



SUMMARY REPORT

FOR

Slow Loris Workshop

Cat Tien National Park, Vietnam

1st & 2nd August 2015



Assessing the present status of Pygmy loris (*Nycticebus pygmaeus*) in South Vietnam.

Attended - 48 Vietnamese delegates

15 Foreign delegates

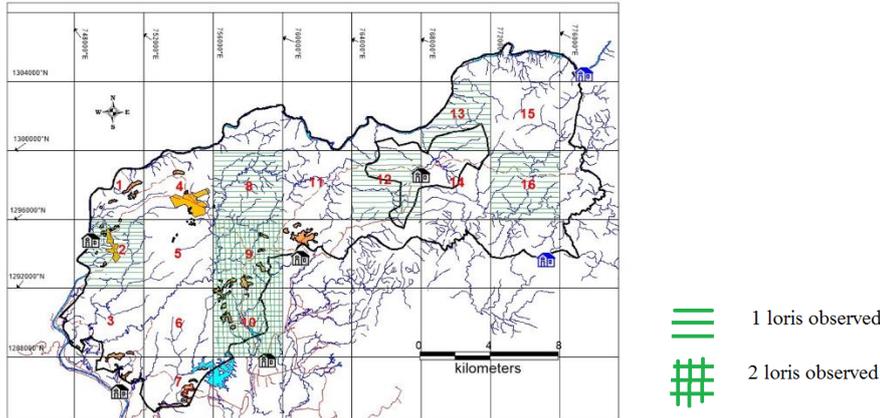
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Saturday 1st August

8.00-8.30. Welcome by Nguyen Manh Hiep, Nguyen Van Dien and Alison Cronin. *Very excited delegates from so many different sections of primate conservation have kindly attended to support Vietnamese Slow Loris conservation.*

8.30-9.00. Bach Thanh Hai- Introduction to Cat Tien National Park and Primate Conservation. *Sharing the information of CTNP, since 2010 under control of VN Forest. A recognised UNESCO MAB since 2001, 2005 RAMSAR site and nominated for World Heritage Site. Bach Thanh Hai went into great detail of the rich biodiversity in the Park- in particular focussing of the 8 different primate species. (one Loridae, four cercopithecinae, two colobinae and one Hylobatidae. Sharing conservation status of each species, estimated population size in CTNP and the number of rescued and released primates for each species. Detail of future action for CTNP included to strengthen ex-situ and in-situ conservation, continue with surveys, developing conservation strategies for each species. Expand international cooperation in primate conservation. Increase local community environmental awareness.*

9.00- 9.15. Nguyen Van Thuan – Pygmy loris surveys in CTNP. *Surveys conducted in the Cat Loc section of CTNP by CTNP technical Department in collaboration with EAST (Endangered Asian Species Trust). A methodical survey of the 27,530 ha. Survey conducted using transects of 1.6 – 2.5km in length through three different habitat types. (Bamboo, mixed evergreen and cashew plantation. Transects walked at dusk starting around 18.00h following survey methods of Nekaris et al. 2008. All layers of vegetation scanned with a red light, as two surveyors walked slowly along the trail 10 m apart. Indices of abundance were calculated using the linear encounter rate. Hunting of pygmy loris confirmed- individual found with gunshot wounds. Loris encounter rate for Cat Loc was 0.26 loris/km- with the highest encounters found in the Cashew plantations. This was compared to surveys in nam cat tien with overall loris encounter rate of 0.55, the highest in semi-evergreen and non-confirmed in bamboo. Survey results from Cat Loc below.*



Questions- Anna Nekaris- detectability function should be included in the future. Suggested loris use cashew plantations mainly when flowering- not full time use. Maps of area usage very important. Do loris compete with other primates? After 21.00 loris have a sleep. Best survey 18.00 – 06.00 so to cover all wake and resting periods.

9.20-9.35. Vuong Duc Hoa – Slow loris surveys in Bu Gia Map. *Main forest type in Bu Gia map is lowland semi-evergreen (with three sub habitats- evergreen, intermixed and bamboo). A rapid loris survey in July 2013 confirmed 9 individuals of *N.pygmaeus*, and Bu Gia map believed to have a healthy pygmy loris population. Bu Gia map has also rescued two pygmy loris, but has insufficient facilities/ technical capacity at this time. Future recommendations include further training on loris conservation, support for rescue activities, surveys and protection.*

Questions- Bu Gia map found 6 dead loris being prepared for traditional medicine.

Surveys best in dry season- less leaves but issues of torpor- observed in Cambodia but not clear in Vietnam. Seasonality must be taken into account.

Loris can often be heard but not observed on surveys- strong support from CTNP surveys. Survey technique using occupancy suggested- (choose 30 habitat plots- check in every plot if any sign- call, observation, gouging- and then just mark presence or absence. Calls are not directional and often go above human hearing range. In wet season modulation changes- thus more likely to detect calls in dry season.

Why small rescue centres- Government wanted every area that had a need to develop a rescue centre- some areas like Bu Gia map have small need.

It was put to all delegates if surveys had been done elsewhere- surveys were confirmed in Bi Duop Nu Ba- with no loris confirmed.

10.00- 10.15 Tran Van Bang & Hoang Minh Duc. Slow loris surveys in south Vietnam- *Pygmy loris distribution lies on east side of Mekong, in a wide range of forest types. In 1987 est a population of 72,720 individuals in full distribution range. Estimated about 600 -700 in Vietnam (Dang 1998). Threatened by habitat loss, poaching and trading. In Southern Vietnam cover around 16.3 million hectares, of which 4.3 million hectares of natural forest. Within this 1.7 million hectares are protected forest. Surveys done in 28 sites in 11 provinces ranging from National Parks, Nature Reserves and non-protected areas. From 116 night transect surveys with a total trail length of 398 km- recorded loris 53*



times with a total of 54 individuals. Encounter rate differed from site to site. Encounter rate was highest in Bu Gia Map and neighbouring forests. Habitat preference was noted- greatest in semi-evergreen forest, evergreen and mixed bamboo, least in plantation coastal Dipterocarp and bamboo forest. Most lorises observed in dry season and rarely above 1000m in elevation. Time of most frequent sighting was between 20.00 and 21.00 hrs. Recommendations- greater study of morphology, environmental factors and forest structure above and below 1200m to understand limiting factors with elevation.

Questions- best to survey all night and always present data relative to survey effort.

10.20-10.35 Nguyen Hoang Hao- Slow loris surveys in Dong Nai Biosphere Nature Reserve. DNBR contains 67,903 ha of forest. A very rich biodiversity area containing many endangered wildlife including gaur, elephants and golden-cheeked gibbons. Small scale surveys have been conducted for pygmy loris, plus traffic based surveys, and in different habitats. Pygmy loris surveys in 2007-2009 confirmed *N.pygmaeus* in Dakinde, Suoi Rang, Ba Cai, Rang Rang and Suoi Sai. The forest in young regeneration forest with cases of illegal activity- hunting wildlife for traditional medicine and the pet trade. In 2014 Mary Blair from the American Museum of New York and Hanoi University conducted 5 nights of loris surveys- with 7 lorises observed. Recommendations for national wide surveys to see present distribution.

Questions- Mary Blair commented how the area has been successful for primate conservation, working in collaboration with community control groups- but existing methods do not cover nocturnal animals. Request for national nocturnal animal survey training. Agreement on surveys methods needed.

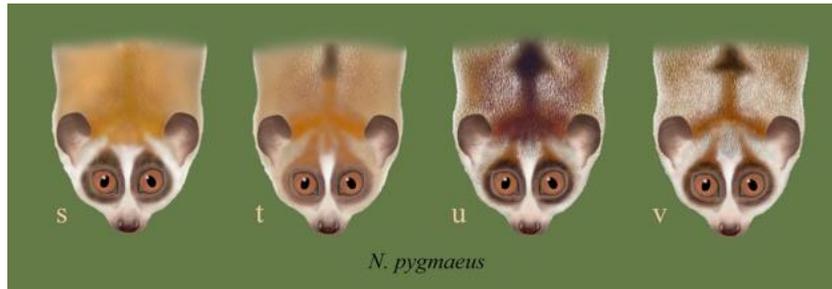
Anna Nekaris- asked with nocturnal surveys what other animals did you see- can this be an indicator of forest wildlife health.

Nguyen Hao commented how they have established green clubs for old and young- work very well- especially as taboo for lorises still present- bad luck to continue hunting.

Yok Don National Park- confirmed pygmy loris observed.

13.00-13.45 Cao Thi Huong Giang & Mary Blair – Slow Loris Conservation genetics in Vietnam. Looking at the Wildlife Trade. Goal 1 – surveys across Vietnam for Slow lorises. Generating a DNA database for forensic identification. Interviewing people to understand the trends and drivers of the slow loris trade in Vietnam. Looking at the number of species and latitudinal change. Mitochondrial DNA analysis has allowed an improved ability to determine species and lineage identities: providing a basis for more informed management decisions. Developed a forensic reference data base.

This work is important because of International demand from Taiwan, Japan and Russia. Covering all red book species. Now have the ability to identify 4 sub populations of *N.pygmaeus* in Vietnam, stretching North to South. With a distinct clade from North to South- with a crossover in Quang Nam. Information on *bengalensis*- showing greater diversity.



14.00- 14.15 Thai Truyen. CITES- Vietnam. Conservation on International Trade in Endangered species of Wild Fauna and Flora. *Covering 34,000 species – under three Appendix (I, II & III). N.pygmaeus and N.bengalensis both Appendix I- meaning no trade permitted. The law exists but the problem is enforcing the law if exact identification of the species is not possible. Greater capacity building is needed with police and customs, including building capacity with immediate care of confiscated animals- so they do not die before law enforced.*

Questions- Hiep suggested Central Government assess carefully with greater planning of rescue centres throughout Vietnam.

Dr Pei- suggested smart phone id- which is used in Taiwan. ~This would not hold at this time in Vietnam-only a few experts, bodies can make official id. Even Saigon Zoo is not able to do phenotypic id of confiscated animals.

Dr Lam- the forensic issue is a problem, suggesting that rescue centre should be systemized. Plus identify species that need forensic id confirmation and other species that do not- reducing the cost and time of forensic testing. Should put in legal procedures- if confiscated in north and released in South. Lam also reinforced need training for immediate care.

Lam WAR- highlighted 100% of their rescue costs covered by private donor- not the Government. Should the Government support more of the costs of rescue and rehab?

15.00-15.15- Bui Thi Ha ENV. *ENV have developed a wildlife crime unit- with a hotline. 8700 wildlife crimes reported since 2005. Loris trade in Vietnam driven by traditional medicine, food declining. Also a trend among young Vietnamese. Many loris are advertised on the internet- this can be used as a tracking tool. Since 2010 120 loris wildlife crimes on the internet, with 93% advertising them as a pet (of which 50% in HCMC and Hanoi). ENV has a special interest in loris as good rescue and release history. Of 114 loris rescued- 70% successful. However punishment of crime limited- only 9 cases with a maximum fine of 30 million VND.*

ENV use sting operations. In the first 7 months of 2013, 8 individuals worked with Environment police in Hanoi- resulting in 3 rescued individuals. ENV has 5000 volunteers- full country coverage. Discovering Vietnamese people have a limited understanding of wildlife rules. There have been no cases of loris keepers prosecuted. Concerns that education does not work- they need the money for local livelihood. Suggested the best solution is to help increase the livelihood near protected areas- and enforce a stricter law on the middlemen- the traders. Believed for prosecutions and seen as not important. Not valued highly- for example compared to tiger valued at 100 million VND. Loris value in HCMC only 2 million VND.



Greater consideration needed during prosecution- in which decrees prosecuted under- Decree 57 different to penal code. Species highly protected should be prosecuted under decree 32- endangered. Only two institutions with authority to identify species- causing a serious time lag in processing.

Questions- Truyen- need better more accurate wording with the law. What does substantial, mild mean?

Nekaris- compared to Indonesia- in Indonesia loris has very little value to the hunter.

Cronin- 10,000 £ for loris in the UK.

14.30-14.45 Anna Nekaris- The illegal trade of slow loris in Indonesian Wildlife markets. *Eight species of slow loris recognised. Greatest threats- pets (national and International markets), photo props (national but often imported species) and traditional medicine (believed to cure over 100 diseases). In the last decade rescue centres have started to specialise in loris (Vietnam, Cambodia, Thailand, India, Singapore, Java, Sumatra and Kalimantan). All commercial trade banned since 2007 (CITES appendix I) within range countries – prohibit hunting, killing, selling, owning. Yet still loris hunted in Indonesia, hunters catching 1-4 loris per hunting day. Supplement other incomes- value of only 0.85\$ per loris. Can walk up to 30km a night looking for them- hunting them in the day at sleep sites. Slow loris have a venomous bite which can kill humans. Thus teeth are clipped to reduce damage from biting- to each other or to humans. Little Fire face project started in 2012 to study wild loris behaviour, educate and empower people and monitor the trade. Aims - carry out systematic surveys of the trade throughout Indonesia. The trade appeared to peak in 2012, with average price \$63. Change in the trends of species observed in the trade- declining populations. Greater awareness is happening. Further action needed – greater awareness in hunting areas- show the benefits of loris- eating agricultural pests. Prosecute offenders with monetary and jail fines, and finally shut down animal markets.*

14.50-16.10 Alison Cronin- The work of Monkey World Ape Rescue and EAST in the Conservation of Slow loris. *Monkey World assists many Governments around the world in primate confiscations. The international illegal trade in primates has increased as a result of the internet and social media. In Thailand, Turkey as tourist photo props. Trade increasing in the Russian Federation. Illegal trade in slow loris even in the UK. CITES law strong- with many confiscation within Vietnam and loris going to Dao Tien. Recently Monkey World travelled to the Maldives to rescue a Bengal slow loris, confiscated by the Maldivian Government- their first CITES law enforcement since signing up to CITES in 2013.*

Sunday 2nd August

8.30-8.45 Marina Kenyon Pygmy loris reintroduction in Dong Nai Province by the Dao Tien Endangered Primate Species Centre. *Dao Tien opened in 2008, working with the FPD to receive confiscated endangered primates including slow loris. When pygmy loris arrive at Dao Tien they are given health checks and as much information about where they came from obtained. Recently collaborating with Prof Minh from Hanoi University on genetic analysis. Since 2008 rescued 43 loris, 21 radio collared and released so far. Before release wild surveys conducted to find protected good habitat sites with very low or absent loris populations- but where loris existed in the past. VHF collars weighing 4g, receivers fitted on each individual with a battery life of 6 months. Post release monitoring led by Vo Thanh Binh, collecting data on location of sleep sites, tree height, tree DBH and forest quality. Areas used mapped- showing only limited overlap. Survival best when released in the wet season, with*



two days in an in situ release cage. Predation is the cause of greatest mortality- release sites with low predator density favoured. Releases running parallel with education awareness work.

Questions- need to ensure home range area in more detail.

8.50-9.10. Stephanie Poindexter. Pygmy Loris Reintroduction in Cuc Phuong National Park. *First EPRC releases in 2002 (9 lorises) looking at sleeping sites, nightly movement, social behaviour, feeding ecology and cause of mortality. Current releases 7 pygmy loris (4 male, 3 female). Staggered releases between Oct 2014- May 2015. Data collected on nightly movements, sleeping sites and substrate use. Overlap of loris home ranges mapped. Observed so far- females travel less /night than males and a preference for small to medium sized substrate. Recommendations- sizeable distance between release sites, release more females to males and if terrain difficult consider GPS technology.*

Questions- greater investigation for release sites. More data like this required.

9.45-10.00 Marina Kenyon. Golden-cheeked gibbon rescue and rehabilitation. *The Dao Tien Endangered Primate Species Centre has received 37 confiscated gibbons from tourist attractions, pets and new from the forest. Transferred to Dao Tien, 56 ha island. Health checks carried out- 78 % gibbons carry no disease. Checked for broken bones, signs of rickets, and DNA carried out to confirm *N.gabriellae* (95% confirmed as *N.gabriellae*). Gastro-intestinal parasites monitored. Rehabilitation started including a social and physical training. Providing gibbons with a conspecific and eventually trees to gain forest fitness. Gibbons also have to de-habituate to humans- gibbons must not want to approach humans positively or negatively- as these individuals become very dangerous and cannot be released. 30 % of gibbons fail based on health and social behaviour. Suggestions requested on what to do with them as they take up vital capacity in rehabilitation centres.*

Questions. Saigon zoo will see if they have any healthy gibbons they can exchange. For International transfer this could be done with CITES approval through Saigon Zoo- directly dealing with an International Zoo.

10.05-10.20 Marina Kenyon. Releasing Golden-cheeked gibbons back to the wild in South Vietnam. *Work by the Dao Tien Endangered Primate Species Centre. For gibbon release, release site criteria important. (1) Is it a reintroduction (site that use to hold gibbons but now empty) or reinforcement (very low numbers remain in wild population)? (2) Habitat- good number of tall trees and food availability all year round, high ficus density makes it much easier. (3) Protection – long-term effective hunting and community engagement. Two gibbon releases have taken place within Dong Nai.VHF and GPS collars were trialled to see if can be used with gibbons. All collars worked well and the gps collar acquired 60% fixes even from within canopy. Now there is a need for more suitable release sites to be found within the lowlands of South Vietnam that fit all criteria.*

Questions- Bu Gia Map and Chu Yang Sin- for further investigation.

Final close by Professor Pei and all delegates invited to Dao Tien in the afternoon. Thank you



FURTHER WORK

- **WILD SURVEYS**
- Increased collaboration and networking within Loris Conservation in South Vietnam and throughout known geographical range.
- Identified areas of known loris surveys and areas in need of attention.
- Agreement that survey methods should all be standardised.
- **RESCUE AND REHABILITATION**
- Awareness of limited specialist knowledge in primate care/husbandry. Steps to be taken by EAST on request of VN forest to develop information for immediate care of confiscated primates of South Vietnam.
- Increased awareness for more genetic analysis of confiscated individuals using 10 hair samples collected from each loris.
- Training for rescue centre staff from South of Vietnam to Dao Tien possible. Starting with Bu Gia Map.
- Potential for increase capacity training for post-release monitoring in Indonesia.
- New loris release sites needing further investigation- Logo Xomat and Chu Yang Sin.