

**HERPETODIVERSITY OF THE CON DAO ARCHIPELAGO AND
A PROVISIONAL LIST OF AMPHIBIANS AND REPTILES OF CON DAO
NATIONAL PARK (BA RIA - VUNG TAU PROVINCE, VIETNAM)**

N.A. POYARKOV, A.B. VASSILLIEVA
Lomonosov Moscow State University

The Con Dao Archipelago includes 16 mountainous islands and islets belonging to Ba Ria - Vung Tau province and is one of the southernmost territories of Vietnam. These offshore islands are of continental origin and belong to Sunda shelf (Gupta, 2005). However due to sea level oscillations in Pleistocene this territory was many times reconnected and isolated from the Indochinese mainland; the present shallow strait separating the archipelago from the continent was established around 20 thousand years ago (Voris, 2000). These factors might lead to repeated colonization and consequent isolation events which formed the present herpetofauna diversity of Con Dao, including formation of endemic reptile taxa (see Darevsky *et al.*, 1991).

The Con Dao National Park was established on March 1, 1984; it covers the major part of the archipelago and adjacent waters (total area 19.998 ha; 81% of the total terrestrial area is extensively forested) and is one of the oldest national parks in Vietnam. The Con Dao Archipelago contains a number of nesting beaches for two globally threatened marine turtles – Green Turtle (*Chelonia mydas*) and Hawksbill Turtle (*Eretmochelys imbricata*) (Nguyen, 1998; 2003; Nguyen, 1999). All these facts make the Con Dao National Park a unique nature conservation area for Vietnam.

Previous studies of Con Dao herpetofauna were carried out by both Vietnamese scientists (Do, 1997; Nguyen *et al.*, 2004; see review in Nguyen *et al.*, 2009) and their overseas colleagues (Darevsky, 1990; 1999; Darevsky *et al.*, 1991; Orlov & Ananjeva, 2007; Smith, 1920; Campden-Main, 1970; Honda *et al.*, 2001). However the major part of these studies contained brief preliminary reviews of Con Dao herpetofauna or were focused on biology of certain species. One can assume that herpetodiversity of Con Dao is also underestimated and an update of amphibian and reptile species list is required. Herein, we provide a review of Con Dao amphibians and reptiles based on available literature sources and our recent findings and additions to the herpetofauna of the Con Dao Archipelago.

I. MATERIALS AND METHODS

Fieldwork on three major islands of the archipelago was carried out from May 26 to June 12, 2010. Majority of surveys covered both protected areas and anthropogenic terrain of the national park on the archipelago's largest island – the Con Son. During additional herpetological excursions we investigated the islands of Hon Ba (May 31, 2010) and Bai Can (June 11, 2010). Altogether we surveyed 14 localities with different types of biotopes well-representing typical communities of the national park and adjacent man-made landscapes. Amphibians and reptiles were recorded during day and mainly night excursions following standard methods: establishment of pit-fall traps, surveys of transects and breeding waterbodies. Specimens were photographed in the field and identified. Tissue samples were collected from specimens of uncertain identity for further molecular analysis and identification.

II. RESULTS AND DISCUSSION

Our survey results indicate that presently available herpetofaunal lists for the Con Dao Archipelago are incomplete. Meanwhile, the maximum herpetofauna species list of Con Dao includes records of 13 species of amphibians and 43 species of reptiles (56 species altogether). Assuming that some of the records are dubious and might be caused by misidentifications, basing on our fieldwork results and literature data we confirm the presence of 11 amphibian and at least 31 reptilian species (42 species altogether). Including visitant (sea turtles) and possibly extinct in the wild (some large snakes and crocodiles) species, we get a number around 40 reptilian species recorded for the archipelago. Beside confirmation of previously recorded species, these numbers include new species records. We herein add 12 species, 9 genera 4 families and 1 order (1 Ichthyophiidae, 1 Rhacophoridae, 3 Microhylidae, 1 Gekkonidae, 2 Scincidae, 1 Acrochordidae, 1 Xenopeltidae, 1 Colubridae and 1 Natricidae; assumed presence of 1 Typhlopidae) which were not known from the region before. The provisional annotated checklist of amphibian and reptile species found in Con Dao National Park is given in Table 1. The exact number of amphibian and reptile species, however, is yet unclear and requires further research.

Mostly the new species recorded for the Con Dao Archipelago are generally quite common on the mainland of southern Vietnam but were not yet found on the islands. These are mostly lowland monsoon forest species or taxa typical for coastal forests and mangroves: bug-eyed frog *Theloderma* (Rhacophoridae: *Th. cf. stellatum*), narrow-mouthed or rice frogs of the genus *Microhyla* (Microhylidae: *M. fissipes*, *M. cf. picta*, *M. heymonsi*), flat-tailed house gecko *Cosymbotus platyurus*; tree skink *Lipinia vittigera* and borrowing skink *Lygosoma cf. bowringii*, wart snake *Acrochordus granulatus* and bronzeback *Dendrelaphis cf. pictus*. We also provide a first confirmed record of yellow-spotted keelback snake *Xenochrophis flavipunctatus*.

Some of our records, however, are of certain biogeographic interest. In several localities on the Con Son Island ranging from 30 to 250 m a.s.l. we recorded caecilians of the genus *Ichthyophis*. These burrowing legless amphibians belong to a distinct order, have quite secretive habits and are hard to find. Up to now they were not recorded for Con Dao by any previous investigators and so far this population is the southernmost known locality for caecilians in Vietnam. On the mainland *Ichthyophis* are found sporadically in various forest types but usually near permanent waterbodies such as forest streams (Orlov & Ananjeva, 2007). There are no permanent watercourses on any of the islands of the Con Dao Archipelago; water is found only in seasonal streams which completely disappear during the dry season. This makes the new record of *Ichthyophis* for Con Dao quite unexpected. Taxonomy and distribution of Vietnamese *Ichthyophis* are unclear: Orlov & Ananjeva (2007) propose presence of *I. kohtaoensis* in the South and *I. bannanicus* in the North of the country and report about several undescribed species. However, Nguyen *et al.* (2009) attribute all Vietnamese *Ichthyophis* to *I. bannanicus*. Herein we provisionally indicate this species as *I. cf. kohtaoensis*. Some populations of *Ichthyophis* from offshore islands of Thailand and Malaysia were described as distinct species, so the taxonomic status of Con Dao caecilians is questionable and requires further comparative investigations, including molecular and thorough morphological analyses.

We also report about new findings of an endemic legless worm lizard *Dibamus kondaoensis*. Previously this species was recorded for Con Son Island by I.S. Darevsky as *D. montanus* (Darevsky, 1990) and so far was known only from the environs of the type locality – Mt. Thanh Gia (Thai) summit (577 m a.s.l.). Later this population was described as a separate species *D. kondaoensis* (Honda *et al.*, 2001). We recorded this endemic species from 4 different

localities: Mt. So Ray (ca. 200 m a.s.l.), Mt. Núi Chua (ca. 500 m a.s.l.) (both at Con Son Island) and also from Hon Ba (40 m a.s.l.) and Bai Canh (10 m a.s.l.) islands. New records from Hon Ba and Bai Canh islands change our understanding of ecology of this secretive lizard species: previously *D. kondaoensis* was believed to inhabit only forests at mountain summits above 500 m a.s.l. (Darevsky *et al.*, 1991) whereas we found this species in dry forests almost on the sea level.

These and other findings allow us to reconsider the concept of vertical zoning of Con Dao herpetofauna formulated by Darevsky *et al.* (1991) according to which the majority of amphibian and reptiles species are only found on certain altitudes above sea level. In fact our data indicate that there is almost no pattern in vertical distribution of Con Dao amphibians and reptiles. Some species however demonstrate high ecological plasticity, whereas the others have very narrow habitat preferences. All of the latter amphibian and reptile species can be accordingly grouped into two herpetofaunal complexes: ruderal lowland species versus mountain forest species.

The complex of ruderal lowland species mostly encompasses amphibian and reptile taxa which are quite widespread in southern Vietnam and are often found in man-made environments. These are the majority of recorded frog species, synanthropic geckos (genera *Hemidactylus*, *Cosymbotus* and *Gehyra*), garden agamas *Calotes versicolor*, kukri snakes *Oligodon* and the keelback *Xenochrophis*. The complex of Con Dao forest species is more peculiar and includes a frog *Theloderma stellatum*, breeding in tree hollows, forest lizards *Draco maculatus*, *Scincella* cf. *rufocaudata*, *Gekko gekko* and all endemic reptile species – bent-toed geckos *Cyrtodactylus condorensis* and day geckos *Cnemaspis boulengeri*, as well as worm lizards *Dibamus kondaoensis*. Interestingly enough, origin of some endemic herpetofaunal elements of Con Dao such as *Cnemaspis boulengeri* and *Cyrtodactylus condorensis* is probably connected with eastern edges of Cardamom Mountains since their sister species are found in Phu Quoc Island and mainland of Kien Giang province, as well as in southern Cambodia.

Around 20 thousand year ago the Con Dao archipelago was still connected with the mainland (Voris, 2000). Physical geography of the archipelago, its geographic location in more than 80 km from the continent and repeated isolation events due to Pleistocene sea level oscillations had influence on formation of Con Dao herpetofauna. In lowlands of southern Vietnam mountains above 400 m a.s.l. are not common unless they belong to the foothills of Annamite Mountains. Being a part of the Sunda Land, Con Dao was a remarkably high mountain of volcanic origin surrounded by many kilometers of swampy lowlands. There are many examples of endemic species confined to similar mountains (Mt. Ba Den, Tay Ninh province give us a good example). We can assume that the Con Dao archipelago already possessed specific herpetofaunal elements long before its isolation by the sea strait took place.

Island biogeography also caused some peculiarities of Con Dao herpetofauna, such as the presence of marine herpetofaunal complex of Indo-Pacific – sea turtles and snakes. Moreover, despite the herpetofaunal diversity is quite substantial for such small archipelago as Con Dao, some common mainland species of amphibians and reptiles are totally absent on the islands. Examples include such widespread and numerous on the continent taxa as blue forest agamas *Calotes mystaceus*, flying dragons *Draco indochinensis*, forest skinks *Sphenomorphus*, ground skinks *Eutropis* other than *E. multifasciata*, and many common frog species. Faunal pauperization

is a characteristic feature of island ecosystems and is caused by long-term isolated evolution of small populations with limited resources, what finally may lead to population extinction.

Given results indicate that our knowledge of origins and specificity of Con Dao herpetofauna is still far from complete and further investigations are required.

Table 1

Provisional annotated checklist of amphibian and reptile species found in Con Dao National Park, Con Dao Archipelago, Ba Ria – Vung Tau province.

Species	Source
class AMPHIBIA	
ORDER GYMNOPIHONA	
family Ichthyophiidae	
<i>Ichthyophis cf. kohtaoensis</i>	Our data
ORDER ANURA	
family Ranidae	
<i>Hylarana erythrea</i>	Do, 1997; Nguyen <i>et al.</i> , 2004; Nguyen <i>et al.</i> , 2009; our data
<i>Hylarana taipehensis</i> *	Do, 1997; Nguyen <i>et al.</i> , 2004
family Dicroglossidae	
<i>Phrynoglossus (Occidozyga) martensii</i>	Do, 1997; Nguyen <i>et al.</i> , 2004 (as <i>Phrynoglossus laevis</i>); Nguyen <i>et al.</i> , 2009 (as <i>Occidozyga martensii</i>); our data
<i>Hoplobatrachus rugulosus</i>	Do, 1997; Nguyen <i>et al.</i> , 2004; our data
<i>Fejervarya limnocharis</i>	Bo Khoa..., 2000; Bui, 1978; Do, 1997; Nguyen <i>et al.</i> , 2004; our data
family Bufonidae	
<i>Duttaphrynus melanostictus</i>	Bo Khoa..., 2000; Bui, 1978; Do, 1997; Nguyen <i>et al.</i> , 2004; our data
family Rhacophoridae	
<i>Polypedates leucomystax</i>	Bo Khoa..., 2000; Do, 1997; Nguyen <i>et al.</i> , 2004; our data
<i>Theloderma cf. stellatum</i>	Our data
family Microhylidae	
<i>Microhyla berdmorei</i> *	Bo Khoa..., 2000; Do, 1997; Nguyen <i>et al.</i> , 2004; Nguyen <i>et al.</i> , 2009
<i>Microhyla fissipes</i>	Our data
<i>Microhyla cf. picta</i>	Our data
<i>Microhyla fissipes</i>	Our data
class REPTILIA	
ORDER TESTUDINES	
family Dermochelidae	
<i>Dermochelys coriacea</i>	Dang, 1994; Nguyen & Ho, 1997; Nguyen <i>et al.</i> , 2004; Nguyen <i>et al.</i> , 2009
family Cheloniidae	
<i>Caretta caretta</i>	Smith, 1931; Nguyen <i>et al.</i> , 2009; single records
<i>Chelonia mydas</i>	Dang, 1994; Nguyen & Ho, 1997; Nguyen <i>et al.</i> , 2004; Nguyen <i>et al.</i> , 2009; breeding
<i>Erethmochelys imbricata</i>	Dang, 1994; Nguyen & Ho, 1997; Nguyen <i>et al.</i> , 2004; Nguyen <i>et al.</i> , 2009; breeding
<i>Lepidochelys olivacea</i>	Dang, 1994; Nguyen & Ho, 1997; Nguyen <i>et al.</i> , 2004; Nguyen <i>et al.</i> , 2009; single records

Species	Source
ORDER SQUAMATA	
suborder Sauria	
family Gekkonidae	
<i>Gekko gecko</i>	Bo Khoa..., 2000; Do, 1997; Nguyen <i>et al.</i> , 2004; our data
<i>Hemidactylus bowringi</i>	Bo Khoa..., 2000; Do, 1997; Nguyen <i>et al.</i> , 2004; Nguyen <i>et al.</i> , 2009; our data
<i>Hemidactylus frenatus</i>	Do, 1997; Nguyen <i>et al.</i> , 2004; our data
<i>Hemidactylus garnoti</i>	Bo Khoa..., 2000; Do, 1997; Nguyen <i>et al.</i> , 2004; Nguyen <i>et al.</i> , 2009
<i>Hemidactylus vietnamensis</i>	Bobrov & Semenov, 2008 (p. 137)
<i>Cosymbotus (Hemidactylus) platyurus</i>	Our data
<i>Gehyra mutilata</i>	Bo Khoa..., 2000; Nguyen <i>et al.</i> , 2004; Bobrov & Semenov, 2008 (p. 127); Nguyen <i>et al.</i> , 2009; our data
<i>Cyrtodactylus condorensis</i>	Smith, 1920; 1935; Bo Khoa..., 2000; Bobrov, 1995; Darevsky & Szczerbak, 1997; Do, 1997; Darevsky, 1999; Nguyen <i>et al.</i> , 2004; Bobrov & Semenov, 2008 (p. 115); Nguyen <i>et al.</i> , 2009; our data
<i>Cnemaspis boulengerii</i>	Darevsky <i>et al.</i> , 1991 (as <i>Chemaspsis boulengerii</i>); Bo Khoa..., 2000; Do, 1997; Nguyen <i>et al.</i> , 2004; Bobrov & Semenov, 2008 (p. 110); Nguyen <i>et al.</i> , 2009; our data
<i>Ptychozoon trinotaterra</i>	Bobrov & Semenov, 2008 (p. 140)
family Agamidae	
<i>Calotes versicolor</i>	Bo Khoa..., 2000; Bui, 1978; Nguyen <i>et al.</i> , 2004; Nguyen <i>et al.</i> , 2009; our data
<i>Calotes emma emma</i>	Darevsky <i>et al.</i> , 1991; Bo Khoa..., 2000; Bui, 1978; Nguyen <i>et al.</i> , 2004; Bobrov & Semenov, 2008 (p. 153); Nguyen <i>et al.</i> , 2009.
<i>Draco maculatus ssp.</i> Subspecies allocation is uncertain according to Manthey, 2008	Bo Khoa..., 2000; Nguyen <i>et al.</i> , 2004; Bobrov & Semenov, 2008 (p. 157); Manthey, 2008; Nguyen <i>et al.</i> , 2009; our data
family Scincidae	
<i>Dasia olivacea</i>	Bo Khoa..., 2000; Do, 1997; Nguyen <i>et al.</i> , 2004; Bobrov & Semenov, 2008 (p. 174); Nguyen <i>et al.</i> , 2009; our data
<i>Eutropis multifasciata multifasciata</i>	Darevsky <i>et al.</i> , 1991; Bo Khoa..., 2000; Do, 1997; Nguyen <i>et al.</i> , 2004; Nguyen <i>et al.</i> , 2009; our data
<i>Lipinia vittigera cf. microcerca</i>	Our data
<i>Lygosoma cf. bowringii</i>	Our data
<i>Scincella rufocaudata</i>	Darevsky <i>et al.</i> , 1991 (as <i>Scincella rufocaudata</i>); Bo Khoa..., 2000; Do, 1997; Nguyen <i>et al.</i> , 2004; Bobrov & Semenov, 2008 (as <i>Sphenomorphus rufocaudatus</i> , c. 206); Nguyen <i>et al.</i> , 2009 (as <i>Sphenomorphus rufocaudatus</i> , c. 266); our data
<i>Scincella ochracea</i> *	Bobrov & Semenov, 2008 (p. 199)
family Dibamidae	
<i>Dibamus kondaoensis</i>	Darevsky <i>et al.</i> , 1991 (as <i>D. smithii</i>); Bo Khoa..., 2000; Bui, 1978; Nguyen <i>et al.</i> , 2004 (as <i>D. montanus</i>), Honda <i>et al.</i> , 2001 (as <i>D. kondaoensis</i>); Bobrov & Semenov, 2008 (p. 153); Nguyen <i>et al.</i> , 2009; our data

HỘI NGHỊ KHOA HỌC TOÀN QUỐC VỀ SINH THÁI VÀ TÀI NGUYÊN SINH VẬT LẦN THỨ 4

Species	Source
family Varanidae	
<i>Varanus salvator</i>	Bo Khoa..., 2000; Nguyen <i>et al.</i> , 2004; Nguyen <i>et al.</i> , 2009; our data
<i>Varanus nebulosus</i>	Bo Khoa..., 2000; Nguyen <i>et al.</i> , 2004; Nguyen <i>et al.</i> , 2009
suborder Serpentes	
family Typhlopidae	
<i>Typhlops diardii</i>	Darevsky <i>et al.</i> , 1991
<i>Ramphotyphlops braminus</i>	Presence assumed, see Campden-Main, 1970 (p. 90-91)
family Acrochordidae	
<i>Acrochordus granulatus</i>	Our data
family Cylindrophidae	
<i>Cylindrophis ruffus</i>	Bo Khoa..., 2000; Do, 1997; Nguyen <i>et al.</i> , 2004; Nguyen <i>et al.</i> , 2009
family Pythonidae	
<i>Python molurus</i>	Bo Khoa..., 2000; Nguyen <i>et al.</i> , 2004; Nguyen <i>et al.</i> , 2009
<i>Python reticulatus</i>	Campden-Main, 1970; Bo Khoa..., 2000; Nguyen <i>et al.</i> , 2004; Nguyen <i>et al.</i> , 2009
family Xenopeltidae	
<i>Xenopeltis unicolor</i>	Our data
family Homalopsidae (former subfamily Homalopsinae; Colubridae)	
<i>Enhydris enhydris</i>	Smith, 1943; Campden-Main, 1970; Bo Khoa..., 2000; Do, 1997; Nguyen <i>et al.</i> , 2004; Nguyen <i>et al.</i> , 2009
<i>Enhydris bocourti</i>	Bo Khoa..., 2000; Do, 1997; Nguyen <i>et al.</i> , 2004.
family Colubridae (former subfamily Colubrinae; Colubridae)	
<i>Lycodon capucinus</i>	Campden-Main, 1970; Bo Khoa..., 2000; Bui, 1978; Do, 1997; Nguyen <i>et al.</i> , 2004; Nguyen <i>et al.</i> , 2009; our data
<i>Oligodon cinereus</i>	Campden-Main, 1970; Bo Khoa..., 2000; Bui, 1978; Do, 1997; Nguyen <i>et al.</i> , 2004; Nguyen <i>et al.</i> , 2009; our data
<i>Oligodon taeniatus</i>	Bo Khoa..., 2000; David <i>et al.</i> , 2008 (as <i>O. taeniatus</i> s. str.); Nguyen <i>et al.</i> , 2009; our data
<i>Oligodon fasciolatus</i>	Campden-Main, 1970; Bo Khoa..., 2000; Nguyen <i>et al.</i> , 2004 (as <i>O. cyclurus</i>); Nguyen <i>et al.</i> , 2009 (as <i>O. fasciolatus</i>).
<i>Ahaetulla prasina</i> cf. <i>prasina</i>	Campden-Main, 1970; Bo Khoa..., 2000; Nguyen <i>et al.</i> , 2004; Nguyen <i>et al.</i> , 2009; our data
<i>Ahaetulla nasuta</i>	Campden-Main, 1970; Bo Khoa..., 2000; Nguyen <i>et al.</i> , 2004; Nguyen <i>et al.</i> , 2009; our data
<i>Boiga cyanea</i>	Smith, 1943; Campden-Main, 1970; Bo Khoa..., 2000; Nguyen <i>et al.</i> , 2004; Nguyen <i>et al.</i> , 2009; our data
<i>Coelognathus radiatus</i>	Bo Khoa..., 2000; Bui, 1978; Do, 1997; Nguyen <i>et al.</i> , 2004; our data
<i>Chrysopelea ornata ornatissima</i>	Campden-Main, 1970; Bo Khoa..., 2000; Nguyen <i>et al.</i> , 2004; Nguyen <i>et al.</i> , 2009; our data
<i>Dendrelaphis</i> cf. <i>pictus</i> (Visual record only; exact species identification of <i>Dendrelaphis</i> sp. requires thorough morphological and / or molecular analysis of collected specimens)	Our data.

Species	Source
family Natricidae (former subfamily Natricinae; Colubridae)	
<i>Xenochrophis flavipunctatus</i>	Our data.
family Elapidae	
subfamily Elapinae	
<i>Ophiophagus hannah</i>	Campden-Main, 1970; Bo Khoa..., 2000; Nguyen <i>et al.</i> , 2004; Nguyen <i>et al.</i> , 2009
<i>Calliophis maculiceps</i>	Campden-Main, 1970; Bo Khoa..., 2000; Nguyen <i>et al.</i> , 2004; Nguyen <i>et al.</i> , 2009; our data
subfamily Hydrophiinae	
<i>Hydrophis fasciatus</i> (In surrounding waters one could expect future records of other <i>Hydrophis</i> species: <i>H. brookii</i> , <i>H. caeruleus</i> , <i>H. cyanocinctus</i> , <i>H. gracilis</i> , <i>H. melanocephalus</i> , <i>H. ornatus</i> , <i>H. parviceps</i> , as well as new records of sea snakes of genera <i>Enhydrina</i> , <i>Kerilia</i> , <i>Kolpophis</i> , <i>Pelamis</i> , <i>Praescutata</i> and <i>Laticauda</i> . See review in Nguyen <i>et al.</i> , 2009.)	Dang, 1994; Nguyen & Ho, 1997; Nguyen <i>et al.</i> , 2004; Nguyen <i>et al.</i> , 2009; our data
ORDER CROCODYLIA	
<i>Crocodylus porosus</i> (<i>Crocodylus porosus</i> in Vietnam is believed to be extinct in the wild, see Stuart <i>et al.</i> , 2002 for details)	Dang, 1994; Nguyen & Ho, 1997; Stuart <i>et al.</i> , 2002; Nguyen <i>et al.</i> , 2004; Nguyen <i>et al.</i> , 2009

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**SỰ ĐA DẠNG CỦA BÒ SÁT VÀ LƯỠNG CƯ TẠI CÔN ĐẢO
VÀ DANH MỤC SƠ BỘ CỦA BÒ SÁT, LƯỠNG CƯ Ở VƯỜN QUỐC GIA CÔN ĐẢO
(TỈNH BÀ RỊA - VŨNG TÀU, VIỆT NAM)**

N.A. POYARKOV, A.B. VASSILLIEVA

TÓM TẮT

Kết quả nghiên cứu khu hệ bò sát tại Côn Đảo (Bà Rịa - Vũng Tàu) ghi nhận có sự hiện diện của 11 loài động vật lưỡng cư và 31 loài thuộc lớp bò sát, trong đó có 12 loài, 9 giống, 4 họ và 1 bộ lần đầu tiên được phát hiện tại Côn Đảo. Lần đầu tiên tại đảo Côn Sơn phát hiện một loài động vật lưỡng cư mà tiếng Việt gọi là ếch giun thuộc chi *Ichthyophis* (bộ Gymnophiona) nhưng chưa xác định được thuộc loài nào. Sự phát hiện này làm thay đổi hình dung trước đây về sự phân bố của ếch giun tại khu vực miền Nam Việt Nam và cho phép mở rộng ranh giới khu vực phân bố của chi *Ichthyophis* về phía Nam. Ngoài ra, các nghiên cứu của chúng tôi còn cho phép hiệu chỉnh, bổ khuyết số liệu về sự phân bố của thằn lằn đặc hữu *Dibamus kondaoensis* của Côn Đảo là loài mà ngoài khu vực đảo Côn Sơn còn được phát hiện trên các vùng thấp (trũng) của đảo Hòn Bà và Bãi Cạn. Số liệu thu thập được cho phép đưa ra cách nhìn nhận mới trong các tư liệu khoa học về bức tranh phân bố theo độ cao địa hình của động vật lưỡng cư và lớp bò sát trên các đảo thuộc Côn Đảo. Về tổng thể, khu hệ bò sát của Côn Đảo được hình thành bởi các thành tố của hai phức hợp khu hệ động vật chính, gồm: Phức hợp khu hệ đồng bằng bao gồm những loài phân bố chủ yếu trên vùng đất liền của Việt Nam và phức hợp khu hệ rừng - núi cao bao gồm cả một số ít các loài sinh sống trong các sinh cảnh rừng. Hiện tượng đặc hữu địa phương khá cao của khu hệ bò sát ở Côn Đảo được quyết định bởi lịch sử hình thành của quần đảo này.