



STANDARD OPERATION PROCEDURES FOR THREATS ASSESSMENT SURVEYS FOR SKYWALKER GIBBONS

THE MYANMAR SKYWALKER GIBBON CONSERVATION PROJECT

April 2021



Suggested citation: Thompson C., Aung P.P., Grindley M., Lwin N., Aung T.H., Fan, P., Turvey S., Smiley-Evans T. Standard Operation Procedures for Threats Assessments for Skywalker Gibbons. (2021). The Myanmar Skywalker Gibbon Conservation Project. <http://skywalkergibbon.org>

Authors: Carolyn Thompson, University College London and ZSL's Institute of Zoology
Pyaephyo Aung, Nature Conservation Society Myanmar
Mark Grindley, Fauna & Flora International Myanmar
Ngwe Lwin, Fauna & Flora International Myanmar
Tin Htun Aung, Nature Conservation Society Myanmar
Peng-Fei Fan, Sun Yat-Sen University
Samuel Turvey, ZSL's Institute of Zoology
Tierra Smiley Evans, Wildlife Health Center, University of California, Davis

The program: These standard operating procedures are an output of the Myanmar Skywalker Gibbon Conservation Project, a joint initiative of the Nature Conservation Society Myanmar (NCSM), University of California Davis School of Veterinary Medicine (UCD), IUCN Section on Small Apes (SSA), Friends of Wildlife (FOW), Fauna & Flora International (FFI), Wildlife Conservation Society (WCS), Sun-Yat-Sen University, the German Primate Center and the California National Primate Research Center.

Funded by: Arcus Foundation Great Apes Fund

IUCN Section on Small Apes

INTRODUCTION

The Myanmar Skywalker Gibbon Conservation Project (MSGCP) is a collaboration between Burmese, Chinese and international NGOs and institutions aiming to address knowledge gaps and implement evidence-based holistic solutions to ensure the survival of the Skywalker Hoolock gibbon (*Hoolock tianxing*). The success of sustainable solutions for human-gibbon co-existence often benefits from local community involvement.

There are several books explaining the basics of anthropological methods in the form of community surveys (i.e. interviews, focus group discussions etc.) (Bernhard et al., 2018; Newing et al., 2011), as well as published articles studying local communities surrounding Skywalker gibbon habitat (Turvey et al., 2017; Zhang et al., 2020). This SOP is not designed to replace these foundational documents. Please consult these works for explanations of popular methods and the rationale behind them. We aim here to outline the minute details that are often omitted or not explained in full within these articles but are crucial for accurate and successful community surveys.

The goal of community surveys are to help target forested areas for gibbon population surveys and to understand the most important threats facing gibbon populations in Myanmar. Villages near forested areas suspected to have Skywalker gibbons present will be prioritised for community surveys. Two approaches (focus group discussions and individual semi-structured interviews) will be taken to maintain confidentiality for potential illegal activities and to ensure the most accurate information is collected. These methods, especially the line of questioning, should be piloted first to ensure accurate information is captured whilst also being sensitive to traditions and practices.

BASIC APPROACH FOR FOCUS GROUP DISCUSSIONS ON GIBBON LOCATIONS

Community groups will consist of a combination of community leaders and local villagers. Hunters will not be specifically targeted for these focus groups to avoid undue disclosure of gibbon locations. A minimum of five individuals will be selected for each focus group based on discretion of the local leader.

Using A2-A0 sized paper, participants will first be asked to do an initial sketch of the area (including topological features such as mountains, forests, rivers, villages etc.). This is an important stage of the process as it captures additional information and ensures participant understanding of scrutinising maps. After which, researchers can 'ground-truth' the sketched maps to ensure accuracy. This can be done using Google Earth 3D

or even a topological map overlay (1:50,000 sheets are available digitally for all Myanmar, but can be printed and laminated in advance). It is important to note that Google Earth is not always practical in the field.

The topological or Google Earth map can then be used to share images of local forested areas and to prompt questions about prominent landmarks, portions of the forest visited and reports of gibbon presence. Reported presence of gibbons will be marked on the map and downloaded as a single file which will represent the data entry form for this interview. Where appropriate, additional notes can be made by the interviewer or an assistant who acts as an observer only.

Information to ask about gibbon presence and location of key threats and landmarks:

1. What areas of the forest are visited by members of the community?
Ask participants to i) outline areas of forest visited; ii) name these forest areas; and iii) highlight other key forest landmarks and mark these on the topological / Google Earth map.
2. How frequent do members of the community visit these parts of the forest?
Ask participants to rank each outlined area as: daily, once per week, once per month, once per year.
3. How often have you heard gibbon calls at this sight and when was the most recent date?
Ask the participants to go through each outlined forest area systematically.
4. How many individuals / groups do you believe you have heard?
Ask the participants if they have visualised multiple individuals or heard calls.
5. Are there any sites which used to have gibbons but are there no longer?
 - a. If yes, when was the last time that gibbons used to be there?
 - b. If yes, why do you believe they are gone?
Prompt: Were there changes in hunting intensity, human forest use, deforestation?
6. What areas of the forest have new human settlements established within the last five years?
Ask participant to outline areas on the topological / Google Earth map.
7. *Show participants areas on the map representing recent forest loss. For each area ask the following:*
 - a. Was this forest loss due to shifting agriculture?
 - i. If so, what crops?
 - b. Was this forest loss due to small, individual household farming?
 - i. If so, what crops/animals?
 - c. Was this forest loss due to commercial / industrial farming?
 - i. If so, what crops/animals?

- d. Was this forest loss due to logging?
8. *Show participants areas on the map representing mining & quarrying. Are these areas correct? Ask participants to define what is mined / quarried at each site.*
9. *What regions of the forest have burned in the last year? Ask participants to outline areas of forest on the topological / Google Earth map.*

BASIC APPROACH FOR SEMI-STRUCTURED INTERVIEWS

1. Select informants to be interviewed based on likelihood to be engaged in activities placing threats on gibbons (e.g. hunting, logging, forest disturbance etc.). Participants must be 18 years or older and only one person per household should be interviewed to ensure independence of responses. Both men and women may be interviewed. See interview scripts in Appendix I.
2. Arrange a place and time for the interview that is convenient to the informant and where they will feel at ease, there will be minimal interruptions and there will be sufficient light and space to work.
3. Introduce yourself and describe the purpose of the interview. Discuss the confidentiality of responses. Offer relevant information about how the results will be used and answer any questions.
4. Ensure the informant is comfortable throughout the interview or survey. Provide something to drink or eat, if appropriate.
5. Be conscious of time and try not to conduct the interview longer than a reasonable time (less than 45 minutes is generally recommended).
6. Take notes during the interview or survey. Write them up as soon as possible after it is completed while it is still fresh in your mind. If possible, audio record the interviews (responses will then have to be transcribed later). Majority of respondents may not feel comfortable with this, however.
7. Record any visualisation diagrams developed during the interview.
8. Carefully review and analyse the interview notes to identify key statements, issues and patterns that relate to the stakeholder groups and parameters, as discussed.

FIELD ASSESSMENTS

Certain threats are best assessed through field assessments without directly engaging communities. Field teams will be asked to explore local areas surrounding forest habitat for assessment to understand local industries

present, markets and other potential threats from the community. These investigations will need to be done casually without drawing undue attention to the field teams. Checklists for field assessments are in Appendix II.

REFERENCES

This guide is intended as a quick reference for field teams. For more detailed descriptions of community survey and threats assessment methodology please reference:

- Bernard R.H. (2018). *Research Methods in Anthropology: Qualitative and Quantitative Approaches*, 6th edn., Maryland, USA: Rowman and Littlefield.
- Newing H., Eagle C.M., Puri R.K. and Watson C.W. (2011). *Conducting research in conservation: A social science perspective*, Routledge: UK, USA, Canada.
- Turvey S.T., Bryant J.V., Duncan C., Wong M.H.G., Guan Z., Fei H., Ma C., Hong X., Nash H.C., Chan B.P.L., Xu Y. and Fan P. (2017). How many remnant gibbon populations are left on Hainan? Testing the use of local ecological knowledge to detect cryptic threatened primates. *American Journal of Primatology*, 79: e22593.
- Zhang L., Guan Z., Fei H., Yan L., Turvey S.T. and Fan P. (2020). Influence of traditional ecological knowledge on conservation of the Skywalker hoolock gibbon (*Hoolock tianxing*) outside nature reserves. *Biological Conservation*, 241: 108267.



Male and Female pair of *Hoolock tianxing*. Photo: Professor Fan Peng-Fei

APPENDIX I

INDIVIDUAL QUESTIONNAIRE

Date: _____ Interviewer(s): _____ Village/Town: _____

State/Region: _____ Coordinates/Point: _____

PLEASE READ TO PARTICIPANT:

The purpose of this study is to better understand your community's interactions with wildlife. Before you decide if you want to participate, we will explain the research study to you. Once you understand what it involves, including the risks and benefits, you can make an informed decision. This is what we call informed consent. Your decision to take part in the study is entirely voluntary. This means that you are free to choose whether or not you want to participate. If you agree to participate in this research, you will be asked to answer a questionnaire. You will be asked questions about primates within and nearby your community. People age 18 and above may participate.

PRIVACY AND CONFIDENTIALITY

To minimize the risks of breach of confidentiality, we will not collect your name or use your name or any identifying information.

BENEFITS

You will not benefit directly from your participation in this discussion, but by sharing your experiences, you may help us to discover ways to better protect wildlife and the forest.

COMPENSATION

We will provide refreshments during the interview. At the end, you will receive a small token of appreciation for your participation. We will not pay you to take part in this study.

RIGHT TO WITHDRAW FROM THE STUDY

Participation in this research study is completely voluntary. You are free to decline to take part in the project. You can decline to answer any questions and you can stop taking part in the focus group at any time.

IF YOU HAVE QUESTIONS OR CONCERNS

If you have any questions about this research, please ask them now.

If you have questions about this study after we are gone, you may contact:

Pyaephyo Aung, Nature Conservation Society Myanmar: pyaephyoaung@ncsmm.org

- 1. Are you willing to participate in this survey? () YES () NO**
- 1a. Have you been interviewed about wildlife before? () YES () NO, *go to Section 2.*
- i. Who came to speak with you? _____
- ii. What did they speak to you about? _____

2. PERSONAL INFORMATION

- 2a. Age: _____
 2b. Ethnicity: _____
 2c. Religion: _____
 2d. Gender: () MALE () FEMALE () OTHER: _____
 2e. Highest level of education? () NONE () PRIMARY () SECONDARY () HIGH
 () COLLEGE () UNDERGRAD () POSTGRAD () OTHER: _____

3. LIVELIHOOD AND FOREST ACTIVITIES

- 3a. Primary occupation? _____
 3b. Are you retired? () YES () NO
 3c. What is your annual household income? _____
 3d. How often do you visit the forest? _____
 3e. Do you visit the forest () more or () less than you did 5 years ago?
 3f. Why do you visit the forest? () HUNTING () LEISURE () AGRICULTURE
 () COLLECTING PRODUCTS () OTHER: _____
 3g. How many people around your village hunt? () NONE () FEW () HALF () MOST
 () NEARLY ALL () ALL () DON'T KNOW
 3h. Do you hunt?
 () NO, BUT I USED TO.
 () YES, go to 3j.
 () NEVER, go to Section 4.
 () NO COMMENT, go to Section 4.
 3i. When did you last hunt? () <1 year () 1-5 years () 5-10 years () 10+ years
 3j. How long were/have you been a hunter? () <5 years () 5-10 years () 10+ years
 3k. What are/were your main reasons for hunting? () INCOME () SUBSISTENCE
 () OTHER: _____
 3l. Do/did you hunt all year round? () YES () NO, PLEASE GIVE DETAILS: _____
 3m. How often do/did you hunt? _____
 3n. Where do/did you hunt? *Indicate on map.* () AROUND VILLAGE, EST. DIST. (Km): _____
 () NON-LOCAL FOREST, EST. DIST. (Km) & DETAILS: _____ () OTHER: _____
 3o. How many hours on average do/did you hunt during one trip? () <5 () 5-12 () 13-24 () >24
 3p. What kind of weapon do/did you use for hunting? *Tick all that apply.*
 () GUNS () DOGS () TRAP () CROSSBOW () SNARES () OTHER: _____
 3q. What species are/were your main target (*list all mentioned*)? _____
 3r. Have you ever sold the meat or any part of the animal you hunted? () YES () NO () DON'T KNOW

NAME OF SPECIES	WILDLIFE PART (e.g. skin/fur, brain, whole animal etc.)	USE OF WILDLIFE (e.g. medicinal, [be specific] food, etc.)	PRICE (KYATS)	SOLD TO WHOM (e.g. Local neighbour, middleman etc.)	SOLD TO WHERE (Village, Township, State)

4. GIBBON KNOWLEDGE

- 4a. Can you identify this animal? *Show photo of Skywalker gibbon.* () YES () NO
i. If YES, what is it called? *Please list all names.* _____
ii. Does it have a tail? () YES () NO () DON'T KNOW
- 4b. Can you identify this animal? *Play Skywalker vocalisation.* () YES () NO
i. If YES, what is it called? *Please list all names.* _____
- 4c. How do you know about it? *Tick all that apply.*
() SEEN IN ZOO
() SEEN IN WILD: WHERE AND WHEN WAS THE LAST TIME? _____, _____
() SEEN ON TV
() SEEN IN A BOOK
() AWARENESS INITIATIVE: WHICH? _____
() HEARD IN WILD: WHERE AND WHEN WAS THE LAST TIME? _____, _____
() SOMEONE TOLD ME ABOUT IT: WHO? _____
() DON'T KNOW
() OTHER: _____
- 4d. Have you ever heard of people hunting gibbons? () YES () NO () DON'T KNOW
i. If YES, when did they last hunt gibbons? _____
ii. If YES, why do they hunt gibbons? _____
iii. If YES, where? _____
- 4e. Have you ever heard of people hunting other primate species? () YES () NO () DON'T KNOW
i. If YES, what species? _____
ii. If YES, when did they last hunt other primates? _____
iii. If YES, why do they hunt other primates? _____
- 4f. Are there any local taboos against hunting gibbons? () YES () NO () DON'T KNOW
i. If YES, what are they? _____
- 4g. Do you know any stories, myths or legends about gibbons? If so, can we hear one?

- 4h. Do you think gibbon numbers are: () INCREASING () STABLE () DECREASING () EXTINCT
() DON'T KNOW
i. Can you please explain your response? _____
ii. If applicable, when did this change happen? _____
- 4i. Are gibbons protected? () YES () NO () DON'T KNOW
i. If YES, what is their protected status in Myanmar? _____
ii. If an animal is protected, what does that mean? _____
- 4j. Do you think it is important to protect gibbons? () YES () NO () DON'T KNOW
iii. Can you please explain your response? _____
- 4k. What are the main threats to gibbons? _____

5. PROTECTED AREAS (PA) AND CONSERVATION KNOWLEDGE

- 5a. What does "nature conservation" mean to you? _____
- 5b. What does "extinction" mean to you? _____
- 5c. Are there PAs (national parks, reserve forest, wildlife sanctuaries) close to where you live?
() YES () NO () DON'T KNOW
i. If YES, what are the PAs called? _____

- 5d. Do you think PAs are important? YES NO DON'T KNOW
 i. Why? _____
- 5e. Do you know where the boundary of the PA is? YES NO
 i. Please describe and/or indicate on the map? _____
- 5f. Do you know why the PA was established? *Tick all that apply.* PROTECT ANIMALS
 PROTECT TREES/VEGETATION HUMAN LEISURE OTHER: _____
- 5g. Since the PA was established, has it led to changes in the following? *Tick all that apply.*
 YOUR INCOME YOUR LIVELIHOOD AMOUNT OF TIME YOU SPEND IN FOREST
 YOUR FOREST ACTIVITIES WHERE YOU GO IN FOREST NO CHANGE
 OTHER: _____
 i. Can you elaborate on these changes? _____
- 5h. When the PA was established, did it include part of your land? YES NO DON'T KNOW
- 5i. Were you offered any form of compensation/benefits? YES NO DON'T KNOW
 i. If YES, what compensation/benefits were you offered? _____
- 5j. Do you know of any regulations laid down by the PA? *Tick all the interviewee says.*
 NO LOGGING NO GATHERING FUEL WOOD NO SLASH-AND-BURN
 NO GRAZING NO HUNTING NO PRODUCT COLLECTION
 OTHER: _____
- 5k. Were you/your community ever involved in decisions about the park? YES NO DON'T KNOW
- 5l. Would you like to be involved in decisions? YES NO DON'T KNOW
- 6. FOREST COVER CHANGE AND HABITAT QUALITY**
- 6a. Do you think forest cover is: INCREASING DECREASING UNCHANGED DON'T KNOW
- 6b. Do you know the causes of forest change? YES NO
 i. If YES, what are they? _____

Thank you for your participation.

APPENDIX II FIELD ASSESSMENT CHECKLIST

Tourism active in forest area (e.g. are individual tourists or group tours present? Is there evidence of tourism in the area, i.e. hotels, tourist sites etc.?) Specify _____.

Recreation site in forest area (e.g. recreational hunting, hiking etc.) Specify _____.

Industry present within 5 km of forest area (e.g. mining, logging, roadworks etc.). Specify _____.

Recent visible logging. Specify location _____.

Open markets with animals or animal parts or products for sale. Specify location _____.

Species Available for Sale	Quantity Available	Cost \$

Concealed markets with animals or animal parts or products for sale. Specify location _____.

Species Available for Sale	Quantity Available	Cost \$

Individuals selling animals or animal parts or products. Species location _____.

Species Available for Sale	Quantity Available	Cost \$

Temporary venues (e.g. festivals, mobile markets, special events) with animals or animal parts or products for sale. Species location _____.

Species Available for Sale	Quantity Available	Cost \$