



Primates of Vietnam: Conservation in a Rapidly Developing Country

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Primates of Vietnam

Conservation in a Rapidly
Developing Country

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Vietnam is home to a very impressive biodiversity, including a large number of primate species. Vietnam is also a rapidly developing country; economic gains are often prioritized over environmental protection and many of its endangered plants and animals, including its primates, are at risk of extinction. Thus, Vietnam is at a crossroads where it needs to seek a balance between development and conservation. The challenges facing Vietnam's biodiversity are not unusual and, in fact, share similarities with those of many countries in the tropics around the world. While it has been well recognized that nonhuman primate populations have been declining across the tropics over the past 30 years, an article titled "Impending extinction crisis of the world's primates: Why primates matter" published in January 2017¹ succeeded in capturing a great deal of media attention around the world.

A variety of reasons for this expansive exposure come to mind, but we think it is reasonable to point at two important details: one, the phrase "impending extinction crisis"

is frightening, and two, this article notes that the major reason for this crisis is unsustainable human activities, another frightening thought. In addition to including the usual human activities of hunting, deforestation and the expansion of agriculture as examples of such unsustainable activities, these authors provided a much more nuanced and thorough list that contained extensive new road construction, large-scaled industrial agriculture, dam building, a host of extractive activities and the international illegal wildlife trade. Moreover, this was directly situated within consideration of high levels of poverty, rapid human population growth and the profoundly important challenge of addressing the needs of local human populations in many of the areas where nonhuman primates are found.

The authors also noted that "extinction rarely results from deficient scientific knowledge of the steps required to protect the species. Instead, it is embedded in political uncertainty, socioeconomic instability, organized criminality, corruption, and policies that favor short-termed profits over long-term sustainability." This statement goes well beyond standard calls for better understanding of the ecology of endangered species and improved law enforcement; it places conservation needs within a much more detailed and daunting context. Nonhuman primates primarily inhabit tropical environments with notable diversity of species in Central and South America, sub-Saharan Africa, Madagascar, and South and Southeast Asia. Presently, primates occur in approximately 90 countries. Vietnam ranks among the top 15 countries in the world for primate diversity. A review of these animals within the context

of the “impending extinction crisis” is quite thought provoking.

Vietnam Primate Diversity and Listing

Vietnam is a Southeast Asian country that is slightly larger than New Mexico with a human population of about 95 million. The economy has developed rapidly during the past 20 years, and the country is now a major exporter of agricultural goods, clothing, crude oil and electronics. Vietnam is located in the tropics and is home to an impressive diversity of primates, with 25 species and subspecies (Table 1); Vietnam trails only Indonesia in Southeast Asia in the number of different primates found within its borders. The most widely followed standard for the conservation status of species is the Red List of the International Union for the Conservation of Nature (IUCN). This list includes a number of categories, and three, critically endangered (CR), endangered (EN) and vulnerable (VU), are considered to be those that represent species threatened with extinction.

As illustrated in Table 1, 22 (or 88 percent) of Vietnam’s primates are threatened. Thus, the primates of Vietnam are at a much higher risk of extinction than are primates at the global level, where approximately 60 percent are threatened, or even regionally, as 73 percent of Asian primate species are threatened. Another indicator of Vietnam’s conservation challenges can be seen by reviewing the biennial *Primates in Peril* report² prepared by IUCN, Conservation International (CI) and the International Primatological Society (IPS), which highlights the top 25 most endangered primates. This process was

initiated in 2000, and the 2014–2016 version includes three primates of Vietnam on the top 25 most endangered primate list. Sadly, these animals have the dubious distinction of being the only species that have been included in each report since the inception of this listing practice.

The primates of Vietnam represent four different groups: the two species of lorises are strepsirrhines, or tooth-combed primates; the six macaques are cercopithecines, or cheek-pouched monkeys; the 11 species of *Trachypithecus*, *Pygathrix* and *Rhinopithecus* are colobines, or leaf monkeys; and the six gibbons are hylobatids, or small apes. As noted in Table 1, the majority of primates that live in Vietnam are at risk of extinction.

Why Are the Primates of Vietnam at Such a High Risk of Extinction?

The primates of Vietnam are faced with many of the threats identified in the “impending extinction crisis” article, with the illegal wildlife trade, habitat degradation, habitat fragmentation and habitat destruction being central. In addition, most of the habitat damage is directly related to unsustainable human activities that privilege short-term profits over long-term sustainability, including mining, dam construction, conversion of natural forest to rubber plantations, timber harvesting, road construction and other sorts of development along with the concomitant environmental pollution.

A brief survey of some of the Vietnamese primates most at risk of extinction provides some context to this situation. More detailed information for each of the primates de-

Table 1. Primates of Vietnam

Taxon	Common Name	Conservation Status
Strepsirrhini		
Loridae		
<i>Nycticebus pygmaeus</i>	pygmy slow loris	VU
<i>Nycticebus bengalensis</i>	Bengal slow loris	VU
Haplorrhini		
Cercopithecoidea		
Colobinae		
<i>Trachypithecus crepusculus</i> ¹	Indochinese grey langur	EN
<i>Trachypithecus delacouri</i>	Delacour's langur	CR
<i>Trachypithecus francoisi</i>	Francois's langur	EN
<i>Trachypithecus germaini</i>	Germain's langur	EN
<i>Trachypithecus margarita</i> ²	Annamese langur	EN
<i>Trachypithecus hatinensis</i>	Hatinh langur	EN
<i>Trachypithecus poliocephalus</i>	Cat Ba langur	CR
<i>Pygathrix cinerea</i>	grey-shanked douc	CR
<i>Pygathrix nemaeus</i>	red-shanked douc	EN
<i>Pygathrix nigripes</i>	black-shanked douc	EN
<i>Rhinopithecus avunculus</i>	Tonkin snub-nosed monkey	CR
Cercopithecinae		
<i>Macaca arctoides</i>	stump-tailed macaque	VU
<i>Macaca assamensis assamensis</i>	Assamese macaque	NT
<i>Macaca fascicularis fascicularis</i>	long-tailed macaque	LC
<i>Macaca fascicularis condorensis</i>	Con Song long-tailed macaque	VU
<i>Macaca leonina</i>	northern pig-tailed macaque	VU
<i>Macaca mulatta</i>	rhesus macaque	LC
Hylobatidae		
<i>Nomascus annamensis</i>	northern yellow-cheeked crested gibbon	EN
<i>Nomascus concolor</i>	western black crested gibbon	CR
<i>Nomascus gabriellae</i>	southern yellow-cheeked crested gibbon	EN
<i>Nomascus leucogenys</i>	northern white-cheeked crested gibbon	CR
<i>Nomascus nasutus</i>	eastern black crested gibbon	CR
<i>Nomascus siki</i>	southern white-cheeked crested gibbon	EN

CR = critically endangered; EN = endangered; VU = vulnerable; NT = near threatened; LC = least concern.

¹Included in *Trachypithecus phayrei* by IUCN.

²Included in *Trachypithecus germaini* by IUCN.



Figure 1. Photo by H. Covert. Quarrying limestone in Kien Giang Province. This is causing serious degradation to the habitat of the endangered Germain's langur.



Figure 2. Photo by Hoang Minh Duc. Road construction in Bu Gia Map National Park in Binh Phuoc Province that is fragmenting primate habitat.



Figure 3. Photo by Le Khac Quyet. Tonkin snub-nosed monkeys in Khau Ca forest.

scribed in the following is available in recent publications.³

Rhinopithecus avunculus, the Tonkin snub-nosed monkey, was first recognized by the international scientific community in 1912. At that time, it was already quite rare and known only from a small region of northern-most Vietnam. Because of infrequent sightings, some scholars in the 1980s wondered whether this creature was extinct. A “rediscovery” occurred in the late 1980s, leading to a number of surveys in both its historical range and adjacent areas. Tonkin snub-nosed monkeys were confirmed to exist in only two provinces, Tuyen Quang and Ha Giang. Today it is possible that they only remain in two isolated areas in Ha Giang, with a global population of less than 250 individuals. Hunting, development activities including a large hydroelectric dam project

and deforestation have led to a rapid population decline and a highly fragmented habitat. It is presently listed as critically endangered.

Trachypithecus poliocephalus, the Cat Ba langur, occurs only on Cat Ba Island of Ha Long Bay in Northeast Vietnam. Experts believe that as recently as the 1960s nearly 3,000 of these creatures inhabited Cat Ba and its surrounding mangrove forests. Today, the global population is less than 70 individuals. This dramatic decline is related to systematic hunting of this species, primarily for use in traditional medicine, and the destruction of most of the mangroves. In addition, during the past two decades, there has been large-scale development of Cat Ba Island for tourism. Activity associated with tourism continues to damage the habitat of the langurs and threatens their existence. It is presently listed as critically endangered.



Figure 4. Photo by Hoang Minh Duc. Cat Ba langur, Cat Ba National Park, Hai Phong.

Trachypithecus delacouri, Delacour's langur, is restricted to a small area of northern Vietnam just south of Hanoi. Extensive surveys over the past two decades suggest that these animals now exist in less than 10 locations, and during this time the global population has declined from around 350 to 200 individuals. One location has about 100 individuals and all others have very small numbers. Hunting, deforestation and mining of karst for concrete materials are the leading causes for this population decline. It is presently listed as critically endangered.

Nomascus nasutus, the eastern black crested gibbon, is restricted to a single forest area along the northeastern Vietnam – China border. There has been a concerted conserva-

tion effort to protect this species during the past 15 years, and presently the global population is thought to be approximately 130 individuals in fewer than 25 social groups. The population appears to be increasing in size during the past decade, but there is a lack of suitable habitat for much population expansion at this time. This area has suffered significant deforestation over the past decades, primarily because of agricultural expansion. This forest destruction, coupled with hunting, has caused a dramatic decline in population size until the present conservation work. It is presently listed as critically endangered.

These four species not only are listed as critically endangered, they are also among the most threatened primate species in the



Figure 5. Photo by Le Khac Quyet. Delacour's langur, Van Long Nature Reserve, Ninh Binh Province.



Figure 6. Photo by H. Covert. Van Long Nature Reserve—Delacour's langur habitat.

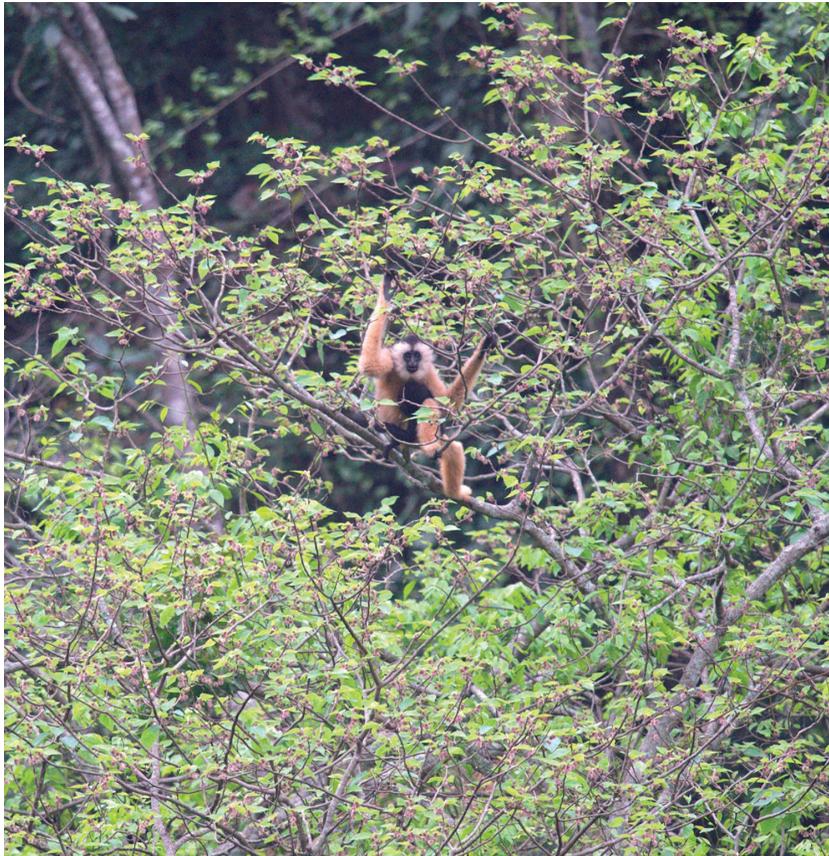


Figure 7. Photo by Le Khac Quyet. Cao Vit gibbon, Cao Bang Province.

world and reflect that Vietnam is facing an impending extinction crisis for its primates. Our goal in the remainder of this article is to provide a detailed account of how Vietnam is responding to this situation. We start with two instructive case studies.

Tonkin Snub-Nosed Monkeys and Khau Ca Forest

As noted earlier, the Tonkin snub-nosed monkey is listed as critically endangered and is on the edge of extinction. While there may

still be a small number of individuals in two or three locations in Tuyen Quang Province, most involved in working with this species doubt whether any of these groups are viable, if they in fact exist. The two most recently discovered populations are in Ha Giang Province at Khau Ca, a small forest area of about 1,000 hectares in the center of the province, and Tung Vai, another small degraded forest area of about 5,000 hectares near the border with China on the northwestern edge of the province. Ha Giang is one of the poorest provinces in Vietnam. The communes in the area described here have economies based

on agriculture. Briefly reviewing the history of work at Khau Ca allows us to understand both conservation successes and ongoing challenges.

In January of 2002 while working as a field biologist for Fauna & Flora International (FFI), Le Khac Quyet confirmed the presence of this species in the Khau Ca forest of Ha Giang Province. FFI immediately started to work with a variety of stakeholders including the Ha Giang Provincial People's Committee, the Ha Giang Provincial Forestry Protection Department (FPD), and the People's Committees of the three communes that surround and include the Khau Ca forest, Tung Ba, Yen

Dinh and Minh Son. Their goal was to develop a sustainable conservation plan. One of the most important initial achievements was an agreement among the communes to no longer allow hunting and timber felling in the Khau Ca forest. In addition, FFI raised funds to train and support a community patrol group that reported violations of the agreement to the FPD and worked with the communes to help increase conservation awareness.

Le Khac Quyet was instrumental in all of these activities. He also visited the Khau Ca forest as often as possible and soon became fascinated with the ecology of the Tonkin



Figure 8. Photo by Amy Harrison-Levine. Rice harvest in Tung Ba Commune.

snub-nosed monkeys. Surveys indicated that this local population included approximately 60 individuals. In 2004, FFI invited Bert Covert to become involved in this project as a scientific advisor for Quyet. Working with the Vietnam National University, Hanoi (VNUH), we started to do an inventory of the plant diversity in the Khau Ca forest and established a number of vegetation plots and six phenological transects to study the forest productivity. This includes identifying when trees flower, produce fruit and grow new leaves — information that is important for understanding the feeding ecology of the Tonkin snub-nosed monkeys. We have employed four local research assistants from the Tung Ba commune nearly continuously since 2004, and they have been invaluable partners in all of our research endeavors. With colleagues from the U.S., we also started to collect feeding ecology data on the Tonkin snub-nosed monkeys. Quyet earned a Master of Science at VNUH in 2006, and his thesis focused on the ecology of these monkeys at Khau Ca.

Following the discovery of this population in 2002, hunting nearly ceased in Khau Ca, a number of infants were observed every year, and it appears that this population has been steadily increasing.⁴ One of the most important accomplishments of this collaborative work in the Khau Ca area occurred on August 26, 2009, when the Chairman of Ha Giang Provincial People's Committee signed an official order establishing the Tonkin Snub-nosed Monkey Species and Habitat Conservation Area (SHCA) at Khau Ca. Its total area is about 2,000 hectares, located in three communes of Ha Giang Province: Tung Ba, Yen Dinh and Minh Son. The pace of work at Khau Ca has increased since the new SHCA

at Khau Ca was created. The Denver Zoo has been working with the three communes to incorporate biodiversity conservation into the public school education for third-grade students.

Quyet earned a doctorate at the University of Colorado Boulder (UCB), and his dissertation focused on the positional behavior and habitat use of the Tonkin snub-nosed monkeys.⁵ Dr. Amy Harrison-Levine conducted dissertation research in the Khau Ca area, investigating resource use overlap between humans and Tonkin snub-nosed monkeys and providing important information on long-term conservation planning.⁶ Amy, as a senior scientist at the Denver Zoo, has brought in the New Nature Foundation to deliver fuel-efficient stoves to the surrounding commune households. Most of the people in this region cook over an open fire, and this requires a substantial investment of time in collecting fuel wood. This stove program promises to require much less fuel wood and thus save households time and energy and decrease the pressures of illegal wood collection in the SHCA. In addition, these stoves produce less smoke than the traditional cooking methods and thus should decrease levels of pollution within the households.

Recent surveys conducted by FFI in the SHCA at Khau Ca have confirmed a population of about 130 Tonkin snub-nosed monkeys, suggesting the local population has doubled since first discovered in 2002 — wonderful news, indeed. Dr. Andie Ang's research on the genetic variability of this population provides a more sober take on this recent population growth.⁷ Her analysis of the mitochondrial DNA in this population revealed no variation. This represents



Figure 9. Photo by Amy Harrison-Levine. Interviewing Yen Dinh Commune residents about the use of forest products.

the lowest amount of mitochondrial genetic variation ever documented for a wild primate population. The lack of genetic variability in the Khu Ca area is likely the result of intense hunting and extensive deforestation in recent decades, leaving a fragmented habitat, which has caused population bottlenecks. In addition, gene flow has been restricted for decades, with the closest population of Tonkin snub-nosed monkeys being found in the Tung Vai Forest, 35 km away and separated by highly modified landscapes. While some species with low genetic variation such as black-footed ferrets and cheetahs have been able to persist, it is also known that loss of genetic variation in some species such as the Tasmanian devil is associated with increased extinction risk.

In summary, good cooperation across stakeholders has yielded a conservation success story at Khu Ca. The provincial People's Committee and Forestry Protection Department have been responsible leaders, and Vietnamese scientists from VNUH and other institutions have helped with developing an understanding of the local biodiversity. International partners, furthermore, including FFI, UCB and the Denver Zoo, have helped with conservation planning, scientific research and education. Local people, importantly, have been continuously employed as research assistants and community patrol members, and a formal protected area has been established. All of this has contributed to the conservation of the resident Tonkin snub-nosed monkeys, whose population has

doubled in the past 15 years or so. There are ongoing challenges, one of which is the lack of mitochondrial genetic variation. To address this issue, we plan to collect similar information for the Tung Vai population of this species and to investigate variation in nuclear genetic markers.

Red-Shanked Doucs and Son Tra Nature Reserve

The Son Tra Peninsula of Da Nang City lies off the central coast of Vietnam in the East Sea (also known as South China Sea). It provides an excellent example of the complexities and often nonoverlapping goals of conservation and development. Son Tra is a small mountain range with Mount Son Tra being the highest peak, at nearly 700 meters. The area of the peninsula is about 4,600 hectares, and, in 1992, the Vietnamese government established the Son Tra Nature Reserve, comprising 4,400 hectares — nearly the entire peninsula. The Reserve included almost 2,600 hectares of strictly protected forest.

Primatologists and others have long known that the endangered red-shank douc (*Pygathrix nemaeus*) occurred in this forest. In 2003, researchers reported that there were likely no more than 45 red-shanked doucs remaining on the peninsula; they also noted that the forest still showed damage left from the use of defoliates by the U.S. military during the American War.⁸ Thus, it was a surprise when surveys in 2006 by Mr. Vu Ngoc Thanh of VNUH and colleagues with funding from Dr. Lois Lippold of the Douc Langur Foundation confirmed more than 171 doucs living in 12 groups — a much larger population than

anticipated and likely the second largest in all of Vietnam.

This good news immediately generated a great deal of conservation and ecological research activities focusing on these endangered primates. This included work by Vietnamese scientists from VNUH, the Da Nang University and the Southern Institute of Ecology (SIE) and involved international scientists from the Douc Langur Foundation (DLF), the Frankfurt Zoological Society and UCB. Most recently, the University of Minnesota and Texas A&M have also joined this effort. In addition, a local conservation nongovernment organization (NGO), GreenViet, was created by a team of young Vietnamese conservationists in response to the need for grassroots-level work in this region of Vietnam. Activities by all of these groups have yielded our best information yet on the ecology of this species and have heightened awareness of the biodiversity on Son Tra Peninsula. In 2016, researchers estimated that the population of red-shanked doucs was close to 600 individuals, although this probably does not represent a recent growth spurt. Even so, it reflects a better understanding of the local biodiversity.

Da Nang City, like much of Vietnam, is developing rapidly, and because it is adjacent to beautiful beaches, the city's leaders have targeted tourism as an important emerging economy. In 2008, the People's Committee of Da Nang City decided to reduce the size of Son Tra Nature Reserve from 4,400 to 2,600 hectares and proposed to develop tourist facilities from sea level to 200 meters all around the peninsula. The past nine years have seen a tremendous amount of tourism infrastructure built on Son Tra, including



Figure 10. Photo by H. Covert. Red-shank douc, Son Tra Nature Reserve, Da Nang.

more than 70 kilometers of paved roads and nearly 20 hotels and resorts completed, with an additional dozen or so planned. Unfortunately, this development has come at a high environmental cost and clearly represents policies that favor short-term profits over long-term sustainability.

The roads crisscross the peninsula and have divided the remaining forests on Son Tra into a number of fragments. The red-shanked douc is nearly completely arboreal, meaning that it rarely comes to the ground and is quite uncomfortable crossing open spaces that are

the outcome of the new roads. This creates a situation where groups of these monkeys become isolated from one another because the roads act as significant barriers; over time this limits the flow of genes and yields sub-populations with limited genetic variation.

GreenViet members have argued that nearly 30 percent of the habitat for the local biodiversity has been severely damaged by the recent construction activities. They have also been critical of the lack of concern about environmental protection and note that there have been a number of recent cases of ille-



Figure 11. Photo by H. Covert. Son Tra peninsula—red-shanked douc habitat.

gal hunting in the nature reserve. More than 2,000 snares have been collected by rangers and volunteers in this area over the past couple of years, an activity supported by both the DLF and GreenViet. Of equal concern is illegal construction activities on Son Tra. In March 2017, the local media reported that Da Nang City had suspended the construction of a large tourist resort because the infra-

structure license had not been approved by the city. Yet this action occurred after nearly a year of development activity at this site, including the destruction of the forest and construction of roads and foundations for 40 villas. In the same report, Da Nang authorities revealed that they had also identified 68 homes, villas and restaurants that had been illegally built within the nature reserve.



Figure 12. Photo by Bui Van Tuan. Construction on Son Tra Nature Reserve destroying red-shanked douc habitat.

In addition to the recent damage to the environment by this development, a new government plan calls for developing 1,000 of the remaining 2,600 hectares in Son Tra Nature Reserve to house a large up-scale resort. As presently conceived, it would cause significant damage to the remaining forest and likely lead to a dramatic decrease in the population of red-shanked doucs specifically and to the overall biodiversity more generally. To repeat, this is an example of policies that favor short-termed profits over long-term sustainability. The forest that will

remain in the nature reserve will be highly fragmented and degraded and poorly suited for the red-shanked doucs. Moreover, it is not clear whether short-term profits will even be obtained. According to Da Nang City's tourism association, only 50 percent of hotel capacity was used this past year, yet rapid building of new accommodations continues. Like many developing countries, the tourism industry in Vietnam is notoriously unstable and shaped by rapidly shifting strategies as perceived market opportunities change.

* * *

These case studies run counter to stereotypical critiques of biodiversity conservation that describe significant conflict between local communities and conservation organizations in rural and poor areas of developing countries. Here, poor rural communities surrounding the Khau Ca forest in Ha Giang Province are important and willing partners in conserving the Tonkin snub-nosed monkeys, while wealthy developers in the relatively well-to-do Da Nang City continue to chip away at the Son Tra Nature Reserve and devastate the habitat of the local population of red-shanked doucs.

National-Level Actions for Biodiversity Conservation in Vietnam

In August of 2014, the 25th Congress of the International Primatological Society took place in Hanoi, the capital of Vietnam. There were more than 900 participants from nearly 60 countries, and the theme of the congress was “meeting the challenges of conserving primate diversity.” The Vietnam Administration of Forestry (VNFOREST) of the Ministry of Agriculture and Rural Development (MARD) was the official host of the congress and actively engaged the local and international press, highlighting primate diversity and conservation activities in Vietnam. At the end of the congress, it was readily apparent that there was a new generation of Vietnamese scientists and government officials that are prepared to take the lead in primate research and conservation within their country.

A good example of this commitment was the realization by VNFOREST that there was a need for a national-level action plan to direct and coordinate primate conservation activities. A team of Vietnamese and international scientists (including the authors) met a number of times since 2014 and completed a draft titled “Conservation Action Plan for Primates in Vietnam” in late 2016. It was approved by VNFOREST and MARD in early 2017 and submitted to the Prime Minister for his approval, which was granted on May 10, 2017. This action plan includes a series of principles and goals, and with the appropriate governmental support, we hope that it will lead to successful and sustainable conservation action for all of the nonhuman primates in Vietnam.

Like many conservation action plans, this one includes a series of principles, with a number of specific goals and with objectives and actions that should enable actors to reach the identified goals. The overarching vision of this plan is to establish self-sustaining populations of each of the Vietnamese primate species and subspecies inside and outside protected areas. This will be accomplished by effective protection of populations and habitats under the leadership of the central government and with the support of civil society. Important goals include eradicating the illegal hunting and trading of animals; an enhancement and expansion of conservation education targeting K–12 students, the general public and government officials; and the development of a sustainable financial framework for primate conservation.

Having this action plan completed and approved by the Prime Minister is of critical importance. There have been a number of at-

tempts to draft such an action plan over the past two decades but all have failed, in large part because they were not successful in engaging a variety of Vietnamese stakeholders. In this case, the leadership shown by young Vietnamese scientists working in partnership with the Vietnam government, international scientists and NGOs, along with a concerted effort to look beyond varying opinions to develop consensus and realistic objectives and goals, yielded success.

Conclusions

Recently, a group of experts has made a compelling argument that primates around the world are facing an impending extinction crisis resulting from unsustainable human activities. Vietnam is home to a large number of primate species and, like many countries, is struggling to balance development and conservation. We have reviewed some of the threats to Vietnam's endangered primates. We have also provided two examples that highlight the challenges of primate conservation activities in Vietnam.

At Khu Ca, in Ha Giang Province, a number of stakeholders have worked together to protect the critically endangered Tonkin snub-nosed monkey. The good news here is that the population has doubled during the past decade. Unfortunately, this population has quite limited genetic diversity. At Son Tra Nature Reserve, adjacent to Da Nang City, tourism development threatens one of the largest populations of the endangered red-shanked douc in Vietnam. Here, construction of resorts and roads is destroying this species habitat for short-term profits

over long-term sustainable management of the protected area.

In May of 2017, the Prime Minister of Vietnam approved a Conservation Plan for Primates in Vietnam that promises to provide the framework needed to move forward with primate conservation in Vietnam. This is a major achievement and indicates that there is a new generation of Vietnamese scientists and government officials that are ready to take the lead in primate research and conservation. We hope that their efforts will allow Vietnam to avoid extinctions of any of its primate species for the foreseeable future.

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