

CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES
OF WILD FAUNA AND FLORA



Thirty-third meeting of the Animals Committee
Geneva (Switzerland), 12 – 19 July 2024

Compliance

Review of trade in animal specimens reported as produced in captivity

OVERVIEW AND UPDATE ON IMPLEMENTATION OF REVIEW OF TRADE IN ANIMAL SPECIMENS
REPORTED AS PRODUCED IN CAPTIVITY

1. This document has been prepared by the Secretariat.
2. In Resolution Conf. 17.7 (Rev. CoP19) on *Review of trade in animal specimens reported as produced in captivity*, the Conference of the Parties:
3. *DIRECTS the Secretariat, for the purpose of monitoring and facilitating the implementation of this Resolution and the relevant provisions of the Convention:*

.....

b) *to maintain a record of species-country combinations that are included in the review process set out in this Resolution, including a record of progress with the implementation of recommendations;*

Overview

3. This is the first time the Secretariat produces a record of the status of the *Review of trade in animal specimens reported as produced in captivity* as outlined in paragraph 3 b) of the Resolution, following the second iteration of the Resolution at the 32nd meeting of the Animals Committee (AC32; Geneva, June 2023; see document [AC32 Doc. 15.1](#)).
4. Details of the 44 cases of species/country combinations that have been selected for the review of trade in animal specimens reported as produced in captivity during the two iterations to-date are presented in tables in Annex 1 [Table 1 – Species selected by the Animals Committee for the review at AC29 (post CoP17) and Table 2 – Species selected by the Animals Committee for the review at AC332 (post CoP19)], arranged alphabetically by taxon. A table of the 25 current ongoing cases, arranged alphabetically by Party, is presented in Annex 2 to this document.

Recommendations of the Animals Committee at its 32nd meeting (AC32; Geneva, June 2023),

5. At its 32nd meeting (AC32; Geneva, June 2023), in accordance with paragraph 1 c) of Resolution Conf. 17.7 (Rev. CoP19), the Animals Committee selected a number of species-country combinations for review under the Resolution, taking into account the biology of the species, and prepared general and specific questions and a brief explanation of the selection, to be addressed to the Parties concerned by the Secretariat in accordance with Stage 2, subparagraph 2 g). In making the selection, the Committee was mindful of paragraph 2 g) of the Resolution which refers to the need to “determine if the correct source codes have been used, under the applicable Resolutions, for specimens claimed to be produced in captivity”.
6. Seventeen taxa (concerning 14 countries) were selected for review in accordance with paragraph 1 c) of Resolution Conf. 17.7 (Rev. CoP19). In accordance with paragraph 2 i) of the Resolution, at the present

meeting, the Animals Committee will review the responses from countries, any review commissioned by the Secretariat and any additional relevant information; and determine if trade is in compliance with Article III and Article IV of the Convention, as well as Article VII, paragraphs 4 and 5 (see document AC33 Doc. 15.2).

Recommendations of the Standing Committee at its 77th meeting (SC77; Geneva, November 2023)

7. At its 77th meeting (SC77; Geneva, November 2023), the Standing Committee considered document [SC77 Doc. 36](#), which presented a review of the 11 species/country combinations that were retained in the review following the 74th and 75th meetings of the Standing Committee (SC74; Lyon, March 2022; SC75, Panama City, November 2022). The conclusions of the Standing Committee are summarized below and full details are found in the summary record [SC77 SR](#).

8. The Committee agreed to remove the following species/country combinations from the review:

- *Cacatua alba* / Indonesia
- *Vulpes zerda* / Sudan
- *Centrochelys sulcata* / Ghana¹
- *Hippocampus comes* / Viet Nam
- *Centrochelys sulcata* / Sudan
- *Geochelone elegans* / Jordan
- *Testudo hermanni* / North Macedonia

9. Concerning *Centrochelys sulcata* / Ghana, the Standing Committee agreed to:

- a) remove *Centrochelys sulcata* from Ghana from the review subject to the publication of a maximum size limit of 15cm straight carapace length with its export quota on the CITES website; and
- b) remind Ghana of the offer from the United States of America to provide assistance related to the development and implementation of a unique marking system for the breeding stock at the facilities.

Ghana has confirmed its export quota with the size restriction, which has been published on the CITES webpage. This species/country combination has been removed from the review.

10. At SC77, the Standing Committee agreed to retain the following species / country combinations in the review:

- *Centrochelys sulcata*² / Benin, Mali and Togo
- *Varanus exanthematicus* / Ghana

11. Concerning *Centrochelys sulcata* / Benin, the Standing Committee agreed to:

- a) retain *Centrochelys sulcata* from Benin in the review and maintain its current zero export quota for captive bred specimens (C) of *C. sulcata* until such time as it addresses the concerns of the Animals and Standing Committees; and
- b) encourage Benin to provide an update on the implementation of the recommendations to the Secretariat by 1 March 2024 so that the matter can be considered at the 33rd meeting of the Animals Committee (AC33, July 2024, tbc).

12. Concerning *Centrochelys sulcata* / Mali, the Standing Committee agreed to:

- a) retain *Centrochelys sulcata* from Mali in the review until such time as it addresses the concerns of the Animals and Standing Committees; and
- b) urge Mali to provide an update on the implementation of the recommendations to the Secretariat by 1 March 2024 so that the matter can be considered at the 33rd meeting of the Animals Committee (AC33, July 2024, tbc).

¹ Subject to the publication of an export quota with a size restriction of maximum size limit of 15cm straight carapace length.

² For *Centrochelys sulcata*: a zero annual export quota has been established for specimens removed from the wild and traded for primarily commercial purposes by the Conference of the Parties.

13. Concerning *Centrochelys sulcata* / Togo, the Standing Committee agreed to:
- a) retain *Centrochelys sulcata* from Togo in the review until such time as it addresses the concerns of the Animals and Standing Committees; and
 - b) encourage Togo to provide an update on the implementation of the recommendations to the Secretariat by 1 March 2024 so that the matter can be considered at the 33rd meeting of the Animals Committee (AC33, July 2024, tbc).

14. Concerning *Varanus exanthematicus* / Ghana, the Standing Committee agreed to:

- a) retain *Varanus exanthematicus* from Ghana in the review;
- b) request that Ghana clarify if its 2023 export quotas of 3,000 wild (W) and 9,000 ranched (R) were established based on the rapid assessment carried out by the Scientific Authority and explain the scientific justification for how it has arrived at these figures when it has stated that it has not been able to make a non-detriment finding.

The Standing Committee also invited Ghana to share its rapid assessment with the Chair of Animals Committee for review; and provide an update on the implementation of the recommendations to the Secretariat by 1 March 2024 so that the matter can be considered at the 33rd meeting of the Animals Committee (AC33, July 2024, tbc).

15. The Secretariat wrote to all Parties concerned on 22 December 2022 to inform them of the outcomes of the discussions that took place at SC77. For those retained in the review, the Secretariat requested updates by 1 March 2024.

Responses from Parties

16. At the time of writing, the Secretariat had not received a response concerning *Centrochelys sulcata* from Benin or Mali. Togo responded with an assessment of the production of live specimens of *C. sulcata* from Togolese breeding farms, following a non-detriment finding (NDF) "primary evaluation template", which can be found in Annex 3 to the present document, in the language and format received.
17. Concerning *Varanus exanthematicus*, Ghana provided a copy of its rapid assessment, which confirms that the 2023 export quotas of 3,000 wild (W) and 9,000 ranched (R) were established based on the rapid assessment carried out by the Scientific Authority. The rapid assessment is presented in Annex 4 to the present document, in the language and format received.

Update on the implementation of recommendations

18. In the present document, the Secretariat reports on actions taken by Parties to implement recommendations made by the Animals Committee and the Standing Committee in order to ensure compliance with the obligations of Article IV, paragraph 4 and 5 of the Convention for the 4 cases selected at the 29th meeting of the Animals Committee (AC29; Geneva, July 2017) and retained in the review of trade in animals specimens reported as produced in captivity and retained in the process at SC77.
19. The Secretariat is hereby consulting with the Animals Committee on its determination as to whether the recommendations have been implemented by the Party concerned. Annex 5 to the present document contains a summary update of the status of those species / country combinations selected for review following CoP17 at AC29 and retained at SC77. The table in Annex 5 comprises four columns that contain the following information for the species/country combinations concerned:
- a) the species / country combination concerned;
 - b) the most recent action recommended by the Standing Committee (at SC74, SC75 and/or SC77);
 - c) a summary of any response received from the Party concerned, and notes from the Secretariat; and
 - d) the Secretariat's determination regarding compliance with the recommendations, and its recommendations to the Animals Committee.

20. Based on the information submitted by Ghana as outlined in the Table in Annex 5 to the present document and the rapid assessment in Annex 4 the Secretariat recommends that the following species/country combinations be removed from the review:

Ghana / *Varanus exanthematicus* (following the publication of the export quota with size restriction, as submitted by Ghana)

21. The Secretariat recommends that the following species/country combinations be retained within the review until such time as they address the concerns of the Animals and Standing Committees:

Benin / *Centrochelys sulcata*

Mali / *Centrochelys sulcata*

Togo / *Centrochelys sulcata*

Update on matters referred to the 77th meeting of the Standing Committee (SC77; Geneva, November 2023)

22. At AC32, the Animals Committee noted that the use of source code R for *Diceros bicornis* used by South Africa and *Loxodonta africana* used by Zimbabwe is not appropriate and requested the Secretariat to remind these Parties accordingly. The Secretariat reached out to South Africa and Zimbabwe and reminded the Parties, as requested by AC32.
23. At AC32, in relation to table 7 in the Annex to document [AC32 Doc 15.1](#), the Committee agreed to refer the contents of the table to the Standing Committee for its consideration. At SC77, the Standing Committee requested the Secretariat to contact the Parties in Table 7 of Annex 2 to document SC77 Doc. 36 to inquire about the source codes used and any reporting inconsistencies and bring back to the Standing Committee any issue that would require follow up.
24. In relation to table 8 in the Annex to document AC32 Doc 15.1, the Committee agreed to refer the contents of the table to the Secretariat for further consultation with the Parties concerned and to refer any issues of concern to the Standing Committee.
25. The Secretariat has been following up with the Parties concerned. An oral update will be provided at this meeting and any issues of concerning will be brought to the attention of the 78th meeting of the Standing Committee (SC78; Geneva, February 2025),
26. At SC77, the Standing Committee also requested the Secretariat to consider ways in which the information concerning Parties that are released from the review process under certain conditions can be made easily available in the long term to ensure that conditions are adhered to and can be monitored. The Standing Committee asked the Secretariat to bring forward a proposal for accomplishing that task for consideration at SC78. In this regard, the Secretariat notes that some information is available on the Species+ website but proposes to submit the following draft decision to SC78 for the development of a database, similar to the tracking and management database that has been developed for the Review of Significant Trade (RST) under Decision 17.108 (Rev. CoP19).

Directed to the Secretariat

20.AA Subject to external funding and available Secretariat resources, the Secretariat shall develop, test and establish a Captive Breeding tracking and management database as an essential tool for the effective implementation and transparency of the process under Resolution Conf. 17.7 (Rev. CoP18) on *Review of animal specimens reported as produced in captivity*.

Recommendation

27. The Animals Committee is invited to:
- a) Concerning *Centrochelys sulcata* / Benin,
 - i) recommend retaining *C. sulcata* from Benin in the review and maintain its current zero export quota for captive bred specimens (C) of *C. sulcata* until such time as it addresses the concerns of the Animals and Standing Committees; and

- ii) encourage Benin to provide an update on the implementation of the recommendations to the Secretariat by 30 September 2024 so that the matter can be considered at the 78th meeting of the Standings Committee (SC78; Geneva, February 2025).
- b) Concerning *Centrochelys sulcata* / Mali,
 - i) recommend retaining *C. sulcata* from Mali in the review until such time as it addresses the concerns of the Animals and Standing Committees; and
 - ii) urge Mali to provide an update on the implementation of the recommendations to the Secretariat by 30 September 2024 so that the matter can be considered at the 78th meeting of the Standing Committee (SC78; Geneva, February 2025).
- c) Concerning *Centrochelys sulcata* / Togo,
 - i) recommend retaining *Centrochelys sulcata* from Togo in the review, until it provides evidence of legal acquisition of all breeding stock for all facilities, including information on source of animals used to augment the breeding stock; and
 - ii) encourage Togo to provide an update on the implementation of the recommendations to the Secretariat by 30 September 2024 so that the matter can be considered at the 78th meeting of the Standing Committee (SC78; Geneva, February 2025).
- d) Concerning *Varanus exanthematicus* / Ghana,
 - i) recommend removing *Varanus exanthematicus* from Ghana from the review; and
 - ii) request Ghana to ensure that the correct source code is applied in future.
- e) note that *Centrochelys sulcata* / Ghana was removed from the review following the publication of a maximum size limit of 15cm straight carapace length with its export quota on the CITES website.
- f) consider and agree to submit the draft decision in paragraph 26 to the Standing Committee for consideration at its 78th meeting (SC78; Geneva, February 2025).

PROGRESS IN THE IMPLEMENTATION OF THE
REVIEW OF TRADE IN ANIMAL SPECIMENS REPORTED AS PRODUCED IN CAPTIVITY

Key: AC = Animals Committee; SC = Standing Committee

Table 1: Species selected by the Animals Committee for the review at AC29 (post CoP17)

Taxon selected	Reference document(s)	Status of review
<i>Agalychnis callidryas</i>	AC30 Com. 7. (Rev) AC30 Summary Record	Removed for Nicaragua at AC30.
<i>Cacatua alba</i>	SC77 Doc. 36 SC77 Summary Record	Removed for Indonesia at SC77.
<i>Centrochelys sulcata</i>	SC77 Doc. 36 SC77 Summary Record	Ongoing for Benin, Mali and Togo . Removed for Guinea and Sudan at SC77. Removed for Ghana following SC77 with the publication of a maximum size limit of 15cm straight carapace length with its export quota.
<i>Geochelone elegans</i>	SC77 Doc. 36 SC77 Summary Record	Removed for Jordan at SC77.
<i>Hippocampus comes</i>	SC77 Doc. 36 SC77 Summary Record	Removed for Viet Nam at SC77.
<i>Lorius lorus</i>	AC30 Com. 7 (Rev) AC30 Summary Record	Removed for South Africa at AC30.
<i>Macaca fascicularis</i>	AC30 Com. 7 (Rev) AC30 Summary Record	Removed for Cambodia at AC30.
<i>Oophaga pumilio</i>	SC74 Doc. 55 SC74 Summary Record	Removed for Nicaragua and Panama at SC74.
<i>Ornithoptera croesus</i>	SC74 Doc. 55 SC74 Summary Record	Removed for Indonesia at SC74.
<i>Ptyas mucosus</i>	AC30 Com. 7 (Rev) AC30 Summary Record	Removed for Indonesia at AC30.
<i>Testudo hermanni</i>	SC77 Doc. 36 SC77 Summary Record	Removed for North Macedonia at SC77.
<i>Trachyphyllia geoffroyi</i>	AC30 Com. 7 (Rev) AC30 Summary Record	Removed for Indonesia at AC30.
<i>Tridacna crocea</i>	AC30 Com. 7 (Rev) AC30 Summary Record	Removed for Micronesia (Federated States of) at AC30.
<i>Varanus exanthematicus</i>	SC77 Doc. 36 SC77 Summary Record AC30 Com. 7 (Rev) AC30 Summary Record	Ongoing for Ghana . Removed for Togo at AC30.
<i>Varanus timorensis</i>	SC74 Doc. 55 SC74 Summary Record	Removed for Indonesia at SC74.
<i>Vulpes zerda</i>	SC77 Doc. 36 SC77 Summary Record	Removed for Sudan at SC77.

Table 2: Species selected by the Animals Committee for the review at AC332 (post CoP19)

Taxon selected	Reference document(s)	Status of review
<i>Agalychnis callidryas</i>	AC32 Doc. 15.1 AC32 SR	Ongoing for Nicaragua See document AC33 Doc. 15.2
<i>Batagur borneoensis</i>	AC32 Doc. 15.1 AC32 SR	Ongoing for United States of America See document AC33 Doc. 15.2
<i>Cheilinus undulatus</i>	AC32 Doc. 15.1 AC32 SR	Ongoing for Indonesia See document AC33 Doc. 15.2
<i>Chlamydotis macqueenii</i>	AC32 Doc. 15.1 AC32 SR	Ongoing for Kazakhstan See document AC33 Doc. 15.2
<i>Chlamydotis undulata</i>	AC32 Doc. 15.1 AC32 SR	Ongoing for Morocco See document AC33 Doc. 15.2
<i>Ctenosaura quinquecarinata</i>	AC32 Doc. 15.1 AC32 SR	Ongoing for Nicaragua See document AC33 Doc. 15.2
<i>Ctenosaura similis</i>	AC32 Doc. 15.1 AC32 SR	Ongoing for Nicaragua See document AC33 Doc. 15.2
<i>Dendrobatus auratus</i>	AC32 Doc. 15.1 AC32 SR	Ongoing for Nicaragua See document AC33 Doc. 15.2
<i>Gecko gecko</i>	AC32 Doc. 15.1 AC32 SR	Ongoing for Indonesia See document AC33 Doc. 15.2
<i>Hirudo medicinalis</i>	AC32 Doc. 15.1 AC32 SR	Ongoing for Azerbaijan See document AC33 Doc. 15.2
<i>Kinyongia boehmei</i>	AC32 Doc. 15.1 AC32 SR	Ongoing for Kenya See document AC33 Doc. 15.2
<i>Macaca fascicularis</i>	AC32 Doc. 15.1 AC32 SR	Ongoing for Cambodia, Indonesia, Philippines and Viet Nam See document AC33 Doc. 15.2
<i>Nectophrynoides asperginis</i>	AC32 Doc. 15.1 AC32 SR	Ongoing for United States of America See document AC33 Doc. 15.2
<i>Oophaga pumilio</i>	AC32 Doc. 15.1 AC32 SR	Ongoing for Nicaragua See document AC33 Doc. 15.2
<i>Testudo graeca</i>	AC32 Doc. 15.1 AC32 SR	Ongoing for Jordan See document AC33 Doc. 15.2
<i>Testudo horsfieldii</i>	AC32 Doc. 15.1 AC32 SR	Ongoing for Uzbekistan See document AC33 Doc. 15.2
<i>Testudo kleinmanni</i>	AC32 Doc. 15.1 AC32 SR	Ongoing for Egypt and Syrian Arab Republic See document AC33 Doc. 15.2

SPECIES/COUNTRY COMBINATIONS CURRENTLY
IN THE REVIEW OF TRADE IN ANIMAL SPECIMENS
REPORTED AS PRODUCED IN CAPTIVITY (AS OF APRIL 2024)

Countries are arranged in alphabetical order, with the relevant species in the second column. The final column indicates when the species/range States combination was last discussed.

Country	Species	Status / Comments
Azerbaijan	<i>Hirudo medicinalis</i>	Selected at AC32. To be reviewed at this meeting (see agenda item. 15.2)
Benin	<i>Centrochelys sulcata</i>	Selected at AC29. Last reviewed at SC77.
Cambodia	<i>Macaca fascicularis</i>	Selected at AC32. To be reviewed at this meeting (see agenda item. 15.2))
Egypt	<i>Testudo kleinmanni</i>	Selected at AC32. To be reviewed at this meeting (see agenda item. 15.2)
Ghana	<i>Varanus exanthematicus</i>	Selected at AC29. Last reviewed at SC77.
Indonesia	<i>Macaca fascicularis</i>	Selected at AC32. To be reviewed at this meeting (see agenda item. 15.2)
	<i>Gecko gecko</i>	Selected at AC32. To be reviewed at this meeting (see agenda item. 15.2)
	<i>Cheilinus undulatus</i>	Selected at AC32. To be reviewed at this meeting (see agenda item. 15.2)
Jordan	<i>Testudo graeca</i>	Selected at AC32. To be reviewed at this meeting (see agenda item. 15.2)
Kazakhstan	<i>Chlamydotis macqueenii</i>	Selected at AC32. To be reviewed at this meeting ((see agenda item. 15.2)
Kenya	<i>Kinyongia boehmei</i>	Selected at AC32. To be reviewed at this meeting (see agenda item. 15.2)
Mali	<i>Centrochelys sulcata</i>	Selected at AC29. Last reviewed at SC77.
Morocco	<i>Chlamydotis undulata</i>	Selected at AC32. To be reviewed at this meeting (see agenda item. 15.2)
Nicaragua	<i>Ctenosaura quinquecarinata</i>	Selected at AC32. To be reviewed at this meeting (see agenda item. 15.2)
	<i>Ctenosaura similis</i>	Selected at AC32. To be reviewed at this meeting (see agenda item. 15.2)
	<i>Dendrobatus auratus</i>	Selected at AC32. To be reviewed at this meeting (see agenda item. 15.2)
	<i>Oophaga pumilio</i>	Selected at AC32. To be reviewed at this meeting (see agenda item. 15.2)
	<i>Agalychnis callidryas</i>	Selected at AC32. To be reviewed at this meeting (see agenda item. 15.2)
Philippines	<i>Macaca fascicularis</i>	Selected at AC32. To be reviewed at this meeting (see agenda item. 15.2)
Syrian Arab Republic	<i>Testudo kleinmanni</i>	Selected at AC32. To be reviewed at this meeting (see agenda item. 15.2)
Togo	<i>Centrochelys sulcata</i>	Selected at AC29. Last reviewed at SC77.
United States of America	<i>Nectophrynoides asperginis</i>	Selected at AC32. To be reviewed at this meeting (see agenda item. 15.2)
	<i>Batagur borneoensis</i>	Selected at AC32. To be reviewed at this meeting (see agenda item. 15.2)
Uzbekistan	<i>Testudo horsfieldii</i>	Selected at AC32. To be reviewed at this meeting (see agenda item. 15.2)
Viet Nam	<i>Macaca fascicularis</i>	Selected at AC32. To be reviewed at this meeting (see agenda item. 15.2)

Primary Evaluation Template

Text in italics is explanatory and should be deleted in completed documents. Please refer to the NDF Guidelines document for further explanation on how to complete this evaluation.

Species name	<i>Centrochelys sulcata</i>
Range state name	Togo
Report compiled by	Gabriel H. SEGNIAGBETO ¹ , Djafarou IDRISOU ² & Valentin Koffi MAWOUGNIGNA ¹ 1. Laboratoire d'Ecologie et d'Ecotoxicologie, Faculté des Sciences (Autorité Scientifique CITES), Université de Lomé, 01BP 1515 Lomé Togo, Email : gsegniagbeto@gmail.com , gmawougnigan@gmail.com 2. Direction des Ressources Forestières (Organe de Gestion CITES), Ministère de l'Environnement et des Ressources Forestières, B.P 355, Lomé-TOGO, E-mail: idridjaff@gmail.com
Date compiled	11/04/2024
Section One: Summary	
<i>Please provide a short overview (1-2 paragraphs) of the trade in this species in the country of interest.</i>	
<p>La présente évaluation de statut CITES de la production des spécimens vivants de <i>Centrochelys sulcata</i> à partir du Togo rend compte de l'origine des spécimens qui sont exploités dans le commerce international. En s'appuyant sur les investigations menées auprès des fermes d'élevage, de l'organe de gestion CITES, on remarque que les animaux qui sont exportés à partir du Togo sont des animaux nés en captivité. Les fermes d'élevage installées au Togo disposent d'une longue expérience de production des spécimens vivants de cette espèce. La production des spécimens de cette espèce au Togo est une activité établie depuis les années 70. Actuellement, on dénombre 554 adultes reproducteurs dont 304 individus males et 150 individus femelles. La taille annuelle de production varie entre 12500 et 13500 de spécimens par an sur la base des adultes reproducteurs disponibles au sein des différentes fermes d'élevage. La production des spécimens vivants de cette espèce a débuté il y a au moins une dizaine d'années et que certaines fermes d'élevage ont pu avoir une deuxième génération (F2) des spécimens vivants. De façon général, les spécimens exportés proviennent du cheptel reproducteur de départ et sont rarement âgés de plus d'un an. En se référant définitions des codes source, les spécimens de <i>C. sulcata</i> exportés à partir du Togo sont plutôt pour la plupart "nés en captivité". On doit ainsi leur attribuer le code « F » ou « F1 » et non le contraire. Dans ce cas la taille des spécimens à l'exportation ne devra pas dépasser 15 cm.</p>	
Section Two: Primary Evaluation score	

Please score each attribute listed within the table below and sum these to provide a total.

Criteria	Number of points			Score
	1	2	3	
Annual Harvest level	Low (<2,000)	Medium (2,000 - 20,000)	High (>20,000)	3
Area of occupancy	Large (>20,000km ²)	Medium (2,500 – 20,000km ²)	Small (<2,500km ²)	3
Life-history	Fast	Medium	Slow	3
Illegal trade and IUCN status	If known, should be included under "Annual harvest level". If unknown, and suspected to be detrimental, and/or if the species is listed as VU, EN or CR give a maximum score of 1 point			1

Score de l'Avis de Commerce non préjudiciable : 10

Cependant, la production des spécimens vivants de cette espèce au Togo est purement une activité réalisée par les fermes d'élevage. Ce sont des animaux nés en captivité de source « F » ou de source « F1 ».

Section Three: Justification – Harvest level

Please provide an explanation with appropriate references to justify the score given.

Centrochelys sulcata (anciennement *Geochelone sulcata*) est également appelée tortue sillonnée ou tortue des savanes ou tortue à éperons africaine. Elle est nommée tortue à éperons africaine en raison des protubérances pointues au niveau de ses pattes postérieures. Elle est la deuxième plus grande tortue terrestre au monde (Branch, 2008).

La tortue à éperon africaine *Centrochelys sulcata* est une espèce indigène du désert du Sahara et du Sahel, où sa distribution est fragmentée (Trapeet al., 2012 ; Petrozzi et al., 2015 et 2016). Toutes les populations de cette grande tortue (jusqu'à 90 kg) sont en déclin, principalement en raison de deux menaces indépendantes : la concurrence avec le bétail domestique pour la nourriture et l'espace (Branch, 2008), et la collecte pour le commerce des animaux de compagnie (CITES, 2006) et pour la subsistance (Branch, 2008). L'espèce est classée comme vulnérable sur la liste rouge de l'UICN (Tortoise & Freshwater Turtle Specialist Group, 1999).

De part son habitat et sa zone de distribution, *Centrochelys sulcata* n'est pas présente au Togo à l'état sauvage. Les spécimens exportés à partir du Togo sont produits en captivité. Tous les établissements d'élevage de la faune sauvages surtout les reptiles maîtrise l'élevage de cette espèce. Ces établissements sont : ADAPTATION, ARZOOTIC GARDEN, FEXASS-HERP-TOGO, TOGANIM, MARE, PAJAR, REPTILAND, TOGO-EXOTIC. D'autres fermes qui ne sont pas impliquées dans le commerce international produisent les spécimens vivants de cette espèce. En ceci, les spécimens produits au Togo pour le commerce international sont de source « F » ou de source « F1 ». Une évaluation réalisée par l'Autorité Scientifique CITES en 2018 et complétée par Idrissou (2023) sur la production des spécimens vivants de cette espèce dans le commerce international par les différentes fermes d'élevage indiquent les résultats suivants (tableau 1). Sur la base des résultats ci-dessous mentionnés, il est évident que les spécimens vivants de l'espèce exportés à partir du Togo sont produits en captivité par les fermes d'élevage.

Cependant, pendant longtemps et même au cours des différentes exercices, on note qu'il y a une incompréhension de la définition de code source à la fois par les établissements d'élevage et par l'Organe de Gestion pour les spécimens exportés à partir du Togo. Compte tenu du statut de l'espèce au Togo (Trape et al., 2012 ; Petrozzi et al., 2015 ; 2016 ; 2017a-b) et des résultats de nos investigations au niveau des différents établissements, le code qui devrait être appliqué aux spécimens à partir du Togo doit être le Code «F» ou même le code « F1 ». L'élevage en captivité des spécimens de cette espèce au Togo date des années 80.

En prenant en compte le nombre d'individus exportés à partir du Togo et sur la base de capacités de production annuelle des fermes d'élevage, le score retenu pour le critère relatif au niveau de collecte annuel est 2. Ce score ne fait que répondre à la capacité annuelle de production des spécimens de cette espèce à partir du Togo. Il ne tient pas compte de l'exploitation des populations sauvages de l'espèce.

Tableau 1 : Cheptel reproducteur initial et supplémentaire des établissements

	Etablissement	Cheptel reproducteur initial			Effectifs des spécimens 2023				Capacité annuelle de production
		Mâle	Femelle	Année d'acquisition	Mâle	Femelle	Jeune	Total	
1	Adaptation	2	4	1986	19	46	21	86	1200
2	ETS Fexas-Herp	1	1	2002	20	50	101	171	1800
3	Mare	1	3	1992	16	43	17	76	1200
4	Pajar Sarl	22	30	1978	40	60	33	133	1400
5	Reptiland Export	15	25	2000	3	9	28	40	1600
6	Toganim Sarl	1	2	1975	-	-	-	-	-
7	Togo Exotic	2	4	2010	7	16	6	29	600 à 1400
8	Arzootoc Garden				10	22	11	43	1700

9	Grand Nouglo à Tabligbo	2	4	1998	35	38	16	89	2000
10	Nouglo Junior	1	2	2003	10	14	17	31	1000
11	Tali N'na (Atakpamé)			2007	4	6	-	10	
TOTAUX		49	74	-	Total des spécimens en 2023			708	12500 à 13300

La production des spécimens de cette espèce au Togo est une activité établie depuis les années 70. Actuellement, on dénombre 554 adultes reproducteurs dont 304 individus males et 150 individus femelles. La taille annuelle de production varie entre 12500 et 13500 de spécimens par an sur la base des adultes reproducteurs disponibles au sein des différentes fermes d'élevage. La production des spécimens vivants de cette espèce a débuté il y a au moins une dizaine d'années et que certaines fermes d'élevage ont pu avoir une deuxième génération (F2) des spécimens vivants. De façon général, les spécimens exportés proviennent du cheptel reproducteur de départ et sont rarement âgés de plus d'un an. En se référant définitions des codes source, les spécimens de *C. sulcata* exportés à partir du Togo sont plutôt pour la plupart "nés en captivité". On doit ainsi leur attribuer le code « F » ou « F1 » et non le contraire. Dans ce cas la taille des spécimens à l'exportation ne devra pas dépasser 15 cm.

Section Four: Justification – Area of occupancy

Please provide an explanation with appropriate references to justify the score given.

La répartition de l'espèce couvre la majorité des zones climatiques du Sahel et du Soudan, dans des zones de précipitations annuelles comprises entre 150 et 700 mm, et s'étend de la Mauritanie et du Sénégal au Soudan, à l'Éthiopie, à l'Érythrée et à l'extrémité sud-ouest de la péninsule arabique, bien qu'au sein de cette région sa distribution soit très fragmentée (Trape et al., 2012). En Afrique de l'Ouest, les principaux centres de distribution se trouvent dans le sud de la Mauritanie, dans la région du Ferlo au Sénégal, au centre du Mali, dans le sud-est du Burkina Faso, dans le parc national du W et dans le massif du Termit au Niger (Trape et al., 2012).

Bien que l'aire de répartition de l'espèce ne couvre pas l'ensemble du territoire Togolais, les travaux de terrain ainsi que les entretiens auprès des fermes d'élevage et d'exportation des spécimens sauvage du Togo, les collectionneurs, et des particuliers organisées dans le cadre de la mise en œuvre du projet PARC au Togo, montrent que d'important élevage et reproduction de l'espèces est effectuée dans presque toute les ferme d'élevage, majoritairement dans la région maritime. Des visites de quelques centres d'élevage ont permis de recenser d'important individus adultes reproducteurs, reproduit en captivité depuis les années 1980 (pour L'ADAPTION SARL), 1997 (pour REPTILAND), 1994 (pour MARE), 2004 (pour Togo Exotic), 2012 (ARZOTIC GARDEN).

Sur la base des données relevées dans les différentes fermes d'élevage de l'espèce au Togo, il est difficile d'attribuer un score en ce qui concerne l'aire de répartition. Dans les conditions actuelles, le score de 0 ne présente aucun inconvénient étant donné que l'espèce n'existe pas à l'état sauvage au Togo.

Section Five: Justification – Life history

Please provide an explanation with appropriate references to justify the score given.

Selon les travaux de Trape et al. (2012), cette espèce était encore abondante dans les années 1950 dans la nature et n'est commune aujourd'hui qu'en captivité où elle se reproduit facilement. En milieu naturel, elle passe la majeure partie de la saison sèche dans de profonds terriers qu'elle creuse avec ses pattes antérieures. Elle se nourrit principalement de plantes. En ce qui concerne la reproduction, chez *Centrochelys sulcata*, la ponte compte 15 à 20 œufs en moyenne, à raison de 6 pontes par an. Elle se reproduit également et facilement en captivité ; elle s'accouple toute l'année (Lock, 2006). Pendant la période d'accouplement, le mâle se montre violent et peut même retourner un rival au moyen de sa puissante fourche d'écaillures.

Au Togo, les observations enregistrées chez les fermes d'élevage montrent que l'espèce pond en moyenne trois à quatre fois par an, entre 15 à 50 œufs en par ponte en fonction de son âge avec un succès d'éclosion moyen de 90%. Sur la base des observations réalisées dans le cadre de la présente étude, la capacité de production des spécimens vivants de cette espèce dans les fermes d'élevage est importante. On enregistre une capacité annuelle de 12500 à 13300 spécimens vivants par an. Etant donnée que la production des spécimens vivants est purement réalisée par les fermes d'élevage en captivité, ce sont des spécimens de source « F » ou « F1 » et ne nécessitent pas forcément la définition de quota pour son exportation.

Les autorités CITES du Togo travaillent pour mettre en œuvre des outils de de contrôle de la production des spécimens vivants de cette espèce au niveau national. Au besoin pour chaque exportation, des agents de l'organe de gestion participent au contrôle des spécimens en vue de s'assurer que les spécimens proviennent réellement de l'élevage en captivité. Des réglementations sont actuellement élaborées et sont en train d'être prises pour évaluer d'abord les adultes reproduction auprès des différentes fermes d'élevage, et pour le contrôle de l'acquisition des adultes reproducteur potentiel dans les années à venir.

Section Six: Illegal trade and IUCN Status

Please provide an explanation with appropriate references to justify the score given.

Les ferme d'élevage des animaux sauvages installées au Togo maîtrisent très bien la production des spécimens vivants (les jeunes) de cette espèce de tortue. D'ailleurs la reproduction même de l'espèce est facile en captivité. Il n'y a donc pas de commerce illégal des spécimens de l'espèce à partir du Togo. Cependant, là où les travaux de cette évaluation présente des limites résident dans les conditions d'acquisition des adultes reproducteurs dans les fermes d'élevage. Dans la plupart des cas, on se rend compte que les années d'acquisition des spécimens dans de nombreuses fermes datent des années 70, 80 et 90, période au cours de laquelle les exigences de la CITES n'étaient pas encore aussi cruciales comme cela l'est aujourd'hui. Donc, il n'y avait pas suffisamment un degré d'application des textes de la CITES qui obligerait les responsables à disposer des permis d'acquisition et de détention des spécimens reproducteurs. Dans ces conditions, les autorités CITES du Togo s'engagent à régulariser les procédures d'acquisition et de détention des spécimens vivants de la faune sauvage.

En ce qui concerne le statut de conservation, *Centrochelys sulcata* a été récemment évaluée pour la Liste rouge de l'UICN des espèces menacées en 2020. Il est classé dans la catégorie "En danger" selon les critères A4bcd (Petrozzi et al., 2021). Les populations dans leur Aires de réparation de cette espèce ont diminué en raison de la désertification, du surpâturage, de la fragmentation des habitats et de la collecte pour le commerce des animaux de compagnie (Garrigues & Cadi 2011). Dans de nombreuses zones où l'espèce est encore présente, la densité est très faible, la survie future des populations étant sérieusement menacée (Petrozzi et al., 2018a,b) bien que sa reproduction en captivité est bien maîtrisée au Togo.

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Section Seven: Conclusion, course of action and determination on exports

Please provide an overall conclusion on the perceived threat of trade to the species and details on whether further course of action will be taken to complete an NDF for the species.

La présente évaluation rend compte de l'état de production des spécimens vivants de *Centrochelys sulcata* exploités dans le commerce international à partir du Togo. En raison de la bonne maîtrise de la reproduction de l'espèce dans les différentes fermes d'élevage à travers le pays et la quantité importante de parents reproducteurs ainsi que des nouveaux nées produits par les fermes, le commerce international des spécimens vivants de l'espèce ne constitue aucune menace pour des populations sauvages. Le commerce n'est pas non plus illégal au Togo, les autorités CITES disposent des outils de contrôle réguliers des activités des différentes fermes d'élevage. Il n'y a pas de raison à définir un quota d'exportation pour l'espèce ni à suspendre son exportation à partir du Togo.

De façon générale, la mission a constaté qu'il y a une confusion dans l'attribution des codes source pour l'exportation de spécimens de *Centrochelys sulcata* à partir du Togo y a quelques années. En effet, même si la plupart des fermes d'élevage ont débuté l'élevage de l'espèce il y a au moins une dizaine d'années et qu'elles ont pu avoir une deuxième génération (F2), les spécimens exportés proviennent du cheptel reproducteur de départ et sont rarement âgés de plus d'un an. Si nous nous référons aux clarifications faites par Lyons et al. (2015) dans le guide d'emploi des codes source, les spécimens de *C. sulcata* exportés à partir du Togo sont plutôt pour la plupart "nés en captivité". On devrait ainsi leur attribuer le code « F » ou « F1 » et non le contraire. Dans ce cas la taille des spécimens à l'exportation ne devra pas dépasser 15 cm.

Section Eight: Literature Cited

Please provide references to all the reports and literature cited in this evaluation.

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Centrochelys sulcata chez Mare (adultes reproducteur) (Photo © Idrissou)

Rapid assessment of *Varanus exanthematicus* in Ghana



Scientific Authority of Ghana
October, 2022

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Executive summary

Varanus exanthematicus, known colloquially by animal collectors as “bok” and in the Nungu language spoken at Dawa as “piti”, is an important species in live animal trade from West Africa, with over 900,000 specimens exported since 1975. The species has been listed in Appendix II of CITES. This means that Non-Detrimental Findings need to be conducted for the species to ensure that trade levels are sustainable. Currently, trade levels from Ghana over a long period have been undertaken without a scientific basis or data to determine its sustainability. With the large number of species under international trade requiring NDF, means that conduct of a comprehensive NDF requires enormous resources which are not available. In the absence of a comprehensive NDF, it was necessary to conduct a rapid assessment to ascertain whether current levels of trade for *V. exanthematicus* were sustainable. Therefore the objective of the study is to conduct a rapid assessment on *V. exanthematicus* to preliminarily establish quotas both Wild and Ranches specimen. The assessment was undertaken through review literature/information on the species, interviews and field visits. Six exporting companies were interviewed.

From discussions with the MA, six exporting companies are engaged in the export of the species every year. It is estimated that the active companies collect about 21,857.14 eggs of *V. exanthematicus* annually for ranching. Thus, a hatching success of 75-80% then leads to the production of 16,393-17,486 young ones. It is estimated that 10% of the hatchlings are released back into the wild to boost the wildlife populations therefore this leaves hatchlings for export of between 14,754-15,737 young ones with a mean value of 15,245 hatchlings.

Given the estimate of roughly 15,245.36 hatchlings from ranching annually based on information from collection per unit effort by collectors, a quota of 9000 is set for exports from ranching. The rationale for a lower value than the net mean of 15,245.36 hatchlings is to make room for about 10% mortality of the young animals after hatching. This value is a conservative estimate as it does include an analysis of the other incidental exports from less active companies. For the small to medium sized animals taken directly from the wild for export a quota of 3,000 is recommended. The rationale for the high value for the ranching compared to the wild is to encourage more ranching of the species. Currently, the species has been listed in Appendix II and therefore a comprehensive NDF is required to determine a quota that is not detrimental to the survival of the species. In the absence of a comprehensive NDF, a conservative quota is recommended for export both from ranching and the wild based on rapid assessment of the collection effort and other biological characteristics.

It is evident that collection of *V. exanthematicus* is restricted to a few areas although the species is widespread across the country. Although the current trade level is not detrimental to the survival of the species, the Scientific Authority is recommending the implementation of a conservative quota until a comprehensive NDF is undertaken. From the analysis conducted and limited information used in the estimation of quotas for the species, the following actions are recommended:

- A conservative quota of 9,000 ranched and 3000 wild specimen of *V. exanthematicus* specimen of length equal to, or less than 25 cm snout-vent length (≤ 25 cm SVL) is recommended for export from Ghana,
- The CITES Management and Scientific Authorities of Ghana should put in place measures to ensure that, until a comprehensive NDF on the species is undertaken, the propose quotas shall strictly be adhered to.
- The Scientific Authority for Ghana should carry out periodic monitoring of exports and collections to ensure that they are consistent with recommendations in the rapid assessment report.
- The Management Authority should put in place measures to ensure that collectors expand the area of collection to reduce pressure on a few populations that have become areas of cyclic annual collection of eggs for the ranching of *V. exanthematicus*.

1.0 Introduction

Varanus exanthematicus, known colloquially by animal collectors as “bok” and in the Nungu language spoken at Dawa as “piti”, is an important species in live animal trade from West Africa, with over 900,000 specimens exported since 1975 (CITES trade statistics derived from the CITES Trade Database, UNEP World Conservation Monitoring Centre, Cambridge, UK) (Bennett and Ali, 2017). The species has been listed in Appendix II of CITES. This means that Non Detrimental Findings need to be conducted for the species to ensure that trade levels are sustainable. Currently, trade levels from Ghana over a long period have been undertaken without a scientific basis or data to determine its sustainability. Also coupled with the difficulty in captive breeding of the species, it is necessary to take urgent steps to address these issues. Considering the large number of species being traded internationally, enormous amount of resources are required to conduct comprehensive NDFs which are not available. In the absence of a comprehensive NDF, it was necessary to conduct a rapid assessment to ascertain whether current levels of trade for *V. exanthematicus* were sustainable. The scientific authority has observed large numbers of trade of *V. exanthematicus* over a long period of time and needed to take steps to advise the MA on the trade levels. Therefore the objective of the study is to conduct a rapid assessment on *V. exanthematicus* to determine whether trade levels were sustainable and to prescribe a precautionary quota for trade.

2.0 Biological and ecological characteristics

2.1 Morphological features

The savannah monitor (*Varanus exanthematicus*) is a medium-sized species of monitor lizard native to Africa south of the Sahara (Steele, 1996). It is found in west and central parts of Africa and southward toward Zaire (Rogner, 1997). The species is known as Bosc's monitor in Europe, after the French scientist Louis Bosc who first described the species. It belongs to the subgenus *Polydaedalus*. Savannah monitors are robust creatures, with powerful limbs for digging, powerful jaws and blunt, peglike teeth. The skin coloration pattern varies according to the local habitat substrate. They are usually dark grey with lighter tan or yellowish patterns. The body scales are large, usually less than 100 scales around midbody, a partly laterally compressed tail with a double dorsal ridge and nostrils equidistant from the eyes and the tip of the snout. Bosc's monitor is a shy animal. Its small size, highly seasonal patterns of activity, undistinguished colouration and secretive habits mean that they are easily overlooked and often considered rare in areas where they are actually very abundant.

2.2 Reproduction and life history

The breeding season for *V. exanthematicus* is the same as the feasting period. They feast and breed during the wet season (Steele, 1996). When a male finds a mate, he will follow her around relentlessly, occasionally biting her on the neck and scratching her neck and legs with his claws. Eventually the female allows the two to mate. The female will dig a nest herself and lay 20 to 50 eggs (Rogner, 1997). The eggs of *V. exanthematicus* have an unusually high hatch rate of 100 % (Bennett, 1999). Incubation of the eggs takes five to six months and the eggs hatch out in March (Rogner, 1997). The juveniles grow the quickest during their first two months (Bennett, 1999). Hatchlings are independent at birth and become reproductively

mature when they are 1.5-2 years old. Despite substantial improvements in husbandry techniques for *Varanus* lizards which have resulted in regular captive reproduction for some species, *V. exanthematicus* still performs very poorly in captivity. Documented breeding events are isolated and very rarely repeated, and cycling of females in any captive environment appears to be rare and never occurs for longer than a couple of years. Nesting in captive females is extremely rare, with most reproductive females depositing eggs on the surface. The only information about the biology and natural history of the species are studies of diet and reproductive cycles in Senegal (Cisse, 1971; 1972; 1976) and a study of abundance, diet and feeding ecology of mainly juvenile animals (Bennett & Ali, 2017). The species is known to have a lifespan of 8-13years (<https://animalia.bio/savannah-monitor>)

2.3 Geographic distribution

The species is relatively widespread in Ghana, occurring in the savanna and transitional areas (Figure). The savanna and transitional areas cover more than two-thirds of the land area of Ghana (IUCN and CI, 2013). The species occurs in both protected areas and areas outside protected areas. The species' distribution has not changed according to observations by experts and collectors in the various localities in Ghana (Oppong, SK pers. communication, 2022).

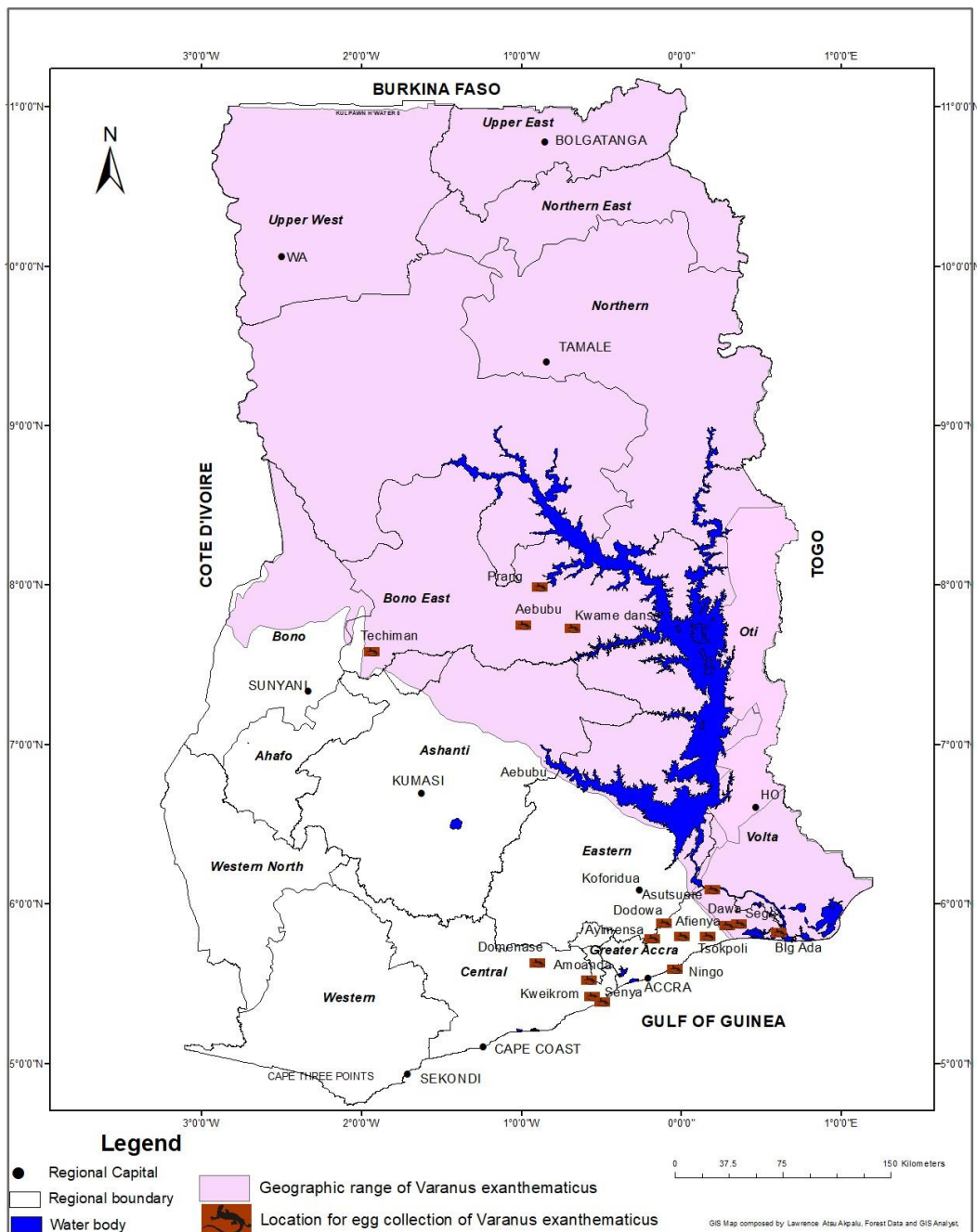


Figure 1: Geographic range and location of egg collection for ranching of *V. Exanthematicus* in Ghana

2.4 Populations and trends

There are no studies that explicitly provide population estimates of *V. exanthematicus* in Ghana (Bannett and Ali, 2017). In Ghana it is most common on sandy soils, particularly in areas with mosaics of agricultural and uncultivated land (Bennett, 2004). Juvenile densities could be as high as 357 per square kilometre, indicating a density of around 24 adult females per km² (Bennett, 2000). Average encounter rates of 0.43 ± 0.28 adults and 0.54 ± 0.47 juveniles per hour have been recorded in good habitat (Bennett, 2004). Analysis by IUCN shows that the populations of the species are not severely fragmented. There is no evidence from studies and consultation with collectors that indicate significant decline in populations over the years.

2.5 Conservation status

Varanus exanthematicus was last assessed for The IUCN Red List of Threatened Species in 2012. *Varanus exanthematicus* is listed as Least Concern (Bennett *et al.*, 2021). This means that the species is considered to be under any immediate threat globally.

2.6 Threats

Threats to the species include predation, incidental killings, and use for traditional medicine, wildfires and international trade. The species faces threats such as collection for consumption and hunting for the bushmeat trade, particularly in West Africa. However, in Ghana, it is not a priority or target for bushmeat due to its low market demand. *Varanus exanthematicus* are not deliberately hunted but they are occasionally caught by hunters for food and bushmeat trade. Predation is also identified as a threat to both the species and its habitat. Across its range in Ghana, different communities have different cultural relationships with the species. Some tribes do not consume the species as they consider it a taboo.

2.7 Trade trends

Exporter reported data from the UNEP-WCMC database indicate that trends in export levels of *Varanus exanthematicus* between 2010 and 2019 showed fluctuations (Figure 2). Export levels declined between 2011 and 2017, from 23,421 to 3,595 specimens. However, between 2016 and 2019, export levels bounced back in 2018 to 16,080 and declined again in 2019. Annual average export of *V. exanthematicus* between 2010 and 2019 is 13,171 specimens. According to the exporters interviewed, a decline or rise in export of *V. exanthematicus* is directly related to demand.

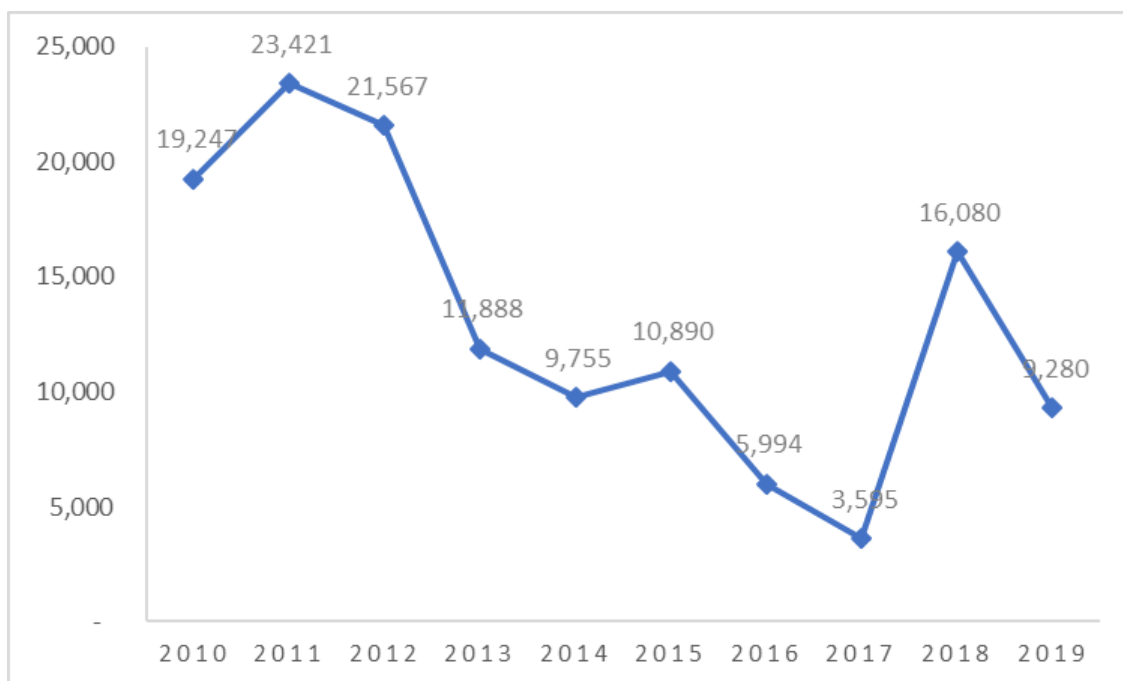


Figure 2: Export levels between 2010-2019 for *Varanus exanthematicus* for Ghana

Ranching of *Varanus exanthematicus*

Records show that Ghana has exported specimens of *Varanus exanthematicus* both from the wild and ranching operations for so many years now. However, for reasons not clear to the present administration, source code 'W' has been used for all the exports. Currently, there are six exporting companies that are engaged in the ranching of *V. exanthematicus*. At the moment four of these companies are considered to be active. The profile of the companies is presented in Table 1. The distributions of the locations of egg collection for ranching are indicated in Figure 1.

Table 2: Profile of the companies involved in the ranching of *Varanus exanthematicus* in Ghana

<i>Name of company</i>	<i>Number of collectors</i>	<i>Location of ranching site</i>	<i>Ranching capacity per season (total number of eggs collected)</i>	<i>Hatching success (number of eggs that hatch, %)</i>
Marco Gains company Ltd	4	TESHIE	5000 - 6000	75 - 80
Oguns and Co (Gh) Ltd	5	KASOA	3000 -4000	75 - 80
Exotic Zoo Enterprise	4	NEW TOWN	3000	75 - 80
Safari Pet Supply	6	HAATSO	4000 – 5000	75 -80
Eublah Ent.	6	HAATSO	4000	75- 80
Gogo Ultimate	4	NEWTOWN	2000	75 – 80

Source: Survey by SA, 2022

3.0 Assessment approach

3.1 Desk study

A review of the species biology and ecological characteristics was undertaken. This included geographic distribution, reproduction and population, conservation status, harvesting trends, collection permits and quotas. Secondary information from published and unpublished reports was collected from internet searches, IUCN website, CITES website and CITES Management Authority for Ghana.

3.2 Interviews

In order to gather data on the stocking of the species, interviews were conducted with six companies engaged in the export of *V. exanthematicus* in Ghana. Each of the exporting

companies has a number of collectors that they engage seasonally to collect the eggs of *V. exanthematicus*. The exporters interviewed were Marco Gains Company Ltd, Oguns and Co (Gh) Ltd, Exotic Zoo Enterprise, Safari Pet Supply, Eublah Ent. and Gogo Ultimate. These individuals were queried regarding their daily collection efforts, the geographical area covered, and the duration of egg collection during the breeding season. Additionally, information on the number of collectors, location of ranching site, ranching capacity per season (total number of eggs collected), period of year collection is done, Hatching success (number of eggs that hatch), number of eggs per nest, number of nests visited per day, total number of days for egg collection, name of collection sites/communities, how long does the eggs take to hatch after collection, brief description on the management of the ranch, total number wild specimen collected from the wild, how long after the wild collection do they export, what happens to un-exported specimen and the size of the ranch. The interviews were conducted in September, 2022. Virtually, the same companies were involved in the collection of wild specimens (small to medium sized *V. exanthematicus*) for export.

4.0 Export Quota estimation

4.1 Analysis

Interactions with collectors revealed that exporting companies engage four to six collectors who collectively gather eggs from up to 20 breeding sites (nests) per day. Each nest typically contains between 21-25 eggs. Collectors systematically search the area for nests taking eggs upon detection. The total effective search area during the season spans roughly 300 hectares (equivalent to 3 square kilometres). According to the collectors, roughly 30% of the nests are identified and the eggs collected. Following hatching, 10% of the offspring are released back into their natural habitat. Hatching success for the ranching sites is between 75-80%. Each company collects between 2000 and 6000 eggs per season, with an average of about 3600 eggs collected annually depending on the size of the team.

According to discussions with the CITES Management Authority, six exporting companies are annually involved in the export of the species. Based on the active companies, approximately 21,857.14 eggs of *V. exanthematicus* are collected each year for ranching. Thus, a hatching success of 75-80% leads to the production of 16,393 - 17,486 young ones. It is estimated that 10% of the hatchlings are released back into the wild to boost the wild populations. This leaves residual number of hatchlings for export ranging between 14,754 - 15,737 young ones with a mean value of 15,245 hatchlings. According to the exporters interviewed, all specimens exceeding the 25 cm snout-vent length (≤ 25 cm SVL) are returned to the wild since they no longer meet the export requirement. On the other hand, analysis of the trade levels between 2010 and 2019 showed that on the average 13,171 specimens were exported from Ghana.

4.2 Quotas and considerations

Existing export levels from Ghana are usually driven by annual market demand for the species. Given the estimate of 15,245.36 hatchlings from ranching annually based on information from collection per unit effort by collectors, a quota of 9000 is set for exports from ranching. The rationale for a lower value than the net mean of 15,245.36 hatchlings is to make room for about 10% mortality of the young animals after hatching. This value is a conservative estimate as it does include an analysis of the other incidental exports from less active companies. For the wild specimen, 30% of the quota for the ranched specimen of 3,000 is recommended. The wild specimens for export are usually taken from the same site as the eggs collected for the ranching. Therefore, the reduced quota for the wild specimen is intended to minimise the pressure on the wild populations until a comprehensive study is conducted. The combined numbers for the ranched and wild species were pegged slightly less than the average export levels recorded between 2010-2019 of 13,171.

The rationale for the lower quota for the wild specimen is to reduce pressure on the wild population in the same localities where the eggs are collected for ranching. Another reason is to encourage more ranching of the species since hatchlings in the wild are likely to face risks such as predation and wildfires. Moreover, captive breeding of the species has been observed to be very difficult (producing low success) (Bennett and Ali, 2017) and therefore ranching of the species is considered a better and more practical approach. For most

exporters ranching is perceived as more cost-effective compared to the capture of live animals from the wild which may result in injury and mortality of the young animals.

The species is very widespread, has a short maturity period and produces a sizeable number of eggs annually. Current collections of the eggs for ranching are however, restricted to a few localities although the species is widespread in Ghana with the range of the species covering more than two-thirds of the country. This means that a large proportion of the populations of *V. exanthematicus* in Ghana are not exploited for export. Though these localised collections may not significantly affect the population, it is important that more dispersed collection is encouraged to reduce the pressure on a few populations. Moreover, 10% of the hatchlings are annually released into the wild to boost the populations. In circumstances where the market demand for a particular year is low, the remaining hatchlings are also released into the wild.

The species is currently listed in CITES Appendix II and therefore a comprehensive NDF is required to determine a quota that is not detrimental to the survival of the species. In the absence of a comprehensive NDF, a conservative quota is recommended for export both from ranching and the wild based on the rapid assessment of the collection effort and other biological characteristics of the species.

5.0 Management and Conservation Measures

The species is protected by Ghana's laws, with regulated harvesting and trade. Harvesting permits are issued to registered wildlife traders, and export permits (CITES certificates) are granted after meeting specified requirements. Harvesting is strictly prohibited in Conservation Areas. Currently, no quota is set for the species, and Non-detrimental Findings (NDF) has not been undertaken due to resource constraints.

5.1 Monitoring and Control of the species

The Wildlife Division, which serves as the CITES Management Authority, conducts periodic monitoring of ranching activities, particularly during the breeding season. Monitoring of ranching operations by the Management Authority (MA) indicates that the operations of various companies meet most of the MA's requirements. A dedicated unit at Kotoka International Airport collaborates with Customs to inspect and verify permits and wildlife shipments. Veterinary Services also ensure the health status of specimens before export. The Management Authority ensures that only small-sized *V. exanthematicus*, up to a length of 25 cm snout-vent length (≤ 25 cm SVL), are exported and guarantees that healthy adult populations, which have survived predation, disease, and other risks, are maintained for reproduction in the wild.

5.2 Legal Framework

Ghana's legal framework, including the Wild Animal Preservation Act, Wildlife Conservation Regulation, Wildlife Reserves Regulations, and Exportation and Importation of Parrots (Prohibition Regulation), (L.I. 1240) 1980 governs the management and utilisation of wildlife resources. The Wildlife Resources Management bill (at consideration stage in parliament) aims to consolidate and revise existing legislation.

5.3 Conservation Education

Continuous community sensitization programmes are conducted to raise awareness on the need for the protection of the species particularly in local communities within the range of the species. .

5.4 Ranching

Wildlife breeders and traders are encouraged by the Management Authority to undertake ranching operations in controlled environment to avoid collection of species in the wild where there is very low probability of the species surviving to adulthood' due to high natural mortality from predation, disease and other environmental factors.

6.0 Conclusions and recommendations

The study provides preliminary analysis of the status of the species based on biological characteristics and egg collection information elicited from exporters and collectors. A considerable quantity of eggs is collected annually for ranching *V. exanthematicus* in Ghana. It is evident that collection of *V. exanthematicus* is restricted to a few areas although the species is widespread across the country. Although the current trade level is not detrimental to the survival of the species, the Scientific Authority is recommending the implementation of conservative quota until a comprehensive NDF is undertaken. From the analysis conducted and the limited information used in the estimation of quotas for the species, the following actions are recommended:

- A conservative quota of 9,000 ranching and 3000 wild specimens of *V. exanthematicus* is recommended for export from Ghana. This is pegged slightly lower than average for the export levels between 2010-2019 until a more comprehensive NDF is undertaken.
- The CITES Management and Scientific Authorities of Ghana must implement measures to ensure strict adherence to these quotas until a comprehensive Non-Detriment Findings (NDF) on the species is conducted.
- The Management Authority should ensure that restriction of exported animals with less than or equal to 25 cm snout-vent length (≤ 25 cm SVL) is maintained and that exporters are apprised adequately on these requirements.
- The Scientific Authority for Ghana should conduct periodic monitoring of exports and collections to ensure consistency with the recommendations made in the rapid assessment report.
- The Management Authority should implement measures to ensure that collectors expand the area of collection to reduce pressure on a few populations that have become areas of cyclic annual egg collection for the ranching of *V. exanthematicus*.

7.0 References

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8.0 Appendices

Appendix I Interview questions for Exporters of *Varanus exanthematicus*

Date

Name of company..... Number of collectors.....

Location of ranching site.....

Ranching capacity per season (total number of eggs).....

Period of year collection is done.....

Hatching success (number of eggs that hatch).....

No. of eggs per nest..... No. of nests per day.....

Total number of days for egg collection.....

Name of collection sites/communities.....

How long does the eggs take to hatch after collection.....

Brief description on the management of the ranch.....

.....
.....
.....

Total number of wild specimen collected from the wild.....

How long after collection do they export.....

What happens to un-exported specimen.....

Size of ranch.....

Challenges.....

Appendix II Pictures of ranching activities in Ghana











Appendix III Summary of responses of the exporters of *Varanus exanthematicus* in Ghana

Name of company	Number of collectors	Location of ranching site	Number of eggs collected per season (total number of eggs)	Period of year collection is done	Hatching success (number of eggs that hatch)	No. of eggs per nest	No. of nests per day	Total number of days for egg collection	Name of collection sites/ communities	How long does the eggs take to hatch after collection	Brief description on the management of the ranch	Total number wild specimen collected from the wild	How long after collection do they export	What happens to un-exported specimen	Size of ranch
Marco Gains company Ltd	4	TESHIE	5000 - 6000	DEC – FEB	(75% - 80%)	25	VARIES 0-20	30-45 DAYS	KWEKROM SENYA AMOANDA DOMINASE PRANG KWAME-- DANSO	ONE TO THREE MONTH			WHEN BABIES START HATCHING	THEY ARE RELEASED INTO THE BUSH. IT'S A GENERAL PRACTICE IN THE TRADE	
Oguns and Co (Gh) Ltd	5	KASOA	3000 - 4000	DEC - FEB	75% - 80%	21		60 – 80 DAYS	DAWA NINGO CHOPOLI DODOWA						
Exotic Zoo Enterprise	4	NEW TOWN	3000	DEC - FEB	75% - 80%	22		60 – 80 DAYS	ADA SEGA ASUTSURE AFIENYA						
Safari Pet Supply	6	HAATSO	4000 – 5000	DEC-FEB	75% - 80%	25		60-80 DAYS	AYIMENSA DAWA DOOWA						
Eublah Ent.	6	HAATSO	4000	DEC-FEB	75%-80%	25		30-45 DAYS	DAWA DOMINASE NINGO TECHIMA ATEBUBU						

Gogo Ultimate	4	NEWTOWN	2000	DEC-FEB	75% - 80	22		60 DAYS	AMOANDA SENYA AMOANDA						
Parrison Enterprise	6	KANESHIE	3000	DEC-FEB	75% - 80%	22		60 DAYS	DODOWA DAWA						

- June-August, collect wild (small to medium-sized)
- Since the pandemic the demand has gone down i.e. less than 10,000 young ones
- Export 2000 (Marco Gains, etc.)
- Collected eggs are hatched in Natural incubators (most) and automated incubators (2)

RECOMMENDATIONS OF THE ANIMALS AND STANDING COMMITTEES FOR SPECIES SELECTED FOR THE REVIEW OF TRADE IN SPECIMENS OF SPECIES REPORTED TO BE PRODUCED IN CAPTIVITY SELECTED AT AC29 AND RETAINED AT SC77;
RESPONSES FROM THE PARTIES CONCERNED; AND
DETERMINATION OF IMPLEMENTATION BY THE SECRETARIAT

Species/country combination (in alphabetical order by Party)	Action recommended at SC74 / SC75 (and SC77)	Response from range State	Assessment and recommendation of Secretariat
<i>Centrochelys sulcata</i> / Benin	<p>SC74 – Benin requested to:</p> <p>a) provide documentation for the justification of the legal origin of the founder stock;</p> <p>b) amend the published quota to include only specimens with a maximum carapace length of 15 cm; and</p> <p>c) provide information (e.g., in the form of stud books, pictures or other documentation) that allows the assessment of the ability of the breeding facilities to produce F1/F2 offspring in the reported numbers and the ability of the facilities in its territory to produce F2 specimens or manage the species in a manner demonstrated to be capable of doing so.</p> <p>SC77 agreed to a) retain <i>Centrochelys sulcata</i> from Benin in the review and maintain its current zero export quota for captive bred specimens (C) of <i>C. sulcata</i> until such time as it addresses the concerns of the Animals and Standing Committees; and b) encourage Benin to provide an update on the implementation of the recommendations to the Secretariat by 1 March 2024 so that the matter can be</p>	No response was received from Benin.	<p><u>Assessment</u></p> <p>Benin has not addressed the recommendations of the Animals and Standing Committees.</p> <p><u>Recommendation</u></p> <p>The Animals Committee is invited to:</p> <p>i) recommend retaining <i>C. sulcata</i> from Benin in the review and maintain its current zero export quota for captive bred specimens (C) of <i>C. sulcata</i> until such time as it addresses the concerns of the Animals and Standing Committees; and</p> <p>ii) encourage Benin to provide an update on the implementation of the recommendations to the Secretariat by 30 September 2024 so that the matter can be considered at the 78th meeting of the Standings Committee (SC78, Geneva, February 2025).</p>

Species/country combination (in alphabetical order by Party)	Action recommended at SC74 / SC75 (and SC77)	Response from range State	Assessment and recommendation of Secretariat
	considered at the 33rd meeting of the Animals Committee (AC33, July 2024, tbc).		
<i>Centrochelys sulcata</i> / Ghana	<p>Ghana requested to respond to the recommendations of the Standing Committee as follows:</p> <ul style="list-style-type: none"> – Provide evidence of legal acquisition of all breeding stock for all facilities, including information on source of animals used to augment the breeding stock; – Provide information on the ability of the facilities in Ghana to produce F2 specimens or manage the species in a manner demonstrated to be capable of doing so; and – Restrict export to specimens of less than 15cm straight carapace length. <p>Ghana was further encouraged to:</p> <ul style="list-style-type: none"> – Introduce standard reporting forms to be used by the facilities according to the ones in the guidance – Continue regular monitoring and inspections as appropriate; inspections should occur at the end of the breeding season for each stock – Establish a unique marking system for the breeding stock. <p>SC77 agreed to: a) remove <i>Centrochelys sulcata</i> from Ghana from the review subject to the publication of a maximum size limit of</p>	<p>Ghana previously responded in a letter dated 31 May 2022, the details of which can be found in document SC77 Doc. 36.</p> <p>On the basis of that response, SC77 agreed to remove <i>Centrochelys sulcata</i> from Ghana from the review subject to the publication of a maximum size limit of 15cm straight carapace length with its export quota on the CITES website.</p> <p>Ghana confirmed the export quota and size restriction, which has now been published on the CITES website. Therefore, this species/country combination has been removed from the review.</p>	<p><u>Assessment</u></p> <p>Ghana has addressed the recommendations of the Standing Committee.</p> <p><u>Recommendation</u></p> <p>The Animals Committee is invited to note that <i>Centrochelys sulcata</i> from Ghana has been removed from the review, following the publication of a maximum size limit of 15cm straight carapace length with its export quota on the CITES website.</p>

Species/country combination (in alphabetical order by Party)	Action recommended at SC74 / SC75 (and SC77)	Response from range State	Assessment and recommendation of Secretariat
	15cm straight carapace length with its export quota on the CITES website; and b) remind Ghana of the offer from the United States of America to provide assistance related to the development and implementation of a unique marking system for the breeding stock at the facilities.		
<i>Varanus exanthematicus</i> / Ghana	<p>Ghana requested to respond to the recommendations of the Standing Committee as follows:</p> <p>Ghana should confirm that it will report all specimens from facilities that are produced under the management practices described in document AC30 Doc. 13.1 A2 as source code W and that accordingly they will undertake a non-detriment finding (NDF) for all exports.</p> <p>SC77 agreed to: a) retain <i>Varanus exanthematicus</i> from Ghana in the review; b) request that Ghana clarify if its 2023 export quotas of 3,000 wild (W) and 9,000 ranched (R) were established based on the rapid assessment carried out by the Scientific Authority and explain the scientific justification for how it has arrived at these figures when it has stated that it has not been able to make an NDF. The Standing Committee also invited Ghana to share its rapid assessment with the Chair of Animals Committee for review; and provide an update on the implementation of the recommendations to the Secretariat by 1 March 2024 so that the matter can be</p>	<p>Ghana previously responded in a letter dated 31 May 2022 the details of which can be found in document SC77 Doc. 36.</p> <p>On the basis of that response, SC77 agreed to retain <i>Varanus exanthematicus</i> from Ghana in the review; and request that Ghana clarify if its 2023 export quotas of 3,000 wild (W) and 9,000 ranched (R) were established based on the rapid assessment carried out by the Scientific Authority and explain the scientific justification for how it has arrived at these figures when it has stated that it has not been able to make an NDF.</p> <p>Following SC77, Ghana provided a copy of the rapid assessment, on which it established the following quotas for <i>V. exanthematicus</i>: 3,000 Wild (W) and 9,000 Ranched (R), which were published in 2023. This rapid assessment is found in Annex 4.</p> <p><u>Note from Secretariat:</u></p> <p>The following two clarifications from Ghana would be useful:</p>	<p><u>Assessment</u></p> <p>Ghana has addressed the recommendations of the Animals and Standing Committees.</p> <p><u>Recommendation</u></p> <p>The Animals Committee is invited to:</p> <p>i) recommend removing <i>Varanus exanthematicus</i> from Ghana from the review; and</p> <p>ii) request Ghana to ensure that the correct source code is applied in future.</p>

Species/country combination (in alphabetical order by Party)	Action recommended at SC74 / SC75 (and SC77)	Response from range State	Assessment and recommendation of Secretariat																																										
	considered at the 33rd meeting of the Animals Committee (AC33, July 2024, tbc).	<p>1. The trade data presented in the rapid assessment is stated to reflect exports but differs from the comparative data extracted by the Secretariat on 6 May 2024, which is presented below:</p> <table border="1" data-bbox="1014 496 1547 1407"> <thead> <tr> <th data-bbox="1014 496 1106 592">Year</th> <th data-bbox="1106 496 1328 592">Importer (source - live specimens)</th> <th data-bbox="1328 496 1547 592">Exporter (source - live specimens)</th> </tr> </thead> <tbody> <tr> <td data-bbox="1014 592 1106 624">2010</td> <td data-bbox="1106 592 1328 624">W – 14,015</td> <td data-bbox="1328 592 1547 624">W – 20,547</td> </tr> <tr> <td data-bbox="1014 624 1106 687">2011</td> <td data-bbox="1106 624 1328 687">W – 15,900</td> <td data-bbox="1328 624 1547 687">W – 23,330 R – 90</td> </tr> <tr> <td data-bbox="1014 687 1106 751">2012</td> <td data-bbox="1106 687 1328 751">W – 11,577 R - 653</td> <td data-bbox="1328 687 1547 751">W – 21,517 R – 50</td> </tr> <tr> <td data-bbox="1014 751 1106 815">2013</td> <td data-bbox="1106 751 1328 815">W – 7,031</td> <td data-bbox="1328 751 1547 815">W – 11,853 R – 350</td> </tr> <tr> <td data-bbox="1014 815 1106 911">2014</td> <td data-bbox="1106 815 1328 911">W – 5,443 C – 50</td> <td data-bbox="1328 815 1547 911">W – 9,455 R - 300</td> </tr> <tr> <td data-bbox="1014 911 1106 1007">2015</td> <td data-bbox="1106 911 1328 1007">W – 7,180 C - 100</td> <td data-bbox="1328 911 1547 1007">W – 10,000 R - 390 C – 500</td> </tr> <tr> <td data-bbox="1014 1007 1106 1038">2016</td> <td data-bbox="1106 1007 1328 1038">W – 5,994</td> <td data-bbox="1328 1007 1547 1038"></td> </tr> <tr> <td data-bbox="1014 1038 1106 1094">2017</td> <td data-bbox="1106 1038 1328 1094">W - 6826</td> <td data-bbox="1328 1038 1547 1094">W – 3,495 C – 100</td> </tr> <tr> <td data-bbox="1014 1094 1106 1190">2018</td> <td data-bbox="1106 1094 1328 1190">W – 7,607 C - 400</td> <td data-bbox="1328 1094 1547 1190">W – 15,760 R – 200 C – 120</td> </tr> <tr> <td data-bbox="1014 1190 1106 1254">2019</td> <td data-bbox="1106 1190 1328 1254">W – 7,243 R – 200</td> <td data-bbox="1328 1190 1547 1254">W – 9,280</td> </tr> <tr> <td data-bbox="1014 1254 1106 1286">2020</td> <td data-bbox="1106 1254 1328 1286">W – 6,062</td> <td data-bbox="1328 1254 1547 1286"></td> </tr> <tr> <td data-bbox="1014 1286 1106 1350">2021</td> <td data-bbox="1106 1286 1328 1350">W – 3,121 F - 50</td> <td data-bbox="1328 1286 1547 1350">W – 12,420 F - 50</td> </tr> <tr> <td data-bbox="1014 1350 1106 1407">2022</td> <td data-bbox="1106 1350 1328 1407">W – 5,181 C - 250</td> <td data-bbox="1328 1350 1547 1407">W – 5,805</td> </tr> </tbody> </table>	Year	Importer (source - live specimens)	Exporter (source - live specimens)	2010	W – 14,015	W – 20,547	2011	W – 15,900	W – 23,330 R – 90	2012	W – 11,577 R - 653	W – 21,517 R – 50	2013	W – 7,031	W – 11,853 R – 350	2014	W – 5,443 C – 50	W – 9,455 R - 300	2015	W – 7,180 C - 100	W – 10,000 R - 390 C – 500	2016	W – 5,994		2017	W - 6826	W – 3,495 C – 100	2018	W – 7,607 C - 400	W – 15,760 R – 200 C – 120	2019	W – 7,243 R – 200	W – 9,280	2020	W – 6,062		2021	W – 3,121 F - 50	W – 12,420 F - 50	2022	W – 5,181 C - 250	W – 5,805	
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Species/country combination (in alphabetical order by Party)	Action recommended at SC74 / SC75 (and SC77)	Response from range State	Assessment and recommendation of Secretariat
		<p>From the table above, it appears that Ghana may be experiencing some difficulties in assigning the correct source codes.</p> <p>2. Figure 1 seems to indicate that most of the egg collection occurs outside of the range, which would seem a little strange.</p> <p>Overall, it appears that Ghana may be experiencing some difficulties in assigning the correct source codes, but this is a widespread species and the quotas appear to be sufficiently precautionary.</p>	
<i>Centrochelys sulcata</i> / Mali	<p>Mali requested to:</p> <p>a) provide evidence of the legal acquisition of the stock,</p> <p>b) provide documentation and evidence in the form of stud books, pictures or other documentation that allows the assessment of the ability of the breeding facilities to produce F1/F2 offspring in the reported numbers,</p> <p>c) amend the published quota to include only specimens with a maximum carapace length of 15 cm and the scientific basis by which it has been established that the quantities of <i>Centrochelys sulcata</i> taken from the wild and used as breeding stock. would not be detrimental to the survival of the species.</p> <p>SC77 agreed to a) retain <i>Centrochelys sulcata</i> from Mali in the review until such time as it addresses the concerns of the Animals and Standing Committees; and b)</p>	No response was received from Mali.	<p><u>Assessment</u></p> <p>Mali has not addressed the recommendations of the Animals and Standing Committees.</p> <p><u>Recommendation</u></p> <p>The Animals Committee is invited to:</p> <p>i) recommend retaining <i>C. sulcata</i> from Mali in the review until such time as it addresses the concerns of the Animals and Standing Committees; and</p> <p>ii) urge Mali to provide an update on the implementation of the recommendations to the Secretariat by 30 September 2024 so that the matter can be considered at the</p>

Species/country combination (in alphabetical order by Party)	Action recommended at SC74 / SC75 (and SC77)	Response from range State	Assessment and recommendation of Secretariat
	<p>urge Mali to provide an update on the implementation of the recommendations to the Secretariat by 1 March 2024 so that the matter can be considered at the 33rd meeting of the Animals Committee (AC33, July 2024, tbc).</p>		<p>78th meeting of the Standing Committee (SC78, Geneva, February 2025).</p>
<p><i>Centrochelys sulcata</i> / Togo</p>	<p>Togo requested to provide an update on the implementation of the recommendations of the Standing Committee as follows:</p> <p>By 1 February 2019, Togo should:</p> <ul style="list-style-type: none"> – provide evidence of Legal acquisition of all breeding stock for all facilities, including information on source of animals used to augment the breeding stock – provide the justification for, and details of, the scientific basis by which it has been established that the quantities of <i>Centrochelys sulcata</i> taken from the wild and used as breeding stock would not be detrimental to the survival of the species. – provide information on the ability of the facilities in Togo to produce F2 or manage the species in a manner demonstrated to be capable of doing so. – restrict export to specimens of less than 15cm straight carapace length – confirm that they will export specimens produced in these facilities with source code “F” only and make a legal acquisition and non-detriment finding prior to authorizing export, until such time that a given facility is able to produce to F2 generation in which case source code “C” can be used those 	<p>Togo responded with an assessment of the production of live specimens of <i>C. sulcata</i> from Togolese breeding farms, following a non-detriment finding (NDF) “primary evaluation template”.</p> <p>Togo explains that the production of specimens of this species in Togo has been established since the 1970s. “There are currently 554 breeding adults, including 304 males and 150 females. The annual production size varies between 12,500 and 13,500 specimens per year, based on the breeding adults available at the various breeding farms. Production of live specimens of this species began at least ten years ago and some breeding farms have been able to produce a second generation (F2) of live specimens. In general, exported specimens come from the original breeding stock and are rarely more than one year old. Based on source code definitions, <i>C. sulcata</i> specimens exported from Togo are mostly “captive born”. They should therefore be assigned the code “F” or “F1” and not the other way round. “</p>	<p><u>Assessment</u></p> <p>Togo has partially addressed the recommendations of the Standing Committee, but the origin and the legality of the breeding stock remains unclear.</p> <p><u>Recommendation</u></p> <p>The Standing Committee is invited to:</p> <ul style="list-style-type: none"> i) recommend retaining <i>Centrochelys sulcata</i> from Togo in the review, until it provides evidence of legal acquisition of all breeding stock for all facilities, including information on source of animals used to augment the breeding stock; and ii) encourage Togo to provide an update on the implementation of the recommendations to the Secretariat by 30 September 2024 so that the matter can be considered at the 78th meeting of the Standing Committee (SC78, Geneva, February 2025).

Species/country combination (in alphabetical order by Party)	Action recommended at SC74 / SC75 (and SC77)	Response from range State	Assessment and recommendation of Secretariat
	<p>specimens in accordance with Resolution Conf.10.16 (Rev. CoP19)</p> <p>Togo is further encouraged to:</p> <ul style="list-style-type: none"> – introduce standard reporting forms to be used by the facilities according to the ones in the guidance – continue regular monitoring and inspections as appropriate at the end of the breeding season – establish a unique marking system for the breeding stock – re-evaluate their existing export quota in consultation with the Scientific Authority <p>SC77 agreed to: a) retain <i>Centrochelys sulcata</i> from Togo in the review until such time as it addresses the concerns of the Animals and Standing Committees; and b) encourage Togo to provide an update on the implementation of the recommendations to the Secretariat by 1 March 2024 so that the matter can be considered at the 33rd meeting of the Animals Committee (AC33, July 2024, tbc).</p>	<p>In this case, the size of specimens exported should not exceed 15 cm, but Togo does not feel it is necessary to establish an export quota.</p> <p>As part of the implementation of the PARC project in Togo show that the species is being bred and reproduced on almost all the breeding farms, mainly in the maritime region. Visits to a number of breeding centres have enabled Togo to identify large breeding adults, reproduced in captivity since the 1980s (for L'ADAPTION SARL), 1997 (for REPTILAND), 1994 (for MARE), 2004 (for Togo Exotic) and 2012 (ARZOTIC GARDEN).</p> <p>Togo provides details of the initial and additional breeding livestock at its establishments (Table 1 in Annex 3 of this document). Togo states that the species does not occur in Togo in the wild, although the Secretariat notes that species + indicates that Togo is a range State.</p> <p>In Togo, observations recorded at breeding farms show that the species lays on average three to four times a year, between 15 and 50 eggs per clutch depending on its age, with an average hatching success of 90%. Based on the observations made during this study, the production capacity of live specimens of this species on breeding farms is significant. An</p>	

Species/country combination (in alphabetical order by Party)	Action recommended at SC74 / SC75 (and SC77)	Response from range State	Assessment and recommendation of Secretariat
		<p>annual capacity of between 12,500 and 13,300 live specimens has been recorded.</p> <p>Togo states that its CITES authorities are working to implement tools to control the production of live specimens of this species at national level. Where necessary for each export, officers from the management authority are involved in checking the specimens to ensure that they really come from captive breeding. Regulations are currently being drawn up and implemented for the initial assessment of breeding adults at the various breeding farms, and for controlling the acquisition of potential breeding adults in the years to come.</p> <p>Togo acknowledges that in most cases, the years in which specimens were acquired on many farms date back to the 70s, 80s and 90s (Togo became a Party to CITES in 1979), when there was not enough enforcement of CITES to oblige those responsible to have permits to acquire and hold breeding specimens. Togo's CITES authorities are therefore committed to regularising the procedures for acquiring and holding live wildlife specimens.</p> <p><u>Notes from the Secretariat</u></p> <p>Togo's status as a range State needs to be clarified. Togo claims that the species does</p>	

Species/country combination (in alphabetical order by Party)	Action recommended at SC74 / SC75 (and SC77)	Response from range State	Assessment and recommendation of Secretariat
		<p>not occur in the wild (though it is listed as a range State in Species+).</p> <p>It is noted that the species/country combination was reviewed under the review of Significant Trade process (see document AC29 Doc. 13.2, Annex 1), when it was determined that “Occurrence in Togo has been questioned, but has been reported from the extreme north of the country. No estimates of population size, but population considered rare and fragile.... The species is considered rare, with questionable occurrence in Togo”.</p> <p>To see if the breeding stock could have been imported, the Secretariat examined the CITES trade database for the period 1980 to 2024. Indications are that a total of 3,615 specimens may have been imported into Togo between 2001 and 2020 under source code C (from Mali, Ghana and Niger); and, 3,580 live specimens were imported into Togo between 2009 and 2014 under source code F (from Mali). However, these volumes were only reported by the exporter; Togo did not report any imports.</p> <p>It would be useful if Togo could clarify if any of this trade took place as it may explain the legal origin of some of the breeding stock.</p>	