

Nepal scientists to 'poo-print' tigers

October 21 2011, by Frankie Taggart



A Royal Bengal tiger cools off in a pond at Kathmandu Zoo in Kathmandu in 2003. Scientists in Nepal are to build up the world's first national DNA database of the endangered Bengal tiger by collecting and recording a unique genetic fingerprint from each adult's faeces.

Scientists in Nepal are to build up the world's first national DNA database of the endangered Bengal tiger by collecting and recording a unique genetic fingerprint from each adult's faeces.

Conservationists have relied in the past on the old-fashioned technique of photographing the big cat and recording footprints to study the population, said to number little over 100 adults in Nepal.

But the Center for Molecular Dynamics Nepal (CMDN) told AFP a two-year Tiger [Genome Project](#) would gather a raft of vital behavioural and genetic information to help [conservationists](#) better understand the

species.

"The whole idea is to scoop all the poop and get a genetic database of all the [tigers](#) in Nepal," said CMND researcher Diwesh Karmacharya.

Teams from the centre will fan out in four national parks in Nepal's Terai southern plains, the main habitat of the Royal Bengal tiger, armed with sample bags.

The project, funded by the United States Agency for International Development, is part of a Nepalese effort to double its population of Royal Bengal tigers.

The animals once roamed the country's southern plains in large numbers but have been depleted by poaching and the destruction of their habitat.

"In the past they used to use pugmarks -- which are the footprints -- and then they started using individual cameras," said Karmacharya. "There was a census done in 2009 and in 2010 and both used camera trapping.

"They both worked really well but the information you get is not too detailed. You won't be able to tell more than how many tigers you have in the area of the survey."

He said [faeces](#) would enable researchers to glean the sex of individuals as well as the areas they had come from and a whole host of behavioural information, such as breeding habits.

Karmacharya said that although other countries such as India had collected [genetic information](#) on Bengal tigers in the past, this would be the first systematic survey of a country's entire population.

"The idea is to figure out whether the current boundaries are effective in

housing a healthy genetic population of tigers," he said.

The information will also help assess the percentage of males and females and whether tigers found dead in the border areas were from Nepal or India.

The results will be shared with experts worldwide through scientific publications and presentations, USAID said.

A WWF survey carried out in 2008 found just 121 adult tigers of breeding age in the country.

Experts say poverty and political instability in Nepal have created ideal conditions for poachers who kill the animals for their skin, meat and bones, which are highly valued in Chinese traditional medicine.

Wildlife experts say a single tiger skin is traded for around \$1,000 in Nepalese markets but at least \$10,000 internationally.

The WWF says tigers worldwide are in serious danger of becoming extinct in the wild. During the last 100 years their numbers have collapsed by 95 percent, from 100,000 in 1900 to around 3,200.

(c) 2011 AFP

Citation: Nepal scientists to 'poo-print' tigers (2011, October 21) retrieved 9 April 2024 from <https://phys.org/news/2011-10-nepal-scientists-poo-print-tigers.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--