



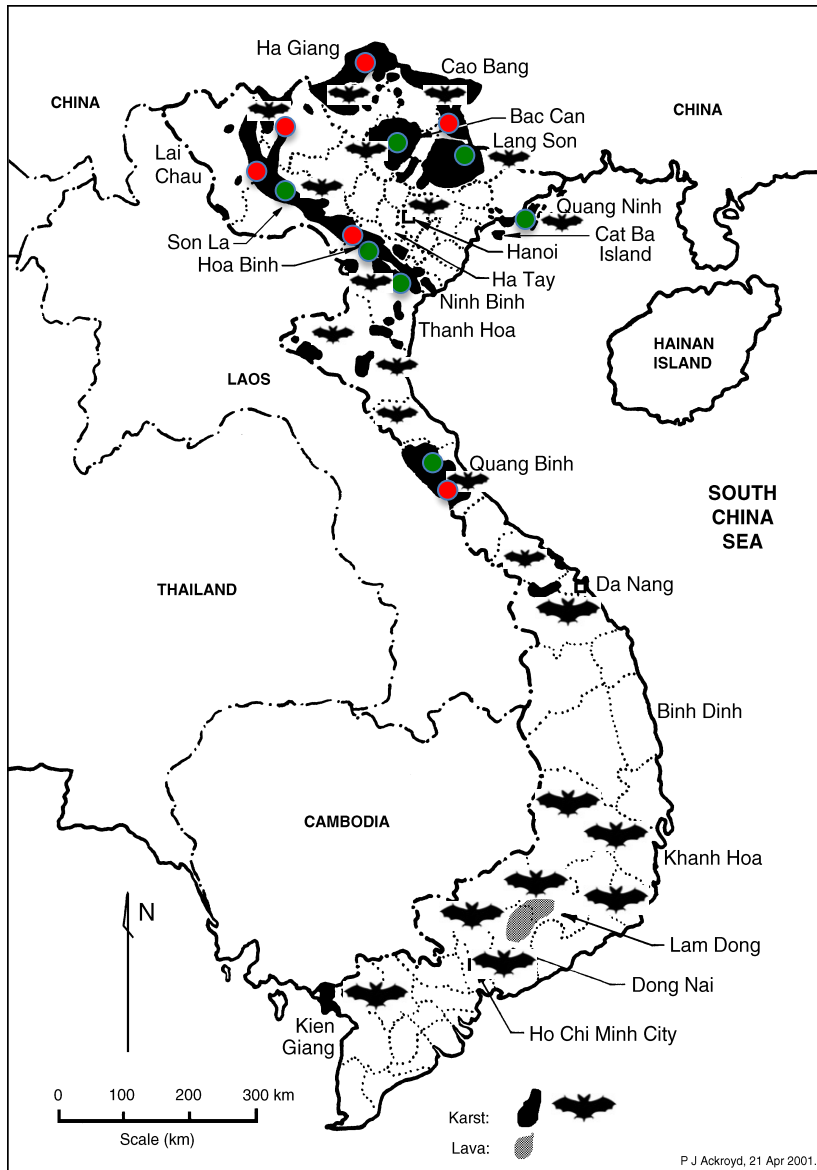
# **Cave-Dwelling Bats in Vietnam: Conservation Status, Threats & Needs**

**Presented by:**

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# 1. National Karst Area: a.60,000 km<sup>2</sup>



# Karst and Caves

## 2. Cave Survey Areas:

- Northeastern
- Northwestern
- North central



## 3. Priority Areas for Future Cave Bat Surveys:

- Northeast area
- Northwestern area
- North Central

● Caves surveyed

● Priority area for cave bat surveys

● Bats surveyed



# Vietnam Cave Bats: What we know

## 1. Major Cave Bat Colonies

- An Tinh cave in Kim Hy NR: at least 21 bat species and counted 35,000 individuals
- Most of those belong to 2 fruit bat species (*Rousettus leschenaulti* and *Eonycteris spelaea*).

## 2. Cave Bat Species Richness

- So far, some caves in Kim Hy NR, Pu Luong NR, Phong Nha-Ke Bang NP, Cuc Phuong N.P have recorded at least 15 dwelling bat species
- Cave -bat species found abundantly are fruit bats (*Rousettus* ssp, *E. spelaea*) and insectivorous bats (*Rhinolophus* spp, *Hipposideros* ssp)

## 3. Priority Cave Bat Species for Conservation

- Cave dwelling fruit bats
- Some rare cave dwelling insectivorous bats:

# Current Threats to Cave Bats

Type of Threat	Occurrence	Urgency	Importance
Foraging habitat loss/disturbance outside caves	3	3	6
Cave tourist development	2	3	5
Pollution of water sources and food chain	2	3	4
Illegal bat hunting / harvesting	1	3	4
Guano collecting	1	1	2
Infectious diseases	NA	NA	NA

**Occurrence:** 1= Localized; 2= Widespread; 3= Nationwide.

**Urgency:** 1= Low; 2= Medium; 3= High.

**Importance:** For conservation attention

# Current or Recent Cave Bat Research

Type of Research	Location	MajorAims	Contact Person/ Institution
Conservation research	Kim Hy NR Ba Be NP	- Access the level of bat diversity and the needs to conserve them	Dr Neil Furey FFI
Conservation research	Huu Lien NR	- Access the level of bat diversity and the needs to conserve them	Dr Neil Furey FFI
Conservation research	Cat Ba NP	- Access the level of bat diversity and the needs to conserve them	Dr Vu Dinh Thong IEBR
Conservation research	Phong Nha- Ke Bang NP	- Access the level of bat diversity and the needs to conserve them	Dr Vu Dinh Thong IEBR
Conservation research	Hoang Lien NP	- Access the level of bat diversity and the needs to conserve them	Dr Vu Dinh Thong IEBR



# Current Cave Bat Conservation Activities

Type of Activity	Location	MajorAims	Contact Person/ Institution
Conservation research	Northwestern	- Access the level of bat diversity and the needs to conserve them	Vuong Tan Tu IEBR
PhD research	Annamite range	- Access the level of diversity and endemism of regional bats	Vuong Tan Tu IEBR



# Future Needs for Cave Research & Conservation in Vietnam

Action or support needed	Importance	Justification
Legal reform and investments to improve local residents' life and awareness	1	Local people play a key role in any bioconservation efforts but they are poor and their life depend on the nature harvesting. They also lack of knowledge of nature conservation.
Strengthen professional capacity of local rangers and authors	2	Local rangers and authors need to equip the guidance in bioconservation and management.
Improvement national research capacity	3	Vietnamese bat researchers is still weak in both quantity and quality.
Cooperation with international scientists and organizations	4	This will help to enhance local research capacity.
Establishment a national expertise networks	5	The integration among experts will overcome the lacks in cave bat surveys