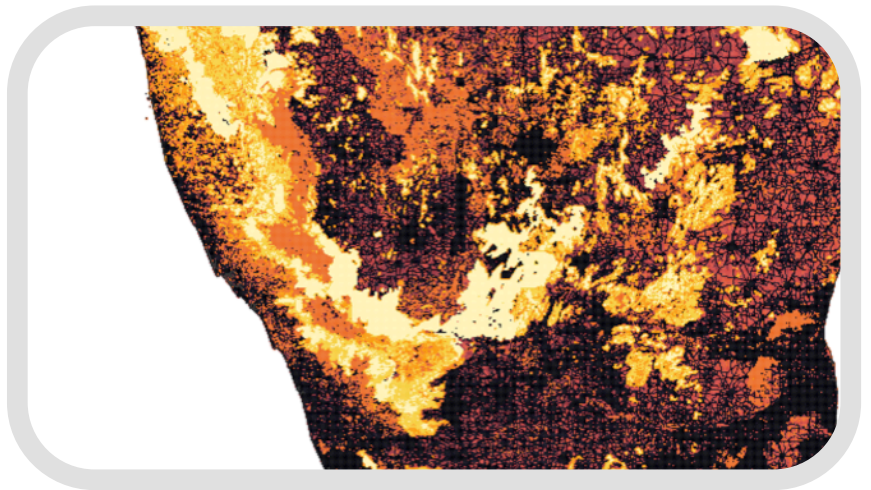
Our latest research work focuses on **mapping connectivity** for dholes, so as to identify **forest corridors** that need to be consolidated and protected to help dholes move and **disperse** across protected areas.
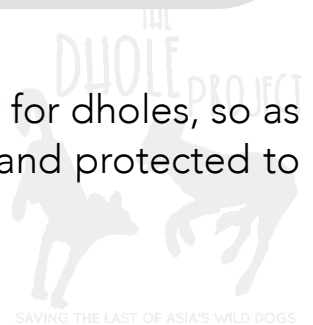
project **ACTIVITIES**

Our analysis of dhole distribution from **2007** to **2015** showed that dhole-occupied areas reduced from **62% to 54%** in Karnataka's Western Ghats. The study, published in the international journal **_Scientific Reports_**, highlights the importance of **protected areas**, and identifies locations where wildlife managers should target **conservation interventions**.

populations | **WESTERN GHATS**

wayanad wildlife sanctuary

740 km surveyed

111 scats collected

3500 signs recorded

In collaboration with **Kerala State Forest Department**, we initiated a long-term study to **monitor** dhole populations. In **summer**, we undertook **field surveys** in **Wayanad Wildlife Sanctuary** to estimate dhole populations using DNA from their scats (poop!). We also recorded over 3500 **indirect signs** of dholes, their co-predators and prey species during our surveys.

SAVING THE LAST OF ASIA'S WILD DOGS

project **ACTIVITIES**

genetic tools **| LAB WORK**

Dholes cannot be individually identified based on the way they look (they all look very similar to each other). We use their **DNA** extracted from their scats (poop!), and apply sophisticated **statistical models** to find out how many dholes exist.

This involves developing **genetic tools** and methods, with intensive laboratory work.

Working with the **National Centre for Biological Sciences**, we developed advanced genetic methods to identify individual dholes using DNA from their scats (poop!).
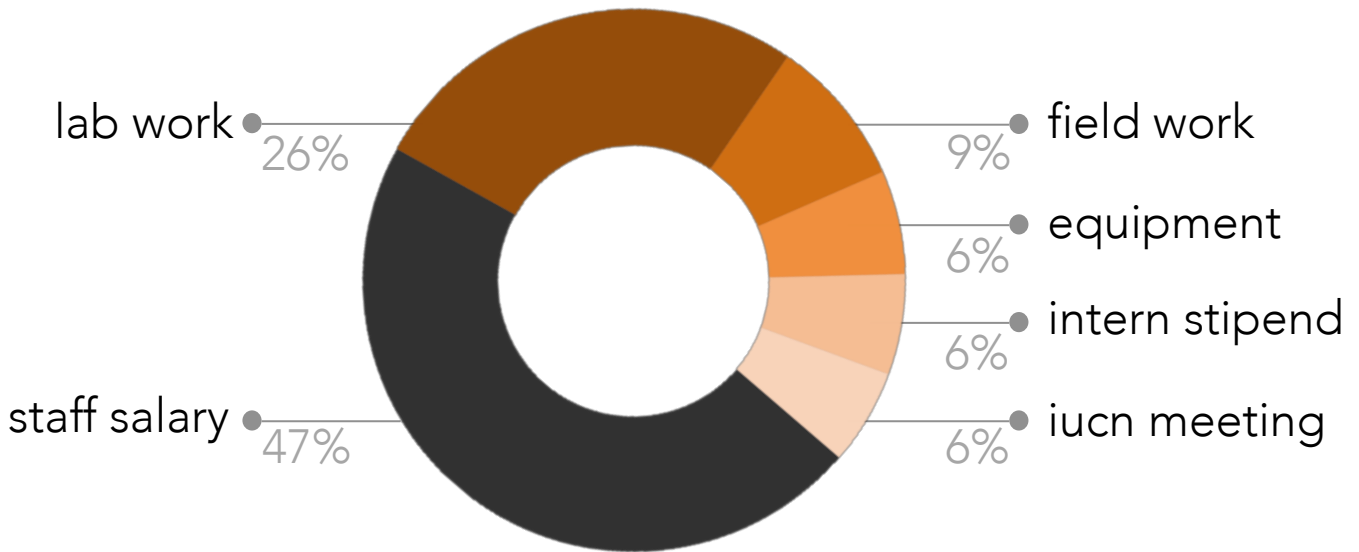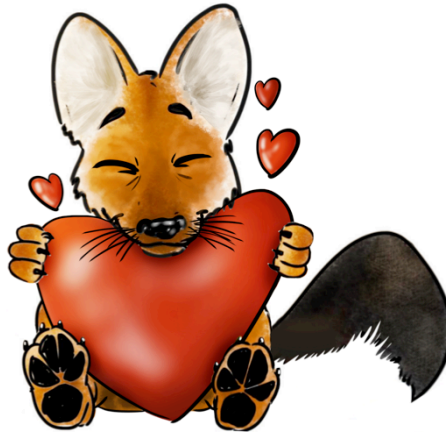
training **| OUTREACH**

We trained 2 field **research assistants** and 6 **interns** this year. Assistants and interns were **citizen-scientists** and **students**, who were trained in **field methods** to conduct **surveys** of large carnivores, data processing, **literature** surveys, **statistical analysis**, analyzing GIS and **remote-sensing** data, **communication** and **outreach**. We collectively produced 4 articles in **popular media** outlets and 3 **blog** articles.

project SUPPORT

budget | FUNDING

lab work ● 26%

staff salary ● 47%

field work ● 9%

equipment ● 6%

intern stipend ● 6%

iucn meeting ● 6%

We spent a total of around **18000 USD** towards the project in 2019. The chart above shows a rough breakdown of the costs by categories.

acknowledgements

Project personnel: Arjun Srivathsa | Sushma Sharma | Ryan Rodrigues

THE
DHOLE
PROJECT

SAVING THE LAST OF ASIA'S WILD DOGS

supporting institutions and organizations

WCS INDIA

UF | UNIVERSITY of FLORIDA

ncbs
national centre for biological sciences

WCN
Wildlife Conservation Network