



#### TERMS OF REFERENCE

# Hiring 3 senior technicians to conduct end-line biodiversity survey in Dong Chau Khe Nuoc Trong Nature Reserve

#### I. BACKGROUND

The "USAID Biodiversity Conservation" activity is a 5 year-project starting from July 2020 to June 2025. The project aims to maintain and increase forest quality and protect and stabilize wildlife population in high conservation value provinces (Ha Tinh, Quang Binh, Quang Tri, Thua Thien Hue (TT Hue), Quang Nam, and Lam Dong). The project targets 15 special use forests (SUFs) and 07 protection forests (PFs), linking forest management units across the landscape to maintain forest cover and connectivity of habitats vital for the protection of Vietnam's threatened and endemic species. The project lead in Vietnam is WWF-Vietnam, and Fauna & Flora (FFI) has a sub-contract from WWF-US, to work alongside WWF-Vietnam, but under their management framework. Fauna & Flora will take the lead and/or provide oversight (as per the contract) on all the project's Strategic Areas (SA) in Quang Binh Province, which are (1) Promote Conservation-Friendly Enterprises in Forest Dependent Communities; (2) Strengthen management of national parks and protected areas; (3) Increase functionality of law enforcement systems for forest and wildlife crimes; and (4) Reduce local demand on wildlife products.

Strategic Approach 2 aims to strengthen management of special use and protection forests in project's sites. A metric for measuring the impact of improved Protected Area (PA) management and the ultimate project success is adequate and standardized systematic monitoring of wildlife and forest condition. To achieve this, standardized baseline camera trap surveys of terrestrial birds and mammals in target PAs will be undertaken. Surveys will also contribute to our basic understanding of the status of terrestrial vertebrate species, both in the park and nationally.

In addition to the biodiversity monitoring, threats to terrestrial birds and mammals will be monitored, using snares and other trap types as the main indicator. Snaring is thought to be prevalent across the Annamites, including Dong Chau Khe Nuoc Trong Nature Reserve (DCKNTNR).

A biodiversity baseline survey using camera traps and assessing threats caused by traps at DCKNTNR was carried out from June to September 2022. This activity aimed to establish an initial database to evaluate the impact of the Project's interventions. This baseline survey installed and retrieved 37 camera trap stations.

To evaluate the impact of the Project's interventions, the Project organizes an end-line biodiversity survey at DCKNTNR from March to June 2024.

#### II. OBJECTIVE

The specific objectives for the camera-trapping component of this work are:

- 1. To build a species list of terrestrial mammals and birds present in DCKNTNR.
- 2. To create a heatmap of biodiversity value in DCKNTNR, using terrestrial vertebrates as the indicator group (species richness).
- 3. To uncover the factors which are affecting the distribution of terrestrial vertebrates in DCKNTNR, including the importance of threat drivers, such as hunting.
- 4. To map the distribution of a subset of 'high priority' species (based on IUCN Red List status).

The specific objectives for the snare survey component of this work are:

- 1. To estimate snare occupancy (i.e., the probability of snare presence in a sample site) and detectability (i.e., the probability that patrol teams detect a snare in a sample site) across DCKNTNR.
- 2. To create a heatmap of snare prevalence in DCKNTNR.
- 3. To provide ad-hoc snare presence data, collected during the course of fieldwork.

# **III.EXPECTED OUTPUTS:**

- 37 camera trap stations set up across the whole of DCKNTNR and snares removed across an equal number of survey plots.
- In-field training on camera trapping and SMART methods delivered to partners, including rangers.
- Data on mammal and bird distribution across DCKNTNR.
- Data on snare prevalence and distribution from surveys carried out during setting the camera traps, as well as ad-hoc surveys along routes taken during surveys.

**Note:** these outputs will be delivered by Fauna & Flora staff and the consultant technicians jointly, and the consultants are not solely responsible for the tasks.

# IV. MAIN TASKS OF THE CONSULTANCY:

- Work as a team leader to set up camera traps in DCKNTNR as designed, ensuring that the camera traps are installed following the SOP;
- Work with Fauna & Flora's assigned staff to develop logistical details of plan for field work:
- Participate in a training on SMART and guidance on camera trap protocols;
- Each consultant installs at least 10-14 camera trap stations (each station has 2 camera traps);
- Collect data on snare/trap prevalence and distribution from surveys carried out during setting the camera traps, as well as ad-hoc surveys along routes during surveys;
- Submit all data to Fauna & Flora, including data on mammal and bird distribution across DCKNTNR and data on snare prevalence and distribution.

# V. DELIVERABLES

The consultants are expected to deliver the following outputs:

- Data of camera-trapping setting up and retrieving, following the Fauna & Flora template.
- Accurate data on snare/trap occurrence, in the survey plots and along all travel routes, also following the Fauna & Flora template.
- Ad-hoc data on other species encountered during fieldwork, including notes and GPS coordinates
- High quality video clips and pictures related to the field surveys.

# VI. SCOPE AND TIMEFRAME

Survey work was carried out at about 10-14 camera trap stations designed in DCKNTNR, Quang Binh province (See map, below). The estimated time is 18-20 days for a consultant, not including travel time from home to DCKNTNR. The exact number of days will be discussed and decided upon signing the contract.

#	Tasks	# Days	Timing
1	Camera trap installation trip 1.1	18-20 days	3-4/ 2024

**Remarks:** Fauna & Flora will mobilize staff and hire local guides and logistics support people to help consultants during the survey process.

# VII. QUALIFICATIONS AND EXPERIENCE

- University degree in one of the following fields: conservation biology, natural conservation, forestry or related fields;
- At least 3 years of experience in conducting biodiversity surveys, including conducting a minimum of 2 camera trapping surveys;
- Familiar to DCKNTNR (advantage);
- Strong commitment and responsibility working for this task.
- High attention-to-detail and demonstrated ability to collect accurate, well-organised and clear field data

# VIII. CRITERIA FOF ASSESSMENT

Evaluation Criteria	Maximum rating
1. Technical approach	40
SOP for biodiversity survey with camera trapping combined with threat data survey	20
Skills in using SMART mobile to conduct biodiversity survey and data collection	20
2. Past performance	50
Experience in conducting similar survey with camera trapping following the SOP	25
Experience in organising similar work as a team leader	15
Experience working in DCKNTNR or similar areas	10
3. Expertise and availability for this assignment	10
Expertise	10
Total score	100

Only candidates achieving the technical score of more than 70 through the interview will be assessed consultant daily rate follow the quality and cost base selection with the weight of technical and financial score 80/20.

#### IX. ADMINISTRATIVE SUPPORT

Fauna & Flora will provide the consultant with the following support:

- Administrative procedures to working in the field and with Fauna & Flora's local partners;
- Fauna & Flora will cover all costs relating to the field trip based on actual expenditures and not exceeding Fauna & Flora's cost norm.

Interested candidates are invited to send CV, letter of interest, quotation and confirmation of availability in English and Vietnamese to Ms. Le Hong Viet via email <a href="wiet.hong.le@fauna-flora.org">wiet.hong.le@fauna-flora.org</a> no later than 12h00, 15 March 2024. Only shortlisted candidates will be contacted for interviewing.

or more information about Fauna & Flora, please visit <a href="http://www.fauna-flora.org">http://www.fauna-flora.org</a>

#### **Annex 1: SURVEY METHOD**

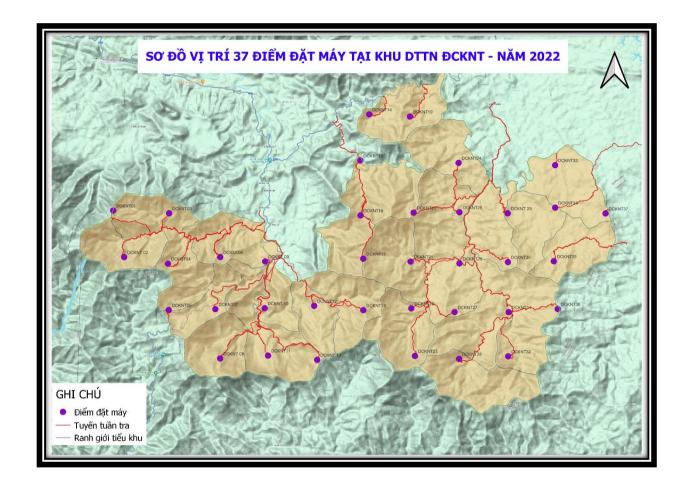
# **Camera-trapping methods (in brief):**

- A systematic grid of points, separated by 2.5 km, will be used in DCKNTNR map.
- Camera traps are set up at the same coordinates where they were set up in 2022
- Setting-up the two camera-traps per station within a 20 x 20 m plot.
- Camera traps will be left in place for approximately 2 months (or longer) before retrieve.

All snares and other traps that are encountered during the course of fieldwork will be recorded in SMART Mobile. In addition to this 'patrol-based' data collection, snares and other traps will also be surveyed in systematic plots, with the following methods:

- Snare/trap surveys will be carried out in circular plots with a 200 m radius surrounding each camera trap station.
- Survey teams (2-3 people) will intensively search these plots for 60-90 mins, removing all snares/traps that they find.
- The exact start time of the survey, and exact time that each snare/trap is found, will be recorded; if snare lines are encountered, the time of finding the first snare in the line will be recorded and all snares that are within the boundary of the plot will be counted.
- All snares that are found will be collected and taken out of the forest; other trap types will be dismantled.
- Data will be collected and managed in SMART, using devices with SMART Mobile installed.

**Annex 2:** Figure 1. Layout of camera-trap stations for camera trapping in DCKNTNR set up and retrieved in 2022



# **Annex 3: STATEMENT OF AVAILABILITY**

I (We)	, the ur	ndersigned		
			` '	re available to conduct end-line th to April 2024 (18-20 days)
	No	Expert's Name	Title/Position	Duration
	1			
	2			
	3			
perfor	mance	of the services may lea	- '	s) listed above available for the f the Contract if the justification vance
Signat	ures:			
Date:				