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PRELIMINARY RESULTS OF A PRIMATE SURVEY IN NORTHEASTERN VIETNAM, WITH SPECIAL REFERENCE TO GIBBONS

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Introduction

Gibbons (***Hylobatidae*** spp.) are among the most endangered of Vietnamese primates. Gibbon populations can become extinct faster than other primates because of the following characteristics of gibbon biology: (1) **Intergroup spacing** Gibbon groups live in exclusive territories; (2) **Small group size** Gibbon groups usually consist of one adult pair and one to three dependent offspring; (3) **Long inter birth interval** Wild gibbon pairs give birth to single offspring every three to four years; (4) **Late sexual maturity** Wild gibbons are believed to attain sexual maturity at an age of about seven to eight years. These characteristics result in relatively low densities of gibbon populations and slow reproduction. Shooting even a single individual may have a more dramatic impact on the population numbers than in most other primate species.

Recent research suggests that as many as four different gibbon species are parapatrically distributed in Vietnam (Geissmann, 1995). One of these, the eastern black gibbon (***Nomascus* sp. cf. *nasutus)***, is so poorly known that the problems surrounding its taxonomic status and the affinities of its populations are not yet fully resolved. Its distribution area appears to be restricted to Hainan island (one subspecies) and to Vietnam east of the Red River (probably two subspecies). It already has become clear, however, that this must be the rarest and most critically endangered primates species worldwide. During a survey in 1993, the population on Hainan was estimated to be less than 20 individuals (T.G., personal observation), and no confirmed sightings are known from northeastern Vietnam since the last museum specimens were shot in 1965 (Geissmann, 1996, 1997).

A recent survey (Canh & Nhat, 1997) reports a gibbon sighting from Kim Hi forest (Na Ri district, Bac Kan province). This sighting was made in 1993 (Prof. Pham Nhat, pers. comm.). In addition, Canh and Nhat (1997) cite a personal communication from Mr. Do Quang Huy reporting that a gibbon was shot in Than Sa forest (Vo Nhai district, Thai Nguyen province) in November 1995. Both forests are situated east of the Red River. In order to verify these reports and to find out whether gibbons still occur in these forests, we conducted a foot survey in each forest in March 1998. In addition, we also collected information on all other diurnal nonhuman primates in the survey area.

Method

The survey was carried out from 6 to 31 March 1998. During the survey period, 13 days were spent traveling by car, making logistic arrangements in the provinces and the districts for field work, conducting interviews with local people, traveling on foot in the forest, and in inactivity due to unfavorable weather conditions. A total of 13 days was spent surveying two areas in both the Kim Hi forest and the Than Sa forest (Table 1). The locations of survey areas and villages mentioned in the text are shown in Figure 1.

Table 1. Location and duration of foot surveys in 4 areas

Name of forest	Name of survey area	Coordinates	Survey days	Total area surveyed
Kim Hi	"Camp 1"	22°10'-22°11'N; 106°01'-106°03'E	3	162 km^2
	"Camp 2", Cout valley	22°11'-22°12'N; 106°00'-106°01'E	4	162 km^2
Than Sa	"Camp 3"	21°47'-21°48'N; 105°56'-105°57'E	4	95 km^2
	"Camp 4", Lan Ly valley	21°50'-21°51'N; 105°56'-105°57'E	2	46 km^2

These areas were selected after interviews with local people had indicated where gibbons had been seen most recently. Each day the team was divided into three groups, each surveying a different section of the area. Survey walks began at 06:00 a.m. and ended at about 11:30 a.m.. The areas covered by our survey (Table 1, last column) are minimum estimates. Moreover, the loud gibbon songs may carry as far as 2 km in the forest.

Results

Results of the surveys and interviews conducted in each area are summarized in Table 2. Direct evidence (animals sighted and/or heard) was obtained for the occurrence of stumptail macaques (***Macaca arctoides***) in three of four survey areas and of Francois's langur (***Trachypithecus francoisi***) in one area. No gibbons were heard or sighted during the survey. Because we were able to survey only small fractions of each forested area, the occurrence of gibbons in these forests cannot be excluded.

Table 2. Diurnal primate species occurring in the survey areas, according to author's observations and reports by local people

Species	Kim Hi forest		Than Sa forest	
	Camp 1	Camp 2	Camp 3	Camp 4
Macaca arctoides	1	2	3	2
Macaca assamensis or *M. mulatta*	3*		–	–
Rhinopithecus avunculus	4*		4	–
Trachypithecus francoisi	3	2	3	4
Nomascus sp. cf. *nasutus*	3	3	4	3

Legend: 1 = Animals observed during this survey; 2 = Vocalizations heard during this survey; 3 = Reports during the last 3 years; 4 = Reports older than 3 years; * = Reports referring to Kim Hi area: it is not known whether they are valid for the areas of either Camp 1, Camp 2, or both.

In each survey locality, several locals reported having seen and shot gibbons in recent years (less than 10 years ago). In Than Sa we repeatedly met hunters and loggers, and hunting pressure appears to be particularly high in this forest. Not only is the resident human population of Than Sa relatively high (about 2000 people), but it also harbors an even larger population of immigrant gold miners (about 10000 people) who add to the hunting pressure in the forest.

In Kim Hi we met just a few hunters and loggers and only close to the village (Ban Ke) from which we walked into the forest. The population of Kim Hi was much smaller than that of Than Sa (about 300 people). Gold mining was declared illegal in Kim Hi forest and most gold miners were driven away from the area early in 1998. The most valuable trees apparently already have been removed from the forest by selective logging, making Kim Hi less attractive for loggers than Than Sa forest.

Trachypithecus calls were heard only in Kim Hi and not in Than Sa. The most recent report for the occurrence of gibbons stems from Kim Hi forest. According to Mr. Quyen, head of the Kim Hi Forest Station, two hunters from Na Toan village (An Tinh commune, neighboring Kim Hi commune) shot a black gibbon on 7 March in the Kim Hi forest, apparently close to the area where, two days later, we established Camp 1. This information became available the day after we left Kim Hi, making it impossible to visit and interview the two hunters.

Discussion

We identify the most immediate threat to wildlife conservation in general, and of gibbon conservation in particular, in the survey areas as over-utilization of wildlife for trade and subsistence. The absence of gibbon songs during our survey indicates the number of gibbons must be extremely low, as compared to the surveys carried out by us in other localities of black crested gibbons at similar latitudes (Yunnan Province, China; Hainan Island, China; Bokeo Province, Laos), where gibbon songs were heard in the forest every day (T.G., personal observations).

To judge by the reports of local people, the number of gibbons surviving in the survey areas, and probably in the whole part of Vietnam east of the Red River, may be little more than 20 individuals. If we add to these the gibbons from Hainan (see Introduction), the total population of the eastern black gibbon may amount to about 50 individuals. The protection of the species clearly deserves top priority status.

Although the Than Sa forest is part of the Than Sa-Phuong Hoang Nature Reserve, we found no evidence for the enforcement of wildlife laws and hunting bans in the area. If a gibbon group should still occur in the areas we surveyed in Than Sa forest (which we consider unlikely), we do not believe they will survive the next decade.

Although we collected only indirect evidence for the continued occurrence of gibbons in the areas surveyed by us, we consider the Kim Hi forest, especially the area near Camp 1, to be an area where a few gibbons still may occur. We therefore urge that a second survey should be carried out in this area as soon as possible in order to explore the area south and east of Camp 1, which is more remote from human settlements and therefore more likely to contain gibbons.

According to Prof. Pham Nhat (pers. comm.), plans exist to establish a nature reserve in Kim Hi, but implementation is not expected in the near future. We recommend the creation of a nature reserve in Kim Hi forest, to promulgate and to enforce wildlife laws and a total hunting ban in the reserve.

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References

Geissmann, T. (1995). Gibbon systematics and species identification. **International Zoo News** 42: 467-501.

Geissmann, T. (1996). Einsichten in der Affensystematik. **UniZürich** (Magazin der Universität Zürich) 1996(2):71.

Geissmann, T. (1997). New sounds from the crested gibbons (***Hylobates concolor*** group): First results of a systematic revision. **Verhandlungen der Deutschen Zoologischen Gesellschaft: Kurzpublikationen – Short Communications, 90. Jahresversammlung 1997 in Mainz** (Zissler, D., ed.), p. 170. Gustav Fischer, Stuttgart.

Li, X.C. and Pham, N. (1997). **Report on preliminary results of survey on Hainan gibbon (*Hylobates concolor hainanus*)**. Unpublished report, Ha Noi.

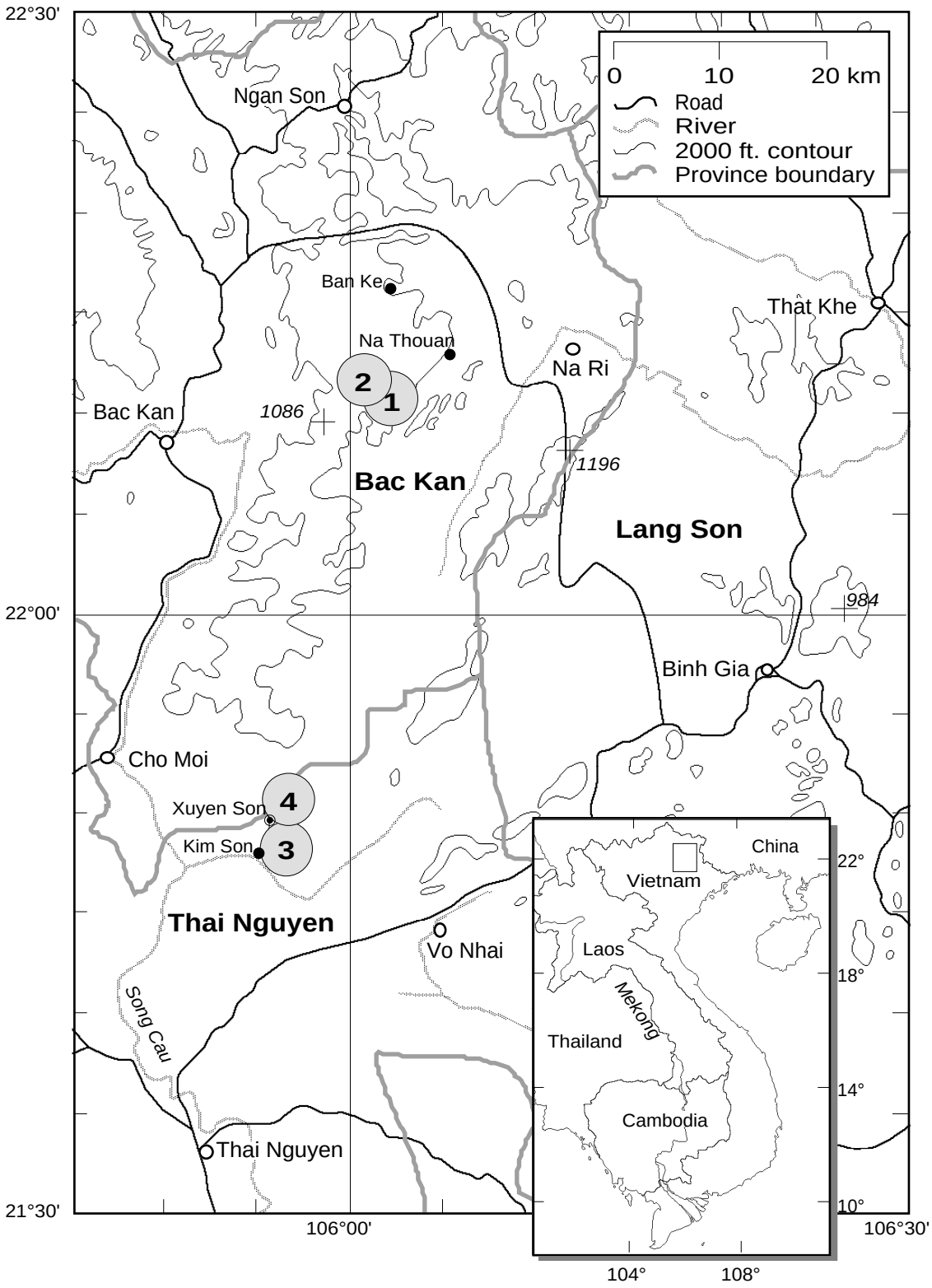

Figure 1. Map showing the location of the four survey areas (circles) in northeastern Vietnam.