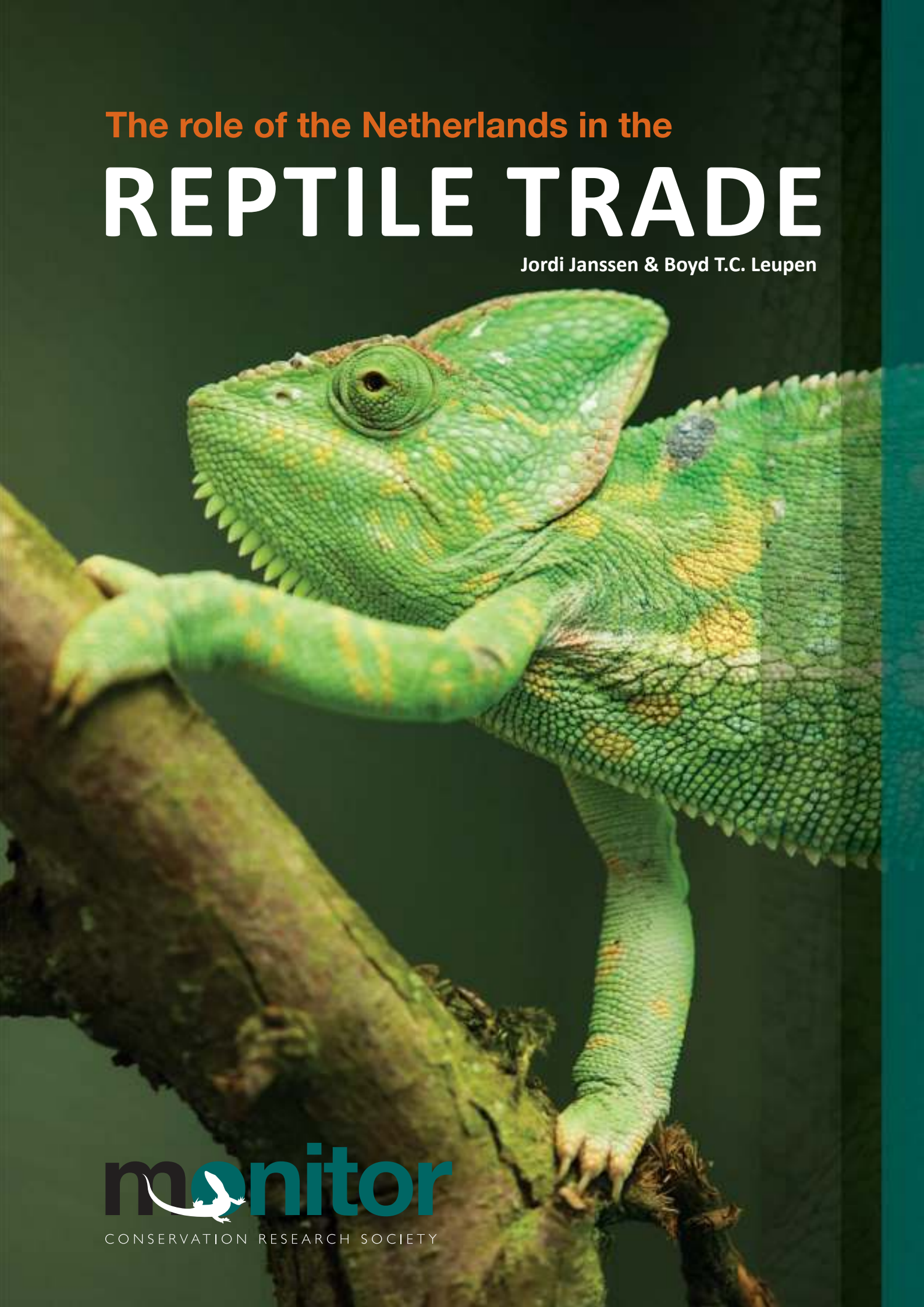
The role of the Netherlands in the

REPTILE TRADE

Jordi Janssen & Boyd T.C. Leupen



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CONSERVATION RESEARCH SOCIETY

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The Netherlands 2019

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ACRONYMS AND ABBREVIATIONS

CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
EC	European Commission
EU	European Union
GWWD	Health and Welfare of Animals Act (Gezondheids- en welzijnswet voor dieren)
IUCN	International Union for Conservation of Nature
LEMIS	Law Enforcement Management Information System
LNV	Ministry of Agriculture, Nature and Food Quality (Ministerie van Landbouw, Natuur en Voedselkwaliteit)
n	number
NVWA	Netherlands Food and Consumer Product Safety Authority (Nederlandse Voedsel- en Warenautoriteit)
RVO	Netherlands Enterprise Agency (Rijksdienst voor Ondernemend Nederland)
UNEP	United Nations Environment Programme
USFWS	United States Fish and Wildlife Service
WCMC	World Conservation Monitoring Centre
Wob	Public Access to Government Information Act (Wet openbaarheid van bestuur)

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EU Wildlife Trade Regulations currently do not prohibit the trade in species that enjoy a protected status in their countries of origin.

Consumers need to be more aware of such issues, but it is unrealistic to expect a change in mindset and behaviour when they are not provided with accurate and relevant information.

EXECUTIVE SUMMARY

The Netherlands has been considered an important player in the international reptile trade and is home to several well-established large reptile fairs, including the quarterly Terraria Expo and the annual “Snake Day” in Houten, which attract visitors from around the world. Within the European Union (EU), the Netherlands is known to function as both a destination and a transit country in the international wildlife trade.

The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) data nevertheless show that the Netherlands does not rank among the top three traders when it comes to the export and import of CITES-listed reptiles in a European context. The country ranks 6th in terms of export and 8th in terms of import. Our data does show that the Netherlands is a more important player in terms of non-CITES species (6th importer in the EU) but considering the country’s lower ranking in terms of monetary value of these imports (8th), it seems that this mostly comprises cheaper, and likely more commonly kept, species.

Some of the species found to have been traded from and within the Netherlands have no legal import records, are prohibited in the EU, or are subject to export-bans in their countries of origin. According to data of the Netherlands Enterprise Agency, a total of 3074 live reptiles were seized between 2004 and 2017, 1443 of which were confiscated because of a violation of the Netherland’s Flora and Fauna or Nature Protection Act. The Netherlands’ role in the international reptile trade is inseparably linked to that of the EU. Due to the EU Single Market, which allows goods to be moved freely among EU Member States, trade analysis on a national level is complicated. Moreover, the EU Single Market facilitates the internal EU trade in illegal and illegally acquired species and poses significant challenges to law enforcement. EU Wildlife Trade Regulations currently do not prohibit the trade in species that enjoy a protected status in their countries of origin.

The issues discussed in this report are well-known, but very difficult to tackle. Many require both legislative change and conscious efforts from consumers to ensure their animals are legally and responsibly acquired. Personal observations learn that many reptile keepers assume that animals for sale in the Netherlands or other EU countries are of legal origin. Many are unaware of the fact that some species may be protected in their range states or may have been brought into the EU illegally using false-paperwork. Consumers need to be more aware of such issues, but it is unrealistic to expect a change in mindset and behaviour when they are not provided with accurate and relevant information. Providing consumers with the necessary information would increase general awareness and enable reptile enthusiasts to check the legality and the conservation impact of their potential purchases.

Rare and/or newly-described species are especially in demand as their exclusivity makes them highly desirable for private collectors.

Illegal trade is one of the main drivers behind over-harvesting and has already resulted in serious population declines in several reptile species

Reptiles are among the most heavily exploited animals in the world (Nijman 2010). Turtles, tortoises, snakes and lizards are sourced for food, clothing, medicinal purposes and for the global trade in pets. Not all this trade is legal or sustainable (Nijman and Shepherd 2010, Nijman et al. 2012a, Nijman et al. 2012b, Auliya et al. 2016a, Janssen and Blanken 2016). Reptiles fetch high prices on the black market and are relatively easy to conceal and transport, making them ideal targets for wildlife traffickers (Altherr 2014). Illegal trade is one of the main drivers behind over-harvesting and has already resulted in serious population declines in several reptile species (Shepherd and Ibarrondo 2005, Nijman and Shepherd 2009). Rare and/or newly-described species are especially in demand as their exclusivity makes them highly desirable for private collectors. Yet, the high value attached to such rare species fuels over-exploitation, making the species even rarer and increasing their desirability, forcing species into an extinction vortex (Courchamp et al. 2006). However, as they are often endemic, occur in limited areas and have small populations, they are particularly vulnerable to over-exploitation (Hall et al. 2008, Lyons and Natusch 2013, Altherr 2014, Meiri et al. 2018). Some species such as the Roti Island Snake-necked Turtle *Chelodina mccordi* and Borneo's Earless Monitor Lizard *Lanthanotus borneensis* have already suffered the consequences of illegal harvesting practices (Shepherd and Ibarrondo 2005, Nijman and Stoner 2014) and more are likely to follow.

The European Union (EU) constitutes one of the largest and most diverse markets for wildlife in the world (Auliya 2003, Theile et al. 2004, Engler et al. 2007, O'Criodain 2007, Janssen and Blanken 2016). With a booming pet trade, it is also one of the largest markets for live reptiles (Auliya 2003, Auliya et al. 2016b, Crook and Musing 2016). Large annual

reptile fairs are held in several EU member states (in Barcelona, Spain; Hamm, Germany; Houten, the Netherlands; Longorane, Italy; and Prague, Czech Republic) and function as meeting points and trade hubs for sellers and buyers from around the globe (Altherr 2016). In addition to being the world's second largest importer of live reptiles (Robinson et al. 2015), the EU is considered the largest market for illegally-caught reptiles (Nijman and Shepherd 2009, Nelsen 2015, Altherr 2016, Auliya et al. 2016a). Private collectors in the EU often target species protected in their range states despite or because of their often-weak conservation status (van Krevelt 2007, Altherr 2014, 2016, Janssen and Blanken 2016). Many of these species are either nationally protected in their country of origin with their export being prohibited or may only be traded if bred in captivity. This results in such species being relatively rare in trade and in high demand by collectors (Altherr 2014, 2016). These species are either imported or smuggled into the EU, after which they are bred and sold for high profits (Vinke and Vinke 2015). Several EU smugglers and traders are known to be key players in the international reptile trade (Interpol 1996, Altherr 2016). However, the actual size of reptile markets is often unknown, as trade in reptiles is often only documented when it includes species listed in the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) (Janssen and Shepherd 2018, Jensen et al. 2018).

In addition to being the world's second largest importer of live reptiles, the EU is considered the largest market for illegally-caught reptiles

The EU is increasingly aware of its role in the international wildlife trade, including the reptile trade (Altherr, 2014) and has suspended the import of – and trade in – several endangered foreign (reptile) species (Janssen and Blanken 2016, UNEP 2016). In 2016, the European Commission adopted the EU Action Plan Against Wildlife Trafficking, which details the EU approach for joined efforts to combat wildlife crime within the EU and strengthening the EU's role in combatting such crime.

Within the EU, the Netherlands is known to function as both a destination and a transit country in the international wildlife trade (Engler and Parry-Jones 2007, van Krevelt 2007, Janssen and Blanken 2016). The county is home to Europe's largest port (Rotterdam), making it a logistically attractive location for international wildlife traders (Van Uhm 2009, Netherlands 2014, Pieters 2016). Besides acting as a gateway to other European countries such as Germany and Czech Republic, the Netherlands has a flourishing domestic reptile market as well. The country's annual 'Slangendag', meaning 'Snake day', is among the most important reptile events in Europe and is often quoted as the largest snake only reptile fair in the world (Janssen and Blanken, 2016). Such fairs are visited by reptile keepers and traders from all over the world, often export large quantities back to other reptile markets like the United States or Japan. However, the true size of the reptile market in the Netherlands is poorly documented. This report aims to quantify the role of the NL within the global reptile trade. It aims to establish a preliminary assessment of the scale of the trade that occurs in and through the country and address several legislative and enforcement challenges currently facing the Netherlands and the EU as a whole.

Weak national enforcement can seriously hinder EU-wide efforts to regulate the trade in wildlife...

2.1 The European Union

The EU implements the EU Wildlife Trade Regulations through Council Regulation (EC) No.338/97 implementing the provisions of the (European Comission 2015, European Comission and Traffic 2015). All EU Member states have individually ratified CITES. In addition, the EU, as an entity, ratified CITES in 2015. EU Wildlife Trade Regulations, list species on EU Annex A, B, C and D, and are stricter than required under the Convention; EU Annex A includes species listed in CITES Appendix I, some species listed in CITES Appendix II and III and some non-CITES species. Annex B includes all other CITES Appendix II species, some CITES Appendix III species and some non-CITES species. Annex C includes all other CITES Appendix III species. EU Annex D includes some Appendix III species for which the EU holds a reservation and some non-CITES species for which the EU has decided additional monitoring is required.

The implementation of the EU Wildlife Trade Regulations and external border control is the responsibility of the EU's individual Member States. Weak national enforcement can therefore seriously hinder EU-wide efforts to regulate the trade in wildlife (Engler et al. 2007, Theile et al. 2004). The uneven and often insufficient implementation and enforcement of the EU Wildlife Trade Regulations across individual Member States can be considered a major impediment to the tackling of illegal wildlife trade. In 2016, the European Commission adopted the EU Action Plan Against Wildlife Trafficking, in order to strengthen the EU's efforts to combat illegal wildlife trade. The action plan focuses on three areas:

1. **increased enforcement through closer EU-collaboration,**
2. **more effective prevention through demand and supply reduction and**
3. **strengthening of co-operation with range States.**

2.2 The Netherlands

The Netherlands ratified CITES in April 1984, which entered into force in July 1984. The Ministry of Agriculture, Nature and Food Quality (LNV) functions as the CITES Management Authority of the Netherlands and is responsible for the effective implementation of CITES. Required permits under CITES and EU legislation are issued by the Netherlands Enterprise Agency (RVO) (Van Uhm 2009, RVO 2016, van Uhm 2016).

EC.No.338/97

...the Netherlands is obligated to report import numbers, including for species for which no import permit is required

3.1 Online Survey

On international platforms, advertisements placed by Dutch nationals were collected, regardless of the language that was used in the post.

A 21-day survey of Dutch online trading platforms was conducted between 20 August and 10 September 2018. This research period was chosen because it roughly coincided with several large reptile fairs, including Terraristika Hamm in Germany (8 September) and Houten Reptile Expo in the Netherlands (23 September). In the weeks leading up to such events online reptile trade activity typically increases. This allowed the researchers to make a more accurate assessment of the number of different species that can be found on the Dutch market. Advertisements were collected on one Dutch online trading platform (Marktplaats.nl), one international reptile website (Terraristik.com) and one social media platform (Facebook.com). Across these platforms, all advertisements posted in the Dutch language were considered to targeting the Dutch market, regardless of the nationality of the seller, and were therefore included in this study's dataset. On international platforms, advertisements placed by Dutch nationals were collected, regardless of the language that was used in the post. Additionally, advertisements on Facebook, placed by foreign nationals but stating that the animals on sale could be delivered in the Netherlands, were included. Surveys of the abovementioned platforms were conducted twice per week. Screenshots of all relevant advertisements were taken. For each relevant advertisement, the following data was collected:

1. **species offered for sale,**
2. **advertised quantities,**
3. **advertised prices (if available), and**
4. **any information regarding the origin of the animal(s).**

Duplicate advertisements were discarded. In cases where no quantity was given, a minimum quantity of one animal was assumed. In cases where multiple animals were said to be available, without any specific numbers being mentioned, a minimum quantity of two animals were assumed. In addition to the online surveys, the product lists of two online reptile shops were recorded. These two shops were chosen as they updated their stocklist within the research period, providing a recent and up to date overview of their stocklist.

3.2 Trade Data Analysis

3.2.1 CITES

Dutch import and export records for live reptiles (trade terms 'Live' [LIV]) were extracted from the UNEP-WCMC CITES Trade Database for the period between 1 January 2000 and 31 December 2017. The UNEP-WCMC CITES Trade Database holds all international trade records of CITES-listed species. Only entries with the purpose codes relevant to commercial trade (Commercial ['T'] and Personal ['P']) were included in our analysis. The use of the UNEP-WCMC CITES Trade Database for analytical purposes has often been a subject of debate, as reported trade levels may differ significantly per country. While trade should be reported based on actual imported or exported quantities (CITES Notification 2017/006), many countries report trade based on permits issued (Robinson and Sinovas 2018). This hinders an accurate depiction of actual trade levels in two ways:

1. **not all animals for which an export permit has been granted are subsequently exported, leading to an overestimation of export levels;**
2. **not all species (including most CITES Appendix II species) require import permits, leading to an underestimation of import levels.**

In this study, we have chosen to base our analysis on trade levels as reported by the Netherlands. As the Netherlands is obligated to report import numbers, including for species for which no import permit is required, importer-reported quantities are likely more accurate than using exporter-reported quantities. For the export we looked at exporter-reported quantities as not all CITES parties are obligated to issue import permits, therefore the exporter-reported data could represent an overestimation rather than an underestimation of actual trade levels.

3.2.2 Non-CITES

For European countries, the UNEP-WCMC CITES Trade Database also includes entries concerning non-CITES species that are listed in one of the EU Wildlife Trade Regulations' Annexes (A, B, C or D). Across the Annexes, the Regulations adopt stricter import requirements than CITES, with import permits needed for species listed in Annex A and B, and import notifications required for species listed in Annex C and D (Commission Regulation (EC) 865/96). (Re-)Export permits and certificate are required for all listed species except those listed in Annex D.
Data was also collected from EUROSTAT (available at https://ec.europa.eu/eurostat/data/database) for commodity group number 0106 20 00 (live reptiles). From this platform, we collected the total number of live reptiles imported for each European country, and their reported value (in Euros [EUR]).

3.3 LEMIS Data Analysis

Under the United States (US) Lacey Act, import of any wildlife in violation of foreign legislation (§3372, a2A) is prohibited. To investigate the potential role of the Netherlands in exporting protected species to the US, import data for the US was obtained from the US Fish and Wildlife Service's (USFWS) Law Enforcement Management Information System (LEMIS), for the period between 1 January 2000 and 31 December 2014. LEMIS specifies the content of each imported shipment with either a species code, a genus code or a more general code (e. g. NONR= Non-CITES reptile), with the latter being more common in larger shipments (Schlaepfer et al. 2005). As LEMIS contains trade data concerning non-CITES species, including Annex D species (for which no (re-)export records are kept in the EU), its inclusion in our analysis enables a more detailed overview of live reptile exports from the Netherlands.

...its inclusion in our analysis enables a more detailed overview of live reptile exports from the Netherlands.

Under the United States (US) Lacey Act, import of any wildlife in violation of foreign legislation (§3372, a2A) is prohibited.

3.4 Seizure Data

To obtain additional information regarding

1. reptile seizures and

2. seized animals coming from the Netherlands

Freedom of Information Act and Wet Openbaarheid van Bestuur (Wob)-requests were sent to the USFWS and both the RVO (request: Wob/2018/157) and the Netherlands Food and Consumer Product Safety Authority (NVWA) respectively. USFWS responded that no live reptiles were seized coming from the Netherlands. Live reptile seizure data for the period between 2004 and 2017 was received from the RVO on 2 January 2019. The dataset contained all seizures of live reptiles within the Netherlands, with the exception of cases that are part of ongoing criminal investigation (Article 2, paragraph 2C of Wob). It did not include information pertaining to the origin of the seized shipments. As part of the document was redacted, the total number of live reptiles seized is likely to be higher than reported here. The data was received in two different formats for two different time periods (2004-2015 and 2016-2017), owing to a system change in 2016. Although each format had slightly different output fields, data from both formats was merged as much as possible. Correct scientific names were added in cases where only common names were given. Terminology with regards to the final destination of the animals was homogenised between both documents, e. g. 'schenken' was considered to correspond to 'herplaatst'.

Circular graphs were made with Circos Table Viewer v0.63-9 http://mkweb.bcgsc.ca/tableviewer/. All used country codes are listed in Annex VI.

According to the UNEP-WCMC CITES Trade Database, the Netherlands reported the import of 188 015 live reptiles...

4.1 The Netherlands as an importing country

4.1.1 CITES Trade Database

According to the UNEP-WCMC CITES Trade Database, the Netherlands reported the import of 188 015 live reptiles under purpose codes 'T' and 'P', totalling 154 taxa, between 1 January 2000 and 31 December 2017. (see Annex I). Most of the specimens (n=187 974; 99.9%) were exported under purpose code 'T', with only 41 specimens (7 taxa) imported under code 'P'.

Iguanidae was the most frequently imported reptile family

Almost all live reptiles (99.69%, n=187 431) imported into the Netherlands were listed in CITES Appendix II, while none were listed in CITES Appendix I (Table 1). Iguanidae was the most frequently imported reptile family (24.09%, n=44 819), closely followed by Testunidae (22.23%, n=41 712), Chamaeleonidae (14.17%, n=26 945) and Pythonidae (12.98%, n=24 152) (Table 2). All imported iguanas were Green Iguanas *Iguana iguana*, making it the most frequently imported species of this study, followed by Leopard Tortoises *Stigmochelys pardalis* (11.97%, n=22 478) and Ball Pythons *Python regius* (11.06%, n=20 508) (Table 2).

Table 1. NUMBER OF CITES-LISTED AND NON-CITES (EU ANNEX-LISTED) LIVE REPTILES IMPORTED INTO THE NETHERLANDS BETWEEN 1 JANUARY 2000 AND 31 DECEMBER 2017.

CITES status	Number	%
Appendix I	0	0
Appendix II	187 431	99.69
Appendix III	110	0.06
Non-CITES	474	0.25
Total	**188 015**	

Table 2. NUMBER OF CITES-LISTED LIVE REPTILES IMPORTED INTO THE NETHERLANDS BETWEEN 1 JANUARY 2000 AND 31 DECEMBER 2017 SEPARATED PER FAMILY. ON THE RIGHT ARE THE 10-REPTILE SPECIES WITH THE HIGHEST EXPORT NUMBERS.

Family	Number	%	*Species*	*Number*	*%*
Agamidae	10153	5%	*Iguana iguana*	*44819*	*24%*
Alligatoridae	8156	4%	*Stigmochelys pardalis*	*22478*	*12%*
Boidae	7734	4%	*Python regius*	*20508*	*11%*
Chamaeleonidae	26945	14%	*Testudo horsfieldii*	*9992*	*5%*
Colubridae	95	0%	*Uromastyx ocellata*	*7745*	*4%*
Cordylidae	2827	2%	*Caiman crocodilus crocodilus*	*5251*	*3%*
Elapidae	42	0%	*Chelonoidis carbonarius*	*4716*	*3%*
Emydidae	2	0%	*Boa constrictor*	*3926*	*2%*
Gekkonidae	11513	6%	*Varanus exanthematicus*	*3528*	*2%*
Geoemydidae	300	0%	*Phelsuma laticauda*	*3052*	*2%*
Helodermatidae	44	0%			
Iguanidae	44819	24%			
Pelomedusidae	110	0%			
Podocnemididae	100	0%			
Pythonidae	24152	13%			
Scincidae	89	0%			
Teiidae	2227	1%			
Testudinidae	41712	22%			
Trionychidae	6	0%			
Varanidae	6980	4%			
Xenopeltidae	9	0%			
Total	**188 015**				

24%

4.1.1.1 Origin

The majority of imported live reptiles was declared as wild-caught (41.89%, n=77 788). The most commonly reported wild-caught species were the Occelated Mastigure *Uromastyx occelata* (4.14%, n=7745), the Spectacled Caiman *Caiman crocodilus* (2.86%, n=5251) and the Green Iguana (2.03%, n=3732). A total of 33.55% (n=63 080) of imported reptiles were reportedly bred in captivity, with the Green Iguana accounting for 66% (n=41 086) of all specimens declared as captive-bred. 'Captive-bred' refers to animals bred in accordance with CITES Resolution Conf. 10.16 Rev., meaning that they are at least second-generation (F2) offspring born in a controlled environment. Animals 'born in captivity' (representing first generation offspring (F1) or animals not bred in accordance with CITES Resolution Conf. 10.16 Rev.) comprised 9.24% (n=17 376) of. About 15.30% (n=28 764) of all imported reptiles were declared as 'ranched', meaning they were taken from the wild as eggs or juveniles and subsequently reared in a controlled environment.

4.1.1.2 Trade routes

During the research period, live reptiles were imported into the Netherlands from 47 different countries. However, only a small group of countries were found to be behind the bulk of global reptile exports to the Netherlands. Tanzania was found to have been the main exporter to the Netherlands, accounting for 16.46% of all imported live reptiles (n=30 949), followed by the United States (12.53%, n=23 556), El Salvador (12.12%, n=22 794) and Togo (7.68%, n=14 439). More than half of the Netherlands' reptile imports originated from the African continent (52.37%, n=98 463) (Figure 1). Together, Tanzania, Togo, Ghana and Madagascar accounted for more than 70% (n=69 212) of all reptiles exported from Africa to the Netherlands. North America exported the second largest total number of live reptiles to the Netherlands (12.92%, n=23 729). Of the Asian countries, Uzbekistan was found to have exported the most live CITES-listed reptiles to the Netherlands (3.99%, n=7500, all comprising Horsfield's Tortoises *Testudo horsfieldii*). For South America, Guyana (5.62%, n= 10 570) and Suriname (4.92%, n=9254) were found to be the most important exporting countries.

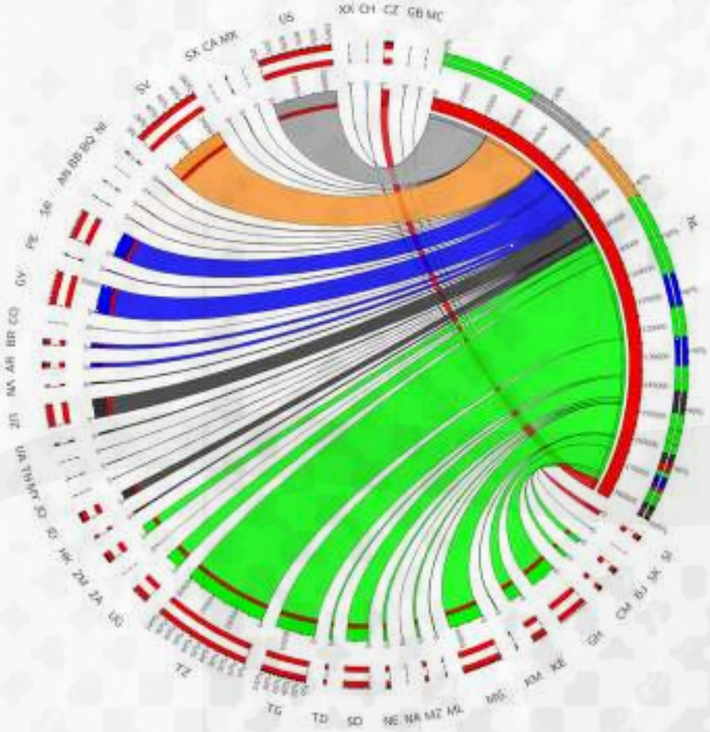


Figure 1. IMPORT OF LIVE CITES-LISTED REPTILES (SOURCE CODES 'T' AND 'P') TO THE NETHERLANDS. EACH COLOUR REPRESENTS A CONTINENT, AFRICA (GREEN), EUROPE (RED), ASIA (DARK GREY), SOUTH AMERICA (BLUE), CENTRAL AMERICA (ORANGE) AND NORTH AMERICA (LIGHT GREY). SEE ANNEX VI FOR COUNTRY CODES.

4.2 The Netherlands as an exporting country

4.2.1 CITES Trade Database

Between 1 January 2000 and 31 December 2017, the Netherlands reported the export of 9917 live reptiles under purpose codes 'T' and 'P', totalling 97 taxa (see Annex II). Most of the specimens (98.9%, n=9808) were exported under purpose code 'T', with only 109 specimens (16 taxa) exported under purpose code 'P'. According to the UNEP-WCMC CITES Trade Database, nearly all exported live reptiles (99.6%, 9881 specimens) were listed in Appendix II, with only 26 specimens listed in CITES Appendix I (Table 3).

Table 3. NUMBER OF CITES-LISTED AND NON-CITES LIVE REPTILES EXPORTED FROM THE NETHERLANDS BETWEEN 1 JANUARY 2000 AND 31 DECEMBER 2017.

CITES status	Number	%
Appendix I	26	0.26
Appendix II	9881	99.6
Appendix III	2	0.02
Non-CITES	8	0.08
Total	**9917**	

...live reptiles were imported into the Netherlands from 47 different countries.

Table 4. **NUMBER OF CITES-LISTED LIVE REPTILES EXPORTED BY THE NETHERLANDS BETWEEN 1 JANUARY 2000 AND 31 DECEMBER 2017 SEPARATED PER FAMILY. ON THE RIGHT ARE THE 10-REPTILE SPECIES WITH THE HIGHEST EXPORT NUMBERS.**

Family	Number	%	*Species*	*Number*	*%*
Agamidae	267	3%	*Python regius*	*2729*	*28%*
Alligatoridae	79	1%	*Chamaeleo calyptratus*	*2405*	*24%*
Boidae	266	3%	*Testudo horsfieldii*	*1221*	*12%*
Chamaeleonidae	2856	29%	*Phelsuma ornata*	*370*	*4%*
Cheloniidae	1	0%	*Phelsuma cepediana*	*319*	*3%*
Colubridae	41	0%	*Phelsuma guimbeaui*	*296*	*3%*
Cordylidae	9	0%	*Boa constrictor*	*193*	*2%*
Crocodylidae		0%	*Uromastyx tomasi*	*160*	*2%*
Elapidae	10	0%	*Python bivittatus*	*159*	*2%*
Emydidae	194	2%	*Terrapene carolina*	*147*	*1%*
Gekkonidae	1065	11%			
Geoemydidae	22	0%			
Iguanidae	3	0%			
Pelomedusidae	2	0%			
Pythonidae	3153	32%			
Teiidae	81	1%			
Testudinidae	1541	16%			
Varanidae	279	3%			
Viperidae	7	0%			
Xenosauridae	41	0%			
Total	**9917**	**100%**			

Python regius
28%

Chamaeleo calyptratus
24%

Testudo horsefieldii
12%

Pythonidae was the most frequently exported reptile family

Pythonidae was the most frequently exported reptile family (31.79%, n=3153), followed by Chamaeleonidae (28.8%, n=2856), Testudinidae (15.54%, n=1541) and Gekkonidae (10.74%, n=1065 specimens) (Table 4). Together, these four families accounted for 86.87% of live reptiles exported from the Netherlands. The most frequently exported species was the Ball Python (27.52%, n=2729), followed by Veiled Chameleon *Chamaeleo calyptratus* (24.25%, n=2405 specimens) and Horsfield's Tortoise (12.31%, n=1221) (Table 4). Notably, Eight Red-eared Sliders *Trachemys scripta elegans* were exported from the Netherlands during the study period, during which this species was listed in EU Annex B (Council Reg. (EC) No 338/97 since 9 December 1996).

4.2.1.1 Origin

The majority of exported live reptiles in the CITES Trade Database (73.84%, n=7323) was claimed to have been bred in captivity. Only 13.47% (n=1336) was marked as wild-caught. This mainly comprised animals exported in 2012 (n=950) and 2016 (n=355). Horsfield's Tortoise accounted for 91.24% (n=1219) of all wild-caught specimens. Of the exported Horsfield's Tortoises, all but three specimens were reportedly wild-caught.

...33.55% of imported reptiles were reportedly bred in captivity

Figure 2. **EXPORT OF LIVE REPTILES FROM THE NETHERLANDS OVER THE PERIOD 2000-2017 WITH THEIR RESPECTIVE SOURCE CODES. SOURCE CODES: C= BRED CAPTIVITY, F=BORN IN CAPTIVITY, I = CONFISCATED OR SEIZED, O= PRE-CONVENTION, R= RANCHED ANIMAL, U= UNKNOWN, W= WILD.**

Asian countries and territories imported more live reptiles than the United States, indicating that Asia is an important destination for reptiles from the Netherlands.

4.2.1.2 Trade routes

According to the CITES Trade Database, the Netherlands exported live reptiles to 25 different countries during the research period. However, the bulk of these exports were destined for a relatively small group of countries (Figure 3). The US was the main importer of live reptiles from the Netherlands (44.69%, n=4432), followed by Asian destinations such as Hong Kong SAR (29.18%, n=2894), South Korea (7.94%, n=787), Japan (6.77%, n=671) and Taiwan (4.19%, n=416). Together, these Asian countries and territories imported more live reptiles than the United States, indicating that Asia is an important destination for reptiles from the Netherlands.

A total of 69.24% (n=6869) of all live reptiles exported from the Netherlands had a different country marked as the origin (Figure 3). Most specimens that we re-exported by the Netherlands originated from Czech Republic (27.83%, n=2760), Uzbekistan (12,29%, n=1219), Togo (10,12%, n=1004) and Germany (7.12%, n=706). The Netherlands role as a transit country for live reptiles is further supported by the fact that frequent importing countries are not among the most frequently named countries or origin. Most live reptiles appear to be traded from Europe, Africa and Uzbekistan to the United States and Asia via the Netherlands.

Figure 3. EXPORT OF LIVE CITES-LISTED REPTILES FROM THE NETHERLANDS. TRADE BETWEEN NETHERLANDS AND IMPORTING COUNTRIES IN BLACK, COUNTRIES LISTED AS THE ORIGIN OF LIVE REPTILES EXPORTED FROM THE NETHERLANDS ARE DISPLAYED IN RED.

13 249

live reptiles in the US between 1 January 2000 and 31 December 2014

4097

recorded specimens, the Central Bearded Dragon *Pogona vitticeps* was the most abundant non-CITES species that was exported from the Netherlands to the US

59.20%

Non-CITES reptiles exported from the Netherlands to the US

4.2.2 LEMIS

According to LEMIS, the Netherlands exported 13 249 live reptiles to the US between 1 January 2000 and 31 December 2014 (see Annex III). Most of these (97.25%, n=12 888) were identified to the genus or species level. A total of 361 specimens were not identified and were marked with the general code for Non-CITES Reptiles (NONR). The Netherlands exported 100 different taxa to the USA, 36 of which were listed in one of the CITES Appendices. The majority of the CITES-listed species were listed in Appendix II (91.66%, n=33), while the rest was listed in Appendix I (8.33%, n=3). Non-CITES reptiles accounted for 64 taxa, totalling 7843 specimens, which constituted 59.20% of all reptiles exported from the Netherlands to the US. Four of the non-CITES species are currently classified as Endangered on the IUCN Red List of Threatened Species (hereafter referred to as the IUCN Red List).

With 4097 recorded specimens, the Central Bearded Dragon *Pogona vitticeps* was the most abundant non-CITES species that was exported from the Netherlands to the US. This was followed by the Corn Snake *Pantherophis guttatus* (n=1123) and Western Hognose Snake *Heterodon nasicus* (n=454), both of which are native to the US. Remarkably, the majority of imported Western Hognose Snakes (85.02%, n=386) were marked as wild-caught. Wild-caught animals of another US species; the native Black-tailed Rattlesnake *Crotalus molossus*, were also reportedly exported from the Netherlands. The export of US native species to the US is of interest as the import of native snakes from non-range states raises questions. However, seeing how both species are commonly kept in captivity and bred in a wide variety of colour morphs, it is possible that the imported animals were bred in captivity and belonged to a certain colour morph. While this could have been an administrative error, and both species also occur in other North American countries (e. g. Mexico), the import of these species from the Netherlands raises questions concerning the true origin of these animals.

Four of the non-CITES species are currently classified as Endangered on the IUCN Red List of Threatened Species

4.3 Online Survey

Python regius
22.65%

Pantherophis guttatus
7.22%

Correlophus ciliatus
3.96%

During the 22-day period between 20 August and 10 September 2018, 1260 advertisements, accounting for a total of 4663 reptiles of 346 different taxa, were counted across the monitored online platforms (see Annex IV). Of these 4663 animals, 31 could not be identified past the genus level, and four animals were hybrids. Most advertisements were found on Marktplaats.nl (n=785), followed by Facebook (n=364) and Terraristik.com (n=111). In terms of trade volumes, Facebook takes the lead, accounting for 42% of all reptiles found advertised online (n=1979) and only slightly surpassing Marktplaats.nl, with 1901 animals (41%). Terraristik accounted for 599 advertised animals (13%) while the two reptile web shops contained advertisements for a total of 184 (3.95%) animals. Marktplaats.nl advertisements contained the largest diversity of taxa (n=154), followed by Facebook with 148 taxa, Terraristik.com with 127 taxa and the reptile web shops with a total of 33 taxa. Across the online platforms, private sellers were responsible for the advertisement of 270 taxa, involving 3948 reptiles, while reptile shops advertised 102 taxa, accounting for only 713 animals (15% of total).

The Ball Python was found to be the most commonly advertised reptile with 1069 specimens (22.65%), followed by the Corn Snake (7.22%, n=341) and the Crested Gecko *Correlophus cilliatus* (3.96%, n=187). In general, quantities per species were low; for 266 out of 346 taxa encountered total volumes remained under 10. For 75 of these taxa, only one animal was counted.

Prices were collected for 2198 animals and ranged from 5 EUR (for juvenile Corn Snakes) to 2000 EUR (for juvenile Beaded Lizards *Heloderma h. horridium*). The total advertised value of the online trade amounted to 301 377 EUR. The total advertised value per platform followed similar percentages as the number of animals observed per platform. Facebook accounted for 45% of the total quoted value (138 379 EUR), followed by Marktplaats.nl (41%, 124 213 EUR) and Terraristik.com (13%, 38 665 EUR).

The Ball Python was found to be the most commonly advertised reptile...

4.3.1 Origin

For 76.8 % of all reptiles (n=3582) the supposed origin was mentioned in the advertisement. For 76% (n=3560) the animal was said to have been bred in captivity. Twenty-one animals were said to have been wild-caught, or long-term captive-bred (LTC) (suggesting a wild origin). The two reptile web shops did not report the origin of any of the advertised species, yet one of the shops advertised some animals as 'recent arrival from Mozambique', suggesting a wild origin of at least some of the advertised animals.

4.3.2 Protection Status

Of the 346 encountered taxa, 119 (34.39%) are currently not listed in any of the IUCN Red List categories. Of the remaining species, six (totalling 29 animals) are listed as Critically Endangered, 10 as Endangered, 24 as Vulnerable and 11 as Near Threatened. Most encountered species (61%, n=154), are listed as Least Concern. Ten of the 346 taxa are listed in CITES Appendix I, meaning that commercial trade in wild-caught specimens of those species is prohibited. Trade in these species is only allowed when bred in captivity at registered breeding facilities or when bred in captivity for non-commercial purposes. Three of these species, Radiated Tortoise *Astrochelys radiata*, William's Dwarf Gecko *Lygodacytlus williamsi* and Campbell's Alligator Lizard *Abronia campbelli*, are listed in CITES Appendix I and are also categorized as Critically Endangered. A further 85 encountered taxa are listed in CITES Appendix II and seven are listed in CITES Appendix III.

4.3.3 Nationality of the Sellers

A large difference was observed between the nationalities of the sellers offering reptiles for sale on each of the monitored online platforms. On Marktplaats.nl, the only Dutch website of the survey, most advertisements were naturally placed by Dutch nationals (98%) and a few Belgian nationals (1.37%). Yet, across the different Facebook groups, a larger array of nationalities was found catering reptiles to the Dutch market. Here, Dutch nationals were responsible for 51% of all collected advertisements, with the other 49% posted by sellers of 14 other nationalities. Of these nationalities, the Belgian (15.51%), British (10.21%), German (7.18%) and Ukrainian (6.42%) were most frequently encountered. Other sellers were from Cyprus, Czech Republic, Denmark, France, Hungary, Italy, Poland, Sweden, Switzerland, and Turkey. All these sellers claimed that the advertised animals could be picked up in or delivered to the Netherlands.

98%

4.4 Live Reptile Seizures

According to the data received from the Netherlands Enterprise Agency, a total of 3074 live reptiles were seized in a minimum of 234 cases in the Netherlands between 2004 and 2017.

Figure 4. **NUMBER OF LIVE REPTILES SEIZED IN THE NETHERLANDS BETWEEN 2004 AND 2017. SOURCE: RVO**

There seems to be no real pattern in the seizures, with an average of 13 animals seized per day. Several outliers can be observed (Figure 4); most notably the seizure of 444 Common Caimans *Caiman crocodilus* at Amsterdam Airport Schiphol on 29 November 2013, which is the largest seizure in the data set. Other notable cases are the seizure of 298 Green Iguanas on 16 April 2008, and the seizure 199 Common Caimans at 12 December 2013, both at Amsterdam Airport Schiphol.

The reason for confiscation was indicated for 2706 of the 3074 seized reptiles. Violation of the Flora and Fauna Act (Flora- en faunawet) and the Nature Protection Act (Wet Natuurbescherming), which replaced the Flora and Fauna Act in 2017, were most frequently indicated, with a combined total of 1443 seized animals. The Health and Welfare of Animals Act (Gezondheids- en welzijnswet voor dieren (GWWD) and the Animals Act (Wet Dieren), which replaced the GWWD in 2013, were indicated as the reason for the confiscation of 1036 animals. Violation of CITES was indicated for 12 reptiles, and violation of EU Regulation No 1143/2014 on Invasive Alien Species for seven animals. A total of 110 animals were seized under various criminal laws, while 952 animals were seized under various administrative laws. For 185 seized reptiles, animal welfare issues were the specific reason for seizure.

The seized reptiles belonged to 120 different taxa of which Crocodilia (crocodiles, alligators and caimans) were the most frequently encountered (n=846) (Annex V), followed almost immediately by the turtles and tortoises (n=843) and lizards (n=756). Snakes accounted for only 382 seized specimens. For 247 seized reptiles, no identification was given (e. g. 'reptile'). Of only four taxa, more than 100 animals were seized. The Common Caiman was most frequently encountered, with a total of 816 seized animals, followed by the Green Iguana (n=349), the Leopard Tortoise *Stigmochelys pardalis* (n=197) and the Greek Tortoise *Testudo graeca* (n=115). For 93 out of 120 identified taxa, 10 animals or less were seized.

Ten of the encountered taxa, accounting for 116 animals, are currently listed in CITES Appendix I (Annex V), which effectively prohibits all trade in wild-caught animals. Dumeril's Boa *Acrantophis dumerili* was the most frequently seized CITES Appendix I-species, with a total of 51 animals. It should be noted that this species is prolific in captivity and relatively easy to breed for consumers. A total of 56 of the encountered taxa are currently listed in CITES Appendix II and three are listed in CITES Appendix III. The remaining taxa (n=51) are not listed in CITES. Twenty-seven of the recorded taxa (n=321) are considered threatened on the IUCN Red List (Critically Endangered, Endangered or Vulnerable), of which six are considered Critically Endangered (Annex V). Five of these Critically Endangered species are also listed in CITES Appendix I. A further six taxa are considered Endangered and 15 taxa are considered Vulnerable. Several taxa (e. g. *Abronia* spp.) were protected in their Range States at the time of seizure, before being listed in CITES.;

Dumeril's Boa was the CITES Appendix I species most frequently seized...

Figure 5. LIVE REPTILE SEIZURES PER PROVINCE IN THE NETHERLANDS BETWEEN 2004 AND 2017. THE FIVE MAIN SEIZURE LOCATIONS ARE HIGHLIGHTED IN BOLD. FOR SEVEN CONFISCATED REPTILES NO SEIZURE LOCATION WAS SPECIFIED. SOURCE: RVO (WOB/2018/157).

The recorded seizures occurred in 104 different locations (Figure 5). For seven animals no seizure location was specified. Five locations combined, all of which are situated in the Randstad, accounted for approximately 81% (n=2513) of all seized reptiles. Amsterdam Airport Schiphol accounted for the highest number of seized reptiles (n=1640), followed at a distance by Amsterdam (n=270), Hoofddorp (n=248), The Hague (n=227) and Rotterdam (n=128). This suggests that the main entry points to the Netherlands are also the main locations for seizures of live reptiles e. g. Amsterdam Airport Schiphol. For 85 locations the obtained data only reported ten or less seized reptiles.

Approximately 50% of seized reptiles was either dead on arrival (n=44) or died after their confiscation (n=1502). This was particularly the case for Crocodilians, of which almost 96% died. Approximately 9% of seized reptiles (n=285) was given back to the owners, while 37% (n=1137) was either donated or rehomed. Of particular interest is that 33 animals were reportedly destroyed.

Table 5. NUMBER OF LIVE REPTILES SEIZED IN THE NETHERLANDS BETWEEN 2004 AND 2017 AND FINAL DESTINATION OF EACH REPTILE. SOURCE: RVO (RVO.NL) (WOB/2018/157).

Taxon	Total seized	Dead on Arrival	Died	Back to owner	Rehomed	Sold	Destroyed
Crocodilians	846		809	1	34		1
Lizards	756	15	462	7	220	2	27
Snakes	382	1	93	41	207	6	4
Turtles and tortoises	843	28	138	19	647	11	
Unidentified	247			217	29		1
Grand Total	**3074**	**44**	**1502**	**285**	**1137**	**19**	**33**

4.5 The Netherlands in a European Context

When looking at the import of live CITES-listed reptiles reported by all countries in the EU, the UNEP-WCMC CITES Trade Database reveals that almost 5 111 703 live CITES-listed reptiles were imported under source codes 'T' and 'P' between 1 January 2000 and 31 December 2017. Among EU countries, Germany was the country reporting the highest numbers of CITES-listed live imported reptiles (n=1 263 451) during this period, closely followed by Spain (n=1 038 506), Italy (n=603 827) and Portugal (n=531 344) (Table 6). The Netherlands was the 8th country when it comes to CITES-listed reptile importer volumes, with a mere 3.68% (n=188 015) of all live CITES-listed reptiles imported into the EU. A total of 441 790 live CITES-listed reptiles were exported from the EU during the research period. Slovenia was the country reporting the highest number of exported reptiles (n=140 597), followed by Czech Republic (n=139 701) and Germany (n=54 635) (Table 7). The Netherlands was the 6th largest exporter, accounting for a mere 2.24% (n=9917) of all CITES-listed exported reptiles. Of interest is that the number of CITES-listed reptiles exported from the EU comprises only 8.6% of all CITES-listed imports, suggesting that most CITES-listed imported reptiles are destined for the EU internal market.

...most CITES-listed imported reptiles are destined for the EU internal market.

Table 6. IMPORT AND EXPORT OF LIVE CITES-LISTED REPTILES INTO AND FROM THE EUROPEAN UNION BETWEEN 1 JANUARY 2000 AND 31 DECEMBER 2017.

EU Importer	Number	%	EU Exporter	Number	%
DE	1 263 451	24.72%	SI	140 597	31.82%
ES	1 038 506	20.32%	CZ	139 701	31.62%
IT	603 827	11.81%	DE	54 635	12.37%
PT	531 344	10.39%	SK	50 995	11.54%
FR	394 534	7.72%	IT	19 050	4.31%
GB	379 249	7.42%	NL	9917	2.24%
CZ	276 102	5.40%	ES	5104	1.16%
NL	188 015	3.68%	FR	4261	0.96%
GR	118 078	2.31%	GB	4104	0.93%
BE	104 206	2.04%	HU	3688	0.83%

Whereas the Netherlands seems to play a relatively small role as an importer and exporter of CITES-listed reptiles coming into and going out of the EU, it remains largely unclear how much of the internal EU reptile trade passes through, or is destined for, the country. However, the EUROSTAT database does provide some further insight. Between 2002 and 2017, the database reveals that the EU imported a total of 26 472 570 live reptiles. During the same time period, the EU imported 4 658 562 live CITES-listed reptiles, suggesting that the remaining 21 814 008 reptiles are not listed in CITES. The Netherlands imported 1 342 541 live reptiles, making it the 6th country in terms of total reptile import volume. This suggests that the Netherlands is a more important player when it comes to the import of non-CITES reptiles, rather than CITES-listed reptiles (8th in terms of import volume). Germany is the EU's number one importer, with a total of 7 792 380 imported live reptiles (1 263 451 CITES-listed; Table 6); almost double the total quantity of CITES-listed reptiles imported into the EU during the same time period. The total number of live reptiles exported by EU countries is dwarfed by the imported quantities, with merely 8 681 322 live reptiles exported according to EUROSTAT. Sweden accounted for approximately 93% of these exports, amounting to 8 031 068 animals. The Netherlands ranked 5th in terms of live reptile exports , with a total of 106 898 animals exported between 2002 and 2017.

the Netherlands is a more important player when it comes to the import of non-CITES reptiles...

Table 7. **IMPORT AND EXPORT NUMBERS OF LIVE REPTILES INTO AND FROM THE EU BETWEEN 1 JANUARY 2002 AND 31 DECEMBER 2017 AND QUOTED VALUE IN EUR. SOURCE: EUROSTAT**

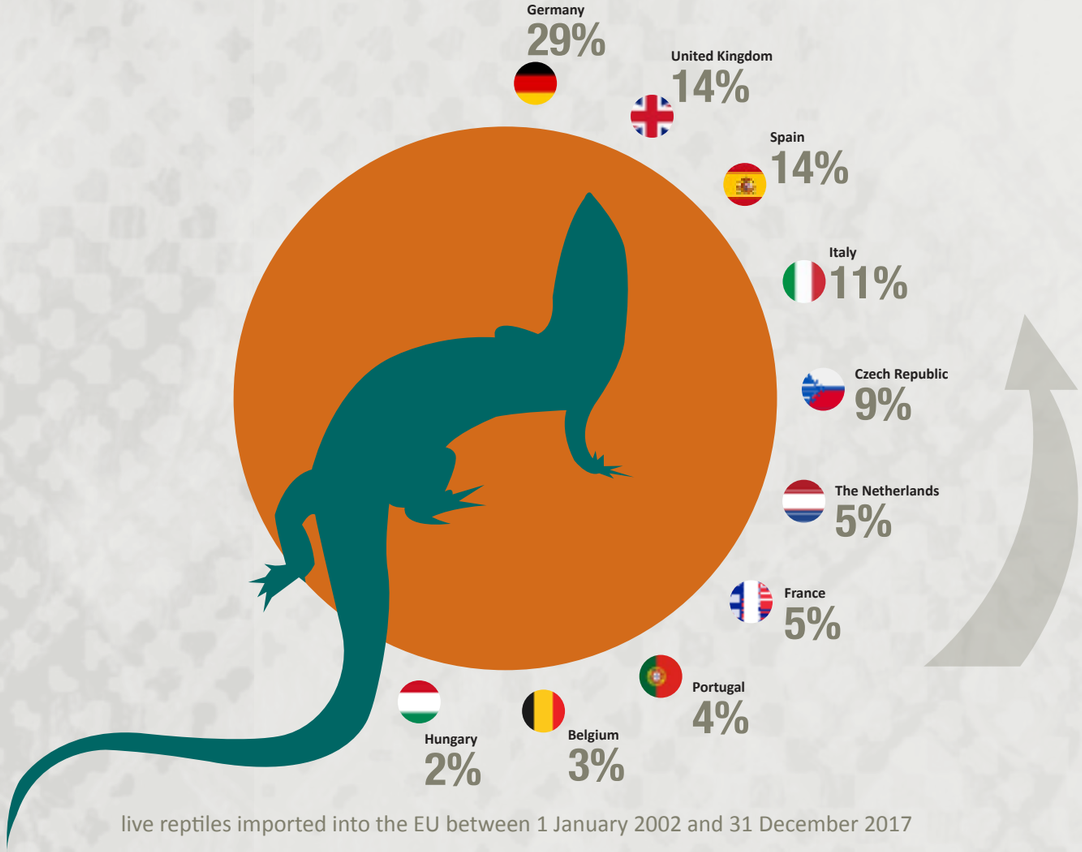
Importer	Number	%	Importer	EUR	%	Exporter	Number	%	Exporter	EUR	%
DE	7 792 380	29%	DE	30 638 909	30%	SE	8 031 068	93%	DE	6 710 263	29%
UK	3 739 707	14%	UK	17 467 469	17%	DE	158 397	2%	CZ	3 738 619	16%
ES	3 706 024	14%	ES	12 207 724	12%	CZ	133 272	2%	SL	3 187 300	14%
IT	2 838 522	11%	FR	9 332 332	9%	SL	122 345	1%	**NL**	**3 073 342**	**13%**
CZ	2 365 975	9%	CZ	7 572 922	7%	**NL**	**106 898**	**1%**	IT	1 438 707	6%
NL	**1 342 541**	**5%**	BE	6 246 337	6%	SK	25 290	0%	AT	1 172 150	5%
FR	1 316 043	5%	IT	6 146 516	6%	IT	23 768	0%	SE	800 306	3%
PT	993 433	4%	**NL**	**5 784 274**	**6%**	FR	16 542	0%	FR	790 759	3%
BE	869 660	3%	PT	2 015 234	2%	RO	12 282	0%	UK	736 287	3%
HU	424 316	2%	DK	1 492 995	1%	DK	11 045	0%	DK	481 574	2%

The total value of all live reptiles imported by the EU is documented at 103 065 334 EUR. In the Netherlands, live reptile imports are valued at 5 784 274 EUR, making it the 8th EU country in terms of monetary value (Table 7). This is of particular interest as it suggests that the average reptile imported in the Netherlands is cheaper compared to e. g. France (7th importer in terms of volume, but 4th in terms of quoted value) or Belgium (9th importer in quantities, 6th in terms of monetary value). When it concerns the export of live reptiles, the Netherlands ranks 4th with the total live reptile exports valued at 3 073 342 EUR, nearly 14% of the total value of all reptiles exported by the EU. This suggests the export of higher valued animals compared to other EU member states.

Sweden accounted for approximately 93% of these exports, amounting to 8 031 068 animals

26 472 570

live reptiles reported in the EU between 2002 and 2017



live reptiles imported into the EU between 1 January 2002 and 31 December 2017

5. DISCUSSION

Whenever illegal wildlife enters the EU through... “weak links”, it becomes nearly impossible for law enforcement to detect it at a later stage

5.1 Species of Concern

During this study, several species of concern were observed. These are species whose advertisement and/or trade in or from the Netherlands raises suspicion or should be seen as being of concern to its conservation. The following examples relate to several different concerns.

...there are reporting gaps and/or animals are illegally entering the EU market.

5.1.1 Species exported without import records

Between 1 January 2000 and 31 December 2017, the Netherlands exported 30 taxa for which no import records were found (in the period between 1 January 1975 and 31 December 2017). However, for 25 of these taxa, import records existed for other EU countries in the years prior to when they were exported from the Netherlands, suggesting they may have been imported into the Netherland via the EU internal market. Three taxa were exported a year after they were listed in CITES, which would explain the absence of import records. However, for the remaining two species; the Iraqi Mastigure *Saara loricata* and the Northern Ridge-tailed Monitor *Varanus primordius*, no legal import records into the EU could be found.

Iraqi Mastigure *Saara loricata*

The Iraqi Mastigure, native to Iraq and Iran, is not commonly found in the pet trade (Papenfuss et al. 2009). This species has been listed in CITES Appendix II since 1977. When looking at EU trade data, it is revealed that in 2015, the Netherlands exported 18 live animals for commercial purposes to Japan (Figure 6). The shipment in question originated from the Czech Republic, yet neither the Czech Republic or any other EU Member State has reportedly imported this species for commercial purposes since its CITES-listing. The Netherlands was found to have exported the species again in 2017 (eight animals). In addition to the lack of legal import records in the EU, no legal export records from the species' range states (Iran, which joined CITES in 1976, and Iraq, which joined CITES in 2014) exist. It seems likely that Iraqi Mastigures have been illegally exported from their range states and have entered the EU via the Czech Republic. While it is legal to trade this species with the right paperwork and the species does not seem to be threatened (it is currently classified as Least Concern on the IUCN Red List), its presence in multiple EU member states without there being import records shows that there are reporting gaps and/or that animals are illegally entering the EU market.

Comparative Tabulation Report

Year	App.	Taxon	Class	Order	Family	Genus	Importer	Exporter	Origin	Importer reported quantity	Exporter reported quantity	Term	Unit	Purpose	Source
2015	II	Saara loricata	Reptilia	Sauria	Agamidae	Saara	JP	NL	CZ	18	18	live		T	C
2015	II	Saara loricata	Reptilia	Sauria	Agamidae	Saara	US	CZ		12	12	live		T	C
2015	II	Saara loricata	Reptilia	Sauria	Agamidae	Saara	US	DE	CZ	1	5	live		T	C
2015	II	Saara loricata	Reptilia	Sauria	Agamidae	Saara	US	DE		4		live		T	C
2017	II	Saara loricata	Reptilia	Sauria	Agamidae	Saara	US	NL		8	8	live		T	C

Figure 6. **IMPORT AND EXPORT DATA FOR THE IRAQI MASTIGURE FOR THE PERIOD (1975-2018). SOURCE: UNEP-WCMC CITES TRADE DATABASE. COUNTRY CODES: SEE ANNEX VI.**

Northern Ridge-tailed Monitor *Varanus primordius*

The Northern Ridge-tailed Monitor is an Australian endemic found in the country's Northern Territory. The species is listed in CITES Appendix II (since 1975) and is classified as Least Concern on the IUCN Red List. Whereas Australia does not allow the live export of native wildlife (Alacs and Georges 2008), this species was found to have been exported from Denmark and Germany in 2015 (Figure 7). In 2016, the Netherlands also exported 11 specimens to Japan, with Germany as its listed origin. With no legal export records existing for Australia, and no legal import records for Germany, this species has very likely entered the EU illegally. All specimens traded from the EU were marked as bred in captivity or born in captivity. However, even if the exported specimens were indeed bred in captivity, parent stock would have to have been illegally exported from Australia in the past. Species that have illegally entered the EU can subsequently be relatively freely traded among member states, making it likely that the species is also available in the Netherlands.

...parent stock would have to have been illegally exported from Australia in the past.

Comparative Tabulation Report

Year	App.	Taxon	Class	Order	Family	Genus	Importer	Exporter	Origin	Importer reported quantity	Exporter reported quantity	Term	Unit	Purpose	Source
2001	II	Varanus primordius	Reptilia	Sauria	Varanidae	Varanus	AU	US	AU		12	specimens		S	W
2015	II	Varanus primordius	Reptilia	Sauria	Varanidae	Varanus	US	DE		14	14	live		T	C
2015	II	Varanus primordius	Reptilia	Sauria	Varanidae	Varanus	US	DE		32	32	live		T	F
2015	II	Varanus primordius	Reptilia	Sauria	Varanidae	Varanus	US	DK	DE		7	live		P	F
2015	II	Varanus primordius	Reptilia	Sauria	Varanidae	Varanus	US	DK		7		live		T	C
2016	II	Varanus primordius	Reptilia	Sauria	Varanidae	Varanus	JP	DE	DK	2		live		T	C
2016	II	Varanus primordius	Reptilia	Sauria	Varanidae	Varanus	JP	DE			2	live		T	C
2016	II	Varanus primordius	Reptilia	Sauria	Varanidae	Varanus	JP	NL	DE	11	11	live		T	C
2017	II	Varanus primordius	Reptilia	Sauria	Varanidae	Varanus	JP	DE	DK	11		live		T	C
2017	II	Varanus primordius	Reptilia	Sauria	Varanidae	Varanus	JP	DE			11	live		T	C
2017	II	Varanus primordius	Reptilia	Sauria	Varanidae	Varanus	US	DE		4	4	live		T	C

Figure 7. **IMPORT AND EXPORT DATA FOR THE NORTHERN RIDGE-TAILED MONITOR OVER THE PERIOD 1975-2018. SOURCE: UNEP-WCMC CITES TRADE DATABASE.**

5.1.2 Fraudulent source declarations

A large percentage of the imported (33.21%) and exported (73.84%) animals and those advertised online (76%), was reportedly bred in captivity. While this seems like a positive development, recent research suggests that a proportion of these animals is likely being fraudulently declared as such (Franke and Telecky 2001, Lyons and Natusch 2011, Nijman and Shepherd 2015, Janssen and Chng 2018). This 'laundering' of reptiles is an increasingly popular way to circumvent trade restrictions. Certain species, often protected by national legislation, are only allowed to be exported or traded when bred in captivity. Therefore, traders declare animals as such, even when they have been caught in the wild. Life history characteristics of many species do not allow them to reproduce quickly enough to meet demand on the pet market. Janssen and Chng (2018) revealed that the practice of laundering animals is widespread. This provides difficulties for enforcement authorities as laundered animals often come with the correct (but illegally acquired) paperwork attached.

Many traders or reptile keepers in the Netherlands are often unaware of trade restrictions and laundering practices for certain reptiles (personal observation), in particular when it concerns non-CITES species. Consumers understandably assume the origin of their pet to be what the seller claims it to be. Because of this unawareness, trade in laundered species continues.

During this study, we found several species for which laundering practices have been documented in the past, such as the Green Tree Python *Morelia viridis*, which is nationally protected and for which researchers have estimated that up to 80% of all exported animals are fraudulently declared as captive-bred (Lyons and Natusch 2011, Natusch and Lyons 2012), and Boelen's Python *Simalia boeleni* (Lettoof 2015). Another example is the Horsfield's Tortoise:

Horsfield's Tortoise *Testudo horsfieldii*

Horsefield's Tortoise is listed in CITES Appendix II (since 1975) and is classified as Vulnerable on the IUCN Red List. It is popular among reptile keepers, but its trade has recently been criticized due to supposed laundering practices (Smith and Porsch 2015). Most of the trade in this species originates from Uzbekistan (CITES Party since 1997).

Consumers understandably assume the origin of their pet to be what the seller claims it to be. Because of this unawareness, trade in laundered species continues.

35 000

Uzbek authorities estimate that actual trade numbers are much higher than those reported

593 303

trade numbers across the EU are much higher

91%

Horsfield's Tortoises accounted for all wild-caught reptiles imported by the Netherlands

Uzbekistan's export quota for captive-bred Horsfield's Tortoises increased from a mere 5000 in 2015 to 30 600 in 2017. This is in addition to a quota for wild-caught animals (~85 000 in 2017), ranched animals (~31 300 in 2017) and animals born in captivity (~11 900 in 2017). The total number of animals allowed to be exported from Uzbekistan accumulates to over 100 000 annually. However, only one Uzbek farm is known to breed Horsfield's Tortoises, making said export quotas unrealistic (Smith and Porsch 2015). It has been estimated that 50 to 75% of all Horsfield's Tortoises declared as captive-bred are likely to have been fraudulently declared as such (Smith and Porsch 2015). Moreover, Uzbek authorities estimate that actual trade numbers are much higher than those reported (roughly 35 000 in 2007), meaning that the pressure on wild populations is likely to be even higher than already thought. Additionally, several other Horsfield's Tortoise range states are not a Party to CITES, which likely adds to the illegal trade in the species by complicating the differentiation between legal and illegal trade streams. This facilitates laundering practices in source country's that are a Party to CITES. Horsfield's Tortoises accounted for 91% (n=9991) of all wild-caught reptiles imported by the Netherlands and for about 12% of all CITES-listed reptiles that were exported from the Netherlands during the research period. A relatively small number of Horsfield's Tortoises (n=34) was observed during the online survey. The Netherlands appears to be both a transition and a destination country in the international Horsfield's Tortoises trade, although trade volumes appear to be relatively low. Trade numbers across the EU are much higher, with a total of 593 303 Horsfield's Tortoises imported during the study period. Due to the EU Single Market, which enables the free cross-border movement of goods, these tortoises can easily find their way to Dutch reptile keepers, many of which are likely to be unaware of the concerns regarding the Horsfield's Tortoise trade.

306

animals were imported from Ukraine in 2016-2017, for some of which EU suspensions for wild-caught specimens are currently in place

The large number of animals found to have been imported into the Netherlands from Ukraine as captive-bred, also raises questions. Of interest is the fact that 306 animals were imported from Ukraine in 2016-2017, for some of which EU suspensions for wild-caughtspecimens are currently in place. Parson's Chameleon Calumma parsonii is such a species. Eighty-six reportedly captive-bred animals were imported between 2016 and 2017. This species is relatively difficult to breed in captivity and breeding the reported quantities seems challenging.

The fact that Ukraine had only imported seven Parson's Chameleons before 2016 raises questions. Ukraine did import 26 Parson's Chameleons in 2016, which could have been before the documented export to the Netherlands. Yet, the large number of captive-bred exported animals raises questions, as Ukraine had only imported wild caught animals. This increases the suspicion that these animals have likely been fraudulently declared as such and were likely caught in the wild.

5.1.3 Nationally protected species

Many of the species observed in this study are subject to trade restrictions in their countries of origin. For many of these species it is illegal to export them from their range States, regardless of them being listed in CITES or not. Whereas many reptile keepers and traders are aware of international trade restrictions and national legislation in certain countries (e. g. Australia), for other countries (e. g. Sri Lanka) this information is either not known or very difficult to find. For instance, LEMIS data showed that reportedly wild-caught Leopard Geckos *Eublepharis macularius* were imported from the Netherlands by the US. While this species is one of the most commonly-kept and bred reptiles in the global pet trade, wild-caught specimens are rarely encountered. Whereas initial demand was for profitable colour morphs, wild-caught animals are now wanted to establish new bloodlines.
The increasing rarity of wild Leopard Geckos is fuelling an increase in price for wild-caught animals. Pakistan, one of the range states, does not allow the export of live wildlife, yet smuggling appears to be ongoing and thriving (Rasheed 2013).

The following two examples are illustrative of this problem:

Australia

Australia is a well-known example of a range state that prohibits the export of (any) native wildlife. Notwithstanding the country's trade restrictions, Australian endemics are increasingly found on the international market. Apart from the commonly-kept and captive-bred Central Bearded Dragon, observations suggest that more and more rare (and often locality-specific) Australian endemics are being traded on an international level (e. g. the aforementioned Northern-

ridge Tailed Monitor). Between July and September 2018, more than 110 native Australian reptiles were confiscated by Australian authorities in a total of 20 foiled smuggling attempts (Australian Border Force, 2018). Several Australian species are known to be bred outside Australia, advertisements of large numbers of animals are sometimes encountered, often with specific locality data attached. Animals with the locality "Goldfield" from Western Australia are an example of this; during the online survey, Shinglebacks *Tiliqua rugosa* "Goldfield" were found for sale in the Netherlands. Shinglebacks are difficult to breed in captivity and slow-reproducing; the attachment of specific locality provides another indication that animals have likely been smuggled or originate from smuggled parental-stock.

The trade in nationally protected species and the unawareness of reptile traders and keepers regarding the protection status of their animals in their countries of origin extends well beyond the Netherlands.

Several supposedly wild-caught Australian reptile species (Central Bearded Dragon and Rankin's Dragon *Pogona henrylawsoni*) were also exported from the Netherlands to the US. As the export of any live native wildlife from Australia is effectively prohibited (Alacs and Georges, 2008), these transactions should not have been allowed under the US Lacey Act.

Sri Lanka

Two species, advertised as originating from Sri Lanka, were observed during the online survey; the Indian Star Tortoise *Geochelone elegans* and Indian Cobra *Naja naja*. However, Sri Lanka does not allow the export of native wildlife for commercial purposes. Nevertheless, Sri Lankan species are increasingly observed in trade in the EU. At least 17 Sri Lankan species have been recorded within the EU and more are likely to be available and kept in the Netherlands (Janssen and de Silva, in press). Unlike the Indian Star Tortoises (CITES Appendix II), which is a known target of wildlife smugglers (Shepherd et al. 2004) many of these Sri Lankan species are not protected under CITES, meaning that no legal paperwork is required when buying them at EU reptile fairs. As most of these non-CITES listed species are also bred in captivity, the line between legal and illegal trade is being blurred.

The trade in nationally protected species and the unawareness of reptile traders and keepers regarding the protection status of their animals in their countries of origin extends well beyond the Netherlands. Two consecutive studies by Pro Wildlife found nationally protected species from 18 different countries for sale across the EU (Altherr, 2014; 2016). In the case of non-CITES species, the legality of their trade becomes unclear once the animals have been smuggled out of their country of origin. Technically, such species may be freely traded once they have (illegally) reached the EU market. The fact that these nationally protected species are legally available in the Netherlands and the EU further obstructs customer awareness regarding these animals' protected status. Whereas the European Commission states that the "EU market should not fuel demand for species that have been harvested illegally or unsustainably" (European Commission, 2018), the lack of legal protection for such species makes the EU a major player in their trade (Altherr, 2014; Vinke and Vinke, 2015; Auliya et al., 2016). Many customers understandably assume that reptiles, openly offered in pet stores and on reptile fairs, are legal, without realising they are fully protected in their range States. The free trade in nationally protected non-CITES species, smuggled from their range States can be considered one of the most significant challenges in the illegal reptile trade today.

When protected species are bred in captivity outside their country of origin, another problem arises; although they are genuinely bred in captivity, parent stock was illegally exported from the country of origin. Whereas CITES species, smuggled out of their range States, require false paperwork, non-CITES species do not require such paperwork and can be relatively freely traded. Monitoring trade in non-CITES reptiles is subjected to many challenges and often only able to provide a partial overview (Janssen and Shepherd 2018).

EU legislation currently does not specifically protect nationally-protected species from non-EU range States like the US Lacey Act does. An important step to tackle this problem, and to provide law enforcement the legal means to enforce, is for the EU to adopt similar legislation. Secondly, increased awareness among reptile keepers is required on national legislation of range States, yet this requires resources to be made available for reptile keepers to find such legislation e. g. similar to http://www.speciesplus.net for CITES/EU legislation. There is no readily available information that could assist reptile keepers in obtaining information about the legal status of their pets in their range states before they buy them.

Figure 8. **EXAMPLE OF EU-PROHIBITED SPECIES FOR SALE ON MARKTPLAATS.NL; CUMBERLAND SLIDER *TRACHEMYS SCRIPTA TROOSTI***

Trade in species listed under this regulation is strictly prohibited because of the damage these species will cause to the biodiversity, public health or the economy of the EU

5.1.4 EU regulated species

In 2015, the EU Regulation No. 1143/2014 on the prevention and management of the introduction and spread of invasive alien species (IAS) entered into force. This EU Regulation serves to prevent, detect and rapidly eradicate new invasions, and manage invasions that are already widespread. Trade in species listed under this regulation is strictly prohibited because of the damage these species will cause to the biodiversity, public health or the economy of the EU. Private owners of such species are allowed to keep their animals until they die but are not allowed to sell or trade them in any way. Some listed species, including three subspecies of the Pond Slider *Trachemys scripta*, were encountered during the online survey. A total of 36 specimens was counted, showing that trade in these species is still being conducted (Figure 8). All but one of the specimens was observed on Marktplaats.nl. Several reptile keepers intentionally advertised prohibited species (EU invasive species) for sale and admitted that they did so illegally. One seller claimed that he did not have the space to keep the animals any longer but would rather sell them than send them to a rescue centre. Several other reptile traders claimed they would prefer selling their reptiles instead of bringing them to a rescue centre as they did not agree with the EU regulations.

5.1.5 Critically Endangered species

...any negative harvesting impact on wild populations is likely to only be discovered when the damage is already severe.

This study has found that several Critically Endangered species are either kept or offered for sale in the Netherlands. Some of these species may be highly endangered in the wild but relatively common in captivity (e.g. William's Dwarf Gecko). However, for most of them, any trade in wild-caught specimens is likely to have a significant impact on wild populations. For example, the Union Island Gecko *Gonatodes daudini* has an extremely limited distribution, only occurring in a 1km^2 area. Nevertheless, two specimens of the species were found for sale online. Union Island Geckos are not yet listed in CITES. Monitoring the trade in threatened non-CITES species is significantly hampered by poor data collection and reporting efforts (Janssen and Shepherd 2018). If trade in species is poorly documented, any negative harvesting impact on wild populations is likely to only be discovered when the damage is already severe.

The Radiated Tortoise is illustrative of the difficulties involved in combatting the trade in Critically Endangered species. The recent discovery (April 2018) of more than 10 000 poached wild Radiated Tortoises in Madagascar shows that the international demand for this CITES Appendix I-listed species is still thriving. Despite its CITES-listing, effectively prohibiting all commercial trade in wild-caught specimens, non-commercial trade of the species is still possible when it concerns captive-bred specimens. Moreover, non-range state Mauritius has two registered captive breeding facilities, which export legally-bred specimens. Radiated Tortoises were also observed at an illegal turtle and tortoise farm in Spain in August 2018. This leads to a situation in which legal captive-bred animals are mixed-in with poached specimens, and smuggled specimens are given false paper-work, resulting in a market in which the actual origin of specimens is difficult to trace.

Many reptile keepers claim that keeping reptiles in captivity is an act of conservation. Such keepers claim that keeping and breeding rare reptiles in captivity can save species, as many are often severely threatened by e. g. habitat loss or destruction. Even when species are classified as Critically Endangered, some people are not deterred from keeping them. Common reasoning behind this is that breeding and keeping species will allow them to survive, even if this is only in captivity. Such attitudes towards conservation may fuel demand and may have devastating effects on wild populations and the ecosystems they are a part of. Similar attitudes were observed in regard to the trade in non-Critically Endangered species such as the Earless Monitor Lizard. This species' exact distribution patterns were published in 2012 (Nijman and Stoner, 2014), after which many animals were illegally exported to the EU, in some cases supposedly to 'save them from habitat destruction'.

5.2 Impact of the EU Single Market on Trade Analysis

The EU Single Market system allows wildlife to move virtually unnoticed from one EU country to another. An analysis of the Netherlands imports, and export data therefore does not provide a complete picture of the country's involvement in the international reptile trade. As noted above (5.1.1 Species exported without import records), the Netherlands were found to have exported 30 taxa for which no import records existed. It is likely that most of these taxa entered the country via another EU Member State. The data indeed showed that 25 of the 30 species had been imported into surrounding EU Member States in the years prior to their export from the Netherlands. While the Netherlands ranks 8th among EU countries when it comes to reptile imports, and 6th when it comes to exports, it remains largely unclear how many species and specimens end up on the Dutch market through other EU Member States. Besides complicating trade analyses on a national level, the unregistered movement of reptiles between EU countries facilitates the trade in illegal and illegally acquired species within the EU. The impact of the EU Single Market was further laid bare during the online survey. Sellers of fifteen different nationalities were observed catering to the Dutch market, 12 of which had EU nationalities. Foreign sellers advertised 1014 animals to be sold at Dutch reptile fairs, including 13 that are listed in CITES Appendix I. Conversely, Dutch sellers were found advertising a total of 581 animals on German reptile classified website Terraristik.com with global audience.

The lack of border control on the EU internal market provides significant challenges to law enforcement. The enforcement of the EU Regulations is only as strong as the weakest link within the EU. Whenever illegal wildlife enters the EU through such "weak links", it becomes nearly impossible for law enforcement to detect it at a later stage. Moreover, even when such trade is detected, if the right paperwork has been handed out by other EU Member States, not much can be done to forbid it. While this issue is very likely on the radar of law enforcement, consumers might not be aware of the problem. Personal experience learns that many reptile keepers assume that animals for sale in the Netherlands or other EU countries have a legal origin. Many are unaware of the fact that some species might be brought into the EU illegally, with false-paperwork.

The trade in nationally protected species and the unawareness of reptile traders and keepers regarding the protection status of their animals in their countries of origin extends well beyond the Netherlands.

6. CONCLUSION

The Netherlands is an important exporter and importer of reptiles traded within the EU.

The Netherlands has been considered an important player in the international reptile trade. The country is home to several well-established large reptile fairs, including the quarterly Terraria Expo and the annual "Snake Day" in Houten, which attract visitors from all over Europe and the world. The high total value of the recorded online trade further suggests that the Netherlands is an important exporter and importer of reptiles traded within the EU. CITES data nevertheless show that the Netherlands ranks lower than expected when it comes to the export and import of reptiles in a European context. The country ranks 6th in terms of export (2,24% of total EU reptile exports) and 8th in terms of import (3,68% of total EU reptile imports). Our data shows that the Netherlands is a more important player in terms of non-CITES species (6th importer in the EU) but considering the country's lower ranking in terms of monetary value (9th), it seems that this mostly comprises cheaper, and likely more commonly kept, species.

...legal trade in non-protected species may nevertheless be detrimental to wild populations

Some of the species found to have been traded from and within the Netherlands have no legal import records, are prohibited in the EU, or are subjected to export-bans in their countries of origin. The selected examples provided in this report are illustrative to these respective problems. It should also be highlighted that legal trade in non-protected species may nevertheless be detrimental to wild populations, particularly where it concerns newly-described endemic species with limited distribution and small populations.

The Netherlands' role in the international reptile trade is inseparably linked to that of the EU. Due to the EU Single Market, which allows goods to be moved freely among EU Member States, trade analysis on a national level is complicated. Moreover, the EU Single Market facilitates the internal EU trade in illegal and illegally acquired species and poses

significant challenges to law enforcement. Additionally, the EU Wildlife Trade Regulations currently do not prohibit the trade in several species that enjoy a protected status in their countries of origin. Whereas the European Commission states that the "EU market should not fuel demand for species that have been harvested illegally or unsustainably", the lack of legal protection for such species makes the EU a major player in the illegal trade in such species. The adoption of trade restrictions regarding such nationally protected species would improve regulation of an important part of the international reptile trade.

The issues mentioned in this report are well-known, but very difficult to tackle. Many require both legislative change and conscious efforts from consumers to ensure their animals are legally and responsibly acquired. Personal observations learn that many reptile keepers assume that animals for sale in the Netherlands or in other EU countries are of legal origin. Many are unaware of the fact that some species may be protected in their range states or may have been brought into the EU illegally using false-paperwork. Consumers need to be more aware of such issues, but it is unrealistic to expect a change in mindset and behaviour when they are not provided with the right information. Providing consumer with a specially-designed information tool would increase general awareness and enable reptile enthusiasts to check the legality and the conservation impact of their potential purchases.

...the EU Wildlife Trade Regulations currently do not prohibit the trade in several species that enjoy a protected status in their countries of origin.

CITES trade records are not representative of the actual numbers of reptiles traded internationally...

...the EU should adopt legislation that ensures such species are also protected in the EU

FURTHER RESEARCH

In order to paint a more comprehensive picture of the trade volumes of live reptiles moving through the Netherlands, this study's trade analysis needs to be complemented with further research into the trade of non-CITES species. Only a relatively small percentage (~8%) of all reptiles in trade is listed in the CITES appendices, meaning that CITES trade records are not representative of the actual numbers of reptiles traded internationally (involving both CITES and non-CITES species). While the EUROSTAT data provided an indication of trade quantities and the online survey provided an indication of what non-CITES species are traded, the latter should only be considered a snapshot. Only through structural and well-coordinated registration of all reptiles (CITES and non-CITES) entering and exiting the Netherlands (and the EU), would it be possible to obtain a comprehensive overview of the species moving through the country.

ONLINE TRADE MONITORING

Social media platforms and other online trade platforms play an increasingly important role in the reptile trade. Advertisements are placed by sellers from a wide range of countries, making it easier to obtain rare or illegal species. It is therefore essential that the online reptile trade is monitored.

Many of the species observed online are subject to trade restrictions, classified as Critically Endangered and/or are likely to have been laundered. Further research into the scale of the online trade in live reptiles in the Netherlands is required to detect and effectively combat illegal trade practices.

LEGISLATIVE CHANGE

Several studies have highlighted the impact of the lack of EU protection of non-native species that are protected in their range states. Current legislation enables protected non-CITES species to be freely traded within the EU once they have been smuggled out of their country of origin. In order to combat the increasing trade in nationally-protected species, the EU should adopt legislation that ensures such species are also protected in the EU, much like the United States has done by adopting the Lacey Act.

DEVELOP INFO TOOL FOR CONSUMERS

To increase consumer awareness in regard to the protected status of nationally-protected non-native species, it is essential that relevant information on such species is made freely and easily available. An information tool outlining all relevant legislation concerning a species, including trade bans (such as the total ban of export of live native wildlife in Australia), its national protection level, CITES-status and laundering history (in cases where this is relevant) should be developed. This would allow consumers to make well-considered purchases and enable them to detect illegal trade practices. Governmental- and non-governmental organizations should actively promote such a tool and seek collaboration of local herpetological societies. The RVO is one of the institutions that could be responsible for the development and management of such a tool.

...allow consumers to make well-considered purchases and enable them to detect illegal trade practices.

PRIORITY SPECIES

This report has highlighted many species which are subjected to trade restrictions or for which trade is a potential conservation concern. However, as the data obtained in this report should only be considered a snapshot, it is essential to obtain more information on the scale of trade in these species in the Netherlands. The following species should be considered priority species and should be the subject of further research:

Species	Reason
Australian monitor lizards* with no or small captive population (e.g. *Varanus varius, V. giganteus, V.semiremex, V.rosenbergi*)	Export from range state prohibited, new species observed in trade and likely recent smuggling attempts. Small captive population, likely little to no captive breeding.
Bourret's Box Turtle *Cuora bouretti*	Critically endangered, protected but known smuggling attempts. Documented trade in wild individuals.
Cophotis spp. and *Ceratophora* spp.	Non-CITES, protected in range state. Known smuggling attempts.
Egernia spp.*	Non-CITES, protected in range state and frequent smuggling attempts documented.
Horsfield's Tortoise *Testudo horsfieldii* Parson's Chameleon *Calumma parsonii* Radiated Tortoise *Astrochelys radiata*	Laundering documented en masse. Laundering documented, difficult to breed in captivity. Critically Endangered, CITES Appendix I and subjected to frequent smuggling attempts.
Shinglebacks *Tiliqua rugosa*	Non-CITES, protected in range state and frequent smug gling attempts documented.
Union Island Gecko *Gonatodes daudini*	Non-CITES, nationally protected and Critically endangered. Known smuggling attempts and observed in trade

*Captive breeding occurs in some of these species e.g. *V.acanthurus* and *V.tristis*, but smuggling is ongoing.

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ANNEX I – IMPORT OF LIVE REPTILES 2000-2017

	IUCN	CITES	Main Exporter	C	F	O	R	U	W	(blank)
Agamidae										
Acanthosaura armata			VN						185	
Saara hardwickii		II	SI	220						
Uromastyx dispar		II	TD, ML, US						1016	
Uromastyx geyri		II	NE, BJ						967	
Uromastyx ocellata	LC	II	SD						7745	
Uromastyx ornata	LC	II	UA	20						
Alligatoridae										
Alligator mississippiensis	LR/lc	II	CH	1					4	
Caiman crocodilus	LR/lc	II	GY, SR						2205	
Caiman crocodilus crocodilus	LR/lc	II	GY, SR						5251	
Caiman crocodilus fuscus	LR/lc	II	HK, CH, CO	451						
Paleosuchus palpebrosus	LR/lc	II	GY, US						240	
Paleosuchus trigonatus	LR/lc	II	GY						4	
Boidae										
Boa constrictor		II	SR, GY, CZ	2014	290				1622	
Calabaria reinhardtii		II	GH, TG						128	
Candoia aspera		II	ID						155	
Candoia carinata		II	ID						63	
Candoia paulsoni		II	ID						12	
Corallus caninus	LC	II	SR, GY	3	7				1222	
Corallus hortulanus	LC	II	SR, GY						1490	
Epicrates angulifer		II	CZ	9						
Epicrates cenchria		II	CZ, GY, AR	198	53				229	
Epicrates cenchria cenchria		II	GY						22	
Epicrates maurus		II	CA, GY	12					1	
Eunectes murinus		II	GY, SR						74	
Eunectes notaeus		II	CZ	68						
Gongylophis colubrinus		II	CA	17						
Gongylophis muelleri		II	GH						21	
Lichanura trivirgata	LC	II	CA	24						
Chamaeleonidae										
Brookesia stumpffi	LC	II	MG						157	
Brookesia superciliaris	LC	II	MG						156	
Brookesia therezieni	LC	II	MG						57	
Brookesia thieli	LC	II	MG						65	
Calumma parsonii	NT	II	UA	86						
Chamaeleo africanus	LC	II	NE, SD						238	
Chamaeleo calyptratus	LC	II	CZ, UA	160						
Chamaeleo dilepis	LC	II	TZ, UG, MZ						2986	
Chamaeleo gracilis	LC	II	TZ, TG, BJ			329			519	
Chamaeleo senegalensis	LC	II	GH, BJ, TG			805			503	
Furcifer balteatus	EN	II	UA	7						
Furcifer campani	VU	II	MG						9	
Furcifer cephalolepis	LC	II	MG, KM						40	
Furcifer lateralis	LC	II	MG						1787	
Furcifer oustaleti	LC	II	MG, XX						837	
Furcifer pardalis	LC	II	MG, XX, UA	8					1106	
Furcifer verrucosus	LC	II	MG, XX						724	
Kinyongia fischeri	NT	II	TZ						2099	
Kinyongia tavetana	NT	II	TZ						1463	
Kinyongia xenorhina	NT	II	UG						349	
Trioceros bitaeniatus	LC	II	TZ, UG						1401	
Trioceros cristatus	LC	II	CM						480	
Trioceros ellioti	LC	II	UG						727	
Trioceros fuelleborni	LC	II	TZ		16				243	
Trioceros hoehnelii	LC	II	KE, UG		1449				1123	
Trioceros jacksonii	LC	II	UG		1747				435	
Trioceros johnstoni	LC	II	UG						866	
Trioceros melleri	LC	II	TZ, MZ						2374	
Trioceros montium	NT	II	CM						641	
Trioceros oweni	LC	II	CM						36	
Trioceros quadricornis	VU	II	CM						290	
Trioceros rudis	LC	II	TZ						627	
Colubridae										
Elaphe radiata			ID, BR, MY						23	
Ptyas mucosus		II	ID						72	
Cordylidae										
Cordylus rhodesianus		II	MZ, US						219	
Cordylus tropidosternum		II	TZ, MZ						2398	
Smaug mossambicus		II	MZ, ID						85	
Smaug warreni	LC	II	MZ						125	
Elapidae										
Naja kaouthia	LC	II	US					1		
Naja oxiana	DD	II	US					5		
Naja siamensis	VU	II	CH		3					
Naja sputatrix	LC	II	CH						2	
Naja sumatrana	LC	II	US, CH					17		
Ophiophagus hannah	VU	II	ID					8		6
Emydidae										
Trachemys scripta elegans			ZA, SX					1	1	
Gekkonidae										
Correlophus ciliatus	VU		US		6					
Phelsuma comorensis	LC	II	MG, KM						30	
Phelsuma dubia	LC	II	TZ, MG						1293	
Phelsuma grandis	LC	II	MG						170	
Phelsuma kochi	LC	II	MG						60	
Phelsuma laticauda	LC	II	MG, KM						3052	
Phelsuma lineata	LC	II	MG						1823	
Phelsuma madagascariensis	LC	II	MG						1407	
Phelsuma parkeri	LC	II	TZ						1100	
Phelsuma quadriocellata	LC	II	MG						2075	
Phelsuma v-nigra	LC	II	KM, MG						170	
Uroplatus ebenaui	VU	II	US		26				10	
Uroplatus fimbriatus	LC	II	MG, UA		2				14	
Uroplatus finiavana	NT	II	UA		8					
Uroplatus giganteus	VU	II	UA		10					
Uroplatus henkeli	VU	II	MG, UA		4				10	
Uroplatus lineatus	LC	II	MG						10	
Uroplatus phantasticus	LC	II	UA, MG		41				16	
Uroplatus pietschmanni	EN	II	UA		3					
Uroplatus sameiti	LC	II	UA		13					
Uroplatus sikorae	LC	II	MG, UA		48				52	
Uroplatus spp.		II	MG						60	

Geoemydidae									
Cuora amboinensis	VU	II	ID				288		
Heosemys spinosa	EN	II	GB		12				
Helodermatidae									
Heloderma suspectum	NT	II	US		44				
Iguanidae									
Iguana iguana	LC	II	SV, US, SR	41086		1	3732		
Pelomedusidae									
Pelomedusa subrufa		III	GH, TG				55		
Pelusios castaneus		III	GH				30		
Pelusios niger		III	TG				25		
Podocnemididae									
Podocnemis unifilis	VU	II	PE		100				
Pythonidae									
Antaresia childreni	LC	II	CA	8					
Antaresia maculosa	LC	II	CA	10					
Apodora papuana		II	ID				12		
Aspidites melanocephalus	LC	II	US, CA	3	8				
Leiopython albertisii		II	ID				143		
Liasis fuscus	LC	II	ID				2		
Liasis mackloti		II	ID				16		
Liasis olivaceus	LC	II	ID				2		
Malayopython reticulatus		II	ID, US, CZ	172			204		
Morelia spilota	LC	II	US, ID	4	2		5		
Morelia viridis	LC	II	ID, US	575	48				
Python bivittatus	VU	II	CZ, VN, US	1867					
Python breitensteini	LC	II	ID, US	14			40		
Python brongersmai	LC	II	ID, US	27			124		
Python curtus	LC	II	ID, US	6	6		132		
Python molurus		II	US	6					
Python regius	LC	II	TG, GH, US	1192	52	18524	740		
Python sebae		II	BJ, TZ, GH	2		75	60		
Simalia amethistina	LC	II	ID				55		
Simalia clastolepis		II	CA	14					
Simalia nauta		II	CH		1		1		
Scincidae									
Tiliqua scincoides	LC		ID				52		
Tribolonotus gracilis	LC		ID, US				33	4	
Teiidae									
Dracaena guianensis		II	PE		41				
Salvator merianae	LC	II	AR, US, CH	1038	90		50		
Salvator rufescens		II	AR, CH	540			1		
Tupinambis teguixin		II	GY				467		
Testudinidae									
Aldabrachelys gigantea		II	MU, US	4	11				
Centrochelys sulcata	VU	II	US, ML, GH	30	370				
Chelonoidis carbonarius		II	SR, BR, BB	2263	1187		1266		
Chelonoidis chilensis	VU	II	AR	263					
Chelonoidis denticulatus		II	SR, GY, PE		100		585		
Geochelone elegans	VU	II	SI, UA	30					
Geochelone platynota	CR	II	US		6				
Homopus areolatus	LC	II	NA, ZA	4			1		
Indotestudo elongata	EN	II	MY				150		
Kinixys belliana		II	TG, GH				754	176	
Kinixys erosa	DD	II	GH, TG				25	55	
Kinixys homeana	VU	II	TG, GH				441	96	
Stigmochelys pardalis	LC	II	TZ, ZM, KE	5657	14345		200	2276	
Testudinidae spp.		II	MC				1		
Testudo graeca	VU	II	JO, UA, US	135	1				
Testudo hermanni	NT	II	SI	1288					
Testudo horsfieldii	VU	II	UZ, US, UA	40	552		6500	2900	
Trionychidae									
Pelochelys bibroni	EN	II	ID					6	
Varanidae									
Varanus acanthurus	LC	II	CA	20					
Varanus albigularis		II	TZ, MZ					285	
Varanus doreanus	LC	II	ID					58	
Varanus exanthematicus	LC	II	GH, TG, US				1110	2418	
Varanus glauerti	LC	II	CA	3					
Varanus gouldii	LC	II	CA, ID, US	6	13				
Varanus indicus	LC	II	ID	11				8	
Varanus melinus		II	US		6				
Varanus niloticus		II	TG, TZ, CH					1473	
Varanus pilbarensis	LC	II	CA	37					
Varanus prasinus	LC	II	ID	36					
Varanus rudicollis		II	ID					339	
Varanus salvator	LC	II	ID, HK					1142	
Varanus tristis	LC	II	CA	15					
Xenopeltidae									
Xenopeltis unicolor	LC		MY, ID					9	

ANNEX II – EXPORT OF LIVE REPTILES 2000-2017

	IUCN	CITES	Main Importer	C	F	I	O	R	U	W
Agamidae										
Saara loricata	LC	II	JP, US	26						
Uromastyx acanthinura		II	US	2						
Uromastyx ornata	LC	II	CA, CH, US	26						
Uromastyx princeps		II	JP, US	53						
Uromastyx thomasi	VU	II	NO, CH, IS	144	16					
Alligatoridae										
Alligator mississippiensis	LR/lc	II	CH, IS, US	34						1
Caiman crocodilus fuscus	LC	II	NO, CH	4					40	
Boidae										
Acrantophis dumerili	LC	I	CA	8						
Acrantophis madagascariensis	LC	I	CA	7						
Boa constrictor		II	US, JP, NO	186						7
Corallus batesii		II	JP	5						
Corallus caninus	LC	II	US	4						2
Corallus hortulanus	LC	II	KR	8						

Corallus ruschenbergerii	LC	II	JP	7					
Epicrates cenchria		II	CA, AE	11					
Epicrates striatus		II	JP		11				
Sanzinia madagascariensis	LC	I	US, CA	10					
Chamaeleonidae									
Bradypodion pumilum	VU	II	JP, CA	44					
Bradypodion thamnobates	VU	II	CA	2					
Calumma parsonii	NT	II	US	6					
Chamaeleo calyptratus	LC	II	HK, US	2405					
Furcifer pardalis	LC	II	TW, US, KR	77	60				
Trioceros hoehnelii	LC	II	US, JP	102					
Trioceros jacksonii	LC	II	JP, US	144					
Trioceros johnstoni	LC	II	US						16
Cheloniidae									
Cheloniidae spp.		I	CH				1		
Colubridae									
Hydrodynastes gigas		II	CA, JP, US	41					
Cordylidae									
Ouroborus cataphractus	LC	II	TW	9					
Elapidae									
Naja atra	VU	II	US	2					
Naja kaouthia	LC	II	ID	6					
Naja naja		II	US	2					
Emydidae									
Clemmys guttata	EN	II	TW	32					
Terrapene carolina	VU	II	TW, HK	147					
Terrapene ornata	NT	II	TW	7					
Trachemys scripta elegans		N	XX, ZA, SR	2			5	1	
Gekkonidae									
Naultinus elegans		II	CA	2					
Naultinus grayii		II	US, CA	4					
Phelsuma astriata	LC	II	US	15					
Phelsuma borbonica		II	JP	6					
Phelsuma breviceps	VU	II	JP	4					
Phelsuma cepediana	LC	II	US	319					
Phelsuma grandis	LC	II	AE	2					
Phelsuma guimbeaui		II	US	296					
Phelsuma klemmeri	EN	II	US	25					
Phelsuma madagascariensis	LC	II	JP	12					
Phelsuma ornata		II	US	370					
Phelsuma standingi	VU	II	JP	8					
Uroplatus pietschmanni	EN	II	US	2					
Geoemydidae									
Cuora amboinensis	VU	II	UA			5			
Mauremys japonica	LR/nt	II	TW				17		
Iguanidae									
Iguana iguana	LC	II	AE, CH, US	1	1			1	
Pelomedusidae									
Pelusios niger		III	AW	2					
Pythonidae									
Aspidites melanocephalus	LC	II	JP, CA, US	88					
Aspidites ramsayi	LC	II	JP, TW	4					
Liasis olivaceus	LC	II	JP	3					

Malayapython reticulatus		II	CA, SA, JP	23					11
Morelia bredli	LC	II	US	18					
Morelia spilota	LC	II	TW, US	73					
Morelia viridis	LC	II	US	29					
Python anchietae	LC	II	JP, TW	11					
Python bivittatus	VU	II	JP, CA, AE	159					
Python regius	LC	II	US, KR, HK	1648	79		1000	2	
Simalia boeleni		II	US		5				
Teiidae									
Dracaena guianensis		II	CA, CH	15	3				
Salvator merianae	LC	II	CA, US, CH	63					
Testudinidae									
Aldabrachelys gigantea		II	CN	4	4				
Centrochelys sulcata	VU	II	KR, MO, AW	73					
Chelonoidis carbonarius		II	HK, AE, US	68	1				30
Chelonoidis denticulatus		II	AE, AW	1					46
Geochelone platynota	CR	II	HK	4					
Kinixys belliana		II	AW	1			2		
Kinixys homeana	VU	II	AW				2		
Malacochersus tornieri	VU	II	US	1					
Manouria emys	EN	II	AW	2					
Stigmochelys pardalis	LC	II	AW						2
Testudo graeca		II	US	2					2
Testudo hermanni	NT	II	JP, AW	21					
Testudo horsfieldii		II	US, KR, CL	1				1	1219
Testudo marginata	LC	II	JP	54					
Varanidae									
Varanus acanthurus	LC	II	KR, TW, CA	104					
Varanus caudolineatus	LC	II	CA	2					
Varanus cumingi	LC	II	US, KR	10					
Varanus gilleni	LC	II	US	24					
Varanus glauerti	LC	II	US, CH, CA	34					
Varanus gouldii	LC	II	CA		1				
Varanus kingorum	LC	II	US, TW	30					
Varanus mertensi	EN	II	US, JP, KR	11					
Varanus pilbarensis	LC	II	CA, TW, US	9					
Varanus primordius	LC	II	JP	11					
Varanus rudicollis		II	US	1					
Varanus salvator	LC	II	US, CA	10					
Varanus spenceri		II	JP, CA	5					
Varanus storri	LC	II	US, TW	8					
Varanus tristis	LC	II	CH, US	7					
Varanus varius		II	US, TW	12					
Viperidae									
Trimeresurus mangshanensis		II	US	7					
Xenosauridae									
Shinisaurus crocodilurus	EN	II	US, CA	41					

ANNEX III – EXPORT TO THE NETHERLANDS TO THE UNITED STATES (LEMIS)

	IUCN	CITES	C	F	R	U	W
AGAMIDAE							
Chlamydosaurus kingii	LC		13				
Hypsilurus spp.			4				
Laudakia spp.			2				
Lophosaurus dilophus	LC		35				
Pogona barbata	LC		7				
Pogona henrylawsoni	LC		7				79
Pogona minor	LC		20				
Pogona spp.			100				155
Pogona vitticeps	LC		3547				550
Uromastyx thomasi	VU	II	27				
Xenagama taylori			6				
ANGUIDEA							
Abronia spp.			2				
BOIDAE							
Boa constrictor		II	13				7
Corallus caninus	LC	II	5				2
Sanzinia madagascariensis	LC	I	6				
CARETTOCHELYIDAE							
Carettochelys insculpta	VU	II				3	
CARPHODACTYLIDAE							
Nephrurus wheeleri	LC		8				
Phyllurus amnicola	NT		4				
Underwoodisaurus milii	LC		23				
CHAMAELEONIDAE							
Chamaeleo calyptratus	LC	II	93				
Rhampholeon acuminatus	CR	II					25
Rhampholeon brevicaudata		II					4
Rhampholeon spp.		II					4
Rhampholeon temporalis	EN	II					8
CHELLIDAE							
Chelus fimbriata			130				
Phrynops spp.			4				
COLUBRIDAE							
Coelognathus radiatus	LC		2				
Elaphe moellendorffi			2				
Elaphe quatuorlineata	NT		1				
Elaphe spp.			4				
Elaphe taeniura			38				
Euprepiophis conspicillata	LC		2				
Euprepiophis mandarina			3				
Gonyosoma frenatum			2				
Gonyosoma oxycephalum	LC			3			
Lampropeltis spp.			2				
Lampropeltis triangulum			13				
Oreocryptophis porphyracea			250				36
Pantherophis bairdi	LC		2				
Pantherophis guttatus	LC		1123				
Thamnophis eques	LC		24				
Thamnophis hammondi			2				
Thamnophis melanogaster	EN		8				
Thamnophis sirtalis	LC		2				
Thamnophis sirtalis tetrataenia			10				
Zamenis situla	LC		2				
CORYTOPHANIDAE							
Laemanctus serratus	LC		1				
DACTYLOIDAE							
Anolis barbatus			15				
Anolis equestris						5	
Anolis porcus			9				
Anolis smallwoodi						1	
Anolis spp.			8			56	
DIPLODACTYLIDAE							
Bavayia montana	DD		1				
Correlophus ciliatus	VU		35				
Correlophus sarasinorum	VU		9				
Mniarogekko chahoua	VU					3	
Rhacodactylus leachianus	LC		37				
Rhacodactylus trachyrhynchus	EN		2				
DIPSADIDAE							
Heterodon nasicus	LC		454				326
ELAPIDAE							
Naja spp.			41				11
EMYDIDAE							
Trachemys spp.			4				
EUBLEPHARIDAE							
Coleonyx spp.						9	
Eublepharus macularius			2				20
GEKKONIDAE							
Cnemaspis spp.			2				
Paroedura spp.							22
Phelsuma cepediana	LC	II	169				100
Phelsuma guimbeaui		II	192				50
Phelsuma ornata		II	220				100
Phelsuma quadriocellata	LC	II	20				
GEOEMYDIDAE							
Cuora trifasciata	CR	II	1				
HELODERMATIDAE							
Heloderma horridum	LC	II	5				
IGUANIDAE							
Ctenosaura spp.			11				
Iguana iguana	LC	II				1	
LACERTIDAE							
Gastropholis prasina	NT		9				
Lacerta spp.			64				
Podarcis spp.							26
Timon lepidus	NT		368				
Timon spp.			63				
LAMPROPHIIDAE							
Boaedon fuliginosus			2				
Pseudaspis cana			4				
LEIOCEPHALIDAE							
Leiocephalus spp.						6	

PHRYNOSOMATIDAE					
Petrosaurus thalassinus	LC		23		
PHYLLODACTYLIDAE					
Tarentola chazaliae	VU		330		
PYTHONIDAE					
Aspidites melanocephalus	LC	II	7		
Morelia spilota	LC	II	32		
Morelia spilota variegata	LC	II	15		
Morelia viridis	LC	II	14		
Python bivittatus	VU	II	150		
Python regius	LC	II	10	2000	
SCINCIDAE					
Egernia spp.			1		
Tiliqua multifasciata	LC		2		
Tiliqua nigrolutea	LC		6		
Tiliqua occipitalis	LC		2		
Tiliqua rugosa	LC		4		
Tiliqua spp.			6		
SHINISAURIDAE					
Shinisaurus crocodilurus	EN	I	51		
SPAERODACTYLIDAE					
Sphaerodactylus spp.				1	
TEIIDAE					
Salvator merianae	LC	II	10		
TESTUDINIDAE					
Chelonoidis carbonarius		II	7		
Kinixys belliana		II	1		
Malacochersus tornieri	VU	II	1		
Testudo hermanni	NT	II	4		
Testudo horsfieldii	VU	II	1		950
VARANIDAE					
Varanus acanthurus	LC	II	14		
Varanus cumingi	LC	II	3		
Varanus gilleni	LC	II	17		
Varanus glauerti	LC	II	25		
Varanus kingorum	LC	II	28		
Varanus mertensi	EN	II	5		
Varanus pilbarensis	LC	II	2		
Varanus storri	LC	II	6		
Varanus tristis	LC	II	3		
VIPERIDAE					
Atheris spp.			6		
Cerastes cerastes			15		
Crotalus basilicus			11		
Crotalus mitchellii	LC		9		
Crotalus molosus					3
Crotalus spp.			4		
Crotalus vegrandis			21		
Montivipera latifii	EN		4		
Montivipera raddei	NT		1		
Montivipera wagneri	CR	II	2		
Trimeresurus spp.			9		
Vipera ammodytes	LC		20		
Vipera spp.			31		
NON-CITES					
Non-cites			277	72	12

ANNEX IV – ONLINE SURVEY

	IUCN	CITES	Facebook	Marktplaats.nl	Shops	Terraristik.com
AGAMIDAE						
Acanthosaura capra					4	
Acanthosaura crucigera				2		
Chlamydosaurus kingii	LC		8	2		1
Gonocephalus grandis	LC			1		
Hydrosaurus amboinensis			13			
Hydrosaurus pustulatus	VU		2			
Hydrosaurus weberi			14			4
Intellagama lesueurii	LC			2		1
Leiolepis belliana				2		
Physignathus cocincinus			2	2		
Pogona henrylawsoni	LC		22	31		1
Pogona minor	LC			1		
Pogona vitticeps	LC		13	170		
Uromastyx geyri		II		2		
Uromastyx nigriventis			4			5
Uromastyx ornata	LC	II	20	2		
Xenagama taylori				1		
ALLIGATORIDAE						
Caiman crocodilus	LR/lc	II	6			
Caiman latirostris	LR/lc	I/II				4
Paleosuchus palpebrosus	LR/lc	II		2		
ANGUIDAE						
Abronia campbelli	CR	I	2			
Abronia taeniata	EN	II	2			
Abronia graminea	VU	II	9			
BOIDAE						
Acanthrophis dumerili	LC	I	8	2		
Boa constrictor		II	39	29	1	5
Boa constrictor amarali		II	5			
Boa imperator		II	114	35		
Corallus hortulanus	LC	II	3	3		
Epicrates cenchria		II	45	38		
Eunectes murinus		II		2		
Eunectes notaeus		II	1	2		1
Gongylophis colubrinus		II	9	1		
Sanzinia madagascariensis	LC	I	7	7		
CARPHODACTYLIDAE						
Nephrurus deleani	LC					7
Nephrurus levis pilbarensis			1			2

Nephrurus stellatus	LC						11
Nephrurus vertebralis	LC						2
Nephrurus wheeleri	LC			2			
Nephrurus wheeleri cinctus	LC						1
Nephrurus wheeleri wheeleri	LC						6
Saltuarius wyberba	LC						2
CHAMAELEONIDAE							
Chamaeleo calyptratus	LC	II	22	9			2
Furcifer pardalis	LC	II	13	9			
Trioceros hoehnelii	LC	II	8	5			8
CHELIDAE							
Chelodina oblonga	LR/nt			1			
Emydura subglobosa	LR/lc			5			
CHELYDRIDAE							
Chelydra serpentina	LC	III		7			
Macrochelys temminckii	VU	III	2	2			2
COLUBRIDAE							
Boiga drapiezii	LC		1				
Chrysopelea paradisi	LC		1				
Coelognathus flavolineatus	LC		2				
Coelognathus helena			10				
Crotaphopeltis hotamboeia					10		
Dipsadoboa aulica					1		
Elaphe anomala			11				
Elaphe carinata							1
Elaphe climacophora	LC		13				
Elaphe davidi			4				
Elaphe dione	LC						1
Gonyosoma boulengeri				1			
Gonyosoma oxycephalum	LC			3			
Heterodon kennerlyi			1				
Hydrodynastes gigas							2
Lampropeltis abnorma				4			
Lampropeltis californiae			3	10	1		4
Lampropeltis getula	LC						7
Lampropeltis holbrooki			1				
Lampropeltis mexicana	LC		2				
Lampropeltis polyzona			8				6
Lampropeltis thayeri			2				
Lampropeltis triangulum							5
Lystrophis pulcher			8				
Nerodia fasciata	LC		5				
Nerodia floridana	LC		6				
Nerodia rhombifer	LC		2				
Oligodon purpurascens	LC		3				
Oreocryptophis porphyraceus coxi				10			
Oreocryptophis porphyraceus laticinctus				1			
Oreocryptophis porphyraceus pulcher			1	1			2
Orthriophis moellendorfi				1			
Orthriophis taeniurus friesei				1			
Orthriophis teaniurus ridleyi			1				
Orthriophis teaniurus teaniurus			6				
Pantherophis bairdi	LC						6
Pantherophis guttatus	LC			144		180	2	15
Philothamnus semivariegatus							5	
Pituophis catenifer sayi	LC			6				
Spilotes pullatus				2				2
Thamnophis cyrtopsis	LC			1				
Thamnophis elegans terrestris	LC					2		
Thamnophis eques obscurus	LC			1				
Thamnophis proximus	LC			2				
Thamnophis sauritus	LC					8		
Thamnophis sirtalis infernalis	LC			1				8
Thamnophis sirtalis pickeringii	LC							3
Zamenis situla	LC			3				
CORDYLIDAE								
Platysaurus broadleyi	LC							1
Platysaurus imperator	VU						10	
Platysaurus intermedius	LC						10	
Platysaurus maculatus							10	
Platysaurus torquatus	LC						25	
Smaug mossambicus		II				2		
CORYTOPHANIDAE								
Basiliscus plumifrons	LC					2		
CROCODYLIDAE								
Crocodylus niloticus	LR/lc	I/II				1		1
CROTAPHYTIDAE								
Crotaphytus collaris	LC			14		10		
DACTYLOIDAE								
Anolis bartschi								3
Anolis carolinensis	LC					23		
Anolis equestris								1
Anolis marmoratus								3
Anolis marmoratus alliaceus								2
Anolis marmoratus girafus						2		
Anolis pogus	VU					1		
Anolis roquet summus				2		5		1
Anolis sabanus						1		
Anolis sagrei						30		
DIPLODACTYLIDAE								
Correlophus ciliatus	VU			75		92		20
Eurydactylodes agricolae	NT							2
Mniarogekko chahoua	VU			4		2		1
Oedura marmorata	LC			1				
Rhacodactylus auriculatus	LC			9		3		3
Rhacodactylus leachianus	LC			4				
Strophurus intermedius	LC							1
Strophurus spinigerus	LC							4
Strophurus taenicauda	LC							4
DIPSADIDAE								
Heterodon nasicus	LC			24		8		19
Philodryas baroni	LC			19				
ELAPIDAE								
Aspidelaps lubricus								6
Aspidelaps lubricus cowlesi				2		2		2
Aspidelaps scutatus fulafula							1	

Dendroaspis viridis	LC						1
Naja arabica	LC		2				
Naja atra	VU	II	2	1			
Naja kaouthia	LC	II	2	2			
Naja naja		II	15				
Naja nivea			4				
EMYDIDAE							
Clemmys guttata	EN	II	3				2
Emydidae spp.				2			
Emys orbicularis	LR/nt						2
Emys orbicularis galloitalica	LR/nt						2
Graptemys pseudogeographica	LC	III		35			1
Pseudemys concinna hieroglyphica	LC			21			
Terrapene carolina	VU	II					14
Terrapene carolina truinguis	VU	II					4
Trachemys scripta	LC		1	3			
Trachemys scripta elegans	LC			9			
Trachemys scripta scripta	LC			7			
Trachemys scripta troostii	LC			4			
Trachemys spp.				12			
EUBLEPHARIDAE							
Aeluroscalabotes felinus					3		3
Coleonyx brevis	LC						2
Coleonyx mitratus	LC			3	1		
Coleonyx variegatus	LC						1
Eublepharis angramainyu	DD		11				
Eublepharis fuscus	LC		3				
Eublepharis hardwickii	LC		28				
Eublepharis macularius			12	108			1
Hemitheconyx caudicinctus	LC		8	20			2
GEKKONIDAE							
Blaesodactylus sakalava	LC		2				
Gekko auratus				6			
Gekko gecko				4			2
Hemidactylus frenatus	LC			13			
Heteronotia binoei	LC		5				
Homopholis wahlbergi					10		
Lygodactylus capensis					25		
Lygodactylus conraui				2			7
Lygodactylus kimhowelli				1			
Lygodactylus williamsi	CR	I	8	11			10
Pachydactylus vansoni	LC				1		
Paroedura picta	LC		2				
Paroedura stumpffi	LC		2				
Phelsuma dorsivittata	NT	II					8
Phelsuma grandis	LC	II	2	11			27
Phelsuma klemmeri	EN	II					10
Phelsuma laticauda	LC	II		9			
Phelsuma lineata	LC	II					4
Phelsuma pasteuri	NT	II					5
Phelsuma quadriocellata	LC	II		2			4
Phelsuma standingi	VU	II	2				
Stenodactylus petrii				4			

Uroplatus phantasticus	LC	II	8				
Uroplatus sikorae	LC	II	1				
GEOEMYDIDAE							
Cuora bourreti	CR	II					3
Cuora galbinifrons	CR	II					3
Geoemyda spengleri	EN						2
Mauremys reevesii	EN	III		11			
Rhinoclemmys pulcherrima manni				1	1		
GERRHOSAURIDAE							
Gerrhosaurus flavigularis					5		
Gerrhosaurus major bottegoi				1			
Zonosaurus ornatus	LC			1			
Zonosaurus quadrilineatus	VU			1			
HELODERMATIDAE							
Heloderma horridum exasperatum	LC	II					1
Heloderma horridum horridum	LC	II	19				
IGUANIDAE							
Ctenosaura clarki	VU						1
Ctenosaura pectinata			1				
Ctenosaura similis	LC				1		
Iguana iguana	LC		2	18			3
Sauromalus ater	LC		6	1			2
KINOSTERNIDAE							
Claudius angustatus	LR/nt						3
Sternotherus carinatus	LC			14			
Sternotherus odoratus	LC			38			
Sternotherus spp.				6			
LACERTIDAE							
Darevskia unisexualis	NT						16
Gastropholis prasina	NT			3			2
Lacerta billineata							3
Lacerta pamphylica	LC						2
Lacerta trilineata	LC			2			2
Podarcis siculus campestris	LC			6			2
Podarcis siculus klemmeri	LC			1			
Takydromus dorsalis	EN			9			
Takydromus sexlineatus				1			
Timon lepidus	NT			14			7
Timon pater	LC						2
LAMPROHIIDAE							
Atractapsis spp					1		
Atractaspis irregularis	LC				1		
Boaedon capensis			7				
Boaedon fulignosus				2			
Boaedon lineatus				2			
Lycophidion semiannule					1		
Psammophis notostictus					5		
Xenocalamus bicolor					3		
OPLURIDAE							
Chalarodon madagascariensis	LC				1		
PELOMEDUSIDAE							
Pelomedusa subrufa				11			
Pelusios castaneus				2			

PHRYNOSOMATIDAE						
Sceloporus malachiticus	LC			5		
Uta stansburiana	LC			2		
PHYLLODACTYLIDAE						
Ptyodactylus hasselquistii				6		
Tarentola chazaliae	VU		3			
PLATYSTERNIDAE						
Platysternon megacephalum	EN	I				2
PYTHONIDAE						
Antaresia childreni	LC	II	4	5		9
Antaresia maculosa	LC	II	32			35
Antaresia perthensis	LC	II				2
Antaresia stimsoni orientalis	LC	II	8	2		4
Aspidites ramsayi	LC	II	1			
Malayopython reticulatus		II	49	25		22
Morelia bredli	LC	II	3	1		
Morelia carinata		II	2			
Morelia spilota	LC	II	9	10		
Morelia spilota cheynei	LC	II	1	7		
Morelia spilota harrisoni	LC	II	5			
Morelia spilota mcdowelii	LC	II	2			
Morelia spilota variegata	LC	II	2	1		
Morelia viridis	LC	II	3	4		2
Python anchietae	LC	II	2	2		
Python bivittatus	VU	II	68	8		4
Python bivittatus progschai	VU	II	1			
Python breitensteini	LC	II		1		
Python brongersmai	LC	II	3	1		2
Python curtus	LC	II		1		
Python molurus		II	18	80		
Python molurus pimbura		II	11			
Python regius	LC	II	681	356		32
Python sabae		II		2		
Simalia amethistina		II	10	1		5
SCINCIDAE						
Corucia zebrata		II				3
Eumeces algeriensis	LC			3		
Eutropis macularia				1		
Lamprolepis smaragdina						3
Lepidothyris fernandi				2		
Microacontias lineatus					25	
Scincus scincus			1			
Tiliqua gigas	LC		3	2		8
Tiliqua rugosa rugosa	LC					1
Tiliqua scincoides	LC			1		
Tiliqua scincoides chimearea	LC					4
Trachylepis aureopunctata	LC			1		3
Trachylepis quinquetaeniata				1		
Tribolonotus novaeguineae	LC		2			
SHINISAURIDAE						
Shinisaurus crocodilurus	EN	I	5			2
SPHAERODACTYLIDAE						
Gonatodes albogularis	LC			1		
Gonatodes albogularis fuscus	LC					6
Gonatodes annularis					2	
Gonatodes daudini	CR					2
Teratoscincus przewalskii	LC					2
TEIIDAE						
Cnemidophorus deppei					1	
Salvator merianae	LC	II	1			1
Salvator rufesence			4			
TESTUDINIDAE						
Astrochelys radiata	CR	I		2		
Centrochelys sulcata	VU	II		19		1
Chelonoidis carbonarius		II		6		
Geochelone elegans	VU	II		3		1
Indotestudo forstenii	EN	II				1
Malacochersus tornieri	VU	II				4
Stigmochelys pardalis	LC	II		3		
Stigmochelys pardalis babcocki	LC	II		4		
Testudo graeca	VU	II		2		
Testudo graeca terrestris	VU	II				4
Testudo hermanni	NT	II		12		
Testudo hermanni boettgeri	NT	II	5	12		6
Testudo hermanni hercegovinensis	NT	II		1		1
Testudo hermanni hermanni	NT	II	1	11		
Testudo horsfieldii	VU	II		28		6
Testudo marginata	LC	II	4	4		25
TRIONYCHIDAE						
Apalone ferox	LC	III		7		1
Apalone spinifera	LC	III				1
TROPIDURIDAE						
Leiocephalus personatus	LC			2		
TYPHLOPIDAE						
Afrotyphlops schlegelii					1	
Typhlops spp					10	
VARANIDAE						
Varanus acanthurus	LC	II	5	3		
Varanus albigularis		II	2			3
Varanus exanthematicus	LC	II	1	12		4
Varanus gilleni	LC	II		1		3
Varanus indicus	LC	II				1
Varanus jobiensis	LC	II		1		
Varanus macraei	EN	II				1
Varanus niloticus		II		1		
Varanus panoptes horni	LC	II		1		
Varanus pilbarensis	LC	II		2		
Varanus salvator	LC	II		1		
Varanus salvator macromaculatus	LC	II		2		
VIPERIDAE						
Agkistrodon bilineatus	NT					1
Bitis arietans			9			
Bitis rhinoceros	LC		2			
Bothrops barnetti			5			
Causus maculatus					1	
Cerastes cerastes			4			2

Crotalus mitchellii pyrrhus	LC			7			11
Crotalus ravus	LC		2				
Daboia palaestinae	LC		2				
Daboia russelii		III	7				
Gloydius blomhoffi siniticus			1				
Ovophis monticola	LC				2		
Ovophis okinavensis			1				
Trimeresurus albolabris	LC		2				
Trimeresurus purpureomaculatus			4				1
Trimeresurus wiroti	LC				1		
Tropidolaemus wagleri	LC				2		
Vipera ammodytes	LC		1				
Vipera aspis keri	LC		2				
Vipera aspis zinnikeri	LC		2				
Vipera berus			3				
Vipera berus berus			3				
Vipera latastei	VU		4				
Vipera nikolskii			4				
Vipera renardi			4				
Vipera ursinii	VU	I	3				
Vipera ursinii moldavica	VU	I	3				
OTHER							
Hybrids			2	2			

ANNEX V – SEIZED LIVE REPTILES IN THE NETHERLANDS 2004-2017

Taxon	Total seized	IUCN status	CITES listing
REPTILES UNIDENTIFIED			
Unknown	461	-	-
CROCODILIA			
Alligatoridae			
Alligator sinensis	22	CR	I
Caiman crocodilus	816	LR/lc	II
Unknown	6	-	-
Crocodylidae			
Osteolaemus tetraspis	2	-	I
LIZARDS			
Agamidae			
Physignathus cocincinus	4	-	-
Pogona vitticeps	20	LC	-
Saara hardwickii	18	-	II
Anguidae			
Abronia lythrochila	20	LC	II
Abronia mixteca	27	VU	II
Mesaspis viridiflava	8	LC	-
Chamaeleonidae			
Furcifer pardalis	3	LC	II
Unknown	5		
Cordylidae			
Ouroborus cataphractus	8	LC	II
Smaug giganteus	19	VU	II
Cordylus tropidosternum	5	-	II
Corytophanidae			
Corytophanes hernandezii	13	-	-
Crotaphytidae			
Crotaphytus collaris	42	LC	-
Eublepharidae			
Eublepharis macularius	6	-	-
Gekkonidae			
Hemidactylus frenatus	2	LC	
Pachydactylus spp	5	-	-
Phelsuma madagascariensis	1	LC	II
Helodermatidae			
Heloderma suspectum	2	NT	II
Iguanidae			
Ctenosaura pectinata	16	-	-
Iguana iguana	349	LC	II
Sauromalus ater	3	LC	-
Sauromalus varius	13	-	I
Sceloporus spp.	18	-	-
Unknown	3		
Lacertidae			
Lacerta agilis	1	LC	-
Nucras ornata	2	-	-
Podarcis muralis	3	LC	-
Podarcis spp.	4	-	-
Zootoca vivipara	1	LC	-
Leiosauridae			
Enyalius brasiliensis	2	-	-
Enyalius iheringii	2	-	-
Enyalius perditus	7	-	-
Phrynosomatidae			
Phrynosoma spp.	75	-	-
Scincidae			
Tribolonotus gracilis	2	LC	-
Teiidae			
Salvator merianae	3	LC	II
Salvator rufescens	4	-	II
Salvator spp.	1	-	II
Varanidae			
Varanus exanthematicus	5	LC	II
Varanus niloticus	2	-	II
Varanus salvator	1	LC	II
SNAKES			
Boidae			
Acrantophis dumerili	51	LC	I
Acrantophis madagascariensis	8	LC	I
Boa constrictor	26	-	II
Corallus caninus	3	LC	II
Epicrates cenchria	5	-	II

Gongylophis colubrinus	1	-	II
Eryx jaculus	1	-	II
Eunectes notaeus	1	-	II
Colubridae			
Lampropeltis spp.	6	-	-
Leptodeira splendida	1	LC	-
Orthriophis taeniurus	1	-	-
Unknown	12	-	-
Elapidae			
Aspidelaps lubricus	2	-	-
Dendroaspis polylepis	2	LC	-
Dendroaspis viridis	1	LC	-
Naja atra	1	VU	II
Naja kaouthia	4	LC	II
Naja siamensis	2	VU	II
Pythonidae			
Malayopython reticulatus	4	LC	II
Morelia spilota	4	LC	II
Morelia viridis	8	LC	II
Python molurus	11	-	II
Python regius	12	LC	II
Unknown	2		II
Viperidae			
Atheris squamigera	1	-	-
Azemiops feae	1	LC	-
Bitis atropos	2	LC	-
Bothrops insularis	2	CR	-
Bothrops jararaca	24	-	-
Crotalus cerastes	1	LC	-
Vipera ammodytes	6	LC	-
Vipera ursinii	2	VU	I
Unknown	1		
TURTLES AND TORTOISES			
Carettochelyidae			
Carettochelys insculpta	7	EN	II
Chelidae			
Phrynops hilarii	2	-	-
Platemys platycephala	4	-	-
Unknown	1	-	-
Chelydridae			
Chelydra serpentina	4	LC	III
Emydidae			
Chrysemys picta dorsalis	5	LC	-
Clemmys guttata	0	EN	II
Emys orbicularis	65	NT	-
Graptemys pseudogeographica	4	LC	III
Homopus femoralis	1	LC	II
Malaclemys terrapin	1	NT	II
Sternotherus carinatus	2	LC	-
Terrapene carolina	20	VU	II
Terrapene nelsoni	27	DD	II
Trachemys scripta	6	LC	-
Trachemys scripta elegans	77	LC	-
Trachemys scripta troostii	15	LC	-
Trachemys spp.	1	-	-
Unknown	55	-	-
Geomydidae			
Cuora amboinensis	4	VU	II
Cuora flavomarginata	3	EN	II
Heosemys grandis	5	VU	II
Mauremys spp.	37	-	-
Mauremys sinensis	1	EN	III
Terrapene ornata	0	NT	II
Kinosternidae			
Kinosternon cruentatum	4	-	-
Kinosternon spp.	0	-	-
Sternotherus minor	2	LC	-
Sternotherus odoratus	2	LC	-
Testudinidae			
Aldabrachelys gigantea	2	-	II
Astrochelys radiata	12	CR	I
Centrochelys sulcata	38	VU	II
Chelonoidis carbonarius	8	-	II
Cycloderma spp.	1	-	-
Geochelone elegans	10	VU	II
Geochelone platynota	1	CR	I
Gopherus agassizii	1	VU	II
Indotestudo elongata	3	EN	II
Kinixys homeana	1	VU	II
Malacochersus tornieri	1	VU	II
Manouria emys	2	EN	II
Psammobates tentorius	1	LC	II
Pyxis arachnoides	4	CR	I
Stigmochelys pardalis	197	LC	II
Testudo graeca	115	VU	II
Testudo hermanni	46	NT	II
Testudo horsfieldii	17	VU	II
Testudo kleinmanni	1	CR	I
Testudo marginata	13	LC	II
Unknown	4	-	-

ANNEX VI - COUNTRY CODES

AD	ANDORRA
AE	UNITED ARAB EMIRATES
AF	AFGHANISTAN
AG	ANTIGUA AND BARBUDA
AI	ANGUILLA
AL	ALBANIA
AM	ARMENIA
AN	NETHERLANDS ANTILLES
AO	ANGOLA
AQ	ANTARCTICA
AR	ARGENTINA
AS	AMERICAN SAMOA
AT	AUSTRIA
AU	AUSTRALIA
AW	ARUBA
AX	ÅLAND ISLANDS
AZ	AZERBAIJAN
BA	BOSNIA AND HERZEGOVINA
BB	BARBADOS
BD	BANGLADESH
BE	BELGIUM
BF	BURKINA FASO
BG	BULGARIA
BH	BAHRAIN
BI	BURUNDI
BJ	BENIN
BM	BERMUDA
BN	BRUNEI DARUSSALAM
BO	BOLIVIA (PLURINATIONAL STATE OF)
BR	BRAZIL
BS	BAHAMAS
BT	BHUTAN
BV	BOUVET ISLAND
BW	BOTSWANA
BY	BELARUS
BZ	BELIZE
CA	CANADA
CC	COCOS (KEELING) ISLANDS
CD	CONGO, DEMOCRATIC REPUBLIC OF THE
CF	CENTRAL AFRICAN REPUBLIC
CG	CONGO
CH	SWITZERLAND
CI	CÔTE D'IVOIRE
CK	COOK ISLANDS
CL	CHILE
CM	CAMEROON
CN	CHINA
CO	COLOMBIA
CR	COSTA RICA
CS	FORMER SERBIA AND MONTENEGRO
CU	CUBA
CV	CAPE VERDE
CX	CHRISTMAS ISLAND
CY	CYPRUS
CZ	CZECH REPUBLIC
DD	FORMER EAST GERMANY
DE	GERMANY
DJ	DJIBOUTI
DK	DENMARK
DM	DOMINICA
DO	DOMINICAN REPUBLIC
DZ	ALGERIA
EC	ECUADOR
EE	ESTONIA
EG	EGYPT
EH	WESTERN SAHARA
ER	ERITREA
ES	SPAIN
ET	ETHIOPIA
FI	FINLAND
FJ	FIJI
FK	FALKLAND ISLANDS (MALVINAS)
FM	MICRONESIA, FEDERATED STATES OF
FO	FAROE ISLANDS
FR	FRANCE
GA	GABON
GB	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND
GD	GRENADA
GE	GEORGIA
GF	FRENCH GUIANA
GG	GUERNSEY
GH	GHANA
GI	GIBRALTAR
GL	GREENLAND
GM	GAMBIA
GN	GUINEA
GP	GUADELOUPE
GQ	EQUATORIAL GUINEA
GR	GREECE
GS	SOUTH GEORGIA AND THE SOUTH SANDWICH ISLANDS
GT	GUATEMALA
GU	GUAM
GW	GUINEA-BISSAU
GY	GUYANA
HK	HONG KONG
HM	HEARD AND MCDONALD ISLANDS
HN	HONDURAS
HR	CROATIA
HT	HAITI
HU	HUNGARY
ID	INDONESIA
IE	IRELAND
IL	ISRAEL
IM	ISLE OF MAN
IN	INDIA
IO	BRITISH INDIAN OCEAN TERRITORY
IQ	IRAQ
IR	IRAN, ISLAMIC REPUBLIC OF
IS	ICELAND
IT	ITALY
JE	JERSEY
JM	JAMAICA
JO	JORDAN
JP	JAPAN
KE	KENYA
KG	KYRGYZSTAN
KH	CAMBODIA
KI	KIRIBATI
KM	COMOROS
KN	SAINT KITTS AND NEVIS
KP	KOREA, DEMOCRATIC PEOPLE'S REPUBLIC OF
KR	KOREA, REPUBLIC OF
KW	KUWAIT
KY	CAYMAN ISLANDS
KZ	KAZAKHSTAN
LA	LAO PEOPLE'S DEMOCRATIC REPUBLIC
LB	LEBANON
LC	SAINT LUCIA
LI	LIECHTENSTEIN
LK	SRI LANKA
LR	LIBERIA
LS	LESOTHO
LT	LITHUANIA
LU	LUXEMBOURG
LV	LATVIA
LY	LIBYA
MA	MOROCCO
MC	MONACO
MD	REPUBLIC OF MOLDOVA
ME	MONTENEGRO
MG	MADAGASCAR
MH	MARSHALL ISLANDS
MK	MACEDONIA
ML	MALI
MM	MYANMAR
MN	MONGOLIA
MO	MACAU
MP	NORTHERN MARIANA ISLANDS
MQ	MARTINIQUE
MR	MAURITANIA
MS	MONTSERRAT
MT	MALTA
MU	MAURITIUS
MV	MALDIVES
MW	MALAWI
MX	MEXICO
MY	MALAYSIA
MZ	MOZAMBIQUE
NA	NAMIBIA
NC	NEW CALEDONIA
NE	NIGER
NF	NORFOLK ISLAND
NG	NIGERIA
NI	NICARAGUA
NL	NETHERLANDS
NO	NORWAY
NP	NEPAL
NR	NAURU
NU	NIUE
NZ	NEW ZEALAND
OM	OMAN
PA P	ANAMA
PC	FORMER PACIFIC TRUST TERRITORY
PE	PERU
PF	FRENCH POLYNESIA
PG	PAPUA NEW GUINEA
PH	PHILIPPINES
PK	PAKISTAN
PL	POLAND
PM	SAINT PIERRE AND MIQUELON
PN	PITCAIRN
PR	PUERTO RICO
PS	OCCUPIED PALESTINIAN TERRITORY
PT	PORTUGAL
PW	PALAU
PY	PARAGUAY
QA	QATAR
RE	RÉUNION
RO	ROMANIA
RS	SERBIA
RU	RUSSIAN FEDERATION
RW	RWANDA
SA	SAUDI ARABIA
SB	SOLOMON ISLANDS
SC	SEYCHELLES
SD	SUDAN
SE	SWEDEN
SG	SINGAPORE
SH	SAINT HELENA AND DEPENDENCIES
SI	SLOVENIA
SJ	SVALBARD AND JAN MAYEN ISLANDS
SK	SLOVAKIA
SL	SIERRA LEONE
SM	SAN MARINO
SN	SENEGAL
SO	SOMALIA
SR	SURINAME
ST	SAO TOME AND PRINCIPE
SU	FORMER SOVIET UNION
SV	EL SALVADOR
SY	SYRIAN ARAB REPUBLIC
SZ	SWAZILAND
TC	TURKS AND CAICOS ISLANDS
TD	CHAD
TF	FRENCH SOUTHERN TERRITORIES
TG	TOGO
TH	THAILAND
TJ	TAJIKISTAN
TK	TOKELAU
TL	TIMOR-LESTE
TM	TURKMENISTAN
TN	TUNISIA
TO	TONGA
TR	TURKEY
TT	TRINIDAD AND TOBAGO
TV	TUVALU
TW	TAIWAN PROVINCE OF CHINA
TZ T	ANZANIA, UNITED REPUBLIC OF
UA	UKRAINE
UG	UGANDA
UM	UNITED STATES MINOR OUTLYING ISLANDS
US	UNITED STATES OF AMERICA
UY	URUGUAY
UZ	UZBEKISTAN
VA	HOLY SEE
VC	SAINT VINCENT AND THE GRENADINES
VE	VENEZUELA, BOLIVARIAN REPUBLIC OF
VG	VIRGIN ISLANDS (BRITISH)
VI	VIRGIN ISLANDS (U.S.)
VN	VIET NAM
VU	VANUATU
WF	WALLIS AND FUTUNA ISLANDS
WS	SAMOA
XA1	FRENCH ANTILLES
XC1	CARIBBEAN
XE1	EUROPE
XF1	AFRICA
XM1	SOUTH AMERICA
XS1	ASIA
XV1	VARIOUS
XX1	UNKNOWN
YE	YEMEN
YT	MAYOTTE
YU	FORMER YUGOSLAVIA
ZA	SOUTH AFRICA
ZC1	FORMER CZECHOSLOVAKIA
ZM	ZAMBIA
ZW	ZIMBABWE
ZZ1	INTRODUCTION FROM THE SEA

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