

Review of *Python regius* from Togo (source R)

(Version edited for public release)

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Contents

- Introduction and summary 4
 - Python regius* 5
- References 12
- Appendix 13

4 Introduction and summary

This report reviews the conservation status and trade levels of *Python regius* from Togo, with particular focus on trade in ranched (source R) specimens, to inform discussions by the Scientific Review Group on the sustainability of trade.

CITES Resolution Conf. 12.3 (Rev. CoP16) recommends that source code F indicates "*animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof*" and that source code R indicates "*specimens of animals reared in a controlled environment, taken as eggs or juveniles from the wild, where they would otherwise have had a very low probability of surviving to adulthood*".

Permits for both sources F and R require a non-detriment finding and there are a number of European Union decisions at the species/country level for these sources. The SRG is currently assessing these decisions. Based on information presented at the 66th meeting of the SRG, the Chair invited Member States to provide comments on the suggested treatment of the currently valid decisions by 10th of January 2014. The SRG subsequently decided that a number of opinions may warrant more in-depth review, with particular focus on trade in sources F and R, and the following species/country combinations were selected:

- *Python regius* from Togo
- *Stigmochelys pardalis* from Mozambique and Zambia
- *Chelonoidis carbonaria* from Suriname

This report presents a review of *P. regius* and any information on ranching in Togo.

REPTILIA: PYTHONIDAE

5

Python regius II/B

SYNONYMS:	<i>Boa regia</i> , <i>Cenchrus regia</i> , <i>Enygrus regius</i> , <i>Hortulia regia</i> , <i>Python bellii</i>
COMMON NAMES:	Ball Python/Royal Python (English), Python royal (French), Pitón real (Spanish)
RANGE STATES:	Benin, Burkina Faso, Cameroon, Central African Republic, Chad, Congo, Côte d'Ivoire, Democratic Republic of the Congo, Equatorial Guinea, Gabon, Gambia, Ghana, Guinea, Guinea Bissau, Kenya, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone, South Sudan, Sudan, Togo, Uganda
UNDER REVIEW:	Togo
EU DECISIONS:	<p>Current positive opinion for ranched specimens from Benin first formed on 20/12/2005 and last confirmed on 03/12/2010. Previous Article 4.6(b) import suspension for ranched specimens first applied on 22/12/1997 and removed on 21/11/1998. Current Article 4.6(b) import suspension for wild specimens first applied on 03/09/2008 and last confirmed on 11/07/2013. Previous negative opinion for wild specimens first formed on 20/12/2005.</p> <p>Current positive opinion for Cameroon formed on 25/10/2005.</p> <p>Current no opinion for wild specimens from Central African Republic, the Congo, Equatorial Guinea, Gabon and Liberia formed on 22/02/2000. Previous Article 4.6(b) import suspension for wild specimens from these countries first applied on 22/12/1997 and removed on 24/09/2000.</p> <p>Current negative opinion for ranched specimens from Ghana formed on 06/12/2013 and confirmed on 27/02/2014. Previous positive opinion for ranched specimens formed on 02/09/1997 and confirmed on 27/03/2007; replaced by a no opinion on 14/09/2007; positive opinion formed again on 29/02/2008 and confirmed on 15/09/2008. Current negative opinion for wild specimens formed on 06/12/2013. Previous positive opinion for wild specimens formed on 27/03/2007; replaced by a no opinion on 14/09/2007; positive opinion formed again on 12/03/2009.</p> <p>Current Article 4.6(b) suspension for wild specimens from Guinea first applied on 10/05/2006 and last confirmed on 11/07/2013. Previous negative opinion for wild specimens formed on 20/03/2002.</p> <p>Current positive opinion for ranched specimens from Togo first formed on 21/12/2005 and last confirmed on 15/09/2008. Previous Article 4.6(b) import restriction for captive-bred and ranched specimens first applied on 22/12/1997 and removed on 21/11/1998. Current positive opinion for wild specimens first formed on 12/06/2006 and last confirmed on 15/09/2008. Previous negative opinion for wild specimens formed on 20/12/2005.</p>
IUCN:	Least Concern

Trade patterns

Togo: Due to its relatively small size compared to Asian Pythons, *P. regius* was reported to be mainly exported for international pet trade (Natusch and Lyons, 2014). Bartlett and Bartlett (2000) described it as “one of the least expensive and most readily available [...] python species”.

Togo published CITES export quotas for wild-sourced and ranched *P. regius* specimens every year 2003-2012 (Table 1). The quota of 1500 wild-sourced specimens appear to have been exceeded in 2003-2005 according to data reported by the importers only, and in 2008 and 2011 according to data reported by Togo only (Table 1). The quotas for ranched specimens appear to have been exceeded in 2003 and 2005-2007 according to data reported by the importers and in 2004 according to data reported by Togo (Table 1). Togo’s CITES annual report for 2006 has not yet been received. Togo specified that its 2011 annual report was compiled on the basis of permits issued rather than actual trade; the basis for previous reports was not specified. A permit analysis showed that of the export permits reported by importers in 2005, over a third

were not reported by Togo in either its 2004 or 2005 annual report.

Direct exports of *Python regius* from Togo to the EU-28 2003-2012 principally comprised of high numbers of live, ranched individuals exported for commercial purposes (Table 2). The main EU-28 importers were France, Germany and Italy. Trade data by EU Member State is available here: <https://db.tt/4S7755QS>.

Direct trade to the rest of the world 2003-2012 comprised mainly of very high numbers of live, ranched individuals exported for commercial purposes (Table 2). The main importer was the United States of America.

Indirect exports of *P. regius* to the EU-28 originating in Togo 2003-2012 comprised mainly of live, ranched specimens traded for commercial purposes (Table 3). The only reported re-exports of source F specimens were 30 live snakes imported by France in 2009 (Table 3). The main re-exporting countries were the United States of America and Ghana.

Table 1: CITES export quotas for ranched *Python regius* from Togo and global direct exports of live specimens and leather products from Togo, as reported by the countries of import and export, 2003-2014. (At the time of data extraction, Togo’s annual reports for 2006 and 2012 had not yet been received; trade data for 2013 and 2014 are not yet available.)

Reported by		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Quota (W)		1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Quota (R)		52500	52500	52500	52500	62500	62500	62500	62500	62500	62500	62500	62500
W	Importer	3165	2453	2143	460	947	220	175	600	230	330		
	Exporter		710	415		305	5310	1		1750			
R	Importer	61839	44983	67603	72287	65954	54804	33029	35764	54486	60656		
	Exporter	48705	52674	49422		38673	25217	39497	13964	28475			

Source: CITES Trade Database, UNEP-WCMC, Cambridge, UK, downloaded on 16/04/2014.

Table 2: Direct exports of *Python regius* from Togo to the EU-28 (EU) and the rest of the world (RoW), 2003-2012. (At the time of data extraction, Togo's annual reports for 2006 and 2012 had not yet been received.)

Importer	Term	Source	Purpose	Values	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Total			
EU	leather products (small)	R	P	Importer														
				Exporter								2500				2500		
	live	R	P	Importer				61	15							76		
				Exporter														
				T	Importer	17513	8978	13179	21072	23512	22147	15617	14766	18632	11980	167396		
					Exporter	18530	18034	25267		24161	16465	14570	2400	20535		139962		
				W	T	Importer	200		20			20	75	250				565
						Exporter		25	50		10	3460				1000		4545
	RoW	leather products (small)	W	P	Importer													
					Exporter								1				1	
live		C	T	Importer			100								100			
				Exporter														
				R	Importer									1		1		
					Exporter													
				T	Importer	44326	36005	54424	51154	42427	32657	17412	20998	35853	48676	383932		
					Exporter	30175	34640	24155		14512	8752	22427	11564	7940		154165		
U		T	Importer			410									410			
			Exporter															
				W	Importer					28						28		
					Exporter													
				T	Importer	2965	2453	2123	460	919	200	100	350	230	330	10130		
					Exporter		685	365		295	1850				750	3945		

Source: CITES Trade Database, UNEP-WCMC, Cambridge, UK, downloaded on 16/04/2014.

8 Table 3: Indirect exports of *Python regius* from Togo to the EU-28 (EU), 2003-2012.

Importer	Term	Source	Purpose	Reported by	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Total
EU	live	C	T	Importer					10						10
				Exporter											
		F	T	Importer											
				Exporter							30				
		R	P	Importer				8	1			1			10
				Exporter	1										
			Q	Importer						4	4		1		9
				Exporter							12			6	
			T	Importer	275	305	810	771	794	609	170	212	252	26	4224
				Exporter	197	302	919	743	630	560	230	702	252	26	4561
		W	P	Importer											
				Exporter							1				
		W	T	Importer	12		10		21	283					326
				Exporter			22		21	220					

Source: CITES Trade Database, UNEP-WCMC, Cambridge, UK, downloaded on 16/04/2014.

Conservation status

Python regius is a relatively small, non-venomous African snake (Aubret *et al.*, 2005b; Spawls *et al.*, 2002). Females reach maturity at approximately 27–31 months, and breed between mid-September and mid-November (Graf, 2011), annually or every two years, depending on the availability of food (Harwood, 2003). Females were observed to coil around their nest for the gestation period of approximately two months, preventing the desiccation of the eggs (Aubret *et al.*, 2005b, 2005a). Aubret *et al.* (2003) captured 138 gravid females from the wild in Togo, reporting clutch sizes of 3–12 eggs, with the majority (95%) of clutches containing more than five eggs. The hatching success rate was 96.6% (Aubret *et al.*, 2003). In captivity, a lifespan of over 50 years has been reported (Bartlett *et al.*, 2001), but the average lifespan in the wild was estimated to be ten years (Graf, 2011).

P. regius was reported to inhabit a variety of different habitats (Jenkins, 1998; Auliya and Schmitz, 2010; Harris, 2002), including savannah, grasslands and open forests (O’Shea, 2011; Graf, 2011; Auliya and Schmitz, 2010; Spawls *et al.*, 2002). It was often found to be abundant on altered habitats, such as agricultural land, where rodent prey populations may be high (Jenkins, 1998; Aubret *et al.*, 2003; Harris, 2002). In Ghana, Gorzula *et al.* (1997) considered the conversion of forest to farmland to benefit the species.

The species has a wide distribution, from Senegal in West Africa to Uganda in the east and into the Republic of Sudan (O’Shea, 2011; Spawls *et al.*, 2002). Graf (2011) considered *P. regius* not to be threatened due to its “large range and high, stable population numbers”. However, Lawson and Klemens (2001) considered the information about the status of *P. regius* to be insufficient, and recommended additional monitoring.

P. regius was categorised as Least Concern in the IUCN Red List, with the justification that the “suspected population decline is not

large enough to warrant threatened status”, although it was noted that “the trade of this species should still be carefully monitored and the numbers exploited should be reduced” (Auliya and Schmitz, 2010). The population trend was considered to be unknown as no population data were available for the species (Auliya and Schmitz, 2010).

Auliya and Schmitz (2010) and O’Shea (2011) considered the levels of harvest for international pet trade to be the main threat to the species. Being relatively small and easy to handle, *P. regius* was reported to be in high demand for the pet trade (Graf, 2011; O’Shea, 2011; Bartlett and Wagner, 2009; Harwood, 2003). It was noted that adult wild-caught *P. regius* adapted poorly to captivity, typically refusing to eat (Bartlett, 2000; Natusch and Lyons, 2014) and to often arrive in poor condition, with many dying later (O’Shea, 2011). O’Shea (2011) noted that increasing demand for selectively-bred colour morphs had led to a decline in the market for wild-caught, normal-patterned specimens.

P. regius was also reported to be hunted widely for its meat and leather, and killed out of fear (O’Shea, 2011; Auliya and Schmitz, 2010; Spawls *et al.*, 2002), apart from areas where it was partially protected due to religious reasons (Buffrenil, 1995; Gorzula *et al.*, 1997; Jenkins, 1998; Harris, 2002; Ineich, 2006).

Togo

Jenkins (1998) reported *P. regius* to be widespread throughout the higher rainfall areas in southern Togo. The country, and the neighbouring Ghana and Benin were considered to be the core range of the species (Aubret *et al.* 2005b, 2005a).

Harris (2002) compared the density of *P. regius* between hunted and non-hunted areas in agricultural and “bush vegetation” sites in Togo, recording the highest densities (1.665+0.427 ind./ha) in non-hunted agricultural sites and the lowest densities

(0.306+0.116 ind./ha) in hunted agricultural sites. The differences between hunted and non-hunted “bush vegetation” were not significant (Harris, 2002).

Traditional beliefs were reported to prevent the hunting and capturing of the species particularly in certain southern areas (Aubret *et al.*, 2005a), but it was reportedly captured for meat in the north, and sold in local markets (Harris, 2002).

Several visits have been conducted to the Togolese facilities where *P. regius* is kept (e.g. Buffrenil, 1995; Jenkins, 1998; Harris, 2002; Ineich, 2006); however, no more recent reports were identified. Based on the visits conducted 1999-2000 to the main four Togolese reptile farms (Fexas, Mare, Pajar and Toganim) around Lomé, Harris (2002) noted that “very little” captive breeding appeared to take place in Togo. However, he noted that *P. regius* had been “regularly produced to F₂ generations and beyond”, although there was a lack of reliable records of captive-bred parent stock. Harwood (2003) visited these four facilities again in 2002 and considered the system in place to represent ranching, although small numbers of snakes were also being retained in captivity. Ineich (2006) confirmed that *P. regius* was mainly produced through ranching in Togo. He also mentioned three further facilities (Reptogo, Reptiland and Arzootic Garden) (Ineich, 2006).

The harvesting of *P. regius* for ranching was reported to take place mainly in agricultural areas (Roe *et al.*, 2002) in the very south of Togo (Harris, 2002). Harris (2002) reported harvesting in several areas, including Tsevie, Davié, Gapé, Assahoun, Tabligbo, Vogon and Gboto). Facilities were reported to operate a system whereby gravid females were being collected and kept until they have laid eggs, upon which they are released back into the wild and eggs placed into a pit and covered with substrate until hatching, with crude monitoring of the temperature (Harwood, 2003). Ineich (2006) pointed out that some facilities in Togo had satellite holding facilities and that several villages were

involved in the ranching, whereby trained villagers also hatched eggs laid by captured gravid females, to then sell the juveniles on to the exporting facilities.

Aubret *et al.* (2005a) reported that all mature *P. regius* females caught by local hunters for the Togolese farm Toganim, were released back into the wild after egg-laying, along with 10% of juveniles. Ineich (2006) reported a release rate of 20% of juveniles. Aubret *et al.* (2005a) also noted that all ranched individuals appeared to be in “good condition”. However, Harris (2002) noted that no information was available on the survival of young snakes released into the wild.

Harris (2002) also pointed out that as larger individuals were being selected for sale, the ones released may be smaller and weaker. Ranching was also considered to potentially harm wild populations through the spreading of parasites from the ranching operations to wild populations following the release of mature females (Natusch and Lyons, 2014). However, Ineich (2006) reported that no sick animals were being released into the wild from the facilities in Togo.

In the mid 1990s Jenkins (1995) made recommendations regarding the improvement of record keeping, which Harris (2002) found to have been partially implemented, with farms keeping detailed records of stock numbers, reproduction statistics and disposal of animals produced. However, the figures relating to *P. regius* offspring produced through ranching on Togolese farms were considered to “lack accuracy”; there were discrepancies between the stock counts reported, with the high quantities of young produced, low numbers of adults kept and the allocated share in the export quota not aligning (Harris, 2002). This was thought to indicate either overproduction or overestimation of the number of young produced; harvest quotas were being established on the basis of previous’ year’s production figures, therefore potentially leading to overestimation of

production figures (Harris, 2002). Ineich (2006) made a number of recommendations based on his visits to the country; it is unclear whether and to which extent these have been implemented. More recently,

Gorzula *et al.* (1997) reported smuggling of *P. regius* from Ghana to Togo and Benin, and suggested that this might be two-way. Ineich (2006) too reported that pythons were being imported from Benin into Togo – legally and illegally – which was possibly having negative impacts on agricultural areas in Benin due to a reduced number of rodent

predators. Furthermore, Ineich (2006) raised the question on whether animals released from facilities were being collected illegally – although facilities reported releasing them at night to avoid such issues.

P. regius is included in Annex 2 of Ordinance No. 4, which categorises protected wildlife species in three annexes, 1 (protected species), 2 (predatory species) and 3 (small grazers); therefore their killing is normally permitted in inhabited and agricultural areas, excluding protected areas (Togo, 1968).

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Appendix

Table 1: Purpose of trade

Code	Description
T	Commercial
Z	Zoo
G	Botanical garden
Q	Circus or travelling exhibition
S	Scientific
H	Hunting trophy
P	Personal
M	Medical (including biomedical research)
E	Educational
N	Reintroduction or introduction into the wild
B	Breeding in captivity or artificial propagation
L	Law enforcement / judicial / forensic

Table 2: Source of specimens

Code	Description
W	Specimens taken from the wild
R	Ranched specimens: specimens of animals reared in a controlled environment, taken as eggs or juveniles from the wild, where they would otherwise have had a very low probability of surviving to adulthood
D	Appendix-I animals bred in captivity for commercial purposes in operations included in the Secretariat's Register, in accordance with Resolution Conf. 12.10 (Rev. CoP15), and Appendix-I plants artificially propagated for commercial purposes, as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 4, of the Convention
A	Plants that are artificially propagated in accordance with Resolution Conf. 11.11 (Rev. CoP15), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5 (specimens of species included in Appendix I that have been propagated artificially for non-commercial purposes and specimens of species included in Appendices II and III)
C	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5
F	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof
U	Source unknown (must be justified)
I	Confiscated or seized specimens (may be used with another code)
O	Pre-Convention specimens