

This report will be made public. If it contains confidential or sensitive information, please also provide a revised report for sharing with the public.

Section I. Project Information					
Project Title: Monitoring Populations of Amur Leopards and Tigers in Northeast China					
Grantee Organisation: Wildlife Conserv	vation Society				
Location of project: Hunchun Nature Pesenve (HNP) and adjacent lands within Northeast China					
Tiger and Leopard National Park (NCTLNP) Hunchun County Jilin Province China at approximately					
42.41972 N, 129.86416 E.	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
Size of project area (if appropriate):	No of tigers and / or Amur leopards in project area, giving				
About 5,000 square kilometres	evidence & source:				
	Hunchun Nature Reserve: 42 and 28 Amur tigers and				
	leopards, based on our camera trap analysis of 2022 (see				
	final report to WCCA, February 2022 – January 2023).				
	Dahuanggou: 9 and 2 Amur tigers and leopards, based on				
	the analysis of our latest camera trapping data (see below).				
<b>Partners:</b> (Please give details of partner	rs, including communities, academic institutions etc. for this				
project.					
The administration of NCTLNP is our pr	imary partner, especially the Hunchun Bureau Branch (also				
called HNR Administration) and Hunchun Municipal Bureau Branch (also called Hunchun Municipal					
Forestry Bureau). We've been working on monitoring projects with them since before they became					
park branches, and we are trusted part	ners. For this project, we are working on camera trap				
monitoring together with their staff to	better understand the current status of tiger and leopard				
populations within Hunchun county.					
Project Contact Name: (main contact via omail)					
Aimin Wang Scott Waller Jonathan Slaght					
Annin Wang, Scott Waller, Jonathan Slaght					
Email: awang@wcs.org; swaller@wcs.org; jslaght@wcs.org					
Actual start date of project: (if different from 1 <sup>st</sup> February)					
Reporting period: February 1, 2023 - II	ine 30, 2023				

## Section II. Project Progress

**Summary of progress for the first 6 months:** (please provide a summary for use in our communication materials)

Thanks to the support of WildCats Conservation Alliance, WCS China continued camera trap monitoring within HNR and in the nearby Dahuanggou region, marking the 11<sup>th</sup> year of monitoring Amur tigers and leopards within HNR. This research provides critical information on the population



status of these endangered big cats, such as whether the numbers of individuals have continued to increase, and how many cubs are being produced each year. In HNR, WCS China staff checked all 120 of their camera sites during the reporting period to switch out memory cards and replace batteries, and staff are now busy processing the many thousands of images on these memory cards. The WCS China team also analysed monitoring data from the nearby Dahuanggou study area. Based on data from November 2022 to April 2023, our researchers documented the presence of at least nine tigers and two leopards, a considerable increase from the four tigers and single leopard we documented just the year before. These are encouraging findings, and further, more-detailed monitoring data will be presented in our final project report.

**Details of activities and results to date:** (*Please give details of progress made towards the objectives & outputs of your Logframe, and activities included in your Workplan. Please add any relevant charts, maps and images.* 

#### Objective 1: Monitoring populations of Amur leopards and tigers in Hunchun.

#### Activity 1.1. Continue camera trap monitoring in HNR.

According to the schedule of this project, we plan to send field staff to visit all camera traps at least three times throughout the year to check and replace batteries and to swap out memory cards. At the end of May 2023, we collected data and replaced batteries from 120 camera trap sites across HNR (**Figure 1**). Now, we are working on processing the image data collected by these camera traps, and we look forward to sharing our findings in the final report.



**Figure 1.** Map of camera trap locations across Hunchun County that are used to monitor populations of Amur tigers and Amur leopards. Red stars represent camera trap locations where tigers were photographed and blue dots represent camera trap locations where leopards were photographed. Empty circles represent locations where no big cats were photographed. Data processed only in Dahuanggou region for this map.



## Activity 1.2. Continue and expand camera trap monitoring in Dahuanggou.

In the Fall of 2022, we cooperated with the Hunchun Municipal Bureau Branch of NCTLNP to deploy camera traps at 30 sites across Dahuanggou, covering approximately 270 km<sup>2</sup> of key habitat for Amur tigers and leopards (Figure 1). Later this spring, we sent teams out to visit these sights, conduct camera maintenance, then collect memory cards (**Figure 2**). Later, our staff analysed the photographs captured by these camera traps from November 2022 to April 2023. This monitoring period included 7,692 trap nights, during which we obtained 9,544 images and videos of wildlife and human activity in Dahuanggou. The detection information for images of Amur tigers and leopards are presented in **Table 1** below.



**Figure 2.** WCS China staff in the field, checking and fixing cameras deployed to monitor Amur tigers and leopards across Northeast China. Photo © WCS China.

Table 1. Information on Amur leopards and tigers detected by camera traps in Dahuanggou by	WCS China from
November 2022 to April 2023.	

Common Name	Encounters	Sites Represented	Images/Videos	Individuals
Amur leopard	5	5	10	2
Amur tiger	40	13	89	9

In Dahuanggou, Amur tigers and leopards were captured at 16 of the 30 camera trap locations (53%). Tigers alone were seen at 13 sites (43%), while leopards were photographed less often at only 5 sites (17%). Two sites (7%) detected both species. By analysing the unique stripe patterns of tigers and the spot patterns of leopards, we identified 9 individual tigers (2 male, 3 females and 4 of unknown sex) and at least 2 leopards (unknown sex). Of the 9 tigers identified by our team, 5 individuals were seen in previous years (including 2 that were previously captured at HNR). The other 4 tigers were new individuals we have not seen before (including three cubs). For leopards, we identified two new individuals. This suggests that there maybe be as many as 5 leopards here if we consider the previous years' data as well. Below, we provide example images of these animals captured by our camera traps (Figures 3).





**Figure 3.** Example images of an Amur tiger and Amur leopard captured by camera traps in Dahuanggou, Northeast China. Photos © WCS China.

In addition to Amur leopards and tigers, we recorded other wildlife at our camera traps (**Figure 4**) including wild boar, roe deer, sika deer, Asian badger, Manchurian hare, red fox, leopard cat, raccoon dog, yellow-throated marten, and Siberian weasel. Human activity accounted for 59% of all camera trap trigger events, with human, vehicles, and livestock contributing a similar number of detections to this proportion (**Figure 5**). Wild animals accounted for 41% of all captures, more than half of which were ungulates (62% of all wildlife). Roe deer were the most common ungulate, accounting for about 73% of ungulate detections, followed by wild boar (24%).



**Figure 4.** Other wildlife beyond tigers and leopards were detected during our monitoring efforts in Dahuanggou: top left, wild boar; top right, red fox; bottom left, Siberian roe deer; bottom right, yellow-throated marten. Photos © WCS China.







# Give details of any obstacles to success that the project has encountered over the last 6 months.

(Please provide detailed examples, explain what impact these will have on the project results and the changes to the budget and timetable of project activities)

So far there have been no obstacles to the success of this project, and our first round of maintenance work was successfully completed. Although the camera maintenance time of HNR was somewhat delayed due to work conflicts of our partners, the overall activity was not affected.

#### Budget: Is the spending on target? If not, please give details and provide an updated budget sheet.

Spending is on target. From February 2023 to June 2023, the activities were carried out as planned and the expenses during this period were mostly supported by other WCS funding. We will continue the camera monitoring activities in July and October 2023 and the expenses, including activities and personnel, will be charged to WCCA grant

**Media:** Please provide a list of recent publications and media both local and national which mentions the work funded by this project and/or mentions WildCats Conservation Alliance

N/A

WildCats Conservation Alliance asks for at least 5 relevant high-resolution jpeg files of images of the project activities during this time period.

Please see the photos attached to the same email as this report.