



# THAILAND CONSERVATION AND DEVELOPMENT PROGRAM

# **Project Proposal**

Title	Preliminary status review for Hylobates lar carpenteri in Thailand				
Location	Mae Hong Son, and Chiang Mai provinces, Northwest Thailand				
Date/ duration	May 2012 to October 2012				
Submitted by	Mark Grindley, Saw Blaw Htoo and Waiying Thongbue				
Contact person	Mark Grindley, People Resources and Conservation Foundation (PRCF)				
Applicant organization	Karen Environmental and Social Action Network (KESAN), to be implemented by the WISE Foundation with technical support from the People Resources and Conservation Foundation (PRCF)				
Total budget	THB 140,700	3 140,700 CHF 4,175			

## 1. Summary

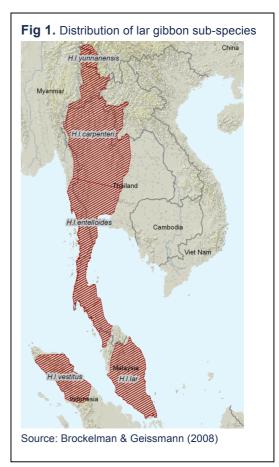
Geissmann (2007) reports that all gibbon populations are now endangered with extinction. Conservation actions are therefore essential for the survival of this whole family of primates. In many cases, successful interventions have begun with conservation status assessments that have helped prioritize sub-populations and interventions, and to raise awareness and concern (e.g., Geissmann *et al.*, 2000; Duckworth, 2008).

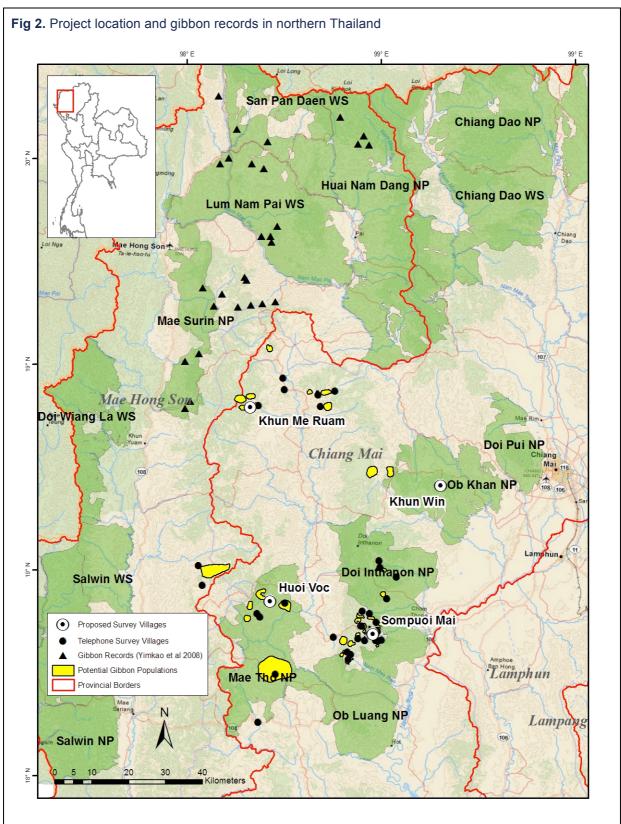
We present here an argument for preliminary research to better establish the status of Carpenter's White-handed Gibbon (*Hylobates lar carpenter*), and to identify actions for its protection.

## 2. Background

During the Asiatic Primate Expedition of 1937-1938, 92 specimens of *Hylobates lar* were collected at two sites in northern Thailand: Doi Chiang Dao and Doi Inthanon (Guatelli-Steinberg 2000). Groves later described the subspecies *carpenteri* – Carpenter's Lar – based on these specimens (Groves 1968).

The geographical distribution of Carpenter's Lar has been somewhat contentious. Geissmann (1995, p.474) gave *H. I. carpenteri* as occurring in "Northern Thailand" only, though Brandon-Jones *et al.* (2004, p.149) expanded this to "Eastern Burma, Western Laos, and Northern Thailand". Brockelman & Geissmann (2008) agree with Brandon-Jones *et al* (2004), but provide a more detailed range map (Fig.1).





Source: Project Data. Prepared by Mark Grindley/PRCF.

Note: Gibbon Records from Yimkao et al (2008) are approximate and symbols represent only general location of records, not the number of records. 'Potential Gibbon Populations' are approximate areas where telephone interviews in 2011 suggested gibbons were present. In the absence of further records, we currently propose that surveys be centered on the four Proposed Survey Villages, though this focus may be changed following further telephone interviews.

The commonly accepted range for Carpenter's Lar (Brockelman & Geissmann 2008) has as its northeastern extent the Mekong River, which is the species boundary with Nomascus gibbons. At the northern extent the boundary with *H. I. yunnanensis* roughly follows the China-Myanmar border, and encompasses Myanmar's Shan state east of the Salween, which is the species boundary with Hoolock gibbons (genus Hoolock). By contrast, with no major geographic feature marking the transition between *caprtenteri* and *entelloides*, the southern extent is a rather arbitrary boundary in central Thailand. Large parts of this range are now devoid of suitable forest (Stibig et al 2003), and the subspecies is current considered Endangered, as it is believed to have undergone a decline of more than 50% in the last three generations (45 years) due to "rampant forest loss and loss of mature individuals due to hunting" (Brockelman & Geissmann 2008). The majority of the remaining habitat appears to be in northern Thailand, primarily in only three provinces: Chiang Mai, Mae Hong Son and Tak to the south, of which the least is currently known about Tak. There is also a possibility that some animals may remain in Burma's Shan state, east of the Salween River, but due to conflict in that part of the country currently only Thailand is secure enough to consider field surveys or conservation interventions.

## 2. Rationale

Tilson et al (1993) estimated the total population of all lar sub-species in Thailand to be around 110,000, though there has been little work on *Hylobates lar carpenter* and the current status – population size, distribution and threats – of the sub-species is little known.

Following the first documented study of gibbons in northern Thailand (Carpenter 1940; in Yimka et al 2008), the most significant other studies to date did not occur until the early 2000s. Srikosamatara et al (1999) and Yimkao & Srikosamatara (2006) both looked at relatively small parts of Mae Hong Son province in the far northwest of the country, and found pockets of the animals very close to ethnic Karen villages. This work was later expanded (Yimkao et al 2008) through 53 village interviews in four districts in Mae Hong Son, within which the authors identified 293 gibbons in 66 groups and 33 sub-populations (Fig 2). While worrying low, these figures certainly do not account for all gibbons in the province, as the survey covered less than 50% of the area and only a small number of the villages. But it did indicate that gibbon populations, even in and around protected areas, were small and fragmented, and at risk from further fragmentation and hunting (Yimkao et al 2008).



With a crises seemingly looming for Carpenter's Lar, we began to take an interest in the species in 2009, initially compiling the available records and mapping the distribution. This indicated that the species has been recorded in 16 protected areas in the north of the country, the majority of which are in the north west and along the western border with Burma (Mesher & Grindley 2010). This part of the country is home to most of the nation's ethnic Karen (Fig 3). The Karen are widely believed to have traditional prohibitions on hunting gibbons (Steinmetz & Mather 1996, Saw Blaw Htoo & Grindley 2010), while other groups generally do not (Yimkao et al 2008).

Although our current knowledge on the distribution of Carpenter's Lar is incomplete, we do find that more animals seem to persist in Karen areas than those of the other major groups in northern Thailand, particularly Blue H'mong, who are more active hunters Yimkao et al (2008). Indeed, our initial assessment of current records (Mesher and Grindley 2010) shows they may either have been eradicated or at least significantly depleted in Doi Pui, Doi Inthanon and Doi Chiang Dao protected areas, both areas dominated by H'mong. Sadly, the last two of these are the original type locality. On the other hand, Yimkao et al (2008) note that Karen villages adjacent to gibbons not only have developed "compassion" for the animals but also a propensity to conserve them. Based on current evidence, we too find a compelling argument to engage with ethnic Karen communities to help build on traditional beliefs and knowledge and any pre-existing desire to protect the species and its habitat.

To expand on the work of Srikosamatara et al (1999), Yimkao & Srikosamatara (2006) and Yimkao et al 2008, one of the project partners, the WISE foundation, conducted telephone interviews with 35 Thai-Karen villages within their network. WISE is a Karen community based organization, and the survey aimed to help establish the distribution and status of gibbons in a larger area of northwest Thailand than previously known. All the villages surveyed so far are in Chiang Mai province, and the results have allowed us to begin mapping possible gibbon locations (Fig 2). This data has provided evidence for locations suitable for the long-term protection of the species, which now require field visits.

Under the current proposal, we aim to expand on telephone interviews on gibbon distribution to southern Mae Hong Son and northern Tak provinces, and to make rapid field visits to confirm what areas retain viable gibbon populations with manageable threats. Of particular interest is the Om Goi Forest complex in central Tak province (not shown in Fig 2), Which could contain the largest single population of *H. I. carpenteri* in Thailand (Mesher and Grindley 2010). We also aim to augment the distribution data with a telephone survey of the 50 or so Thai protected areas known to be in the range area. By involving Thai Karen communities in this research we will build on the existing relationship between the group and the species, and hopefully provide more options for strong, locally relevant conservation actions.

### 3. Aim

To improve information on the status of *Hylobates lar carpenteri* in northwest Thailand and to identify at least one viable population and any necessary conservation interventions.

#### 4. Objectives

In line with the above aim, the project holds for main objectives as follows:

- Complete village telephone survey in central Chiang Mai province, and expand it to Mae Hong Son and northern Tak provinces.
- Complete a telephone survey of protected areas in the range of Carpenter's Lar in Thailand
- Train WISE Foundation in the conduct of rapid gibbon field surveys and threats assessments.
- Conduct at least three field surveys in areas previously identified as containing significant numbers of gibbons in villages in Chiang Mai province.
- Identify one priority site and conduct participatory planning for conservation actions at the site.

#### 5. Description

The telephone interviews will be conducted by the Research Assistant, under the supervision of the Research Leader. WISE already has contact details for several hundred villages with its network, which can be reached through district facilitators. As gibbon distribution is now so fragmented and populations so small, we prefer not to use a random sampling frame but to request district supervisors to suggest which villages are known to support gibbons or at least be near forest. We assume this use of local knowledge will help ensure that we only include villages in areas with gibbons, and that we will have data from a higher number of villages from those areas.

We will survey at least 50 more villages under the project. There are also at least 50 protected areas within the range of *H. I. carpenteri*, all of which we assume have a permanent staff and office. The project will therefore also conduct a telephone questionnaire survey with these parks, following a similar methodology to that used by Phoonjampa & Brockelman (2008). We will aim to contact all the parks, and expect a response rate of over 50%. He results will provide an indication of which sites might be followed up with site visits at a later date.

Following surveys, we will train WISE staff for three days about rapid gibbon surveys. The trainers are Mark E. Grindley and Saw Blaw Htoo, and training will be at the WISE Office in Chiang Mai. After the training the research team will go to the villages where the gibbon research is taking place. Villages will be selected based on the results of the telephone interviews, but based on current evidence we would favor the sites indicated in Fig 2.

Firstly the team member will meet with villagers and find out about the suitable locations where the gibbon could be sighted. Then the team will leave for five survey days, to be accompanied by local guides familiar with the gibbon locations. After, the survey the team will come back to the village again and hold a meeting to discuss results and identify villagers who are willing to be involved in conserving and monitoring the remaining gibbon population, should that seem desirable and feasible.

The current plan is for the first village meeting to take place at Huay Som Poi community, with six villages invited, comprising 12 representatives including four women and eight men. The second meeting is proposed to take place in Mae Lo Kee communities with three villages invited, comprising 12 representatives, four women and eight men. The third workshop will take place at Mu Wee Kee, only one village, with 12 villagers comprising three women and nine men. This plan may be revised following additional telephone interviews.

During the second meeting with each group, the survey team will help villagers to define some local policies that will decrease the threat to the local gibbon population, based on a participatory threats assessment. This will be repeated in at least three villages or village clusters. Then the team will return to Chiang Mai and put the data together to make a report. A final workshop will be held with concerned villages and local government representatives.

Activity	Duration	Month	Who	Where	
Completion of village telephone survey	20 days	Мау	WISE Team	Chiang Mai office	
Completion of telephone protected area survey	10 days	June	WISE Team	Chiang Mai office	
Training for staff	2 days	July	Mark Grindley, Saw Blaw Htoo,	Chiang Mai	
Field research	11 days	Aug	Field Team	Research sites	
Results/ planning workshop	1 day, plus travel	Sep	Mr. Waiying, local stakeholders	Research site	
Report writing	One month	Sep - Oct	Project supervisors	Chiang Mai	

## 6. Schedule

## 7. Outputs

The project will result in four major outputs, as follows:

- Draft Hylobates lar carpenteri status review
- Telephone interview data for 30 additional villages
- Field results from three sites; gibbon populations, population estimates, threats
- Action plan for at least one survey area

## 8. Partners and staff

The research will be supervised by Waiying Thongbue, who has 20 years of experience working with the Karen Network for Culture and Environment (KNCE) in 15 provinces in Thailand. He is now a Board member and advisor for WISE Foundation, and was the researcher who compiled the current database of gibbon records from 35 villages. Mr. Thongbue has a masters degree in sustainable land use management and planning from Chiang Mai University, and is interested in promoting sustainable

resource management in Thai Karen areas based on indigenous knowledge, through community empowerment, cultural preservation and research.

Technical support, village survey and threats assessment design and training will be provided by Mark E. Grindley (PRCF) and Saw Blaw Htoo (KESAN), who between them have considerable experience of designing and conducting gibbon research and conservation programs (see Saw Blaw Htoo and Grindley 2010, and the April 2010 proposal to the Gibbon Conservation Alliance for gibbon conservation in Karen state, Burma). Mr Grindley and Mr. Saw Blaw Htoo will also be responsible for overseeing data analysis, mapping, and reporting.

In the field, one assistant researcher from WISE Foundation will conduct research, and two local 'experts' identified in each of the three research sites. Following training, the assistant researcher will lead the fieldwork with supervision from Mr. Thongbue.

## 9. Budget (THB)

Item Description		Unit	Quantity	Unit Cost	Sub-Totals*	
			(No. Items)	THB	THB	
A Personnel (non-project personnel)						
1	1 Mr Mark E Grindley, Trainer and Advisor		15	0	-	
2	Mr Saw Blaw Htoo, Trainer and Advisor	Day	15	300	4,500	
	Mr Waiying Thongbue, Research Leader	Month	3	4,500	13,500	
	Assistant Researcher	Day	45	200	9,000	
	Local village counterparts (three sites x2)	Pers-Day	60	200	12,000	
	Forest Department counterparts	Pers-Day	20	200	4,000	
7	Village meetings (3 villages x 2 meetings)	Meeting	6	1,000	6,000	
	Sub-total (a):				49,000	
В	Logistics (e.g., transport, communications)					
1	Fuel for motorbikes, and cars	Vehicle-Day	50	300	15,000	
2	Car rental	Vehicle-Day	30	0	-	
3	Food for field work	Pers-Day	135	100	13,500	
4	Telecommunications	Month	4	2,500	10,000	
5	Accommodation	Pers-Day	120	0	-	
	Sub-total (b):				38,500	
С	C Materials (e.g., copies, utensils, film)					
1	Training materials	Lump Sum	1	1,000	1,000	
2	Awareness materials printing	Lump Sum	1	3,000	3,000	
	Binoculars	Pair	3	3,000	9,000	
4	GPS	ltem	1	4,000	4,000	
5	Camera with 18 x zoom	ltem	1	9,000	9,000	
6	Reference books	Lump Sum	1	3,000	3,000	
7	Batteries (GPS, camera etc)	Month	1	1,500	1,500	
	Sub-total (c):					
D	Other Costs (not within the above categories)				30,500	
1	Contribution to KESAN rent	Month	2	2,000	4,000	
2	Meeting to discuss results, action plan	Lump Sum	1	6,000	12,000	
	Sub-total (d):				16,000	
	Sub-total (THB)				134,000	
	Administration overhead (5%)				6,700	
Total (THB)					140,700	
	Total (Swiss Franks 1 = 33.7 THB)				4,175	
	total (US dollars 1 = 30.7 THB)					
* En	* Empty fields (unit cost = zero) represent in kind contributions from project proponents					

\* Empty fields (unit cost = zero) represent in-kind contributions from project proponents

#### 10. References

- Brandon-Jones D, Eudey AA, Geissmann T, Groves CP, Melnick DJ, Morales JC, Shekelle M, Stewart C-B (2004). Asian primate classification. *Int J Primatol* 25(1):97-164.
- Brockelman W and Geissmann T (2008). *Hylobates lar* ssp. *carpenteri*. In: IUCN 2011. IUCN Red List of Threatened Species. Version 2011.2. <www.iucnredlist.org>. Downloaded on 25 November 2011.
- Carpenter C (1940). A field study in Siam of the behavior and social relations of the gibbon (*Hylobates lar*). *Comparative Psychology Monographs* 16(5): 1-212.
- Duckworth JW (2008). Preliminary Gibbon Statue Review for Lao PDR 2008. Fauna and Flora International, unpublished report
- Geissmann T (1995). Gibbon systematics and species identification. *International Zoo News* 42: 467-501.
- Geissmann T (2007). Status reassessment of the gibbons: results of the Asian primate red list workshop 2006. *Gibb J* 3:5-15.
- Geissmann T, Nguyen Xuan Dang, Lormee N and Momberg F (2000). Vietnam Primate Conservation Status Review Part 1: Gibbons. Flora and Fauna International, Indochina Programme, Hanoi
- Groves CP (1968). A new subspecies of white-handed gibbon from northern Thailand, *Hylobates lar carpenteri* new subspecies. *Proceedings of the Biological Society of Washington* 81: 625-628
- Guatelli-Steinberg D (2000). Linear Enamel Hypoplasia in Gibbons (*Hylobates lar carpenteri*). *American Journal of Physical Anthropology*, 112:395–410
- Mesher G and Grindley ME (2010). Status of *Hylobates lar carpenteri* (version 2.1). Unpublished PowerPoint presentation. People Resources and Conservation Foundation (PRCF), Chiang Mai, Thailand
- Phoonjampa R and Brockelman W (2008). Survey of pileated gibbon *Hylobates pileatus* in Thailand: populations threatened by hunting and habitat degradation. *Oryx* 42 : pp 600-606
- Tilson R, Castle K, Supriatna J, Gurmaya KJ, Brockelman W and Tunhikorn S (1993). Multidisciplinary strategic planning for gibbon conservation in Thailand and Indonesia, pp 177-197 in Wallis RA (Ed), *Primate Conservation: The Role of Zoological Parks*
- Srikosamatara S, Naosawat S, Laoyeepa S and Suteethorn V (1999). Status of mineral licks and wildlife in Mae Hong Son and their potentials for ecotourism industry, pp. 826-831 in Maimai, V et al (eds). Research reports on biodiversity in Thailand. Biodiversity Training Program (BRT), Bangkok, 892 pp.
- Saw Blaw Htoo and Grindley, M. (2010). Hoolock Gibbon and Biodiversity Survey on Khe Shor Ter Mountain, Nattaung Range, Luthaw Township, Mudraw District, Karen State, Myanmar. Myanmar Primate Conservation Program Report No. 11. People Resource and Conservation Foundation (PRCF) and Karen Environmental and Social Action Network (KESAN)
- Stibig H-J, Roy PS, Upik R, Agrawal S, Joshi P, Beuchler R, Hildanus and Mubareka S (2003). Land cover map for South and South East Asia in the year 2000 v.2. GLC 2000 data-base, European Commission Joint Research Centre
- Yimkao P and Srikosamatara S (2006). Ecology and Site-based Conservation of the White-handed Gibbon (*Hylobates lar* L.) in Human-use Forests in Mae Hong Son Province, Northern Thailand. *Nat Hist Bull Siam Soc* 54(1): 109-138
- Yimkao P, Naksamrit J and Srikosamatara S (2008). Roles of Communities and Impassioned Individuals in Conservation of Gibbons (*Hylobates lar* L.) in Upper Mae Hong Son Province, Northern Thailand. *Nat Hist Bull Siam Soc* 56(1): 69-83