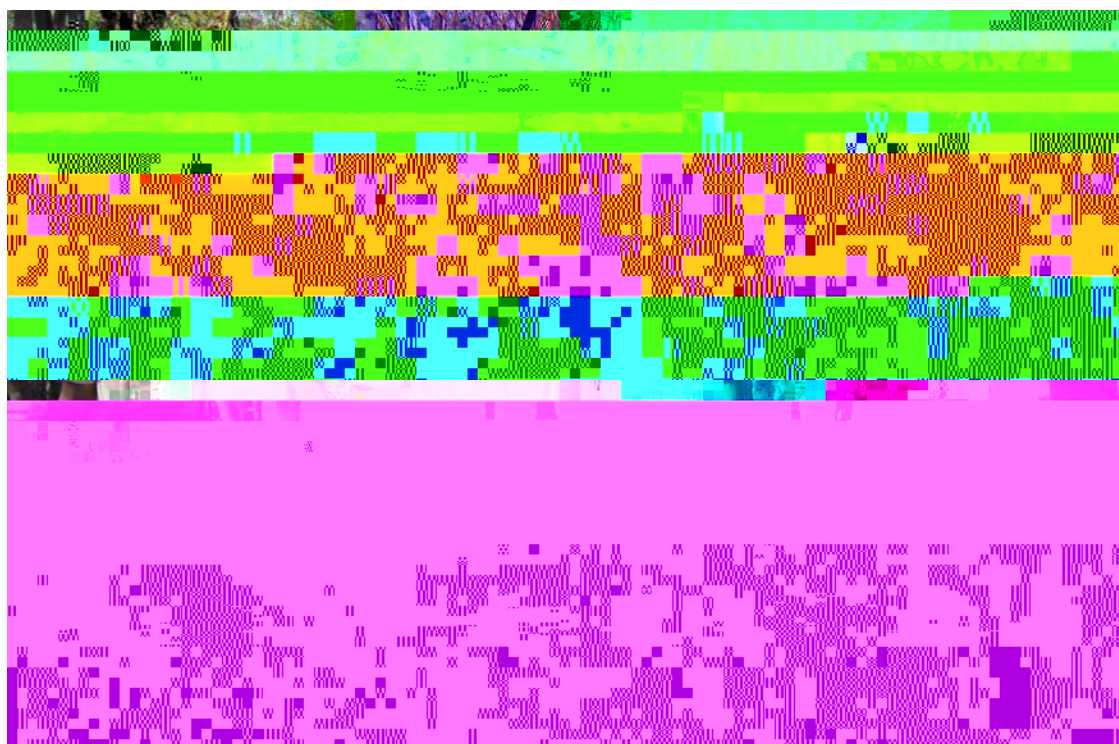


Gibbon Surveys

Nam Phui National Protected Area and Dong Khanthung Provincial Protected Area



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With funding support from the United States Embassy to Lao PDR and
Fauna & Flora International (FFI)

June 2010

List of Figures

Figures	Page
Figure 1. Map of NPAs and Gibbon distribution in Lao PDR.....	12
Figure 2. Photo of juvenile male White-handed Gibbon taken at Nam Phui NPA Office (left), Juvenile male Pileated Gibbon at Ban Mai, Moun District, DKT (right).....	13
Figure 3. Gibbon survey team in Dong Khanthung, in front of <i>Sala loamchai</i> or Friendship Meeting Point at the Lao-Thai-Cambodia border.....	14
Figure 4. Gibbon survey team in Dong Khanthung, discussing the survey plan and transect walks from Ban Peao to Ban Thahin. Below is another team going to Nang Ing sector. Tractors were used when a car could not access the deeper forest.....	14
Figure 5. Nam Phui NPA staff reading map to check the survey routes, at Nam Lop survey camp, Mr. Somsouy and Keomaniphone	

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Threats to the gibbon population in Nam Phui NPA are hunting and habitat loss from forest fires, which makes habitat ranges smaller and limits the availability of food sources.

birds, as well as forest birds. It is highly important that the area is established as a conservation area with national and international recognition. The conservation of forests and wildlife communities in this area of Lao PDR can also benefit conservation values in the region. Ideally, the area is best suited to be labeled a National Wildlife Sanctuary. Designing it as a conservation area will require having corridor zones connecting all six sectors identified in Dong Khanthung. However, preparations for proposing it to be a conservation area will take time; in the meantime the Protected Area Management Division of Champasak as well as the Provincial Agriculture and Forestry Office should inform local authorities about the specific conservation needs of gibbons as well as other key protected wildlife species in Dong Khanthung. Also, the local Kumban should incorporate conservation awareness-raising work on the status and conservation significance of the species into their development agenda, as should national defense agencies when operating at army camps and Dong Khanthung villages.

Acknowledgments

We would like to thank those who assisted us in the conduct of the surveys and consultation in both Sayabouli and Champasak Provinces, especially the Agriculture and Forestry Offices and Protected Area Management Divisions of these provinces for providing fieldwork permission and information on gibbons and site conditions. In particular, thanks to the Nam Phui National Protected Area in Sayabouli Province, especially to Mr. Souphab Denphoukhao and Mr. Chandy Chanthavong – Head and the Deputy Head of Protected Area Management Division for Sayabouli Province, and Mr. Khamphet, as well as their dedicated staff. In Dong Khanthung Provincial Protected Area in Champasak Province, we are grateful to Mr. Saway Phimmason – Deputy Head of Provincial Forestry Office, Mr. Vixay

1 Introduction

This report provides the summary of key findings from trips to the Nam Phui NPA² for surveys of White-handed Gibbon (*Hylobates lar*) and to Dong Khanthung PPA³ for surveys of Pileated Gibbon (*Hylobates pileatus*). It also provides some initial recommendations for the conservation of these gibbon species in the future.

Lao PDR has six gibbon species (Figure 1), second only to Indonesia in terms of the high number of gibbon species found in the country (Duckworth 2008). However, little is known about the status of gibbon species in the country. Gibbons are considered an indicator species for biodiversity value—the presence of gibbons in an area indicates that there are still healthy forests and good biodiversity in that area. As the gibbon population becomes low in Lao PDR, there are few villages from which we can hear the gibbons' songs. Because gibbons can be so easily identified by their melodious singing, instead of the unmelodious calls of other primates, the absence of gibbon song in the forest is a reliable indicator that gibbons have left the area. Due to the unsustainable use of wildlife and pressures from human population growth, wildlife market demands and socio-economic development activities, the biodiversity levels of the country have been declining, and more rapidly so in recent years. Because of the threats that gibbons have been exposed to, they are now a species of concern, whose population is experiencing a rapid decline. Growing momentum and mutual interest on the part of the Government of Lao PDR (GoL) and international organizations, who are aware of the trend, has led to greater efforts to conserve this species by developing

gibbon surveys by relying largely on their songs. The season that gibbons make good active songs are between November and March “the cold time period in Laos” which would be the time that they make attractive songs to one another for mating. However, due to time constraints, it was decided that the surveys be conducted anyway. The surveyors still expected to ascertain the basic current status of these two species and their main threats.

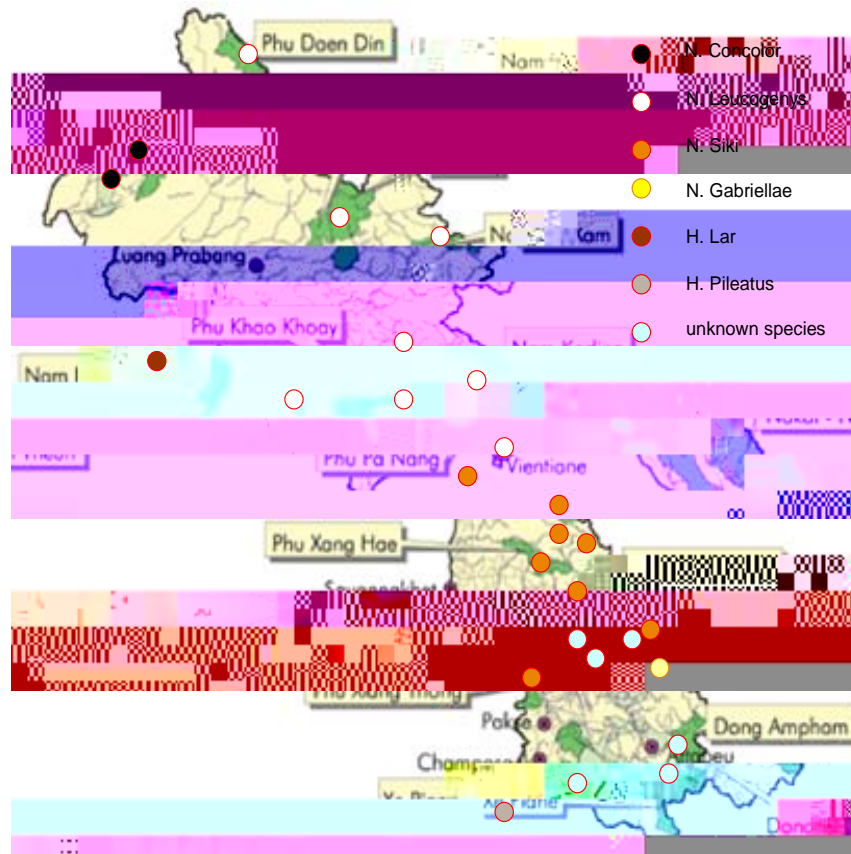


Figure 1. Map of NPAs and Gibbon distribution in Lao PDR

The surveys began with interviews of officials/local authorities and villagers regarding knowledge about gibbons, other key species (especially in DKT), threats and future conservation needs. During the interviews, the surveyors carefully assessed the information and did cross-checks with other sources. Village interviews were conducted with local officials informally, local hunters and villagers in order to verify the presence of the key species in the area. The key reference materials used to design the survey areas include the reports of IUCN (Boonratana, 1998; Berkmueller and Vannalath, 1996) and Wildlife Conservation Society (Round, 1998). For Dong Khanthung, apart from the gibbon survey, the surveyors also collected information on the status of other key wildlife species.

During discussion sessions, the surveyors selected key hunters in the target villages to interview regarding the perception of gibbon distribution in their village area. In the interviews, especially in Dong Khanthung, th

help protect the species from further population decline. They were interested to see the conservation project and gibbon conservation at work in their own provinces and they wanted to join in these efforts.



Figure 3. Gibbon survey team in Dong Khanthung, in front of *Sala loamchai* or Friendship Meeting Point at Lao-Thai-Cambodia border.

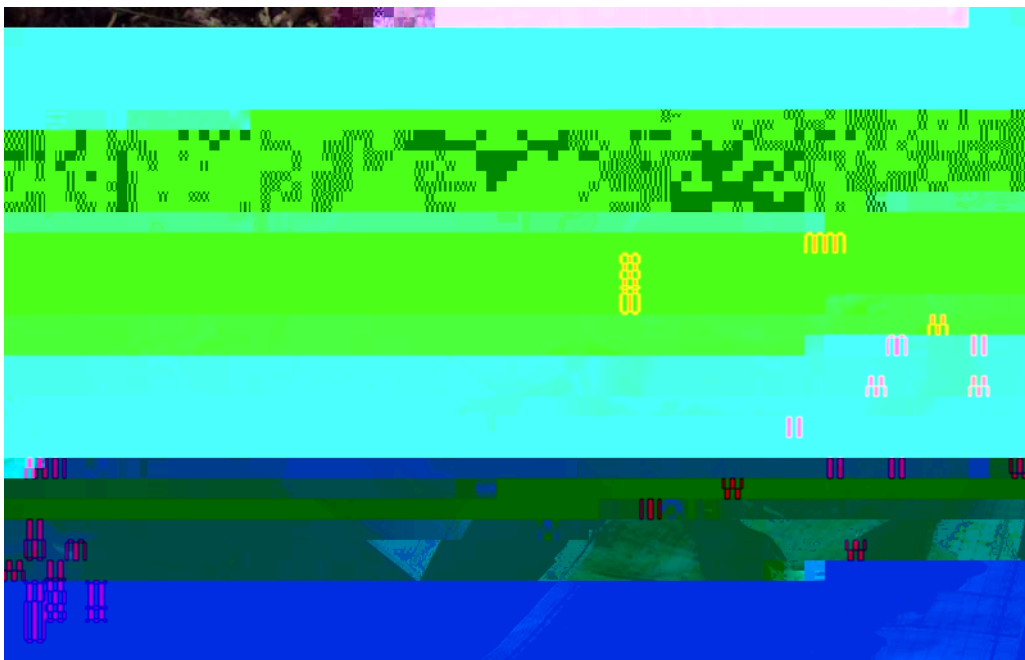


Figure 4. Nam Phui NPA staff reading map to check the survey routes, at Nam Lop survey camp, Mr. Somsouy and Keomaniphone.

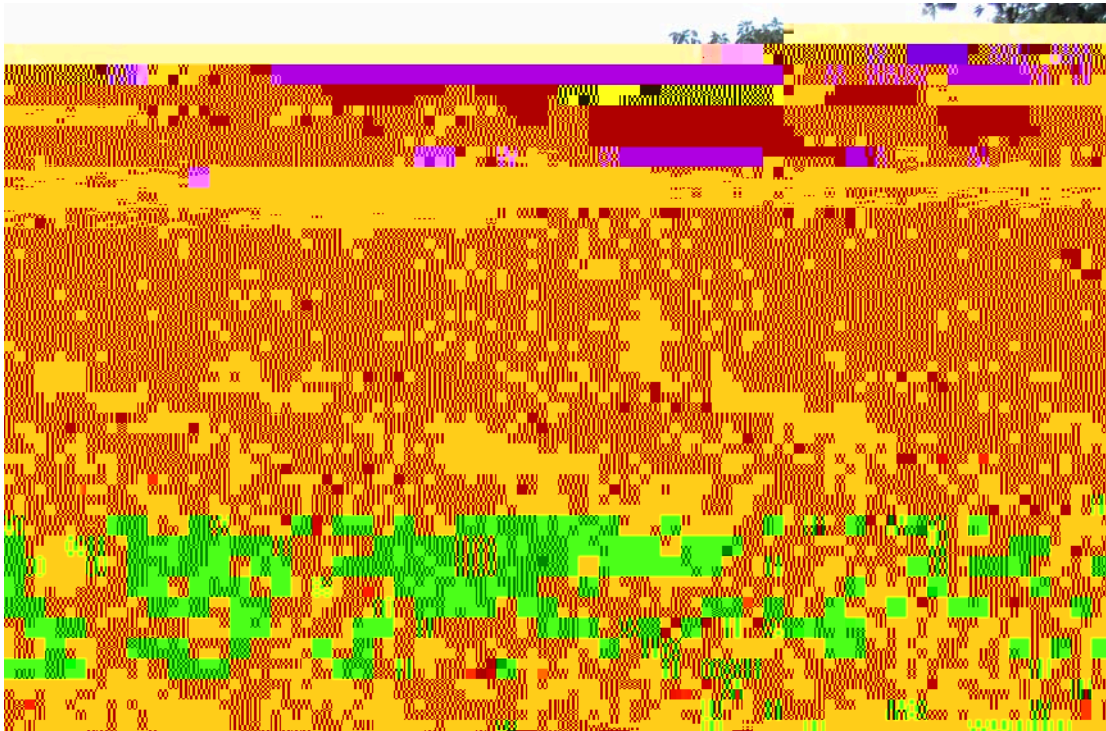


Figure 5. Gibbon survey team in Dong Khanthung, discussing the survey plan and transect walks from Ban Peao to Ban Thahin. Below is another team going to Nang Ing sector. Tractors were used when a car could not access the deeper forest.



3. Key findings

Although both surveys were relatively short, both trips were very useful and yielded interesting findings. In addition to the gibbon survey work, the surveyors gained an understanding of the current status of these sites in terms of wildlife communities, wildlife habitats and threats, as well as potentials for site-based conservation. Gibbons can be considered a flagship species, and success in protecting their habitats and reducing their threats can certainly benefit the conservation of other wildlife and wildlife habitats. Detailed findings for each site are presented below.

3.1. Surveys of White-handed Gibbon in Nam Phui NPA

Nam Phui National Protected Area is one of Lao PDR's largest NPAs (1,912 km², the attitude averages 500 m above sea level), and is a single area located on the west bank of the Mekong. It lies in 3 districts of Sayabouli Province: Muang Phiang, Thong Mixay and Paklay. There are a total of 41 villages in and around the NPA. The area is covered with mixed deciduous and dry evergreen forests (Figure 6). Forest fire is a major threat in the area, after hunting. Nam Phui NPA is home to a good-sized population of Asian elephants. It includes the area where the last rhino in the area was reportedly killed in 2004, and is only the place in Lao PDR with a population of White-handed Gibbons. However, the information on this species is out of date – officially, nothing post-dates 1998 (Boonratana, 1998). Therefore, it is important to gain updated information on this species. Apart from its uniqueness, the area still has native teak forests, many important hardwood species, and other large animals including a medium-sized mammal such as langurs.



Figure 6. Landscape of Nam Phui National Protected Area, at Phou Pu area



Figure 7. Camping at Houy Hoy, Nam Phui National Protected Area

3.1.1 Management Status of Nam Phui NPA

The status of site management is good compared to the situation in many NPAs in Lao PDR, as the Nam Phui has good basic infrastructure (e.g. office building, large meeting room, 2 dorms) and the number of staff is fairly adequate (17 staff, including a government liaison staff). The construction of the meeting room and dorms was funded by the Provincial Agriculture and Forestry Office (Figure 8). The meeting room can hold 70 participants. The NPA also has some office and field equipment in place.

The NPA staff are working quite actively and continuously on patrolling, inspecting and investigating poachers and illegal loggers. For example, those hunting gibbon have been fined 4 million kip; a number of chainsaws and timber have also been confiscated. However, due to insufficient budget, there is a lack of conservation awareness raising activities, zoning management and other activities to ensure better support of the site's management. Assistance from the WWF⁵ Elephant Conservation Project is helping to improve staff capacity and monitoring systems in the area and is partly supporting NPA activities.

At the village level, the NPA has contact villages that informally report any illegal activities happening in the area. This is a good initiative also for building up a network on gibbon conservation at the grassroots level.

⁵ WWF = World Wide Fund for Nature. It has an elephant monitoring project for a two-year project with budget of USD 50,000 working on strengthening the staff capacity in elephant surveys and monitoring.



Figure 8. Meeting room and dorms of Nam Phui National Protected Area, funded by the Provincial Agriculture and Forestry Office.

3.1.2 Current Records of White-handed Gibbons in Nam Phui NPA

White-handed Gibbons in Nam Phui NPA are distributed in a scattered fashion between latitude 18°35'-43' and longitude 101°20'-26' from the southern Phou Tong on the east of the NPA to the core area at Phou Pu, and in the west at the border with Thailand. Overall, the population of this species is very low and fragmented due to deforestation and bisection by a road cutting through from Ban Naven to Thongmixay District. There are five main areas with reports (partly certified) of their songs being heard, including the southern Phou Tong (18°37'30'' N/101°26'53'' E), Phou Dam (18°38'02'' N/101°21'47'' E), Phou Pu (18°38'25'' N/101°20'51'' E), Houy Saheun watershed, Phou Khaothong and Navene. There is still

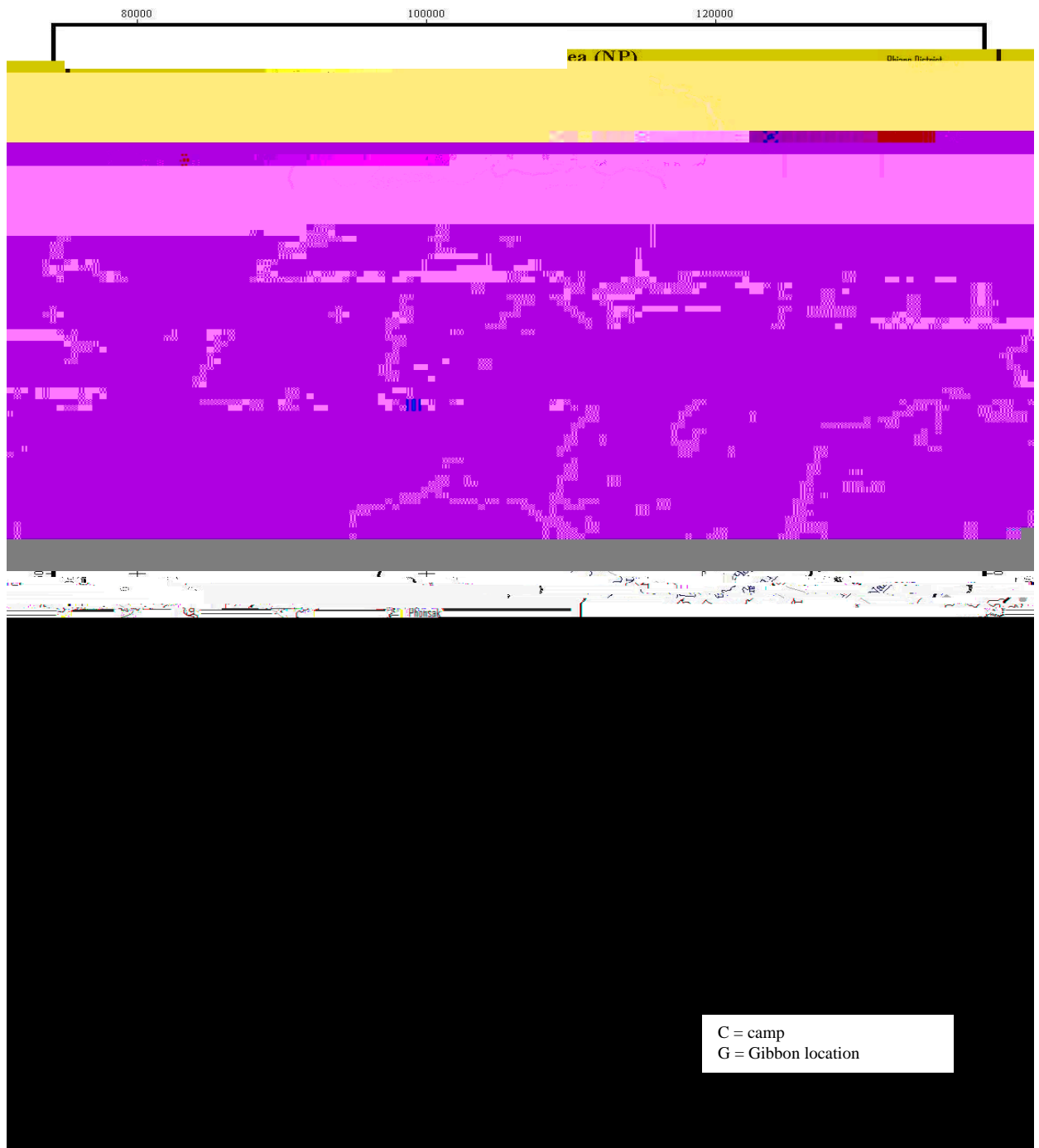


Figure 9. Map of White-handed Gibbon Distribution in Nam Phui National Protected Area



3.1.3 Threats of Nam Phui NPA

Forest fires and human disturbances from hunting are the main threats to Nam Phui NPA. The newly built road crossing the NPA from Ban Navene to Thong Mixay has resulted in increased wildlife hunting in the area from both ends of the road. Long periods of continuing forest fire from year to year have resulted in habitat loss (Figure 10). The forest in the northern Nam Phui area has become degraded and even gives the appearance of bare land in places, except the Phou Pu and Phou Dam areas where population of gibbons is still reported. Hunting for food and sale is also reported and there is a lack of education and awareness activities to remedy these threats. Hunting gibbon infants for pets is also reported. For example, one juvenile male of White-handed Gibbon was found at the Nam Phui NPA Office, having been confiscated from a local hunter the year before. Based on the reports, in the last five years, gibbons' songs were heard in the upper Nam Phou Noy of Thongmixay area and north-eastern part belong to Phiang District but have not been heard in recent years in these areas. This is an indication that the population of the species is in serious decline.

Nam Phui NPA is the only place in Lao PDR where White-handed Gibbons have been officially reported. Therefore, if there is no intervention to address the situation, the White-handed Gibbon may be extinct in Lao PDR in the next two decades.



Figure 10.

3.1.4 Other Interesting Findings from the Survey in Nam Phui NPA



3.1.5 Recommendations for Nam Phui NPA

In order to conserve the gibbon species urgent action on conservation awareness raising is required at army camps and adjacent local communities, alongside a ban on hunting gibbons and other key species, increased penalty fees, and efforts to improve habitat quality to increase food sources for wildlife. A more detailed population study in the long-run is also recommended, as well as assigning some villagers in areas where gibbons are reported to monitor them from time to time. The area should be zoned according to where high biodiversity occurs and sites that gibbons inhabit should be classified as totally protected zones (Figure 12). Forest fires should be prevented as much as possible by holding a campaign yearly before the forest fire season starts (March to April) and authorizing each village to help protect the forest from fire within their administrative boundaries.

Tong Luang who live in the forest and in the core area could be “eyes and ears” for the Nam Phui NPA. They could be given incentives for supplying up-to-date information about gibbon populations and reporting people who violate NPA laws. Mae Koung at Ban Nakong is the contact person for liaising with the Tong Luang.

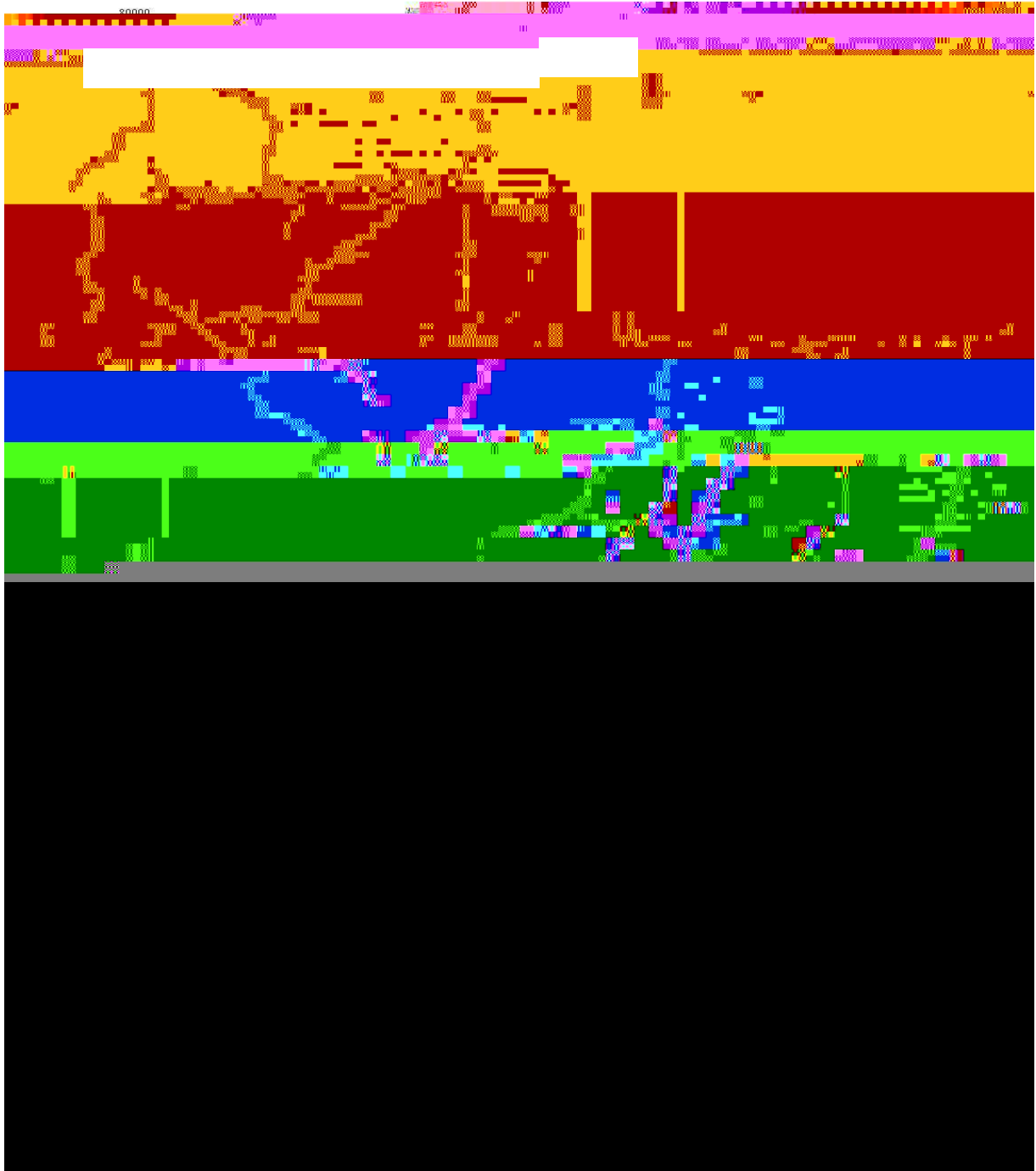


Figure 12. Map of potential core zone area of Nam Phui National Protected Area

3.2. Surveys of Pileated Gibbons in Dong Khanthung PPA

DKT is located in Mounlapamok District and its forest range lies partly in Sukhoumma District, Champasak Province. It is located west of the Mekong River, which shares a border with Cambodia to the south (Preah Vihear Protected Forest) and Thailand to the west (Phou Chong Na Yoy National Park). It is a good-quality forest landscape, with an area of 1,400 km

Habitat disturbance and hunting for taking animals as pets are the key threats in the area (Figure 15). Wildlife hunting often involves outsiders, the army and partly local hunters; and, it is less severe in Dong Khanthung than in the other areas (e.g. in Hin Namno NPA in 2007). Also, hunting of infant gibbons for sale (worth 3,000-5,000 Baht each) is reported and observed in the area. The infant female gibbon found in Ban Nong Nga had found her mother shot dead this year. When the mother fell down, her infant was discovered on her back. She is now 5 months old. In this case, they knew who the hunter was, but there was no report of any penalty imposed for hunting this protected species. A ban on hunting small-sized animals such as gibbons is not so seriously enforced around country, even though it is illegal. This is partly because villagers understand that large animals are important and legally protected, whereas there is less concern over smaller animals. It seems likely that wildlife hunting by outsiders will increase in the near future if the road connecting Mounlapamok to the triangle border of Lao-Thai-Cambodia is completed.

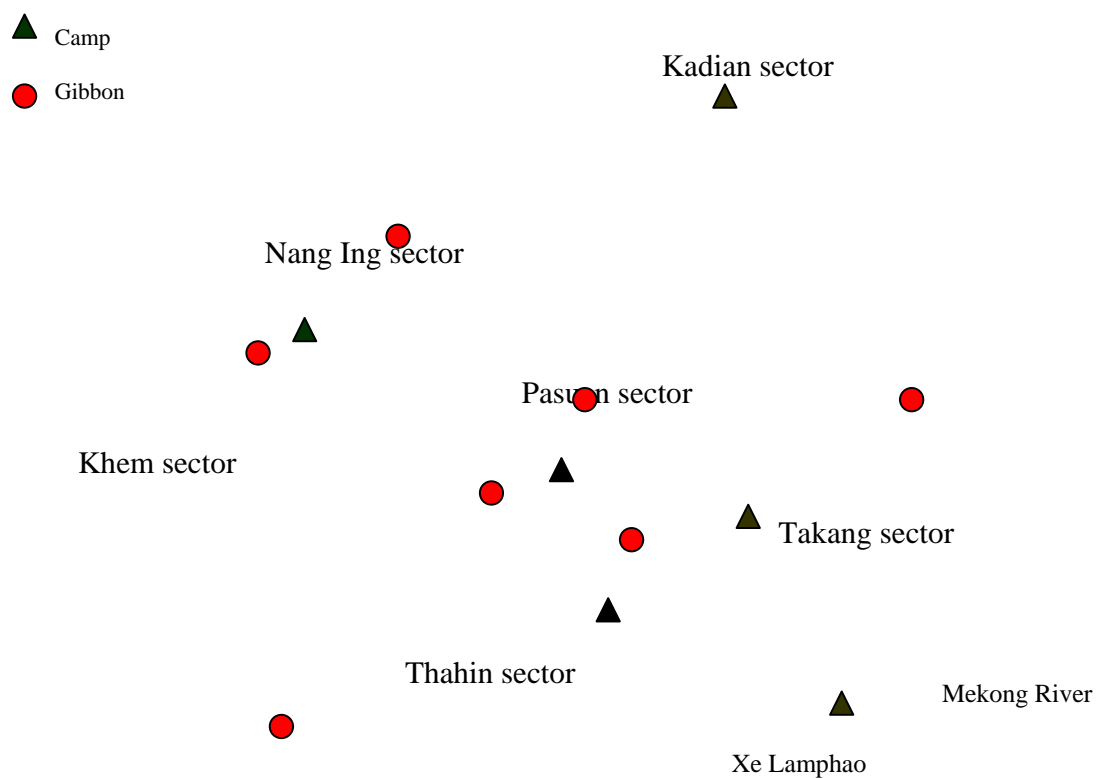


Figure 14. Map of Pileated Gibbon Distribution, Dong Khanthung Provincial Protected Area

The forest of DKT is degraded, fragmented and without a connecting canopy make it difficult for gibbons to move from place to place. Their food sources have also declined

DKT harbours various types of wildlife habitats, such as lowland/semi-evergreen forest, dry dipterocarp/mixed dipterocarp forest, pine forest, wetlands, a number of salt-licks, fish

- § Northern Pig-tailed macaque (*Macaca leonina*), just reported by villagers in Ban Thahin and Ban Peao. They were confident on the presence of this animal in the area, especially in Paseun sector.
- § Leaf Langur (*Trachypithecus garmaini*), The presence of some groups was reported, even though this species and a number of other monkeys are rarely found west of the Mekong.
- § Otter (*Aonyx* and *Lutrogale* spp). Both species are reported. The habitats are very suitable for otter species.
- §

area. As for Laos, it is understood that this species is present in the Xe Khaman upstream, Attapeu Province.

- Š White-wing duck (*Cairina scutulata*). Two pairs were seen at the Houy Talo and Nam Phak. This species is very rare in this region, and is only reported in Nakai Nam Theun and Xe Pian NPA. This species is considered of high conservation significance.
- Š Lesser adjutant (*Leptoptilos javanicus*). It was reported that the species is often seen in the beginning of the dry season and could be observed in all sectors in DKT. However, some villagers could not distinguish this species from the great adjutant. Š

Apart from water birds, it is only one of a few areas that still has reports of a good population of green peafowl. This species is reported in all sectors identified in DKT where they often come to feed during the rice harvest season. One special squirrel common in the area was also observed very frequently by the team. It may be endemic to this area or to the west of the Mekong River, and perhaps found in Cambodia too. This species of squirrel is not found in the east of the Mekong. Based on detection, it has a mark on its tail with white stripes of about 4 cm. This squirrel is dark red in colour, including its tail, with white-stripes in the first few cm of the tail. Based on the description, it could be called in Lao a white-striped tailed squirrel. The previous reports by Round (1998); Duckworth (1999) mention the three important squirrels found in DKT as Black Giant Squirrel, Variable squirrel (*Ratufa bicolor*) and Cambodian striped squirrel (*Tamiops rodolphii*) but no descriptions are given. The surveyors believe there is another species found west of the Mekong River and it is referred in this report by using its local name *kahok khang hangkan*, and proposes that it should be called *Callosciurus finlaysonii annellatus* (Duckworth *per. com.* 2010).

According to local reports, the Cambodian side is forested and well-conserved and partially well-conserved on the Thailand side as well. The movement of wildlife between Cambodia and Lao PDR is well reported, especially large mammals and large birds.

3.2.6 Recommendations for Dong Khanthung PPA

On the whole, DKT is still in a good position to be protected for the conservation of many important large mammals and water birds as well as forest birds. It is highly important that the area is established as a conservation area with national and international recognition. The

to protect the area in consultation with the GoL and ideally to establish the area as a National Wildlife Sanctuary (NWS) (Figure 15). Doing so

contribute to economic growth and local live

List of Key GPS coordinates of survey areas and key wildlife records

Location	GPS	Description
Nam Phui NPA		
Phou Tong	18°37'30'' N/101°26'53'' E (750 m above sea level)	The high mountain of the eastern part, front to Ban Nakong, making the eastern border ranges of Nam Phui

		abandoned during Indochina War in 1970s
Ban Thahin	14°08'56.5'' N/105°35'03'' E	

		this area, with permanent camp. As observed they probably use electrical fishing gear. Quantity of fish harvested per day, e.g. channa and cat fish.
Houy Kadan bridge	14°11'55'' N/105°30'19'' E 126 m asl	
Nong Ben – large wetlands Survey area	This GPS waypoint is at the north of the wetlands. Ban Hinlat will be relocated to this area as the old settlement near Xe Lamphao suffers annual floods.	Nong Ben is important wetland for many water birds, also reports of visits of

		is quite old – about a month ago
Kadien sector	14°25'24'' N/105°33'56'' E	Elephant tracks were seen, it is very fresh – about a few days ago