

Scientific basis for regulation of international trade in endangered wild species of animals and plants

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Background

The Norwegian Environment Agency refer to appointment of the Norwegian Scientific Committee for Food Safety and the Environment (VKM) as national scientific authority under CITES. We request that VKM assess the listing proposals as proposed by the Parties to the upcoming 19th Conference of the Parties (CoP19).

The 19th Meeting of the Parties (CoP19) will be held in Panama City, Panama, 14-25. November 2022. The CoP will, among other things, consider the proposals the parties have submitted for changes to the CITES Appendices. All proposals will be considered in accordance with the guidelines in Resolution 9.24 (Rev CoP17), which are the list criteria. The assessment and report from VKM on the list proposals will be used in the preparation of a draft for mandate and Norwegian positions for the CoP, which will be submitted to KLD for a final decision.

Terms of Reference

The Norwegian Environment Agency requests VKM to assess all list proposals submitted by the parties for CoP19. The assessment should follow the format of Annex 1 and should be approximately two pages per proposal. Some proposals may include more than one species, assessments of these may exceed two pages if necessary. The list criteria in Res. Conf. 9.24 (Rev. CoP17) are the primary basis for the parties' assessment of proposals, see <https://cites.org/sites/default/files/document/e-res-09-24-r17.pdf>. It follows that assessment from VKM should be based on these criteria and include an assessment of which criteria are met for each proposal. The Norwegian Environment Agency points out that there will be analyzes of the list proposals from several other organizations, including the FAO and the CITES Secretariat, which will also contribute to the CoP's assessments of the proposals. Information on previously adopted or rejected proposals can be found on the CITES Secretariat's website (<https://cites.org>). In addition, we refer to relevant information about the species in <http://speciesplus.net>, <http://trade.cites.org>, and any assessments made by organizations such as IUCN-TRAFFIC (<http://www.traffic.org>)

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Introduction

Assessment of species listing proposals for the 19th Conference of the Parties to the Convention on International Trade in Endangered Species (CITES CoP19). The Norwegian Scientific Committee for Food and Environment (VKM) is the Norwegian national Scientific Authority under CITES. The Norwegian Environment Agency has requested VKM to assess the listing proposals submitted by the Parties to the upcoming 19th Conference of the Parties (CoP19). The 19th Meeting of the Parties (CoP19) will be held in Panama City, Panama, 14-25. November 2022. The CoP will, among other things, consider the proposals the Parties have submitted for amendment of the CITES Appendices. All proposals will be considered in accordance with the guidelines in Resolution 9.24 (Rev CoP17), which include the criteria for listing of species. This assessment of the listing proposals by VKM is provided to support preparation of a draft mandate for Norwegian positions for the CoP, which will be submitted to KLD for a final decision.

A total of 52 listing proposals have been submitted ahead of CoP19. The proposals cover a wide range of species of both fauna and flora, inhabiting a wide range of different habitats.

Sharks and rays as well as turtles are among the most threatened groups of vertebrates, and many species from these groups are included in the CoP19 proposals.

The role of CITES in marine conservation has been debated over the years (Vincent et al., 2014), but in recent years more and more marine species have been listed in the CITES Appendices. Among the CoP19 listing proposals, there are several new proposals for marine species. Dulvy et al. (2021) reported that more than one-third of the world's sharks and rays are estimated to be threatened, with overfishing being a universal threat to the species. Both coastal and oceanic sharks species are threatened with overexploitation (MacNeil et al., 2020; Pacoureau et al., 2021). The common denominators for the shark proposals submitted to CoP19 is that there is a lack of coordinated regulation of harvest and international trade. The lucrative shark-fin trade is hard to monitor at species level as dried shark fins are hard to tell apart and thus look-alike issues (i.e. difficulties in separating between different species products in trade) impede effective monitoring.

Turtles and tortoises are under intense pressure from a range of threats including collection and trade for human consumption as well as the international pet trade (Stanford, 2018). The geographic distribution of the most threatened turtles and tortoises is heavily skewed towards Asia (Stanford, 2018). This is partly due to high species diversity of turtles found in Asia. The main causes are, however, the intense levels of harvest of adults and eggs, extensive habitat degradation and loss, and the international trade in turtles and turtle products (Stanford, 2018). Global turtle trade follows a boom and bust pattern- once a species is depleted or regulated, the trade shifts to another species (CITES, 2016).

Boom and bust cycles are also what characterizes many species in the timber trade. Among the listing proposals we find several that concern genera of tropical timber tree species. In timber trade stocks of most of the highest priced species have been depleted previously, and trade shifts to new genera that have wood with similar – if somewhat inferior – properties. These new genera often contain one or two species that are favored in the timber trade, and then again dwindling supplies lead to secondary shifts to other species within the same genus. Timber trade is very distinct from the more multi-faceted use complexity seen for cartilaginous fish (sharks, guitarfish and rays). However as trade is multidirectional and subject to national legislation and quotas in many countries, CITES listings for timber species are hard to enforce.

Noteworthy, listing proposals that can be expected to generate significant discourse include: Listing the common hippopotamus in Appendix II due to significant levels of international trade in hippo parts and derivatives, particularly hippo teeth (hippo ivory); the proposed exclusion of *Dalbergia sissoo* from Appendix II, a common cultivated species listed at CoP17 together all *Dalbergia* species to limit trade; two contradictory proposals concerning some of the African elephant populations of south-eastern Africa; as well as proposals concerning the trade status of southern white rhinoceros and sea cucumbers.

Table 1. Proposals for amendment of the Appendices.

Species name	Common name	CoP19 Proposal
<i>Hippopotamus amphibius</i>	Hippopotamus amphibius	1
<i>Ceratotherium simum simum</i>	White rhinoceros	2
<i>Ceratotherium simum simum</i>	White rhinoceros	3
<i>Loxodonta africana</i>	African elephant	4
<i>Loxodonta africana</i>	African elephant	5
<i>Cynomys mexicanus</i>	Mexican prairie dog	6
<i>Branta canadensis leucopareia</i>	Aleutian cackling goose	7
<i>Kittacincla malabarica</i>	White-rumped shama	8
<i>Pycnonotus zeylanicus</i>	Straw-headed bulbul	9
<i>Phoebastria albatrus</i>	Short-tailed albatross	10
<i>Caiman latirostris</i>	Broad-snouted caiman	11
<i>Crocodylus porosus</i>	Saltwater crocodile	12

<i>Crocodylus siamensis</i>	Siamese crocodile	13
<i>Physignathus cocincinus</i>	Chinese water dragon	14
<i>Cyrtodactylus jeyporensis</i>	Jeypore Indian gecko	15
<i>Tarentola chazaliae</i>	Helmethead gecko	16
<i>Phrynosoma platyrhinos</i>	Desert horned lizard	17
<i>Phrynosoma</i> spp.	Horned lizards	18
<i>Tiliqua adelaidensis</i>	Pygmy bluetongue lizard	19
<i>Epicrates inornatus</i>	Puerto Rican boa	20
<i>Crotalus horridus</i>	Timber rattlesnake	21
<i>Chelus fimbriata</i> , <i>C. orinocensis</i>	Matamata turtle, Orinoco matamata turtle	22
<i>Macrochelys temminckii</i> , <i>Chelydra serpentina</i>	Alligator snapping turtle, Common snapping turtle	23
<i>Graptemys barbourin</i> , <i>G. ernsti</i> , <i>G. gibbonsi</i> , <i>G. pearlensis</i> , <i>G. pulchra</i>	Map turtles	24

<i>Batagur kachuga</i>	Red-crowned roofed turtle	25
<i>Cuora galbinifrons</i>	Indochinese box turtle	26
Rhinoclemmys spp.	Neotropical wood turtles	27
<i>Claudius angustatus</i>	Narrow-bridged musk turtle	28
<i>Kinosternon</i> spp.	Mud turtles	29
<i>Staurotypus salvinii</i> , <i>S. triporcatus</i>	Giant musk turtle, Mexican musk turtle	30
<i>Sternotherus</i> spp.	Musk turtles	31
<i>Apalone</i> spp.	Softshell turtles	32
<i>Nilssonina leithii</i>	Leith's softshell turtle	33
Centrolenidae spp.	Glass frogs	34
<i>Agalychnis lemur</i>	Lemur leaf frog	35
<i>Laotriton laoensis</i>	Lao warty newt	36
Carcharhinidae spp.	Requiem sharks	37

Sphyrnidae spp.	Hammerhead sharks	38
<i>Potamotrygon albimaculata</i> , <i>P. henlei</i> , <i>P. jabuti</i> , <i>P. leopoldi</i> , <i>P. marquesi</i> , <i>P. signata</i> , <i>P. wallacei</i>	Freshwater stingrays	39
Rhinobatidae spp.	Guitarfishes	40
<i>Hypancistrus zebra</i>	Zebra pleco	41
<i>Theleonata</i> spp.	Sea cucumbers	42
Flora species with annotation #1, #4, #14 and Appendix-I listed species of Orchidaceae		43
<i>Handroanthus</i> spp., <i>Roseodendron</i> spp., <i>Tabebuia</i> spp.	Trumpet trees	44
<i>Rhodiola</i> spp.	Stonecrops	45
<i>Azalia</i> spp.	Pod mahoganies	46
<i>Dalbergia sissoo</i>	North Indian rosewood	47
<i>Dipteryx</i> spp.	Cumaru	48
<i>Paubrasilia echinata</i>	Brazil wood	49
<i>Pterocarpus</i> spp.	Padauk	50

<i>Khaya</i> spp.	African mahoganies	51
Orchidaceae spp.	Orchids	52

Assessments

CoP19 Prop. 1 *Hippopotamus amphibius*

Review of listing proposal under CITES

Benin, Burkina Faso, Central African Republic, Gabon, Guinea, Liberia, Mali, Niger, Senegal and Togo propose to transfer *Hippopotamus amphibius* from CITES Appendix II to Appendix I. The proponents state that the transfer to Appendix I is in line with Res. Conf. 9.24 (Rev. CoP17), Annex 1, paragraph C: "A marked decline in the population size in the wild, which has been either i) observed as ongoing or as having occurred in the past (but with a potential to resume); or ii) inferred or projected on the basis of any one of the following: a decrease in area of habitat; a decrease in quality of habitat; levels or patterns of exploitation; a high vulnerability to either intrinsic or extrinsic factors; or a decreasing recruitment." The proponents emphasise that the hippos' biological characteristics such as low reproductive output makes them particularly vulnerable to population decline.

Species name: *Hippopotamus amphibius* (Linnaeus, 1758), Common name: Common hippopotamus, Norsk navn: Flodhest

Distribution: Hippos inhabit 38 countries in Africa including Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Central African Republic, Chad, Côte d'Ivoire, Democratic Republic of Congo, Equatorial Guinea, Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea Bissau, Kenya, Malawi, Mali, Mozambique, Namibia, Niger, Nigeria, Republic of Congo, Rwanda, Senegal, Sierra Leone, Somalia, South Africa, South Sudan, Sudan, Swaziland, Tanzania, Togo, Uganda, Zambia, and Zimbabwe (Lewison and Pluháček, 2017).

Population trend: While the overall population trend was categorized as stable in 2016 (Lewison and Pluháček, 2017), a more detailed assessment of the populations of different range countries revealed that 25 out of 38 hippo populations were in fact decreasing or the trend was unknown (Lewison and Pluháček, 2017, Supplementary information). In addition, the population trend for some of the national populations that were described as stable or increasing in 2016, are currently better described as unknown, either because of outdated studies or they are declining based on more recent studies (CoP19 Prop.1).

Habitat status: Fragmented, particularly in West and Central Africa (Lewison and Pluháček, 2017). Loss and degradation of habitat are among the primary threats to hippos (Lewison and Pluháček, 2017). Hippos are dependent on freshwater areas that are shallow enough for them to stand and be completely submerged and large enough to contain the territories of several males. They compete with humans for freshwater resources, and diversion of freshwater for agricultural development and human development around water bodies pose a threat to hippo populations (Lewison and Pluháček, 2017 and references therein).

Describe known/suspected level of trade: Hippos are traded (mainly meat and ivory) in large quantities, both legally and illegally. Illegal trade is, together with loss and destruction of habitat, the most significant threat to this species.

Literature review of biological status and conservation status, including information on status in other relevant conventions

Hippos are classified as Vulnerable A4acd on the IUCN Red List (Lewison and Pluháček, 2017). The species was also listed as Vulnerable in the previous Red List assessment in 2008, and while the population size estimate is a lot lower in the 2016-assessment, it is believed that this is due to an

overestimation of population size in 2008. It is however noted that the hippo conservation situation is precarious, and that there is a need for conservation actions across their range (Lewison and Pluháček, 2017). Preparing an updated Red List assessment is one of the goals laid out in the IUCN Hippo Specialist Group 2020-report (Lewison and Pluháček, 2020). Hippos were initially listed in CITES Appendix III (Ghana) on 26/02/76, then later in CITES Appendix II in 1995 and under the EU Trade Regulations Annex B in 1997.

Evaluation of trade data

Data from the CITES trade database (trade.cites.org), analysed by the proponents (CoP19 Prop.1), indicates that, between 2009 and 2018, 77,579 hippo specimens without a measurable unit were globally imported from all sources and for all purposes; 98% were of wild source, and the main purposes of trade were commercial (73%), hunting trophy (24%), and personal (3%). The most common specimens in trade are carvings (made from teeth) and teeth, known as hippo ivory. Hippo ivory is popular among consumers as it is generally cheaper and more easily attainable than elephant ivory (Fisher, 2016). The US is the largest importer of hippo products (Nazeri et al., 2022). The 2016 IUCN red list assessment identified "illegal and unregulated hunting for meat and ivory" as a primary threat to the hippo (Lewison and Pluháček, 2017). The proponents present numerous examples of hippo teeth seizures and arrests since 2016 (CoP19 Prop.1, Annex, Table 8). There is evidence that the legal trade in hippo ivory provides an alley for the illegal trade. Anderson and Gibson (2018) documented major discrepancies in the quantities of hippo ivory reported as imported into Hong Kong SAR versus that reported as exported from Uganda and Tanzania over a decade. Tanzania and Uganda, which are the two countries of origin for most of the legal hippo ivory between 2009 and 2018, were also the countries of origin with the largest quantity of illegally traded hippo ivory (Andersson and Gibson, 2018; Moneron and Drinkwater, 2021).

Potential other information by CITES reviews and on nature management issues in range states

In May 2022, several conservation organizations (the Humane Society of the United States, Humane Society International, Humane Society Legislative Fund, and Center for Biological Diversity) prepared a petition to the US Fish and Wildlife Service to list the hippo under the Endangered Species Act. The petition is justified by "The common hippopotamus has suffered a major reduction in population size across its range primarily due to habitat loss and fragmentation, legal overutilization for commercial and recreational purposes, illegal hunting and trade, disease, and the inadequacy of current regulatory mechanisms, and such decline continues unabated" (Nazeri et al., 2022). Hippos have been the subject of CITES Animal Committee Review of Significant Trade (RST) two times: first in 1999 (CITES, 1999) and second in 2008 due to concerns about declining populations and high trade levels. The RST process resulted in export quotas for Tanzania. The hippo was selected as eligible for inclusion in the Review of Significant Trade Following CoP18 due to high trade volume and a sharp increase (IUCN-WCMC, 2020). The hippo is officially protected in many range states, but the level of enforcement of such regulations remains poor in many countries (Lewison and Pluháček, 2017). Hippos are protected from hunting for commercial or other purposes in 14 range States: Angola, Burkina Faso, Cameroon, Central African Republic, Congo, Gabon, Ghana, Guinea Bissau, Kenya, Niger, Nigeria, Rwanda, Senegal, and Somalia (CoP19 Prop.1). Except for in Equatorial Guinea, hippos are partially protected, which means that hunting for commercial or other purposes requires a permit (CoP19 Prop.1). Except for Cameroon, none of the range States involved in legal hippo trade have national hippo management plans. The IUCN Hippo Specialist Group has called for regional action plans for hippo conservation including coordination across West, Central and East Africa (Lewison and Pluháček, 2020).

Recommendations

Flodhesten er sårbar og er truet av tap og ødeleggelse av habitat og internasjonal handel, både lovlig og ulovlig. Det mangler oppdatert informasjon om bestandsstørrelse for mange land, inkludert de landene hvor det eksporteres flest flodhestdeler og -produkter fra. Mange bestander er i nedgang, mens noen er ikke det. Det er derfor vanskelig å si konkret hvor markant nedgangen i

den totale bestanden er. Det er dermed uklart hvorvidt arten oppfyller kriteriene i Res. Conf. 9.24 (Rev. CoP17), Annex 1, paragraph C, i og ii. Internasjonal handel vil trolig kunne være ødeleggende for denne artens videre overlevelse.

Literature list

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- CITES (1999). Trade in Wild-caught Animal Specimens: A Review of Selected Animal Species. Draft Report to CITES Animals Committee prepared by WCMC, IUCN/SSC and TRAFFIC International. AC15.14.4.
- CoP19 Prop.1: <https://cites.org/sites/default/files/documents/E-CoP19-Prop-01.pdf>
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- Nazeri et al. (2022) Petition to List the Common Hippopotamus (*Hippopotamus amphibius*) Pursuant to the United States Endangered Species Act: https://www.humanesociety.org/sites/default/files/docs/Petition_Hippo_ESA_Protections.pdf
- UNEP-WCMC. 2020. Selection of species for inclusion in the Review of Significant Trade following CoP18: Extended analysis. UNEP-WCMC, Cambridge.

CoP19 Prop. 2 *Ceratotherium simum simum*

Review of listing proposal under CITES

Namibia and Botswana propose to transfer the Namibian population of *Ceratotherium simum simum* from CITES Appendix I to Appendix II with the following annotation: For the exclusive purpose of allowing international trade in:

- a) live animals for in-situ conservation only; and
- b) hunting trophies.

All other specimens shall be deemed to be specimens of species included in Appendix I and the trade shall be regulated accordingly. The proponents state that the population no longer fulfil the criteria for inclusion in Appendix I, as the wild population is not small, does not have restricted distribution nor has it experienced a marked decline since the species was re-introduced to Namibia 46 years ago. Both the South African and the Eswatini populations are subject to the Annotation.

Species name: *Ceratotherium simum simum* Burchell 1918. Common name: Southern white rhinoceros. Norsk navn: Stumpnesehorn.

Distribution: The majority of *C. simum simum* occur in South Africa. Smaller reintroduced subpopulations occur within former range States in Botswana, Namibia, Eswatini, and Zimbabwe; subpopulations of free-ranging southern white rhino have also been established outside their historical range in Kenya, Zambia and more recently Uganda (Emslie et al., 2020).

Population trend: The global population trend is decreasing according to the latest IUCN Red List assessment (Emslie et al., 2020). As of December 31, 2017, there were an estimated 18,064 white rhinos in the wild (Emslie et al., 2019). Namibia holds the second largest white rhino population in the world after South Africa, with a population estimated to 1237 rhinos in 2021 (CoP19 Prop. 2).

Habitat status: The potential range for southern white rhinoceros in Namibia is restricted by rainfall, as the species is not known to occur in areas with less than 200mm of annual rainfall (CoP19 Prop. 2). Southern white rhinos in Namibia occur on private land and in protected areas. It is estimated that Namibia has sufficient habitat to carry as many as 14,000 white rhinoceros (CoP19 Prop. 2).

Describe known/suspected level of trade: Poaching to supply international illegal trade in rhino parts and derivatives, particularly rhino horns, is the main threat to the white rhino population (Emslie et al., 2020). Legal trophy hunting of southern white rhinos takes place in South Africa and Namibia only (Emslie et al., 2016). According to the proponents (and verified by the trade.cites.org website), from 2008 to 2021, a total of 94 white rhinos were hunted, thus on average 7 per year.

Literature review of biological status and conservation status, including information on status in other relevant conventions

The family *Rhinocerotidae* was included in CITES Appendix I in 1977. The South African population of *C. simum simum* was transferred to Appendix II in 1994 under the following annotation: "...for the exclusive purpose of allowing international trade in live animals to appropriate and acceptable destinations and hunting trophies. All other specimens shall be deemed to be specimens of species included in Appendix I, and trade in them shall be regulated accordingly." In 2004, Eswatini's (then Swaziland) population was transferred to Appendix II under the same annotation. The species is listed in Annex A under the EU Wildlife Trade Regulations (since 01.06.1997), whereas the populations of South Africa and Eswatini are listed on Appendix B, with the same Annotation as for the CITES listing.

Evaluation of trade data

It has been estimated that around 95% of horn sourced in Africa for illegal markets in Asia in 2016 and 2017 came from animals poached in the wild (Emslie et al., 2019). In addition, horn for illegal

markets have been stolen or illegally sold from stockpiles or private trophies or museum exhibits. The issue with “pseudo hunting”, where sport hunters from non-traditional hunting countries have aimed to provide horn to illegal markets, has also been a problem, but this practice is reduced since South Africa implemented several measures in 2012 (Emslie et al., 2020).

Potential other information by CITES reviews and on nature management issues in range states

Namibia proposed to transfer its white rhino population to Appendix II, subject to the same Annotation, at CoP18, but the proposal was rejected after a secret ballot, with 82 parties voting against and 39 voting in favour of the proposal. The IUCN/TRAFFIC analysis of the proposal submitted at CoP18 concludes that “overall, the Namibian population does not meet the biological criteria for retention in Appendix I”. They also point out that the Annotation in question has been used for export of this subspecies from South Africa and Eswatini for several years with no apparent problems (IUCN and TRAFFIC, 2019). The CITES Secretariat, in their assessment of the CoP18 proposals, land on the same conclusion as the IUCN/TRAFFIC (CoP18 Doc. 105,1, Annex 1). The IUCN published in 2016 a briefing paper on trophy hunting, describing how well managed hunting can contribute to conservation (IUCN, 2016). Trophy hunting of rhinos (both black and white) in South Africa and Namibia is presented as a positive (i.e sustainable and contributing to species conservation) case study.

Recommendations

Den namibiske bestanden av sørlig stumpnesehorn er den nest største bestanden av denne underarten, den er ikke i nedgang og har heller ikke begrenset utbredelsesområde. Både bestanden fra Sør-Afrika og Eswatini har blitt forvaltet under denne Annotasjonen i flere år uten at det har virket å være problemer med dette. Kontroll og forvaltningstiltak er grundig beskrevet i forslaget, for eksempel hvordan man skal forhindre at stumpnesehorn deler som er anskaffet på lovlig vis skal lekke til det illegale markedet. Basert på de overnevnte faktorer så virker det usannsynlig at denne type handel vil være ødeleggende for denne artens overlevelse.

Literature list

CoP18 Doc. 105,1, Annex 1: <https://cites.org/sites/default/files/eng/cop/18/doc/E-CoP18-105-01-A1.pdf>

CoP19 Prop. 2: <https://cites.org/sites/default/files/documents/E-CoP19-Prop-02.pdf>

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CoP19 Prop. 3 *Ceratotherium simum simum*

Review of listing proposal under CITES

Kingdom of Eswatini (formerly Swaziland) proposes to remove the existing annotation on the Appendix II listing of the country's southern white rhino population. This to enable regulated legal trade in Eswatini's white rhinos, including their horns and derivatives. More specifically, Eswatini wish to sell from an existing stock of 330 kg rhino horn to licenced retailers in the Far East as well as horn to be harvested annually in a non-lethal way in the future (amounting to up to 20 kg per year).

Res. Conf. 9.24 (Rev. CoP17) does not include criteria for assessments of proposals to change annotations. However, in this case, removing the annotation would basically mean that trade in the white rhino population of Eswatini would be regulated as any other CITES Appendix II species. It is therefore essential to make sure that the precautionary measures of Res. Conf. 9.24 (Rev. CoP17) Annex 4, are in place.

Species name: *Ceratotherium simum simum* Burchell 1918. Common name: Southern white rhinoceros. Norsk navn: stumpnesehorn.

Distribution: The majority of *C. simum simum* occur in South Africa. Smaller reintroduced subpopulations occur within former Range States in Botswana, Namibia, Eswatini, and Zimbabwe. Subpopulations of free-ranging Southern White Rhino have also been established outside their historical range in Kenya, Zambia and more recently Uganda (Emslie et al., 2020).

Population trend: The global population trend is decreasing according to the latest IUCN Red List assessment (Emslie et al., 2020). As of 31 December 2017, there were an estimated 18,064 White Rhino in the wild (Emslie et al., 2019).

Habitat status: Fragmented. Most of Africa's southern white rhino populations occur in South Africa, where they are reported to be fragmented but widespread (UNEP-WCMC, 2014). Populations occur in both state owned and private protected areas, with 23% of the South African white rhino population is kept on private game farms (UNEP-WCMC, 2014). In Eswatini, white rhinos occur in the Hlane Royal National Park (est. 1967) and the Mkhaya Game Reserve (est. 1980). These parks have a total population of 98 white rhino after recent recovery from drought mortalities (as at end December 2021) (CoP19 Prop.3).

Describe known/suspected level of trade: Poaching to supply international illegal trade in rhino parts and derivatives, particularly rhino horns, is the main threat to the white rhino population (Emslie et al., 2020). Legal trophy hunting of southern white rhinos takes place in South Africa and Namibia (Emslie et al., 2016).

Literature review of biological status and conservation status, including information on status in other relevant conventions

C. simum simum is listed as Near Threatened on the IUCN Red List (Emslie et al., 2020). The family *Rhinocerotidae* was included in CITES Appendix I in 1977. The South African population of *C. simum simum* was transferred to Appendix II in 1994 under the following annotation: "...for the exclusive purpose of allowing international trade in live animals to appropriate and acceptable destinations and hunting trophies. All other specimens shall be deemed to be specimens of species included in Appendix I, and trade in them shall be regulated accordingly." In 2004, Eswatini's (Swaziland) population was transferred to Appendix II under the same annotation. The species is listed in Annex A under the EU Wildlife Trade Regulations (since 01.06.1997), whereas the populations of South Africa and Eswatini are listed on Appendix B, with the same annotation as for the CITES listing.

Evaluation of trade data

Between 2000 and 2021 there are 26 records of rhino exports from Eswatini to South Africa (trade.cites.org) where the majority were either for Law enforcement/judicial/forensic purposes (source code L) and reintroduction (source code N). Rhino horn has traditionally had two main uses: in Chinese medicine and ornamental use. It has been estimated that around 95% of horn sourced in Africa for illegal markets in Asia in 2016 and 2017 came from animals poached in the wild (Emslie et al., 2019). In addition, horn for illegal markets have been stolen or illegally sold from stockpiles or private trophies or museum exhibits. The issue with “pseudo hunting”, where sport hunters from non-traditional hunting countries have aimed to provide horn to illegal markets, has also been a problem, but this practice is reduced since South Africa implemented several measures in 2012 (Emslie et al., 2020).

Potential other information by CITES reviews and on nature management issues in range states

Eswatini proposed to remove the existing Appendix II annotation for its southern white rhino population both at CoP17 and CoP18, but both these proposals were rejected. The CITES Secretariat, in their analyses of the proposals submitted to CoP18, recommended that the proposal should be rejected. They point out that Parties by virtue of the precautionary approach and in case of uncertainty regarding the status of a species or impact of trade on the conservation of a species, shall act in the best interest of the conservation of the species concerned, and thus that the existing annotation for the Appendix II listing of the population of *C. simum simum* of Eswatini should be maintained (CoP18 Doc. 105.1, Annex 1).

Recommendations

Ved å fjerne annotasjonen vil handel med stumpnesehorn fra Eswatini kunne reguleres som handel med enhver annen Appendix II listet art. Det er ikke mulig å vurdere hvilken effekt lovlig salg av nesehorn fra Eswatini vil kunne ha for etterspørsel og ulovlig handel andre steder. Krypsskyting etterfulgt av ulovlig handel med nesehorn-horn er et transnasjonalt problem som påvirker den totale bestanden av denne arten svært negativt.

Literature list

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CoP19 Prop. 4 *Loxodonta africana*

Review of listing proposal under CITES

Zimbabwe proposes to amend Annotation 2 pertaining to the elephant populations of Botswana, Namibia, South Africa and Zimbabwe. The amendment has previously been proposed (and rejected) by Botswana, Namibia and Zimbabwe at CoP18 (CoP18 Prop. 11), Geneva, 2019.

Zimbabwe proposes to remove the following from Annotation 2:

e) trade in leather goods for commercial or non-commercial purposes for Botswana, Namibia, South Africa and Zimbabwe and for non-commercial purposes for Zimbabwe,

And the following under point g:

iv) trade in leather goods for commercial or non-commercial purposes for Botswana, Namibia, South Africa and Zimbabwe and for non-commercial purposes for Zimbabwe,

v) in addition to the quantities agreed at CoP12, government-owned ivory from Botswana, Namibia, South Africa and Zimbabwe registered by 31 January 2007 and verified by the Secretariat may be traded and despatched, with the ivory in paragraph (g) iv) above, in a single sale per destination under strict supervision of the Secretariat,

vii) the additional quantities specified in paragraph g) v) above shall be traded only after the Standing Committee has agreed that the above conditions have been met, and) no further proposals to allow trade in elephant ivory from populations already in Appendix II shall be submitted to the Conference of the Parties for the period from CoP14 and ending nine years from the date of the single sale of ivory that is to take place in accordance with provisions in paragraphs g) i), g) ii), g) iii), g) vi) and g) vii). In addition, such further proposals shall be dealt with in accordance with Decisions 16.55 and 14.78 (Rev. CoP16).

Basically, this proposal's main effect would be to allow exports of registered raw ivory.

Species name: *Loxodonta africana* (Blumenbach, 1797). Common names: African savanna elephant. Norsk navn: Savanneelefant. Synonyms: *Elephas africana* Blumenbach, 1797, *Loxodonta africana ssp. africana* (Blumenbach, 1797).

Note on recent change in taxonomy: as of 2021, the African Elephant Specialist Group of IUCN is treating African elephants as two species: the forest elephant *Loxodonta cyclotis* and the savannah elephant *Loxodonta africana* (Hart et al., 2021). This is taken into account in the new (2021) IUCN Red List assessments (Gobush et al., 2021ab). This is, however, not considered in the current proposal, nor is it implemented in the CITES listing. The population estimates from Thouless et al. (2016) are not separated between the two species, however, the forest elephant is considered to be restricted to western Africa, and is, according to the IUCN (Gobush et al., 2021a) not present in Botswana, Namibia, South Africa and Zimbabwe. As such, the elephant populations considered in the current proposal, are likely savannah elephants.

Distribution: *L. africana* (African savannah elephant) is distributed in Angola, Botswana, Cameroon, Central African Republic, Chad, Congo, The Democratic Republic of the, Eritrea, Ethiopia, Kenya, Malawi, Mali, Mozambique, Namibia, Nigeria, Rwanda, Somalia, South Africa, South Sudan, Tanzania, United Republic of, Uganda, Zambia, Zimbabwe. The species is also present in Burkina Faso.

Population trend: Overall declining (Gobush et al., 2021a) with an estimated decline of 111,000 elephants over the past decade (Thouless et al. 2016). Most recent population estimates from the range States behind this proposal from Thouless et al., 2016:

Zimbabwe: 82,630 (+- 8,589) Declining.

Botswana: 131,626 (+- 12,508) Population trend is unclear.

South Africa: 18,841 (+-0) Increasing.

Namibia: 21,967 (+- 4,704) Increasing.
Note that a new status report is expected to be published prior to CoP19 (November, 2022).

Habitat status: Vary across range states, but the *L. africana* distribution is retracting and becoming increasingly fragmented across their range. African savanna elephants occupy an estimated 15% of their historic pre- agricultural range (Chase et al., 2016).

Describe known/suspected level of trade: There is no legal commercial trade in elephants, but there are legal quotas for trophy hunting. Export quotas for trophy hunting as of 2022 (source: CITES):

Namibia: 180 tusks as part of hunting trophies from 90 elephants.

South Africa: 300 tusks as part of hunting trophies from 150 elephants.

Zimbabwe: 1000 tusks as part of hunting trophies from 500 elephants.

Botswana: 800 tusks as part of hunting trophies from 400 elephants.

Illegal trade in ivory is among the primary threats to the survival of this species.

Literature review of biological status and conservation status, including information on status in other relevant conventions

L. africana is listed as Endangered A2abd (Gobush et al., 2021). All populations of *L. africana* have been listed on Appendix I of CITES since 1989, with the exception of populations later transferred to Appendix II from Botswana, Namibia, and Zimbabwe (since 1997) and South Africa (since 2000). The Appendix II listing is subject to Annotation 2. The species is also listed in Annex A of the EU Wildlife Trade Regulations (since 1997), but with the populations of Botswana, Namibia, Zimbabwe, and South Africa listed in Annex B.

Evaluation of trade data

There are five African countries (the countries of this proposal and Tanzania) with a current export quota for tusks from trophies, and this is the only legal export of elephant products. Illegal trade in ivory is a significant problem, and poaching is, together with loss of habitat, the main threat to the survival of this species in the wild. Elephant poaching has become dominated by large transnational criminal organizations with the potential to wipe out populations in record time (Wasser and Gobush, 2019).

Potential other information by CITES reviews and on nature management issues in range states

The CITES initiative Monitoring the Illegal Killing of Elephants (MIKE) report contains up to date information on illegal killing of elephants. It reports the proportion of illegally killed elephants recorded at 60 designated MIKE-sites in Africa, which together holds an estimated 30-40 % of the African elephant population (CITES, 2019). The proportion of Illegally Killed Elephants (PIKE) is calculated as the number of illegally killed elephants found divided by the number of elephant carcasses encountered (https://cites.org/eng/prog/mike/data_and_reports#MIKE Data Analysis). PIKE is used as an indication of poaching trends and PIKE levels above 0.5 is considered a threshold above which elephant populations are very likely to be in net decline (CITES, 2019).

According to analyses presented in CITES (2022), the annual mean PIKE generally increased from 2003 to 2010, peaked in 2011, and decreased from 2011 to 2020. However, Schlossberg et al., (2019) point out several problems with these results, and by taking missing data into account when analysing the PIKE data, they concluded that there is no significant decrease in poaching across most of Africa. For Botswana, which has the largest savanna elephant population by far, Schlossberg et al. (2019) present evidence suggesting an increase in the poaching for ivory in northern Botswana. The number of poaching related carcasses had increased between 2014 and 2018, with new carcasses clustered in five hotspots. They found population declines of as much 16% in the hotspots, while population size was increasing in the surrounding areas. Their results suggests that ivory poaching on the scale of hundreds of elephants per year has been occurring in northern Botswana since 2017 or possibly earlier.

Recommendations

Det er i Res. Conf. 9.24 (Rev. CoP17) ikke gitt noen eksplisitte retningslinjer for hvordan man skal forholde seg til en søknad om endring eller sletting av en annotasjon for en Appendix II art. Det viktigste utfallet fra den foreslåtte endringen av #Annotasjon2 vil være at det åpnes for salg av registrert elfenben. Det er vanskelig å lage en samlet vurdering av de fire bestandene i søknaden da landene har relativt ulike nasjonale utfordringer knyttet til forvaltning av elefanter. Dette gjør det vanskelig å identifisere i hvilken grad de ulike landene oppfyller føre-var kriteriene i Anneks 4, av overnevnte Resolusjon. Flere nyere studier konkluderer med at den ulovlige handelen med elfenben drives av internasjonale nettverk som jobber på tvers av landegrenser, at krypskyting for elfenben fortsatt er et betydelig problem, og at den totale elefantbestanden er i nedgang. Enhver form for internasjonal handel vil dermed sannsynligvis være ødeleggende for denne artens videre overlevelse.

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CoP19 Prop. 5 *Loxodonta africana*

Review of listing proposal under CITES

Burkina Faso, Equatorial Guinea, Mali and Senegal propose to transfer the African elephant (*Loxodonta africana*) populations of Botswana, Namibia, South Africa and Zimbabwe from CITES Appendix II to Appendix I (CoP19 Prop. 5). The proponents argue that the listing would be in accordance with Res. Conf. 9.24 Annex 1, C, in that there has been a marked decline in population size in the wild and Annex 3 "listing of a species in more than one Appendix should be avoided in general in view of the enforcement problems it creates".

*see assessment of CoP19 Proposal 4 for more extensive information about the species, trade and conservation, as well as the recent splitting of African Elephants into *Loxodonta africana* og *Loxodonta cyclotis*.

Population trend: The total elephant population has showed a marked decline over the last decade (111,000 elephants, Thouless et al., 2016). There is high uncertainty regarding the population estimates in the African Elephant Status Report (Thouless et al., 2016). Population trends for South Africa and Namibia are increasing. No trend is available for the Botswana population. The Zimbabwe population is in decline (Thouless et al., 2016).

Literature review of biological status and conservation status, including information on status in other relevant conventions

*see assessment of CoP19 Proposal 4 for more extensive information about the species, trade and conservation, as well as the recent splitting of African Elephants into *Loxodonta africana* og *Loxodonta cyclotis*.

Evaluation of trade data

*see assessment of CoP19 Proposal 4 for more extensive information about the species, trade and conservation, as well as the recent splitting of African Elephants into *Loxodonta africana* og *Loxodonta cyclotis*.

Potential other information by CITES reviews and on nature management issues in range states

Uplisting of these elephant populations to Appendix I has previously been proposed and rejected at CoP18 (CoP18, Prop. 12). In regard to the CoP18-proposal, both the CITES Secretariat and the IUCN/TRAFFIC analyses of the proposals to amend the Appendices concluded that these populations did not fulfil the criteria for an Appendix I listing (IUCN and TRAFFIC, 2019; CoP18 Doc.105.1 Annex 2).

Recommendations

Den totale bestanden av afrikansk elefant (inkludert både savanneelefant og skogselefant) er i nedgang som en følge av tap av habitat og ulovlig handel. Bestandene som foreslås opplistet i dette listeforslaget er relativt store. To er stabile, en har ukjent trend og den siste er mest sannsynlig i nedgang, men trolig ikke i så stor grad at den oppfyller kriteriene for en Appendiks I listing. Selv om listing av samme art på to ulike Appendiks frarådes så sørger annotasjonen (Annotasjon 2) knyttet til Appendiks II-listingen av bestandene i dette listeforslaget for at de forvaltes som om de var på Appendiks I. Merk at det også er sendt inn et listeforslag som foreslår å endre #Annotasjon 2 for disse bestandene (CoP19, Prop.4) og dermed åpne for handel med registrert elfenben. Skulle et slikt forslag aksepteres vil det kunne føre til utfordringer knyttet verifisering av opphavet til elfenben i handel.

Literature list

CoP18 Doc.105.1 Annex 2: <https://cites.org/sites/default/files/eng/cop/18/doc/E-CoP18-105-01-A2.pdf>

CoP19 Prop.5: https://cites.org/sites/default/files/documents/E-CoP19-Prop-05_0.pdf

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CoP19 Prop. 6 *Cynomys mexicanus*

Review of listing proposal under CITES

Mexico recommends transferring Mexican prairie dog from Appendix I to Appendix II. Mexico assessed this species situation as a part of the Periodic Review of the Appendices (Res. Conf. 14.8 (Rev. CoP17)). The conclusion of the review is that the Mexican prairie dog is not threatened by international trade, thus a transfer to Appendix II is in accordance with paragraph 1 of the Fundamental Principles in Article II of the Convention, as well as the precautionary measures A1 and A2 listed in Annex 4 of Res. Conf 9.24 (Rev. Cop17). Mexico's recommendation was supported by the Animals Committee (AC31 SR).

Species name: *Cynomys mexicanus* (Merriam, 1892) (Wilson and Reeder, 2005). Common names: Mexican prairie dog, Mexican prairie marmot, Norsk navn: Meksikansk præriehund

Distribution: *C. mexicanus* is endemic to Mexico. The species distribution is restricted to the States of Coahuila, Zacatecas, San Luis Potosi and Nuevo Leon (CoP19 Prop. 6).

Population trend: Decreasing (Álvarez-Castañeda et al., 2019).

Habitat status: Fragmented. The species has lost 65% of its former habitat due to agriculture and livestock operations (Álvarez-Castañeda et al., 2019).

Describe known/suspected level of trade: There is no available evidence to suggest that *C. mexicanus* is in trade.

Literature review of biological status and conservation status, including information on status in other relevant conventions

C. mexicanus is listed as Endangered by the IUCN Red List (Álvarez-Castañeda et al., 2019). The endangered status result from the species occupying an area of less than 500 km² and that its habitat and distribution are highly fragmented. There is a continuing decline in habitat quality and extent as well as numbers of locations and subpopulations (Álvarez-Castañeda et al., 2019).

C. mexicanus has been listed under CITES Appendix I since 1975 and under the EU Wildlife Trade Regulations since 1997. The species is listed as Endangered under the US Endangered Species Act (USFWS, 1970). In Mexico there are several legal instruments, including the General Wildlife Act with the goal of protecting the species and its habitat, and it is considered a species at risk and a conservation priority (CoP19 Prop. 6, AC31 Doc.41.2 and references therein).

Given the species' status as endangered it cannot be taken from the wild for other purposes than research (AC31 Doc.41.2).

Evaluation of trade data

There are two records in the CITES trade data base since the species was included in Appendix I in 1975. In 2012, 200 biological samples were exported to Germany for scientific purposes (source code S) and in 2004, another 300 tissue samples were exported to the US, also for scientific purposes (CITES Trade Database, trade.cites.org).

Potential other information by CITES reviews and on nature management issues in range states

The National Commission for Protected Areas in Mexico has created the Action Program for the Conservation of Species (PACE) which establishes the goals and targets for the conservation of both the Mexican prairie dog and the black-tailed prairie dog (*Cynomys ludovicianus*) (AC31 Doc.41.2). Despite the PACE initiative, there is no regular population monitoring of *C. mexicanus*.

Recommendations

C. mexicanus er utryddingstruet og er hovedsakelig truet av tap og ødeleggelse av habitat. Det er iverksatt bevaringstiltak for å lette på disse truslene, men bestanden er i nedgang. Arten har vært inkludert i 'Periodic Review of the Appendices' og basert på denne rapporten konkluderer Mexico med at arten ikke oppfyller kriteriene for Appendix I, da den ikke virke å være i internasjonal handel. Dyrekomiteen i CITES støtter denne konklusjonen. Internasjonal handel er derfor trolig ikke en trussel for denne artens videre overlevelse.

Literature list

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CoP19 Prop.6

CoP19 Prop. 7 *Branta hutchinsii leucopareia*

Review of listing proposal under CITES

The United States of America proposes transfer of the Aleutian cackling goose from Appendix I to Appendix II based on a status review as part of the Periodic Review of the Appendices (Res. Conf. 14.8 (Rev. CoP17)). The transfer of this subspecies is in accordance with the Precautionary Measures of Annex 4 on CITES Res. Conf. 9.24 (Rev. CoP17), which indicates that Parties should “adopt measures that are proportionate to the anticipated risks to the species”. The review document was presented at the 31st meeting of the Animals Committee (31 May to 24 June, 2021). The Animals Committee supports the recommendation to transfer the species to Appendix II (AC31 SR).

Species name: *Branta hutchinsii leucopareia* (Brandt, 1936). Common names: Aleutian cackling goose, Aleutian Canada goose, Aleutian goose. Synonym: *Branta canadensis leucopareia* (1836). *Branta hutchinsii leucopareia* is a sub-species of the cackling goose *Branta hutchinsii*. Norsk navn: Polargås. Taxonomy note: This sub-species was previously thought to be a smaller sub-species of the Canada goose (*Branta canadensis*), but was re-classified in 2004 as a sub-species of cackling goose (*Branta hutchinsii*).

Distribution: Most of the population of the Aleutian cackling goose lives in the United States. There is also a small re-introduced population in Russia, which spend its winters in Japan; AC31 Doc.41.5 and references therein). The species is also possibly present in Mexico, but this is not confirmed by any scientific literature (AC31 Doc.41.5 and references therein)

Population trend: Increasing. The sub-species was nearly extinct in the 1960s but has since then recovered rapidly to a current population of more than 160,000 individuals, as a result of extensive conservation measures (AC31 Doc.41.5 and references therein).

Habitat status: Fragmented. The sub-species rely on treeless islands for nesting, on steep coastal hillsides, during summer. In winter, it relies on agricultural lands (AC31 Doc.41.5 and references therein). Much of the breeding habitat became unavailable for *B. hutchinsii leucopareia* due to invasive predators being introduced on the islands throughout the North Pacific. Fox eradication has restored some breeding habitat. Loss and alteration of winter habitat is an issue at some places, although habitat has been secured in California, through the protection of public lands and public-private conservation easements (AC31 Doc.41.5 and references therein).

Describe known/suspected level of trade: There is very limited trade in this species, most legal trade in this species has been for captive breeding and re-introduction purposes and mostly with captive bred sources.

Literature review of biological status and conservation status, including information on status in other relevant conventions

B. hutchinsii leucopareia has been listed under CITES Appendix I since 1975 and under the EU Wildlife Trade Regulations since 1997. In the U.S., the sub-species is protected under the Migratory Bird Treaty Act. This Act requires hunters to have a valid federal permit to hunt, kill, sell or purchase listed migratory birds. The sub-species was de-listed from the Endangered Species Act in 2001. In Japan, the sub-species is considered a rare wildlife species and is protected under the Wildlife Protection, Control, and Hunting Management Act (AC31 Doc.41.5).

Evaluation of trade data

There are very few records of international trade in this sub-species in the CITES trade database between years 2000 and 2022 (trade.cites.org). The proposal includes a detailed summary of records in the CITES trade database between 1975 and 2020 (Table 1, AC31 Doc.41.5). The proponent raises the possibility of there being additional international trade or transport for hunting

purposes if the sub-species is transferred to Appendix II, but since the majority of the geese inhabits the United States, they will be protected against overharvesting by domestic laws (AC31 Doc.41.5 and references therein). There is no documentation of illegal trade in this species (AC31 Doc.41.5; CoP19 Prop.7 and references therein).

Potential other information by CITES reviews and on nature management issues in range states

Current threats to this sub-species include habitat alteration in wintering and migration areas, continued predation from invasive species, and infectious disease (AC31 Doc.41.5 and references therein).

Recommendations

Bestanden av polargås har gått fra å være nesten utryddet på 1960-tallet, til en bestand på over 160,000 fugler i dag. Internasjonal handel er svært begrenset og jakt er strengt regulert under nasjonalt lovverk i USA. Det virker derfor som om føre-var-prinsippene i Anneks 4, Res. Conf. 9.24 (Rev.CoP17) er tilfredsstillt. Handel vil trolig ikke være ødeleggende for denne artens videre overlevelse.

Literature list

AC31 Doc.41.5: <https://cites.org/sites/default/files/eng/com/ac/31/Docs/E-AC31-41-05.pdf>

AC31 SR: <https://cites.org/sites/default/files/eng/com/ac/31/sum/E-AC31-SR.pdf>

CoP19 Prop.7: <https://cites.org/sites/default/files/documents/E-CoP19-Prop-07.pdf>

CoP19 Prop. 8 *Kittacincla malabarica*

Review of listing proposal under CITES

Malaysia and Singapore propose to include *Kittacincla malabarica* in Appendix II in accordance with Article II, paragraph 2(a), Resolution Conf. 9.24 (Rev. CoP17), Annex 2a, paragraph B.

Species name: *Kittacincla malabarica* (Scopoli, 1788). Common name: White-rumped shama. Norwegian name: Arieshama. The species was previously lumped with *Kittacincla albiventris* as *Copsychus malabaricus*. According to the proponent 14 subspecies are recognized, of which 11 are island endemics (CoP19 Prop. 8).

Distribution: Bangladesh, Bhutan, Brunei Darussalam, Cambodia, China, India, Indonesia, Lao People's Democratic Republic, Malaysia, Myanmar, Nepal, Singapore, Sri Lanka, Thailand, Viet Nam, introduced to Hawaii (USA).

Population trend: Decreasing. The population size is unknown (BirdLife International, 2021).

Habitat status: The species is threatened by extensive deforestation occurring throughout its range (Roberts et al., 2020).

Describe known/suspected level of trade:

The white-rumped shama is one of the most valuable East-Asian cage birds due to its singing. Some subpopulations have most likely been driven to extinction in the wild by trapping. The species is traded within range States and internationally.

Literature review of biological status and conservation status, including information on status in other relevant conventions

K. malabarica is listed as Least Concern on the IUCN Red List (BirdLife International, 2021). It was included in Annex D of the European Union Wildlife Trade Regulations from 1997 to 2003. At the Asian Songbird Trade Specialist Group meeting in 2019, a discussion on the status of *K. malabarica* subspecies concluded that only the South Asian populations are of Least Concern, while ones in peninsular Southeast Asia were Near Threatened and all others considered Vulnerable, Endangered, or possibly extinct in the wild (Brusland et al., 2019).

Evaluation of trade data

There is no data in the CITES trade database for the period 2010-2022 (trade.cites.org). Extensive illegal trade, also for the international market, has been documented thoroughly (e.g. Chng and Eaton, 2016; Chng et al., 2021). Through surveys (2007-2018) across Indonesia, Malaysia, Singapore, Thailand and Vietnam, Leupen et al. (2018) found a total of 8,271 white-rumped Shama for sale openly in local markets and 917 for sale on-line. 432 seizures were recorded between 2008 and 2018, involving 15,480 birds. The authors strongly recommend that white-rumped shama should be listed in Appendix II of CITES. Captive-breeding programs exist, but wild-caught birds are generally preferred as their song is considered to be superior.

Potential other information by CITES reviews and on nature management issues in range states

The white-rumped shama is protected in Bangladesh, Cambodia, India, Malaysia, and Thailand and is under the regulatory framework for wildlife in China, Indonesia, Myanmar, Singapore. The species is recognized amongst the highest priorities for action by the IUCN SSC Asian Songbird Trade Specialist Group (Lee et al., 2016).

Recommendations

Nivået av ulovlig handel for arieshama virker å være svært høyt, og arten virker dermed å oppfylle paragraf B i Annex 2a, Res. Conf. 9.24 (Rev. CoP17). Selv om den globale bestanden ikke trues kan enkelte underarter (hvorav flere endemiske til øyer) kunne drives til utryddelse av uregulert fangst.

Literature list

BirdLife International. 2021. *Kittacincla malabarica*. The IUCN Red List of Threatened Species 2021: e.T103894856A183077961. <https://dx.doi.org/10.2305/IUCN.UK.2021-3.RLTS.T103894856A183077961.en>. Accessed on 01 July 2022.

Brusland, S., Rheindt, F.E., Eaton, J.A. et al. (2019) White-rumped Shama, status estimates based on personal observations. Internal notes and presentation from IUCN SSC Asian Songbird Trade Specialist Group meeting, 30 March – 1 April 2019.

Chng, S.C.L., Eaton, J.A. 2016. In the Market for Extinction: Eastern and Central Java. TRAFFIC. Petaling Jaya, Selangor, Malaysia

Chng, S.C.L., Saaban, S., Wechit, A., Krishnasamy, K. (2021). Smuggled For Its Song- The Trade in Malaysia's Oriental Magpie-robins. TRAFFIC, Southeast Asia Regional Office, Petaling Jaya, Selangor, Malaysia.

CoP19 Prop. 8: <https://cites.org/sites/default/files/documents/E-CoP19-Prop-08.pdf>

Lee, J.G.H., Chng, S.C.L., Eaton, J.A. (2016) Conservation strategy for South-East Asian Songbirds in trade: recommendations from the first Asian Songbird Trade Crisis Summit 2015 held in Jurong Bird Park, Singapore, 27–29 September 2015. Wildlife Reserves Singapore, Singapore; TRAFFIC South-East Asia, Selangor, Malaysia.

Leupen B.T., Krishnasamy K., Shepherd C.R., Chng S.C.L., Bergin D.A., Eaton J.A.E., Yukin D.A., Hue S.K., Miller A., Nekaris K.A., Nijman V. (2018) Trade in White-rumped Shammas

Kittacincla malabarica demands strong national and international responses. Forktail 34:1-8
Roberts, G. E., Male, T. D., Conant, S. 2020. White-rumped Shama (*Copsychus malabaricus*), version 1.0. In: S. M. Billerman (ed.), Birds of the World, Cornell Lab of Ornithology, Ithaca, NY, USA.

CoP19 Prop. 9 *Pycnonotus zeylanicus***Review of listing proposal under CITES**

Malaysia, Singapore and the United States of America propose to transfer of *Pycnonotus zeylanicus* from Appendix II to Appendix I in accordance with Resolution Conf. 9.24 (Rev. CoP17), Annex 1, Criteria A(i),(ii), and C(i). Small and declining wild population and decline in the area and quality of habitat.

Species name: *Pycnonotus zeylanicus*. Common names: Straw-headed bulbul, straw-crowned bulbul. Norwegian name: Stråbylbyl.

Distribution: The straw-headed bulbul occurs in Southeast Asia in Brunei Darussalam, Indonesia, Malaysia, Myanmar and also breeds in Singapore. Extinct in Thailand in the mid-20th century (BirdLife International, 2021).

Population trend: Decreasing. The population size is assessed to 600-1700 mature individuals. The decline is estimated to exceed 80% in the previous three generations (15 year mainly due to trapping of wild birds for cage-bird trade, and habitat loss).

Habitat status: The straw-headed bulbul occupies successional habitats bordering rivers, marshes and other wet areas (BirdLife International, 2021).

Describe known/suspected level of trade: The straw-headed bulbul is a popular and highly priced cage bird due to its song, both within Range States and Internationally. Wild-caught birds are still considered superior to those bred in captivity (Bergin et al., 2017). The species is easy to spot and trap.

Literature review of biological status and conservation status, including information on status in other relevant conventions

P. zeylanicus has been listed as Critically Endangered A2cd+4cd on the IUCN Red List since 2018 (BirdLife International, 2021). *P. zeylanicus* has been listed in CITES Appendix II since and in EU Wildlife Trade Regulations Annex B since 1997.

Evaluation of trade data

43 individuals originating in Malaysia were recorded in the CITES trade database 2010-2020. All were declared as wild caught, except for three individuals declared by Kuwait (the importer) as captive-bred. Poaching and illegal trade of the straw-headed bulbul trade has been reported over the past 20 years and evidenced from seizures, arrests, convictions, and observations from markets exists (CoP19 Prop. 9 and references therein). Bergin et al. (2017) observed a total of 71 Straw-headed Bubbles in 11 markets in eight cities between July 2014 and June 2015 and recommended listing the species on CITES Appendix I to further protect it from illegal international trade. The demand for wild-caught birds is sustained regardless of captive breeding and some breeding operations are considered to be fronts for trading wild-caught birds (Rentschlar et al., 2018).

Potential other information by CITES reviews and on nature management issues in range states

The straw-headed bulbul is one of the 28 priority species to be most threatened by trade identified in the Conservation Strategy for Southeast Asian Songbirds in Trade (Lee et al., 2016). In Peninsular Malaysia, the species is considered Totally Protected since 2010, but captive breeding is permitted through government regulation. In Myanmar the species is listed as Completely Protected under the Conservation of Biodiversity Protection Act since 2018. In Singapore *P. zeylanicus* is listed as a protected species under the Wildlife Act. *P. zeylanicus* was identified as a possible candidate for inclusion in the review of significant trade for Appendix II species in 2004 (Doc.13.4 Annex 2, <https://speciesplus.net/api/v1/documents/1891>) and selected for inclusion in the Review of Significant Trade following CoP18 (UNEP-WCMC. 2020).

Recommendations

Stråbylby er kritisk truet, i kraftig nedgang, og arten oppfyller kriteriene A (i) og (ii) og C (i) i Anneks 1, Res. Conf. 9.24 (Rev. CoP17). At den fanges for å omsettes som burfugl er den største trusselen mot artens fremtidige overlevelse.

Literature list

Bergin, D., Chng, S. C., Eaton, J. A., Shepherd, C. R. (2018) The final straw? An overview of Straw-headed Bulbul *Pycnonotus zeylanicus* trade in Indonesia. Bird Conservation International 28(1): 128-132.

BirdLife International. 2021. *Pycnonotus zeylanicus*. The IUCN Red List of Threatened Species 2021: e.T22712603A183176477. <https://dx.doi.org/10.2305/IUCN.UK.2021-3.RLTS.T22712603A183176477.en>. Accessed on 01 July 2022.

CoP19 Prop.9: <https://cites.org/sites/default/files/documents/E-CoP19-Prop-09.pdf>

Lee, J.G.H., Chng, S.C.L., Eaton, J.A. (eds). 2016. Conservation strategy for Southeast Asian songbirds in trade. Recommendations from the first Asian Songbird Trade Crisis Summit 2015 held in Jurong Bird Park, Singapore, 27–29 September 2015.

<https://portals.iucn.org/library/sites/library/files/documents/Traf-147.pdf>

Chiok, W.X., Miller, A.E., Pang, S.E.H., Eaton, J.A., Rao M., Rheindt, F.E. (2019) Regional and local extirpation of a formerly common Sundaic passerine, the Straw-headed Bulbul *Pycnonotus zeylanicus*. Forktail 35: 3-11.

Rentschlar, K.A., Miller, A.E., Lauck, K.S., Rodiansyah, M., Mufihati, B., Kartikawati. 2018. A Silent Morning: The Songbird Trade in Kalimantan, Indonesia. Tropical Conservation Science: <https://doi.org/10.1177/1940082917753909>.

UNEP-WCMC. 2020. Selection of species for inclusion in the Review of Significant Trade following CoP18: Extended analysis. UNEP-WCMC, Cambridge

CoP19 Prop. 10 *Phoebastria albatrus*

Review of listing proposal under CITES

The United States of America proposes to transfer *Phoebastria albatrus* from CITES Appendix I to II. The transfer of this subspecies to Appendix II is in accordance with the Precautionary Measures in Annex 4 of CITES Resolution Conf. 9.24 (Rev. CoP17). The content of this proposal was initially presented and discussed at the 31st meeting of the Animals Committee, as part of the Periodic Review of the Appendices (AC31 Doc.42). After completing the review, the US concluded that the transfer to Appendix II is appropriate because there is no known risk to the species from international trade. Furthermore, a transfer of the species to Appendix II is not expected to stimulate increased trade demand. The Animals Committee supported the recommendations presented in the review document (AC31 SR).

Species name: *Phoebastria albatrus* (Pallas, 1769) Common name(s): Short-tailed albatross, Steller's albatross, black-footed albatross, Synonyms: *Diomedea albatrus* (Pallas, 1769). Norsk navn: Gulhodealbatross.

Distribution: China, Korea, Mexico, Canada, Japan, Russian Federation (Eastern Asian Russia), Taiwan, United States and the United States Outlying Islands (BirdLife International, 2018).

Population trend: Increasing, with an estimated 1,734 mature individuals (BirdLife International, 2018). The total population size is estimated to be 5,856 individuals and the population is steadily increasing at rate of 8.5% (AC31 Doc. 41.6). According to the BirdLife/IUCN assessment of this species, there were only 25 birds present on Tori-shima, Japan in 1954. There are currently 609 breeding pairs on Tori-shima and the species has undergone a significant increase since its rediscovery and the onset of conservation efforts

Habitat status: *P. albatrus* spends time in marine habitats, both coastal and pelagic (BirdLife International, 2018). Breeding occurs on levelled, open, areas adjacent to clumps of grass for nesting.

Describe known/suspected level of trade: The species does not seem to be in trade.

Literature review of biological status and conservation status, including information on status in other relevant conventions

P. albatrus is listed as Vulnerable on the IUCN Red List (2018). Conservation efforts have resulted in a steady population increase. But the species has a limited breeding range (only Torishima and Minami-Kojima in the East-China Sea in Japan), thus making it vulnerable to stochastic events and human impacts (BirdLife International, 2018). The species was listed under CITES Appendix I in 1975, and in Annex A of the EU Wildlife trade Regulations since 1997. Management of *P. albatrus* consists of national and international recovery and conservation plans. National plans have been created by Canada, Japan, and the USA (AC31 Doc. 41.6). The Short-tailed Albatross Recovery Plan (USFWS, 2008) program monitors the populations and habitats of *P. albatrus* on Torishima and the Senkaku Islands (Ac 31 Doc.42). The main threat to *P. albatrus* is posed by commercial fisheries (BirdLife International, 2018).

Evaluation of trade data

A search in the CITES trade database for the period 2000-2022 resulted in 8 registered transactions, all for scientific purposes (purpose code S) with the exception of 2 transactions involving pre-convention (source code O) carvings for commercial purposes (purpose code T) (trade.Cites.org).

Potential other information by CITES reviews and on nature management issues in range states

P. albatrus has been subject to a range of management measures throughout its range, including habitat conservation of breeding areas, translocation, and safeguarding under international, national, and state laws prohibiting takings of species (AC31 Doc. 41.6).

Recommendations

P. albatrus virker ikke å være vanlig i handel og bestanden øker stadig. Overføring av arten fra Appendiks I til II virker derfor å være i tråd med føre-var-kriteriene som listes i Anneks 4 av Res. Conf. 9.24 (Rev. CoP17). Dyrekomiteen i CITES støtter forslaget om at arten kan overføres fra CITES Appendix I til II. Handel vil mest sannsynlig ikke være ødeleggende for overlevelsen til denne arten.

Literature list

AC 31 SR- p.44: <https://cites.org/sites/default/files/eng/com/ac/31/sum/E-AC31-SR.pdf>
Ac 31 Doc.42: <https://cites.org/sites/default/files/eng/com/ac/31/Docs/E-AC31-41-06.pdf>
BirdLife International. 2018. *Phoebastria albatrus*. The IUCN Red List of Threatened Species 2018: e.T22698335A132642113. <https://dx.doi.org/10.2305/IUCN.UK.2018-2.RLTS.T22698335A132642113.en>. Accessed on 03 June 2022.
BirdLife International (2022) Species factsheet: *Phoebastria albatrus*
Downloaded from <http://www.birdlife.org> on 03/06/2022.
CoP19 Prop. 10: <https://cites.org/sites/default/files/documents/E-CoP19-Prop-10.pdf>
U.S. Fish and Wildlife Service. 2008. Short-tailed Albatross Recovery Plan. Anchorage, AK, 105 pp.

CoP19 Prop. 11 *Caiman latirostris*

Review of listing proposal under CITES

Brazil proposes to transfer its population of broad-snouted caiman *Caiman latirostris* from Appendix I to Appendix II of CITES, in accordance with Article II, paragraph 2. a), of the Convention and with Resolution Conf. 9.24 (Rev. CoP17) Annex 4, paragraph A. 2. A, ii), that the species is likely to be in demand for trade, but that the Conference of the Parties is satisfied with the range State's management.

Species name: *Caiman latirostris* (Daudin, 1802). Common names: Broad-snouted caiman, yacare overo, yacare ñato (Spanish), jacare-de-papo-amarelo (Portuguese). Norwegian name: Bredneset kaiman.

Distribution: Argentina, Bolivia, Brazil, Paraguay, Uruguay. In Brazil the species is widely dispersed among many small habitat patches over a very large area but at relatively low density (Siroski et al., 2021).

Population trend: Stable. The proposal presents density estimates based on sightings data from different Brazilian regions (CoP19 Prop.11).

Habitat status: The broad-snouted caiman is widely distributed and occupies a diversity of habitats. Habitat destruction has increased significantly in recent years due to human activities e.g. construction of hydroelectric dams (Siroski et al., 2021). The proponent argues habitat modification has limited effect on the species distribution (CoP19 Prop.11 and references therein).

Describe known/suspected level of trade: The skin of *C. latirostris* is attractive for leather products. The majority of trade involves ranched animals from Argentina.

Literature review of biological status and conservation status, including information on status in other relevant conventions

IUCN lists *C. latirostris* as a species of Least Concern (assessed in 2019).

C. latirostris is listed in CITES Appendix I (since 1997), except the Argentinian population that was transferred to CITES Appendix II in 1997. The species is Annex A of the EU Wildlife Trade Regulations, except the Argentinian population that is listed in Annex B.

Evaluation of trade data

The current legal commercial trade is mostly of ranched specimen from Argentina.

According to the proponent (CoP19 Prop.11) five farms for captive breeding in Brazil provide animals that are utilized for meat and skin. In the period 2010-2016 Brazil reported the export of 89 skins for commercial purposes to the CITES trade database (trade.cites.org).

Illegal hunting for meat occurs in parts of Brazil (Siroski et al., 2021).

Potential other information by CITES reviews and on nature management issues in range states

The commercial use of caimans in Brazil is regulated by national laws (CoP19 Prop.11) parts of the range of *C. latirostris* is found within protected areas. In the IUCN SSC Crocodile Specialist Group (CSG) Action Plan the number one priority conservation actions for *C. latirostris*: is to: "Assess population status in Brazil: there is little information on the population status of *C. latirostris* in Brazil which comprises a high proportion of the species' distribution." (Siroski et al., 2021).

Recommendations

Brednese kaimanen har et stort utbredelsesområde, men kunnskapen om bestanden i Brasil er mangelfull og det er uklart om føre-var-kriteriene i Anneks 4, A.2 a) ii), Res. Conf. 9.24 (Rev. CoP17) oppfylles. Det er vanskelig å utelukke at økt kommersiell handel vil kunne svekke overlevelsen til ville bestander.

Literature list

CoP19 Prop.11: <https://cites.org/sites/default/files/documents/E-CoP19-Prop-11.pdf>
Siroski, P., Bassetti, L.A.B., Piña, C., Larriera, A. 2020. *Caiman latirostris*. The IUCN Red List of Threatened Species 2020: e.T46585A3009813. <https://dx.doi.org/10.2305/IUCN.UK.2020-3.RLTS.T46585A3009813.en>. Accessed on 25 July 2022.

CoP19 Prop. 12 *Crocodylus porosus*

Review of listing proposal under CITES

The Philippines proposes to transfer its Saltwater crocodiles (*Crocodylus porosus*) in the Palawan Islands, Philippines from Appendix I to Appendix II, with a zero export quota for wild specimens, in accordance with Resolution Conf. 9.24 (Rev. CoP17).

Species name: *Crocodylus porosus*, Schneider, 1801. Common names: Saltwater Crocodile, Estuarine Crocodile, Indo-Pacific crocodile, Salt-water crocodile, Saltie. Norwegian names: Saltvanskrokodille, deltakrokodille.

Distribution: Australia, Bangladesh, Brunei Darussalam, India, Indonesia, Malaysia, Myanmar, Palau, Papua New Guinea, Philippines, Singapore, Solomon Islands, Sri Lanka, Timor-Leste and Vanuatu. Probably extinct in Cambodia, Thailand and Viet Nam. In the Philippines populations are scattered through remaining wetland habitats including in the Palawan Province (Webb et al., 2021).

Population trend: Stable. The density in the southern portion of Palawan (1.05 individuals/km) is higher than previously thought and the historical declines appear to be reversible (Webb et al., 2021). According to the proponent surveys were undertaken in 2014 and 2019 (CoP19 Prop. 12, Annex 4).

Habitat status: Habitat loss continues to be a major problem in many areas occupied by *C. porosus*, and frequently they are killed as pests regardless of whether their skin is used commercially or not (Webb et al., 2021).

Describe known/suspected level of trade: *C. porosus* has the most valuable skin of any crocodile (Webb et al., 2021).

Literature review of biological status and conservation status, including information on status in other relevant conventions

IUCN lists *C. porosus* as a species of Least Concern (assessed in 2019).

C. porosus is listed on CITES Appendix I except in Australia, Papua New Guinea, Indonesia and Malaysia where it is listed in Appendix II. It is listed in the EU Wildlife Trade Regulations A and B with the same geographic distribution.

Evaluation of trade data

Thousands of skins have been exported from the Philippines to Singapore under Source Code 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)) since 2012. There is large discrepancy between the number reported by the importing and the exporting country prior to 2019 (trade.cites.org).

Management programs based on sustainable use (ranching, wild harvest, captive breeding) have been successfully implemented in Papua New Guinea, Australia and Indonesia, the three countries that contain the majority of the global population of the species.

In 2022 Malaysia has a quota of 875 wild-caught individuals from Sarawak.

Farming of *C. porosus*, based on captive breeding, is undertaken in Bangladesh, China, Thailand, Singapore, Malaysia, Myanmar, Philippines, Indonesia, Papua New Guinea and Australia.

Potential other information by CITES reviews and on nature management issues in range states

Export for commercial purposes of wild-caught *C. porosus* is prohibited throughout the Philippines, and according to the proponent it will remain so, with the zero quota of *C. porosus* from Palawan, until adaptive management approaches are tested and meet the approval of the Parties to CITES. At CITES CoP16, a proposal by Thailand to transfer its population of *C. porosus* from Appendix I to Appendix II (CoP16 Prop. 24) was rejected. At CITES CoP17 a proposal by Malaysia to transfer from Appendix I to Appendix II was accepted (CoP17 Prop. 24)

Recommendations

Den globale bestanden av saltvannskrokodille er stabil på grunn av effektiv forvaltning i noen utbredelsesland. På Filippinene tyder det på at bestanden er i vekst, men med spredt utbredelse og i ferd med å gjenombygges etter historisk nedgang. Nedlistingen, med en 0-kvote for eksport, virker derfor å være i tråd med føre-var-prinsippene som listes i Anneks 4, 2 a) iii av Res. Conf. 9.24 (Rev. CoP17).

Literature list

CoP19 Prop. 12: <https://cites.org/sites/default/files/documents/E-CoP19-Prop-12.pdf>

CoP16 Prop. 24 - <https://speciesplus.net/api/v1/documents/1111>

CoP17 Prop. 24 - <https://speciesplus.net/api/v1/documents/9196>

Webb, G.J.W., Manolis, C., Brien, M.L., Balaguera-Reina, S.A., Isberg, S. 2021. *Crocodylus porosus*. The IUCN Red List of Threatened Species 2021: e.T5668A3047556.

<https://dx.doi.org/10.2305/IUCN.UK.2021-2.RLTS.T5668A3047556.en>. Accessed on 26 July 2022.

CoP19 Prop. 13 *Crocodylus siamensis*

Review of listing proposal under CITES

Thailand proposes to transfer *Crocodylus siamensis* from Appendix I to Appendix II with a zero quota for wild specimens, on the basis of Article II, paragraph 2 (a), in accordance with Annex 4 (A.2.a) of the Resolution Conf. 9.24 (Rev. CoP 17).

Species name: *Crocodylus siamensis*, Schneider, 1801. Synonyms: *Crocodylus galeatus*, Cuvier, 1807, *Crocodylus planirostris*, Graves, 1819. Common names: Siamese crocodile. Norwegian name: Siamkrokodille.

Distribution: Brunei Darussalam, Cambodia, Indonesia, Lao People's Democratic Republic, Malaysia, Thailand and Viet Nam. Uncertain in Myanmar. The current distribution is greatly diminished and fragmented (Bezuijen et al., 2012).

Population trend: Decreasing. All remnant subpopulations are small and fragmented (Bezuijen et al., 2012).

Habitat status: The lowland freshwater habitats of *C. siamensis* is declining. Habitat loss is a main threat (Bezuijen et al., 2012).

Describe known/suspected level of trade: Commercial hunting in the mid-twentieth century for the skin trade is considered to be the principal cause of the historical decline of *C. siamensis*. Illegal collection of eggs and crocodiles is still a major threat (Bezuijen et al., 2012).

Literature review of biological status and conservation status, including information on status in other relevant conventions

IUCN lists *C. siamensis* as Critically Endangered A2cd (assessed in 2012, needs updating).

C. siamensis has been listed under Appendix I of CITES and Annex A of the EU Wildlife Trade regulations since 1975.

A proposal by Thailand to transfer *C. siamensis* from CITES Appendix I to Appendix II was rejected at CoP 16 in 2013 (CoP16 Prop. 25).

Evaluation of trade data

There is extensive legal international commercial trade in *C. siamensis* with source code D (captive bred animals). Primarily in leather products, skulls, skins and meat. In the CITES Trade database (trade.cites.org) the number of transactions between Thailand and other countries between 2010 and 2020 was 2,069,827 reported by exporter and 644,178 reported by importer. There are large captive population in farms, particularly in Thailand where according to the proponent, in 2020 a total of 731,457 *C. siamensis* were held by 928 owners including 29 Thai registered crocodile farms under Resolution Conference 12.10 (Rev. CoP15) of CITES. According to the proponent no illegal trade of wild Siamese crocodiles has recorded in Thailand since 1991. However, some illegal capture from the wild is suspected to be ongoing and in a survey of Facebook Thailand 25 individuals were found offered for sale (Phassaraudomsak and Krishnasamy, 2018).

Potential other information by CITES reviews and on nature management issues in range states

Crocodiles are protected by Thai law and populations of *C. siamensis* within protected areas in Thailand (CoP19 Prop. 13).

Recommendations

Den internasjonale kommersielle handelen med siamkrokodiller fra oppdrett er omfattende. Den ville bestanden er regnet som kritisk truet og all handel med denne vil kunne være en trussel mot artens naturlige overlevelse. Overføring av denne bestanden virker derfor ikke å være i tråd med Annex 4, paragraf A 2. a) av Res. Conf. 9.24 (Rev. CoP17).

Literature list

Bezuijen, M., Simpson, B., Behler, N., Daltry, J., Tempsiripong, Y. 2012. *Crocodylus siamensis*. The IUCN Red List of Threatened Species 2012: e.T5671A3048087.
<https://dx.doi.org/10.2305/IUCN.UK.2012.RLTS.T5671A3048087.en>. Accessed on 11 August 2022.
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CoP19 Prop. 14 *Physignatus cocincinus***Review of listing proposal under CITES**

The European Union proposes to include *Physignatus cocincinus* in CITES Appendix II. The proponent states that the listing of *P. cocincinus* in Appendix II is in accordance with Annex 2a, Criterion B of Res. Conf 9.24 (Rev.CoP17).

Species name: *Physignatus cocincinus* Cuvie, 1829. Common names: Chinese water dragon, Asian water dragon, Thai water dragon, green water dragon.

Distribution: *P. cocincinus* occurs throughout Lao PDR, Cambodia and Viet Nam, and throughout eastern Thailand. It is also found in southern China, in the southwest part of Guandong, Guanxi, and Hekou in Yunnan (Stuart et al., 2019). *P. cocincinus* also occurs as an introduced species in Hong Kong, Taiwan, peninsular Malaysia and Florida (Gewiss et al., 2020).

Population trend: Decreasing (Stuart et al., 2019). *P. cocincinus* is locally abundant but is subject to ongoing declines because of harvesting of both adults and eggs for food and juveniles for the international pet trade, as well as declines in habitat quality in parts of its range (Stuart et al., 2019).

Habitat status: There are declines of habitat quality on parts of its range, however, the extent varies among the range states. For example, for Cambodia and Laos in particular, habitat loss is extensive because of agriculture and development (Stuart et al., 2019).

Describe known/suspected level of trade: *P. cocincinus* is in high demand for the international pet trade (Nguyen et al., 2018; Gewiss et al., 2020).

Literature review of biological status and conservation status, including information on status in other relevant conventions

Listed as Vulnerable A4cd on the IUCN Red list (Stuart et al., 2019). The classification as vulnerable is justified because the species is subject to high rates of harvesting throughout most of its range, both at a subsistence level for food and for export to support the European pet trade.

The species is listed in Annex D of the EU Wildlife Trade Regulations. Annex D includes some CITES Appendix III species and some non-CITES listed species, and is referred to as the "monitoring list" because it includes species that might be eligible for listing in one of the other Annexes and for which EU import levels should therefore be monitored (https://ec.europa.eu/environment/cites/species_en.htm)

Evaluation of trade data

P. cocincinus is threatened by collection from the wild. UNEP-WCMC (2009) did a survey of 24 websites offering reptiles for sale in the EU and found that *P. cocincinus* was commonly advertised for sale. A search in the CITES trade database (years 2000 to 2022) resulted in a significant number of records of *P. cocincinus* imports to the EU. Between 2010 and 2022, 84,907 live individuals were reported as being in trade for commercial purposes and with source being either unknown or wild collected (trade.cites.org). Most of these records were of exports from Viet Nam. Nguyen et al. (2018) interviewed local people involved in *P. cocincinus* in the Thua Thien Hue Province of Viet Nam and found that there are no attempts at breeding the species in captivity since harvesting from the wild is currently more economical. Thus, it is expected that most of the recorded imports to the EU are wild caught animals. Nguyen et al. (2018) also emphasise that the number of records in the UNEP-WCMC CITES trade database only represents the tip of the iceberg of actual international trade levels in this species since only imports to the EU are recorded. Gewiss et al. (2020) report similar findings and concludes that *P. cocincinus* is in high demand for the international pet trade.

Potential other information by CITES reviews and on nature management issues in range states

P. cocincinus was included in a review of non-CITES reptiles that are known or likely to be in international trade, prepared for the European Commission by the World Conservation Monitoring Centre (UNEP-WCMC, 2009). The review revealed that *P. cocincinus* is very popular in the international pet trade and that individuals are collected from the wild.

There was a zoo-population of 323 individuals in 2009 (ISIS, 2009, cited in UNEP-WCMC, 2009).

Recommendations

Data viser at denne arten er svært populær i handel, samt at dyrene i handel stammer fra ville bestander. Arten er listet som sårbar og bestanden er i nedgang med uttak for både for internasjonal handel og for mat som hovedtrussel. Således er det tydelig at forslaget om å liste denne arten på CITES Appendiks II er i tråd med retningslinjene i Anneks 2a, B, Res. Conf. 9.24 (Rev. CoP17). Uregulert handel vil være ødeleggende for denne artens videre overlevelse.

Literature list

CoP19 Prop. 14: <https://cites.org/sites/default/files/documents/E-CoP19-Prop-14.pdf>

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CoP19 Prop.15 *Cyrtodactylus jeyporensis***Review of listing proposal under CITES**

India proposes to include *Cyrtodactylus jeyporensis* in Appendix II of CITES according to the criteria in paragraph 2(a) of Article II of the Convention and criteria A in Annex 2a of Resolution Conf, 9.24 (Rev. CoP17).

Species name: *Cyrtodactylus jeyporensis* (Beddome, 1878). Common names: Jeypore ground gecko, Patinghe Indian gecko. Synonyms: *Geckoella jeyporensis* (Beddome, 1878) *Gymnodactylus jeyporensis* Beddome, 1878.

Distribution: *C. jeyporensis* is endemic to Eastern Ghats India (Orissa, Andhra Pradesh) (Mohapatra, 2021).

Population trend: Nothing is known about the population size or trends of this species, but it appears to be extremely scarce given a very few observations (none between 1870 and 2010) (Mohapatra, 2021).

Habitat status: The status of the habitat is unknown as it is known only from two separated locations in high elevation moist forest of Jeypore Hills in Orissa and neighbouring Andhra Pradesh. There are several threats to the habitat which include deforestation and other human activities.

Describe known/suspected level of trade: The species is not known to be in use or trade, but it is an attractive species and could become the target of commercial collection (Broom, 2017; Mohapatra, 2021).

Literature review of biological status and conservation status, including information on status in other relevant conventions

The status of *C. jeyporensis* on the IUCN Red List is Endangered B1ab(iii)+2ab(iii) (Mohapatra, 2021).

Evaluation of trade data

No trade data exists. The proposal includes examples of specimen for sale on social media. There is no available information about the captive breeding of this species.

Potential other information by CITES reviews and on nature management issues in range states

Collection requires permission from the National Biodiversity Authority of India. That specimen are found for sale outside India suggests that illegal export has occurred.

Recommendations

C. jeyporensis er svært sjelden, utrydningstruet og finnes bare i et begrenset sårbart habitat. Det er ikke noe tilgjengelig informasjon om handel med denne arten, og listeforslaget virker dermed ikke å være i tråd med kriterium A i Anneks 2a, Res. Conf. 9.24 (Rev. CoP17). Gitt den sjeldne statusen til denne arten er det likevel gitt at all uregulert handel vil være en trussel mot fremtidig overlevelse.

Literature list

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CoP19 Prop.15: <https://cites.org/sites/default/files/documents/E-CoP19-Prop-15.pdf>

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CoP19 Prop. 16 *Tarentola chazaliae*

Review of listing proposal under CITES

Mauritania and Senegal propose to include *Tarentola chazaliae* in Appendix II in accordance with Resolution Conf. 9.24 (Rev. CoP17), as the species satisfies criterion A and B of Annex 2(a).

Species name: *Tarentola chazaliae* (Mocquard, 1895). Common name: Helmethead gecko. Norwegian name: Murgekko. Synonym: *Geckonia chazaliae* Mocquard, 1895.

Distribution: Along the coast of western North Africa in Mauritania, Morocco, Western Sahara (Wilms et al., 2013).

Population trend: Decreasing (Wilms et al., 2013).

Habitat status: Particularly the Moroccan part the habitat is degrading rapidly due to ongoing coastal development and population decline is expected (Wilms et al., 2013).

Describe known/suspected level of trade: The species is commonly traded as a pet internationally in relatively large numbers (Wilms et al., 2013).

Literature review of biological status and conservation status, including information on status in other relevant conventions

Listed on the IUCN Red List as Vulnerable A3cd; B1ab(iii,v). Justified by the limited extent of occurrence (less than 20,000 km²), a small number of known locations (less than ten), a continuing and predicted decline in extent and quality of its habitat and decline in mature individuals due to collection for the pet trade (Wilms et al., 2013). The assessment was made in 2004 and needs updating.

Evaluation of trade data

The proposal refers to documentation of legal trade in North America, Europe and Asia (CoP19 Prop. 16 and references therein). Some illegal trade is also documented (CoP19 Prop. 16 and references therein). In a recent risk assessment *T. chazaliae* was identified as a species with high risk from the international pet trade (Altherr et al., 2020). It is suspected that collection from trade has led to decline in the wild and that the demand is higher than the supply from captive breeding.

Potential other information by CITES reviews and on nature management issues in range states

The species exists in some protected areas of Morocco and Mauritania, but most of its range remains outside protected areas (Wilms et al., 2013).

Recommendations

Denne arten av murgekko har synkende bestandsstørrelse, noe som til dels skyldes internasjonal handel. Habitatet dens er forventet å endre seg dramatisk i nær fremtid. Forslaget om å liste denne arten under CITES Appendix II virker dermed å være i tråd med kriteriene A og B i Annex 2a, Res. Conf. 9.24 (Rev. CoP17). All uregulert handel kan være en trussel mot fremtidig overlevelse.

Literature list

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CoP19 Prop. 17 *Phrynosoma platyrhinos***Review of listing proposal under CITES**

The United States of America proposes to include desert horned lizard (*Phrynosoma platyrhinos*) in Appendix II, under the provisions of Article II, paragraph 2(a) of the Convention, in accordance with Resolution Conf. 9.24 (Rev. CoP17), Annex 2a, Criterion A and Criterion B.

Species name: *Phrynosoma platyrhinos* (Girard in Baird and Girard 1852). Common names: Desert horned lizard, lagartija-cornuda de desierto (Spanish). Earlier studies include *P. goodei* as a subspecies of *P. platyrhinos*.

Distribution: Two subspecies: 1) *P. platyrhinos platyrhinos* occurs in the USA (California, Idaho, Nevada, Oregon, and Utah), and 2) *P. p. calidiarum*, occurs in the USA (Arizona, California, Nevada, and Utah), and in Mexico (Baja California) (Hammerson et al., 2019).

Population trend: Stable. In the IUCN assessment it is stated that the rangewide population size is stable or slowly decreasing (Hammerson et al., 2019). According to the proponent little data exists and that the population is decreasing in some areas (CoP19 Prop. 17).

Habitat status: Habitat loss and fragmentation has resulted from human activities. Local populations have been eliminated (Hammerson et al., 2019).

Describe known/suspected level of trade: Individuals are collected for the pet trade (Hammerson et al., 2019).

Literature review of biological status and conservation status, including information on status in other relevant conventions

IUCN lists *P. platyrhinos* as a species of Least Concern (Hammerson et al., 2019).

Evaluation of trade data

Data from the U.S. Fish and Wildlife Service Law Enforcement Management Information System (LEMIS) for the years 2013 – 2017 shows that 8,553 individuals were exported from the U.S. in 316 shipments. 96% of the specimen had been collected in the wild (CoP19 Prop. 17).

From 2010 to 2020, Mexico imported 1,500 specimens from the U.S. and re-exported 80 specimens; 30 specimens to Holland and 50 specimens to Ukraine for commercial purposes (Mexican CITES Scientific Authority, 2022). Some illegal trade has been documented through seizures (see CoP19 Prop.17). The majority of collected *P. platyrhinos* individuals die in captivity (Hammerson et al., 2019).

Potential other information by CITES reviews and on nature management issues in range states

P. platyrhinos is not protected under the United States Endangered Species Act and the level of protection varies from State to State. In Mexico any harvest of terrestrial and native wildlife species must prove that harvest rates are lower than natural renovation of the population and that harvest will not have a detrimental effect on the population (Mexican CITES Scientific Authority 2022). Mexico proposes to include the genus *Phrynosoma* in CITES Appendix II (CoP19 Prop. 17)

Recommendations

P. platyrhinos omsettes som hobbydyr internasjonalt og de fleste dyrene i handel er samlet inn fra naturen. Forslaget virker derfor å være i tråd med de retningslinjene som er satt i A og B, Anneks 2a, Res. Conf. 9.24 (Rev. CoP17). Regulering av handelen vil kunne bidra til at den ikke setter de ville bestandene i fare for utryddelse.

Literature list

CoP19 Prop. 17: <https://cites.org/sites/default/files/documents/E-CoP19-Prop-17.pdf>
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Mexican CITES Scientific Authority. 2022. Information on biology and trade of *Phrynosoma platyrhinos*. Prepared with information provided by the Mexican CITES Authorities (Scientific Authority, CONABIO; Management Authority, DGVSEMARNAT and Law Enforcement Authority, PROFEPA).

CoP19 Prop. 18 *Phrynosoma* spp.

Review of listing proposal under CITES

Mexico proposes to include the genus *Phrynosoma* in Appendix II according to the criteria in paragraph 2(a) of Article II of the Convention. According to the proponent, seven of the species are satisfying criterium A in Annex 2a of Res. 9.24 (Rev. CoP17) and due to similarity between species the whole genus should be included under Criterion A of Annex 2b.

Species name: *Phrynosoma* spp. Species identification is difficult, and the taxonomy debated among experts (see CoP19 Prop.18). Common name: Horned lizards, agartos cornudos (Spanish). Norwegian name: Hornøgler.

The seven focal species are:

P. platyrhinos, Girard, 1852. Common name: Desert horned lizard.

P. asio, Cope, 1864.

P. taurus, Dugés, 1868.

P. orbiculare (Linnaeus, 1789).

P. braconnieri, Duméril & Bocourt, 1870.

P. modestum, Girard, 1852.

P. solare, Gray, 1845.

Distribution: *Phrynosoma* species are found in Canada, Guatemala (uncertain), Mexico and the United States of America.

P. platyrhinos: Mexico, USA (Arizona, California, Idaho, Nevada, Oregon, Utah).

P. asio: Guatemala (uncertain), Mexico.

P. taurus: Mexico.

P. orbiculare: Mexico.

P. braconnieri: Mexico.

P. modestum: Mexico, USA (Arizona, Colorado, New Mexico, Texas).

P. solare: Mexico, USA (Arizona, New Mexico).

Population trend: According to the IUCN (2022), the majority of species have stable trends, including the seven focal species. But many of the assessments are outdated (i.e. from more than a decade ago). Many populations are in decline, some are locally extinct (CoP19, Prop.18 and references therein). The proponent argues that more information is needed about population status and trends.

Habitat status: Increasingly fragmented. The habitats of many *Phrynosoma* species are eroding and becoming increasingly fragmented due to climate change and human activities. Most species are ant specialists and availability of edible ants can be limiting (CoP19 Prop. 18 and references therein).

Describe known/suspected level of trade: Several species are found in international pet trade. Most specimen in trade are collected from the wild. *P. platyrhinos* is the most traded species. *P. asio* is also popular in the pet trade according to IUCN (Canseco-Marquez et al., 2013).

Literature review of biological status and conservation status, including information on status in other relevant conventions

IUCN lists *P. mcallii* as Near Threatened, 13 species as Least Concern and one (*P. ditmarsii*) as data deficient. The seven focal species are all listed as Least Concern:

P. platyrhinos (Hammerson, 2019).

P. asio (Canseco-Marquez et al., 2013).

P. taurus (Canseco-Marquez et al., 2007a).
P. orbiculare (Mendoza-Quijano et al. 2007).
P. braconneri (Canseco-Marquez et al., 2007b)
P. modestum (Hammerson et al, 2007a).
P. solare (Hammerson et al, 2007b).

In 1992, four species were included in CITES Appendix II: *P. coronatum*, *P. blainvillii*, *P. cerroense* and *P. wigginsii*. The same species were included in the EU Wildlife Trade Regulations in 1997.

Evaluation of trade data

US Fish and Wildlife Service Law Enforcement from 2006 to 2015, show exports of 21,393 live specimens of at least nine species of *Phrynosoma* of which 93.8% were taken from the wild. The most exported species is, by far, *P. platyrhinos*, of which 20,199 specimens were exported. The EU is the main market for live specimens of *Phrynosoma*, followed by Asia. According to the proponent *Phrynosoma* species are sold illegally at markets and through pet stores in Mexico, also internationally. Both artificially bred and wild collected horned lizards usually die within a short time in captivity due to their very specialized diet (Hammerson et al., 2019).

To get an idea of legal international trade in *Phrynosoma* spp: the four species of *Phrynosoma* that are already listed under Appendix II, are not represented by many records of international trade in the CITES trade database between 2010 and 2022. There are 13 records involving *Phrynosoma coronatum*, one record of *Phrynosoma cerroense*, two of *Phrynosoma blainvillii*, one of *Phrynosoma wigginsii* (trade.cites.org). The majority of these records are for scientific purposes, but with three records being for T-commercial purposes. The majority of the individuals are registered as being wild-caught.

Potential other information by CITES reviews and on nature management issues in range states

Some species are protected in USA and Mexico (CoP19 Prop. 18). *P. orbiculare* and *P. taurus* are considered Endangered in Mexico, while *P. asio* and *P. braconneri* are considered in Special Protection. The U.S. proposes to include *P. platyrhinos* in Appendix II (CoP19 Prop. 17).

Recommendations

Hornøgle-artene i slekten *Phrynosoma* er å finne i internasjonal handel. Dette virker å gjelde de fleste artene. IUCN-vurderingene av de syv fokusartene er stort sett fra 2007 og bør oppdateres. Det er derfor vanskelig å si noe om bestandstrender for disse artene. Det er uklart om de oppfyller kriterium A i Anneks 2a, Res. Conf. 9.24 (Rev. CoP17). Det er vanskelig å skille mellom mange av artene, men om kriterium A, Anneks 2b oppfylles er ikke helt åpenbart. Like fullt så er det klart at regulering av handel vil kunne være nyttig i forhold til bevaring av disse artene.

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Hammerson, G.A., Vazquez Díaz, J., Gadsden, H., Quintero Díaz, G.E., Ponce-Campos, P., Lavin, P. 2007a. *Phrynosoma modestum*. The IUCN Red List of Threatened Species 2007: e.T64078A12734244. <https://dx.doi.org/10.2305/IUCN.UK.2007.RLTS.T64078A12734244.en>. Accessed on 18 July 2022.

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Mendoza-Quijano, F., Vázquez Díaz, J. & Quintero Díaz, G.E. 2007. *Phrynosoma orbiculare*. *The IUCN Red List of Threatened Species* 2007: e.T64079A12734405. <https://dx.doi.org/10.2305/IUCN.UK.2007.RLTS.T64079A12734405.en>. Accessed on 18 July 2022.

CoP19 Prop. 19 *Tiliqua adelaidensis***Review of listing proposal under CITES**

Australia proposes to include *Tiliqua adelaidensis* in Appendix I, in accordance with Resolution Conf. 9.24 (Rev. CoP17), Annex 1 Paragraph B and Paragraph C.

Species name: *Tiliqua adelaidensis* (Peters, 1864); Common name: Pygmy bluetongue lizard; Synonyms: *Cyclodus adelaidensis* (Peters, 1864).

Distribution: The species is endemic to South-Australia (CoP19 Prop. 19).

Population trend: Decreasing (Fenner et al., 2018).

Habitat status: Increasingly fragmented. The species' population is severely fragmented among 33 sites, each separated by areas of unsuitable habitat (ploughed pasture, roads), with natural dispersal between subpopulations impossible (CoP19 Prop.19). In addition, there is hardly any more of the species' preferred habitat across its range, and Delean et al. (2013) forecasted a future deterioration in the northern two-thirds of the species' current range.

Describe known/suspected level of trade: *T. adelaidensis* is not in legal trade. There are several recent reports of illegal trade in this species (CoP19 Prop. 19).

Literature review of biological status and conservation status, including information on status in other relevant conventions

T. adelaidensis is listed as Endangered B2ab(ii,iii,iv,v) on the IUCN Red list because of an area of occupancy of less than 500km², a severely fragmented population and ongoing destruction of habitat (Fenner et al., 2018). The species is listed on CITES Appendix III, effective 22 June 2022 (CoP19 Prop.19).

Evaluation of trade data

There is no legal collection and trade in this species. *T. adelaidensis* is listed as Endangered both at the national and state level (South Australia). No permits have been granted for the species to be taken from the wild for the purpose of export and the species cannot be kept as a pet (CoP19 Prop.19). There have not been any permitted exports of live specimens for commercial purposes since 1982, and no permitted exports for non-commercial purposes since 2002, thus all individuals for sale outside Australia are almost certainly illegally exported specimens or the progeny of illegally exported specimens (CoP19 Prop. 19). The first reports of *T. adelaidensis* for sale internationally were in 2017 (CoP19 Prop.19). *T. adelaidensis* was available at a pet shop in the UK for 6,000 Euros per animal, and furthermore at on-line platforms and social media posted in Germany, UK and Russia (Altherr et al., 2019). There are also recent reports concerning advertisement of this species in Japan (CoP19 Prop.19). There has also been a report of burrows being excavated by shovels or similar tools (CoP19 Prop.19). *T. adelaidensis* restricted and fragmented populations makes them particularly vulnerable to harvest. The species primary shelters are spider burrows made by mygalomorph spiders. These burrows are a limiting factor for *T. adelaidensis* and poachers digging out the lizards is likely to damage and permanently remove such holes, thus affecting lizard survival (CoP19 Prop. 19). There are two known viable captive populations in Australia. The captive populations are used to understand species biology and captive husbandry requirement for this species (CoP19 Prop. 19).

Potential other information by CITES reviews and on nature management issues in range states

As of 20.06.2022, the United Kingdom, Bermuda, British Virgin Islands, Bailiwick of Guernsey, Isle of Man, Bailiwick of Jersey and Montserrat holds a reservation to the Appendix III listing of *T. adelaidensis* (Species+). *T. adelaidensis* was considered extinct prior to 1992. In 1992, a recovery

program was initiated and there is a recovery plan under national legislation, focusing on preserving habitat for the species (CoP19 Prop.19).

Recommendations

T. adelaidensis er en truet art som man tidligere trodde var utdryddet. Det er ikke lovlig handel med denne arten, men nylig rapportering og beslag indikerer at det er en økende interesse for *T. adelaidensis* i den internasjonale hobbydyrhandelen og at det er et betydelig nivå av ulovlig handel. Uttak for handel er også ødeleggende for kritisk habitat. Listeforslaget er derfor å være i tråd med kriteriene B og C, Anneks 1, Res. Conf. 9.24 (Rev. CoP17). Gitt artens status som utryddingstruet er det sannsynlig at enhver handel med *T. adelaidensis* vil kunne være ødeleggende for denne artens videre overlevelse.

Literature list

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CoP19 Prop. 20 *Epicratus inornatus*

Review of listing proposal under CITES

The United States of America proposes to transfer *Epicratus inornatus* from CITES Appendix I to CITES Appendix II. The proponent states that the species does not meet the "threatened with extinction" criteria (Annex 1) established in Conf. 9.24 (Rev. CoP17) and does not appear to fit the "affected by trade" criteria (Annex 5).

Species name: *Epicrates inornatus* (Reinhardt, 1843). Common names; Puerto Rican boa, yellow tree boa, boa de Puerto Rico, boa sobre, gewone slanke boa. Synonyms: *Boa inornata* Reinhardt 1843: 253; *Chilabothrus inornatus* Duméril & Bibron 1844: 563; *Epicrates inornatus* Boulenger 1893: 97; *Boella tenella* Smith & Chiszar 1992; *Chilabothrus inornatus* Reynolds et al. 2013.

Distribution: The species is endemic to Puerto Rico (Rodrigues et al., 2018).

Population trend: Unknown (Rodrigues et al., 2018). It is widely distributed but is particularly abundant in the Northern Karst region (Rodrigues et al., 2018).

Habitat status: Not fragmented (Rodrigues et al., 2018).

Describe known/suspected level of trade: The species does not appear to be in international trade.

Literature review of biological status and conservation status, including information on status in other relevant conventions

E. inornatus is listed as Least Concern on the IUCN Red List (Rodrigues et al., 2018).

E. inornatus was listed in CITES Appendix I in 1977 and in Annex A of the EU Wildlife Trade Regulations in 1997.

Evaluation of trade data

Between years 2000 and 2022, only 5 records of international trade in *E. inornatus* were recorded in the CITES trade database (trade.cites.org). None of these individuals were recorded as wild-caught.

Potential other information by CITES reviews and on nature management issues in range states

The species was subjected to a review as part of the Periodic Review of the Appendices between CoP15 (2010) and CoP17 (2016). The United States carried out the review and concluded that the species does not meet the "threatened with extinction" criteria (Annex 1) established on Res. Conf. 9.24 (Rev. CoP17) and does not appear to fit the "affected by trade" criteria in Annex 5 (AC27 Doc.24.3.7). The Animals Committee supported the views of the US review that the species is no longer threatened by trade and should be transferred from Appendix I to Appendix II.

Recommendations

Epicrates inornatus er ikke vanlig i internasjonal handel og er ikke utryddningstruet. Dermed oppfylles ikke kriteriene i Anneks 1, Res. Conf. 9.24 (Rev. CoP17). Det er ikke sannsynlig at handel vil være ødeleggende for artens videre overlevelse.

Literature list

CoP19 Prop. 20: <https://cites.org/sites/default/files/documents/E-CoP19-Prop-20.pdf>

AC27 Doc.24.3.7: <https://cites.org/sites/default/files/E-AC27-24-03-07.pdf>

Rodriguez, C., Mayer, G.C., Tolson, P.J. 2018. *Chilabothrus inornatus*.

The IUCN Red List of Threatened Species 2018:

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Accessed on 20 June 2022.

CoP19 Prop.21 *Crotalus horridus*

Review of listing proposal under CITES

The United States of America proposes to include the timber rattlesnake (*Crotalus horridus*) in Appendix II, in accordance with Article II Paragraph 2 (a) of the Convention and satisfying Criterion B in Annex 2a of Resolution Conf. 9.24 (Rev. CoP17). Specifically for Criteria B: It is known, or can be inferred or projected, that regulation of trade in the species is required to ensure that the harvest of specimens from the wild is not reducing the wild population to a level at which its survival might be threatened by continued harvesting or other influences.

Species name: *Crotalus horridus*, Linnaeus, 1758. Common name: Timber rattlesnake. Norwegian name: Skogklapperslange.

Distribution: USA where it is widely distributed. Extinct in Canada (Hammerson, 2007).

Population trend: Decreasing (Hammerson, 2007).

Habitat status: Loss of habitat; habitat fragmentation and isolation of populations are the main threats to *C. horridus* (Hammerson, 2007).

Describe known/suspected level of trade: According to the proponent live animals, dead animals, museum and research specimens, and derivatives (e.g., venom extracts, medicinal products, skeletons, skins, and trophies) are known to be in international and domestic trade. Illegal capture from the wild occurs.

Literature review of biological status and conservation status, including information on status in other relevant conventions

C. horridus is listed as Least Concern by IUCN (assessed in 2007 and needs updating).

Evaluation of trade data

The demand for exotic reptile skins skyrocketed in 1980s, but the degree of harvest and trade is largely undocumented. Some evidence of legal and illegal trade on the international pet market can be found in CoP19 Prop. 21 and references therein. Canada, Thailand, Germany, Austria and Japan are the main importing countries. According to the proposal (CoP19 Prop. 21 and references therein) captive breeding programs for the conservation of *C. horridus* have proven difficult.

Potential other information by CITES reviews and on nature management issues in range states

USA proposed unsuccessfully to include *C. horridus* in Appendix II at CITES CoP10 in 1997 (CoP10 Prop. 10.63).

Many States in the US have regulations for harvesting of *C. horridus*.

Recommendations

Regulering av handel med skogklapperslanger vil kunne bidra til å unngå at innsamling av slanger fra naturen setter artens overlevelse i fare. Det er uklart om listingen av denne arten oppfyller kriterium B, Annex 2a, Res. Conf. 9.24 (Rev Cop.17).

Literature list

CoP10 Prop.63: <https://cites.org/sites/default/files/eng/cop/10/prop/E-CoP10-P-63.pdf>

CoP19 Prop. 21: <https://cites.org/sites/default/files/documents/E-CoP19-Prop-21.pdf>

Hammerson, G.A. 2007. *Crotalus horridus*. The IUCN Red List of Threatened Species 2007: e.T64318A12765920.

<https://dx.doi.org/10.2305/IUCN.UK.2007.RLTS.T64318A12765920.en>. Accessed on 22 August 2022.

CoP19 Prop. 22 *Chelus fimbriata* and *Chelus orinocensis***Review of listing proposal under CITES**

Brazil, Colombia, Costa Rica and Perú propose to include the two matamata turtles *Chelus fimbriata* and *Chelus orinocensis* in CITES Appendix II. The inclusion of these two species is, according to the proponents, in line with Article II of the Convention, as well as criteria A and B of Annex 2a of Res. Conf. 9.24 (Rev. CoP17).

Species name: *Chelus fimbriata* (Schneider, 1783) and *Chelus orinocensis* Vargas-Ramírez, Caballero, Morales-Betancourt, Lasso, Amaya, Martínez, Silva-Viana, Vogt, Pires-Farias, Hrbek, Campbell and Fritz, 2020. Common names: Amazon matamata (*C. fimbriata*) and Orinoco matamata (*C. orinocensis*). Synonyms (*C. fimbriata*): *Testudo terrestris* Fermin, 1765 (nomen oblitum, non T.t. Forskål 1775), *Testudo fimbriata* Schneider, 1783, *Testudo torticollis* Ferreira 1784; *Testudo fimbria* Gmelin, 1789 (nomen subst. pro *T. fimbriata* Schneider), *Testudo matamata* Bruguière, 1792; *Testudo bi-spinosa* Daudin 1802; *Testudo rapara* Gray, 1831 (nomen nudum), *Testudo fimbriata* Cuvier, 1831, *Chelys matamata* Duméril y Bibron, 1835, *Testudo raparara* Gray, 1844 (nomen nudum), *Testudo raxarara* Gray, 1855 (nomen nudum), *Chelys fimbriata* (Günther, 1882; Boulenger, 1889; *Chelus fimbriatus* — Mertens 1934; *Chelus fimbriata* Iverson, 1992

Distribution:

C. fimbriata: Inhabits the Amazon River (Ecuador, Perú, Colombia, Brazil and Bolivia) and the river Maury (Surinam and French Guinea; Vargas-Ramírez et al., 2020).

C. orinocensis: Has a much smaller distribution compared to *C. fimbriata*. Inhabits the river Orinoco, the Essequibo River, as is confirmed present in Brazil, Colombia, Guyana and Venezuela. (Vargas-Ramírez et al., 2020).

Population trend: Unknown (CoP19 Prop.22).

Habitat status: The *Chelus* spp. have a wide distribution, but not much is known about their biology and ecology. Given the lack of information and their wide range it is not possible to classify habitat status for the total distribution of these species, but habitat reduction and destruction is most likely an issue throughout their range. For example, the Amazon has been undergoing constant changes in its landscape, including loss of natural habitats from deforestation (Cunha et al., 2021).

Describe known/suspected level of trade: The matamata turtles have striking morphological characteristics that makes them very popular for zoo exhibitions worldwide and many hatchlings are sold in the international pet market (Vargas-Ramirez et al., 2020; Lasso et al., 2018).

Literature review of biological status and conservation status, including information on status in other relevant conventions

C. fimbriata was in 2017 classified as Least Concern by the Turtle Taxonomy Working Group (which is the IUCN Red List Authority for turtles; TTWG, 2017). The Least Concern listing was based mainly on the species wide distribution range. There is no assessment of the newly identified *C. orinocensis*.

Evaluation of trade data

The matamata is renowned for its bizarre appearance making it "one of the strangest creatures on earth" (Ernst and Barbour 1989, cited in Vargas-Ramirez et al., 2020). The *Chelus* spp. fetches some of the highest market prices (\$300 USD per individual) in pet markets in the USA (Ceballos and Fitzgerald, 2004), Europe (Kopecký et al, 2013), Asia (Van Dijk et al., 2000), and the Philippines (Sy, 2015). Between 2014 and 2019, Colombian authorities have seized thousands of matamatas which were planned to be exported. The extent of the harvest nor the impact on the species is known. In Venezuela there are reports that thousands of eggs are collected from the wild

annually. These eggs are incubated in captivity and the hatchlings are exported by the pet trade (Vargas-Ramirez et al., 2020). In Peru, *C. fimbriata* is the second most seized species of freshwater turtles (CoP19 Prop. 22). Overall, the proposal highlights the significant international trade in these species in the majority of their range.

Potential other information by CITES reviews and on nature management issues in range states

In Colombia, illegal trade is regulated under the control of “illegal harvest of renewable natural resources” (CoP19 Prop. 22). The two *Chelus* spp. were recently recognized as two species, with *C. fimbriata* (Vargas-Ramírez et al., 2020). Turtles from this genus are visually indistinguishable (Sanchez-Villagra et al., 1995) and often trafficked across its distribution range. To return confiscated individuals back to their correct distribution range, molecular tools have been developed for rapid identification (Cardeñosa et al., 2021). The recent discovery of *C. orinocensis* highlights the need for further studies of population status and distribution in order to assess conservation status.

Recommendations

Chelus-slekten ble nylig splittet til de to artene i dette listeforlaget. Man vet ikke mye om artenes biologi og økologi, særlig om *C. orinocensis* som ble beskrevet først i 2020. Det er ikke mulig å separere de to artene basert på morfologi alene, så det er uklart hvilken art som det tas ut flest av. På grunn av sitt svært spesielle utseende er disse artene verdifulle i hobbydyrhandelen. Listeforslaget er dermed i tråd med kriteriene A og B, Anneks 2a, Res. Conf. 9.24 (Rev. CoP17). Uregulert handel vil kunne være ødeleggende for disse artene.

Literature list

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CoP19 Prop. 23 *Macrochelys temminckii* and *Chelydra serpentina*

Review of listing proposal under CITES

The United States of America proposes to transfer the North American members of the snapping turtle Family *Chelydridae* from Appendix III to Appendix II. The proponent claims that the transfer of *Macrochelys temminckii* is in accordance with Article II, paragraph 2(a) of the Convention and Resolution Conf. 9.24 (Rev. CoP17), Annex 2(a) as per: Criterion B and that the transfer of *Chelydra serpentina* is in accordance with Article II, paragraph 2(b) of the Convention and Resolution Conf. 9.24 (Rev. CoP17), Annex 2(b) as per: Criterion A (the look-alike criterion).

Species name: *Macrochelys temminckii* (Troost in Harlan 1835); *Chelydra serpentina* (Linnaeus 1758); **Common names:** Alligator snapping turtle (*M. temminckii*); Common snapping turtle, North American snapping turtle, Eastern snapping turtle (*C. serpentina*). **Synonyms:** see Fritz & Havaš (2007) **Norske navn:** Alligatorskilpadde og snappeskilpadde.

Distribution: *M. temminckii*: Endemic to the United States. Confined to river systems that drain into the Gulf of Mexico and present in 12 states in the south-eastern USA (CoP19 Prop. 23). *C. serpentina*: United States and Canada. *C. serpentina* is native and present in 42 states and has been introduced to other countries such as Taiwan, China and Japan (Van Dijk, 2012).

Population trend: *M. temminckii* has not fully recovered from past harvesting practices, and recent studies indicate altered population dynamics and population declines after 10-20 years of recovery (CoP19 Prop. 23). *C. serpentina* has experienced local declines, but there is an overall stable population trend (van Dijk, 2012). It is, however, important to note that the Red List assessment with the population trend estimate is from 2012 and outdated.

Habitat status: Increasingly fragmented from multiple past and ongoing human activities (CoP19 Prop. 23).

Describe known/suspected level of trade: A significant number of live individuals are exported annually from the United States, mainly to China, Hong Kong and Macao, primarily for meat consumption but also for the pet trade. Both legal and illegal trade occur (CoP19 Prop. 23 and references herein).

Literature review of biological status and conservation status, including information on status in other relevant conventions

Both species have been listed in CITES Appendix III (United States) since 2006 (*M. temminckii*) and 2016 (*C. serpentina*).

C. serpentina is listed as Least Concern on the IUCN Red list (van Dijk, 2012)

M. temminckii was listed as Vulnerable A1cd back in 1996, but this assessment is thus highly outdated (TFTSG, 1996).

Evaluation of trade data

Slow life history (delayed maturity, long generation time, low reproductive output) makes these species vulnerable to current and future harvest from the wild (CoP19 Prop. 23; Colteaux and Johnson, 2017). Both species are harvested and exported mainly for meat consumption, and to a lesser extent the pet trade. Commercial trade is dominated by immature individuals, and these are highly similar in appearance between the two species (CoP19 Prop. 23). Domestic commercial collection of *M. temminckii* is not permitted, and personal harvest is allowed in two states only. *C. serpentina* can be collected legally for commercial use in several states of the US, but not in Canada. The main exporter of both species is the U.S. (>99%). Since both species are listed under CITES Appendix III international trade is reported through the CITES trade database. More than

500,000 *M. temminckii* were exported between 2006 and 2020 and more than 700,000 *C. serpentina* were exported between 2017 and 2020 (CoP19 Prop. 23). Exported turtles are classified as either wild caught or farmed. The majority of *M. temminckii* are exported under the source code W, wild-caught. For *C. serpentina*, most of the trade is commercial, but source code W is not used very often, rather F- born in captivity or C-bred in captivity. The distinction between wild-caught and farmed is not clear, because there is no documentation on how much farms supplement their stock with wild-caught individuals and how many of these individuals who are then exported as farmed (Colteaux and Johnson, 2017). In addition, an unknown quantity of snapping turtle meat is processed and canned domestically before export (Colteaux and Johnson, 2017). Past levels of overharvest have made significant negative impacts on *M. temminckii* populations (CoP19 Prop. 23). The collapse of Asian turtle populations over the last decades from over-harvesting has resulted in a shift (particularly in China) from domestic harvest of wild turtles to aquaculture and international import, which again has increased harvest pressure on turtle species around the world (Colteaux and Johnson, 2017). Information about how many wild-caught individuals that are exported every year is missing, for example wild-caught animals may be reported as farm stock after being transferred to farm ponds (Colteaux and Johnson, 2017). Illegal domestic trade has been reported for *M. temminckii*. Information on illegal trade in *C. serpentina* is limited, but there are reports confirming it (CoP19 Prop. 23). Given its high numbers in trade, and morphological similarities of immatures to *M. temminckii*, trade in *C. serpentina* also presents potential opportunities for laundering the more threatened *M. temminckii* as *C. serpentina* (CoP19 Prop. 23).

Potential other information by CITES reviews and on nature management issues in range states

In Canada, *C. serpentina* is considered a species of Special Concern on Schedule 1 under Canada's Species at Risk Act (SARA). In Canada, Illegal harvest is considered a threat of medium-level concern for *C. serpentina* and according to ECCC (2020), the Ontario Multi-Species Turtles at Risk Recovery Team estimated the maximum sustainable harvest of *C. serpentina* to be less than 1% of the population/year (CoP19 Prop. 23). The USFWS currently recognizes two species of alligator snapping turtle: *M. suwanniensis* and *M. Temminckii*. In April and November 2021, respectively, the USFWS proposed to list both species, considered collectively here as *M. temminckii*, as Threatened under the U.S. Endangered Species Act of 1973 (ESA). The proposed rules have not been finalized, and therefore, *M. temminckii* is not currently protected under the ESA (CoP19 Prop. 23). The IUCN/SSC Tortoise and Freshwater Turtle Specialist Group supports inclusion of *M. temminckii* and *C. serpentina* in CITES Appendix II (<https://www.regulations.gov/comment/FWS-HQ-IA-2021-0008-0093>). The proposal submitted by the U.S. was reviewed by turtle biologist, Dr. Kurt Buhlmann of the University of Georgia, Savannah River Ecology Laboratory (Aiken, South Carolina). He agrees that the regulation of trade in these species is needed and supports the inclusion of *Macrochelys* and *Chelydra* in CITES Appendix II.

Recommendations

De to artene av alligatorskilpadde behandlet i dette listeforslaget er begge svært populære i den internasjonale handelen med skilpaddekjøtt, og de eksporteres årlig i store mengder fra USA til Kina.. Tidligere nivå av overhøsting påvirker fortsatt *M. temminckii* bestanden på en negativ måte. Det mangler fullstendig oversikt over det faktiske antallet av viltfangede individer i internasjonal handel. Etterspørselen etter skilpaddekjøtt er forventet å øke. Forslaget om listing av *M. temminckii* virker derfor å være i tråd med kriterium B, Annks 2a, Res. Conf. 9.24 (Rev. CoP17). Uregulert handel med *M. temminckii* vil mest sannsynlig kunne være ødeleggende for denne arten. Da handel foregår hovedsakelig med unge individer og disse er vanskelig å skille morfologisk vil også *C. serpentina* kunne påvirkes negativt av uregulert handel, og den foreslåtte listingen oppfyller dermed kriterium A av Annks 2b, Res. Conf. 9.24 (Rev. CoP17).

Literature list

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CoP19 Prop. 24 *Graptemys* spp.

Review of listing proposal under CITES

The United States of America proposes to transfer five species of broad-headed map turtles of the Genus *Graptemys* from Appendix III to Appendix II in accordance with Article II paragraph 2(a) of the Convention, satisfying Criterion B, Annex 2a of Resolution Conf. 9.24 (Rev. CoP17). All other *Graptemys* spp. remain in Appendix III.

Species name: *Graptemys barbourin*, Carr & Marchand, 1942. Common names: Barbour's map turtle, Barbour's sawback turtle.

G. ernsti, Lovich & McCoy, 1992 (was previous to 1992 classified as *G. pulchra*). Common name: Escambia map turtle.

G. gibbonsi, Lovich & McCoy, 1992. Common name: Pascagoula map turtle.

G. pearlensis, Ennen, Lovich, Kreiser, Selman & Qualls, 2010 (was previous to 2019 classified as *G. gibbonsi*). Common name: Pearl River map turtle.

G. pulchra, Baur, 1893. Common name: Alabama map turtle.

Common name for the five species is broad-headed map turtles. Norwegian name for the family Emydidae: Sumpskilpadder.

Distribution: The five species are endemic to the southeastern United States where they inhabit rivers. Species with restricted range: *G. ernsti* (Alabama, Florida), *G. gibbonsi* (Mississippi) and *G. pearlensis* (Louisiana and Mississippi).

Population trend: *Decreasing* (van Dijk, 2011abcd) *except G. Pulchra* for which the trend is Unknown (van Dijk, 2011e).

Habitat status: Habitat degradation and loss of basking sites (the species leave the water only to nest) is a challenge to all of the species as well as water pollution, particularly *G. gibbonsi* and *G. pearlensis* (van Dijk, 2011abcde).

Describe known/suspected level of trade: The international pet trade has become an increasing threat to the broad-headed map turtles and harvesting from the wild occurs (van Dijk, 2011abcde).

Literature review of biological status and conservation status, including information on status in other relevant conventions

IUCN lists *G. gibbonsi* as Endangered A2bce+4ce, *G. pearlensis* as Endangered A1bcde+4bcde, *G. barbourin* as Vulnerable A2bcde. *G. ernsti* and *G. Pulchra* are listed as Near Threatened (all assessed in 2010 and needs updating).

In the U.S., the genus *Graptemys* has been listed in CITES Appendix III since 2006 and the EU Wildlife Trade Regulations Annex C since 2008.

Evaluation of trade data

Some trade in captive bred live turtles, primarily between non-range countries, is recorded in the CITES trade database (trade.cites.org), except for *G. ernsti* and *G. pearlensis*.

According to the proponent the extent to which the five species of broad-headed map turtles are captive bred for commercial purposes remains unknown.

Potential other information by CITES reviews and on nature management issues in range states

A proposal by the US to include the genus *Graptemys* in CITES Appendix II was rejected at CoP10 in 1997 (CoP10 Prop.59).

Many range States in the U.S. regulate the species either through licensing requirements or collection and trade restrictions (CoP19 Prop. 24 and references therein).

Recommendations

Etterspørselen etter disse artene av sumpskilpadder (to er listet som Sterkt Truet) synes å være økende i det internasjonale kjæledyrmarkedet. Forslaget virker dermed å være i tråd ved kriterium B, Anneks 2a, Res. Conf. 9.24 (Rev. CoP17). Regulering av handel kan bidra til å sikre ville bestander mot overhøsting. Alle IUCN vurderinger er fra 2010 og trenger å oppdateres.

Literature list

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CoP19 Prop. 25 *Batagur kachuga***Review of listing proposal under CITES**

India proposes to transfer the red-crowned roofed turtle (*Batagur kachuga*) to CITES Appendix I, in accordance with Article II, paragraph 1, of the Convention. The proponent claims that *Batagur kachuga* qualifies for listing in CITES Appendix I because it meets the biological criteria found in Resolution Conf, 9.24 (Rev. CoP17), Annex I, specifically paragraph C(ii).

Species name: *Batagur kachuga* (Gray, 1831); Common name: Red-crowned roofed turtle; Synonyms: *Batagur bakeri* (Lydekker 1885); *Batagur ellioti* (Gray 1862); *Emys kachuga* (Gray 1831); *Emys lineata* (Gray 1830); *Emys lineata* (Gray 1831) [nomen oblitum]; *Kachuga fusca* (Gray, 1870); *Kachuga kachuga* (Gray 1831).

Distribution: India. Possibly Bangladesh, but most likely extinct (Praschag et al., 2019).

Population trend: Decreasing (Praschag et al., 2019).

Habitat status: Available habitat for *B. kachuga* is decreasing. The species is highly susceptible to major hydrological projects and their impacts on river flow dynamics, nesting beaches, and water pollution (CoP19 Prop. 25 and references therein).

Describe known/suspected level of trade: All commercial trade in *B. kachuga* from India is illegal and any trade is likely to be illegal. *B. kachuga* has been recorded in both the subsistence/local and international food market, and in the international pet market. Harvesting of this species has resulted in large-scale declines (Praschag et al., 2019).

Literature review of biological status and conservation status, including information on status in other relevant conventions

B. kachuga is listed as Critically Endangered A2cd+4cd on the IUCN Red list (Praschag et al., 2019). The CR listing is justified because of the species selective habitat requirements, slow recruitment and that it is threatened by incidental exploitation as well as systemic impacts on main river habitat. While quantitative data are not available, the species population is inferred to have declined well over 80% in past 50 years. The decline is projected to continue (Praschag et al., 2019). The species has been listed in CITES Appendix II since 2003 and under the EU Wildlife Trade Regulations Annex B since 2010.

Evaluation of trade data

Between 2010 and 2021, two records (3 live individuals) of trade in *B. kachuga* was registered in the CITES trade database (trade.cites.org). Two individuals were reported as being confiscated (source code I), exported from Singapore to Austria and the other one was of unknown origin (source code U), exported from Hong Kong to the United States (trade.Cites.org). According to the proponent and Praschag et al. (2019) there is a prevalent illegal market for *B. kachuga*. In 2017, 23 male *B. kachuga* were confiscated in Agra (Uttar Pradesh); at least five animals were confiscated in Hong Kong; and several were recorded in the Chinese pet trade (Praschag et al., 2019).

Potential other information by CITES reviews and on nature management issues in range states

In India, *B. kachuga* is provided the highest legal protection available through listing on Schedule I of the Wild Life (Protection) Act of 1972. Hunting and collection of the species is prohibited (Section 9 of the Act), and all commercial trade of the species and its derivatives is prohibited (Sections 40 and Chapter VI-A of the Act) (CoP19. Prop.25). However, illegal harvest and trade is significant in India. A 2019 study by TRAFFIC based on reported seizures for India calculated that between 2009 and 2019 on average more than 11,000 tortoises and freshwater turtles were poached and illegally

traded every year and that species identification was not reported in 51.5% of the cases (Badola et al., 2019).

Recommendations

B. kachuga er kritisk truet på grunn av tap av leveområder og også ulovlig høsting for kjøtt. All handel med denne arten er ulovlig under indisk lov. En markant nedgang i bestand (estimert til 80% siste 50 år) gjør at paragraf C(ii) I Anneks 1, Res. Conf. 9.24 (Rev. COP17) oppfylles. Uttak for handel vil sannsynligvis ha ødeleggende effekt på denne arten.

Literature list

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CoP19 Prop. 26 *Cuora galbinifrons*

Review of listing proposal under CITES

Viet Nam and the European Union propose to transfer the turtle *Cuora galbinifrons* from Appendix II to Appendix I. The proponents state that the transfer is in accordance with Article II, paragraph 1 of the Convention and that the species meets the biological criteria found in Annex 1 of Res. Conf. 9.24 (Rev.CoP17), under criteria A v) a small population in the wild with high intrinsic vulnerability and C i) past and ongoing severe decline due to exploitation.

Species name: *Cuora galbinifrons* Bourret, 1939 Common names: Indochinese box turtle, flowerback box turtle. Synonyms: *Cyclemys flavomarginata hainanensis* Li, 1958; *Cuora galbinifrons serrata* Iverson and McCord, 1992.

Distribution: China, Laos P. D. R, Viet Nam (Li et al., 2020).

Population trend: Decreasing (Li et al., 2020). No population size estimates are available. Several studies report extremely low encounter rate for this species over the past 20 years, and Li et al. (2020) conclude that it is reasonable to say that the population has declined steeply in the past three generations (estimated to over 90%).

Habitat status: Fragmented. *C. galbinifrons* inhabits upland, moist, closed canopy forest, usually between 300m and 1700m altitude. Forest cover in Vietnam has increased since early 2000 due to a reforestation programme, but the reforestation has mostly been monoculture and the primary forests *C. galbinifrons* depend on continues to be lost or degraded (CoP19 Prop. 26).

Describe known/suspected level of trade: The primary threat to *C. galbinifrons* is collection for trade. The species is in high demand in the international pet trade and the Asian consumption trade. The illegal trade is significant (Li et al., 2020; CoP16 Prop. 33; CoP19 Prop. 26 and references therein).

Literature review of biological status and conservation status, including information on status in other relevant conventions

C. galbinifrons is listed as Critically Endangered (criteria A2bd+4bd) on the IUCN Red List (Li et al., 2020). The species has been subject to intensive exploitation since the 1990s across its range, for both consumption and pet farming/aquaculture trades. The species has been listed in CITES Appendix since 2000, as a part of the genus listing for *Cuora* spp. A zero quota on wild specimens traded for commercial purposes was adopted for *C. galbinifrons* at CoP16 (CoP16 Prop.32). It is included in the EU Wildlife Trade Regulations Annex B, also as part of the *Cuora* spp. listing.

Evaluation of trade data

From years 2000/2001 there are several records of wild caught *C. galbinifrons* being traded internationally for commercial purposes, but after that the majority of the records of wild caught individuals are for either scientific or zoological purposes. There is a great number of records of commercial trade in captive individuals in recent years (trade.cites.org). Li et al. (2020) present evidence of significant levels of illegal use and trade in *C. galbinifrons* throughout its range. For example, Cheung and Dugdeon (2006) recorded over 15,000 *C. galbinifrons* traded on Hong Kong SAR markets alone in the time period between 2000 and 2003, making it the fourth most traded turtle species at 4% of total, and comparing it to the total of 916 live *C. galbinifrons* that were recorded in the CITES trade database during the same period. This suggests a significant level of illegal and unrecorded trade, which is further supported by seizure data (TRAFFIC, 2015). Market surveys by Wildlife Conservation Society between 2008 and 2011 in Guangzhou in China, documented 1,826 animals in food markets and 1,944 recorded in the local pet trade (Li et al., 2020, and references therein). There are also numerous examples of more recent seizures of illegally collected *C. galbinifrons* (CoP19 Prop. 26). There are attempts to breed *C. galbinifrons* in captivity, but the species is considered a difficult and sensitive species to breed. *C. galbinifrons* is

maintained in small numbers in captivity by hobbyists in Asia, Europe, North America and elsewhere, and also at the Turtle Conservation Centre at Cuc Phuong National Park (Li et al., 2020). Species with limited reproductive output (such as most turtles and tortoises) are highly susceptible to over-exploitation, and the population trend of *C. galbinifrons* strongly suggest that the species has been subject to unsustainable collection over the past 15-20 years (CoP19 Prop. 26 and references therein).

Potential other information by CITES reviews and on nature management issues in range states

C. galbinifrons is considered among the top 25 most endangered freshwater turtles by the Turtle Conservation Coalition 2018, which consist of several turtle conservation groups, including the IUCN SSC Tortoise and Freshwater Turtle Specialist Group. There are national parks and special conservation areas in place across much of the *C. galbinifrons* range, with several records of the species originating from inside protected areas. However, these areas do not necessarily offer protection against collection of turtles and are insufficient to safeguard viable populations of the species in its natural habitat (CoP19 Prop. 26). There is no known management of populations of *C. galbinifrons* in any parts of its range. No known population monitoring programs are present for *C. galbinifrons* (CoP19 Prop. 26). *C. galbinifrons* was selected by the Animals Committee for Review of Significant Trade following CoP11 (2000). The species was removed from the Review for Lao PDR after a zero quota was established (AC31 Doc. 13.1). At CoP16, a proposal to transfer *C. galbinifrons* to Appendix I was defeated in a procedural vote following the adoption of Proposal 32 CoP19 Prop. 26 – p. 10 which placed a zero quota on trade in wild specimens of *C. galbinifrons* for commercial purposes. At the request of Viet Nam at CoP16, *C. galbinifrons* was included in the Periodic Review of Animal Species in the Appendices, conducted by the Animals Committee (Decision 16.124). The review of the species was prepared by Viet Nam and presented in document AC28 Doc.20.3.8. The Animals Committee agreed with the recommendation in the Periodic Review document to transfer *C. galbinifrons* to Appendix I (AC28 Sum. 2 (Rev. 1); CoP17 Doc. 73 para.11).

Recommendations

C. galbinifrons er kritisk truet og bestanden er redusert med mer enn 90%. Arten har, som de fleste skilpadder, lav reproduksjonsrate, og er derfor spesielt sårbar i forhold til overutnyttelse og handel. Forslaget om å liste denne arten under CITES Appendix I oppfylder derfor kriteriene A v) og C i) i Annex 1, Res. Conf. 9.24 (Rev. CoP17). Arten ble nylig vurdert i et CITES review og dyrekomiteen støtter anbefalingen om å flytte *C. galbinifrons* til Appendix I. Det er sannsynlig at all handel vil være ødeliggende for denne artens videre overlevelse.

Literature list

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CoP17 Doc. 73: <https://cites.org/sites/default/files/eng/cop/17/WorkingDocs/E-CoP17-73.pdf>

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Turtles in Trouble: The world's 25 most Endangered Tortoises and Freshwater Turtles – 2018:
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CoP19 Prop. 27 *Rhinoclemmys* spp.

Review of listing proposal under CITES

The proposal is to include the genus *Rhinoclemmys* in Appendix II. The proponents are Brazil, Colombia, Costa Rica and Panama. There is no mention of which criteria of Annex 2a or 2b, of Res-Conf. 9.24 (Rev. CoP17) the genus fulfills.

Species name: *Rhinoclemmys* spp.; Common names: Neotropical wood turtles. Scientific synonyms: See Fritz and Havas (2007) and TTWG (2017).

Distribution: From northwestern Mexico to northwestern Brazil and the Pacific slope of Ecuador. See CoP19 Prop. 27 for species specific distributions. Some species, namely *R. diademata*, *R. nasuta* and *R. rubida* have restricted distributions.

Population trend: There is little quantitative information on population trends in *Rhinoclemmys* spp.

Habitat status: The habitats of *Rhinoclemmys* spp. are under a lot of pressure across their distribution range, with logging and conversion to agriculture seemingly being the main threats to these habitats (CoP19 Prop. 27).

Describe known/suspected level of trade: There seems to be significant local use of *Rhinoclemmys* spp., mainly for consumption but also as traditional medicine. There are also reports of several species being present in the pet trade, but limited information exists (CoP19 Prop. 27 and references therein).

Literature review of biological status and conservation status, including information on status in other relevant conventions

There are five species (*R. funerea*, *R. annulate*, *R. nasuta*, *R. rubida*, *R. areolate*) listed as Near Threatened on the IUCN-red list, however the assessments are from 1996 and 2007 and are thus most likely outdated (TFTSG, 1996abc; van Dijk et al., 2007ab). There are also reports of *Rhinoclemmys* species being imported to Europe, with *R. pulcherrima* and *R. pulcherrima manni* being the most common (CoP19 Prop. 27 and references therein). The *Rhinoclemmys* species are currently not listed under any international trade regulations such as CITES or the EU Wildlife Trade Regulations.

Evaluation of trade data

The proponents list number of exports of *Rhinoclemmys* spp. from Mexico between 2000 and 2021 (CoP19 Prop. 27). In, 2021, 2000 *Rhinoclemmys* spp. were imported to Mexico (CoP19 Prop. 27 and references therein.) There are also reports about species of *Rhinoclemmys* being for sale on online platforms and Facebook groups (CoP19 Prop. 27). A total number of 57,426 animals of *Rhinoclemmys* spp. were imported to the United States between 2011 and 2016, the majority being live animals and of the species *R. pulcherrima*.

There is some illegal trade concerning *Rhinoclemmys* species. Some of the species are listed under national legislation in Mexico. *R. aerolata* and *R. pulcherrima* are both listed as threatened and *R. rubida* is under special protection in the List of Species at Risk in Mexico, and there are reports of seizures of these species (CoP19 Prop. 27). Captive breeding of *R. punctularia* has occurred in a Brazilian zoo, with 200 individuals maintained in the 1990s (CoP19 Prop. 27 and references therein). In Mexico, several management units maintain *Rhinoclemmys* spp. and some of these units raise turtles for the trade (CoP19 Prop. 27 and references therein).

Potential other information by CITES reviews and on nature management issues in range states

None

Recommendations

Det oppgis ikke hvilke kriterier i Anneks 2, Res. Conf. 9.24 det ønskes listing etter, og det er derfor ikke mulig å konkludere i forhold til oppfylling av disse kriteriene. Disse artene er hovedsakelig truet av tap av habitat samt at de er sårbare på grunn av at de vokser sakte og har lav reproduksjonsrate. Det er åpenbart at flere av artene finnes i handel, men det er uklart hva slags innvirkning dette har på videre overlevelse.

Literature list

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CoP19 Prop. 28 *Claudius angustatus*

Review of listing proposal under CITES

Mexico proposes to include *Claudius angustatus* (narrow-bridged musk turtle) in Appendix II, in accordance with Article II, Paragraph 2a of the Convention, and satisfying Criterion A of Annex 2a, subparagraph B, of Resolution Conf. 9.24 (Rev. CoP17).

Species name: *Claudius angustatus*, Cope, 1865. Common name: Narrow-bridged musk turtle.

Distribution: The species is found in Belize, Guatemala and Mexico (Tortoise & Freshwater Turtle Specialist Group, 1996).

Population trend: Unspecified (Tortoise & Freshwater Turtle Specialist Group, 1996)

Habitat status: The species is semi-aquatic and much of its habitat has been modified by agricultural activities (CoP19 Prop. 28).

Describe known/suspected level of trade: *C. angustatus* is popular in the international pet trade. According to the proponent illegal harvesting for meat consumption and the pet trade are the main threats.

Literature review of biological status and conservation status, including information on status in other relevant conventions

C. angustatus is listed as Low Risk/Near Threatened by IUCN (assessed in 1996, needs updating).

Evaluation of trade data

According to the proponent, authorization for export of 11,846 live specimens of *C. angustatus* was granted in the period 2005–2019. The main importers were China, Hong Kong and USA. In a seizure of 15,000 turtles destined for China in 2020, 4,216 specimens were identified as *C. angustatus* (PROFEPA, 2020) *C. angustatus* can easily be found for sale on the internet (Google search).

According to the proponent captive breeding and maintenance of the species is difficult.

Potential other information by CITES reviews and on nature management issues in range states

C. angustatus is classified in the Mexican list of endangered species as "At risk of extinction" and is to some degree protected by the General Wildlife Law (CoP19 Prop. 28).

Recommendations

C. angustatus omsettes internasjonalt som både mat og kjæledyr. Informasjonen om artens tilstand er begrenset og utdatert (siste IUCN vurdering er fra 1996), men forslaget om å liste denne arten under CITES Appendix II virker å være i tråd med kriterium A, Annex 2a, Res. Conf. 9.24 (Rev. CoP17). Regulering kan forhindre at handel blir en trussel mot artens overlevelse.

Literature list

CoP19 Prop. 28: <https://cites.org/sites/default/files/documents/E-CoP19-Prop-28.pdf>

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CoP19 Prop. 29 *Kinosternon* spp.**Review of listing proposal under CITES**

Brazil, Colombia, Costa Rica, El Salvador, Mexico, Panama and the United States of America proposes to include the genus *Kinosternon* (20 species) in Appendix II in accordance with the criteria set out in Resolution Conf. 9.24 (Rev. CoP17), annex 2a and 2b. Furthermore, the proponents also wish to include the species *K. cora* and *K. vogti* in Appendix I, in accordance with criteria A (i, ii, iii, v) and B (i, iii, iv) of Annex 1 of Resolution Conf. 9.24 (Rev. CoP17).

Species name: *Kinosternon abaxillare* (Baur in Stejneger 1925) *K. acutum* (Gray 1831), *K. alamosae* (Berry & Legler 1980), *K. angustipons* (Legler 1965), *K. baurii* (Garman 1891), *K. chimalhuaca* (Berry, Seidel & Iverson 1997), *K. creaseri* (Hartweg 1934), *K. dunni* (Schmidt 1947), *K. durangoense* (Iverson 1979), *K. flavescens* (Agassiz 1857), *K. herrerae* (Stejneger 1925), *K. hirtipes* (Wagler 1830), *K. integrum* (Le Conte 1854), *K. leucostomum* (Duméril & Bibron in Duméril & Duméril 1851), *K. oaxacae* (Berry & Iverson 1980), *K. scorpioides* (Linnaeus 1766), *K. sonoriense* (Le Conte 1854), *K. steindachneri* (Siebenrock 1906), *K. stejnegeri* (Hartweg 1938), *K. subrubrum* (Bonnaterre 1789), *K. cora* (Loc-Barragán et al. 2020), *K. vogti* (López-Luna et al., 2018).

Scientific synonyms: See Annex 1 of CoP19 Prop. 29

Common names: Mud turtles, kinosternids.

Distribution: The 22 species of the genus *Kinosternon* are distributed in 21 countries, from the United States of America to Argentina and Paraguay (see CoP19 Prop. 29 for specific distribution area of each species). *K. vogti* and *K. cora* (proposed to be included in Appendix I) are endemic to Mexico, with highly restricted distributions.

Population trend: Population size is unknown for most species (CoP19 Prop. 29).

Of the 17 species assessed by the IUCN Red list, *K. abaxillare*, *K. herrerae* and *K. hirtipes* are declining, *K. creaseri*, *K. integrum*, and *K. stejnegeri* are estimated to be stable and 11 have unknown population trends (*K. acutum*, *K. alamosae*, *K. angustipons*, *K. baurii*, *K. chimalhuaca*, *K. dunni*, *K. durangoense*, *K. flavescens*, *K. oaxacae*, *K. sonoriense*, *K. subrubrum*; IUCN, 2022).

K. vogti has a declining population trend, with an estimated 80% reduction based on levels of habitat loss (Cupul-Magaña et al., 2022).

Habitat status: Fragmented. Levels of degradation vary among the various distribution countries but in general, housing developments, agriculture and livestock production contribute to high rates of habitat change for these species (Ennen et al., 2020).

Describe known/suspected level of trade: The *Kinosternon* species are traded legally and illegally for use as pets and as raw material to make decorative objects, musical instruments and homeopathic medicines (CoP19 Prop. 29 and references therein).

Literature review of biological status and conservation status, including information on status in other relevant conventions

K. vogti is classified as Critically Endangered on the IUCN Red List (Cupul-Magaña et al., 2022).

Of the 17 species that are assessed by the IUCN, three are classified as Vulnerable (*K. Abaxillare*, *K. angustipons* and *K. dunni*) three as Near Threatened (*K. Acutum*, *K. herrerae* and *K. sonoriense*) and the rest as Least Concern (IUCN, 2022).

Evaluation of trade data

Between 2010 and 2022, Mexico reported having authorized harvest of 688 wild caught *Kinosternon* spp. (*K. integrum*, *K. acutum*, *K. leucostomum*, *K. scorpioides*), the majority of these being *K.*

integrum. Furthermore, in the same time period, 32,883 captive bred specimens (mainly *K. leucostomum*, but also *K. integrum*, *K. acutum* and *Kinosternon* sp.) were exported for commercial purposes (CoP19 Prop. 29). There is extensive captive breeding of several *Kinosternon* species in Mexico. There are also a few registered (3) captive breeding facilities for *K. scorpioides* in El Salvador. There is some captive breeding occurring in the U.S. The U.S. reports import of 1,393 *Kinosternon* specimen from Mexico between 2000 and 2019, and between 2012 and 2019 there were records of exports of 197,930 individuals on *Kinosternon*, mainly for commercial purposes. There seems to be significant levels of illegal trade in *Kinosternon* turtles, with seizures of nearly 20,000 individuals being reported between 2010 and 2022 in Mexico (CoP19 Prop. 29 and references therein). *K. vogti* is under increasing demand and specimens of both *K. vogti* and *K. cora* have been observed in Asian markets (CoP19 Prop. 29). Species of *Kinosternon* have a similar appearance and are difficult to distinguish by people with little experience with the taxonomy of the genus. Iverson (1991) cited in CoP19 Prop. 29 reported that over half of the specimens of *Kinosternon* deposited in museums are misidentified, which affects knowledge on the systematics of this group and makes information on this group scarce compared to that of other reptiles distributed in the Americas.

Potential other information by reviews and on nature management issues in range states

The *Kinosternon* spp. are subject to a various levels of management measures in the different range countries (see detailed description in CoP19 Prop. 29).

K. vogti was only recently described in 2018, and available data suggest that the species is one of the most threatened freshwater turtle species (Lopez-Luna et al., 2018).

K. cora was described in 2020, and the authors state that the conservation status of the species cannot be assessed because only six specimens are known from an area of approximately 500km² (Loc-Barragan et al., 2020).

Marcip-Rios et al. (2015) found that with the exception of *Kinosternon integrum*, all *Kinosternon* spp. of Mexico had marginal or confined (isolated) distributions, thus making them particularly vulnerable to over-harvesting.

Recommendations

K. vogti er listet som kritisk truet på rødlisten og *K. cora* er estimert til å være sjelden eller ekstremt sjelden. Begge arter finnes kun i Mexico, og har begrenset utbredelsesområde. Etterspørselen etter artene på det internasjonale markedet er antatt å være økende. Basert på dette virker begge arter å oppfyller kriteriene som er gitt i Annex 1, Res. Conf. 9.24 (Rev. CoP17). Når det gjelder resten av artene er det uklart om de oppfyller kriteriene for listing gitt i Annex 2a, men hvis *K. vogti* og *K. cora* listes under CITES vil resten trolig oppfylle look-alike kriteriene gitt i Annex 2b, Res. Conf. 9.24 (Rev. CoP19). Det er betydelig omsetning av flere av artene og regulering vil kunne forhindre at ville bestander blir truet i deler av utbredelsesområdet.

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CoP19 Prop. 30 *Staurotypus salvinii* and *Staurotypus triporcatus***Review of listing proposal under CITES**

El Salvador and Mexico propose to include the species *Staurotypus triporcatus* in Appendix II, in accordance with Article II, Paragraph 2a of the Convention, Annex 2a, Criterion B of Resolution Conf. 9.24 (Rev. CoP17). They further propose that the inclusion of *Staurotypus salvinii* in Appendix II, under Criterion A of Annex 2b of Resolution Conf. 9.24 (Rev. CoP17) is in accordance with the look-alike criterium

Species name: *Staurotypus triporcatus* (Wiegmann, 1828). Common names: Mexican giant musk turtle, Mexican musk turtle, northern giant musk turtle. Scientific synonyms: *Terrapene triporcata* Wiegmann, 1828, *Staurotypus Triporcatus* Duméril y Bibron, 1835 *Claudius pictus* Cope, 1872. *Staurotypus salvinii*, Gray 1864. Common names: Pacific Coast giant musk turtle, giant musk turtle. Norwegian name Genus *Staurotypus*: Moskusskillpadder.

Distribution:: *S. triporcatus* Belize; Guatemala; Honduras; Mexico (Tortoise & Freshwater Turtle Specialist Group, 1996a). *S. salvinii*: El Salvador, Guatemala, Mexico (Tortoise & Freshwater Turtle Specialist Group, 1996b).

Population trend: For both species the population trend is unspecified (Tortoise & Freshwater Turtle Specialist Group, 1996a,b). For *S. triporcatus* there are some outdated studies on abundance in several of the regions of occurrence, reporting densities ranging from 0.0008 individuals/m² to 0.0035 individuals/m² (Reynoso et al., 2016).

Habitat status: Both species are semi-aquatic. *S. triporcatus* inhabits lakes, rivers and swamps it spends most of the time in water, but nests and can aestivate on land in tropical forests, grasslands and wetlands. According to the proponents a large part of the potential habitat has been modified for agriculture and livestock farming (CoP19 Prop. 30).

Describe known/suspected level of trade:

Giant musk turtles are in high demand for the meat and are popular in the pet trade (tank turtles) within range States and internationally. According to the proponents *S. triporcatus* is under great pressure from harvesting (CoP19 Prop. 30).

Literature review of biological status and conservation status, including information on status in other relevant conventions

Both species is assessed as Near Threatened by IUCN, the assessments were made in 1996. Nearly no information is available for either of the species.

Evaluation of trade data

The Mexican Scientific Authority to CITES has coordinated studies of *S. triporcatus* (Reynoso et al., 2016, 2021) concluding that the main threat is harvesting for consumption and trade. Reynoso et al. (2021) reported increasing export of meat to Asia. Mexico has authorized export of 24,500 individuals since 2000 (CoP19 Prop. 30). USA reported import of 719 individuals (whereof 255 wild caught) for the period 2015-2020.

In 2020 a shipment of 15,000 turtles (most of them destined for China) was seized in Mexico, 871 were identified as *S. Triporcatus* and 135 as *S. Salvinii*.

Both species can easily be found for sale on-line. Captive breeding occurs, but the extent seems to be uncertain. In the juvenile stage, it is almost impossible to distinguish between the two species. Even an adult specimen of *S. salvinii* and a juvenile *S. triporcatus* may be similar in size (CoP19 Prop.30 and references therein).

Potential other information by reviews and on nature management issues in range states

S. triporcatus and *S. salvinii* are categorized as Endangered in the list of threatened species in Guatemala (LEA CONAP). *S. triporcatus* is found within several protected areas in Mexico.

The IUCN Tortoise and Freshwater Turtle Specialist Group supports the inclusion of *S. triporcatus* and *S. salvinii* in CITES Appendix II.

Recommendations

Det finnes veldig lite informasjon om disse to artene av moskusskillpadder og vurderingene for IUCNs rødliste er ikke blitt oppdatert siden 1996. Søknaden viser imidlertid til nyere dokumentasjon som viser en betydelig etterspørsel etter spesielt *S. triporcatus* på det internasjonale markedet. Begge artene omsettes for kjøttkonsum og for hold i aquarier som hobbydyr. For *S. triporcatus* er høsting fra naturen angitt som den største trusselen mot artens overlevelse og det er grunn til å anta at arten oppfyller kriterium B gitt i Anneks 2a, Res. Conf. 9.24 (Rev. CoP17). Grunnet likheter i morfologi, og da særlig som juveniler vil det være slik at hvis en av artene listes vil den andre mest sannsynlig oppfylle kriteriene i Anneks 2b, Res. Conf. 9.24 (Rev. CoP17).

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CoP19 Prop. 31 *Sternotherus* spp.**Review of listing proposal under CITES**

The United States of America proposes to include all species of Musk turtles in the Genus *Sternotherus* spp. in Appendix II in accordance with Article II, paragraph 2(a) of the Convention, and Resolution Conf. 9.24 (Rev. CoP17), Annex 2a, Criterion B.

Species name: *Sternotherus carinatus* (Gray, 1856). Synonym: *Aromochelys carinata* Gray, 1856. Common names: Razor-backed musk turtle, keeled musk turtle.

S. depressus, Tinkle & Webb, 1955. Common name: Flattened musk turtle.

S. minor (Agassiz, 1857). Synonyms: *Goniochelys minor* Agassiz, 1857, *Kinosternon minor* (Agassiz, 1857), *Sternotherus peltifer* Smith & Glass, 1947. Common names: Loggerhead musk turtle, stripe-necked musk turtle.

S. odoratus (Latreille in Sonnini & Latreille, 1801). Synonyms: *Kinosternon odoratum*, *Kinosternum guttatum*, *Ozotheca tristycha*, *Testudo glutinata*, *Testudo odorata*.

Common names: Eastern musk turtle, common musk turtle, stinkpot. Norwegian name: Moskusskilpadder. The Norwegian name of family Kinosternidae: Mudderskilpadder.

Distribution: The genus *Sternotherus* occurs mainly in the southeastern United States. *S. odoratus* is most widespread and its range extends to the eastern U.S. and southern Canada (Québec and Ontario). *S. depressus* has a small range in one river system in Alabama (van Dijk, 2011b).

Population trend: *S. carinatus* and *S. minor*: Unknown (van Dijk, 2011ac), *S. depressus* Decreasing (van Dijk, 2011b), *S. odoratus*: Stable (van Dijk, 2015).

Habitat status: *Sternotherus* are highly aquatic species and impacted by habitat loss and degradation (e.g. pollution) that are considered the main threats (van Dijk 2011abc; van Dijk 2015).

Describe known/suspected level of trade: The *Sternotherus* turtles are traded internationally as pets and are susceptible to collection from the wild.

Literature review of biological status and conservation status, including information on status in other relevant conventions

The species are listed as Least Concern by IUCN, except *S. depressus* that is Critically Endangered A2bce+4bce (all four were assessed in 2010 and need updating).

Evaluation of trade data

According to the proponent, a total of 1,498,463 live *Sternotherus* were exported from the United States for commercial purposes between 2013 and 2019, mainly to East Asia: 598,058 individuals of *S. carinatus*; 640 individuals of *S. depressus*; 58,182 individuals of *S. minor*; 839,261 individuals of *S. odoratus*; and 2,322 individuals of *Sternotherus* spp. Some documentation of illegal collection and trade in the species exists (CoP19 Prop. 31 and references therein). The extent to which musk turtles are captive-bred for commercial purposes is unknown (CoP19 Prop. 31 and references therein).

Potential other information by CITES reviews and on nature management issues in range states

S. depressus is prohibited from trade by Alabama State legislation since 1984.

Some *Sternotherus* species are protected at the U.S. State level.

The IUCN SSC Tortoise and Freshwater Turtle Specialist Group (TFTSG) supports the inclusion of the genus *Sternotherus* in CITES Appendix II (CoP19 Prop. 31).

Recommendations

Det er betydelig handel med *Sternotherus*-skilpadder på det internasjonale kjæledyrmarkedet, og listingen av disse artene under CITES Appendiks II virker derfor å være i tråd med kriterium B, Anneks 2a, Res. Conf. 9.24 (Rev. CoP17). Regulering vil kunne bidra til å forhindre overhøsting av ville bestander.

Literature list

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CoP19 Prop.32 *Apalone* spp.

Review of listing proposal under CITES

The United States of America proposes to include the Genus *Apalone* spp. (Except the subspecies included in Appendix I) to Appendix II. The proponent states that such a transfer is in accordance with Article II, paragraph 2 (a) of the Convention and Resolution Conf. 9.24 (Rev. CoP17) Annex 2a as per: a) Criteria A., and b) Criteria B.

Genus name: *Apalone* (Rafinesque, 1832). **Species:** *Apalone ferox* (Rafinesque, 1832 1817) *Apalone mutica* (LeSueur, 1827); *Apalone spinifera* (LeSueur, 1827); (*Note: Apalone spinifera atra* which is currently in Appendix I is not considered in this proposal and remains unchanged) as defined in the standard nomenclature reference for turtles, Fritz & Havas (2007). Common names: Florida softshell turtle (*A. ferox*); smooth softshell turtle (*A. mutica*); and spiny softshell turtle (*A. spinifera*), Synonyms: *Testudo loveridgii* Boulenger, 1920.

Distribution:

A. ferox: USA

A. mutica: USA

A. spinifera: Canada, Mexico, USA.

Population trend:

A. ferox: Unknown (van Dijk, 2011a)

A. mutica: Unknown (van Dijk, 2011b)

A. spinifera: Stable (van Dijk, 2011c)

While *A. spinifera* has been categorized as stable, the longevity and age of sexual maturity in turtle species can create a time lag in detecting population declines, making overall population trends appear as stable despite large losses at local and regional levels (Tomillo et al., 2008, cited in CoP19 Prop. 32).

Habitat status: *Apalone* spp. mainly inhabit river systems. Alterations of river structures, such as for example dams, can alter river hydrology and thus the habitat (Alexander et al., 2012 in CoP19 Prop. 32).

Describe known/suspected level of trade:

The three *Apalone* spp. covered by the current proposal were included in CITES Appendix III in 2016, due to concerns over how stricter regulation of the over-harvested populations of softshell turtles in Asia and Africa would impact on harvesting of the American species. The global turtle trade follows a so called boom-and -bust pattern, where once a species is subject to regulations or depleted from the wild, other similar species are exploited in a "boom" until they "bust". Since the Appendix III inclusion, CITES data exports had increased prior to the pandemic and demonstrate a growing demand. It remains unknown if the supply can meet the current commercial demand, thereby, making wild populations vulnerable to over-exploitation (CoP19 Prop. 32).

Literature review of biological status and conservation status, including information on status in other relevant conventions

Red List assessments for these three species are outdated.

A. ferox: Least Concern (van Dijk, 2011a)

A. mutica: Least Concern (van Dijk, 2011b)

A. spinifera: Least Concern (van Dijk, 2011c)

Van Dijk (2011b) states that the red list assessment for *A. mustica* is “more an issue of lack of data documenting a decline than available data indicating stable populations. Population monitoring is highly desirable as the species can be argued to warrant Near Threatened.”

Several American *Apalone* spp., including *A. ferox*, *A. mutica*, and *A. spinifera*, were included in CITES Appendix III in 2016.

Evaluation of trade data

The softshell turtle trade can be divided into four categories (Moler and Berish, 1995, cited in COP19 Prop. 32):

1. Hatchlings that enter the pet trade or establish turtle breeding farms overseas.
2. Turtles larger than 3.5 to 4.5 kg that are butchered and sold as meat.
3. Smaller turtles that are killed, frozen, and sold whole.
4. Turtles under 3 kg that are sold live.

Populations of softshell turtles that are harvested may not recover or it may take years (AFWA, 2020). The consequences of harvest are greatly affected by whether there is exploitation of hatchlings or adults (Tomillo et al., 2008). Commercial turtle farming is a lucrative aquaculture business in the south-eastern United States. Quantifying the true levels of harvest is challenging, and sites of commercial breeding may not be where wild populations are being exploited (Ceballos and Fitzgerald 2004, cited in CoP19 Prop. 32). Export numbers reported in the 2011 IUCN assessment of the species reflect a steady and at times drastic increase in *A. spinifera* individuals. Exports from Canada are suspected to be low given prohibitions under federal and provincial endangered species legislations; however, the rate of illegal trade is expectedly high due to demand (C. Caceres – Canadian Wildlife Service, pers. comm. Cited in CoP19 Prop. 32).

Thousands of individuals, mainly *A. ferox*, but *A. spinifera* (0.41%) and *A. mutica* (0.001%), have been recorded as traded in the CITES trade database (trade.CITES.org) since the inclusion of several *Apalone* spp. in Appendix III in 2016. The majority of the transactions are for commercial purposes, with animals originating from animals born in captivity (source code F, i.e. they do not fulfil the definition of “bred in captivity” as their parents mated in the wild). CITES trade data from 2017 to 2020 show that live turtles account for most trade (99.81%). The proponent reports that exports declared in the LEMIS database show that 171,007 live *A. ferox* and 1,623 live *A. spinifera* were traded from 2016 to 2021. While the majority of *A. ferox* individuals were given the source code “F” (animals born in captivity from parents who mated in the wild) at 86.8%, the majority of *A. spinifera* individuals were given source code “W” (animals from the wild) at 81.8% (proposal). Several articles and reports have highlighted instances of illegal trade in recent years. The Florida Fish and Wildlife Conservation Commission documented 4,000 turtles (including *A. ferox*) illegally taken from 2018 to 2019 to be sold to Asian markets (Florida Fish and Wildlife Conservation Commission, 2019).

Potential other information by CITES reviews and on nature management issues in range states

A. spinifera in Canada was assessed as Endangered in 2016 (COSEWIC 2016) and is Threatened on Schedule 1 of the Species at Risk Act (SARA) (Environment and Climate Change Canada, 2018). The IUCN/SSC Tortoise & Freshwater Turtle Specialist Group recommend these species for inclusion in Appendix II (Peter Paul van Dijk – IUCN/SSC Tortoise & Freshwater Turtle Specialist Group, pers. Comm.; CoP19 Prop. 32). The proposal by USA was reviewed by turtle biologist, Dr. Kurt Buhmann, of the University of Georgia, Savannah River Ecology Laboratory (Aiken, South Carolina). He agrees that the regulation of trade in these species is needed and supports the inclusion of the genus *Apalone* in CITES (CoP19 Prop. 32).

Recommendations

Det finnes lite informasjon om bestandsstatus og trender for disse artene av *Apalone*-skilpadder. Men det er tilstrekkelig informasjon om at disse artene er en del av både lovlig og ulovlig internasjonal handel. Artene er relativt utbredt i akvakultur, men disse bestandene er avhengige av supplering av viltfangede dyr. Det er vanskelig for bestander hvor det har vært uttak av dyr å komme seg tilbake til det nivå de var på før uttak. Forslaget virker dermed å være i tråd med kriteriene A og B gitt i Anneks 2a, Res. Conf. 9.24 (Rev. CoP17). Uregulert uttak og handel vil sannsynligvis være ødeleggende for disse artenes videre overlevelse.

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Cop19 Prop. 33 *Nilssononia leithii*

Review of listing proposal under CITES

India proposes to transfer Leith's softshell turtle (*Nilssononia leithii*) from Appendix II to Appendix I. The proponent claims that the transfer is in accordance with paragraph 1 of Article II of the Convention, as well as criteria A(i) and A(v), B(i) and B(iv), and C(i) of Res. Conf. 9.24 (Rev. CoP17), Annex I.

Species name: *Nilssononia leithii* (Gray, 1872), common names: Leith's softshell turtle/ Nagpur soft-shelled turtle, scientific synonyms: *Aspideretes leithii* Gray, 1872; *Aspilus gataghol* Gray, 1872; *Testudo gataghol*, Buchanan-Hamilton in Gray, 1831 (nomen nudum); *Trionyx javanicus* Gray, 1830; *Trionyx leithii* Gray, 1871; *Trionyx sulcifrons* Annandale, 1915; *Nilssononia leithii* Praschag et al., 2007.

Distribution: Endemic to India (Praschag et al., 2021).

Population trend: The species is likely to have suffered a population reduction of at least 90% in the past 30 years, and the trend is ongoing (Praschag et al., 2021). There is, however, hardly any information about this species' status as it is not common anywhere. Back in 2012 and 2013, a month-long survey in the Kali River resulted in 4 and 2 individuals respectively (Das et al., 2014).

Habitat status: Decreasing habitat trend (CoP19 Prop.33).

Describe known/suspected level of trade: There are no records of legal international trade in the CITES trade database. The species has been heavily exploited for local and domestic trade in India, but it is unclear to which extent such trade goes beyond the domestic market.

Literature review of biological status and conservation status, including information on status in other relevant conventions

N. leithii is listed as Critically Endangered A2cd+4cd on the IUCN Red List (Praschag et al., 2021). *N. leithii* has been included in CITES Appendix II and the EU Wildlife Trade Regulations Annex B since 2013.

Evaluation of trade data

There are no records of international trade in *N. leithii* in the CITES trade database (trade.cites.org). Heavy exploitation for regional trade is the cause of the estimated population decline of 90% over the past 30 years (Praschag et al., 2021). According to the proponent, the peak of the exploitation of this species was during the early twenty first century. *N. leithii* is exploited for meat and some medicinal use of the calipee (CoP19 prop.33). In a recent study of illegal trade in Indian tortoises and freshwater turtles, Mendiratta et al. (2017) reported that *N. leithii* is one of the species that was formerly traded but is absent from present day seizures, probably because it has been extirpated from most of its range. Praschag et al. (2021) confirms this view, reporting that by 2011, the species was considered very difficult to find, with no viable populations known and there were interviews indicating that hunters were no longer making an effort to pursue this species (Praschag et al., 2021 and references therein). Seizures from illegal trade have been reported from Maharashtra and Karnataka. There are a few individuals in captivity in Indian zoos but there are no known viable captive breeding population of this species (CoP19 Prop. 33).

Potential other information by CITES reviews and on nature management issues in range states

N. leithii is protected in India, under Schedule IV of the India's Wildlife (Protection) Act (1972), hunting and collection of the species is prohibited (Section 9 of the Act). Commercial utilization of the

species requires authorization (Section 44 of the Act) and cannot occur from wild populations (Section 48) (CoP19 Prop.33). However, poaching and illegal trade of Indian tortoises and freshwater turtles is a significant issue, with more than 11,000 animals annually since 2009 (Badola et al., 2019).

Recommendations

N. leithii ble tidligere utnyttet for kjøtt og calipee, men er nå veldig sjelden og er borte fra mesteparten av sitt historiske utbredelsesområde. Det er estimert en bestandsnedgang på 90% over de seneste 30 år. Forslaget om å liste denne arten under CITES Appendix I virker dermed å være i tråd med kriteriene A (i) og (v), B (i) og (iv) og C (i) i Anneks 1, Res. Conf. 9.24 (Rev. CoP17). Det legges ikke frem noen dokumentasjon som bekrefter nåværende internasjonal handel med arten, men den er listet som kritisk truet på rødlisten, og ethvert uttak vil dermed kunne være ødeleggende for videre overlevelse.

Literature list

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CoP19 Prop. 34 Centrolenidae spp.

Review of listing proposal under CITES

Argentina, Brazil, Costa Rica, Côte d'Ivoire, Ecuador, El Salvador, the United States of America, Guinea, Niger, Panama, Peru, the Dominican Republic and Togo propose to include the family *Centrolenidae* in Appendix II. 12 of the species according to paragraph 2 (a) of Article II and satisfies Criterion B of Annex 2a Resolution Conf, 9.24 (Rev. CoP17). Due to similarity between species the whole family should be included under Annex 2b.

Species name: *Centrolenidae* spp. The family contains 12 genera and 158 species, two of which were described in 2022. Common name: Glass frogs, ranas de cristal (Spanish). Norwegian name: Glassfrosker.

Distribution: Central America south through Venezuela, Bolivia, Argentina, and southern Brazil (see CoP19 Prop. 34).

Population trend: Data on the population size of the various species of glass frogs is very limited. According to the proponent 71% of the evaluated species are declining in their natural environment (CoP19 Prop. 34).

Habitat status: Most species inhabit montane rainforest where they are found in vegetation close to water and are affected by habitat fragmentation and loss (see CoP19 Prop. 34).

Describe known/suspected level of trade: Glass frogs have become popular in the pet trade due to their unique transparent skin making their internal organs visible. The prices can be high.

Literature review of biological status and conservation status, including information on status in other relevant conventions

On the IUCN Red List 10 species are listed as Critically Endangered, 28 Endangered, 21 Vulnerable, 11 Near Threatened, 28 Data Deficient and 55 of Least Concern. Five species have not yet been evaluated (IUCN SSC Amphibian Specialist Group).

Evaluation of trade data

There is no available information on the utilization of glass frogs in range States. There is a lack of trade data, but according to the proponent the main market is found in Europe and North America. Some documentation of illegal international trade exists, and on-line sale is increasing (see CoP19 Prop. 34 and references therein). Most frogs imported to the U.S. are declared as bred in captivity. It is unknown if trade of captive bred animals leads to decrease or increase in the demand for wild frogs. According to the proponent, the information about what species that are successfully and legally bred in captivity is poor (CoP19 Prop. 34)

Potential other information by CITES reviews and on nature management issues in range states

At CoP18 a proposal (CoP18 Prop. 38) by Costa Rica, El Salvador and Honduras to include 10 species of glass frogs (of the genera *Hyalinobatrachium*, *Centrolene*, *Cochranella*, and *Sachatamia*) in Appendix II in accordance with Article II 2a and II 2b Resolution Conf, 9.24 (Rev. CoP17) was rejected. Many range States are protecting species of glass frogs and/or areas where they occur. None of them are protected by international law. Some range States, such as Panama and Ecuador, have allowed the legal export of small numbers of specimens. Costa Rica has only allowed export for scientific purposes.

Recommendations

Det virker som om etterspørselen etter glassfrosker er relativt stor internasjonalt, flere av artene er utryddelsestruet og kan bli negativt påvirket av innsamling av individer for handel fra naturen. Forslaget om å inkludere disse artene under Appendiks II virker derfor å være i tråd med kriterium B i Anneks 2a, Res. Conf. 9.24 (Rev. CoP17). Regulering av handel kan bidra til å sikre artenes fremtidige overlevelse.

Literature list

CoP19 Prop.34: <https://cites.org/sites/default/files/documents/E-CoP19-Prop-34.pdf>

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<https://www.iucnredlist.org/search?taxonomies=101658&searchType=species>

CoP19 Prop. 35 *Agalychnis lemur*

Review of listing proposal under CITES

Colombia, Costa Rica, European Union and Panama propose to include *Agalychnis lemur* in Appendix II, in accordance with Article II, Paragraph 2 (a) of the Convention and satisfying Criterion B of Annex 2 a of Resolution Conf. 9.24 (Rev. CoP17), with a zero annual export quota for wild caught specimens traded for commercial purposes.

Species name: *Agalychnis lemur* (Boulenger, 1882). Common names: Lemur leaf frog, lemur tree frog. Norwegian name: Lemurtrefrosk. Synonyms: *Hylomantis lemur* (Boulenger, 1882), *Phyllomedusa lemur* Boulenger, 1882. The species was moved from genus *Hylomantis* to *Agalychnis* in 2010 (Favivovich *et al.*, 2010).

Distribution: Colombia, Costa Rica, Panama (IUCN SSC Amphibian Specialist Group, 2020).

Population trend: Decreasing (IUCN SSC Amphibian Specialist Group, 2020). Habitat loss and the fungal disease chytridiomycosis are current the main drivers of decline.

Habitat status: Severely fragmented. General habitat loss and fragmentation remains a threat throughout this species' range (IUCN SSC Amphibian Specialist Group, 2020).

Describe known/suspected level of trade:

The international pet trade has been identified to have had an impact on the species in the past. The species is available in the international pet trade, presumably from captive-bred sources. It is unknown whether individuals are still being collected from the wild.

Literature review of biological status and conservation status, including information on status in other relevant conventions

A. lemur is listed as Critically Endangered because of an observed decline of 80–95% of the remaining population since 1998 (IUCN SSC Amphibian Specialist Group, 2020).

Evaluation of trade data

There are no records in the CITES Trade database (trade.cites.org). Most trade is believed to be of captive bred animals.

Potential other information by CITES reviews and on nature management issues in range states

The genus *Agalychnis* was listed in Appendix II in 2010 at CoP15 (CoP15 Prop. 13), before *A. lemur* was included in the genus. Some populations occur within protected areas and successful captive breeding programs exists (CoP19 Prop.35). Habitat protection will be necessary for its conservation in the wild (IUCN SSC Amphibian Specialist Group, 2020).

Recommendations

Lemurtrefrosk er en kritisk truet art i nedgang. Den omsettes på det internasjonale kjæledyrmarkedet. Mesteparten av dyrene i handel er antatt å stamme fra oppdrett, men enhver innsamling fra naturen vil kunne sette den ville bestanden i fare for utryddelse. Forslaget om å liste lemurtrefrosk under CITES Appendiks II virker derfor å være i tråd med kriterium B i Anneks 2a, Res. Conf. 9.24 (Rev. CoP17).

Literature list

CoP15.prop.13: <https://cites.org/sites/default/files/eng/cop/15/prop/E-15-Prop-13.pdf>

CoP19 Prop.35: <https://cites.org/sites/default/files/documents/E-CoP19-Prop-35.pdf>

Favivovich, J., Celio F. B. Haddad, Baeta, D., Jungfer, K.-H., Sheil, C., Barrientos, L.S., Barrio-Amoros, C.L., Cruz, C.A.G., Wheeler, W.C. (2010) The phylogenetic relationships of the charismatic poster frogs, Phyllomedusinae (Anura, Hylidae). *Cladistics* 26: 227–261.

IUCN SSC Amphibian Specialist Group. 2020. *Agalychnis lemur*. *The IUCN Red List of Threatened Species* 2020: e.T55855A3033153. <https://dx.doi.org/10.2305/IUCN.UK.2020-3.RLTS.T55855A3033153.en>. Accessed on 30 June 2022.

CoP19 Prop. 36 *Laotriton laoensis*

Review of listing proposal under CITES

The European Union proposes to include *Laotriton laoensis* in CITES Appendix II, with a zero export quota for wild-taken specimens traded for commercial purposes, in accordance with Res. Conf. 9.24 (Rev. CoP17), Annex 2a, criteria A and B.

Species name: *Laotriton laoensis* (Stuart and Papenfuss, 2002). Common names: Laos warty newt, paddletail newt. Synonym: *Paramesotriton laoensis* Stuart and Papenfuss, 2002.

Distribution: Endemic to Laos PDR (IUCN SSC Amphibian Specialist Group, 2014).

Population trend: Decreasing, with an estimated population decline of 50% in the last 10 years. This estimate is based on the facts that *L. laoensis* has a small distributional range outside protected areas, there has been a decline of suitable habitat, and there is over-harvesting for medicine, food and international trade (CoP19 Prop.36 and references therein; IUCN SSC Amphibian Specialist Group, 2014).

Habitat status: Not fragmented. *L. laoensis* inhabits pools within the headwaters of streams that flow through a variety of disturbed and undisturbed habitats (IUCN SSC Amphibian Specialist Group, 2014).

Describe known/suspected level of trade: *L. laoensis* has since its discovery in 2002 been in high demand for the international pet trade due to its novelty and spectacular colour patterns. The pet trade is the primary driver for population declines in this species (Rowley et al., 2016).

Literature review of biological status and conservation status, including information on status in other relevant conventions

Listed as Endangered B1ab (iii,v) on the IUCN Red List (IUCN SSC Amphibian Specialist Group, 2014). This is due to an estimated extent of occurrence of only 4,560 km², continuing declines in habitat quality and the number of mature individuals, and an extremely restricted population with a single threat-defined location (more info on this under "Evaluation of trade data").

L. laoensis is included in Annex D of the EU Wildlife Trade Regulations. Annex D is for species where trade needs to be monitored and that may need further protection.

Evaluation of trade data

L. laoensis was initially described in 2002 (Stuart and Papenfuss, 2002), which brought it and its location to the attention of commercial traders, leading to ongoing unsustainable harvest and subsequent use in the international pet trade in Germany and Japan (Stuart et al., 2006). The species' biology (behaviour and morphology) makes it particularly vulnerable to overharvesting, which remains the primary threat to this species (IUCN SSC Amphibian Specialist Group, 2014). There is only one record of import of *L. laoensis* in the CITES trade database: in 2013, 41 live individuals of unknown origin were imported to Denmark from Japan for commercial purposes (trade.cites.org).

Potential other information by CITES reviews and on nature management issues in range states

Rowley et al. (2016) recommend that all Southeast Asian newts should be listed in CITES.

L. laoensis, was originally described as *Paramesotriton laoensis* and thus a member of the genus *Paramesotriton* but was later included in the mono-specific genus *Laotriton* (Dubois and Raffaëlli 2009). At CoP18, the genus *Paramesotriton* (including 14 species that share similar biological and trade characteristics) was listed in CITES Appendix II (CoP18, prop. 40). *L. laoensis* is left unprotected in regard to trade regulations, and trade in warty newts may therefore be even more focused on this species.

It is possible to breed the species in captivity, and according to ZIMS (Zoological Information Management System of Species360) a total of 46 individuals of the Laos warty newt are currently kept in seven facilities worldwide (CoP19 Prop. 36 and references therein).

Recommendations

L. laoensis ble oppdaget og beskrevet i 2002 og har siden da blitt utsatt for overhøsting hovedsakelig for den internasjonale hobbydyr-handelen. Arten er listet som utryddningstruet, har begrenset utbredelse og en bestand i nedgang. Den foreslåtte listingen oppfyller dermed kriteriene A og B i Anneks 2a, Res. Conf. 9.24 (Rev. CoP19). Det er sannsynlig at uregulert internasjonal handel vil være ødeleggende for denne artens videre overlevelse.

Literature list

CoP19 Prop.36: <https://cites.org/sites/default/files/documents/E-CoP19-Prop-36.pdf>
CoP18 Prop.40: <https://cites.org/sites/default/files/eng/cop/18/prop/060319/E-CoP18-Prop-40.pdf>
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Stuart, B.L., Rhodin, A.G.J., Grismer, L.L., Hansel, T. (2006) Scientific description can imperil species. *Science*, 312 (5777): 1137.

CoP19 Prop. 37 Carcharhinidae spp.

Review of listing proposal under CITES

Bangladesh, Colombia, Dominican Republic, Ecuador, El Salvador, the European Union, Gabon, Israel, Maldives, Panama, Senegal, Seychelles, Sri Lanka, Syrian Arab Republic, United Kingdom of Great Britain and Northern Ireland proposes to include the shark family *Carcharhinidae* (requiem sharks) in CITES Appendix II. More specifically, the proponents suggest to include the grey reef shark (*Carcharhinus amblyrhynchos*), dusky shark (*C. obscurus*), smalltail shark (*C. porosus*), Ganges shark (*Glyphis gangeticus*), sandbar shark (*C. plumbeus*), Borneo shark (*C. borneensis*), Pondicherry shark (*C. hemiodon*), smoothtooth blacktip shark (*C. leiodon*), sharptooth lemon shark (*Negaprion acutidens*), Caribbean reef shark (*C. perezi*), daggernose shark (*Isogomphodon oxyrinchus*), night shark (*C. signatus*), whitenose shark (*Nasolamia velox*), blacknose shark (*C. acronotus*), whitecheek shark (*C. dussumieri*), lost shark (*C. obsoletus*), Pacific smalltail shark (*C. cerdale*), Borneo broadfin shark (*Lamiopsis tephrodes*) and the broadfin shark (*Lamiopsis temminckii*) in Appendix II in accordance with Article II paragraph 2(a) of the Convention and satisfying Criterion A It is known, or can be inferred or projected, that the regulation of trade in the species is necessary to avoid it becoming eligible for inclusion in Appendix I in the near future and B It is known, or can be inferred or projected, that regulation of trade in the species is required to ensure that the harvest of specimens from the wild is not reducing the wild population to a level at which its survival might be threatened by continued harvesting or other influences in Annex 2a of Resolution Conf. 9.24 (Rev. CoP17).

Look-alikes

They further wish to include all other species in the family *Carcharhinidae* (requiem sharks): Genus *Carcharhinus*, Genus *Isogomphodon*, Genus *Loxodon*, Genus *Nasolamia*, Genus *Lamiopsis*, Genus *Negaprion*, Genus *Prionace*, Genus *Rhizoprionodon*, Genus *Scoliodon*, Genus *Triaenodon* and any other putative species of family *Carcharhinidae* in Appendix II in accordance with Article II paragraph 2(b) of the Convention and satisfying Criterion A (The specimens of the species in the form in which they are traded resemble specimens of a species included in Appendix II under the provisions of Article II, paragraph 2 (a), or in Appendix I, so that enforcement officers who encounter specimens of CITES-listed species are unlikely to be able to distinguish between them) in Annex 2b of Resolution Conf. 9.24 (Rev. CoP17).

Species name (scientific, common name):

Carcharhinus amblyrhynchos, Grey reef shark; *Carcharhinus obscurus*, dusky shark; *Carcharhinus porosus*, smalltail shark; *Glyphis gangeticus*, ganges shark; *Carcharhinus plumbeus*, sandbar shark; *Carcharhinus borneensis*, Borneo shark; *Carcharhinus hemiodon*, Pondicherry shark; *Carcharhinus leiodon*, smoothtooth blacktip shark; *Negaprion acutidens*, sharptooth lemon shark; *Carcharhinus perezi*, Caribbean reef shark; *Isogomphodon oxyrinchus*, daggernose shark; *Carcharhinus signatus*, night shark; *Nasolamia velox*, whitenose shark; *Carcharhinus acronotus*, blacknose shark; *Carcharhinus dussumieri*, whitecheek shark; *Carcharhinus obsoletus*, lost shark; *Carcharhinus cerdale*, Pacific smalltail shark; *Lamiopsis tephrodes*, Borneo broadfin shark; *Lamiopsis temminckii*, broadfin shark; and all remaining species found within the family *Carcharhinidae* under Annex 2b, Criterion A (look-alikes).

Distribution (note that specific literature references for each species can be found in the proposal CoP19 Prop. 37):

C. amblyrhynchos: Tropical Indo-West and Central Pacific Oceans; some parts of the Eastern Tropical Pacific Ocean.

C. obscurus: Wide-ranging migratory species with a mainly coastal global distribution in tropical, sub-tropical and temperate oceans.

C. porosus: West Atlantic from the Gulf of Mexico and mainland Caribbean coast to southern Brazil, and central East Pacific.

G. gangeticus: Relatively poorly known, patchy distributions in tropical rivers, estuaries and adjacent coastal waters in South Asia.

C. plumbeus: Circumglobal distribution.

C. borneensis: Known from Kalimantan (Indonesian Borneo) and Sarawak (Malaysian Borneo) and a single specimen collected from Chu San Island in the Chekiang Province of China in the Western Central Pacific.

C. hemiodon: Historically ranged from the Arabian Sea (Oman) to the South China Sea.

C. leiodon: Endemic to the Arabian Seas region, occurring in the northern Indian Ocean, including the Gulf (UAE, Kuwait, Bahrain), Sea of Oman and Arabian Sea (Oman and Yemen).

N. acutidens: Widespread in coastal waters of the tropical and subtropical Indian and Northwest, Western Central, and Eastern Central Pacific Oceans.

C. perezii: Throughout the Western Central and Southwest Atlantic Oceans from the North Carolina (United States of America), the Bahamas, the Gulf of Mexico and Caribbean Sea to Brazil

I. oxyrhynchus: Western Central and Southwest Atlantic from Trinidad and Tobago and eastern Venezuela to Maranhão State, Brazil.

C. signatus: Generally, in outer continental shelf waters in the Northwest, Western Central, and Southwest Atlantic Oceans ranging from Delaware, USA to Río Negro, Argentina, including the Gulf of Mexico, Central America, Bahamas and Caribbean.

N. velox: Eastern Central and Southeast Pacific from Baja California, Mexico to Peru including the Gulf of California and the Galápagos Islands.

C. acronotus: Western Central and Southwest Atlantic Oceans ranging from North Carolina to southern Brazil, including the Gulf of Mexico and Caribbean Sea.

C. dussumieri: Widespread generally along the north coast of the Arabian Sea and the Arabian/Persian Gulf in the Western and Eastern Indian Ocean.

C. obsoletus: Was known from the southern South China Sea (Gulf of Thailand, Viet Nam, and Sarawak, Malaysian Borneo) in the Western Central Pacific Ocean.

C. cerdale: Eastern Central and Southeast Pacific from the Gulf of California, Mexico to Peru.

L. tephrodes: Western Central and Northwest Pacific in Thailand, Indonesia and Malaysia, but likely occurs more widely through the Indo-Malay Archipelago to southern China.

L. temminckii: Broadfin shark occurs in the northern Indian Ocean where it ranges from Pakistan to Thailand.

Population trend: Overall, for the 19 focal species experience significant and continuing declines throughout most of their ranges. Species specific population decline estimates are listed below:

C. amblyrhynchos: 59% globally, and over 75% declines in more than half of the countries surveyed (Simpfendorfer et al., 2020; MacNeil et al., 2020).

C. obscurus: over 80% (Rigby et al., 2019).

C. porosus: 50-90% (Santana et al., 2020).

G. gangeticus: near 100% depletion, possibly extinct in several countries (Rigby et al., 2021b).

C. plumbeus: 50-79% (Rigby et al., 2021a).

C. borneensis: 36-82% (Dulvy et al., 2021c).

C. hemiodon: near 100% depletion, possibly extinct (Kyne et al., 2021).

C. leiodon: 50-80% (Simpfendorfer et al., 2017).

N. acutidens: 50-79% (Simpfendorfer et al., 2021).

C. perezii: 50% or greater (Carlson et al., 2021a).

I. oxyrhynchus: greater than 99% (Pollom et al., 2020c).

C. signatus: 50-79% (Carlson et al., 2021b).

N. velox: 50-79% (Pollom et al., 2020a).

C. acronotus: 50-79%, potentially as high as 82% (Carlson et al., 2021c).

C. dussumieri: 50-70% (Simpfendorfer et al., 2019).

C. obsoletus: near 100% depletion, possibly extinct (Dulvy et al., 2020).

C. cerdale: over 80% (Pollom et al. 2020d).

L. tephrodes: 50-79% (Dulvy et al., 2021a).

L. temminckii: 67% with potential greater sub regional declines (Dulvy et al., 2021b).

Habitat status: Overall, climate change is significantly altering the habitat for all the shark species included in this proposal - both the coastal dwelling species and the species found in open waters - and is predicted to continue (see e.g. Birkmanis et al., 2020). In addition, habitat alteration and degradation due to pollution (and coral bleaching) and clearing are affecting several species that use coastal habitats at some point of their life cycle (for example *C. plumbeus*, *C. borneensis*, *C. amblyrhynchos*) (Rigby et al., 2021a; Dulvy et al., 2021c; Simpfendorfer et al., 2020)

Describe known/suspected level of trade: The family *Carcharhinidae* forms the core of the global shark fin trade, with estimates from recent studies conducted in trade hubs indicating these species make up 46% of all the species recorded in trade (Fields et al. 2018, Cardeñosa et al. 2018a). The shark fin (and meat) trade is driving severe declines of shark populations globally, and the trade is to a large extent unregulated. The 19 focal species of this proposal are all endangered or critically endangered because of exploitation at unsustainable levels.

Literature review of biological status and conservation status, including information on status in other relevant conventions

Listed as Endangered (IUCN Red List criteria in parentheses): *C. amblyrhynchos* (A2bcd, Simpfendorfer et al., 2020), *C. obscurus* (A2bd, Rigby et al., 2019), *C. plumbeus* (A2bd, Rigby et al., 2021a), *C. leiodon* (A2cd+3cd, Simpfendorfer et al., 2017), *N. acutidens* (A2bd, Simpfendorfer et al., 2021), *C. perezi* (A2bcd, Carlson et al., 2021a), *C. signatus* (A2bd, Carlson et al., 2021b), *N. velox* (Pollom et al., 2020a), *C. acronotus* (A2bd, Carlson et al., 2021c), *C. dussumieri* (A2d+3d, Simpfendorfer et al., 2019), *L. tephrodes* (A2d, Dulvy et al., 2021a), *L. temminckii* (A2d, Dulvy et al., 2021b)

Listed as Critically Endangered (IUCN Red List criteria in parentheses): *C. porosus* (A2d, Pollom et al., 2020b), *G. gangeticus* (A2cd; C2a(i), Rigby et al., 2021b), *C. borneensis* (A2cd, Dulvy et al., 2021c), *C. hemiodon* (C2a(i), Kyne et al., 2021), *I. oxyrinchus* (A2bcd, Pollom et al., 2020c), *C. obsoletus* (A2d; D (possibly extinct), Dulvy et al., 2020), *C. cerdale* (A2bcd, Pollom et al., 2020d).

Evaluation of trade data

Sherman et al. (in press) reports that *Carcharhinus* spp. comprises one third of the global reported catch of all Chondrichthyans (240,000 of 736,000 mt/year). Furthermore, the requiem sharks are estimated to comprise one-third of the trade volume of coastal sharks. Requiem sharks are inadequately managed worldwide, both by nations and Regional Fisheries Management Organisations (RFMOs). Taken together, the catch, trade and management shortfall issues have resulted in high levels of overfishing of the *Carcharhinus* genus and an elevated risk of extinction (Sherman et al. in press).

The look-alike issue:

The fin trade (rather than the meat trade) is the major trade-based threat to grey reef shark (*C. amblyrhynchos*), river sharks (*Glyphis* spp.), the dusky shark (*C. obscurus*) and the smalltail shark (*C. porosus*) along with many other members of the wider family (*Carcharhinidae*). At the point of landing (i.e. the whole and unprocessed fish), all 19 focal species can be identified using their unprocessed dorsal fin. However, depending on the type of product, species identification is not always possible with multiple look-alike species within the wider family *Carcharhinidae* (CoP19 Prop. 37 and references therein). Annex 1 of the proposal provides a matrix demonstrating how the different species have several look-alikes.

Potential other information by CITES reviews and on nature management issues in range states

Requiem sharks are highly prevalent in the international shark fin trade (e.g. Cardeñosa et al., 2020; Fields et al., 2018). Sherman et al. (in press) found that requiem sharks have minimal species-specific fisheries regulations, including lack of landing limits, and catch reporting generalised to the genus, class, or often not reported at all. Domestic and international regulations for shark finning have increased in the past decade, but it appears that such regulations have had very little effect on reducing the volumes of fins traded (e.g. Ferretti et al., 2020; Lawson and Fordham, 2018). Furthermore, there has been a recent increase in the international shark meat trade (Sherman et al., in press and references therein). Sherman et al. (in press) highlight that the requiem sharks are subject to a patchwork of management and some species might have lower extinction risk only if a significant part of their range lies within the waters of better managed countries like Australia and the US. For example, the blacktip reef shark is well-managed in Australia but less so elsewhere in its range. The results of MacNeil et al. (2020), further support these observations. Their study of coastal reef sharks showed that the declines in reef sharks from the coastal tropical oceans correlate with key socio-economic differences among reefs and nations (MacNeil et al., 2020). Sherman et al. (in press) stress that there is an immediate need for global cooperation in the monitoring sustainable catch. They conclude that listing requiem sharks on CITES Appendix II provides a mechanism for tackling the management deficits for requiem sharks (Sherman et al. in press). This is further supported by Cardeñosa et al. (2022), who studied the composition of the Hong Kong fin market between 2014 and 2018 and found that traded species disproportionately occur in threatened categories (70.9%) and all premium value species are threatened. The dusky shark (*C. obscurus*) has been listed on Appendix II of the Convention on the Conservation of Migratory Species of Wild Animals (CMS) since 2017.

Recommendations

De 19 fokusartene i dette listeforslaget om å inkludere *Carcharhinidae* under CITES Appendix II er alle klassifisert som kritisk true eller truet. De møter dermed kriteriene for inkludering i Appendix II, gitt som kriterium A og B, Anneks 2a, Res. Conf. 9.24 (Rev. CoP19). Flere arter oppfyller også åpenbart kriteriene for Appendix I siden det er mulig at de allerede er utryddet eller er på vei til å bli det (f.eks Ganges shark, Pondicherry shark og lost shark). Det finnes utfyllende vitenskapelig grunnlag for at bestandsnedgangene er drevet av uregulert internasjonal handel og at familien *Carcharhinidae* utgjør store volum i haifinnehandelen. Familielistingen er foreslått fordi haienes deler (finner og kjøtt) og produkter i handel er vanskelige å skille fra andre arter i familien, noe som gjør at en slik listing vil være i tråd med kriterium A, Anneks 2b, Res. Conf. 9.24 (Rev. CoP17). Uregulert handel vil være ødeleggende for overlevelsen til disse artene.

Literature list

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CoP19 Prop. 38 Sphyrnidae spp.

Review of listing proposal under CITES

Brazil, Colombia, Ecuador, the European Union, and Panama propose to include *Sphyrna tiburo* in CITES Appendix II in accordance with Article II paragraph 2(a) of the Convention and satisfying Criterion A and B in Annex 2a of Resolution Conf. 9.24 (Rev. CoP17). The proponents also recommend including all of the remaining species in the Family *Sphyrnidae* (hammerhead sharks) which are not already listed in CITES Appendix II, including: *Sphyrna media*, *Sphyrna tudes*, *Sphyrna corona*, *Sphyrna gilberti* and *Eusphyrna blochii*, as well as any other yet to be identified species of the Family *Sphyrnidae*, in Appendix II in accordance with Article II paragraph 2(b) of the Convention and satisfying Criterion A in Annex 2b of Resolution Conf. 9.24 (Rev. CoP17).

Species name: *Sphyrna tiburo* (Linnaeus, 1758), Common names: Bonnethead shark, shovelhead shark, Synonyms: *Squalus tiburo* (Linnaeus, 1758), *Sphyrna vespertina* (Springer, 1940)

Distribution: *S. tiburo* (the bonnethead shark) is a coastal hammerhead shark species that occurs in the Western Atlantic and Eastern Pacific Oceans. Distribution countries are: Aruba, Bahamas, Belize, Bermuda, Bonaire, Sint Eustatius and Saba, Brazil, Colombia, Costa Rica, Cuba, Curaçao, Ecuador, El Salvador, French Guiana, Guatemala, Guyana, Honduras, Mexico, Nicaragua, Panama, Peru, Suriname, Trinidad and Tobago, United States, Uruguay and the Bolivarian Republic of Venezuela (Pollom et al., 2021).

Population trend: Decreasing (Pollom et al., 2021). Pollom et al. (2021) estimates a global population reduction of 50-79 % over the past three generation lengths (36 years). It is worth mentioning that the species has not been encountered in Central America since the 1980s and the last record in Mexico was in 2006. The recent absence from large parts of its range in Central and South America and rarity of recent records across this part of its range infer that this species has undergone a population reduction of >80% over the past three generations (36 years) and it is assessed in that region as Critically Endangered (Pollom et al., 2021).

Habitat status: *S. tiburo* inhabits an array of coastal environments including seagrasses, mangroves, estuaries, mudflats, and coral reefs. Human population growth and development are critical drivers of change in coastal zones and generate a high pressure on these habitats (Neumann et al., 2015 cited in CoP19 Prop. 38).

Describe known/suspected level of trade: The principal driver of the species population decline has been widespread unmanaged fishing. Recent studies have detected *S. tiburo* in retail markets in Hong Kong SAR which is one of the major hubs of the international shark fin trade (Fields et al., 2018, Cardeñosa et al., 2019). The lookalike issue with the rest of the hammerhead sharks is significant.

Literature review of biological status and conservation status, including information on status in other relevant conventions

S. tiburo is listed as Endangered A2bcd on the IUCN Red list (Pollom et al., 2021). For the remaining species of hammerhead sharks proposed listed under the look-alike criterium, three are Critically Endangered (*S. media*, *S. tudes*, *S. corona*) (Pollom et al., 2020abc), one is Endangered (*E. blochii*) (Smart and Simpfendorfer, 2015) and one is data deficient (*S. gilberti*) (VanderWright et al., 2020).

Evaluation of trade data

S. tiburo is harvested primarily for its fins and meat. Meat is mainly consumed locally, as the low value of shark meat regionally limits the financial incentive of international trade in meat compared with the lucrative shark fin market (CoP19 Prop. 38). Recent research has demonstrated that smaller-bodied hammerheads are also being traded internationally for their fins (Fields et al. 2018,

Cardeñosa et al. 2019) and coastal shark species are increasingly present in the international fin trade (Van Houtan et al., 2020). Landing data of *S. tiburo* is reported to the FAO, but FAO global capture production data indicate that there is limited reporting of hammerheads at species level, catches are simply reported as "hammerhead sharks" (CoP19 Prop.38). There is a lack of management and trade related measures in place throughout the species range, thus fishing and trade is often unregulated (CoP19 Prop.38). Illegal harvest and trade exist, Feitosa et al. (2018) reported that, despite the fact that *S. tiburo* is protected in Brazil, 2.8% of the shark samples landed and traded on the Brazilian North Coast were *S. tiburo*. Another aspect regarding illegal trade is that the fins of *S. tiburo* are similar to the fins of the juveniles of the three CITES-listed hammerhead sharks, which could provide a mechanism for the legal trade in *S. tiburo* to mask illegal trade in the CITES-listed species (see for example Griffiths et al. 2013 analyses of species diversity in ray products) (CoP19 Prop. 38).

Potential other information by CITES reviews and on nature management issues in range states

The lookalike issue was raised by FAO in their analysis of the CoP16 hammerhead listing proposal (CoP16 Prop. 43), which stated, "it is not clear why the other species in the family Sphyrnidae were not proposed to be listed as "look-alikes" (FAO 2013, page 40). The CITES Animal Committee, at meetings AC28 and AC29, raised the need for identifying hammerhead sharks to species level and to address the lookalike issue. A recent analysis prepared by the James Cook University, Australia, contracted by TRAFFIC and WWF, and presented to the Animals Committee (Rigby et al.,2018) concluded that due to the newfound trade in non-CITES-listed hammerhead fins, it was highly recommended to list the remainder of the Sphyrnidae for compliance, enforcement and reporting purposes. Rigby and Simpfendorfer (2018) found that while parties exporting the three CITES listed hammerhead shark species are meant to produce an NDF with an export permit, most nations do not report data on fishery landings or trade of hammerhead sharks at the species level. Instead, they are reported by using a single hammerhead category, or an even more general shark category. It is also worth mentioning that the IUCNs Green list assessment (i.e. an assessment of the impact of conservation actions on species recovery) found that *S.tiburo* was Largely Depleted, but that if effective fisheries management was implemented throughout its range and within 100 years, the species could become viable across most of its range (Pérez-Jiménez, 2021).

Recommendations

S. tiburo er truet, hovedsakelig av overfiske for haifinner og kjøtt grunnet mangel på regulering av fiske og handel over hele sitt utbredelsesområde, og basert på dette virker kriterium A og B i Anneks 2a, Res. Conf. 9.24 (Rev. COP17) å være oppfylt. Det har vært en økende trend med mindre hammerhaiarter på haifinnemarkedet, og *S.tiburo*-finner er veldig like finnene til de tre hammerhaiartene som allerede er listet under CITES. Det er et reelt «look-alike» problem relatert til handel med hammerhai-familien, og mye av fangsten av disse artene registreres kun under samlekategori «hammerhai» og ikke til artsnivå. «Look-alike» problemstillingen er tidligere tatt opp av både FAO og and CITES dyrekomite. Basert på overnevnte utfordringer med identifisering er kriterium A i Anneks 2b, Res. Conf. 9.24 (Rev. CoP17) oppfylt.

Uregulert handel vil mest sannsynlig være ødeleggende for denne artens overlevelse'.

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CoP19 Prop. 39 *Potamotrygon* spp.**Review of listing proposal under CITES**

Brazil proposes to include *Potamotrygon wallacei* and *P. leopoldi* in CITES Appendix II in accordance with Article II of the Convention and satisfying criteria A (regulation of trade in the species is necessary to avoid it becoming eligible for inclusion in Appendix I in the near future) and B (regulation of trade in the species is required to ensure that the harvest of specimens from the wild is not reducing the wild population to a level at which its survival might be threatened by continued harvesting or other influences) for the inclusion of species in Appendix II of Resolution 9.24 (Rev. Cop 17). The proposal also includes look-alike endemic freshwater stingray species that are in the ornamental fish trade, legally or illegally, in accordance with Criteria A of Annex 2b: *P. henlei*, *P. albimaculata*, *P. jabuti* (black rays as *P. leopoldi*), *P. marquesi* and *P. signata* (brown rays as *P. wallacei*).

Species name: *Potamotrygon leopoldi*, Castex & Castello, 1970. Common names: Xingu freshwater stingray, Xingu river ray. Look-alikes: *Potamotrygon henlei*. *Potamotrygon wallacei* (Carvalho, Rosa & Araújo, 2016). Common names: Cururu stingray, raia, arraia, porcupine stingray. Synonyms: *Disceus thayeri*, *P. histrix* (assessed by the IUCN Red list of threatened species). Norwegian name: Elverokker.

Distribution: Brazil. *P. leopoldi* is endemic to the Xingu River and at least two of its tributaries. *P. wallacei* is endemic to the middle Negro Rivers basin, Amazonas State (Charvet-Almeida et al., 2009).

Population trend: *P. leopoldi*, Unknown (Charvet-Almeida et al., 2009), according to the proponent decreasing in parts of the range. *P. wallacei*, Decreasing (CoP19 Prop. 39 and references therein).

Habitat status: *P. leopoldi* experiences habitat loss/degradation resulting from human activities including the construction of a hydroelectric power plant. The preferred habitat for *P. wallacei* is under intense degradation caused by fire and deforestation (CoP19 Prop.39 and references therein).

Describe known/suspected level of trade: *P. leopoldi*: Juveniles are captured for the international ornamental fish trade (Charvet-Almeida et al., 2009). This is, according to the proponent, the greatest direct threat to the species that is the most popular and valuable stingray on the international market (CoP19 Prop.39 and references therein). *P. wallacei*: Has according to the proponent been in aquarium trade since the 1970ies (as *P. histrix*) and has recently been traded under the name *P. motoro* (CoP19 Prop.39 and references therein).

Literature review of biological status and conservation status, including information on status in other relevant conventions

The IUCN lists *P. leopoldi* as Data Deficient (assessed in 2003, and this assessment is thus outdated). *P. wallacei* has not yet been assessed.

The genus *Potamotrygon* has been listed in CITES Appendix III (Brazil) and EU Wildlife Trade Regulations Annex C since 2017.

Evaluation of trade data

Five freshwater stingray species (*P. henlei*, *P. leopoldi*, *P. orbignyi*, *P. schroederi* and *P. wallacei*) can be exported legally from Brazil. Since 2017 considerable commercial trade in live wild caught individuals of *Potamotrygon* spp. has been recorded in the CITES trade database, also from countries where species of the genus are not found. The same is the case for *P. motoro*. In 2018 there is a record an export of 23 *P. leopoldi* of unknown origin from Thailand to the U.S. Taxonomic confusion of traded fish seems to be common (Chavret et al., 2022).

Illegal trade of *P. leopoldi* has been documented through seizures (CoP19 Prop.39 and references therein).

Captive breeding facilities supply more attractive and valuable color patterned hybrids to the aquarium market (CoP19 Prop.39 and references therein).

Potential other information by CITES reviews and on nature management issues in range states

P. leopoldi is included in Brazil's National Plan for Threatened Amazonian fishes (ICMBIO, 2012) The CITES Animals Committee has listed *P. leopoldi* and *P. "motord"* species complex as species of priority concern (CITES, 2017).

Recommendations

Elverokker i slekten *Potamotrygon* omsettes i det internasjonale markedet for akvariefisk. Informasjonen om taksonomi og opprinnelse for flere av artene i handel virker å være inkonsekvent. Disse artene er truet av habitat ødeleggelse og tap, men det er uklart om kriteriene A og B, Anneks 2a, Res. Conf. 9.24 (Rev. CoP17) er oppfylt. Strengere regulering kan redusere risikoen for at ville bestander som trues av habitatstap blir negativt påvirket.

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CoP19 Prop. 40 Rhinobatidae spp.**Review of listing proposal under CITES**

Israel, Kenya, Panama and Senegal propose to include the family *Rhinobatidae* (guitarfishes) in Appendix II. According to the proponents, the following six species meet the criteria of Res. Conf. 9.24 (Rev. CoP17), Annex 1, paragraph C. A marked decline in the population size in the wild:

1. *Acroteriobatus variegatus*
2. *Pseudobatos horkelii*
3. *Rhinobatos albomaculatus*
4. *Rhinobatos irvinei*
5. *Rhinobatos rhinobatos*
6. *Rhinobatos schlegelii*

Due to the difficulty in identifying parts and derivatives of guitarfishes in trade, this proposal is to also list all the remaining species of the family in Appendix II in accordance with Article II, paragraph 2 (b) of the Convention (the so-called "look-alike provision").

The aim of the Appendix II listing is to obtain better data on international trade.

Species names:

The family *Rhinobatidae* includes 37 species, of which two are newly described and not yet assessed by IUCN but included in Eschmeyer's Catalog of Fishes (Fricke et al., 2022). The family is divided into 3 genera: 10 species in *Acroteriobatus*, 9 species in *Pseudobatos*, and 18 species in *Rhinobatos*. Common name: Guitarfishes. Norwegian name: Gitarfisker.

The six species of particular concern are:

Acroteriobatus variegatus (Nair & Lal Mohan, 1973). Common name: Stripenose guitarfish. The species is morphologically very similar to *A. zanzibarensis*, Zanzibar guitarfish.

Pseudobatos horkelii (Müller & Henle, 1841). Common name: Brazilian guitarfish

Rhinobatos albomaculatus, Norman, 1930. Common names: Whitespotted guitarfish, poisson-guitare à Lunaires, guitarra pecosa.

Rhinobatos irvinei, Norman, 1931. Common names: Spineback guitarfish, raie-guitare d'Irvine, Irvine guitarra.

Rhinobatos rhinobatos (Linnaeus, 1758). Common names: Common guitarfish, violinfish, guitare de mer commune, guitarra común.

Rhinobatos schlegelii, Müller & Henle, 184. Common names: Brown guitarfish, sakatazame (Japanese).

Distribution: Members of family *Rhinobatidae* are found within 110 Range States. Species of *Acroteriobatus* are mostly confined to the western Indian Ocean although some reach to the southeastern Atlantic. Species of *Pseudobatos* are found on both sides of the American continent, while species of *Rhinobatos* are occurring mostly in the Indo-western Pacific and eastern Atlantic (Weigmann et al., 2021).

Stripenose guitarfish occurs in the Arabian Seas region of India (Tamil Nadu), Sri Lanka (Kyne et al., 2017).

Brazilian guitarfish occurs in the Southwest Atlantic in Argentina, Brazil, Uruguay (Pollom et al., 2020).

Whitespotted guitarfish occurs in the eastern Central Atlantic and the Southeast Atlantic in Angola, Benin, Cameroon, Congo, Congo, The Democratic Republic of the, Côte d'Ivoire, Equatorial Guinea, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mauritania, Nigeria, Senegal, Sierra Leone and Togo (Jabado et al., 2021a).

Spineback guitarfish occurs in the eastern Central Atlantic and the Southeast Atlantic in Angola, Benin, Cameroon, Congo, Congo, The Democratic Republic of the, Côte d'Ivoire, Equatorial Guinea, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mauritania, Morocco, Nigeria,

Senegal, Sierra Leone, Togo, Western Sahara. Its occurrence in Namibia is uncertain (Jabado et al., 2021b).

Common guitarfish occurs in the eastern Atlantic Ocean and Mediterranean Sea from the southern Bay of Biscay to Angola. Range States are: Albania, Algeria, Angola, Benin, Bosnia and Herzegovina, Cabo Verde, Cameroon, Congo, Congo, The Democratic Republic of the, Croatia, Cyprus, Côte d'Ivoire, Egypt, Equatorial Guinea, France (Corsica), Gabon, Gambia, Ghana, Gibraltar, Greece, Guinea, Guinea-Bissau, Israel, Italy (Italy (mainland), Sardinia, Sicily), Lebanon, Liberia, Libya, Malta, Mauritania, Monaco, Montenegro, Morocco, Namibia, Nigeria, Portugal, Senegal, Sierra Leone, Slovenia, Spain, Syrian Arab Republic, Togo, Tunisia, Turkey (Turkey-in-Europe), Western Sahara (Jabado et al., 2021c).

Brown guitarfish occurs in the Northwest Pacific in China, Japan, Republic of Korea and Taiwan (Rigby et al., 2021).

Population trend: According to IUCN assessments, 27 of the species have decreasing population trends, six are unknown and two are stable. All of the six species of special concern have decreasing populations. The populations of all of these species are severely fragmented, except for the stripenose guitarfish with unknown status.

Habitat status: Most guitarfishes occur in relatively shallow waters close to the shoreline, down to a depth of about 100 m. Their habitat is being degraded by a range of human activities.

Describe known/suspected level of trade: Fisheries are the main threat to most guitarfishes and are driving numeral species to extinction (Dulvy et al., 2021). The meat is consumed fresh domestically or in nearby countries while dried parts are traded internationally. Both legal and illegal trade is common and a major cause of decline, but has not been quantified (Moore, 2017). All traded individuals are wild caught.

Literature review of biological status and conservation status, including information on status in other relevant conventions

Of the 35 guitarfish species included on the IUCN Red List of Threatened species, five are classified as Endangered, ten of them are Critically Endangered, eight are Vulnerable, four are Near Threatened, three are considered to be of Least Concern and five are data deficient. The six species of special concern are all Critically Endangered. In an overview of the highest total reported captures of *Rhinobatidae* for the years 2018 to 2020 by the Food and Agriculture Organization of the United Nations (FAO) Mauritania was number one with 9,160 tons live weight, with Pakistan being second with 3,632 tons (see CoP19 Prop. 40 for table).

Evaluation of trade data

As no members of the family *Rhinobatidae* are CITES listed no data exists in the trade database. The level of international trade is suspected to be high but is poorly documented according to the proponents. The stripenose guitarfish enters the international trade in dried form and the demand for meat is increasing in India (Kyne et al., 2017). The Brazilian guitarfish is subjected to intense and largely unregulated fishing pressure across its range (Pollom et al., 2020), illegal trade has been documented (deFranco et al., 2012). The whitespotted-, spineback- and common guitarfish are dried and exported across West Africa to supply countries such as Ghana, Guinea, Nigeria, Mali, and Burkina Faso. Dried fins appear to mostly be destined to Asian markets through complex regional trade routes (Jabado et al., 2021abc). The brown guitarfish is consumed in Range States (Rigby et al., 2021), and the skin may be dried and traded internationally as a luxury leather product (Haque *et al.*, 2018). There are no known captive-breeding facilities for any of the guitarfishes.

Potential other information by CITES reviews and on nature management issues in range states

Of other shark-like rays three of five families are CITES listed, sawfishes (family *Pristidae*) in Appendix I, and wedgefishes (*Rhinidae*) and the giant guitarfishes (*Glaucostegidae*) in Appendix II.

Parties with specific regulations protecting some or all species of Rhinobatidae (according to the proponent): Bangladesh, Brazil, European Union, Israel, Kuwait, Pakistan, Mexico, Saudi Arabia, and USA. The proposal contains responses from the following Range States: US, Republic of Korea, Japan, EU, Colombia.

Recommendations

De fleste arter av gitarfisk er rødlistet og i nedgang. Internasjonal handel er sannsynligvis medvirkende årsak til synkende bestander. De 6 fokusartene er alle listet som kritisk truet (CR) på rødlisten, med synkende bestand, og oppfyller således kriterium C, Anneks 1, Res. Conf. 9.24 (Rev. CoP17), samt de kriterier som er gitt Anneks 2a under same resolusjon. Det er her snakk om å liste hele familien Rhinobatidae i CITES Appendiks II fordi det er vanskelig å skille mellom deler og produkter av gitarfisk i handel. Således oppfylles kriteriene A og B, Anneks 2b, Res. Conf. 9.24 (Rev. CoP17). Regulering av handel vil kunne motvirke at bestander overbeskattes.

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CoP19 Prop. 41 *Hypancistrus zebra***Review of listing proposal under CITES**

Brazil proposes to include *Hypancistrus zebra* in Appendix I in agreement with Resolution Conf, 9.24 (Rev. CoP17) Annex I B (restricted area of the wild population) iii) a high vulnerability to either intrinsic or extrinsic factors and iv) an observed, inferred or projected decrease in the area of distribution, the number of individuals and the quality of habitat. Annex 1C (a marked decline in the population size in the wild) i) observed as ongoing or as having occurred in the past (but with a potential to resume), ii) inferred or projected on the basis a decrease in quality of habitat and the levels or patterns of exploitation.

Species name: *Hypancistrus zebra* Isbrücker & Nijssen, 1991. Common names: Zebra pleco, pleco imberial, cascudo-zebra-imperial, Acari-zebra (Pará and Amazonas), cascudo-zebra, Zebrinha. Norwegian name: Zebramalle.

Distribution: Brazil in a restricted area of the of the Xingu River basin (ICMBio, 2022).

Population trend: Decreasing. A population decline of more than 80% with a very high risk of extinction is estimated for the next ten years (ICMBio, 2022).

Habitat status: The quality and area of the habitat (in the whole range) have been negatively affected by the construction of a hydroelectric power plant (ICMBio, 2022; CoP19 Prop.41).

Describe known/suspected level of trade: The zebra pleco is very popular in the ornamental fish market. The level of illegal trade is high.

Literature review of biological status and conservation status, including information on status in other relevant conventions

IUCN lists *H. zebra* as Critically Endangered A3c (assessed in 2018). The species has been listed in CITES Appendix III (Brazil) and EU Wildlife Trade Regulations Annex C since 2017.

Evaluation of trade data

In the CITES trade database 175 live wild caught individuals of unknown origin were recorded exported from Indonesia to the USA for commercial purposes in 2018. International trade of thousands of individuals bred in captivity has been recorded since 2017 (when *H. zebra* was included in Appendix III). There is significant levels of illegal trade in individuals from Brazil, as the species is illegal to capture and there are no approved captive breeding facilities in the country. Trafficking has been documented through Brazil's neighboring countries Colombia and Peru (Sousa, 2021). Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis (IBAMA, Brazil's federal environment agency) reported that 4115 individuals were seized in the period 2006-2019. Seizures of *Hypancistrus zebra* have increased in recent years (Charity and Ferreira, 2020). The species has been bred in captivity since the 1990s, but there is no standardized captive breeding in Brazil.

Potential other information by CITES reviews and on nature management issues in range states

H. zebra has been considered endangered in Brazil since 2005, and the capture, transport and marketing of specimens captured in nature are prohibited.

Recommendations

Den kritisk truede zebramallen omsettes i store kvanta på det internasjonale akvariemarkedet. Det er høye nivå av lovlig handel med fisk som er avlet i fangenskap men Brazil rapporterer også om beslag og illegal handel av ville individer. Arten har et begrenset utbredelsesområde med et habitat som blir stadig mer skadet, noe som gjør at forlaget virker å være i tråd med Annex 1, paragraf B, (iv) Res. Conf. 9.24 (Rev. CoP17). Det er estimert at arten kommer til å gjennomgå en nedgang på mer enn 80%, men det er uklart om dette gjør at den oppfyller kriteriene i Annex 1, C, Res. Conf.

9.24 (Rev. CoP17). Uttak av ville individer for handel vil kunne være ødeleggende for denne artenes videre overlevelse.

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CoP19 Prop. 42 *Thelenota* spp.

Review of listing proposal under CITES

The European Union, Seychelles and United States of America propose to include the three species of *Thelenota* (*T. ananas*, *T. anax*, and *T. rubralineata*), in Appendix II, in accordance with Article II paragraph 2(a) of the Convention. Under criteria A and B in Annex 2a of Resolution Conf. 9.24 (Rev. CoP17).

Species name: *Thelenota ananas* (Jaeger, 1833). Common name: Prickly redfish. *T. anax*. H. L. Clark, 1921. Common name: Amberfish. *T. rubralineata*, Massin & Lane, 1991. The common name of the genus *Thelenota* is sea cucumbers. Norwegian name: Sjøagurker.

Distribution: The three *Thelenota* species are widely distributed throughout the Indo-Pacific, (excluding Hawaii). *T. anax* and *T. rubralineata* are rare (Conand et al., 2013 a,b,c).

Population trend: *T. ananas*: Decreasing (Conand et al., 2013a). *T. anax* and *T. rubralineata*: Unknown (Conand et al., 2013b,c).

Habitat status: *Thelenota* are living mainly on reefs. *T. ananas* is distributed mainly in shallow coral reef areas while *T. anax* and *T. rubralineata* have their habitat on slightly deeper waters e.g. on the outer reef slopes. Coral reefs globally are threatened by fishing activities, coastal development, pollution and global warming (Conand et al., 2013 a,b,c).

Describe known/suspected level of trade: Sea cucumbers are traded widely for food (bêche-de-mer) and *T. ananas* is also in the aquarium trade (Conand et al, 2013a). *T. anax* and *T. rubralineata* are commercially harvested in parts of their ranges (Conand et al., 2013b,c).

Literature review of biological status and conservation status, including information on status in other relevant conventions

T. ananas is listed by IUCN as Endangered A2bd, while *T. anax* and *T. rubralineata* are listed as Data Deficient. (assessed in 2010, needs updating).

Evaluation of trade data

Overexploitation is considered the main threats to sea cucumbers (Conand, 2018). Trade statistics are limited, but documentation of international trade exists, legal and illegal (CoP19 Prop.42 and references therein).

Potential other information by CITES reviews and on nature management issues in range states

According to the proponent, numerous countries have instituted fishing moratoria and area closures for sea cucumbers in response to overexploitation. In some range States there are minimum size limits for *T. ananas*. No international conservation measures are in place for *Thelenota* species.

Sea cucumbers of the subgenus *Holothuria* were included in CITES Appendix II at CoP18 (in 2019), but the entry into effect delayed by 12 months, i.e. until 28 August 2020 (CoP18 Prop. 45 (Rev. 1)).

Recommendations

Sjøagurker omsettes internasjonalt og overfiske er ansett som den viktigste trusselen mot fremtidige overlevelse. Basert på dette virker både kriterium A og B i Anneks 2a, Res. Conf. 9.24 (Rev. CoP17) å være oppfylt. Regulering av handel vil kunne være avgjørende for å sikre bærekraftig utnyttelse.

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CoP19 Prop. 43 Flora species with annotation #1, #4, #14 and Appendix-I listed species of Orchidaceae

Review of listing proposal under CITES

Flora species with annotation #1, #4, #14 and Appendix-I listed species of

Orchidaceae: This proposal is included under Flora and concerns amendment of annotations. It proposes two distinct amendments. Annotations #1, #4, #14 and the annotation to Appendix-I listed species of Orchidaceae include the phrasing "...seedling or tissue cultures obtained in vitro, in solid or liquid media, transported in sterile containers...". The proposal suggests removing "in solid or liquid media" as determining whether seedlings or tissue material is transported in solid or liquid media can be challenging. Modern tissue culture methods can yield material that is transported in depleted or virtually absent media that should still fulfil the criteria of the exemption but could currently lead to confusion. Removing the requirement that seedlings or tissue material are transported in solid or liquid media in addition to sterile containers will facilitate comprehension of this portion of the annotations, while maintaining the original intent of the exemption. An example of the unintended complexity of these annotations is that countries like Australia require seedlings and tissue material for import to be free of culture media to avoid accidental import of any bacterial or fungal infection, live insects and any other extraneous contamination of biosecurity concern. The second amendment concerns alignment of punctuation and vocabulary of annotation #14 on finished products packaged and ready for retail trade. Here small uncontroversial amendments are proposed.

Literature review of biological status and conservation status, including information on status in other relevant conventions

SC74 Doc. 81, the report of the Working Group on Annotations considered at the SC74 in Lyon. Further reading: Resolution Conf. 11.21 (Rev. CoP18) on Use of annotations in Appendices I and II

Evaluation of trade data

Not applicable

Potential other information by CITES reviews and on nature management issues in range states

Not applicable

Recommendations

Endringene vil lette tolkingen av disse merknadene (annotations). Dette er viktige endringer da konvensjonen, listene og merknadene skal være så enkle å tolke og anvende som mulig. Den opprinnelige formuleringen var relevant på det tidspunktet merknadene ble skrevet, men er ikke lenger nødvendig da steril transporterte spirer og vevsmateriale ikke lenger krever synlige dyrkningsmedier.

Literature list

CoP19 Prop. 43: <https://cites.org/sites/default/files/documents/E-CoP19-Prop-43.pdf>

CoP19 Prop. 44 *Handroanthus* spp., *Roseodendron* spp., *Tabebuia* spp.

Review of listing proposal under CITES

List the timber genera *Handroanthus*, *Roseodendron* and *Tabebuia* in CITES Appendix

II: Colombia, the European Union and Panama propose including three genera of tropical trees, *Handroanthus*, *Roseodendron* and *Tabebuia* in Appendix II justified by Resolution Conf. 9.24 (Rev. CoP17), Annex 2 a, Criterion B and Annex 2 b, Criterion A. The genera *Handroanthus*, *Tabebuia* and *Roseodendron* together comprise 113 species of trees (occasionally shrubs) that are distributed in the Americas. The timber is generally traded as "ipê". The proponents of the listing proposal cite the increasing demand for ipê combined with the rapid loss of habitat and the increasing impact of logging as the primary motivation to list the main traded species. In addition, due to the inability to distinguish species in these three closely related genera of ipê in traded form they argue that all species should be listed to ease the regulation and monitoring of trade.

Species name: *Handroanthus*, *Roseodendron* and *Tabebuia* (Bignoniaceae). Currently, 35 species are recognized as *Handroanthus*, 76 species as *Tabebuia* and 2 species as *Roseodendron* (WCVP 2021) Common names: Ipê. Norsk navn: Ipé.

Distribution: The genera are distributed in the Americas from Mexico and the Caribbean south to Argentina (CoP19 Prop.44).

Population trend: This is a large group of species with different distribution ranges for each species. Little information is available on the population sizes of all species as well as the overall trends for the species. *Handroanthus* species are reported to occur at low natural densities (section 4.3 CoP19 Prop. 44; IUCN and TRAFFIC, 2019). The IUCN Red List of Threatened Species has assessed and categorized 50 species of *Tabebuia*, *Handroanthus* and *Roseodendron*, and for those species population trends of 17 are decreasing (including *H. impetiginosus* and *H. serratifolius*), 18 are unknown and 4 are stable (IUCN 2022).

Habitat status: Many of these species occur at low densities. Forest habitat loss is accelerating across its distribution, with especially Brazil experiencing rapid increase in deforestation rates (Junior et al., 2021; INPE 2021). Forest cover loss in Brazil, Mexico, Colombia, Bolivia, Peru, Ecuador, and Venezuela threaten the habitat of the main timber species (COP19 Prop. 44)

Describe known/suspected level of trade: On the international market the wood is highly sought after, and is used for flooring, decks, exterior woods, veneer, and other turned objects, crafts and posts (Grandtner and Chevrette, 2013). The main threats to ipê are deforestation and logging for both the domestic and international trade. Harvesting, overharvesting, illegal logging and timber laundering all affect population trends.

Literature review of biological status and conservation status, including information on status in other relevant conventions

H. impetiginosus is categorised as Near Threatened and *H. serratifolius* as Endangered in the IUCN Red List of Threatened Species (Hills, 2021ab). The IUCN Red List of Threatened Species has assessed and categorized 50 species of *Tabebuia*, *Handroanthus* and *Roseodendron*, and for those species population trends of 17 are decreasing (including *H. impetiginosus* and *H. serratifolius*), 18 are unknown and 4 are stable (IUCN, 2022).

Evaluation of trade data

The three genera *Handroanthus*, *Tabebuia* and *Roseodendron* are not included in the CITES Appendices and their trade is not currently regulated internationally. At least 13 species were reported as exported from Brazil, but the main species in trade appear to be *H. serratifolius* and *H.*

impetiginosus (Greenpeace, 2018; Schulze et al., 2008; Norman and Zunino, 2022). Ipé exports from Brazil were 255,723 m³ for the period 2010-2016, and estimated to be at least 449,381 m³ for the period 2017 and 2021 (CoP19 Prop. 44 and references therein). Cumulative exports from other countries are about half of the volumes exported from Brazil. It should be considered that processing efficiency of these timbers is low, and that the harvested timber volume to meet the above-mentioned export volumes are likely to be almost 3 times higher than the volumes indicated as above (Schulze et al., 2008).

Harvesting regimes, even "reduced impact logging", are projected to lead to massive decrease of available timber for subsequent logging cycles due to the low initial density and competitive regrowth capacity of these taxa (Schulze et al. 2008; Richardson and Peres, 2016). Illegal logging and especially timber overestimation and laundering are a major concern (Richardson and Peres, 2016). These taxa are indistinguishable in traded form using macroscopic and/or microscopic methods (COP19 Prop. 44)

Potential other information by CITES reviews and on nature management issues in range states

Cultivation of various ipê species is done in nurseries throughout the Americas, but timber plantations are less common. More research is needed to optimise nursery and field conditions (Vieira and Weber, 2017), and to reduce the costs for the production of seedlings (Pinto et al., 2021).

Recommendations

Stor etterspørsel kombinert med fraværet av internasjonale mekanismer for å overvåke og kontrollere internasjonal handel med disse sårbare og truede artene har ført til overutnyttelse, svært høye internasjonale handelsvolum samt hvitvasking og ulovlig handel. Den foreslåtte listingen virker således å være i tråd med kriterium B, Anneks 2a, Res. Conf. 9.24 (Rev. CoP17). Inklusjon av 'ipe-artene' i CITES appendiks II vil bidra til å regulere denne handelen mot et bærekraftig volum. For å sikre at alle de 113 artene kan være omsatt under samme handelsnavn og at de forskjellige artene knapt kan skilles fra hverandre er det foreslått å liste opp alle arter i slektene *Handroanthus*, *Tabebuia* og *Roseodendron* for å unngå håndhevingsproblemer, hvilket er i tråd med kriterium A, Anneks 2b, Res. Conf. 9.24 (Rev. CoP17)

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CoP19 Prop. 45 *Rhodiola* spp.

Review of listing proposal under CITES

List the genus *Rhodiola* in CITES Appendix II: China, the European Union, Ukraine, United Kingdom and the United States of America propose including the genus *Rhodiola* in Appendix II justified by Resolution Conf. 9.24 (Rev. CoP17), Annex 2 a, Criterion B and Annex 2 b, Criterion A. Additionally it is proposed to add Annotation #2: All parts and derivatives except: a) seeds and pollen; and b) finished products packaged and ready for retail trade. Norway supports the listing of *Rhodiola* on Appendix II (CoP19 Prop.45 Annex 3). The proponents cite three reasons for listing *Rhodiola* on Appendix II: 1) The genus is inherently vulnerable to overexploitation as a result of its slow growth rate, low rate of germination and seedling survival, whereas the harvest of rhizomes and roots is destructive; 2) The current market relies on wild resources but is uncontrolled. Overharvesting in the USSR in the 1970s/80s has led to precipitous population decline from which it has not recovered (Smelansky et al., 2009); 3) the market for *Rhodiola* products is undergoing rapid diversification and demand is expected to increase. The inability to identify traded material to species-level is used to argue for inclusion of all *Rhodiola* species on Appendix II. The addition of Annotation #2 is proposed to avoid overburdening CITES authorities as seeds and pollen can be harvested sustainably and finished products packaged and ready for retail trade are derived from raw materials and mostly target the local market.

Species name: All species of the genus *Rhodiola* L. The two species most traded are *R. rosea* L. and *R. crenulata* (Hook.f. & Thomson). Common names: Golden root, rose root. Norsk navn: Rosenrot.

Distribution: The distribution of *Rhodiola* spans across the northern hemisphere. Although species within the genus are found across a wide altitudinal range, they are commonly associated with subarctic and alpine areas. The centre of diversity is found in China (CoP19 Prop.45).

Population trend: No data on population trends across full distributions is available for all species, and neither for the two most traded species, *R. rosea* and *R. crenulata*. However, populations have declined sharply locally (CoP19 Prop. 45).

Habitat status: The habitat is generally stable, although climate change is projected to impact many of the higher altitude species (You et al., 2018; Zhang et al., 2018).

Describe known/suspected level of trade: Two main species of *Rhodiola*, *R. rosea* and *R. crenulata*, are extensively traded, but the genus comprises 58-90 species depending on the classification. *Rhodiola* is trade mainly as dried rhizomes, roots, chips and powder, and in this form the material is hard to identify to species level. The increasing demand has resulted in other species in the genus being collected as well (CoP19 Prop. 45). There has also been reports on illegal trade (CoP19 Prop. 44).

Literature review of biological status and conservation status, including information on status in other relevant conventions

IUCN Red-List assessments have been conducted for only two species of *Rhodiola*, *R. marginata* (LC, BEFPW, 2017) and *R. rosea* (LC, Chadburn, 2014). The status of all other species remains to be assessed.

Evaluation of trade data

The largest populations of *R. rosea* subject to intensive commercial wild collection are the Altai Mountains of southern Siberia and the Xinjiang Uyghur Autonomous Region in China (Brinckmann et al., 2021). *R. crenulata* is thought to be harvested mainly in the Tibetan Plateau and Sichuan

province (Cunningham et al., 2020). Illegal harvesting and trade have been reported from Kyrgyzstan, Kazakhstan, Russia and Bulgaria (BfN, 2021). All *Rhodiola* species are slow growing herbs that reach up to 20 years to reach maturity for reproduction, whereas the rhizomes and roots can be harvest earlier. A small fraction of the traded material is from cultivation, but the level of active compounds is lower in cultivated material, and it is thus of less value. In absence of any trade restrictions and quotas it is hard to estimate the volumes harvested and traded annually. Based on U.S. imports and trade data, Cunningham et al. (2020) calculated that 94,000 kg to 312,320 kg of dried root and rhizome raw material are manufactured into concentrated extract annually (CoP19 Prop.45 and references therein).

Potential other information by CITES reviews and on nature management issues in range states

R. rosea is listed nationally in the Red Book of the Russian Federation as a Category 3b species (Rare) (Ministry of Natural Resources and Environment of the Russian Federation, 2008). The Threatened Species List of China's Higher Plants (Qin et al., 2017) lists *R. rosea* var. *rosea* and *R. sachalinensis* as Vulnerable (VU). The species is considered to be Critically Endangered in Bulgaria (Peev et al., 2015) and the Czech Republic (Grulich and Chobot, 2017), Vulnerable in Bosnia and Herzegovina (Federal Ministry of Environment and Tourism, 2014), and Threatened with extinction in Germany (Metzing et al., 2018). *R. crenulata* is considered to be Endangered in China (Qin et al., 2017).

Recommendations

Forslaget om å inkludere *Rhodiola* på CITES Appendiks II er basert på handelsdata og en prediksjon om økt etterspørsel, og virker dermed å oppfylle kriterium B, Anneks 2a, Res. Conf. 9.24 (Rev. CoP17). Det er vanskelig å identifisere materiale i handel ved hjelp av morfologi, og molekylære metoder for identifisering er kostbart. Forslaget anbefaler derfor å inkludere hele slekten i Appendix II, slik at det ikke skapes smutthull for internasjonal handel, hvilket er i tråd med kriterium A, Anneks 2b, Res. Conf. 9.24 (Rev. CoP17). Det er en høy risiko at nåværende villhøsting i kommersiell skala av *Rhodiola rosea*-populasjoner (også norske) kan påvirke overlevelsen av denne arten i naturen negativt.

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CoP19 Prop. 46 *Azelia* spp.

Review of listing proposal under CITES

List all African populations of *Azelia* species in CITES Appendix II: Benin, Côte d'Ivoire, European Union, Liberia and Senegal propose to include all African populations of *Azelia* species in Appendix II of CITES with annotation #17 in accordance with Article II, paragraph 2 (a) of the Convention, and in accordance with Resolution Conf. 9.24 (Rev. CoP17), Annex 2 a, Criterion B and Annex 2 b Criterion A. Annotation #17 Designates logs, sawn wood, veneer sheers, plywood and transformed wood.

Species name: Seven African species of the genus *Azelia* are currently recognised: *A. africana* Sm. ex Pers., *A. bella* Harms, *A. bipindensis* Harms, *A. pachyloba* Harms, *A. parviflora* (Vahl) Hepper, *A. peturei* De Wild. and *A. quanzensis* Welw. (Donkpegan et al., 2020).

Distribution: Sub-Saharan Africa (CoP19 Prop.46).

Population trend: There are no population trend estimates for African populations of *Azelia* spp. (CoP19 Prop. 46). The population trends of *A. bella* and *A. parviflora* are considered stable (Hills, 2019a, BGCI and GTSG, 2019).

Habitat status: Accurate assessment of habitat status for all *Azelia* species and populations are lacking. However, several African range states of *Azelia* taxa have experienced significant deforestation in recent years (FAO, 2020; Vancutsem et al., 2021). *A. peturei* is in decline due to ongoing habitat loss (Kamau et al., 2021 cited in CoP19 Prop.46).

Describe known/suspected level of trade: *Azelia* spp. are intensively logged and threatened by overexploitation for the international timber trade (Oshingboye et al., 2017; Donkpegan et al., 2014, 2020). *Azelia* spp. produce high-quality timber with properties comparable to *Tectona grandis* (Teak) and *Tieghemella* spp. (Kitin et al., 2021).

Literature review of biological status and conservation status, including information on status in other relevant conventions

A. africana, *A. bipindensis* and *A. pachyloba* are categorised as globally Vulnerable in the IUCN Red List due to overexploitation for timber (Hills, 2020; African Regional Workshop, 1998ab); *A. peturei* is categorised as Vulnerable (Kamau et al., 2021 cited in CoP19 Prop.46). *A. quanzensis*, *A. bella* and *A. parviflora* are categorised as Least Concern in the IUCN Red List in 2019 on the basis of a wide distribution (BGCI and GTSG, 2019; Hills, 2019ab).

Azelia spp. are typically slow growing deciduous trees (Oshingboye et al., 2017). *Azelia* spp. are generally large trees, reaching heights of 18-35 m (Oshingboye et al., 2017). African *Azelia* spp. are prized both nationally and internationally for their high-quality timber (Oshingboye et al., 2017), which is highly durable, stable in humidity, resistant to insect attack, and aesthetically decorative (Kitin et al., 2021). The impacts of timber harvest are compounded by additional stressors; *Azelia* spp. are also subject to habitat loss in some areas (Kamau et al., 2021), as well as local harvest for woodcarving, fuelwood, traditional medicine and livestock fodder in many range States (Assogbadjo et al., 2010; Kiyulu et al., 2014; Oshingboye et al., 2017).

Evaluation of trade data

The three major *Azelia* spp. exporting range States are Cameroon, Ghana and Côte d'Ivoire. During 2008-2014, exports of African mahogany (a trade name including *Azelia* spp. as well as other species) from Cameroon alone amounted to ~15 million kg, with >2.3 million kg exported to the European Union. The People's Republic of China and the United States of America are also key importers of African mahogany (CoP19 Prop.46).

However, trade data is hard to assess as timber from *Afzelia* spp. is traded under the umbrella name African mahogany that includes several other genera, including *Khaya* spp. (see CoP19 Prop. 51). For those taxa in which trade volumes are available, for some countries and some years exported volumes vary from 200 – 50000 m³/year. Despite national measures, illegal harvest, including logging without permits and logging in prohibited areas occurs in range states (Cunningham, 2016; Sunday Vision, 2018; Hills, 2020).

Potential other information by CITES reviews and on nature management issues in range states

CITES reviews not applicable as taxa not previously listed. Legislative measures to protect national populations of *Afzelia* spp. are in place in all range states except, DRC, Equatorial Guinea, Eswatini, Ghana, Kenya, Liberia, Namibia, Niger, Somalia, South Africa, Sudan and Zimbabwe (CoP19 Prop. 46 Annex 2). Minimum exploitable diameters (MEDs) have been established in a number of range states for some species (CoP19 Prop. 46 and references therein).

Recommendations

Afzelia africana, *A. bipindensis* og *A. pachyloba* er kategorisert som globalt sårbare i IUCNs rødliste på grunn av overutnyttelse av tømmer, og alle arter er truet av overutnyttelse for internasjonal tømmerhandel. Dagens nivå av internasjonal tømmerhandel i *Afzelia* artene er ikke bærekraftig, og en trussel mot artenes overlevelse i naturen, og dermed oppfylles kriterium B, Anneks 2a, Res. Conf. 9.24 (Rev. CoP17). Virke av *Afzelia* artene er svært likt og vanskelig å skille fra hverandre, hvilket gjør at kriterium A, Anneks 2b, Res. Conf. 9.24 (Rev. CoP17) er oppfylt. Inkludering av slekten *Afzelia* i CITES Appendix II vil muliggjøre overvåking av handel med tømmer fra disse artene. Bruk av merknad #17 vil begrense handelsrestriksjoner til de delene og produktene som eksporteres og truer artene.

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CoP19 Prop. 47 *Dalbergia sissoo***Review of listing proposal under CITES**

Delisting of *Dalbergia sissoo* from CITES Appendix II: India and Nepal propose to remove the listing of *Dalbergia sissoo* from CITES Appendix II as the species does not meet the listing criteria set out in paragraphs 2(a) or 2(b) of Article II of the Convention text or the criteria laid down in Annex 2(a) and Annex 2(b) of Resolution Conf. 9.24 (Rev. CoP17). Appendix II listing of the genus *Dalbergia* at CoP17 placed the abundantly cultivated and important timber tree species *Dalbergia sissoo* on Appendix II. This decision has been highly detrimental to people in range and naturalized states that depend on it for their livelihoods. In this proposal the proponents provide arguments for why this species should be excluded from the genus listing of *Dalbergia*.

Species name: *Dalbergia sissoo* DC. Common names: English: Indian rosewood, Himalaya raintree, Indian dalbergia, penny leaf tree, sisso.

Distribution: Native to Afghanistan, Bangladesh, Bhutan, India, Islamic Republic of Iran, Iraq, Myanmar, Nepal, Pakistan and the Philippines. Exotic to Antigua and Barbuda, Australia, Cameroon, Chad, China, Cyprus, Dominican Republic, Ethiopia, French Polynesia, Ghana, Guinea- Bissau, Indonesia, Israel, Kenya, Mauritius, Malaysia, Mozambique, New Caledonia, Niger, Nigeria, Oman, Paraguay, Philippines, Puerto Rico, Senegal, Sierra Leone, South Africa, Sri Lanka, Sudan, Thailand, Togo, Uganda, United Republic of Tanzania, United States of America, Zambia, and Zimbabwe (CoP19 Prop.47).

Population trend: The Extent of Occurrence (EOO) of wild *D. sissoo* in India is at least 198,974 km² (Bhattacharjee et al., 2018). India's total growing stock of *Dalbergia sissoo* in 2019 was estimated at 5,916 million m³, of which 4,273 million m³ was in forests while the remaining 1,642 million m³ was outside forests (FSI, 2021). In India, the population trend of *D. sissoo* is slightly negative due to habitat loss and disease (CoP19 Prop. 47).

Habitat status: Positive habitat trend in India (CoP19 Prop. 47). Total forest cover of India is 713,789 km², which is 21.71 % of the geographic area of the country (FSI, 2021). Forest covered increased by 5516 km² in the period from 2017 to 2021 (FSI, 2021).

Describe known/suspected level of trade: *Dalbergia sissoo* is one of the most useful timber species of India and is primarily used to make handicraft items, furniture, veneer, plywood and several other tools and artifacts (CoP19 Prop. 47). International legal trade plummeted after the CITES Appendix II listing in 2017 by almost 50% from an estimated ~129 million USD per annum before the listing, to ~64 to 77 million USD per annum after (COP19 Prop.47 and references therein).

Literature review of biological status and conservation status, including information on status in other relevant conventions

D. sissoo was listed in CITES Appendix II in 2017, as part of the genus listing of *Dalbergia* spp. *Dalbergia* spp. is also listed in Annex B of the EU Wildlife Trade Regulations. *D. sissoo* is listed as Least Concern on the IUCN Red List (Lakhey et al., 2020).

Evaluation of trade data

The CITES Trade database has 531 records for trade in *Dalbergia sissoo* with 147 from India and 43 from Pakistan. A total of 525 are categorized as derivatives (wood carvings, wood products, derivatives, specimens). Quantified for India this totals to 26 million kg of carvings / derivatives / sawn wood / timber / wood products of *D. sissoo* globally during 2017 to 2021. In India, *D. sissoo* is very common in cultivation and found growing in farmers' land, gardens, plantations etc. These trees are grown from seeds, cuttings, stumps, and propagules derived from

cultivated parental stock (CoP19 Prop. 47, however not quantified). *Dalbergia sissoo* is easy to identify in its living condition, and is unlikely to be confused with other species, and its wood can be distinguished from other species of *Dalbergia* by its wood anatomical features and also by using technologies like DART-TOF-MS (Shang et al. 2020; Brunswick et al. 2021) and Near-Infrared Spectroscopy (Snel et al. 2018). There is no data to suggest that survival of the species in the wild is threatened by international trade.

Potential other information by CITES reviews and on nature management issues in range states

CITES, 2016. CoP17 Prop. 55.

Recommendations

Å fjerne *Dalbergia sissoo* fra Appendix II vil muliggjøre lovlig handel med arten. *D. sissoo* er utbredt dyrket i India og hogst fra skogproduksjon tilfredsstillende etterspørsel. Det finnes ikke data som viser at handel i *Dalbergia sissoo* utgjør en trussel mot (eller har forvekslingsrisiko med) andre *Dalbergia* arter. Basert på dette virker det ikke som om kriteriene i Anneks 2a og 2b, Res. Conf. 9.24 (Rev. CoP17) er oppfylt.

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CoP19 Prop. 48 *Dipteryx* spp.**Review of listing proposal under CITES**

List the genus *Dipteryx* in CITES Appendix II: Colombia, European Union and Panama propose to list the species *Dipteryx alata*, *Dipteryx micrantha*, *Dipteryx odorata* and *Dipteryx oleifera* in CITES Appendix II in accordance with Article II, Paragraph 2 (a) of the Convention and satisfying Criterion B of Annex 2 a of Resolution Conf. 9.24 (Rev. CoP17) and include the remaining species of the genus *Dipteryx* in Appendix II of CITES for reasons of resemblance, in accordance with Article II (2)(b) of the Convention and satisfying Criterion A of Annex 2b of Resolution Conf. 9.24 (Rev.CoP17). Additionally, it is proposed to add an annotation designating logs, sawn wood, veneer sheets, plywood and transformed wood, and seeds. The annotation can be achieved either as a new annotation or by adding Annotation #17 plus seeds (CoP19 Prop.48).

Species name: The species *Dipteryx alata*, *Dipteryx micrantha*, *Dipteryx odorata* and *Dipteryx oleifera*, as well as the remaining species in the genus. Common names: Cumaru (timber), Tonka (seeds).

Distribution: Central and South America.

Population trend: Global populations of several species are considered to be declining, namely *D. micrantha* (Requena Suarez, 2017b), *D. odorata* (Requena Suarez, 2017a), and *D. alata* (Requena Suarez, 2021).

Habitat status: *Dipteryx* spp. occur in habitats that are increasingly threatened by deforestation and forest degradation (FAO, 2020; Vancutsem et al., 2021; see Section 4.5), logging (Antongiovanni et al., 2020), land conversion to agriculture (Mantovani and Pereira 1998; Fleisswasser, 2014; Antongiovanni et al., 2020) and climate change (IPCC, 2019; Marengo et al., 2018).

Describe known/suspected level of trade: The genus is targeted for its valuable hardwood timber, as well as its seeds, known as tonka beans. The international market for *Dipteryx* timber is expanding, and the genus produces some of the most expensive wood in global trade.

Literature review of biological status and conservation status, including information on status in other relevant conventions

Eight species have been globally assessed against IUCN Red List categories and criteria, and two (*D. alata* and *D. charapilla*) were considered Vulnerable (WCMC, 1998a; WCMC, 1998b), one (*D. polyphylla*) Near Threatened, and two Data Deficient but in decline (Requena Suarez 2017a; 2017b). *Dipteryx* is a widespread neotropical canopy-emergent genus of trees (Terborgh and Wright, 1994). The genus is slow growing, with species taking an estimated average of 46-177 years to reach 30 cm in diameter (Clark and Clark, 2001)

Evaluation of trade data

The main threats to the continued survival of the species are targeted logging, habitat degradation and deforestation. Seed collection affects *D. oleifera*, *D. alata* and *D. punctata*, but *D. odorata* mainly (Bovell-Benjamin and Roberts, 2016; da Silva et al., 2010; Vennetier et al. 2012). Trade in *Dipteryx* is not regulated by international legal instruments, and as such trade data is incomplete. Brazil exported around 11 million kg and 7 million kg, to the US and EU respectively during 2018-2021. These are volumes that are unlikely to be sustainable due to the low recruitment and growth rate of the species (Clark and Clark, 2001). Seed trade data is incomplete, but a study from Bolivia estimated 9000 kg harvested in 2018 (Delgado et al. 2018 in Pérez-Cruz and Villarroel, 2020), and another from Brazil 108 tons from Para state in 2005 (da Silva et al., 2010). Several studies have reported that unsustainable seed collection may negatively impact *D. odorata* population viability (Herrero-Jáuregui et al., 2012, Requena Suarez 2017a; 2017b), but this is

primarily based on qualitative assessments on the impact of seed collection in the 1940s and inference from the effects of intensive seed predation.

Potential other information by CITES reviews and on nature management issues in range states

No information on genus or species-specific management plans was found for *Dipteryx* spp. However, minimum exploitable diameters (MEDs) have been established in a number of range States (This proposal, CoP19 Prop. 48).

Recommendations

Hogst er hovedtrusselen mot *Dipteryx*, og bestander av flere av de viktigste tømmerartene er under press. Inkludering av slekten *Dipteryx* i CITES Appendix II vil muliggjøre overvåking av handel med tømmer og frø fra disse artene. Bruk av merknad #17 vil begrense handelsrestriksjoner til de delene og produktene som eksporteres og truer artene. Å inkludere en merknad for å dekke handel med frø ser ikke ut til å være berettiget basert på dagens kunnskap om handel, trusler og populasjonstrender. Forslaget virker å være i tråd med kriterium B, Anneks 2a, Res. Conf. 9.24 (Rev. CoP17) og kriterium A, Anneks 2b, Res. Conf. 9.24 (Rev. CoP.17).

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CoP19 Prop. 49 *Paubrasilia echinata*

Review of listing proposal under CITES

Transfer *Paubrasilia echinata* from CITES Appendix II to I: Brazil proposes to transfer *Paubrasilia echinata* from Appendix II to Appendix I in accordance with Resolution Conf. 9.24 (Rev. CoP17), Annex I, Paragraph A and B, and with the following annotation: All parts, derivatives and finished products, including bows of musical instruments, except musical instruments and their parts, composing travelling orchestras, and solo musicians carrying musical passports in accordance with Res. 16.8. *Paubrasilia echinata* is an endangered species occurring in diminishing remnants of Atlantic Forest in Brazil. Its wood is highly prized for the manufacture of bows for string instruments. The current legal framework in Brazil and the CITES Appendix II listing and annotation leave loopholes for illegal trade. The current transfer proposal seeks to achieve two objectives: 1) Transfer *Paubrasilia echinata* from Appendix II to Appendix I to initiate the stringent import restrictions by importing countries as a burden on the exporters and importers to do more to prove legal acquisition and non-detriment of traded materials; and 2) to close a loophole in the annotation that exempted bows as finished products from CITES permitting requirements. The latter was a loophole in the sense that producers in Brazil could export bows without permits while legally being practically unable to obtain wood to produce these bows.

Species name: *Paubrasilia echinata* (Lam.) Gagnon, H.C.Lima & G.P.Lewis. Common names: Brazilwood, Pernambuco, Pernambuco wood.

Distribution: Brazil (CoP19 Prop. 49).

Population trend: *P. echinate* occurs in the highly threatened Atlantic Forest, which has been severely degraded causing a decline in habitat quality and local extinctions (COP19 Prop. 49). The population is now highly fragmented and there are no formal experiments that evaluate the population trend, but given the advance of deforestation, the trend is most likely a strong decline in the population (CoP19 Prop. 49).

Habitat status: Fragmented (CoP19 Prop. 49). The original geographical distribution of Brazilwood and the size of its native populations have been reduced by logging, caused by the exploitation of its wood, by the opening of areas for agriculture and forestry activities, and by the expansion of urban centers (Rocha, 2010). Its habitat, the Atlantic Forest, has only 12.4% of its original cover, with deforestation intensifying in recent years (CoP19 Prop. 49).

Describe known/suspected level of trade: *P. echinate* is mainly used for the manufacture of bows for musical instruments, the wood is considered among the very best for making such bows and is highly sought after on the international market (CoP19 Prop. 49). There are reports on illegal transport and trade in Brazil (CoP19 Prop. 49).

Literature review of biological status and conservation status, including information on status in other relevant conventions

P. echinate is listed as Endangered on the IUCN red list (MMA, 2014).

The species has been listed under CITES Appendix II since 2007 and the EU Wildlife Trade Regulations Annex B since 2008.

Evaluation of trade data

Paubrasilia echinata was CITES Appendix II listed in 2007 with annotation #10: designates logs, sawn wood, veneer sheets, including unfinished wood articles used for the fabrication of bows for stringed musical instruments. There are 129 trade records for the species in the CITES trade database. This includes 26 trade records with Brazil as exporter, 11 m³ sawn wood as well as 870 sawn wood items. The other 103 records are for re-export or from unknown origin. Other

significant exporters (re-export) are U.S. 44, FR 11 and IT 9. Importers are EU 53, U.S. 22, JP 16 and CN 14. The most common source codes are W (Wild) and O (Pre-Convention). According to the proponent there is no W material that meets NDF, except for some sporadically harvested ornamental trees. In CoP19 Prop. 49 and references therein there are several reports on illegal trade: in the period 2017-2020, 102 cut log were seized in Brazil, illegal transport of logs was detected on highway BR101 in Brazil, 30 bow makers were fined for illegal wood possession and 200 000 bow blanks were seized. The proponents argue that illegal acquisition is a national problem fueled by the annotation exempting finished bows from CITES permits and the absence of the double LAF and NDF requirement afforded by CITES Appendix I listing. Brazilian Federal Law No. 11,428 of 2006 and Federal Decree No. 6,660 of 2008, prohibit the exploitation of *Paubrasilia echinata*. However, permits can be issued sporadically for cultivated trees. No plantations exist that can yield legally traded timber (Groves and Rutherford, 2016).

Potential other information by CITES reviews and on nature management issues in range states

P. echinata is protected by a series of legal instruments in Brazil, including Federal Law no 6.607, Federal Law no 11.428, Federal Decree no 6,660, MMA Ordinance no 320/2012, MMA Ordinance n°. 443, MMA Normative Instruction no 01, Federal Law no 12,651, IBAMA Normative Instruction no 21, CONAMA Resolution no 278, no 300 and no 317.

Recommendations

Brasil foreslår flytting av *Paubrasilia echinata* fra CITES Appendix II til I med en ny merknad som inkluderer buer til strykeinstrumenter, slik at smutthullet som gjør at ferdige buer er unntatt tillatelse tettes igjen. Arten er sterkt truet og det mangler oppdaterte utbredelsesdata. Det er nesten ingen lovlige kilder til virke og betydelige mengder av virke blir beslaglagt i Brazil. Handel er en stor trussel mot artens overlevelse i naturen, og dermed oppfylles kriteriene A og B, Anneks 1, Res. Conf. 9.24 (Rev. CoP17).

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CoP19 Prop. 50 *Pterocarpus* spp., *P. erinaceus*, *P. tinctorius***Review of listing proposal under CITES**

List all African populations of *Pterocarpus* species in CITES Appendix II: Côte d'Ivoire, European Union, Liberia, Senegal and Togo propose to include all African populations of *Pterocarpus* species in Appendix II of CITES with annotation #17, including already listed species *P. erinaceus* (CoP17, no annotation) and *P. tinctorius* (CoP18, annotation #6) in accordance with Article II, paragraph 2 (a) of the Convention, and in accordance with Resolution Conf. 9.24 (Rev. CoP17), Annex 2 a, Criterion B and Annex 2 b Criterion A. Annotation #17 Designates logs, sawn wood, veneer sheers, plywood and transformed wood.

Species name: Eleven African species of the genus *Pterocarpus* and 6 subspecies are currently recognised according to the African Plant Database (CJBG, 2021). The species are: *Pterocarpus angolensis* DC., *Pterocarpus brenanii* Barbosa & Torre, *Pterocarpus erinaceus* Poir., *Pterocarpus lucens* Lepr. ex Guill. & Perr., *Pterocarpus mildbraedii* Harms, *Pterocarpus osun* Craib, *Pterocarpus rotundifolius* (Sond.) Druce, *Pterocarpus santalinoides* L'Hér. ex DC., *Pterocarpus soyauxii* Taub., *Pterocarpus tessmannii* Harms, and *Pterocarpus tinctorius* Welw. Common names: Padouk, Rosewood, Mukula, Bloodwood.

Distribution: Sub-Saharan Africa.

Population trend: The total population of the different *Pterocarpus* species is not known (Groom, 2012; Barstow, 2018; Barstow and Timberlake, 2018). At the genus level, 90% of the *Pterocarpus* and *Dalbergia* (rosewood) populations for which studies exist, show declining or unstable population trends (Senegal, 2016).

Habitat status: Accurate assessment of habitat status for all *Pterocarpus* species and populations are lacking. However, several African range states of *Pterocarpus* taxa have experienced significant deforestation in recent years (FAO, 2020; Vancutsem et al., 2021). A long-term assessment of reduction in undisturbed tropical moist forest noted that the African countries with the greatest reduction 1990-2019 included Côte d'Ivoire (-81.5%), Ghana (-70.8%), Angola (-67%), Nigeria (46.7%) and Liberia (36%) (Vancutsem et al., 2021).

Describe known/suspected level of trade: Timber trade in African *Pterocarpus* is likely the result of the boom-and-bust cycle of African *Dalbergia* timber. Data suggests that export in the 2010s was due to substitution of *Dalbergia* for *Pterocarpus* timber as the appearance and quality of the wood is similar (Cerutti et al., 2018). The main import market is China, and official Chinese data shows that imports of rosewood species from African nations are up 700% since 2010 (Phiri et al., 2015), which is indicative of a boom phase. Trade data is incomplete, but the 2016 ATIBT report ranks padouk at 7th place on the list of the most commercialized species in the Congo Basin (ATIBT, 2017).

Literature review of biological status and conservation status, including information on status in other relevant conventions

IUCN Red-List assessments have been made for 10 out of 11 species: *Pterocarpus angolensis* (LC, decreasing; Barstow & Timberlake, 2018), *P. brenanii* (LC, unknown; Barstow, 2020), *P. erinaceus* (EN, decreasing; Barstow, 2018), *P. lucens* (LC, stable; Groom, 2012), *P. mildbraedii* (LC, unknown; IUCN SSC EAPRLA, 2022), *P. osun* (LC, unknown; Barstow, 2020), *P. rotundifolius* (LC, stable; BGCI & IUCN SSC GTSG, 2019), *P. santalinoides* (LC, stable; IUCN SSC GTSG & IUCN, 2019), *P.*

tessmannii (NT, unknown; Hills, 2021), *P. tinctorius* (LC, decreasing; Barstow, 2018). One is EN and nine LC, with three having decreasing population trends.

Species are mostly slow-growing, and it has been estimated they could take over 90 years to reach a harvestable size (Burkhill, 1995; Therrell et al., 2002). Rosewoods exhibit poor recruitment, even in protected areas where large numbers of mature trees exist (Augustino & Hall, 2008; Phiri et al., 2015). Size class distribution and other growth rate qualifying studies have been conducted for *P. erinaceus*, *P. angolensis* and *P. lucens*, particularly over the past 15 years, and almost every one of these surveys has shown a size class distribution typical of an unstable population, which is a key indicator of unsustainable harvesting practices (CoP19 Prop.50).

Evaluation of trade data

Trade data is too scarce for an objective evaluation. The report that official Chinese data shows a 700% increase of imports of rosewood species from African nations since 2010 (Phiri et al., 2015), suggest an increasing demand for wood from these taxa.

Potential other information by CITES reviews and on nature management issues in range states

The majority of range states have legislation in place requiring robust management of forests, although this does not prevent substantial levels of forest cover loss in the last 15-25 years (CoP19 Prop.50).

Recommendations

Inkludering av slekten *Pterocarpus* i CITES Appendix II vil muliggjøre overvåking av handel med tømmer fra disse artene. For en av artene, *P. erinaceus* som er rødlistevurdert som sterkt truet av IUCN, er handel ikke bærekraftig. Virke av *Pterocarpus*-artene er svært like og vanskelig å skille. Forslaget virker dermed å være i tråd med kriterium B, Anneks 2a og kriterium A, Anneks 2b, av Res. Conf. 9.24 (Rev. CoP17). Bruk av merknad #17 vil begrense handelsrestriksjoner til de delene og produktene som eksporteres og truer artene.

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Vancutsem C., Achard F., Pekel J.-F., Vieilledent G., Carboni S., Simonetti D., Gallego J., Aragão L.E.O.C. and Nasi R. (2021). Long-term (1990–2019) monitoring of forest cover changes in the humid tropics. Science Advances 7 (eabe1603): 1-21.

CoP19 Prop. 51 *Khaya* spp.

Review of listing proposal under CITES

List African populations of the genus *Khaya* in CITES Appendix II: Benin, Côte d'Ivoire, European Union, Liberia and Senegal propose to list African populations of the genus *Khaya* in CITES Appendix II in accordance with Article II, Paragraph 2 (a) of the Convention and satisfying Criterion B of Annex 2 a of Resolution Conf. 9.24 (Rev. CoP17). Additionally, it is proposed to add Annotation #17: Designates logs, sawn wood, veneer sheets, plywood and transformed wood (CoP19 Prop.51). The genus *Khaya* is one of four genera in the African mahogany species group (encompassing the four genera *Entandrophragma*, *Guarea*, *Lovoa* and *Khaya*). Already 15 years ago, a study by Oni and Igboanugo (2007) identified that *Khaya* spp. are in decline in west Africa as a result of over-exploitation for timber, which in turn results in "serious genetic depletion". Species level identification from vegetative material of *Khaya* spp. is nearly impossible using either macroscopic features (Donkor, 1997) or microscopic features (UNEP-WCMC, 2021). The wood of *Khaya* spp. is considered to be easily mistaken for that of CITES-listed *Swietenia* spp. (Holtken et al., 2012). As a high value timber species, *Khaya* spp., are widely cultivated in plantations in Australia (Dickinson et al., 2011), Sri Lanka (Nikiema and Pasternak, 2008), Southeast Asia (Orwa et al., 2009) and South and Central America (Naidoo, 2007; Lemmens, 2008; Ferraz Filho et al., 2021).

Species name: Populations of all species of the genus *Khaya* from Africa. Common names: Khaya, African mahogany.

Distribution: The genus *Khaya* naturally occurs in tropical and sub-tropical Madagascar, the Comoros and continental Africa (Pakull et al., 2019).

Population trend: *Khaya* spp. is considered to be in decline in west Africa as a result of over-exploitation for timber, resulting in "serious genetic depletion" (Oni and Igboanugo, 2007).

Habitat status: *Khaya* spp. are considered to be threatened by habitat loss and "indiscriminate logging" across their native ranges (Fremlin, 2011). Several *Khaya* range States have experienced high rates of deforestation in recent years (FAO, 2020; Vancutsem et al., 2021).

Describe known/suspected level of trade: The primary use of *Khaya* spp. is timber, but in many range states parts, especially bark, are also used in traditional herbal medicine. The use in traditional medicine is detrimental to some populations (Gaoue and Ticktin, 2007; Pinheiro et al., 2011), but not a major threat to wild populations through international trade. Demand for African mahogany exceeds available resources and regeneration, and cultivated stock from Africa is very limited.

Literature review of biological status and conservation status, including information on status in other relevant conventions

All *Khaya* spp. except for *K. comorensis* have been IUCN Red-List assessed. All assessed species are categorised as globally Vulnerable in the IUCN Red List (IUCN, 2022).

Evaluation of trade data

Trade data is incomplete, and the taxa have not been previously CITES listed. However, during 2015-2019, China imported African mahogany products (which can include other species) equivalent to a total weight of > 23 million kg from *Khaya* spp. range States; the United States of America and the European Union are other key importers of African mahogany (CoP19 Prop. 51).

Potential other information by CITES reviews and on nature management issues in range states

Many range states have management measures in place, but these mostly apply to specific minimum exploitable diameters (MEDs). The effectiveness of these measures is not assessed. SC74 Doc. 81, the report of the Working Group on Annotations considered at the SC74 in Lyon. Further reading: Resolution Conf. 11.21 (Rev. CoP18) on Use of annotations in Appendices I and II.

Recommendations

Å inkludere afrikanske populasjoner av slekten *Khaya* på CITES Appendix II vil muliggjøre overvåking av handel med vilt høstet materiale av disse artene og sette mål for bærekraftig utvinning av tømmer og gjenvekst. Nåværende eksportnivåer er ikke bærekraftige og bidrar til skogforringelse, og således oppfylles kriterium B, Anneks 2a, Res. Conf. 9.24 (Rev. CoP17). *Khaya* arter kan ikke skilles fra hverandre, men de fleste arter blir høstet for tømmer, og det taler dermed for å liste hele slekten. I tillegg kan *Khaya* tømmer forveksles med tømmer fra CITES Appendix II oppført *Swietenia* spp. Forslaget er formulert slik at bare afrikanske populasjoner listes for å ikke hindre handel med materiale avlet på plantasjer utenfor det naturlige utbredelsesområdet til *Khaya* spp. Merknad #17 begrenser listingen til stammer og virkeprodukter for å ikke hindre internasjonal handel med bærekraftig høstede plantedeler.

Literature list

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Naidoo, D.A. 2007. *Khaya anthotheca* (Welw.) C. DC. (Meliaceae). Available at: <http://pza.sanbi.org/khaya-anthotheca> [Accessed: 02/11/2020].

Nikiema, A. and Pasternak, D. 2008. *Khaya senegalensis* (Desr.) A. Juss. In: Louppe, D., Oteng-Amoako, A.A. and Brink, M. (Eds.) 2008. PROTA (Plant Resources of Tropical Africa / Ressources végétales de l'Afrique tropicale), Wageningen, Netherlands. Available at: [https://uses.plantnet-project.org/en/Khaya_senegalensis_\(PROTA\)](https://uses.plantnet-project.org/en/Khaya_senegalensis_(PROTA)) [Accessed: 12/11/2020].

Oni, P.I., Igboanugo, B.I. (2007) Conservation status, natural regeneration pattern and shoot borer susceptibility by *Khaya ivorensis* and *K. anthotheca* genotypes in Nigeria. *Discovery and Innovation* 19 (Special Edition No. 3): 205-211.

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Pakull, B., Ekué, M.R.M., Bouka Dipelet, U.G., Doumenge, C., McKey, D.B., Loumeto, J.J., Opuni-Frimpong, E., Yorou, S.N., Nacoulma, B.M.Y., Guelly, K.A., Ramamonjisoa, L., Thomas, D., Guichoux, E., Loo, J., Degen, B. (2019) Genetic diversity and differentiation among the species of African mahogany (*Khaya* spp.) based on a large SNP array. *Conservation Genetics* 20(5):1035-1044.

Pinheiro, A., Couto, L., Pinheiro, D., Brunetta, J. 2011. Ecology, forestry and technology for the use of African mahogany trees (*Khaya* spp.)

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CoP19 Prop. 52 Orchidaceae spp.

Review of listing proposal under CITES

Amend the annotation to the listing of Orchidaceae included in Appendix II:

Switzerland proposes to amend the annotation to the listing of Orchidaceae included in Appendix II. Specifically, it is proposed to amend annotation #4 by addition of new paragraph g), to read: '(g) finished products packaged and ready for retail trade of cosmetics containing parts and derivatives of *Bletilla striata*, *Cycnoches cooperi*, *Gastrodia elata*, *Phalaenopsis amabilis* or *Phalaenopsis lobbii*

This proposal is the result of a long consultative process in CITES (CoP17, PC23, PC24, CoP18, PC25, SC74) and with the cosmetic industry.

Literature review of biological status and conservation status, including information on status in other relevant conventions

The gist of the process was the desire to exclude finished products made with artificially propagated or assisted produced orchids from CITES regulation, and thus to prevent impeding trade that would not be detrimental to survival of species in the wild. In the consultative process, some terrestrial orchid species were excluded as it was unable to determine whether industry sourced material of these taxa was sourced from the wild or not. The current proposal covers only *Bletilla striata*, *Cycnoches cooperi*, *Gastrodia elata*, *Phalaenopsis amabilis* and *Phalaenopsis lobbii*. In depth research on these species indicated that all were artificially propagated in large numbers to supply the cosmetic and personal care industry, and there was no evidence that wild harvested plants were used in the manufacture of these products. Cosmetic regulations in the UK and EU require that ingredients are labelled on the product packaging by their International Nomenclature of Cosmetic Ingredients (INCI) names, which in turn are set out in the EU Glossary (Commission Decision (EU) 2022/677). The binomials *Bletilla striata*, *Cycnoches cooperi*, *Gastrodia elata*, *Phalaenopsis amabilis* and *Phalaenopsis lobbii* are INCI names, and are thus required to be included on product labeling, and this in turn will facilitate enforcement of the amended annotation #4.

Evaluation of trade data

Not applicable

Potential other information by CITES reviews and on nature management issues in range states

CoP17, Decisions 17.318 and 17.319 on *Annotations for Appendix II orchids*
PC23 Doc. 32
CoP18, Decisions 18.327 to 18.330 on *Annotations for Appendix II orchids*
Resolution Conf. 11.11 (Rev. CoP18)

Recommendations

Endringen vil muliggjøre fri handel med ferdige produkter laget med et lite antall orkideer dyrket i store mengder til kosmetikkindustrien. Forslaget er et resultat av en lang høringsprosess i CITES, CITES-sekretariatet og med industrien. Endring av merknad 4 vil mest sannsynlig ikke påvirke overlevelsen til disse artene i naturen.

Literature list

CoP19 Prop. 52: <https://cites.org/sites/default/files/documents/E-CoP19-Prop-52.pdf>

References used in the introduction text:

CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora). 2016. Consideration of proposals for amendment of Appendices I and II. CoP17 Prop. 36. 18 pp. Available online at: <https://cites.org/sites/default/files/eng/cop/17/prop/060216/E-CoP17-Prop-36.pdf>

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Appendix 1

Reporting format for assessments of listing proposals

Aspects and questions to be addressed by the assessments.

- i. The introduction should present and review the document with the listing proposal, cf. Res. Conf. 9.24 (Rev. CoP17).
- ii. A review of existing literature and global/regional/national assessments on population and habitat status, covering known range states, and information by IUCN or TRAFFIC, the Convention on Migratory Species (CMS; including sub-agreements, www.cms.int) and the Bern Convention on the Conservation of European Wildlife and Natural Habitats (www.coe.int, under subheading 'Democracy'), any prior listing proposals under the Conference of the Parties (CITES CoP) and discussions in the Plant Committee and Animal Committee.
- iii. Trade data by UNEP-WCMC: <http://trade.cites.org/> and any other potential available information and reports summarizing trade status, e.g. by IUCN-TRAFFIC, should be included and categorized as specified in annex 2.
- iv. Other literature with relevant information, supporting or contradictory, not included in paragraph i or ii, should also be reviewed and commented on specifically.
- v. Species that are morphological similar to listed species, i.e. lookalikes, are also to be evaluated under the criteria given in Res. Conf. 9.24 (Rev. CoP17).
- vi. Animal hybrids should be evaluated similarly as the parent taxa with the strictest regulations, cf. Res. Conf. 10.17 (Rev. CoP14), and shall generally be interpreted to refer to the previous four generations of the lineage.

1. Review of listing proposal under CITES Short summary of the listing proposals:

<https://cites.org/eng/cop19> CITES listing criteria as outlined in Res. Conf. 9.24 (Rev. CoP17)
<https://cites.org/sites/default/files/document/E-Res-09-24-R17.pdf>

- Species name: Scientific name incl. reference to author who described the species. English name and Norwegian name when available. Taxonomic uncertainties should be addressed if relevant. It is not necessary to list all synonyms, but names commonly used commercially should be specifically mentioned.
- Distribution: Description of area of natural distribution (+ any introduced populations) and list of range states.

-
- Population trend: If available from IUCN or other literature.
 - Habitat status: Choose one of the following: fragmented/increasingly fragmented/not fragmented, + state any known evaluation.
 - Describe known/suspected level of trade.

2. Literature review of biological status and conservation status, including information status in other relevant conventions.

Summarize briefly the content of relevant paper/s, in addition to IUCN red list category (year and use of criteria). Other listings by CMS, Bern and EU.

- Literature that contributes with additional data on trade or biological data
- Literature that documents deviations from the documentation presented for existing conservation status

3. Evaluation of trade data.

- Describe if data on legal or illegal trade is not available
- Describe if trade is documented to be limited to specimens bred in captivity and shown not to be a relevant threat for the wild populations
- Describe if trade, legal and illegal, in wild specimens is considered to be detrimental
 - Describe if no legal trade is documented, but illegal trade is documented to be substantial
- Describe if trade in captive bred or artificially cultivated specimens is considered to be detrimental for wild populations Information from <http://trade.cites.org>, and Species+, TRAFFIC (<http://www.traffic.org/>) and potentially other and NGO CoP analysis. If large amounts of info are available, select the most essential related to the proposal. For some species it will be necessary to also search for additional information on legal and illegal trade through other sources (e.g. market prices, e-commerce).

4. Potential other information by CITES reviews and on nature management issues in range states Information on regulations on national level/s (if important) and relevant CITES reviews:

- Examples of wild populations threatened or possibly threatened by any legal or illegal trade, even if trade is currently not observed, are to be considered detriment. Acute population decrease indicates that measures to strengthen the protection of a species,

including regulating international trade, should be implemented. • Significant Trade Reviews and recommendations by the Standing Committee, Animals- or Plants committee, that indicate that conservation measures need to be implemented.

5. Recommendations

Short evaluation of why trade could be/not be detrimental on population status. Importantly, the recommendation should not conclude with regard to listing status.

6. References (literature list and reference to relevant webpages)

Alphabetically ordered reference list following the American Assoc. Agronomy format.