Species/country combinations selected for review by the Animals Committee following CoP16:

Range State responses

Contents

Ghana

From: NANA KOFI ADU-NSIAH <adunsiah@yahoo.com>
Sent: 17 March 2017 09:53
To: species
Cc: skoppong.frnr@knust.edu.gh; kobbyoppong@yahoo.com
Subject: Re: Review of taxa in Ghana subject to the CITES Review of Significant Trade

Dear colleague,

This is to provide response to your email on Geochelone sulcata.

Distribution, Population Size, Status and Trends.

Ghana is not a range state of the species in question, however Ghanaian exporters of wildlife import the species principally from Mali to Ghana for captive breeding. The exporters also re-export species to Hong Kong, Taiwan, Spain, Japan etc.

We are compiling the trade statistics, will be submitted soon for you further action.

My regards

NANA KOFI ADU-NSIAH

WILDLIFE DIVISION

GHANA

Guyana

CITES REVIEW OF SIGNIFICANT TRADE
FESTIVE PARROT (*Amazona festiva*)

Scientific name: *Amazona festiva*

Common Name: Festive Parrot

Range Status Plurinational State of Bolivia, Brazil, Colombia, Ecuador, Peru, Guyana and Venezuela.

Under Review Guyana

CITES Listing Appendix II

IUCN Near threatened

Distribution, Population Size, Status and Trends

Preliminary work conducted by the Wildlife Division confirmed that *Amazona festiva* is found in the forested areas of the North Western District, along the Guyana-Venezuelan border, utilizing decaying(standing) trees of the Mora, Purple Heart, ite', Corkwood among others to roost. These birds feed in swampy areas, with an abundance of palms (Manicole, Cookrit and ite'). In 2005, the Guyana Amazon Tropical Birds Society reported the presence of this species in the capital city of Georgetown.

No information is available on the population status. Survey conducted among traders revealed that festive parrots can be easily sourced upon request.

Threats to the Species

In Guyana, there is abundant habitat for this species and much of the ecosystems is intact and fully functional. Major threats would be from habitat destruction (minimal in Guyana) and harvest (controlled by low demand). Festive parrots are primarily harvested for international trade and market demands have been low over the last five years of trade (Refer to Figure 1 below). The level of exports for the period 2011-2015 showed relative stability. There is therefore no species specific management plan in place for the festive parrot in Guyana. Some protection is afforded in protected areas and other managed spaces.

Trade Statistics

The national quota for festive parrots from 2005-2015 was set at 520 live wild caught specimens. However, the quota for 2014 carried a roll over quota from 2013 because the export year was cut short to facilitate the alignment of the licensing year with the calendar year. International export for this species has remained low and well under the national quota for past five years. This species is not highly demanded on the international trade and is often marketed with other psittacines for quota utilization.

Specimens of *Amazona festiva* have been exported mainly to Turkey, Singapore, Philippines, Thailand and Kuwait.

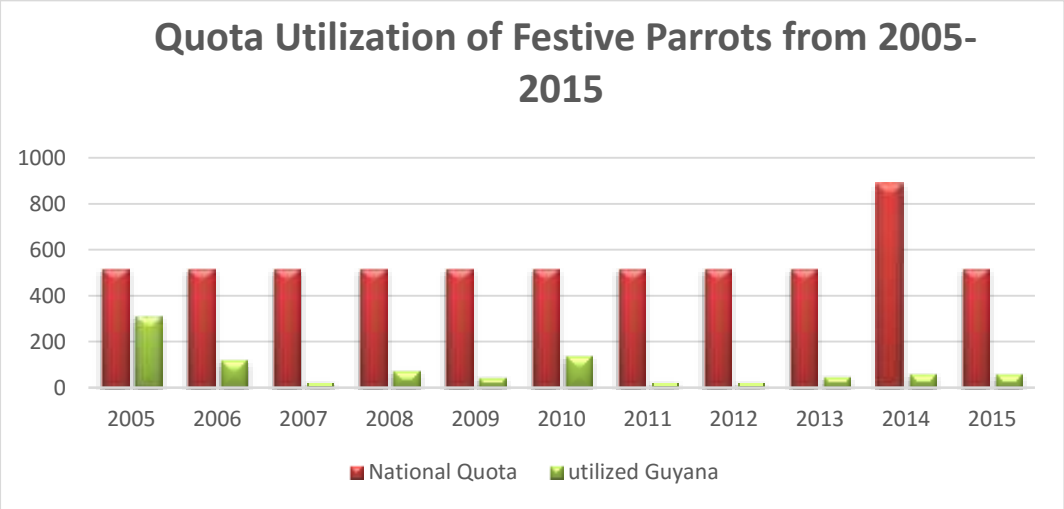
Table 1showing the trade summary for Festive Parrots in Guyana from 2005-2015

	Reported By	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
National	Quota	520	520	520	520	520	520	520	520	520	888	520
utilized	Guyana	314	122	27	76	47	140	28	28	50	62	60

Table 2. Showing the percentage of the National quota utilized for Festive Parrots

	Reported By	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
National	Quota	520	520	520	520	520	520	520	520	520	888	520
utilized	Guyana	314	122	27	76	47	140	28	28	50	62	60
Percentage Utilized		60	23	5	15	9	27	5	5	10	7	12

Figure 1



Species Management and Population Monitoring

There is currently no existing management plan for this species.

Regulation of Wild Harvesting and Trade, Including Legal Protection

Harvesting for the trade in wild-caught birds takes place from June 1 – December 31 each year. Harvesting is not permitted during January 1 – May 31 which is the closed season for psittacines in Guyana. This period coincides with the breeding and nesting period. Information provided to the Wildlife Division indicates that the young birds leave the nests by the end of April.

Contact Details of any Relevant Experts

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CITES REVIEW OF SIGNIFICANT TRADE
YELLOW-FOOTED TORTOISE (*Chelonoidis denticulata*)

Scientific Name: *Chelonoidis denticulata*

Common Name: Yellow-footed Tortoise, South American Tortoise

Range Status: Plurinational State of Bolivia, Brazil, Colombia, Dominica, Ecuador, French Guiana, Guyana, Suriname, Trinidad and Tobago, Venezuela

Under Review: Guyana and Suriname

CITES Listing: Appendix II

IUCN: Vulnerable

Distribution, Population Size, Status and Trends

Chelonoidis denticulata is found locally in all natural regions of Guyana, including savannas, rainforest and dryland forest. While no information is available on the population, sightings are fairly common and can be easily sourced upon request.

In Guyana, there is abundant habitat for this species and much of the ecosystems is intact and fully functional. While there is no accurate species distribution data for the yellow-footed tortoise, the habitat required is widely distributed. They are very common in their habitat but no population data is available because they are not priority species of concern.

Threats to the Species

This species is not very popular in the local wild meat trade but is consumed by the local indigenous people as well as other forest dwellers, and is common in the local pet trade. Major threats would be from habitat destruction (minimal in Guyana) and harvest.

Trade Statistics

The export quota for this species is 704. A deviation of this was recorded in 2014, because of a roll over quota in 2013, where the export year was cut short to accommodate the licensing year with the calendar year. The average quota utilization for the reviewed years shows 67% utilization of the quota.

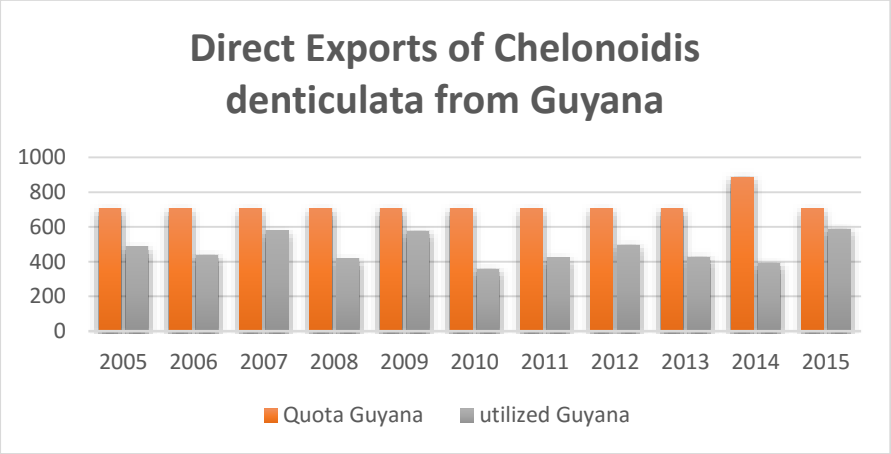
Table 3:Showing the export summary for Chelonoidis denticulata

	Reported By	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Quota	Guyana	704	704	704	704	704	704	704	704	704	887	704
utilized	Guyana	486	438	580	416	576	357	423	495	425	392	587

Table 4 showing export summary and the percentage of quota utilized from 2005-2015

	Reported By	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Quota	Guyana	704	704	704	704	704	704	704	704	704	887	704
utilized	Guyana	486	438	580	416	576	357	423	495	425	392	587
Percentage Utilized		69	62.2	82.3	59	82	51	60	70	60	56	83

Figure 1



The export quota was higher in 2014 due to a roll over from 2013 because the export year was cut short.

Species Management and Population Monitoring

There is currently no existing management plan for this species. Efforts are currently being made by a few wildlife exporters to captive breed *Chelonoidis denticulata* to supply the international wildlife trade.

Regulation of Wild Harvesting and Trade, including legal protection

There is no species specific management plan in place for the yellow-footed tortoise in Guyana. Some protection is afforded in protected areas and other managed spaces. With regard to the risk of mortality after capture and before export, the risk is low because of the nature of the animals.

Contact Details of any Relevant Experts

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Indonesia

MINISTRY OF ENVIRONMENT AND FORESTRY
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DIRECTORATE OF BIODIVERSITY CONSERVATION
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Our Ref: S. 281 /KKH/PKINT/KSA.2/3/2017

16 March 2017

To : Mrs. Claire McLardy
Species Programme
UNEP-WCMC
Email: species@unep-wcmc.org

Subject: Request for information on species subject to the CITES Review of Significant Trade

Dear,

With regards to your letter on 24 February 2017 regarding the above matter, please find in the attachment, information regarding *Ophiophagus hannah, Malayemys subtrijuga, Notochelys platynota, Ornithoptera croesus and Ornithoptera rothschildi* from Indonesia for the purpose of the Review of Significant Trade process for species selected following CoP 16.

It would be grateful if you could consult with us during the workshop meeting in Cambridge, UK, if there is any further information is needed to be completed before included in the report.

Thank you for your kind attention.

Sincerely yours,

Bambang Dahono Adji
Director of Biodiversity Conservation
For CITES Management Authority of Indonesia

cc.:
1. Director General of Natural Resources and Ecosystem Conservation, Indonesia
2. CITES Secretariat

Information of the Range States on Sustainability of Harvests of the King Cobra *Ophiophagus hannah* (Cantor, 1836) In Indonesia

March 2017

This report has been prepared by the CITES Management Authority and Scientific Authority of Indonesia on the request of the CITES Secretariat and WCMC for the purpose of Review of Significant Trade process in accordance with Resolution Conf. 12.8 (Rev. CoP 17). Please direct all comments or enquiries to:

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Executive Summary

The King Cobra, *Ophiophagus hannah*, is a species widely distributed in South Asia, East Asia, and Southeast Asia. In Indonesia, it occurs from Sumatra, Borneo, Java, Bali, Sulawesi and the Moluccas. The species has a high reproductive capability and also can adapt to disturbed habitats. Studies found that wild populations of this species in Indonesia are relatively stable because of its wide distribution and ability to adapt to various habitats in Indonesia. In addition, exports of *Ophiophagus hannah* from Indonesia tend to remain stable in the past 5 years. Thus, the trade of this species is not a significant threat to its population. Indonesia has encouraged breeding operations of this species in captivity, in order to reduce wild harvest gradually and to manage trades of this species to sustainable level. Indonesia believes that the trade of *Ophiophagus hannah* from Indonesia complies with Article IV of the Convention. Therefore, Indonesia asks WCMC and CITES secretariat take into account this information for consideration to exclude Indonesia *Ophiophagus hannah* from review significant trade selection.

A. General Biology : Distribution, Population Size, Status and Trends
1. Biology and Taxonomy

Phylum : Chordata
Sub Phylum : Vertebrata
Class : Reptilia
Ordo : Squamata
Sub Ordo : Serpentes
Family: Elapidae
Genus: *Ophiophagus*
Species: *Ophiophagus hannah* (Cantor, 1836)

Currently there are about 10,499 species of reptiles in the world (Uetz *et al*. 2016). Indonesia covers only 5 percent of the earth's terrestrial surface has about 15% reptile species of the world. The biodiversity of reptile species in Indonesia is about 787 species and 44.34 percents of it are snakes (349 species) (Iskandar and Erdelen, 2006). Thus 21 percents of them are endemic. At present 15 species of snakes from Indonesia are exported under the mechanism of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), including *Python reticulatus*, *Naja sputatrix*, and *Ophiophagus hannah*. Indonesia has several populations of King Cobra, distributed throughout mainland Islands, Sumatra, Java, Bali, Borneo, Sulawesi and Moluccas. The populations also established in adjacent islands, such as Bangka Belitung, Natuna, and even such isolated island Mentawai (west Sumatra).

Although King Cobra has large distribution area, only partial studies revealed the intraspecific variation in Thailand that recorded two distinct population of northern and southern Thailand (Sunutcha et al. 2014). As the result none of sub species was recognized from King Cobra so far. In Indonesia, several population differs in coloration such as light brown (Sumatra, Jambi), black (Borneo), dark brown (southern Sumatra, Java, Bali), olive black (Sulawesi, Moluccas). All these coloration were banded by thin white or yellowish bands along the dorsum. The juvenile has black dorsum banded by distinct yellow bars.

Adult King Cobra can reach 5.85 m in length (Das, 2010), adult sized for male 2.5 m and for female 3 m. Hatchlings size of King Cobra ranged from 288 to 640 mm length (Das, 2010). King Cobra is territorial species, and actively hunts the prey during the day. As similar with most tropical Asian snakes, the King Cobra has a high reproductive capability. According to Das (2010), the clutch size reached 20-51 eggs. The number of egg in single clutch is various depend on the female sizes, usually larger female produces more eggs. King Cobra has sexual dimorphism in size, male has larger and longer than female.

Observation in Sumatra by local informed that a female produced 60 eggs. The female lay eggs once a year, usually from January to April, however information from the local collector in central Java within a year King Cobra probably can breed twice. Egg clutch and baby King Cobra peaking hatching season in January and September. Female will build the nest. Building the nest is a unique behavior character among the snake species. Female will keep protecting them until hatch. The female will choose the best place to build the nest, lay the egg, and guide the nest until the hatch. These kinds of behavior cause high possibility producing higher number hatchling individuals. King Cobra has an average hatching success of 90% in captivity (Sulaiman, Pers. comm.).

King Cobra is a territorial species, both male and female actively hunt for prey during the day (diurnal species). In captivity, King Cobra can grows to a length of about 3-3.5 meters within 10 years. The adult King Cobra exclusively eats on other snake, but some captive breed individuals can take mouse, lizards and other snake. In Indonesia most records predatory events by King Cobra on *Python reticulatus* (Sumatra, Kalimantan, and Bali). As the top predator of snake, King Cobra can kill and eat any species of snake that fit to its body size.

Large number of snake species in Indonesia (200 terrestrial species occur in King Cobra's distribution area) are potential prey that supported the population of King Cobra in Indonesia.

2. Distribution, Population Size, Status and Trends

The geographical distribution of King Cobra in Indonesia is very wide (Fig. 1), almost similar with the distribution of *Python reticulatus*. King Cobra occurs from all parts of Sumatra, some islands in western coast Sumatra such as Mentawai and Nias, some islands in Karimata strait such as Riau Archipelago, Natuna islands, Bangka, Belitung, all part of Kalimantan, Java, Bali, Sulawesi and adjacent islands such as Buton and Banggai. The records of King Cobra also reached Seram (Moluccas islands).

Fig. 1. Distribution range of King Cobra in Indonesia (shown in green)

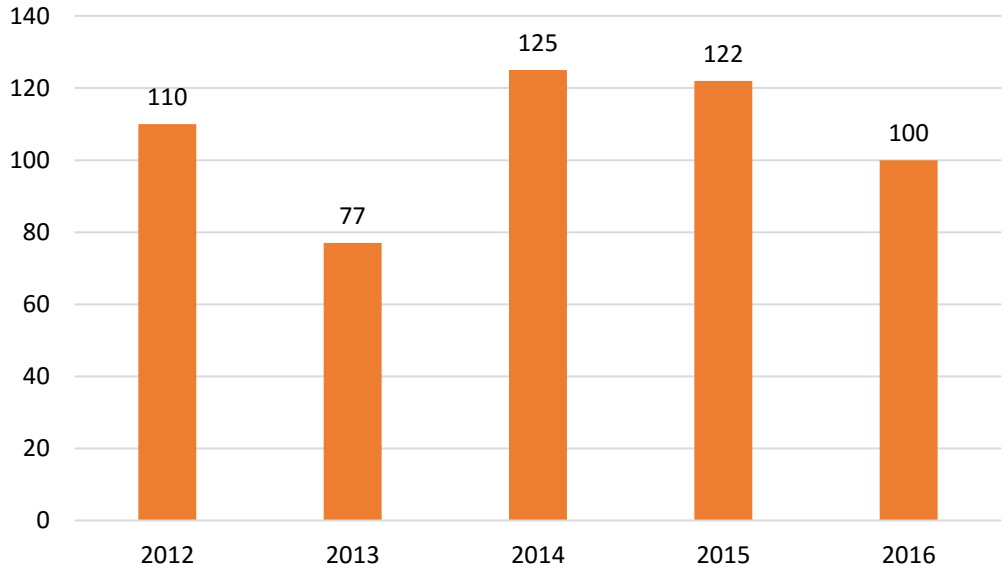
Indonesian King Cobra is harvested partially, especially from central Java and Lampung. The wild harvest individuals are for pet industry. The King Cobra inhabits various types of habitats, from primary forest, secondary forest, oil palm and rubber plantations, shrub to near settlements. In central Java in karst area while in Bali was found near settlements. The nest of King Cobra usually was recorded near river bank in bamboo forest. Bamboo forest is very common in all parts of Indonesia and it provides suitable habitat for King Cobra.

In Java, Lampung (southern Sumatra) and Bali have large area of paddy fields that attracted several preys and predators. The abundant number of rats and mouse as well as the predators such as rat snakes: *Ptyas* (*P. mucosa, P. korros, P. fusca, P. carinata*), *Coelognathus* (*C. radiatus, C. flavolineatus*), and *Gonyosoma oxychepala* are favorite prey for King Cobra. These snakes are diurnal species that actively hunt on mouse and rat. With the development of extensive agriculture such as development of rice field, rubber estate plantation, and palm oil plantation provided potential prey for King Cobra than the forest can do. In Bali, King Cobra can be found more easily in the forest edge near the rice field. Habitat and availability of prey have become an important part to be taken into account in the non detriment finding implementation of the trade in King Cobra in Indonesia. The species may be regarded as a "well adapted" species, where it lives in various type of habitat and can prey on any snake species, including other venomous species such as *Bungarus* (*B. candidus, B. fasciatus*), and *Calloselsma rhodostoma*. Based on the above mention studies, it showed that the wild population of King Cobra in Indonesia is relatively stable or not detrimental.

B. The Basis on Which NDF is Made

1. Trade data

The quota wildlife harvest King Cobra in Indonesia is stable within last five years. From 2012 to 2016, Indonesia exported 534 live specimen.



Source : CITES Management Authority of Indonesia, 2017

Figure 2. Export of King Cobra from Indonesia

2. Quota Establishment

King Cobra is listed in Appendix II. Despite King Cobra is widespread species, Indonesia concerns the continuity of export of this species thus put effort on the management of trade through quota system to satisfy Article IV of the CITES Convention, which meant demonstrating no detriment to the wild population.

Today, quotas for all reptiles subject to export in Indonesia are more sophisticated. Management Authority officers in each Province establish proposed harvest levels, in the field, where harvesting takes place, which are then reviewed and assessed further by CITES Scientific Authority (Indonesian Institute of Science, LIPI). Various parameters, including environmental conditions, are now used to set up quotas. In setting the quotas Scientific Authority involves individuals from a wide range of expertise, including scientists from other Research Organizations, Universities and NGOs . Once quotas are finalized LIPI submits them back to Directorate General of Forest Protection and Nature Conservation (CITES Management Authority), which then issues an annual decree on the national allowable harvest. The decree identifies the allowable harvest of each species down to the Province level.

Individual species harvest quotas are based on a range of available data, including information on the biology, population, and distribution of the species, general land-use and potential threats in specific areas. For example as a precautionary measure, quotas for the species in 2015 were reduced in response to extensive forest fires in Indonesia in 2015. The export quota is typically established as 90% of the total harvest: domestic trade is around 10% (Siswomartono, 1998).

3. Sustainability of Harvest

To ensure the sustainable harvest of this species, Indonesia applies strict quota set for 100 – 150 with the last 5 years. This number of quota considered small compare to the large distribution of this species.

Large distribution area, availability of prey and suitable habitat and stable quota wild harvest suggests a high degree of sustainability at a national level.

4. Captive Breeding

The effort to make captive breed program has been initiated and supported by the Indonesian Government. The captive bred company is registered in the Indonesia CITES MA namely PT Alam Nusantara Jayatama in Cibubur. Registration mechanism of the captive bred operation of CITES listed is according to Government regulation No. 19/Menhut-II/2005 concerning Captive Bred operation on wild fauna and flora. Although the captive breed effort of this species is difficult, the effort to initiate the program is important.

	
The facility of captive breeding	Leucistic individual is subject for breeding

Source : CITES Management Authority of Indonesia, 2017

Aside captive breeding, ranching program has been started in central Java and north Sumatra. The ranching programs usually collect the eggs from the pregnant individual or nest near human settlement. In the reason for human safety, the local usually kill venomous snake near their home.

	
The nest of King Cobra Bamboo habitat	Collecting the female
	
The nest with the eggs	The other nest in the river bank

The hatching rate of ranching program is 90%, survival rate ranged from 80 to 90%. With this achievement, 100 individual as set in the national quota can be full filled only from 3-5 female of ranching program.

	
Eggs and hatchling baby King Cobra	The baby King Cobra hatchling
	
Babies of King Cobra from Central Java, one week after hatching	Babies of King Cobra from Sumatra, one week after hatching

For monitoring, the CITES Management Authority (MA) designed a tool to control and monitor the production of a company namely Maximum Estimated Production (MEP). MEP is an estimate of breeding success for a particular species, by a particular breeder over a forthcoming 1 year period. Each breeder has to submit MEP of this species and then the CITES MA subsequently checks those claims, taking into consideration the previous breeding success of the company, and the biological of the species concerned.

C. Management and Monitoring

Harvest Controls and Internal Trade Monitoring

The provincial offices of the Management Authority (BKSDA) now control and enforce harvest/collection permits, and implement quota management and monitoring, for CITES-listed species in all administrative jurisdictions. In accordance with the Decree of the Minister of Forestry No. 447 of 2003 the BKSDA office will issue permits to collect species included in the quota list in the field based on the quota allocated for each respective province. All

specimens harvested from the habitat are officially registered by the Sub-provincial Section Offices of BKSDA (Districts office of BKSDA) who then, report back to the provincial BKSDA.

For domestic transport, the specimens must be covered by permits issued by BKSDA or its Section Offices. To facilitate better control, the domestic transport permit is, started from January 2005, now standardized throughout Indonesia. All permits (collection and domestic transport permits) are required to be reported to central level, which will improve monitoring of internal (domestic) trade. For international trade, there are already a limited numbers of import/export points nominated for Indonesia's CITES trade (see CITES Notification 1999/79).

Monitoring the chain of custody between source regions and collection points within Indonesia is theoretically possible to a certain degree of accuracy. Each province is divided into a number of BKSDA jurisdictions which will be able to track the legality of the specimens.

Standardized domestic transport permits are now being issued by BKSDA, in which five separate copies must accompany internal shipments within Indonesia. In addition, there should be a monthly report by BKSDA offices to report levels of internal transport to the central Directorate General of Ecosystem and Nature Conservation (DG KSDAE) office (as the CITES MA). The five copies are: the first copy must follow the specimen; the second copy stays as the file of BKSDA; the third copy is sent to the central office (DG KSDAE) as the file for DG KSDAE and used for crosschecking with the original which is enclosed with application for export; the fourth copy is file for BKSDA destination and used for cross checking with the original when the shipment has arrived; and fifth copy is for the Section of BKSDA.

National Legislation and Trade Control

The harvest and trade of all CITES Appendix II species, must be strictly controlled-in terms of harvest, domestic transport and export – by the DG KSDAE as the CITES Management Authority. This follows Decree of the Minister of Forestry Number 447/Kpts-II/2003 concerning the Administration Directive of Harvest and Capture and Distribution of the Specimens of Wild Plant and Animals Species**.** The annual national quota is set under this Decree by the Director General of KSDAE, and the Provincial Offices of the KSDAE (i.e. the BKSDA) issue harvest permits, whose totals cannot exceed the amounts which have been allocated as the provincial quota. Permits for domestic transport are also issued by the provincial office in accordance with the annual quota and with reference to harvest permits.

Collectors and exporters must be licensed and registered at the Directorate General of KSDAE in order to apply for CITES export permits. All shipments are verified and checked by the provincial office of KSDAE (BKSDA) whose officers are posted in the designated international ports.

Any violation to this regulation is sanctioned based on the provisions of the Government Regulation No. 8 of 1999 concerning Wild Animals and Plants Species Utilization, which is the implementation of the Act No. 5 of 1990 concerning Conservation of Living Resources and Their Ecosystems. The Government Regulation No. 8 of 1999 provides penalties for smuggling/misdeclaration or trade that is not inaccordance with the provision of the regulation and may be liable to imprisonement (in accordance with the Customs and Excise Law) and or fines of maximum IDR 250 million (about USD 27,000).

Protection of the species: Protected Areas and other Measures

Harvest of any species within gazetted Protected Areas, is prohibited under Act No. 5 of 1990. Anybody entering or trespassing in Protected Areas without permits may be prosecuted. Despite some reports on encroachment into protected areas by local people, protected areas would be the perfect place to safeguard from illegal harvesting of any species. Most of primary forests as one of suitable habitat of King Cobra are located in protected area. Indonesia has gazetted total 518 units of protected areas covering about 27 million hectares. Of this number, there are 490 units of terrestrial protected areas covering about 23 million hectares (Ministry of Forestry, 2011). The Protected Areas in Sumatra, Kalimantan, Sulawesi, Java, Bali, Moluccas are of important areas for total protection of King Cobra protection. The proportion of these protected areas is as follows: Sumatra: 5,383,243 ha; Kalimantan: 4,900,398 ha; Sulawesi: 1,601,198 ha; Maluku: 657,131 ha; Java and Bali: 629,904 ha.

These are managed in several categories based on IUCN criteria, namely National Parks, Nature Reserves, Game Reserves and Recreational Parks. Other protected area categories managed by the Government of Indonesia include: Hunting Parks and Grand Forest Parks. Except Grand Forest Parks, all categories of protected areas are managed by central government (Ministry of Forestry), therefore they are under direct control of the Management Authority. Protected Areas in Indonesia are generally well-managed, in terms of the monetary and human resources that have been put in the management. However, in many instances, encroachment in the forms of wildlife poaching, illegal logging and land encroachment for shifting agriculture, has become major issue in the management effectiveness of Protected Areas. Therefore, the current resources have been utilized more to undertake enforcement.

References:

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Information of the Range States of Sustainability of Harvests of Mekong Snail-eating Turtle (*Malayemys subtrijuga*) in Indonesia

March 2017

This report has been prepared by the CITES Management Authority and Scientific Authority of Indonesia on the request of the CITES Secretariat and WCMC for the purpose of Review of Significant Trade process in accordance with Resolution Conf. 12.8 (Rev. CoP 17). Please direct all comments or enquiries to:

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Executive Summary

The Mekong snail-eating Turtle (*Malayemys subtrijuga*) is an introduced species in Indonesia with limited distribution on Java and Sumatra. Based on recent research, the Indonesian (Java) population is established by human intervention primarily from a source population in the Mekong River. This turtle is mostly found in paddy fields, shallow rivers, and ditches while preying on snails. The species is difficult to maintain in captivity and in the wild lays about 3 to 10 eggs. Although lacking in population data, it can be assumed that wild population is stable based on export realization data.

Indonesia believe that *Malayemys subtrijuga* trade from Indonesia comply with article IV of the convention and therefore Indonesia ask WCMC and CITES secretariat take into account this information for consideration to exclude Indonesia *Malayemys subtrijuga* from review significant trade selection.

A. General Biology; Distribution, Population Size, Status and Trends

1. Biology and Taxonomy

Phylum : Chordata
Sub Phylum : Vertebrata
Class : Reptilia
Ordo : Testudines
Family: Geoemydidae
Genus: Malayemys
Species: *Malayemys subtrijuga* (Schlegel & Müller, 1845)

M. subtrijuga can reach a carapace length of 20-21 cm (Lim & Das, 1999; Iskandar, 2000). The turtles inhabit mainly marshes but can be found also in canals, paddy fields, and occasionally in slow flowing rivers, to areas with tidal influence (Lim & Das, 1999). In Indonesia, turtles mainly found in paddy fields (Mumpuni & Riyanto, pers.obs).

The turtles are active both during the day and night and primarily preying on freshwater snails. They also prey on freshwater mussels and shrimps (Lim & Das, 1999; Iskandar, 2000). Iskandar (2000) reported a reproductive capability of 5 to 10 eggs per clutch, while Lim & Das (1999) reported a clutch of 3 to 6 eggs.

2. Distribution, Population Size, Status and Trends

The Mekong snail-eating turtle is distributed on lowland freshwater areas of Thailand, Laos, Cambodia, southern Vietnam, the northern Malay Peninsula, and Java Island in Indonesia (Brophy, 2004). Based on a record of the Museum Zoologicum Bogoriense (MZB), the species is distributed in western Java (Banten, Jakarta, Serang, and Tasikmalaya) and Sumatra (Riau). On Java, the species can also be found in Central Java (Mumpuni & Riyanto, pers.obs). The distribution in Indonesia is thought a result of human intervention primarily from the Mekong River on mainland Southeast Asia.

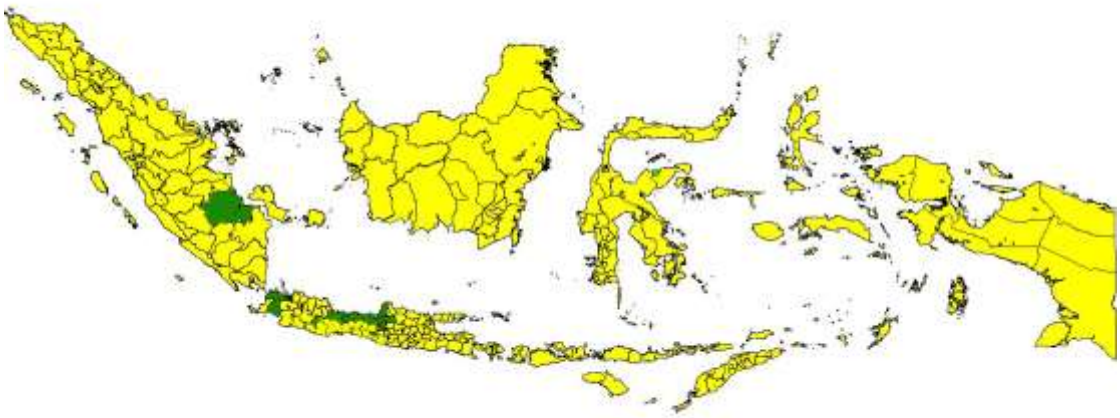


Figure 1. Distribution map for*Malayemys subtrijuga* in Indonesia (shown in green). (Prepared by Munir)

Although lacking in population data, it can be assumed that wild population is stable based on the export realization (Table 1). Effort on building the data population has been initiated for example through the development of survey method and population monitoring guideline for turtle in 2012 by the Indonesian Institute of Sciences.

The Mekong snail-eating turtle is currently not included in the list of protected animals in Indonesia. The turtle is commonly harvested from Central Java and West Java provinces.

B. The Basis on Which NDF is Made

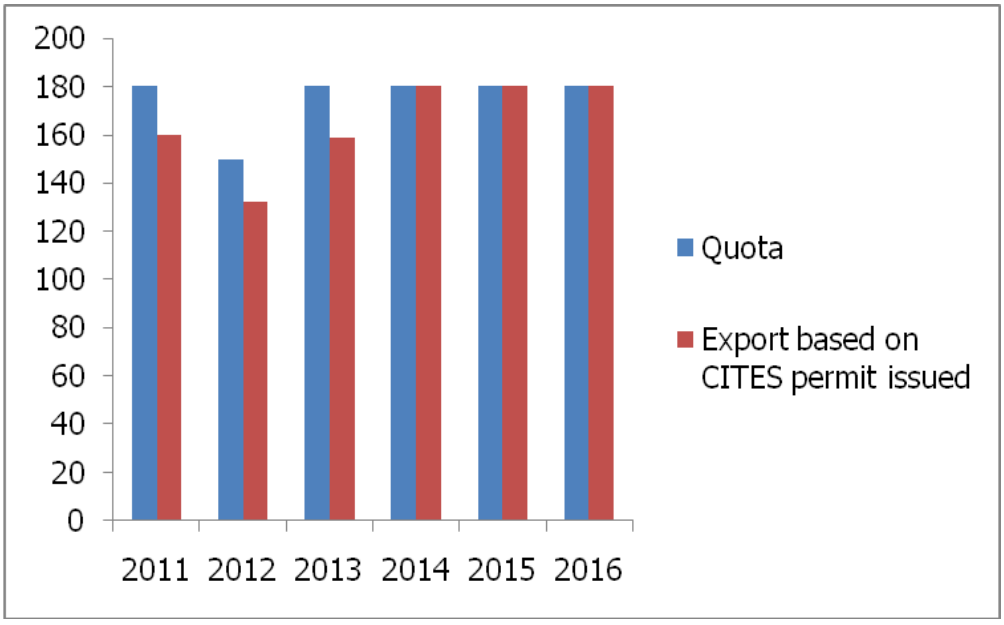
1. Trade data

Mekong snail-eating turtle is one of reptile species exported from Indonesia. The total number of individual Mekong snail-eating turtle exported from Indonesia during the past six years, i.e 2011- 2016 was 991. During this period, export quotas and the number of individual turtles exported with permits are relatively stable (Table 1 and Figure 2).

Table 1. Count of individual *Malayemys subtrijuga* (live) for trade based on CITES export permit issued from 2011 to 2016.

Year	Quota (individual)	Counts with export permit (individual)
2011	180	160
2012	150	132
2013	180	159
2014	180	180
2015	180	180
2016	180	180

Source : CITES Management Authority of Indonesia, 2017.



Source : CITES Management Authority of Indonesia, 2017.

Figure 2. Count of individual *Malayemys subtrijuga* (live) for trade based on CITES export permit issued from 2011 to 2016.

2. Quota Establishment

The Mekong snail-eating turtle was listed in Appendix II of CITES in 2005. *M. subtrijuga* has limited distribution in Indonesia, namely Java and Sumatra. Although distribution range includes both islands as a whole, harvests are only from two provinces on Java, Indonesia concern the continuity of export of this species thus put effort on the management of trade through quota system to satisfy Article IV of the CITES Convention, which meant demonstrating no detriment to the wild population.

Today, quotas for all reptiles subject to export in Indonesia are more sophisticated. Management Authority officers in each Province establish proposed harvest levels, in the field, where harvesting takes place, which are then reviewed and assessed further by CITES Scientific Authority (Indonesian Institute of Sciences, LIPI). Various parameters, including environmental conditions, are now used to set up quotas. In setting the quotas Scientific Authority involves individuals from a wide range of expertise, including scientists from other Research Organizations, Universities and NGOs. Once quotas are finalized LIPI submits them back to Directorate General of Forest Protection and Nature Conservation (CITES Management Authority), which then issues an annual decree on the national allowable harvest. The decree identifies the allowable harvest of each species down to the Province level.

Individual species harvest quotas are based on a range of available data, including information on the biology and distribution of the species, general land-use and potential threats in specific areas. For example as a precautionary measure, quotas for the species in 1998 were reduced in response to extensive forest fires in Indonesia in 1997.

The export quota is typically established as 90% of the total harvest: domestic trade is around 10% (Siswomartono, 1998).

3. Sustainability of Harvest

To ensure the sustainable harvest of this species, Indonesia applies limitation on maximum carapace length for individuals to be traded i.e 15 cm. This limitation is set to ensure stable population by not allowing harvest of adult individuals. Additionally, only trade for pet purposes (live) is allowed.

4. Captive Breeding

Indonesia started the captive breeding operations for this species since 2016. The captive bred company is registered at provincial offices of the Management Authority (Provincial Natural Conservation Agency/ BKSDA) namely PT. Indoreptil in Sawangan Depok, West Java Province. Registration mechanism of the captive bred operation of CITES listed is according to Government regulation No. 19/Menhut-II/2005 concerning Captive Bred operation on wild fauna and flora.

C. Management and Monitoring

1. Harvest Controls and Internal Trade Monitoring

The provincial offices of the Management Authority (BKSDA) now control and enforce harvest/collection permits, and implement quota management and monitoring, for CITES-listed species in all administrative jurisdictions. In accordance with the Decree of the Minister of Forestry No. 447 of 2003 the BKSDA office will issue permits to collect species included in the quota list in the field based on the quota allocated for each

respective province. All specimens harvested from the habitat are officially registered by the Sub-provincial Section Offices of BKSDA (Districts office of BKSDA) who then, report back to the provincial BKSDA.

For domestic transport, the specimens must be covered by permits issued by BKSDA or its Section Offices. To facilitate better control, the domestic transport permit is, started from January 2005, now standardized throughout Indonesia. All permits (collection and domestic transport permits) are required to be reported to central level, which will improve monitoring of internal (domestic) trade. For international trade, there are already a limited numbers of import/export points nominated for Indonesia's CITES trade (see CITES Notification 1999/79).

Monitoring the chain of custody between source regions and collection points within Indonesia is theoretically possible to a certain degree of accuracy. Each province is divided into a number of BKSDA jurisdictions which will be able to track the legality of the specimens.

Standardized domestic transport permits are now being issued by BKSDA, in which five separate copies must accompany internal shipments within Indonesia. In addition, there should be a monthly report by BKSDA offices to report levels of internal transport to the central Directorate General of Ecosystem and Nature Conservation (DG KSDAE) office (as the CITES MA). The five copies are: the first copy must follow the specimen; the second copy stays as the file of BKSDA; the third copy is sent to the central office (DG KSDAE) as the file for DG KSDAE and used for crosschecking with the original which is enclosed with application for export; the fourth copy is file for BKSDA destination and used for cross checking with the original when the shipment has arrived; and fifth copy is for the Section of BKSDA.

2. National Legislation and Trade Control

The harvest and trade of all CITES Appendix II species, must be strictly controlled-in terms of harvest, domestic transport and export – by the DG KSDAE as the CITES Management Authority. This follows Decree of the Minister of Forestry Number 447/Kpts-II/2003 concerning the Administration Directive of Harvest and Capture and Distribution of the Specimens of Wild Plant and Animals Species**.** The annual national quota is set under this Decree by the Director General of KSDAE, and the Provincial Offices of the KSDAE (i.e. the BKSDA) issue harvest permits, whose totals cannot exceed the amounts which have been allocated as the provincial quota. Permits for domestic transport are also issued by the provincial office in accordance with the annual quota and with reference to harvest permits.

Turtles collectors and exporters must be licensed and registered at the Directorate General of KSDAE in order to apply for CITES export permits. All shipments are verified and checked by the provincial office of KSDAE (BKSDA) whose officers are posted in the designated international ports.

Any violation to this regulation is sanctioned based on the provisions of the Government Regulation No. 8 of 1999 concerning Wild Animals and Plants Species Utilization, which is the implementation of the Act No. 5 of 1990 concerning Conservation of Living Resources and Their Ecosystems. The Government Regulation No. 8 of 1999 provides penalties for smuggling/misdeclaration or trade that is not inaccordance with the provision of the regulation and may be liable to imprisonement (in accordance with the Customs and Excise Law) and or fines of maximum IDR 250 million (about USD 27,000).

To curtail smuggling of wildlife species the Government of Indonesia has provided training (in annual basis) on CITES and wildlife law enforcement for field officers and officials of Special Police and Civil Investigator of BKSDA, Customs, Quarantine and State Police. Coordination and cooperation between CITES Management Authority and the Customs and Quarantine are in the process of formalization in the forms of MOU.

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Information of the Range States on Sustainability of Harvest of Malayan Flat-shelled Turtle (*Notochelys platynota*) in Indonesia

March 2017

This report has been prepared by the CITES Management Authority and Scientific Authority of Indonesia on the request of the CITES Secretariat and WCMC for the purpose of Review of Significant Trade process in accordance with Resolution Conf. 12.8 (Rev. CoP 17). Please direct all comments or enquiries to:

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Executive Summary

Malayan Flat-shelled Turtle (*Notochelys platynota*) has relatively wide range distribution in Indonesia from Sumatra, Java to Kalimantan, Bangka and Bunguran islands. This turtle inhabits shallow waters habitat in lowland rain forest and primarily feeds on aquatic vegetation. In the wild, it lays up to 3 eggs per clutch. Although lacking in population data, it can be assumed that wild population is stable based on its wide distribution in Indonesia and export realization data.

Indonesia believes that *Notochelys platynota* trade from Indonesia complies with article IV of the convention. Therefore, Indonesia asks WCMC and CITES secretariat take into account this information for consideration to exclude Indonesia *Notochelys platynota* from review of significant trade selection.

A. General Biology: Distribution, Population Size, Status and Trends

1. Biology and Taxonomy

Phylum : Chordata
Sub Phylum : Vertebrata
Class : Reptilia
Ordo : Testudines
Family: Geoemydidae
Genus: Notochelys
Species: *Notochelys platynota* (Gray, 1834)

N. platynota can reach a carapace length of 36-40 cm (Lim & Das, 1999; Iskandar, 2000). The turtle has variable habitats, including marshes, swamps, ponds, and streams in lowland rain forests with abundant aquatic plants. They feed primarily on aquatic plants. In captivity, they are found omnivorous (Lim & Das, 1999). Iskandar (2000) reported they also prey on snails, fish, and shrimps.

Lim & Das (1999) reported that females of 20.5 cm carapace length produced three large, hardshelled eggs, measuring 56 x 27-28 mm. The hatchlings measure 55-56.2 mm in carapace length.

2. Distribution, Population Size, Status and Trends

Malayan Flat-shelled Turtle ranges from southern Thailand, through Vietnam, West Malaysia, and Singapore, to the islands of Sumatra, Java, Borneo, Bangka and Bunguran (Lim & Das, 1999; Iskandar, 2000; Riyanto, pers.obs).

Figure 1. Distribution map for *Notochelys platynota* in Indonesia based on available museum records and literatures (shown in green). (Map prepared by Munir)

Although lacking in population data, it can be assumed that wild population is stable based on the export realization (Table 1). Effort on building the data population has been initiated for example through the development of survey method and population monitoring guideline for turtle in 2012 by the Indonesian Institute of Sciences.

The Malayan Flat-shelled turtle is currently not included in the list of protected animals in Indonesia. The turtle is harvested from Sumatra and Kalimantan.

B. The Basis on Which NDF is Made

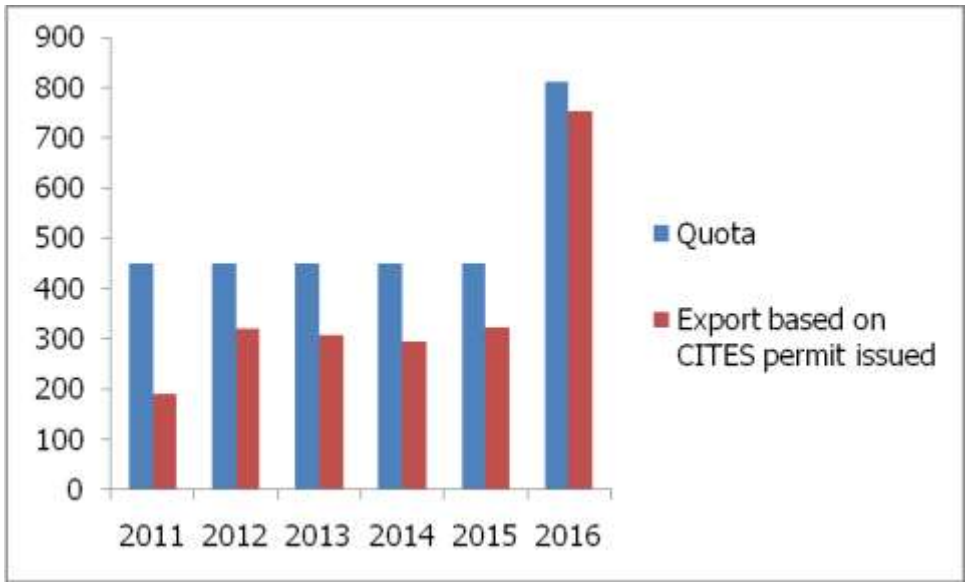
1. Trade data

The exports of Malayan Flat-shelled turtle for the following years showed relatively stable from year to year, except in 2016, where there was an increase about twice from year before (Table 1 and Figure 2).

Table 1. Counts of individual *Notochelys platynota* (live) for trade based on CITES export permits issued from 2011 to 2016.

Year	Quota (individual)	Counts with export permit (individual)
2011	450	190
2012	450	321
2013	450	307
2014	450	296
2015	450	324
2016	810	753

Source : CITES Management Authority of Indonesia, 2017.



Source : CITES Management Authority of Indonesia, 2017.

Figure 2. Counts of individual *Notochelys platynota* (live) for trade based on CITES export permits issued from 2011 to 2016.

2. Quota Establishment

Malayan flat-shelled turtle was listed in Appendix II of CITES in 2005. *N. platynota* has distribution (Sumatra, Bangka, Java, Kalimantan and Bunguran) in Indonesia, but the harvest only taken from Sumatra and Kalimantan only. Indonesia concerns the

continuity of export of this species thus put effort on the management of trade through quota system to satisfy Article IV of the CITES Convention, which meant demonstrating no detriment to the wild population.

Today, quotas for all reptiles subject to export in Indonesia are more sophisticated. Management Authority officers in each Province establish proposed harvest levels, in the field, where harvesting takes place, which are then reviewed and assessed further by CITES Scientific Authority (Indonesian Institute of Sciences, LIPI). Various parameters, including environmental conditions, are now used to set up quotas. In setting the quotas Scientific Authority involves individuals from a wide range of expertise, including scientists from other Research Organizations, Universities and NGOs. Once quotas are finalized LIPI submits them back to Directorate General of Forest Protection and Nature Conservation (CITES Management Authority), which then issues an annual decree on the national allowable harvest. The decree identifies the allowable harvest of each species down to the Province level.

Individual species harvest quotas are based on a range of available data, including information on the biology and distribution of the species, general land-use and potential threats in specific areas. For example as a precautionary measure, quotas for the species in 1998 were reduced in response to extensive forest fires in Indonesia in 1997. The export quota is typically established as 90% of the total harvest: domestic trade is around 10% (Siswomartono, 1998).

3. Sustainability of Harvest

To ensure the sustainable harvest of this species, Indonesia applies limitation on maximum carapace length for individuals to be traded i.e 15 cm. This limitation is set to ensure stable population by not allowing harvest of adult individuals. Additionally, only trade for pet purposes (live) is allowed.

C. Management and Monitoring

1. Harvest Controls and Internal Trade Monitoring

The provincial offices of the Management Authority (BKSDA) now control and enforce harvest/collection permits, and implement quota management and monitoring, for CITES-listed species in all administrative jurisdictions. In accordance with the Decree of the Minister of Forestry No. 447 of 2003 the BKSDA office will issue permits to collect species included in the quota list in the field based on the quota allocated for each respective province. All specimens harvested from the habitat are officially registered by the Sub-provincial Section Offices of BKSDA (Districts office of BKSDA) who then, report back to the provincial BKSDA.

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2. National Legislation and Trade Control

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To curtail smuggling of wildlife species the Government of Indonesia has provided training (in annual basis) on CITES and wildlife law enforcement for field officers and officials of Special Police and Civil Investigator of BKSDA, Customs, Quarantine and State Police. Coordination and cooperation between CITES Management Authority and the Customs and Quarantine are in the process of formalization in the forms of MOU.

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Information of the Range States on Sustainability of Harvests of Wallace's Golden Birdwing Butterfly (*Ornithoptera croesus*) in Indonesia

March 2017

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Executive Summary

Wallace's Golden Birdwing Butterfly (*Ornithoptera croesus*) is an endemic species in North Maluku, Indonesia. This butterfly species is regulated and included as Appendix II CITES. With the endangered status of IUCN and considering its endemicity, this species is proposed to be protected under Indonesian law.

Although population data is lacking, practice of butterfly farming has been known for a long time. This has been conducted by planting food plants and nectar plants in captive facility. Indonesia believes that this species can be harvested sustainably by captive breeding.

A. General Biology; Distribution, Population Size, Status and Trends

1. Biology and Taxonomy

Phylum: Arthropoda
Class: Insecta
Ordo: Lepidoptera
Family: Papilionidae
Genus: *Ornithoptera*
Species: *Ornithoptera croesus* Wallace, 1859

Like other *Ornithoptera* spp., *O. croesus* has specific host plants of the family Aristolochiaceae. The food plant for *O. croesus* is a distinct species of *Aristolochia* (Igarashi & Fukuda, 2000; Matsuka, 2001).

2. Distribution, Population Size, Status and Trends

Wallace's Golden Birdwing Butterfly (*Ornithoptera croesus*) distributes in North Maluku, Indonesia (Fig. 1), on the islands of Morotai, Bacan, and Halmahera (D'Abrera, 1990, Peggie, 2011).

Data on population size of this species is still lacking. Ideally, we would have population data on this species to monitor the impact of trade to wild population.

This butterfly species is regulated and included as Appendix II CITES. Since 1996 this species has been given endangered status of IUCN, and considering its endemicity this species is proposed to be included as protected species under the Indonesian law (Peggie, 2011).

Figure 1. Distribution map for *Ornithoptera croesus* (shown on red circle)

B. Threats to this species

Threats to this species include the habitat destruction and land clearing. Other factors include the illegal trading of this species. Butterflies are so small that most of the time, the illegal trade went unnoticed. Indonesia applies captive breeding and ranching for the trade of this species, in order to minimize the threats to its population in the wild.

C. Export Trade Statistic

The trade of *O. croesus* from Indonesia has been conducted from captive breeding operations. The export of this species from 2011 to 2016 is shown in Fig. 2.

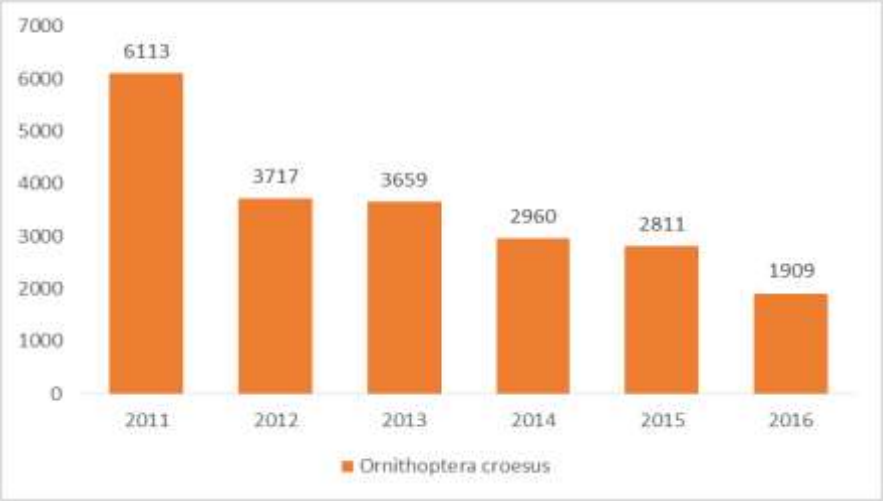

Figure 2. Trade export statistic of *Ornithoptera croesus* in the past 6 years conducted from captive breeding operations

D. Species management and monitoring of the populations

Many species of butterflies are highly sought after. To fulfill the demand of butterflies, practice of butterfly ranching has been known for a long time. This has been conducted by habitat enrichment by way of planting food plants and nectar plants. Indonesia believes that this species can be harvested sustainably by captive breeding or ranching.

Currently there are four registered butterfly breeders in Indonesia, an example of butterfly facility is presented at Fig. 3. Larva and chrysalis at the farm are shown at Fig. 4.

Figure 3. Facility of butterfly ranching of UD Giradys

Figure 4. Chrysalis of *Ornithoptera croesus* of UD Giradys breeding facility

E. National Legislation and Trade Control

The harvest and trade of all CITES Appendix II species, must be strictly controlled-in terms of harvest, domestic transport and export – by the DG KSDAE as the CITES Management Authority. This follows Decree of the Minister of Forestry Number 447/Kpts-II/2003 concerning the Administration Directive of Harvest and Capture and Distribution of the Specimens of Wild Plant and Animals Species**.** The annual national quota is set under this Decree by the Director General of KSDAE, and the Provincial Offices of the KSDAE (i.e. the BKSDA) issue harvest permits, whose totals cannot exceed the amounts which have been allocated as the provincial quota. Permits for domestic transport are also issued by the provincial office in accordance with the annual quota and with reference to harvest permits.

Butterfly collectors and exporters must be licensed and registered at the Directorate General of KSDAE in order to apply for CITES export permits. All shipments are verified and checked by the provincial office of KSDAE (BKSDA) whose officers are posted in the designated international ports.

Any violation to this regulation is sanctioned based on the provisions of the Government Regulation No. 8 of 1999 concerning Wild Animals and Plants Species Utilization, which is the implementation of the Act No. 5 of 1990 concerning Conservation of Living Resources and Their Ecosystems. The Government Regulation No. 8 of 1999 provides penalties for smuggling/misdeclaration or trade that is not inaccordance with the provision of the regulation and may be liable to imprisonement (in accordance with the Customs and Excise Law) and or fines of maximum IDR 250 million (about USD 27,000).

To curtail smuggling of wildlife species the Government of Indonesia has provided training (in annual basis) on CITES and wildlife law enforcement for field officers and officials of Special Police and Civil Investigator of BKSDA, Customs, Quarantine and State Police. Coordination and cooperation between CITES Management Authority and the Customs and Quarantine are in the process of formalization in the forms of MOU.

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Information of the Range States on Sustainability of Harvests of Rothschild's Birdwing Butterfly (*Ornithoptera rothschildi*) in Indonesia

March 2017

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Executive Summary

Rothschild's Birdwing Butterfly (*Ornithoptera rothschildi*) is an endemic species in Arfak, West Papua, Indonesia. This butterfly species is regulated and included as Appendix II CITES. With the vulnerable status of IUCN, this species is protected under Indonesian law.

Although population data is lacking, practice of butterfly ranching has been known for a long time. This has been conducted by habitat enrichment by way of planting food plants and nectar plants. Indonesia believes that this species can be harvested sustainably by captive breeding or ranching.

A. General Biology; Distribution, Population Size, Status and Trends

1. Biology and Taxonomy

Phylum: Arthropoda
Class: Insecta
Ordo: Lepidoptera
Family: Papilionidae
Genus: *Ornithoptera*
Species: *Ornithoptera rothschildi* Kenrick, 1911

Like other *Ornithoptera* spp., *O. rothschildi* has specific host plants of the family Aristolochiaceae. The food plant for *O. rothschildi* is *Aristolochia* (Igarashi & Fukuda, 2000; Matsuka, 2001).

2. Distribution, Population Size, Status and Trends

Rothschild's Birdwing Butterfly (*Ornithoptera rothschildi*) distributes in Arfak, West Papua, Indonesia (Fig. 1), on high elevation of 1800 – 2000 m asl. (D'Abrera, 1990, Peggie, 2011).

Figure 1. Distribution map for *Ornithoptera rothschildi* – Arfak mountain

Data on population size of this species is still lacking. Ideally, we would have population data on this species to monitor the impact of trade to wild population.

This butterfly species is regulated and included as Appendix II CITES. With the vulnerable status of IUCN, this species is protected under Indonesian law (Peggie, 2011).

B. Threats to this species

Threats to this species include the habitat destruction and land clearing. Other factors include the illegal trading of this species. Butterflies are so small that most of the time, the illegal trade went unnoticed. Indonesia applies captive breeding and ranching for the trade of this species, in order to minimize the threats to its population in the wild.

C. Export Trade Statistic

The trade of *O. rothschildi* from Indonesia has been conducted from breeding and ranching operations. The export of this species from 2011 to 2016 is shown in Fig. 2.

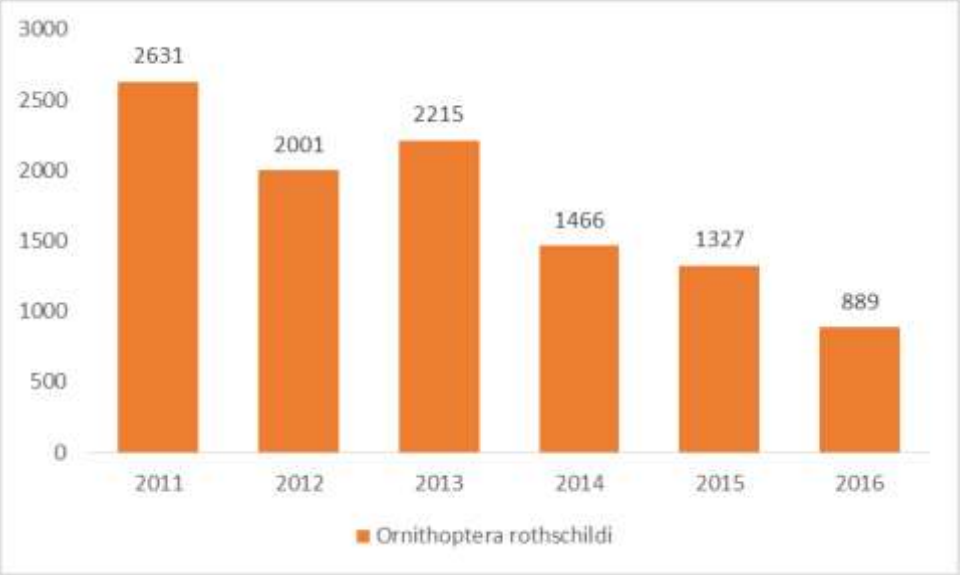

Figure 2. Trade statistic of *Ornithoptera rothschildi* in the past 6 years conducted from breeding and ranching operations

D. Species management and monitoring of the populations

Many species of butterflies are highly sought after. To fulfill the demand of butterflies, practice of butterfly ranching has been known for a long time. This has been conducted by habitat enrichment by way of planting food plants and nectar plants. Indonesia believes that this species can be harvested sustainably by captive breeding or ranching.

Currently there are four registered butterfly breeders in Indonesia. An example of butterfly facility is presented at Fig. 3. Larva and chrysalis at the farm are shown at Fig. 4.

Figure 3. Facility of butterfly ranching of PT. Rizky Perdana at Arfak

Figure 4. Larva and chrysalis of *Ornithoptera rothschildi* at PT. Rizky Perdana facility.

E. National Legislation and Trade Control

The harvest and trade of all CITES Appendix II species, must be strictly controlled-in terms of harvest, domestic transport and export – by the DG KSDAE as the CITES Management Authority. This follows Decree of the Minister of Forestry Number 447/Kpts-II/2003 concerning the Administration Directive of Harvest and Capture and Distribution of the Specimens of Wild Plant and Animals Species**.** The annual national quota is set under this Decree by the Director General of KSDAE, and the Provincial Offices of the KSDAE (i.e. the BKSDA) issue harvest permits, whose totals cannot exceed the amounts which have been allocated as the provincial quota. Permits for domestic transport are also issued by the provincial office in accordance with the annual quota and with reference to harvest permits.

Butterfly collectors and exporters must be licensed and registered at the Directorate General of KSDAE in order to apply for CITES export permits. All shipments are verified and checked by the provincial office of KSDAE (BKSDA) whose officers are posted in the designated international ports.

Any violation to this regulation is sanctioned based on the provisions of the Government Regulation No. 8 of 1999 concerning Wild Animals and Plants Species Utilization, which is the implementation of the Act No. 5 of 1990 concerning Conservation of Living Resources and Their Ecosystems. The Government Regulation No. 8 of 1999 provides penalties for smuggling/misdeclaration or trade that is not inaccordance with the provision of the regulation and may be liable to imprisonement (in accordance with the Customs and Excise Law) and or fines of maximum IDR 250 million (about USD 27,000).

To curtail smuggling of wildlife species the Government of Indonesia has provided training (in annual basis) on CITES and wildlife law enforcement for field officers and officials of Special Police and Civil Investigator of BKSDA, Customs, Quarantine and State Police. Coordination and cooperation between CITES Management Authority and the Customs and Quarantine are in the process of formalization in the forms of MOU.

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Jordan

Report on the status of the Egyptian Spiny-tailed Lizard, *Uromastyx aegyptia*, in Jordan

By

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3 The Royal Society for the Conservation of Nature

Distribution, population size, status and trends

This is a desert dwelling species known to occur in the eastern desert, southern Jordan and Wadi Araba. We have no data on its population size; however, a sharp decline of *U. a. microlepis* was observed over the past 25 years in the eastern desert, Wadi Ramm and Wadi Araba.

Threats to the species

Uromastyx aegyptia is suffering from several threats. Populations of the Spiny-tailed Lizard are diminishing in the eastern desert due to extensive capturing to meet the demand by citizens of neighboring countries. A specimen can be sold for up to 50 US$. It is used as an aphrodisiac and citizens of neighboring countries relish its (Disi et al., 2014).
Also, habitat destruction of its habitat for development projects (agriculture, desert dams etc) caused sharp decline.

Trade statistics, including any evidence of illegal trade

We do not have any records for legal or illegal trade with this animal.

Species management and population monitoring

No studies have been conducted to monitor current populations of *Uromastyx aegyptia* in Jordan. Although it is present in some nature reserves, no special management plans exists.

Regulation of wild harvesting and trade, including legal protection

This species is now listed in appendix 3 of Bylaw no. 43 for the year 2008 of the Provisional Agriculture Law No (44) for the year 2002.

References

Disi, A., Amr, Z.S. & Hamidan, N. 2014. Diversity, threats and conservation of the terrestrial and freshwater herpetofauna of Jordan. *Russian Journal of Herpetology*, 21:221-233.

Report on the status of the Greek Tortoise, *Testudo graeca*, in Jordan

By

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Distribution, population size, status and trends

The Spur-thighed Tortoise or the Greek Tortoise, *Testudo gracea* has a wide range of distribution extending from southern Europe to North Arica and the Middle East with several subspecies. *Testudo gracea terrestris* is the subspecies known from Palestine, Lebanon, Jordan, Syria, SE Turkey.

Previous studies showed the distribution of this species in Jordan (Disi, 1998; Disi et al., 2001). *Testudo gracea* is associated with the Mediterranean bioclimatic zone, extending from the north, reaching as far as around Petra in the south. Disi (1998) stated that *T. gracea* starts it activity in March with highest peak in April and May, with a second lesser peak in September, with no activity beyond November. He observed mating during April and May. Females lay 3-5 eggs per clutch.

Attum et al. (2011) studied the biology of *T. graeca* translocated at Dibeen Nature Reserve. Tortoises were forced to be relatively inactive due to their being released at the beginning of the aestivation season. This study suggested that forced aestivation soft-releases may succeed in reducing dispersal by forcing spur-thighed tortoises to spend time at the release site as the majority of translocated tortoises had similar activity range sizes and movement path tortuosity as resident tortoises.

We do not have studies focusing on the population size of *T. graeca* in Jordan. It used to be common; however, the numbers are on the decline over the past 15 years.

Threats to the species

The spur-thighed tortoise is currently threatened by several causes; harvesting by vacationers in its natural habitats, local trade, crushing by cars during its activity period as well as habitat destruction for agricultural and urban development. Disi et al. (2014) revised threats affecting the reptiles of Jordan. Table 1 summarizes threats affecting the reptiles of Jordan including the spur-thighed tortoise.

Table 1: Threat categories and causes of threats on the reptiles and amphibians in Jordan (After Disi et al. 2014)

Threat category	Cause of threats
Habitat loss and degradation	a. Deforestation b. Destruction of the green mantle of the desert and semiarid lands c. Land tenure and fragmentation d. Overgrazing

Water issues	a. Water extraction and mismanagement of water resources b. Pollution c. Dumping temporary winter rain pools
Human disturbance and related activities	a. Recreational activities and tourism b. Killing by traffic c. Direct persecution d. Scientific collection e. Trade and commercial collection
Legislative and public awareness	a. Enforcement b. Public awareness

Trade statistics, including any evidence of illegal trade

We have data for legal trade through animal farms that breed *T. graeca*. Table 2 shows the number of traded animals since 2012 to 2016. All these animals originated from animal farms and were exported to various countries after issuing a CITES permit.

Table 2: Number of exported *T. graeca* from Jordan that obtained a CITES permit.

Year	Number of traded animals
2012	9982
2013	6623
2014	5750
2015	4200
2016	5900

Japan is the major importer of farm-reared *T. graeca*, with over 17.000 animal over the past five years (Table 3).

Table 3: Importers of the spur-thighed tortoise.

Importing Country	2012	2013	2014	2015	2016	Total
Germany	2	0	0	0	0	2
Japan	5230	2270	4550	2350	2950	17350
South Africa	200	0	0	0	0	200
Hong Kong	1300	500	300	0	0	2100
Taiwan	1800	250	0	260	700	3010
United States of America	1450	3600	0	0	150	5200
Yemen	0	2	0	0	0	2
Saudi Arabia	0	0	200	370	2100	2670
Kosovo	0	0	0	650	0	650
Not indicated	0	0	1050	570	0	1620

Illegal trade with the spur-thighed tortoise have been documented (Eid et al., 2011). The magnitude of animal trade in Amman city, Jordan, was evaluated during July to November 2009, with 42 animals confiscated. Over the past three years, we documented illegal trade in Jordan, with a total of 521 *T. graeca* between 2014-2016 (Table 4).

Table 4: Confiscated *T. gracea* between 2014-2016

Year	Number of confiscated animals
2014	334
2015	81
2016	106

Species management and population monitoring

No studies have been conducted to monitor current populations of *T. gracea* in Jordan. Although it is present in several nature reserves, only a single study on the spatial movement of *T. gracea* was conducted. No special management plans exists.

Regulation of wild harvesting and trade, including legal protection

This species is now listed in appendix 2 of Bylaw no. 43 for the year 2008 of the Provisional Agriculture Law No (44) for the year 2002.

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Malaysia

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Our. Ref : NRE 600-2/17/8 Jld. 4 (25)
Date : 27 April 2017

Ms. Claire McLardy
Species Programme
United Nations Environment Programme
World Conservation Monitoring Centre
219 Huntingdon Rd
Cambridge CB3 0DL
United Kingdom

Dear Madam,

Request for Information on Species Subject to the CITES Review of Significant Trade

May we respectfully refer to the above matter and to your letter dated 24th February 2017.

2. Please find enclosed herewith, the information requested related to *Ophiophagus hannah* (King Cobra) for your kind perusal. In regard to *Malayemys subtrijuga* (Mekong Snail-eating Turtle), kindly be informed that this species is non-native to Malaysia. Hence, we are unable to give further information and we wish to highlight that Malaysia should not be included under review for this species.

3. If you require further information or clarification, please do not hesitate to contact us again. We look forward to your favourable report. Thank you.

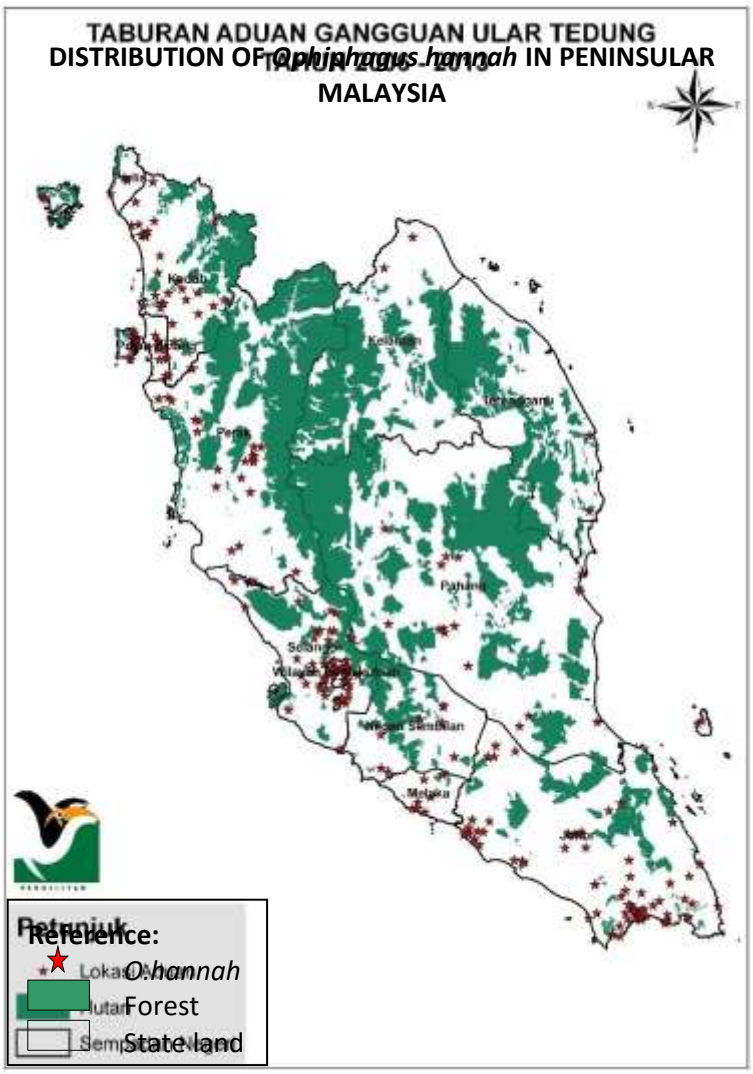
Yours sincerely,

(DR. MEGAT SANY MEGAT AHMAD SUPIAN)
Under Secretary
Biodiversity and Forestry Management Division
For the Secretary General
Ministry of Natural Resources and Environment
Malaysia

INFORMATION ON SPECIES SUBJECT TO THE CITES REVIEW OF SIGNIFICANT TRADE

Ophiophagus hannah (King Cobra)

There is little information on sightings of *O. hannah* collected via inventories and patrolling within Protected Areas, as this species is cryptic, sedentary and often hiding in holes/burrows. Therefore, many of the habitat distribution of this species are recorded based on human-wildlife conflict, which is quite widespread on the west of Peninsular Malaysia as below:



In region of Sabah and Sarawak, there is no documentation on the sightings of *O. hannah* collected.

On average, annual export of this species since 2012 is less than 25 heads. Currently there is no export quota impose for *O.hannah* from Peninsular Malaysia. However, there are strict hunting rules regulated under Wildlife Conservation Act 2010 (Act 716):

- Only licensed hunters are permitted to catch this species using scoop net only. No shooting or destructive methods are allowed;

- Hunting licence fee for *O.hannah* is MYR 2/snake. License is valid for 3 months and hunting should be conducted between 7 am to 7 pm only, outside of Protected Areas, and within respective state that issues the license; and

- States are allowed to impose hunting quota from time to time accordingly with population status in the respective states.

In addition to that, licensed traders only allowed sourcing their snakes from licensed hunters or other licensed traders. Details of their business are recorded in an official logbook including date of trade, quantity, source person (with license number) and etc. Enforcement officers check this logbook regularly. Currently, there is no captive breeding activity for *O.hannah* in Peninsular Malaysia.

In terms of legal protection, as *O.hannah* is listed in Appendix II CITES, the International Trade in Endangered Species Act 2008 (Act 686) stated that any person who imports or exports this species without a permit shall be fine not exceeding MYR100,000 for each animal or readily recognizable part or derivative of this species. But such fine shall not exceed in the aggregate of MYR 1 million; or to imprisonment for a term not exceeding 7 years or to both. When such person is a corporate body, fine shall be not exceeding MYR200,000 for each animal or readily recognizable part or derivative of this species. But such fine shall not exceed in the aggregate of MYR2 millions.

Domestically, in Peninsular Malaysia, *O.hannah* is a species Protected under Wildlife Conservation Act 2010 (Act 716). Any person who (a) hunts or keeps this species; or (b) takes or keeps any part or derivative of this species without a license shall be liable to a fine not exceeding MYR 50,000.00 or to imprisonment for a term not exceeding 2 years or both. Any person who imports, exports or re-exports this species or any part or derivative of this species without a licence shall be liable to a fine not less than MYR 20,000.00 and not more than MYR 50,000.00; and to imprisonment for a term not exceeding 1 year.

Meanwhile in Eastern Malaysia, *O.hannah* is gazetted as Protected Animals both under the Wildlife Conservation Enactment 1997 for state of Sabah and Wild Life Protection Ordinance 1998 for state of Sarawak.

Turkey

REPORT OF HIRUDO MEDICINALIS IN TURKEY

1. Distribution, population size, status and trends

H. medicinalis is recorded in wetlands of Turkey such as Çubuk Dam lake and Eymir Lake (Geldiay, 1949), Gölcük Lake (İzmir) (Geldiay and Tareen, 1972). Sırakaraağaçlar River (Sinop) (Bat et al., 2000), Lakes of Abant, Acarlar, Acıgöl, Ağyatan, Akşehir, Akyatan, Arapçiftliği, Bafa, Beyşehir, Bolluk, Borabay, Burdur, Çaltıçak, Çavuşçu, Çöl, Dalyan, Dipsiz, Eber, Efteni, Eğirdir, Gala, Gerede, Gölcük (Bolu), Işıklı, İznik, Karapınar, Kozanlı, Köyceğiz, Küçük Akgöl, Küçük Mangıt, Kulu, Ladik, Manyas, Marmara, Mogan, Poyrazlar, Samsam, Sapanca, Sarıkum, Süleymaniye, Terkos, Tersakan, Tuz, Apolyont, Uyuz, Yeniçağa, Deltas of Yeşilırmak River, Büyük Menderes ve Kızılırmak, Hotamış, wetlands of Karagöl (Sinop), Eşmekaya, Sultan ve Ereğli bataklıkları, Karamık, Tarsus (Kasparek et al., 2000), Efteni Lake, Poyrazlar Lake (Demirsoy et al., 2001), Delta of Gediz (İzmir) (Ustaoğlu et al., 2003), Yayla Lake (Denizli) (Taşdemir et al., 2004), Gökpınar stream (Denizli) (Duran et al., 2007), Fırnız stream (Kahramanmaraş) (Yıldırım, 2006), Melen Lake (Özbek and Sarı, 2007), Doğubeyazıt reeds (Ağrı), Putka Lake, Eminbey reeds, Armutveren reedsı-1, Armutveren reeds-2, Armutveren reeds-3 (Ardahan), Soğuk Çeşme reeds (Bingöl), Gölbaşı marsh (Bitlis), Beyaz Çeşme marsh, Bahçecik marsh (Elazığ), Subatan marsh, Sülük Lake (Erzincan), Üçkaya Lake (Iğdır), Dellet Marshı, Sülük Lake-1, Sülük Lake-2 (Kars), Ahır Lake (Malatya), Kopuzlar wetland, Palanotu wetland, Büyük Sülük Lake, Küçük Sülük Lake, Sekirek Marshı (Tunceli) (Saglam et al., 2008).

In the studies carried out in Turkey's wetlands was defined the existence of medicinal leech species *Hirudo medicinalis* and *Hirudo verbana*). However, the existence of *H. medicinalis* in Turkish waters was not found in various molecular studies. The species of medical leech identified in the wetlands listed in the above paragraph probably represents the Hirudo verbana. In recent years, it was believed that collected and exported medicinal leeches from Turkey's wetlands that was only belonging to *Hirudo medicinalis* species. But, medicinal leech from Kızılırmak delta that are vast majority of the leech collected from Turkey was seen to belong to *Hirudo verbana* species (Sağlam, 2011). Saglam et al. (2016) have recently revealed important information on Genus *Hirudo* in Turkey. *Hirudo verbana* is widespread in every region of Turkey except Southeast Anatolian region. However, there is only *Hirudo*

sulukii that is a new species of medical leech in South Eastern Anatolia Region of Turkey (See Saglam et al., 2016) (Fig. 1). Over time, it is possible that there will be new changes with the increase of molecular studies on leeches in Turkey.

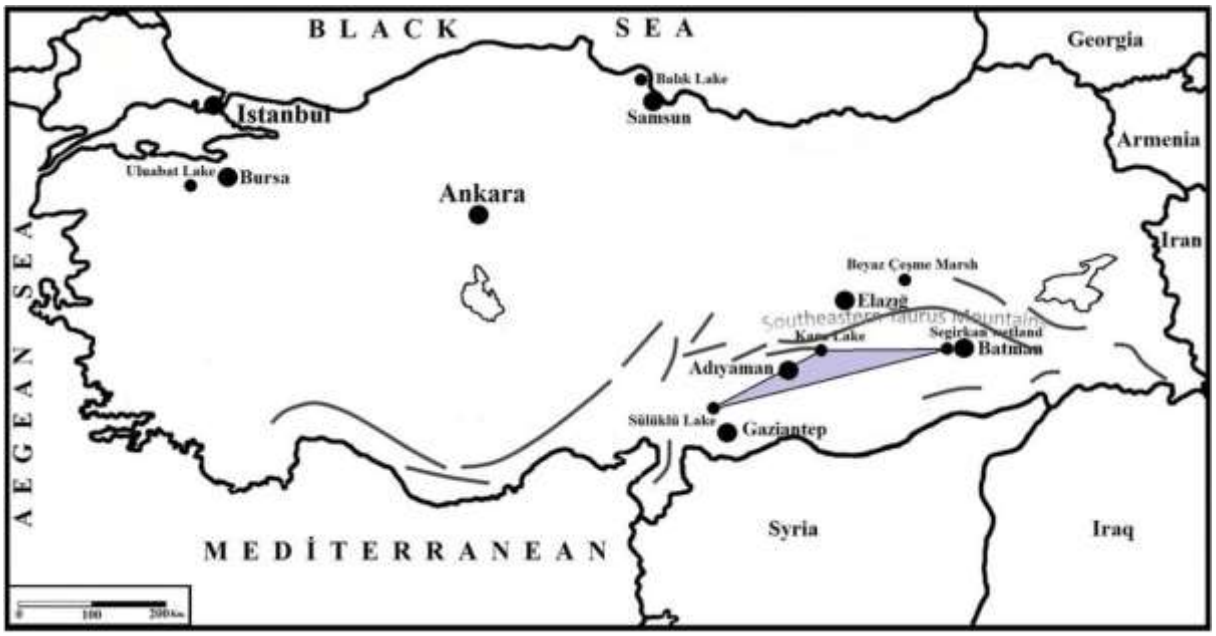


Fig 1. Locations of field sites (small circles) in Turkey from where Hirudo specimens were collected (Saglam et al., 2016).

2. Threats to the species

The threats to *Hirudo medicinalis* and other *Hirudo* species are listed below (Saglam, 2016):

1. Drying of wetlands that live of medical leeches by people in order to combat mosquitoes and other parasites and to convert them to agricultural land.
2. The pesticides coming to the wetlands with surface runoff from agricultural land causes the death of medical leeches.
3. The negative effect of global climate change on medical leeches
4. The use of medicinal leeches for treatment in clinics and hospitals in Turkey have been moved to the legal zone according to traditional and complementary medical practice regulations issued by the Ministry of Health in 2014 (Anonymous, 2014).

This has greatly increased the use of medical leech in the country. Thus, medical leech export has been started to decline due to excessive use. However, this use must be carefully controlled in order to protect of medical leech species, and the use status of leeches in the country should be necessarily recorded. The wildlife medicinal leeches are used by the people although it is stated that leeches to be used according to the regulation of the Ministry of Health should be taken from leech farms.

3. Trade statistics, including any evidence of illegal trade The Economic Importance of Medicinal leeches:

Extensive international trade in *Hirudo medicinalis* was identified as a major threat to natural populations, so that it has been listed in Appendix II of the 1987 of CITES. Countries signing this agreement decided to place a quota on the collection and exportation of *Hirudo medicinalis*. For example, the export quota of medicinal leeches was 10 tons in Turkey in 1996, was reduced to 7 tons in 1997 and has since fluctuated between 2 and 8 tons. The export quota of *H. medicinalis* was given for the period between 2005 and 2010 as 6000 kg. The leech export quota was exported 100% in 2005 year. The amount of leech export and the rate decreased every year.

There are no evidences and statistically data on illegal trade of leeches.

Table 1. The export quotas and exported amount of *Hirudo medicinalis*

Years	Quota (Kg)	Total quantity of reported leech by exporter country		Remarks
		Kg	(%)	
2000	8000	7325.0	91.56	Live or frozen, wild
2001	6000	5071.0	84,52	Live or frozen, wild
2002	6000	3690.0	61,50	Live or frozen, wild
2003	8000	6489.5	81,11	Live or frozen, wild
2004	5000	4931.0	98,62	Live or frozen, wild
2005	6000	6000.0	100	Live or frozen, wild
2006	6000	4841.5	80,69	Live or frozen, wild
2007	6000	4373.0	72,88	Live or frozen, wild
2008	6000	3053.5	50,89	Live or frozen, wild
2009	6000	1350.0	22,50	Live or frozen, wild
2010	6000	1601.0	26,68	Live or frozen, wild
2011	2000	222.0	11,10	Live or frozen, wild

4.

5. Species management and population monitoring

Medicinal leech populations are monitored and controlled by the relevant Provincial Directorates of the Ministry of Food, Agriculture and Livestock within the framework of legal regulations (Anonymous, 1996; Anonymous, 2001; Anonymous, 2011; Anonymous, 2012; Anonymous, 2016)

6. Regulation of wild harvesting and trade, including legal protection

The Ministry of Food, Agriculture and Livestock, The General Directorate of Fisheries and Aquaculture carries out hunting ban for four months during the reproductive period in order to protect of the leech populations. It is also aimed at the management and protection of leeches with export quota issued every year.

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Additional Report on the Medicinal Leeches

Turkey is located to far south of the natural geographic range of *H. medicinalis* (as given in Utevsky et al., 2010; Trontelj & Utevsky, 2012) and that since 2011 Turkey has only published CITES quotas and reported leech exports as *H. verbana*.

Turkey is geographically located at the intersection of Europe, Asia, Middle East and Africa. This geographical location enriches Turkey's biodiversity. At present, there are two species of medicinal leech, namely *H. verbana* and *H. sulukii* in Turkey. However, as molecular investigations progress and more intense studies indicate that *H. medicinalis* and new medicinal leech species can be seen in Turkey.

There are one molecular study on medicinal leeches in Turkey identified Hirudo species (Saglam et alü 2016). In this study, *H. verbana* and a new medicinal leech species, *Hirudo sulukii* of Hirudo genus are defined. Saglam (2011, in Turkish) lists both *H. verbana* and *H. medicinalis* as occurring in Turkish wetlands based on the morphological identification in Table 1 (provided in the previous report).

There is legal protection of leeches in the wild in Turkey. According to the Communiqué No 4/1 (Communiqué No: 2016/35) of the Ministry of Food, Agriculture and Livestock, the collection of medical leeches from wild wetlands between March 1 and June 30 (in reproductive period) is prohibited in Turkey. Additionally, all leech collectors must have licenses for collecting leeches and they have to issue origin certificate for their products and submit to provisional directorate of Ministry of Food Agriculture and Livestock. Origin certificates are registered into Fisheries Information System. Therefore, it is considered that the export quota of 2000 kg can be maintained. Although there is not continuing monitoring program for *H.verbana*, there are some observations at the sites where collection taking place and some scientific studies has been ongoing.