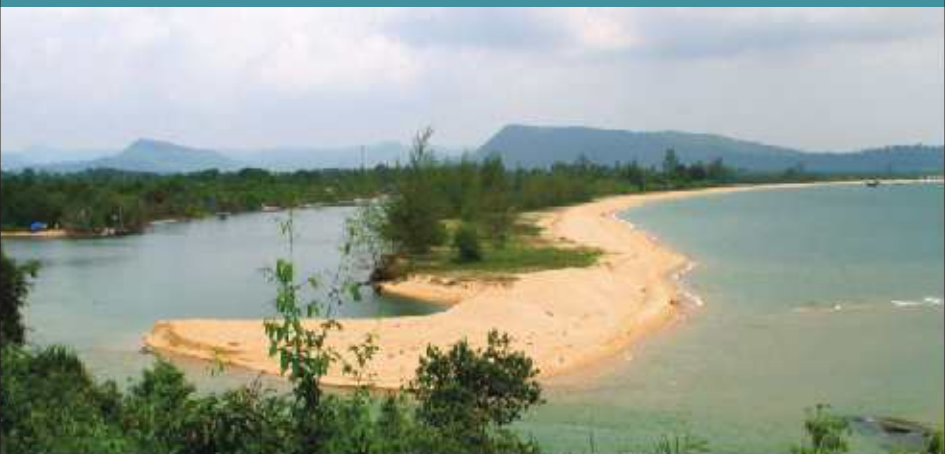


A PHOTOGRAPHIC GUIDE TO
Mammals, Reptiles and Amphibians
OF PHU QUOC ISLAND,
KIEN GIANG PROVINCE, VIETNAM



Dang Huy Phuong, Nguyen Quang Trung,
Nguyen Trung Son & Nguyen Vu Khoi



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Cover photos:

Nguyen Vu Khoi:

- (Front) Reticulated python; Indochinese silvered langur; Changeable lizard
- (Back) Eastern butterfly lizard

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Promoting the conservation of landscapes and natural habitats of threatened species on Phu Quoc island, Vietnam.

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Dang Huy Phuong, Nguyen Quang Truong,
Nguyen Truong Son & Nguyen Vu Khoi

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Phu Quoc National Park - Vietnam



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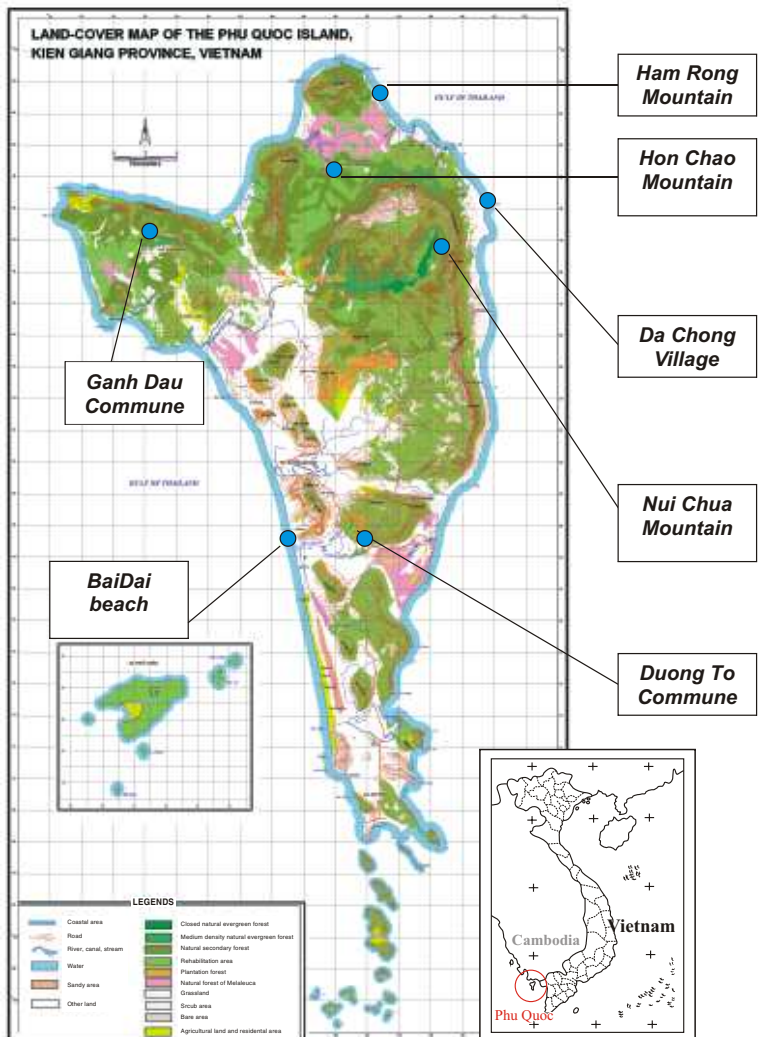
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Map of Phu Quoc Island *with observation sites for wild animals*



Source: Zoological Department - IEBR

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Introduction

With an area of 56,200 ha, Phu Quoc is the largest in an archipelago of 14 Vietnamese islands that lie in the Gulf of Thailand, about 40 km due west of the Vietnam mainland. Phu Quoc National Park is situated in the north-east of the island. The northern and eastern boundaries of the national park follow the coastline. The national park covers an area of 31,422 ha, covering the coordinates from 10°12'- 10°27'N, 103°50' - 104°05'E.

The topography of the national park is hilly, although not particularly steep. The highest point in the national park is Mount “Nui Chua” at 630 metres above sea level. The national park is drained by numerous, mainly seasonal, streams. The only sizeable river on the island is the Rach Cua Can river, which drains the southern part of the national park and flows into the sea on the west coast of the island.

Phu Quoc island support various habitat types which included lowland evergreen forest, coastal sand, off-shore, forest on karst, paper bark (*Melaleuca* sp.) timber forest, mangrove, scrub, Fabaceae forest and anthropogenetic habitats. The island's geographical location enables several forest and habitat types to co-exist, providing ideal conditions for a variety of mammal species.

Phu Quoc island is now facing a number of pressing conservation issues. For example migrants from other parts of Vietnam now account for a significant proportion of the island's growing population. Although the most important economic activity on the island is fishing, not agriculture, Kien Giang provincial Forest Protection Department has identified shifting cultivation as a major threat to biodiversity in the buffer zone of the national park.

Eighty seven (87) vertebrate species were recorded in Phu Quoc during 2000-2006 (Appendixes 1) of which forty-eight (including 20 mammal, 25 reptile and 3 amphibian species) are described in this photographic guide. The species featured in this book are those considered common on the island, and which have been observed in the wild, in captivity or as dead specimens at local households.

This guide to the mammals and other vertebrates of Phu Quoc, the first of its kind is primarily intended as a photographic guide and, as such, contains only basic information on the featured species.

Conservation status is according to national and global categories.

Status in Vietnam according to:

Red Data Book of Vietnam (2000): E = Endangered, V = Vulnerable, R = Rare, T = Threatened

Governmental Decree No. 32/2006/ND-CP dated on 30 March 2006 by the Government of Vietnam: Group IB: Strictly prohibit from exploitation and use for commercial purpose and Group IIB: Limit from exploitation and use for commercial purpose.

Circular No. 2/2006/TT-BTS dated on 20 March 2006 by Ministry of Fisheries which guides to implement the Government's Decree 59/2005/ND-CP dated 4 May 2005 defining conditions for some areas of fisheries-related businesses. (Appendix 5. Species of forbidden exploitation).

IUCN Red List category (2006): CR: Critically Endangered, EN = Endangered, VU = Vulnerable, NT = Near Threatened (meaning LR/nt), LR = Lower Risk (meaning LR/lc: Least concern), NE = Not Evaluated, DD: Data deficient.

Code of conduct for visitors

Vietnam's rich biodiversity is under serious pressure and the wildlife of Phu Quoc is no exception. Many of its species and habitats are still relatively unaffected by development, but island ecosystems are particularly vulnerable to disturbance. You can help to minimize the threats to the fragile ecology of the island by following a few basic guidelines:

DO:

Inform the local Forest Protection Department (FPD) about any places where you observed wildlife animals held in captivity.

Respect the unique wildlife habitats of the island.

Contact Wildlife At Risk with details of any species that you have observed either in captivity or in the wild during your stay.

Avoid eating, drinking or spending money in places where wildlife is held in captivity and tell the owners why they have lost their business.

Follow the instruction of FPD rangers during your visiting to the national park.

Check your hotel's policy on waste treatment and disposal when booking accommodation.

DON'T:

Buy any wild animals or wildlife products, including pets, tortoiseshell, coral, or sea horses.

Import any wildlife to the island.

Remove any wildlife from the island, including flowers, plants and animals.

Eat in restaurants that serve, for example, turtle soup, shark's fin soup or other exotic wildlife dishes.

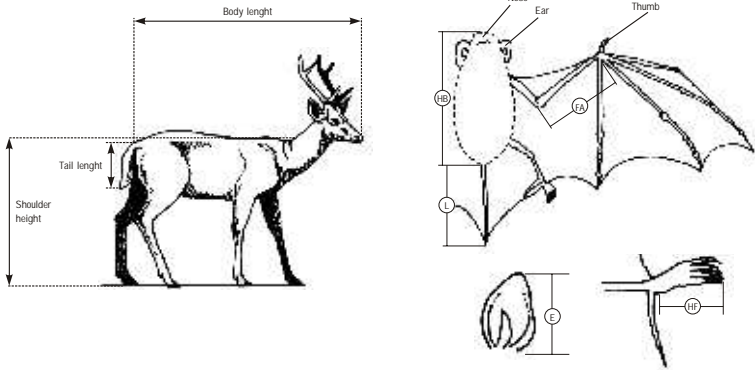
Use the services of businesses that are making a profit at the expense of the environment.

Drop litter in the forest, or elsewhere, during your visit.

Accept the plastic bag that is automatically given with every purchase you make.

How to measure an animal

Figure 1: How to measure a mammal and bat



Note: For small mammals: Total length = Body length + Tail length

For bat: (FA): Arm length (HB): Head body length; (T): Tail length; (E): Ear length; (HF): Food length(include claw); (Wt): Weight.

Figure 2a. How to measure the carapace of an adult tortoise or freshwater turtle

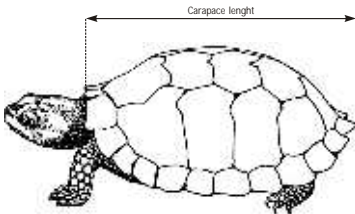
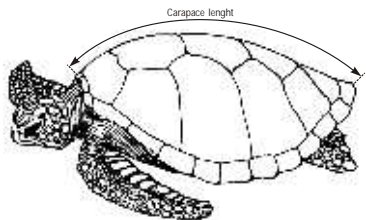


Figure 2b. How to measure the carapace of an adult marine turtle



Measurement of lizards, snakes and crocodiles:

SVL = Snout-ventral length, TL = Tail length



Mammals

(Mammalia)



1. *Tupaia belangeri* (Wagner, 1841)

Ñoi

Northern treeshrew

Status in Vietnam: Not evaluated.

IUCN Red List category: Lower Risk.

Key features: Total length from 30 to 45 cm. Back and tail brown or reddish-brown, with a distinct yellow mark on the shoulder; underparts paler. Muzzle is pointed, with many small teeth. Ears large and round, feet with sharp claws. Tail similar length to head and body.

Habitat: Occurs in various habitats including mangrove forest, scrub, secondary forest and primary forest.

Location of observation: Ham Rong, Hon Chao, Bai Dai and Nui Chua mountains. Uncommon; difficult to observe in the wild.



Photo: Dang Huy Phuong

2. *Pteropus vampyrus* (Linnaeus, 1758)

Dơi Ngõa lôn

Giant flying fox

Status in Vietnam:

Decree 32/2006/ND-CP:

IIB

IUCN Red List

category: Not evaluated

Key features: One of the largest bats in the world.

Body fur of young bats mainly blackish or grayish-brown. Adult grayish-brown, neck and shoulders reddish-brown or dark yellow. Dorsal fur longer and thickers towards neck and shoulders. Abdominal fur long and coarse. No tail. Measurement: HB: 276-339mm; HF: 52-75mm; E: 37-45mm; FA: 184-225mm; Wt: 700-1100g.

Habitat: Mainly in flodded, Melaleuca forest, Dipterocarpacea forest, group size upto 100 individuals. Leaves roosting site at dusk, flying many kilometres in search of fruit and nectar, before returning at dawn.

Location of observation: Hon Chao, Nui Chua mountains



All photos: Nguyen Truong Son

3. *Pteropus lylei* K. Andersen, 1908

Đôi ngỗng Thái lan

Lylei's flying fox

Status in Vietnam:

Decree 32/2006/ND-CP: IIB

IUCN Red list category: Lower Risk

Key features: One of the largest bats in Vietnam, slightly smaller than Giant flying fox. Head darkish-brown, nape reddish or yellowish-brown, shoulders pale yellow. Back grizzled, silver paler along spine and darker towards sides. Throat and upper chest dark yellowish-brown, lower chest and belly darker brown. Ears small dark. No tail. Measurement: HB: 196-249mm; E: 35-42mm; HF: 38-47mm; FA: 145-160mm; Wt. 388-485g.

Habitat: Roosts in colonies usually several hundred strong among branches in *Melaleuca* forest.

Location of observation: Hon Chao and Nui Chua mountains.



All photos: Nguyen Vu Khoi

4. *Hipposideros larvatus* (Horsfield, 1823)

Dơi nếp mũi xaim

Large round leaf horseshoe bat

Status in Vietnam: Not evaluated

IUCN Red list category: Lower Risk

Key features: A medium-sized bat (Wt: 12-17g, FA: 50-65mm), with three supplementary leaflets. Pelage is long and soft, light brown ventrally, the dorsal side dark brown or reddish-brown, sometimes with lighter golden tips. Immature individuals are more greyish than adults. Ears and membranes are well-pigmented, dark. Muzzle pale, anterior and posterior leafs and supplementary leaflets grey. Intermediate leaf with one medial and one pair of lateral inflations. Posterior nose-leaf is subdivided into four cells by three well-developed septa.

Habitat: Occurs in variety of habitats including secondary and primary forest, and mangrove forest. Often roosts in caves

Location of observation: Ham Rong, Hon Chao, Nui Chua mountains



All photos: Nguyen Truong Son

5. *Nycticebus pygmaeus* Bonhote, 1907

Cu li nhồi

Pygmy loris

Status in Vietnam: Red data book of Vietnam: Vulnerable (V). Decree No. 32/2006/ND-CP: IB

IUCN Red List category: Vulnerable (VU).

Key features: Head-body length from 20-23 cm. Similar in overall appearance to slow loris but smaller. Reddish buff coloured fur with white 'frosting'. Dark brown eyerings and sometimes a dark stripe along the spine.

Habitat: Occurs in evergreen forests.

Location of observation: According to FPD rangers, the species can be observed in the wild in the evening along the roads from Duong To and Ganh Dau communes (Bai Dai Beach). Particularly 'Suoi Cai Ganh Dau' or 'Quoc Phong' road.



Photo: Tilo Nadler FZS-EPRC



Photo: Ulrike Streicher - EPRC



Photo: Nguyen Vu Khoi

6. *Nycticebus bengalensis* (Lacépède, 1800)

Cu li lòn

Bengal slow loris

Status in Vietnam:

Red data book of Vietnam:
Vulnerable (V). Decree
No. 32/2006/ND-CP: IB

IUCN Red List category:

Vulnerable (VU).



Key features: Head-body

length 26 to 38 cm. Light brown fur; whitish-brown or white head; always with a clear dark brown or black stripe along the spine.

Habitat: Occurs in both open habitats and evergreen forest.

Location of observation: According to FPD rangers, the species can be observed in the wild in the evening along the roads from Ganh Dau communes, 'Suoi Cai Ganh Dau' or 'Quoc Phong' road.



All photos: Nguyen Vu Khoi

7. *Macaca arctoides* (Geoffroy, 1831)

Khà mai ñoi

Stump-tailed macaque

Status in Vietnam:

Red data book of Vietnam: Vulnerable (V).

Decree No. 32/2006/ND-CP: IIB

IUCN Red List category: Vulnerable (VU).

Key features: Total length 50 to 70 cm. Tail very short (less than 1/3 length of hind leg). Long shaggy fur; back dark brown or reddish-brown, paler underneath. Bare skin on face and rump reddish-brown or bright red. Infants have very light nearly white fur.

Habitat: Found mainly in uplands, in primary or secondary forest.

Location of observation: Ganh Dau Commune (Bai Dai Beach). This species may have been introduced from the mainland. Uncommon. Several observed in captivity.



Male



Female on heat



All photos: Nguyen Vu Khoi

8. *Macaca fascicularis* (Wroughton, 1815)

Khà nưoi dai

Long-tailed macaque

Status in Vietnam:

Decree No. 32/2006/ND-CP: IIB

IUCN Red List category: Lower risk

Key features: Total length 90 to 110 cm. Long tail, similar in length to head and body. Body fur varies from greyish-brown to reddish-brown, light under-parts. Infant dark brown to black. The head is shaped with a pattern of fur as the crest.

Habitat: Primary forest, secondary forest and forests in coastal areas and along large rivers.

Location of observation: Captive at Ganh Dau, Bai Thom, Cua Can, Ham Ninh, and Duong To communes. In the wild, can observed along Quoc Phong road.



All photos: Nguyen Vu Khoi

9. *Trachypithecus villosus germaini* (Milne-Edwards, 1876)

Voice: bair

Indochinese silvered langur

Status in Vietnam: Red data book of Vietnam: Vulnerable (V). Decree No. 32/2006/ND-CP: IB

IUCN Red List category: Data deficient (DD).



Key features: Total length 106 to 144 cm. Tail longer than body. Body fur varies from greyish-black to black. Face blackish-grey with long whitish-light grey whiskers, erect to a light grey crest. Infants bright orange.

Habitat: Found mainly in evergreen forest.

Location of observation: In wild, Ham Rong mountain, Hon Chao and Nui Chua mountains. Observed in deep forest, formerly abundant on the island but has recently become uncommon.



All photos: Nguyen Vu Khoi

10. *Martes flavigula* (Boddaert, 1785)

Chồn vang

Yellow-throated marten

Status in Vietnam: Not evaluated.

IUCN Red List category: Lower risk.

Key features: Total length from 80 to 100 cm. Body long and slender with sleek yellowish-brown fur; black feet, tail and sides of neck; and bright yellow upper chest and throat. Long tail similar in length to body.

Habitat: Found in wide range of habitats, from lowlands to mountain areas.

Location of observation: Ham Rong, Hon Chao and Nui Chua mountains. Uncommon. Difficult to observe in the wild.



All photos: Nguyen Vu Khoi

11. *Aonyx cinerea* (Illiger, 1815)

Rái cáivươi beì

Oriental small-clawed otter

Status in Vietnam: Red data book of Vietnam: Vulnerable (V). Decree No. 32/2006/ND-CP: IB.

IUCN Red List category: Near threatened (NT).

Key features: Total length from 60 to 90 cm. Small size and short claws that do not extend beyond tips of toes. Mainly grey-brown with white throat. Incomplete webbing between on feet.

Habitat: Occurs in wide variety of aquatic habitats from mangrove forest and large rivers to small hill streams and ponds.

Location of observation: Captive in Rach Tram Village, Bai Thom Commune. Uncommon. Difficult to observe in the wild.



Photo: Nguyen Quang Truong

12. *Viverricula indica* (Desmarest, 1817)

Cầy hồng

Small Indian civet

Status in Vietnam: Decree No. 32/2006/ND-CP: IIB.

IUCN Red List category: Lower risk.

Key features: Total length from 80 to 100 cm. Body fur grey with neat rows of spots alongflanks, lack of black crest along back, and dark brown feet. There are 6-7 dark bands around white-tipped tail.



Habitat: Found in open areas (grassland, scrub and secondary forest).

Location of observation: Ham Rong, Hon Chao, Bai Dai, and Nui Chua mountains. Mainly nocturnal. Could be observed in secondary forest after dusk.



All photos: Wildlife Conservation Society (WCS) Cambodia Program

13. *Paradoxurus hermaphroditus* (Pallast , 1777)

Cầy voi rừng

Common palm civet

Status in Vietnam: Not evaluated.

IUCN Red List category: Lower Risk

Key features: Total length from 75 to 140 cm. Body fur varies from olive-grey to cream with three dark stripes on back and dark spots on flanks. Fur on forehead and behind cheeks usually paler. Tail progressively darker toward tip.

Habitat: Found mainly in trees in forest.

Location of observation: Ham Rong, Hon Chao, Bai Dai, and Nui Chua mountains. Mainly nocturnal. Difficult to observe in the wild.



Photo: Nguyen Vu Khoi



Photo: U Minh Thuong Nature Reserve Conservation and Community Development Project
1998-2003 (Source: Dr Pham Trong Anh - IEBR)

14. *Prionailurus bengalensis* (Kerr, 1792)

Mèo rừng

Leopard cat

Status in Vietnam:

Decree No. 32/2006/ND-CP: IB.

IUCN Red List category: Least concern.

Key features: Total length from 60 to 85cm. Yellow-brown fur with large black spots, some merging to form short stripes (shoulders and back of neck). There are two white marks between eyes. Tail approximately 1/2 body length with numerous large black spots.

Habitat: Occurs in wide range of habitats from plantations to scrub or evergreen forest.

Location of observation: Ham Rong, Hon Chao, Bai Dai, and Nui Chua mountains. Mainly nocturnal. Difficult to observe in the wild.



All photos: Nguyen Vu Khoi

15. *Sus scrofa* Linnaeus, 1758

Heo rừng

Wild pig

Status in Vietnam: Not evaluated.

IUCN Red List category: Lower risk.

Key features: Shoulder height from 50 to 80 cm. Dark body with big head and long muzzle, and mane of black hair extending halfway down back. Tusks developed. Tail very short with hard-tipped hairs.

Habitat: Occurs in wide range of habitats from agricultural areas to scrub or evergreen forest.

Location of observation: Ham Rong, Hon Chao, Bai Dai and Nui Chua mountains.



Female & infant



All photos: Nguyen Vu Khoi

16. *Cervus unicolor* Kerr, 1792

Nai

Sambar

Status in Vietnam: Not evaluated.

IUCN Red List category: Lower risk.

Key features: Shoulder height from 120 to 160 cm. Large deer with coarse, short dark brown hair on body; inside of legs and midline of belly paler. Hair on face usually dark brown. Ears broad. Adult males develop antlers 50-100 cm in length, always have 2 tines with main antler.



Photo: Dang Huy Phuong



Photo: Nguyen Vu Khoi

Habitat: Secondary forest to dense rainforest.

Location of observation: An antler of this species was observed at a house in Bai Thom Commune (Nui Chua Mountain). This species was regularly observed in the wild 10 to 15 years ago. Open areas nears army road.



Photo: Nguyen Vu Khoi

17. *Hylopetes lepidus* (Horsfield 1822)

Sóc bay mai xaim

Grey-cheeked flying squirrel

Status in Vietnam: **Decree No. 32/2006/ND-CP: IIB.**

IUCN Red List category: Lower risk.

Key features: Total length from 23 to 26 cm. Fur dark grey or brown on back with some dark brown streaks, grey or cream cheeks and white base to tail; cream or white belly. Tail shorter than head and body length.

Habitat: Occurs in secondary and primary forest.

Location of observation: Ham Rong, Hon Chao and Nui Chua mountains



Photo: Dang Huy Phuong

18. *Callosciurus finlaysoni harmandi* (Milne-Edwards, 1876)

Số: 101/Phủ Quốc

Finlayson's squirrel

Status in Vietnam: Not evaluated

IUCN Red List category: Not evaluated.

Key features: Total length from 37 to 44 cm. Body fur varies from reddish-brown to greyish-brown on back and tail, and orange or grey on belly. Tail shorter than head and body length, with white-tipped hair. The reddish-brown stripe is absent in subspecies *Callosciurus finlaysoni harmandi*.

Habitat: Occurs in a variety of forested habitats from gardens to secondary or primary forest.

Location of observation: Ham Rong, Hon Chao, Bai Dai, and Nui Chua mountains. Duong To township and Ham Ninh communes.



Photo: Dang Huy Phuong

19. *Ratufa bicolor* (Sparrmann, 1778)

Sóc đen

Black giant squirrel

Status in Vietnam:

Not evaluated.

IUCN Red List category:

Lower risk.

Key features: Total length from 65 to 85 cm. Face, body and legs black. Cheeks, throat and underparts cream. Legs with claws. Tail black or dark brown with bristled hairs.

Habitat: Found mainly in forest trees where it feeds on fruit, seeds and leaves.

Location of observation: Ham Rong, Hon Chao, Bai Dai, and Nui Chua mountains.



All photos: Nguyen Vu Khoi

20. *Menetes berdmorei* (Blyth, 1849)

Soi vằn lông

Berdmore's squirrel

Status in Vietnam: Not evaluated.

IUCN Red List category: Lower risk.

Key features: Total length from 25 to 38 cm. Muzzle pointed, ears small and belly white or cream. Tail shorter than body with some black bands. Fur dark grey on back with five dark and light longitudinal stripes.

Habitat: Found in both scrub and forested areas.

Location of observation: Ham Rong, Hon Chao and Nui Chua mountains.



Photo: Dang Huy Phuong





Photo: Ho Thu Cuc

Reptiles (Reptilia)



Photo: Nguyen Vu Khoi

21. *Acanthosaura lepidogaster* (Cuvier, 1829)

Oải roài vaỉ

Scale-bellied tree lizard

Status in Vietnam: Red Data Book of Vietnam: Threatened (T).

IUCN Red List category: Not evaluated.

Key features: SVL from 5 to 10 cm, TL to 20 cm. Body covered with rough scales on underside. Small spine behind eye and another spine or small cluster, above tympanum. Outer part of tympanum covered with small scales. Crest of broad-based compressed scales on neck usually narrowly separated from low crest on back. Coloration varies from green to dark brown. Sometimes has bright lozenge pattern on neck. Dark bars/bands across back and tail.

Habitat: Found in trees in evergreen forest.

Location of observation: Ganh Dau and Bai Thom communes.



Photo: Nguyen Quang Truong

22. *Calotes versicolor* (Daudin, 1802)

Nhông Xanh

Changeable lizard

Status in Vietnam: Not evaluated

IUCN Red List category: Not evaluated.

Key features: SVL from 7 to 10 cm, TL from 25-28 cm. There are two spines above the tympanum. Spines behind the eyes are absent. The male is somewhat larger than the female, and has strongly swollen cheeks and tail base. Coloration varies from uniform tan, marble brown, or clouded grey with reddish. The male develops a reddish head and black blotch on the throat during the mating season.

Habitat: Found on sandy beaches and in shrubs or trees (e.g coconut) along the beach.



Location of observation: Ong Trang beach (In Mango Bay resort; Thangloi resort) and Bai Dai beach. Common species and easy to observe, particularly at the beginning of the rainy season.



All photos: Nguyen Vu Khoi

23. *Leiolepis reevesii* (Gray, 1831)

Nhông cat ri-vô

Eastern butterfly lizard

Status in Vietnam: Not evaluated.

IUCN Red List category: Not evaluated.



Key features: SVL to 15 cm, TL to 30 cm. Species characterized by large dorsal spots, with dark edges that form a continuous network. Three distinct longitudinal lines on back and tail. Flank white, tinged with orange on edge of back.

Habitat: Arid areas such as sandbanks, where it digs deep.

Location of observation: Ganh Dau and Bai Thom communes (Bai Dai Beach, Rach Tram Village). Common species frequently observed in shrubs along sandy beaches.



Photo: Nguyen Quang Trung



All photos: Nguyen Vu Khoi, unless otherwise stated

24. *Physignathus cocincinus* Cuvier, 1829

Rồng nước

Indochinese water
dragon

Status in Vietnam: Red
Data Book of Vietnam:
Vulnerable (V).

IUCN Red List category:
Not evaluated.



Photo: Nguyen Vu Khoi

Key features: One of the largest agamid species, SVL to 25 cm, TL to 65cm. Body covered with small scales. Male has swollen cheeks and crests ridge of enlarged scales over neck, back and tail. Female somewhat smaller and lacks crests. Coloration green with several oblique bright-blue or cream stripes on flanks, tail bears dark bands.

Habitat: Found in trees close to streams or rivers in evergreen forest.

Location of observation: Cua Can and Bai Thom communes (Bai Ngang Village, Hon Mot, Ham Rong, and Hon Chao mountains).



Photo: Nguyen Quang Truong

25. *Gekko gecko* (Linnaeus, 1758)

Tắc kè

Tokay, gecko

Status in Vietnam: Red Data Book of Vietnam: Threatened (T).

IUCN Red List category: Not evaluated.

Key features: SVL to 18 cm, TL to 17 cm. Head flattened and covered with small round scales. Eyes with vertical pupils and immovable transparent eyelids. Back covered by many small scales with orange or red spots with 6-9 faint yellow bands. Well-developed digital pads; inner digit clawless, others bear a claw. Males give loud call “tak ke”; females do not call.

Habitat: Inhabits house roofs, small caves or trees.

Location of observation: Cua Can and Bai Thom communes (Nui Chua, Ham Rong, Hon Chao, Hon Mot mountains), Ong Trang beaches (Mango Bay resort, Thang Loi resort). Nocturnal. Easy to hear and observe in the evening.



Photo: Nguyen Vu Khoi



Photo: Nguyen Quang Truong

26. *Varanus nebulosus* (Gray, 1831)

Kyôñāvāñ

Clouded monitor

Status in Vietnam:

Red data book of Vietnam:
Vulnerable (V). Decree
No. 32/2006/ND-CP: IIB.

IUCN Red List category: Not
evaluated.



Key features: SVL to 85 cm, TL to 110 cm. Nostrils situated about midway between eyes and tip of narrow snout. Long tongue, forked at tip. Brown base color with numerous small yellow spots.

Habitat: Open forest, secondary forest and rainforest.

Location of observation: Ganh Dau and Bai Thom communes (Hon Mot, Ham Rong, and Hon Chao mountains).



All photos: Nguyen Vu Khoi

27. *Varanus salvator* (Laurenti, 1786)

Kỳ nhông hoa

Water monitor

Status in Vietnam: Red data book of Vietnam: Vulnerable (V). Decree No. 32/2006/ND-CP: IIB.

IUCN Red List category: Not evaluated.

Key features: SVL to 105 cm, TL to 140 cm. Long, flattened snout bears oval nostrils close to tip. Long tongue split at tip. Blue-grey or dark grey base colour with regular pattern of cream spots on back. Several black and cream bands on tail.

Habitat: Wide range, from coastal areas to montane forest

Location of observation: Ganh Dau and Bai Thom communes (Rach Tram, Quoc Phong Road).



All photos: Nguyen Vu Khoi

28. *Python molurus* (Linnaeus, 1758)

Trăn nài

Burmese python

Status in Vietnam:

Red data book of Vietnam:
Vulnerable (V). Decree
No. 32/2006/ND-CP: IIB.

IUCN Red List category:

Near threatened (NT).

Key features: SVL to 400 cm.

Distinct head with large, sometimes fragmented, shields. Small eyes with vertical pupils. Body yellowish to light brown. Series of black edged, dark brown blotches superimposed on lighter ground colour. Top of head has pale arrow-shaped mark. Belly cream.

Habitat: Occurs in evergreen forests.

Location of observation: Bai Thom Commune (Da Chong Village).



All photos: Nguyen Vu Khoi

29. *Python reticulatus* (Schneider, 1801)

Trăn gấm

Reticulated python

Status in Vietnam:

Red data book of Vietnam:
Vulnerable (V). Decree
No.32/2006/ND-CP: IIB.

IUCN Red List category: Not
evaluated.

Key features: SVL to 600 cm.

Distinct head with large shields. Small
eyes with vertical pupils. Body yellowish-brown. Network of black lines
extends along top of body and down sides where lines widen and encircle
white spots. Black line extends from snout over crown to neck. Another
black line extends from eyes to the base of jaw. Belly cream or yellowish.

Habitat: Found in humid forest.

Location of observation: Bai Thom Commune (Rach Tram Village).



Photo: Nguyen Quang Truong



Photo: Ho Thu Cuc

30. *Coelognathus radiatus* (Schlegel, 1837)

Rắn sọc dĩa, hoàng gĩa

Copperhead racer, Radiated rat snake

Status in Vietnam: Not evaluated; Decree No. 32/2006/ND-CP: IIB.

IUCN Red List category: Not evaluated.

Key features: SVL to 200 cm. Head elongated and distinct from neck. Body compressed. Vertebral dorsal scales weakly keeled but not enlarged. Body greyish or yellowish-brown with four black stripes on anterior part of body: two inner stripes wider than outer ones. Head coppery brown with three black streaks radiating from eye; one extends back to narrow black band over nape. Belly yellowish or cream.

Habitat: Widely distributed from agricultural land to mountain areas.

Location of observation: Open areas.



Photo: Nguyen Vu Khoi



Photo: Nguyen Quang Truong

31. *Enhydris bocourti* (Jan, 1865)

Rắn bông voi

Bocourt's water snake

Status in Vietnam: Not evaluated.

IUCN Red List category: Not evaluated.

Key features: SVL to 120 cm.

Head flattened and distinct from neck. Snout on dorsal side of head, pupil vertically elliptical. Body stout and cylindrical, with smooth scales. Dark brown above with narrow, irregular, yellow crossbars. Lower sides yellow with dark dorsal colour sometimes extending across belly. Head dark with yellow marks above and yellow below.

Habitat: Found in well-watered lowland.

Location of observation: Bai Thom Commune (Da Chong Village).



Photo: Ho Thu Cuc



Photo: Nguyen Quang Truong

32. *Ptyas korros* (Schlegel, 1837)

Rắn rài thông, rắn lười

Indochinese rat snake

Status in Vietnam: Red Data Book of Vietnam: Threatened (T).

IUCN Red List category: Not evaluated.

Key features: SVL to 200 cm. Head elongate, distinct from neck. Large eyes contain round pupils. Smooth body scales, olive in anterior and brown with dark-edged scales in posterior. Belly yellow.

Habitat: Forest and agricultural land.

Location of observation: Duong To, Cua Can, Ganh Dau, and Bai Thom communes.



Photo: Nguyen Quang Truong

33. *Bungarus candidus* (Linnaeus, 1758)

Rắn cá nia nam, rắn mai gấm

Malayan krait, Blue krait

Status in Vietnam: Not evaluated; Decree No. 32/2006/ND-CP: IIB.

IUCN Red List category: Not evaluated.

Key features:

SVL to 140 cm.

Head flattened and slightly distinct from neck, small eyes contain round pupil.

Black and white bands

alternate along cylindrical body. 18-30 black body bands on, but not encircling, body and 7-9 on tail. Body scales smooth and enlarged in vertebral series.



Photo: Nguyen Vu Khoi

Habitat: Frequents forested areas.

Location of observation: Bai Thom Commune.



Photo: Nguyen Quang Truong

34. *Bungarus fasciatus* (Schneider, 1801)

Rắn cạp nong

Banded krait

Status in Vietnam: Red Data Book of Vietnam: Threatened (T). Decree No. 32/2006/ND-CP: IIB.

IUCN Red List category: Not evaluated.

Key features: SVL to 150 cm. Head distinct from neck. Small eyes contain round pupil. Triangular body. Yellow and black bands of almost equal width encircle body and tail. 14-32 black bands on body and 2-5 bands on tail. Head and neck black, supra-labials yellow.

Habitat: Open and forested areas.

Location of observation: Ganh Dau and Bai Thom communes.



Photo: Nguyen Vu Khoi



Photo: Nguyen Quang Trung

35. *Naja siamensis* Laurenti, 1768

Rắn hổ mang Thái lan

Indochinese spitting cobra

Status in Vietnam: Red Data Book of Vietnam: Threatened (T). Decree No. 32/2006/ND-CP: IIB.

IUCN Red List category: Not evaluated.

Key features: SVL to 200 cm. Head not very distinct from neck, which can be expanded. Small eyes contain round pupil. Hood mark maybe a monocle or U-, V-, or H-shaped, but often faint or absent. Back dark brown, grey or yellowish. A few snakes have four indistinct cross-bands on neck.

Habitat: Found in lowland and hill areas.

Location of observation: Ganh Dau and Bai Thom communes.



Photo: Nguyen Vu Khoi

36. *Ophiophagus hannah* (Cantor, 1836)

Rắn hổ mang chúa

King cobra

Status in Vietnam: Red Data Book of Vietnam: Endangered (E). Decree No. 32/2006/ND-CP: IB.

IUCN Red List category: Not evaluated.

Key features: SVL to 500 cm. Head bears large shields (especially parietal pair); Hood long and narrow. Small eyes with round pupils. Body coloration of adults varies from uniform light greenish-grey, light

brown to dark grey or black, sometimes with darker bands. Hood may bear chevron mark. Hatchlings black with yellow bands and yellow

chevron on neck. Upper body and tail contain dark-edged scales.

Habitat: Found in forests and plantations.

Location of observation: Bai Thom Commune (Hon Chao Mountain).



Photo: Nguyen Quang Truong



All photos: Nguyen Vu Khoi, unless otherwise stated

37. *Lapemis hardwickii* Gray, 1835

Ñeĩn gai

Hardwicke's sea snake

Status in Vietnam: Not evaluated.

IUCN Red List category: Not evaluated.

Key features: SVL to 80 cm. Short head with round snout; small eyes with round pupils. Flattened body and compressed tail. Green-grey on head, brownish-grey or blackish-grey on back and anterior part of tail. 34-50 dark bands on back and 3-8 others on dark grey-tipped tail. Belly yellow or cream.

Habitat: Shallow water in sea.

Location of observation: Shallow water around the island.



Photo: Ho Thu Cuc

38. *Trimeresurus albolabris* Gray, 1842

Rắn lục môi trắng

White-lipped pit-viper

Status in Vietnam: Not evaluated.

IUCN Red List category: Not evaluated

Key features: SVL to 85 cm. Triangular head distinct from neck. Body fairly stout with keeled scales. Head and body green, chin, throat and belly greenish or yellowish-white. Males have white stripe on first body scale row that is indistinct or absent on female. Tail reddish-brown.



Photo: Nguyen Quang Truong

Habitat: Mountain forest, usually found resting or foraging on trees near streams.

Location of observation: Ganh Dau and Bai Thom communes.

39. *Hieremys annandalii* (Boulenger, 1903)

Rùa rùa, Cang Nôôc

Yellow-headed temple turtle

Status in Vietnam: Red data book of Vietnam: Vulnerable (V). Decree No. 32/2006/ND-CP: IIB.

IUCN Red List category: Endangered (EN).



Key features: Carapace length to 50 cm. Head blackish to olive with some grey marking. Upper jaw has medial notch with tooth-like cusp on each side. Carapace elongated and uniformly dark-brown or black. Plastron yellow with a large black blotch on each scute may become black with age.

Habitat: Swamps, flooded fields and slow-flowing rivers.

Location of observation: Bai Thom Commune (Da Chong Village).



All photos: Nguyen Vu Khoi

40. *Malayemys subtrijuga* (Schlegel and Muller, 1844)

Rùa ba gôi

Malayan snail-eating turtle

Status in Vietnam: Not evaluated.

IUCN Red List category:

Vulnerable (VU).

Key features: Carapace length to 20 cm. Head black and adorned with several yellow or cream-coloured stripes. First stripe begins on snout above nostrils and extends posteriorly on each side above orbit to neck; second stripe begins on each side of the snout just behind nostril and runs backwards below orbit to neck. Oval carapace contains three discontinuous keels. Carapace ranges from light to dark brown with yellow or cream-colored border. Yellow or cream-colored plastron has pattern consisting of large dark-brown or black blotch on each scute.

Habitat: Slow-moving or still bodies of water, with soft bottoms (e.g. ponds, small streams, marshes and rice paddies).

Location of observation: Bai Thom Commune (Da Chong Village).



Photo: Nguyen Quang Truong



Photo: Ho Thu Cuc

41. *Amyda cartilaginea* (Boddaert, 1770)

Ba ba Nam boi Cua Ninh

Asiatic softshell turtle

Status in Vietnam: Not evaluated.

IUCN Red List category:
Vulnerable (VU).

Key features: Carapace length to 83cm; Row of rounded bumps along the anterior edge of the carapace; brown or grey carapace with yellow and black speckling.



Adult



Sub-adult

Habitat: Ponds, lakes and creeks with slow current. Conceals itself in the bed of streams and rivers; preferably sandy. Lays eggs on sandy or muddy banks of rivers; streams.

Location of observation: Bai Thom Commune (Da Chong Village).
Difficult to observe in the wild.



Adult

All photos: Nguyen Vu Khoi

42. *Pelodiscus sinensis* (Weigmann, 1834)

Ba ba tròn

Chinese softshell turtle

Status in Vietnam: Not evaluated.

IUCN Red List category:
Vulnerable (VU).

Key features: Carapace length to 27 cm. Rounded, flattened carapace; covered by leathery skin. Long and retractile neck; paddlelike limbs with three claws on each. Snout consists of long proboscis. Carapace olive to grey and, in juveniles patterned with round, light-bordered black spots. White or yellow plastron immaculate in adults but has large black blotches in juveniles.

Habitat: Ponds, lakes and creeks with slow current

Location of observation: Bai Thom Commune (Da Chong Village). Status of species in the wild not yet confirmed, probably introduced to the island.



All photos: Nguyen Quang Truong

43. *Chelonia mydas* (Linnaeus, 1758)

Vích

Green sea turtle

Status in Vietnam:

Red Data Book of Vietnam:

Endangered (E). Circular

No. 02/2006/TT-BTS: Forbidden exploitation.



Adult

Photo: Nguyen Vu Khoi

IUCN Red List category:

Endangered (EN).



Sub-adult

Photo: Nguyen Vu Khoi

Key features: Carapace length to 140 cm. Snout short and blunt. Single pair of prefrontal scales present before and between eyes. Four pairs of non-overlapping pleural scutes on carapace. Front flippers proportionately long, with medium-sized scales in centre; and hatchlings have distinctive white edge on front flippers.

Habitat: Shallow coastal marine water, particularly sandy areas. Nest mainly on gently sloping sandy beaches.

Location of observation: Bai Thom Commune (Da Chong Village), possibly in Ham Ninh Commune.



Photo: Nguyen Quang Truong

44. *Eretmochelys imbricata* (Linnaeus, 1766)

Ñoi moi

Hawksbill turtle

Status in Vietnam: Red Data Book of Vietnam: Endangered (E). Circular No. 02/2006/TT-BTS: Forbidden exploitation.

IUCN Red List category: Critical Endangered (CR).

Key features: Carapace length to 100 cm. Narrow and pointed jaws. Two pairs of prefrontal scales present on head. Carapace dark greenish brown; young specimens reveal a tortoiseshell pattern, with four pairs of overlapping costal scutes. Hatchlings have three distinct keels on carapace and dark grey plastron.

Habitat: Tropical coral reefs. Nests on small beaches.

Location of observation: Ganh Dau Commune (Bai Dai Beach), Bai Thom Commune (Da Chong Village).



Photo: Nguyen Quang Truong

45. *Crocodylus siamensis* Schneider, 1801

Càisáu xiêm, càisáu nước ngọt

Siamese crocodile

Status in Vietnam: Red data book of Vietnam: Endangered (E).

Decree No. 32/2006/ND-CP: IIB.

IUCN Red List category: Critically endangered (CR).

Key features: Total length to 400 cm. Wide head with distinct bony ridges at back of skull. Bony lachrymal ridges form broad-based triangle. Four large scales behind the head. Four distinct keels on tail. Back grey with some large dark spots; paler belly and flanks.

Habitat: Probably prefers slow moving areas of freshwater (swamps, sheltered parts of rivers, lakes and streams).

Location of observation: In captivity at Bai Thom Commune. Status of species in the wild not yet confirmed, probably introduced to the island.



Photo: Nguyen Vu Khoi

Photo: Nguyen Quang Trung



Amphibians (Amphibia)



Photo: Nguyen Vu Khoi

46. *Limnonectes kuhlii* (Tschudi, 1838)

Ếch nheo

Kuhl's creek frog

Status in Vietnam: Not evaluated.

IUCN Red List category: Not evaluated.

Key features: SVL: male from 4 to 8.5 cm, female from 4.5 to 8.5 cm. Smooth and slimy skin, back brown or dark brown, with cream vertebral stripe in some individuals. Belly cream. Tympanum indistinct or absent. Skin fold begins behind eye backwards to shoulder.

Habitat: Occurs near water sources (streams, small pools) in a wide variety of habitats from plantations to secondary or primary forest.

Location of observation: Ganh Dau and Bai Thom communes. Easy to observe in the evening with spotlights



Photo: Nguyen Quang Truong

47. *Sylvirana nigrovittata* (Blyth, 1855)

Ếch suối

Black-striped frog

Status in Vietnam: Not evaluated.

IUCN Red List category: Not evaluated.

Key features: SVL up to 7 cm. Back brown with numerous dark spots. Black stripe begins on tip of snout leading backwards to eyes. Large tympanum, dark brown or black in coloration. Distinct skin folds from behind eyes along back edge toward hind legs. Belly cream or white.

Habitat: Near water sources (streams, rivers, ponds, small pools) in a wide variety of habitats from plantations to secondary or primary forest.

Location of observation: Ganh Dau and Bai Thom and communes. Easy to observe in the evening with spotlights



Photo: Nguyen Quang Truong

48. *Polypedates leucomystax* (Gravenhorst, 1829)

Ếch cây mep trắng

Common treefrog

Status in Vietnam: Not evaluated.

IUCN Red List category: Not evaluated.

Key features: SVL up to 7.5 cm. Smooth skin. Back yellow, yellowish-brown or grey at based, sometimes with four dark stripes or dark brown spots. Several dark brown bars on upperpart of legs. Belly cream or white.

Habitat: Near water sources (streams, rivers, ponds, small pools) in a wide variety of habitats from paddy fields to grassland and evergreen forest.

Location of observation: Ganh Dau, Bai Thom, Cua Can and Duong To communes. Easy to observe in the evening with spotlights



Photo: Nguyen Quang Truong

List of mammals, reptiles and amphibians recorded from Phu Quoc Island



All photos: Nguyen Vu Khoi

Appendix 1: List of Mammals recorded on Phu Quoc island

Vietnamese Name	English name	Scientific name
I. Bò Nhieu Răng	Tree shrews	Order Scandenta
1. Hoi Nôi	Tree shrews	Family Tupaiidae
Nôi	Northern treeshrew	Tupaia glis
II. Dơi	Bats	Order Chiroptera
2. Hoi Dơi Quai	Fruit bats	Family Pteropodidae
Dơi Ngựa Thái Lan	Lyle's flying fox	Pteropus lylei
Dơi Ngựa lớn	Common flying fox	Pteropus vampyrus
3. Hoi Dơi lămũi	Leaf-nosed bats	Rhinolophidae
Dơi mũi xinh	Bicoloured roundleaf bat	Hipposideros bicolor
Dơi mũi tai lớn	Fulvous roundleaf bat	Hipposideros fulvus
Dơi mũi xám	Intermediate roundleaf bat	Hipposideros larvatus
III. Bò Linh trưởng	Primate	Order Primates
4. Hoi cu li	Lorises	Family Loricidae
Cu li lớn	Slow loris	Nycticebus bengalensis
Cu li nhỏ	Pygmy loris	Nycticebus pygmaeus
5. Hoi khê	Macaques and Langurs	Family Cercopithecidae
Khê mặt nâu	Bear macaque	Macaca arctoides
Khê đuôi dài	Long-tailed macaque	Macaca fascicularis
Voi chà / Nhoi nôi	Indochinese silvered langur	Trachypithecus villosus germaini
IV. Bò Ăn Thịt	Carnivores	Order Carnivora
6. Bò chôi	Canids	Family Canidae
Choi rông	Golden Jackal	Canis aureus
7. Hoi chon	Mustelids	Family Mustelidae
Rai cẩu voi bai	Small-clawed otter	Aonyx cinerea
Chon vàng	Yellow-throated marten	Martes flavigula
8. Hoi cầy	Civets	Family Viverridae
Cầy voi hoi	Common palm civet	Paradoxurus hermaphroditus
Cầy hồng	Small Indian civet	Viverra indica
9. Hoi mèo	Cats	Family Felidae
Mèo rừng	Leopard cat	Prionailurus bengalensis
V. Bò quýt chân	Artiodactyles	Order Artiodactyla
10. Hoi lợn	Pigs	Family Suidae
Lợn rừng	Wild pig	Sus scrofa
11. Hoi Hoẵng Nai	Deers	Family Cervidae
Nai	Sambar	Cervus unicolor
VI. Bò Gặm Nhấm	Rodents	Order Rodentia
12. Hoi Sóc bay	Flying squirrels	Family Pteromyidae
Sóc bay má xám	Grey-cheeked flying squirrel	Hylopetes lepidus
Sóc bay má nâu	Red-cheeked flying squirrel	Hylopetes spadiceus
13. Hoi Sóc cày	Squirrels	Family Sciuridae
Sóc chân vàng	Belly-banded squirrel	Callosciurus flavimanus
Sóc nôi Phú Quốc	Finlayson's squirrel	Callosciurus finlaysoni harmandi
Sóc vằn lông	Bermore's squirrel	Menetes bermorei
Sóc đen	Black giant squirrel	Ratufa bicolor
14. Hoi Chuột	Rats	Family Muridae
Chuột rừng	Sladen's rat	Rattus koratensis
Chuột bụng trắng	White-bellied rat	Rattus niviventer
Chuột còng nập	Germain's rat	Rattus germain

Note:

* Species in captivity on Phu Quoc island (probably introduced from the mainland. This issue is still in question and more surveys are required).

Appendix 2: List of Reptiles recorded on Phu Quoc island

Vietnamese Name	English name	Scientific name
I. Bò Cối Vải	Lizards and Snakes	I. SQUAMATA
Thằn lằn	Lizards	Saurina
1. Hoi Nhong	Agamid lizards	Family Agamidae
Olroi vải	Scale-bellied tree lizard	Acanthosaura lepidogaster
Nhong xanh	Changeable lizard	Calotes versicolor
Thằn lằn bay nôm	Spotted gliding lizard	Draco maculatus
Nhong cat ri-vô	Peter's butterfly lizard	Leiolepis reevesii
Rong rắt	Indochinese water dragon	Physignathus cocincinus
2. Hoi Tắc kè	Geckos	Family Gekkonidae
Thạch sung	Fat-tailed house gecko	Cosymbotus platyurus
Tắc kè	Gecko	Gekko gecko
Thạch sung baorin	Baoring's house gecko	Hemidactylus bowringii
Thạch sung nười đẹp	Indo-Pacific gecko	Hemidactylus garnoti
Thạch sung nười sần	Common house gecko	Hemidactylus frenatus
Thạch sung nười thuy	Smooth-backed gliding gecko	Ptychozoon lionotum
3. Hoi Than lằn bóng	Skinks	Family Scincidae
Thằn lằn bóng Sapa	Sapa skink	Mabuya chapaensis
Thằn lằn bóng nôm	Speckled forest skink	Mabuya macularia
Thằn lằn bóng hoa	Bali skink	Mabuya multifasciata
Thằn lằn phe nôi	Pheno skink	Sphenomorphus sp.
4. Hoi Kỳ nhại	Monitor lizards	Family Varanidae
Kỳ nhại vàng	Clouded monitor, Bengal monitor	Varanus nebulosus
Kỳ nhại hoa	Water monitor	Varanus salvator
Rắn	Snake	Serpentes
5. Hoi Rắn hai nâu	Asian pine snakes	Family Cylindrophilidae
Rắn hai nâu nôi rắn trùn	Red cylinder snake	Cylindrophis rufus
6. Hoi Trăn	Pythons	Family Pythonidae
Trăn rắt	Burmese python	Python molurus
Trăn gấm	Reticulated python	Python reticulatus
7. Hoi Rắn mòng	Sunbeam snakes	Family Xenopeltidae
Rắn mòng	Sunbeam snake	Xenopeltis unicolor
8. Hoi Rắn nóc	Colubrids	Family Colubridae
Rắn cồm	Golden snake	Chrysopelea ornata
Rắn sọc xanh	Green bush rat snake, Green tree racer	Coelognathus radiatus
Rắn sọc đỏ	Cooperhead racer, Radiated rat snake	Elaphe radiata
Rắn dê	Bridle snake	Dryocalamus davisonii
Rắn rắn thông	Indochinese rat snake	Ptyas korros
Rắn rắn trâu	Common rat snake	Ptyas mucosus
Rắn bóng voi	Bocourt's water snake	Enhydryis bocourti
Rắn nóc	Checkered keelback snake	Xenochrophis piscator
9. Hoi Rắn hổ	Kraits, Coral snakes and cobras	Family Elapidae
Rắn cạp nia nam	Malayan krait, Blue krait	Bungarus candidus
Rắn cạp nong	Banded krait	Bungarus fasciatus
Rắn hổ mang	Indochinese spitting cobra	Naja siamensis
Rắn hổ chúa	King cobra	Ophiophagus hannah
Nhân nười sọc	Gray's sea snake	Hydrophis ornatus
Nhân gai, nhân côm	Hardwicke's sea snake	Lapemis hardwickii
Nhân nười nôm, nhân sọc đỏ	Yellow-bellied sea snake	Pelamis platurus
10. Hoi rắn lục	Vipers	Family Viperidae
Rắn lục môi trắng	White-lipped pit viper	Trimeresurus albolabris

Vietnamese Name	English name	Scientific name
II. Bò Rùa	TURTLES	TESTUDINATA
11. Hoi Rùa nạm	Turtles	Family Emydidae
Rùa nạm sếp	Asian leaf turtle	Cyclanoides chinensis
Rùa vàng*	Yellow-headed temple turtle	Hieremys annandalii
Rùa ba gôi	Malayan snail-eating turtle	Malayemys subtrijuga
12. Hoi Ba ba		Family Trionychidae
Cua nhỡ / Ba ba nạm bò*	Asiatic softshell turtle	Amyda cartilaginea
Ba ba trơn*	Chinese softshell turtle	Pelodiscus sinensis
13. Hoi Vích	Sea turtles	Family Cheloniidae
Vích	Green turtle	Chelonia mydas
Noi moi	Hawksbill turtle	Eretmochelys imbricata
Quần nhồng	Olive Ridley turtle	Lepidochelys olivacea
14. Hoi Rùa da	Leatherback sea turtle	Family Dermochelyidae
Rùa da	Leatherback sea turtle	Dermochelys coriacea
III. Bò Cạp Sâu	CROCODILES	CROCODYLIA
15. Hoi Cạp Sâu	Crocodiles	Crocodylidae
Cạp Sâu nước ngọt*	Siamese crocodile	Crocodylus siamensis

Note: *: Species in captivity on Phu Quoc island (probably introduced from the mainland. This issue is still in question and more surveys are required).

Appendix 3: List of Amphibians recorded on Phu Quoc island

Vietnamese Name	English name	Scientific name
I. Bò Không Nuôi	Frogs	Anura
1. Hoi Cóc	Toads	Family Bufonidae
Cóc nhái	Black spined toad	Duttaphrynus melanostictus
2. Hoi Nhái bầu	Narrow-mouthed frogs	Family Microhylidae
Cóc nôm	Spotted narrow mouth frog	Kalophrynus interlineatus
Ehnhồng	Banded bullfrog	Kaloula pulchra
Nhái bầu hay moin	Taiwan rice frog	Microhyla heymsi
Nhái bầu trơn	Dell paddy frog	Micryletta inornata
2. Hoi Ehnhái chính thối	True frogs	Family Dicroglossidae
Ngôi	Grass frog	Fejervarya limnocharis
Ehnhồng	Common lowland frog	Hoplobatrachus chinensis
Ehnhuân Nam bộ	Annam wart frog	Limnonectes dabanus
Ehnhuân	Kuhl's creek frog	Limnonectes kuhlii
Cóc nước sấm	Green puddle frog	Occidozyga lima
3. Hoi Ehnhái	Ranids	Family Ranidae
Chang Nai bạc	Teiwei frog	Hylarana taipehensis
Chau	Red and Black frog	Sylvirana guentheri
Ehnhuân	Stream frog	Sylvirana nigrovittata
4. Hoi Ehnhái	Tree frog	Family Rhacophoridae
Chau chang mặt trắng	Common treefrog	Polypedates leucomystax

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