NOTIFICATION TO THE PARTIES

No. 2022/066 Geneva, 9 September 2022

CONCERNING:

PROPOSALS TO AMEND APPENDICES I AND II

Provisional assessments by the Secretariat

1. The list of 52 proposals to amend Appendices I and II to be considered at the 19th meeting of the Conference of the Parties (CoP19, Panama City, 2022) was communicated to the Parties through Notification to the Parties No. 2022/052 of 8 July 2022.

2. The Secretariat has prepared provisional assessments of these proposals in the context of its responsibilities under Article XV, paragraph 1 (a), of the Convention. These provisional assessments are annexed to the present Notification and based on Resolution Conf. 9.24 (Rev. CoP17) on *Criteria for amendment of Appendices I and II* and other pertinent Resolutions of the Conference of the Parties and take full account of Resolution Conf. 5.20 (Rev. CoP 17) on *Guidelines for the Secretariat when making recommendations in accordance with Article XV*.

3. For the most part, these provisional assessments consider only the information presented in the supporting statement provided by the proponent(s). However, where additional information was readily available, this was also considered and is referenced in accordance with Resolution Conf. 5.20 (Rev. CoP17). Any other references cited may be assumed to be drawn from the supporting statements.

4. These provisional assessments are being communicated to the Parties in order to help them in making their own assessment of the proposals, to stimulate discussion and to encourage further clarification to be provided by proponents where appropriate. It is therefore presented at this stage in an unedited form in English only.

5. The Secretariat will update its assessments considering comments received from Parties, intergovernmental bodies having a function in relation to marine species and the organizations specified in Resolution Conf. 10.13 (Rev. CoP18) on *Implementation of the Convention for tree species*. It will also take account of additional information from other sources and provide in due course its final recommendations to the Parties via Notification and in document CoP19 Doc. 89.1.

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Annex

1. *Hippopotamus amphibius* (Hippopotamus)
   Transfer from Appendix II to Appendix I
2. *Ceratotherium simum simum* (population of Namibia) (White rhinoceros)
   Transfer from Appendix I to Appendix II with annotation
3. *Ceratotherium simum simum* (population of Eswatini) (White rhinoceros)
   Removal of existing annotation
4. *Loxodonta africana* (populations of Botswana, Namibia, South Africa and Zimbabwe) (African elephant).
   Amendment of Annotation 2
5. *Loxodonta africana* (populations of Botswana, Namibia, South Africa and Zimbabwe) (African elephant)
   Transfer from Appendix II to Appendix I
6. *Cynomys mexicanus* (Mexican prairie dog)
   Transfer from Appendix I to Appendix II
7. *Branta canadensis leucopareia* (Aleutian cackling goose)
   Transfer from Appendix I to Appendix II
8. *Copsychus malabarica* (White-rumped shama)
   Inclusion in Appendix II
9. *Pycnonotus zeylanicus* (Straw-headed bulbul)
   Transfer from Appendix II to Appendix I
10. *Phoebastria albatrus* (Short-tailed albatross)
    Transfer from Appendix I to Appendix II
11. *Caiman latirostris* (population of Brazil) (Broad-snouted caiman)
    Transfer from Appendix I to Appendix II
12. *Crocodylus porosus* (population of Palawan Islands, Philippines) (Saltwater crocodile)
    Transfer from Appendix I to Appendix II with annotation.
13. *Crocodylus siamensis* (population of Thailand) (Siamese crocodile)
    Transfer from Appendix I to Appendix II with annotation
14. *Physignathus cocincinus* (Chinese water dragon)
    Inclusion in Appendix II
15. *Cyrtodactylus jeyporensis* (Jeypore Indian gecko)
    Inclusion in Appendix II
16. *Tarentola chazaliae* (Helmethead gecko)
    Inclusion in Appendix II
17. *Phrynosoma platyrhinos* (Desert horned lizard)
    Inclusion in Appendix II
18. *Phrynosoma* spp. (Horned lizards)
    Inclusion in Appendix II
19. *Tiliqua adelaidensis* (Pygmy bluetongue lizard)
    Inclusion in Appendix I
20. *Epicrates inornatus* (Puerto Rican boa)
    Transfer from Appendix I to Appendix II
21. *Crotalus horridus* (Timber rattlesnake)
    Inclusion in Appendix II
22. *Chelus fimbriata* and *C. orinocensis* (Matamata and Orinoco matamata turtle)
    Inclusion in Appendix II
23. *Macrochelys temminckii* and *Chelydra serpentina* (Alligator snapping turtle and Common snapping turtle)
    Inclusion in Appendix II
24. *Graptemys barbouri, G. ernsti, G. gibbonsi, G. pearlensis* and *G. pulchra* (Map turtles)
    Inclusion in Appendix II
25. *Batagur kachuga* (Red-crowned roofed turtle)
    Transfer from Appendix II to Appendix I
26. *Cuora galbinifrons* (Indochinese box turtle)
    Transfer from Appendix II to Appendix I
27. *Rhinoclemmys* spp. (Neotropical wood turtles)
    Inclusion in Appendix II
28. *Claudius angustatus* (Narrow-bridged musk turtle)
    Inclusion in Appendix II
29. *Kinosternon* spp. (except the species included in Appendix I) (Mud turtles)
    Inclusion of *Kinosternon cora* and *K. vogti* in Appendix I and all other species of *Kinosternon* spp. in Appendix II

30. *Staurotypus salvinii* and *S. triporcatus* (Giant musk turtle and Mexican musk turtle)
    Inclusion in Appendix II
31. *Sternotherus* spp. (Musk turtles)
    Inclusion in Appendix II
32. *Apalone* spp. (except the subspecies included in Appendix I) (Softshell turtles)
    Inclusion in Appendix II
33. *Nilssonia leithii* (Leith's softshell turtle)
    Transfer from Appendix II to Appendix I
34. Centrolenidae spp. (Glass frogs)
    Inclusion in Appendix II
35. *Agalychnis lemur* (Lemur leaf frog)
    Inclusion in Appendix II with annotation
36. *Laotriton laoensis* (Lao warty newt)
    Inclusion in Appendix II with annotation
37. Carcharhinidae spp. (Requiem sharks)
    Inclusion in Appendix II
38. Sphyrnidae spp. (Hammerhead sharks)
    Inclusion in Appendix II
39. *Potamotrygon albimaculata, P. henlei, P. jabuti, P. leopoldi, P. marquesi, P. signata* and *P. wallacei* (Freshwater stingrays)
    Inclusion in Appendix II
40. Rhinobatidae spp. (Guitarfishes)
    Inclusion in Appendix II
41. *Hypancistrus zebra* (Zebra pleco)
    Inclusion in Appendix I
42. *Thelenota* spp (Sea cucumbers)
    Inclusion in Appendix II
43. Flora species with annotation #1, #4, #14 and Appendix-I listed species of Orchidaceae
    Amendment of Annotation #1, #4 and #14 and the annotation for Appendix I Orchidaceae
44. *Handroanthus* spp, *Roseodendron* spp. and *Tabebuia* spp. (Trumpet trees)
    Inclusion in Appendix II with annotation
45. *Rhodiola* spp. (Stonecrops)
    Inclusion in Appendix II with annotation
46. *Afzelia* spp. (African populations) (Pod mahoganies)
    Inclusion in Appendix II with annotation
47. *Dalbergia sissoo* (North Indian rosewood)
    Deletion from Appendix II
48. *Dipteryx* spp. (Cumaru)
    Inclusion in Appendix II with annotation
49. *Paubrasilia echinata* (Brazil wood)
    Transfer from Appendix II to Appendix I with annotation
50. *Pterocarpus* spp. (African populations) and Pterocarpus erinaceus and P. tinctorius (Padauk)
    Inclusion in Appendix II with annotation and amendment of annotations for *Pterocarpus erinaceus* and *P. tinctorius*
51. *Khaya* spp. (African populations) (African mahoganies)
    Inclusion in Appendix II with annotation
52. Orchidaceae spp.
    Amendment of Annotation #4

Proposal 1

***Hippopotamus amphibius* (Hippopotamus)**

Proposal: Transfer from Appendix II to Appendix I

Proponents: Benin, Burkina Faso, Central African Republic, Gabon, Guinea, Liberia, Mali, Niger, Senegal and Togo

Provisional assessment by the Secretariat

CITES background

H. amphibius was included in Appendix II in 1995.

Purpose and impact of the proposal

The present proposal seeks to prohibit international commercial trade in specimens of wild origin of *H. amphibius.* If it is adopted, international commercial trade in specimens of *H. amphibius* of wild origin will be prohibited. International trade in specimens of the species will be regulated in accordance with the provisions of Article III of the Convention.

If *H. amphibius* is included in Appendix I, operations breeding the species for commercial purposes would need to be registered with the Secretariat in accordance with Resolution Conf. 12.10 (Rev. CoP15) on *Registration of operations that breed Appendix-I animal species in captivity for commercial purposes.*

Compliance with listing criteria

Concerning inclusion of the species in Appendix I, the proponent asserts that the species meets criterion C in Annex 1 of Resolution Conf. 9.24 (Rev. CoP17) because it shows a marked decline in the population size in the wild. The supporting statement says that this marked decline has been either: i) observed as ongoing or as having occurred in the past (but with a potential to resume); or ii) is 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. However the supporting statement does not specify which of these circumstances prevails.

The hippopotamus is a well-known large semiaquatic mammal that is native to sub-Saharan Africa. They require fresh water with areas shallow enough for them to stand and be completely submerged and large enough to contain the territories of several males, who are highly territorial. Availability of suitable habitat is therefore a limiting factor in hippopotamus population size.

According to the supporting statement, *H. amphibius* inhabit 38 countries in Africa. While *H. amphibius* inhabits most of its historic range, the proponents claim that population sizes have decreased. The IUCN Red List of Threatened Species assessment highlights that “there are clear regional differences in population size and distribution across the range. Eastern and Southern African countries represent the conservation stronghold for this species and are the regions where the largest numbers of *H. amphibius* occur. Although *H. amphibius* are found in many West African nations, overall population sizes tend to be much smaller, either because of less available habitat or the higher density of human populations.”

The proponents state that *H. amphibius* is considered to be particularly vulnerable to overexploitation due to its low productivity. Compared to other large herbivores with similar breeding cycles, they have a low calf birth rate and birth rates are affected by environmental conditions. The hippopotamus has a generation length of 10 years and can live up to 50 years. Females generally produce only one offspring every other year and on average, have 10 to 12 pregnancies in their lifetime.

The proponents point out that the 2016 IUCN assessment estimated the global population of *H. amphibius* to be approximately 115,000 to 130,000 and stable at the continental level but, at the national level, populations were decreasing or unknown in 25 of 38 (65%) hippopotamus range States. Trends were decreasing in 16, unknown in nine, stable in nine and increasing in only four. However, they question the validity of some of these national assessments partly because of the age of some of the surveys used to produce population estimates and the baseline dates used for some populations. They present information on the population status of *H. amphibius* by country and region from Lewison & Pluháček (2017), in Table 1 in the Annex. However, as

this is the same reference on which the IUCN assessment is based, it is not entirely clear why the different figures were derived. Table 1 presents a total global population of between 114,290 and 130,190 individuals. This information is broken down into three regions as follows (the estimated population size is presented in parentheses): West Africa (7,090 - 9,490); East Africa (43,050 - 49,550); and Southern Africa (64,150 – 71,150). The East and Southern African regions represent the strongholds of the species, while the co-proponents of this proposal are predominantly from the West African region, where population numbers are lower.

The supporting statement makes specific reference to Annex 5 of the Resolution, which provides “general guidance” that a marked decline should be 50% or more over the past 10 years or over three generations, but they note that the numerical guidelines cited in the Annex are presented only as examples, since it is impossible to give numerical values that are applicable to all taxa because of differences in their biology. They suggest that a ≥30% decline could be considered a marked decline for a low productivity species such as hippopotamus.

Annex 5 also states that “The data used to estimate or infer a baseline for extent of decline should extend as far back into the past as possible". The IUCN Red List assessment from 2016 states that “The most recent population estimates suggest that, over the 8 years since its 2008 assessment, hippopotamus populations have largely remained stable”. It further notes that “the 2008 Red List Assessment estimated hippopotamus populations to be approximately 125,000 and 148,000, with half of the 29 countries in which the species were found reporting declines”. IUCN’s most recent assessment (2016) yields a lower population estimate, on the order of 115,000-130,000 animals. However, they “believe that the observed downward shift in total population size likely reflects overestimated population sizes from some countries in the 2008 Red List Assessment that have now been corrected.” Concerns about the accuracy of historical population estimates make it difficult to accurately track long-term population trends or determine if there has been a true marked decline in the wild population, which is the basis of criterion C of Resolution Conf. 9.24 (Rev.CoP17).

The supporting statement shows that the main exporters (i.e. those representing more than 2% of the global exports, as reported by importers) come from larger populations, where the population trend is assessed to be stable or increasing (see table 1 in Annex to the proposal).

The supporting statement recognises habitat loss and degradation as primary threats to the hippopotamus, along with illegal and unregulated hunting for meat and ivory (canine teeth). Reduced freshwater availability can lead to higher rates of disease transmission and territorial conflicts, while droughts can lead to starvation. Habitat loss is said to be causing population fragmentation, and small, isolated populations are becoming confined to protected areas. Other threats identified in the supporting statement are residential and commercial development; agriculture and aquaculture; hunting and trapping; human intrusions and disturbance through war, civil unrest and military exercise; natural system modifications such as through dams and water management and use; and climate change and severe weather including droughts. The proponents note that “ten hippopotamus range States report growing numbers of hippopotamus-human conflicts, which can result in hippopotamus mortality, and the displacement of animals from protected areas increases the likelihood of human-hippopotamus interaction and therefore conflict.”

The proponents reference a 1994 assessment by TRAFFIC, that reported that illegal trade in Hippopotamus ivory increased sharply following the international elephant ivory ban in 1989. However, they did not refer to a more recent study by Moneron and Drinkwater (2021)[1]”, which, using the same conversion factors as in the supporting statement, estimated that the offtake from the population was a total of 13,491 animals between 2009 and 2018, which equates to approximately 1,349 animals annually. Based on the current population estimates of 130,000–145,000 animals this represented approximately one per cent of the population annually.

Moneron and Drinkwater (2021) also suggest that the quantity of hippopotamus ivory traded has decreased between 2009 and 2018, contrary to concerns that the trade in hippopotamus ivory may increase as a substitute for elephant ivory as countries/territories globally implement stricter legislation around the trading in elephant ivory.

One of the main challenges in interpreting the data from the CITES trade database is the wide range of terms have been used to report on parts and derivatives of *H. amphibius* reported to be in trade. For example, the range of terms used are bodies, bone carvings, bone pieces, bone, carvings, derivatives, feet, genitalia, hair,

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1 *Moneron, S. and Drinkwater, E. (2021)[1]. The Often Overlooked Ivory Trade - A rapid assessment of the international trade in hippopotamus ivory between 2009 and 2018. TRAFFIC, Cambridge, United Kingdom.*

hair products, ivory carvings, ivory pieces, jewellery, jewellery pieces-ivory, leather products (large), leather products (small), live, sides, skeletons, skin pieces, skins, skulls, specimens, tails, teeth, trophies and tusks.

The proponents claim that illegal trade in hippopotamus parts and products, particularly teeth, is extensive. They express concern that small and declining populations are being negatively impacted by poaching and trafficking of illegally acquired parts and products, primarily ivory, into legal international trade. For example, they state that there are numerous examples of hippopotamus teeth seizures and arrests since 2016, including several cross-border incidents involving Uganda, which is one of the top legal exporters of hippopotamus ivory. They also express concerns that co-mingling of legal and illegal hippopotamus ivory may be occurring.

The supporting statement points out that *H. amphibius* are officially protected in many range States, but the level of enforcement of those regulations remains poor in many countries (Lewison & Pluháček, 2017). The hippopotamus is totally protected from hunting for commercial or other purposes in 14 range States including many in the West Africa region, where the population numbers are lowest. *H. amphibius* is partially protected in virtually all other range States including the main countries of origin of hippopotamus specimens in trade.

Additional considerations (including relevant CoP recommendations)

The sustainability of the trade in *Hippopotamus amphibius* has been extensively assessed on two occasions by the Animals and Standing Committees, through the Review of Significant Trade (RST). On both occasions, where potential problems with the sustainability were identified, the range States concerned responded and undertook remedial action, bringing trade to sustainable levels to the satisfaction of both Committees. Currently, there are no Parties under review for trade in *H. amphibius* and there are no current recommendations to suspend trade in this species under the RST.

The proponents question the sustainability of the export quota for the United Republic of Tanzania in particular, which they say amounts to 6% of the national population. Such concerns should be raised under the RST when new cases are being selected for review at the first meeting of the Animals Committee following CoP19.

The supporting statement says that consultations took place with all range States and only two written replies were received from Mali and Uganda, but it does not indicate if these were supportive. Similarly, the proposal is said to have been discussed at two African CoP19 preparatory meetings, but no details of the discussions are provided.

Provisional conclusions

The global population of *H. amphibius* does not appear to be small, nor does the species seem to have a restricted area of distribution. Declines in the population in some range States have occurred, but in others the population is stable or increasing.

The main exporters of hippopotamus specimens are from eastern and southern Africa where many national populations appear to be stable or increasing in number and where offtake appears to be sustainable. Overall, the Secretariat is of the opinion that there does not appear to be enough evidence to determine that the species meets the criteria in Annex 1 of Resolution Conf. 9.24 (Rev. CoP17).

Proposal 2

***Ceratotherium simum simum* (population of Namibia) (White rhinoceros)**

Proposal: Transfer from 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 in them shall be regulated accordingly.

Proponents: Botswana and Namibia

Provisional assessment by the Secretariat

CITES background

The entire rhinoceros family, Rhinocerotidae, was included in Appendix I at CoP1 (1977). The South African population of *C. s. simum* was transferred to Appendix II at CoP9 (1995) with 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 the trade in them shall be regulated accordingly." In 2005, the population of Eswatini was transferred to Appendix II with the same annotation, which remains in place today.

At CoP18 (2019) a proposal similar to the present one was submitted by Namibia with an annotation which would have permitted trade in hunting trophies and in live animals to appropriate and acceptable destinations – rather than for *in-situ* conservation in the present proposal. That proposal was rejected.

Purpose and impact of the proposal

This proposal seeks to transfer the population of *C. s. simum* of Namibia from Appendix I to Appendix II with an annotation that would restrict the purpose of the resulting permitted trade to live animals (for *in-situ* conservation only) and to hunting trophies.

Compliance with listing criteria

This species became extinct in Namibia around in the late 19th century and was reintroduced in 1975.

The supporting statement states that Namibia's population of *C. s. simum* no longer meets the criteria for inclusion in Appendix I, contained in Annex 1 of Resolution Conf. 9.24 (Rev. CoP17). The Namibian population is said to number 1,237 in 2021, which largely accords with the 1,234 reported by the IUCN/SSC African and Asian Rhino Specialist Groups and TRAFFIC in document CoP19 Doc. 75. In terms of paragraph A in Annex 1 of Resolution Conf. 9.24 (Rev. CoP17), this is quite a small wild population compared with the guidance in Annex 5 of same Resolution. Nevertheless, the Parties have already agreed to transfer the much smaller population of this species in Eswatini from Appendix I to Appendix II and there do not seem to be any indications of any of the aggravating factors listed in sub-paragraphs i) to v) of paragraph A.

The supporting statement states that the species does not have a restricted distribution but does not provide details, other than the fact the total area of the three national parks in which the species occurs is more than 1.5 million ha. The distribution of the species in the country is said to be precisely known and be in multiple discrete subpopulations. It seems unlikely that the distribution is as restricted as that of the population of Eswatini, which the Conference of the Parties has already to transfer from Appendix I to Appendix II and there do not seem to be any indications of any of the aggravating factors listed in sub-paragraphs i) to iv) of paragraph B.

The population has not suffered a marked decline in size, indeed the IUCN/SSC African and Asian Rhino Specialist Groups and TRAFFIC in document CoP19 Doc. 75 says that it has increased in recent years. In summary, the species which is the subject of this proposal does not appear to meet the biological criteria for inclusion in Appendix I.

Concerning the precautionary measures of Annex 4 of Resolution Conf. 9.24 (Rev. CoP17) on *Criteria for amendment of Appendices I and II*, the proponents cite precautionary measure A.2.iii, but this seems to refer to subparagraph A 2 a) iii) and relate to the presence of the annotation restricting trade to hunting trophies and to live animals for *in-situ* conservation only. As described in the supporting statement this would indeed constrain the number of specimens that may be exported. Namibia reports exporting only 3-4 live specimens annually for non-commercial purpose in recent years, but they express a hope to increase this if their proposal is adopted. For hunting trophies, according to the CITES trade database the annual number of trophies of this species exported by Namibia annually is in single figures, but Namibia hopes to increase this if the proposal is adopted. The species seems highly managed in Namibia and measures to enforce the proposed annotations limitations appear satisfactory. Illegal killing is said to be less than 1% of the population per annum and showing no upward trend.

Additional considerations (including relevant CoP recommendations)

Annex 3 of Resolution Conf. 9.24 (Rev. CoP17) states that listing of a species in more than one Appendix should be avoided in general in view of the enforcement problems it creates, but this is already the case with *C. s. simum.* The proposed annotation is however not the same as that for the populations of this subspecies already listed in Appendix II – those of Eswatini and South Africa. Those permit international trade in live animals to “appropriate and acceptable destinations”, a term for which the Conference of the Parties has agreed a definition in Resolution Conf. 11.20 (Rev. CoP18). This Resolution further encourages that any permit authorizing trade of live rhinoceroses under this annotation contain a condition stating that the rhinoceros horn from those animals and from their progeny may not enter commercial trade and be sport hunted outside of their historic range.

The proponent of the present proposal proposes that international trade in live animals could be permitted “for *in-situ* conservation only”. This is different from the version of the proposal presented at CoP 18 (CoP18 Prop 9) although no explanation is provided in the supporting statement for this change. Given that demand for live rhinoceroses for *in-situ* conservation is likely to be small and that there may be little practical effect of this difference of wording on the conservation of the species in Namibia or elsewhere in its range. There would be benefit in maintaining consistent terminology in annotations used in the Appendices.

Resolution Conf. 11.21 (Rev. CoP18) recommends that as a general rule Parties should avoid making proposals to adopt annotations that include live animals or trophies and that annotations that specify the types of specimens included in the Appendices should be used sparingly. However as explained above, this situation already prevails for populations of *C. s. simum* included in Appendix II.

Provisional conclusions

The Secretariat considers that Namibia’s wild population of *C. s. simum* does not appear to meet the biological criteria for inclusion in Appendix I. The precautionary measures proposed in the form of an annotation seem satisfactory and proportionate to the anticipated risks to the species and effective enforcement controls appear to be in place.

Proposal 3

***Ceratotherium simum simum* (population of Eswatini) (White rhinoceros)**

Proposal: Remove the existing annotation on the Appendix II listing of Eswatini's population

Proponent: Eswatini

Provisional assessment by the Secretariat

CITES background

The entire rhinoceros family, Rhinocerotidae, was included in Appendix I at CoP1 (1977). The South African population of *C. s. simum* was transferred to Appendix II at CoP9 (1995) with 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 the trade in them shall be regulated accordingly." In 2005, the population of Eswatini was transferred to Appendix II with the same annotation, which remains in place today.

At CoP16 (2013) a proposal was made to amend the annotation relating to the listing of the populations of *C. s. simum* in Eswatini and South Africa in Appendix II by adding the words "Hunting trophies from South Africa and Swaziland [now Eswatini] shall be subject to a zero export quota until at least CoP18". However, after introducing the proposal, the proponents announced that following discussion with South Africa, Eswatini, the Standing Committee Working Group on Rhinoceroses and Member States of the European Union it was being withdrawn.

At CoP17 (2016), Parties considered a proposal from Eswatini to amend the existing annotation on the Appendix-II listing of its white rhinoceros' population, so as to permit a limited and regulated trade in rhinoceros' horn, which had been collected in the past from natural deaths, or recovered from poached rhinoceroses, as well as horn to be harvested in a non-lethal way in the future, from a limited number of white rhinoceroses in Eswatini. The proposal was rejected.

At CoP18 (2019) Parties considered a proposal to remove the existing annotation on the Appendix II listing of *C. s. simum* in Eswatini with the same substance as the present proposal. This proposal was rejected.

Purpose and impact of the proposal

The proposal seeks to remove the existing annotation to the Appendix-II listing of Eswatini's population of *C. s. simum*, so that trade in all specimens of rhinoceros horn from that population may be authorized for primarily commercial purposes, including horns and derivatives thereof. If the proposal is adopted, international trade in these specimens will be regulated in accordance with the provisions of Article IV of the Convention. The supporting statement indicates that the purpose of the proposal is for Eswatini to export "from existing stock 330 kg of rhino horn…… and also up to 20 kg per annum, including harvested horn". The supporting statement goes on to state that "there would be no need to kill even one rhino in order to sustainably satisfy the currently known market", which might suggest that the planned harvesting would be by dehorning. However, these limitations are not presented as an annotation and are not specifically proposed as an export quota and therefore would be at Eswatini's discretion, should the proposal be adopted. Eswatini, sets out a Rhino Horn Trade Protocol for the international trade, which it wishes to engage in, involving the establishment of a Central Selling Organization, managed by professional traders, that would sell to a licensed cartel of retailers in the Far East.

Compliance with listing criteria

The proposal submitted by Eswatini is to amend the substantive annotation to the Appendix-II listing of the subspecies *C. s. simum* so that it does not apply to the population of Eswatini. Although the population of this subspecies of Eswatini is in Appendix II, the current annotation allows only "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 the trade in them shall be regulated accordingly." Consequently, elimination of this annotation for the population of *C. s. simum* of Eswatini may be seen as analogous to a transfer of that population from Appendix I to Appendix II of the specimens that are deemed to be included in Appendix I.

In terms of Resolution Conf. 11.21 (Rev. CoP18) on *Use of annotations in Appendices I and II*, substantive annotations used in the context of transferring a species from Appendix I to Appendix II should follow the precautionary measures contained in Annex 4 of Resolution Conf. 9.24 (Rev. CoP17) on *Criteria for amendment of Appendices I and II*. In the case of the present proposal, the species (in this case the population of *C. s. simum* in Eswatini) is already included in Appendix II, but the effect of the proposal is to remove existing limitations on trade in the species and therefore it seems that the precautionary measures should be applied.

As the species is already included in Appendix II, the Conference of the Parties has already determined that it does not satisfy the relevant criteria in Annex 1 as referenced in paragraph 2 a) of Annex 4 to Resolution Conf. 9.24 (Rev. CoP17). When the Conference of the Parties agreed the transfer of the Eswatini population of *C. s. simum* from Appendix I to Appendix II in 2005, the most recent population estimate of the population was given as 61 animals. The supporting statement for the present proposal gives the current population as 98 animals. This represents a significant increase in percentage terms, but means the population is still very small. The proponents explain that the species is likely to be in demand for trade – in particular approximately 5,000 kg of horn per annum. As no export quota or other special measure is proposed by the proponent as an integral part of the amendment proposal, it must be assumed that the precautionary measures in paragraph 2 a) ii) A) and B) of Annex 4 to Resolution Conf. 9.24 (Rev. CoP17) are contended: the Conference of the Parties should be satisfied with the *implementation by the range States of the requirements of the Convention, in particular Article IV; and appropriate enforcement controls and compliance with the requirements of the Convention*.

In this regard, and in contrast to the proposal considered at CoP18 (2019), the supporting statement in Section 8.6 details a proposed national Rhino Horn Trade Protocol. The stated objectives of the protocol would be to limit the supply to levels sustainable for the population. It is not clear if this supply would be limited to the horn from Eswatini's existing stock of 330 kg and 20 kg per annum, including from harvested horn, as referred to in the overview in the supporting statement. The price of the horn and conditions of sale would be set to maximize benefits to nature conservation. The supporting statement emphasizes the negative effects of the COVID pandemic on the revenue streams for management of the three parks where the species occurs in Eswatini. The proceeds from the sales are planned to provide for sustainable long-term developments which will strengthen species protection and nature conservation initiatives, while also benefitting neighbouring rural communities and the nation at large. It is not made clear exactly how this will be achieved. The Rhino Horn Trade Protocol envisages a single source of supply for horns managed by professional traders and elsewhere in the supporting statement it is stated that the beneficiaries need to be the "rhino custodians", although it is not clear who these are. The Rhino Horn Trade Protocol envisages a "marketing channel" overseen by the CITES Secretariat to ensure that no illegal horn can enter the legal market. It is not made clear what such a "channel" is or how the resources would be made available for the Secretariat to oversee it. Finally, the Rhino Horn Trade Protocol is aimed to incentivize Far Eastern governments to close down illegal trade and implement stringent destination-end controls, but details about how this would work are lacking.

Annex 3 of Resolution Conf. 9.24 (Rev. CoP17) resolves that listing of a species in more than one Appendix should be avoided in general in view of the enforcement problems it creates. Whilst the inclusion of the population of *C. s. simum* in Eswatini in Appendix II to permit international trade in live animals to appropriate and acceptable destinations and hunting trophies is relatively specific, an unrestricted listing of the population in Appendix II might more significant enforcement problems which the criteria in Annex 3 seek to avoid. However, the proposal does foresee that all horn that may be exported be recorded in a national DNA database and accompanied by a DNA certificate which should help address this concern.

Additional considerations (including relevant CoP recommendations)

Considerations arising from Resolution Conf. 11.21 (Rev. CoP18) are included in the section on compliance with listing criteria as they are integrally linked.

Provisional conclusions

The population of the species in Eswatini has increased since the Conference of the Parties agreed the transfer of the population from Appendix I to Appendix II in 2005. However, it is the view of the Secretariat that the precautionary measures proposed in relation to an unrestricted downlisting have not been clarified since the rejection of an identical proposal at CoP18 (2019). Although a national Rhino Horn Trade Protocol is a new element in the present supporting statement, its *modus operandi* is unclear.

Proposal 4

***Loxodonta africana* (populations of Botswana, Namibia, South Africa and Zimbabwe). (African elephant)**

Proposal: Amend Annotation 2 pertaining to the populations of Botswana, Namibia, South Africa and Zimbabwe.

Proposed amendments are shown in strikethrough:

For the exclusive purpose of allowing:
a) trade in hunting trophies for non-commercial purposes
b) trade in live animals to appropriate and acceptable destinations, as defined in Resolution Conf. 11.20 (Rev. CoP17), for Botswana and Zimbabwe and for in situ conservation programmes for Namibia and South Africa;
c) trade in hides;
d) trade in hair;
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;~~
f) trade in individually marked and certified ekipas incorporated in finished jewellery for non-commercial purposes for Namibia and ivory carvings for non-commercial purposes for Zimbabwe;
g) trade in registered raw ivory (for Botswana, Namibia, South Africa and Zimbabwe, whole tusks and pieces) subject to the following:
i) only registered government-owned stocks, originating in the State (excluding seized ivory and ivory of unknown origin);
ii) only to trading partners that have been verified by the Secretariat, in consultation with the Standing Committee, to have sufficient national legislation and domestic trade controls to ensure that the imported ivory will not be re-exported and will be managed in accordance with all requirements of Resolution Conf. 10.10 (Rev. CoP17) concerning domestic manufacturing and trade;
iii) not before the Secretariat has verified the prospective importing countries and the registered government-owned stocks;
~~iv) raw ivory pursuant to the conditional sale of registered government-owned ivory stocks agreed at CoP12, which are 20,000 kg (Botswana), 10,000 kg (Namibia) and 30,000 kg (South Africa);~~
~~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;~~
vi) the proceeds of the trade are used exclusively for elephant conservation and community conservation and development programmes within or adjacent to the elephant range; and
~~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~~
~~h) 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).~~
On a proposal from the Secretariat, the Standing Committee can decide to cause this trade to cease partially or completely in the event of non-compliance by exporting or importing countries, or in the case of proven detrimental impacts of the trade on other elephant populations.
All other specimens shall be deemed to be specimens of species included in Appendix I and the trade in them shall be regulated accordingly.

Proponent: Zimbabwe

Provisional assessment by the Secretariat

CITES background

Loxodonta africana was included in Appendix III in 1976 at the request of Ghana. It was included in Appendix II at CoP1 (1977). At CoP7 (1989), the species was transferred to Appendix I. Subject to complex and detailed annotations, the populations of Botswana, Namibia and Zimbabwe were transferred to Appendix II at CoP10 (1997), and the population of South Africa was transferred to Appendix II under similar terms at CoP11 (2000). The annotations to these Appendix-II populations were merged and further amended at CoP12 (2002), CoP13

(2004) and CoP14 (2007). The text of the current annotation 2, agreed at CoP14, has not been amended since.

At CoP17 (2016), proposals by Namibia and Zimbabwe to delete Annotation 2 to the listing of their respective African elephant populations, were considered and both proposals were rejected. A proposal to transfer the populations of Botswana, Namibia, South Africa and Zimbabwe from Appendix II to Appendix I was also considered at CoP17 and rejected.

At CoP17, the Conference of the Parties discussed the issue of a decision-making mechanism for a process of trade in ivory, which forms part of annotation 2 to the Appendix-II listing and decided that the mandate to the Standing Committee to develop such a decision-making mechanism for a process of trade in ivory under the auspices of the CoP, in Decision 16.55, should not be extended. The Decision was therefore deleted.

At CoP18 (2019) a very similar proposal to CoP19 Prop.4 was submitted by Botswana, Namibia and Zimbabwe (CoP18 Prop. 11). The proposal was amended during the discussion at CoP18 by inserting two paragraphs g) iv) and g) v) in the annotation, as shown in document CoP18 Com. I Rec. 11. The amended proposal was rejected by the Conference of the Parties.

Purpose and impact of the proposal

This proposal seeks to amend the annotation by deleting subparagraphs iv), v) and vii) of paragraph g), and also paragraph h), of annotation 2 to the Appendix-II listing of the African elephant *(L. africana*) populations of Botswana, Namibia, South Africa and Zimbabwe and by deleting the words “and for non-commercial purposes for” in relation to trade in leather goods for Zimbabwe.

The adoption of the proposal would result in no change in the provisions concerning trade in hunting trophies, live animals, hides, hair, leather goods and ekipas from the African elephant populations of Botswana, Namibia, South Africa and Zimbabwe except that leather goods from Zimbabwe could be traded for commercial as well as non-commercial purposes in future. Concerning raw ivory, the change proposed would mean that trade would not be limited to that of a quantity of specified stocks (which were already traded through the one-off sales in 2008) but would be opened to all registered government-owned stocks originating in the four States (excluding seized ivory and ivory of unknown origin). The provisions/conditions in paragraph g) ii) and iii) are not proposed for deletion, and therefore any trade in registered government owned stocks would still be only to certain trading partners verified by the Secretariat in consultation with the Standing Committee. The prospective importing countries and the registered government-owned stocks would be subject to verification by the Secretariat. Similarly, the condition in paragraph g) vi) has not been proposed for deletion and therefore the proceeds of the trade would be used exclusively for elephant conservation and community conservation and development programmes within or adjacent to the elephant range

The penultimate paragraph of annotation 2 would also remain in effect meaning that on a proposal from the Secretariat, the Standing Committee could decide to cause this trade to cease partially or completely in the event of non-compliance by exporting or importing countries, or in the case of proven detrimental impacts of the trade on other elephant populations.

The supporting statement does not indicate the quantity of ivory stocks currently held in the four concerned Parties. Recent ivory stockpile declarations made by these Parties under paragraph 7 e) of Resolution Conf. 10.10 (Rev. CoP18) amount to around 408 tonnes, although it is not clear if all of this would qualify for trade under the proposed revised paragraph g) of annotation 2.

Compliance with listing criteria

The populations of Botswana, Namibia and Zimbabwe were transferred to Appendix II at CoP10, and that of South Africa at CoP11, following an assessment by a Panel of Experts constituted, at the time, under Resolution Conf. 10.9 on *Consideration of proposals for the transfer of African elephant populations from Appendix I to Appendix II*.

The present proposal made does not seek to change the Appendix in which the populations of African elephants concerned are listed. However, it would have the effect of transferring certain stocks of ivory from an Appendix I trade regime to an Appendix II trade regime – albeit subject to some conditionality.

The annotation to the Appendix-II listing of the African elephant populations of Botswana, Namibia, South Africa and Zimbabwe is considered a substantive annotation and an integral part of the species listing in terms

of Resolution Conf. 11.21 (Rev. CoP17) on *Use of Annotations in Appendices I and II*. Parties agreed in Resolution that substantive annotations may be amended only by the Conference of Parties in accordance with Article XV of the Convention.

The proposal should therefore be evaluated with reference to the criteria in Resolution Conf. 9.24 (Rev. CoP17) on *Criteria for amendment of Appendices I and II* and the precautionary measures stipulated in Annex 4 of that Resolution.

In this regard, the supporting statement states that elephant populations of Botswana, Namibia, South Africa and Zimbabwe comprise around 256,000 elephants or 61.6% of all remaining elephants in Africa. This is in line with the information reported to the Standing Committee by the Secretariat under Resolution Conf. 10.10 (Rev. CoP18) in document SC69 Doc. 51.1. In document SC74 Doc. 68 the IUCN SSC African elephant Specialist Group reported that the savanna elephant numbers have also been stable or growing for decades especially in the Kavango-Zambezi Transfrontier Conservation Area, which harbours the largest number of this species on the continent and includes elephant populations of Botswana, Namibia and Zimbabwe. Therefore, the wild population of the species in the four States is not small. The supporting statement does not provide full details of the range of the species in the four States, but in two this totals over 247,000 km2, which does not appear to be a restricted area of distribution in the context of paragraph B of Annex 1 to Resolution Conf. 9.24 (Rev. CoP17). The supporting statement says that populations are either increasing or exhibiting a mild and non-significant decline recently. This accords with information presented to the Standing Committee by the Secretariat as mentioned above.

In terms of precautionary measures [Annex 4 of Resolution Conf. 9.24 (Rev. CoP17)], the present listing in Appendix II suggests that paragraph A 2 iii) is the precautionary measure applied. The proposal is to remove some of the special measures currently in place concerning the trade in ivory – in particular paragraph g), subparagraphs iv), v) and vii). However, the supporting statement does not provide information on what special measures would replace these or what effective enforcement controls are in place associated with these measures. The proponents do not discuss findings by the Elephant Trade Information System (ETIS) relating to the levels and trends in illegal trade in ivory in detail. It is acknowledged that the demand for ivory, particularly in Asia, has been linked to poaching in those range areas where law enforcement is neither strong nor effective. As mentioned above, the proponents do not specifically address precautionary safeguards concerning the trade in registered raw ivory but propose to retain the main restrictions in the annotation to the Appendix II listing adopted at CoP14. Considering the recent closure of domestic markets in Asia and elsewhere, it is not clear which country (or countries) might be a possible trading partner.

It would be helpful to understand how any future trade in registered government-owned raw ivory would be conducted, regulated and enforced, if the proposal is adopted. This would allow the Conference of the Parties to determine whether the precautionary measures are adequate to address the anticipated risks to the species. A very similar situation prevailed when the Parties considered the very similar CoP18 Prop. 11 at the last meeting of the Conference of the Parties.

Additional considerations (including relevant CoP recommendations)

The supporting statement notes that elements of annotation 2 are no longer relevant or appropriate. The elements of the annotation proposed for deletion by the proponents concern details of stockpiles of registered raw ivory detained by Botswana, Namibia, South Africa and Zimbabwe that were already exported. Whilst it is correct that the deletions proposed to paragraph g) of the annotation concern events that have occurred in the past, they also condition future activities as explained above. The deletion of paragraph h) by contrast would not appear to have any impact on trade in the future as the nine years since the sale of ivory have passed and Parties have agreed to delete Decisions 16.55 and 14.78 (Rev. CoP16) at CoP17.

The rationale of the proposal is framed around the funding challenges faced by most state agencies responsible for conservation in Africa. The proponents are of the view that the sale of legally sourced, registered ivory to responsible markets could generate revenue to fund implementation of national elephant management plans and anti-poaching strategies, as well as supporting community-based initiatives to secure elephant habitat, dispersal areas and corridors. The important role that peoples who have to co-exist with elephants play in the future of elephants is also emphasized.

The report on the Monitoring of Illegal Killing of Elephants (MIKE) to be considered by CoP19 (CoP19 Doc. 66.5) indicates a downward trend in the continental Proportion of Illegally Killed Elephants (PIKE) from 2011 to 2021. In terms of the southern Africa sub-regional PIKE trend, there is strong evidence of a downward trend in PIKE over the last five years and the PIKE in southern Africa in 2021 is 0.27 (below the average continental PIKE estimate of 0.40).

The proponents regard CITES as an inhibitor and not an enabler of progress towards the continued protection of large African elephant populations, and that CITES decisions remove rather than create incentives for conservation. The proponents furthermore reflect on the lack of scientific evidence to support the view that a complete ban on ivory trade results in elephant population recovery.

Provisional conclusions

The African elephant populations of Botswana, Namibia, South Africa and Zimbabwe do not appear to meet the criteria for their inclusion in Appendix I. Paragraph h) of annotation 2 has become obsolete and its deletion would appear to simplify the annotation somewhat.

However, in relation to the proposed amendments to delete elements of paragraph g) of annotation 2, it is unclear to the Secretariat whether the precautionary safeguards in Annex 4 of Resolution Conf. 9.24 (Rev. CoP17) have been fully addressed. If adopted, the proposed amendments would have the effect of reducing the quantity of registered government-owned raw ivory of *L. africana* from the populations of Botswana, Namibia, South Africa and Zimbabwe deemed to be specimens of species of Appendix I. The potential risks of increased poaching or illegal trade in ivory associated with a legal trade in registered government-owned raw ivory stocks, or measures to address these risks, are not elaborated upon. The proponents propose to retain the main restrictions in the annotation to the Appendix-II listing adopted at CoP14, but it remains unclear how any future trade in registered government-owned raw ivory would be conducted, regulated and enforced, if the proposal were adopted.

Proposal 5

***Loxodonta africana* (populations of Botswana, Namibia, South Africa and Zimbabwe) (African elephant)**

Proposal: Transfer from Appendix II to Appendix I

Proponents: Burkina Faso, Equatorial, Guinea, Mali, and Senegal

Provisional assessment by the Secretariat

CITES background

L. africana was included in Appendix III in 1976 at the request of Ghana. It was included in Appendix II at CoP1 (1977). At CoP7 (1989), the species was transferred to Appendix I. Subject to complex and detailed annotations, the populations of Botswana, Namibia and Zimbabwe were transferred to Appendix II at CoP10 (1997), and the population of South Africa was transferred to Appendix II under similar terms at CoP11 (2000). The annotations to these Appendix-II populations were merged and further amended at CoP12 (2002), CoP13 (2004) and CoP14 (2007). The text of the current annotation 2, agreed at CoP14, has not been amended since.

At CoP17 (2016), proposals by Namibia and Zimbabwe to delete Annotation 2 to the listing of their respective African elephant populations, were considered and both proposals were rejected. A proposal to transfer the populations of Botswana, Namibia, South Africa and Zimbabwe from Appendix II to Appendix I was also considered at CoP17 and rejected.

At CoP17, the Conference of the Parties discussed the issue of a decision-making mechanism for a process of trade in ivory, which forms part of annotation 2 to the Appendix-II listing and decided that the mandate to the Standing Committee to develop a decision-making mechanism for a process of trade in ivory under the auspices of the CoP, in Decision 16.55, should not be extended. The Decision was therefore deleted.

An identical proposal to the present was submitted to CoP18 (2019) as CoP18 Prop. 12. The proposal was rejected.

Purpose and impact of the proposal

The proposal seeks to transfer the populations of African elephant (*L. africana*) of Botswana, Namibia, South Africa and Zimbabwe from Appendix II to Appendix I. This would result in the prohibition of international trade for primarily commercial purposes in African elephant specimens of wild origin, including from the four range States concerned. The proposal correctly points out that an Appendix-I listing does not preclude the trade in hunting trophies of *L. africana*, as recognized in Resolution Conf. 2.11 (Rev.) on *Trade in hunting trophies of species listed in Appendix I*.

The impact of the adoption of the proposal on the current regulations for trade in ivory would be minimal because international trade in ivory for primary commercial purposes has been prohibited since 2008, as also indicated in annotation 2. If adopted, trade ivory would continue to be subject to provisions in Article III of the Convention, as has been the case since 2008.

Compliance with listing criteria

The proposal is submitted in accordance with the biological criteria in Annex 1, paragraph C, i) and ii) of Resolution Conf. 9.24 (Rev. CoP17) on *Criteria for amendment of Appendices I and II*. That is to say the proponents are of the view that there has been a marked decline in population size of African elephants in the wild in Botswana, Namibia, South Africa and Zimbabwe, which has been either observed as ongoing or as having occurred in the past (but with a potential to resume) or inferred or projected on the basis of a decrease in the area of habitat and levels or patterns of exploitation. The supporting statement addresses the issue in terms of a decline in the biological species *L. africana* as a whole, yet the proposal concerns only the populations of Botswana, Namibia, South Africa and Zimbabwe - which are considered a “species” in terms of Article I (A) of the Convention. Concerning the populations of these States, the supporting statement notes that some animals in parts of Namibia, Botswana and Zimbabwe are migratory between different States which requires coordination of surveys to avoid double-counting or undercounting and that such coordination was not undertaken during the survey on which the estimates provided in Thouless *et al* (2016) which, in the

proponent's view, results in some doubt over the reliability of national population totals reported in these areas. The extent of this doubt is not quantified.

At CoP10 in 1997 Parties determined that the populations of Botswana, Namibia and Zimbabwe did not meet the criteria for inclusion in Appendix I and the same view was reached for the population of South Africa at CoP11 in 2000.

At the 69th meeting of the Standing Committee in 2017, in the Annex to document SC69 Doc. 51.1, the Committee received a report on the status of the species as required under paragraph 12 b) of Resolution Conf. 10.10 (Rev. CoP18 which was based on Thouless *et al,* (2016). For the populations of African elephant which are the subject of this proposal the report noted that Botswana had by far the largest elephant population of any country in Africa. The report noted that population declines in Botswana between 2006 and 2015 seemed ambiguous and may be the result of uncounted elephants, range expansion, seasonal movements into and out of the surveyed area, increased poaching or methodological differences between surveys. Range expansion had been observed into the west towards Namibia and into central Botswana, with notable numbers of elephants observed for the first time in a survey in 2015 in the Central Kalahari Game Reserve. Elephant populations in Namibia and South Africa had increased. Zimbabwe's elephant population declined due to reductions in the Sebungwe and Lower Zambezi populations because of poaching, partially compensated by increases in populations in the south-east of the country. A further report of this kind was received by the Standing Committee at SC74 in the Annex 1a to document SC74 Doc. 68. The report made reference to Gobush *et al* (2021), although the latter report does not contain information specific to the populations of Botswana, Namibia and Zimbabwe and was still based on the data from Thouless *et al,* (2016). The report of the IUCN SSC African elephant Specialist Group to SC74 also noted the unexplained deaths of over 400 elephants in Botswana and Zimbabwe in 2020 which may be a cause for concern.

Overall, the available information does not seem to indicate that the populations of African elephant of Botswana, Namibia, South Africa and Zimbabwe have undergone a marked decline, and therefore, they may not meet the criteria for their inclusion in Appendix I that is mentioned in paragraph C of Annex 1 of Resolution Conf. 9.24 (Rev. CoP17).

The proponents also reference the fact that the current listing is out-of-step with Annex 3 of the Resolution which states that listing of a species in more than one Appendix should be avoided in general in view of the enforcement problems it creates. However, Annex 3 goes on to state that 'when split-listing does occur, this should generally be on the basis of national or regional populations', as is the case with the listing of the populations of African elephant of Botswana, Namibia, South Africa and Zimbabwe.

Additional considerations (including relevant CoP recommendations)

In section 6.2 (Legal trade), the proponents refer to "exemptions" that allow international trade in ivory for commercial purposes. However, the current annotation 2 to the Appendix II listing of the African elephant populations of Botswana, Namibia, South Africa and Zimbabwe does not allow for trade in ivory for commercial purposes since the single sale of register raw ivory stocks from these range States that took place in 2008. Since then, international trade in raw ivory for primary commercial purposes has been prohibited, and trade in ivory has been subject to Article III of the Convention.

The report on the Monitoring of Illegal Killing of Elephants (MIKE) to be considered by CoP19 (CoP19 Doc. 66.5) indicates a downward trend in the continental Proportion of Illegally Killed Elephants (PIKE) from 2011 to 2021. In terms of the southern Africa sub-regional PIKE trend, there is strong evidence of a downward trend in PIKE over the last five years and the PIKE in southern Africa in 2021 is 0.27 (below the average continental PIKE estimate of 0.40).

In section 10 (Consultations), the supporting statement indicates that Botswana, Namibia, South Africa and Zimbabwe had been consulted over the proposal on 9 June 2022, but that there had been no immediate response from them.

Provisional conclusions

The information provided in the supporting statement does not indicate that any of the four African elephant populations that are the subject of this proposal underwent marked declines in their populations in the wild. The populations of *L. africana* of Botswana, Namibia, South Africa and Zimbabwe are not small, and the area of distribution of the species in the four range States is not restricted. The Secretariat finds that Criteria A, B

or C in Annex 1 of Resolution Conf. 9.24 (Rev. CoP17) do not seem to be met given the populations of African elephants from these four range States.

Proposal 6

***Cynomys mexicanus* (Mexican prairie dog)**

Proposal: Transfer from Appendix I to Appendix II

Proponent: Mexico

Provisional assessment by the Secretariat

CITES background

C. mexicanus (Mexican prairie dog) was included in Appendix I in 1975.

This proposal has been prepared by Mexico in the context of Resolution Conf. 14.8 (Rev. CoP17) on *Periodic Review of species included in Appendices I and II*. At its 31st meeting (online, 2021), the Animals Committee agreed, with reference to the criteria in Resolution Conf. 9.24 (Rev. CoP17), that it would be appropriate to transfer the species from Appendix I to Appendix II. In accordance with paragraph 2 i) i) of Resolution Conf. 14.8 (Rev. CoP17). Mexico as the range State is therefore submitting the proposal for consideration at the present meeting.

Purpose and impact of the proposal

This proposal seeks to transfer *C. mexicanus* from Appendix I to Appendix II. If the proposal is adopted, international trade in all specimens of the species will be regulated in accordance with the provisions of Article IV of the Convention.

Compliance with listing criteria

This species is endemic to four states in Mexico. Unpublished fieldwork referenced in the supporting statement (Medellín et al., 2019) reported that colony size varied between 26 and 1,588 animals. Forty-nine colonies are said to exist which would suggest that the total population may be numbered in the tens of thousands of specimens. This is above the guideline for a small population size in the wild given in Annex 5 of Resolution Conf. 9.24 (Rev CoP17).

The area of occupancy of the species has declined by 73%, from 800 km^2 in 1985 to 215 km^2 in 2019. The colonial nature of the species inevitably means that the species has a vulnerability to intrinsic or extrinsic factors.

The number of extant colonies of the species declined from 88 in 1993 to 54 colonies in 1999. More recent information does not seem to be available. On the assumption that there has been no change in colony size, this would represent a 38% decrease in the population size which is below the guideline for a marked recent decline in the population size in the wild given in Annex 5 of Resolution Conf. 9.24 (Rev CoP17). The main reason for the decline is said to be anthropogenic habitat loss due to change in agricultural practices, and killing and poisoning, as the species is considered an agricultural pest.

There is virtually no evidence of any trade or demand for the species for any sort of commercial use.

The proponent cites the precautionary measure in paragraph A 2 of Annex 4 to Resolution Conf. 9.24 (Rev. CoP17) without stating which sub-paragraph of that paragraph is relevant in this case. The content of the supporting statement would suggest that it is sub-paragraph 2 a) i) that applies: *the species is not in demand for international trade, nor is its transfer to Appendix II likely to stimulate trade in, or cause enforcement problems for, any other species*. The species cannot be confused with any other CITES-listed taxon, and it seems unlikely that transfer to Appendix II would create a demand for the species.

As noted by the proponent, under precautionary measure A. 1, an Appendix I species such as *C. mexicanus* cannot be removed from the Appendices unless it has been first transferred to Appendix II, with monitoring of any impact of trade on the species for at least two intervals between meetings of the Conference of the Parties.

The species is fully protected in Mexico and can only be taken from the wild for conservation of research purposes. Penalties for breaching this legislation are substantial and dissuasive.

Additional considerations (including relevant CoP recommendations)

None.

Provisional conclusions

The Secretariat finds that although the conservation status of this species has deteriorated in recent years, it does not appear to meet the biological criteria for inclusion in Appendix I in Annex 1 of Resolution Conf. 9.24 (Rev. CoP17) and international trade does not seem to be a factor affecting the status of the species.

Proposal 7

***Branta canadensis leucopareia* (Aleutian cackling goose)**

Proposal: Transfer from Appendix I to Appendix II

Proponent: United States of America

Provisional assessment by the Secretariat

CITES background

B. c. leucopareia was included in CITES Appendix I in 1975.

This proposal has been prepared by the United States of America in the context of Resolution Conf. 14.8 (Rev. CoP17) on *Periodic Review of species included in Appendices I and II*. At its 31st meeting (online, 2021), the Animals Committee agreed that with reference to the criteria in Resolution Conf. 9.24 (Rev. CoP17), that it would be appropriate to transfer the subspecies from Appendix I to Appendix II. In accordance with paragraph 2 i) i) of Resolution Conf. 14.8 (Rev. CoP17). The United States of America as arrange State is therefore submitting the proposal for consideration at the present meeting.

Purpose and impact of the proposal

This proposal seeks to transfer *B. c. leucopareia* from Appendix I to Appendix II. If the proposal is adopted, international trade in all specimens of the species will be regulated in accordance with the provisions of Article IV of the Convention.

Compliance with listing criteria

Concerning inclusion of the species in Appendix II, the proponent asserts that it no longer meets the criteria for inclusion in Appendix I and should be transferred from Appendix I to Appendix II in accordance with the Precautionary Measures in Annex 4 of CITES Resolution Conf. 9.24 (Rev. CoP17), which indicates that Parties should “adopt measures that are proportionate to the anticipated risks to the species”. The sub-species population is not small, is not in decline, and is not restricted in its distribution, as it once was. Furthermore, the sub-species is not in demand for the international trade and a transfer from Appendix I to Appendix II would not stimulate such trade.

The supporting statement reports that *B. c. leucopareia* is a migratory sub-species that had almost vanished, but has rebounded in response to conservation efforts. Historically, the goose occupied breeding grounds during the summer on dozens of islands across the North Pacific and migrated south for the winter to Japan and the west coast of North America, originally including Canada, Mexico, and the United States of America. Overexploitation and the release of non-native foxes on most of their breeding islands to propagate the fur trade in the 19th and 20th centuries is said to have driven the species towards the brink of extinction. By the 1960s, only a few hundred birds remained, found on a handful of fox-free Alaskan islands in the United States of America.

The proposal states that the current distribution of *B. c. leucopareia* is predominantly in the United States of America, with small re-introduced populations in the Russian Federation and Japan, and occasional records during the winter season in Mexico. The main populations are in the western Aleutian Islands (approximately 160,000 individuals) and the Semidi Islands population (only about 300 individuals) in the United States of America and around 1,700 birds in the Russian Federation and Japan. All breeding populations engaging in annual migrations. The population size therefore is currently estimated at greater than 162,000 individuals.

The proposal reports that the population of *B. c. leucopareia* in the western Aleutian Islands in the United States of America, rebounded after extensive conservation measures were adopted. These included: fox removal, hunting season closures and harvest strategies, management of overwintering and migratory staging areas, disease control, and captive-breeding and re-introductions. The measures were implemented through management plans including the *Aleutian Goose Recovery Plan* and the 1999 *Pacific Flyway Management Plan for the Aleutian Canada Goose.* Current management efforts involve continued detailed monitoring surveys, managing a harvest strategy, and addressing complaints from the agricultural community.

The supporting statement provides details of each population's annual migrations and the range of habitats that the subspecies needs during its breeding and wintering seasons. However, it does not provide any information on its breeding biology, including its life span, age to maturity, clutch frequency and size, mortality rates, etc.

Current threats include habitat alteration in wintering and migration areas, continued predation from invasive species (Artic fox and Norway rat), low recruitment in western populations and infectious disease (e.g. Avian cholera). Urbanization and shifts in agricultural practices affect birds in their wintering and migration habitats in California and Oregon. Harvest at lows levels is no longer a serious threat, although incidental take may continue to affect population size. Thanks to land acquisition programmes, winter and migratory staging habitat does not appear to be limited in most areas.

Most international trade in the CITES Trade Database has been motivated by conservation measures, including the international transport of primarily captive-bred birds for re-introduction efforts or for captive-breeding. Since the sub-species was included in the Appendices in 1975, only three records indicate international trade of wild geese for commercial or trophy purposes (21 geese in total). The proponents assert that it is possible that international trade for hunting/commercial purposes could increase modestly in the scenario of Appendix II transfer, but it is not expected to affect the population at large, as the United States of America (the range country in which the vast majority of the geese reside) enforces state-level harvest restrictions on the geese through hunting permits, bag limits, and hunting seasons.

The recovery of *B. c. leucopareia* is hailed by the proponents as a "conservation success story", to the extent where the sub-species is now managed as a game bird in the United States of America. While unsustainable harvest once posed a threat to the Aleutian cackling goose, hunting is now thought to be well managed and regulated in the United States of America. The proponents highlight that the species recovery plan established a population target of 60,000 birds and that as the population is now in excess of 160,000 birds, some regulation of the population through an officially regulated harvest is required, partly because the birds cause crop damage during spring staging in California. Up to 10 birds can be harvested per day by permitted hunters during goose season (with bag limits determined at the state level). Incidental take may occur to some extent but is not thought to constitute a major threat and no illegal trade has been reported in the United States of America.

Additional considerations (including relevant CoP recommendations)

The text of supporting statement uses the name *Branta hutchinsii leucopareia* which is commonly used in ornithological references, but is not that used in the current standard nomenclatural refence adopted by the Conference of the Parties through Resolution Conf. 12.11 (Rev. CoP18) on *Standard nomenclature*. This situation may change in future depending on the advice of the Animals Committee to the Conference of the Parties.

Provisional conclusions

On the basis of the information in the supporting statement, it would appear that the wild population of *B. c. leucopareia* no longer meets the biological criteria for inclusion of a species in Appendix I. It does not have a small population, a restricted area of distribution or a marked decline in the wild population. Available information seems to suggest that the subspecies has undergone a significant recovery in population size in the wild. The transfer of this subspecies to Appendix II would seem to be in accordance with Precautionary Measure A 2 a) i) in Annex 4 of CITES Resolution Conf. 9.24 (Rev. CoP17).

Proposal 8

***Kittacincla malabarica* (White-rumped shama)**

Proposal: Include in Appendix II

Proponents: Malaysia and Singapore

Provisional assessment by the Secretariat

CITES background

This species is known as *Copsychus malabaricus* according to the standard nomenclatural reference adopted by the Conference of the Parties through Resolution Conf. 12.11 (Rev. CoP18) on Standard nomenclature..

This is the first time that *C. malabaricus* has been proposed for inclusion in the Appendices.

Purpose and impact of the proposal

The proposal seeks to include *C. malabaricus* in Appendix II, in accordance with Article II, paragraph 2 (a) of the Convention. If the proposal is adopted, international trade in all specimens of the species will be regulated in accordance with the provisions of Article IV of the Convention.

Compliance with listing criteria

Concerning inclusion of the species in Appendix II, the proponent asserts that it meets criterion B in Annex 2 a of Resolution Conf. 9.24 (Rev. CoP17) whereby 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 does not reduce the wild population to a level at which its survival might be threatened by continued harvesting or other influences.

C. malabaricus is a small non-migrating and sedentary bird that can be found in the undergrowth of broadleaved evergreen and mixed deciduous forest, secondary growth and bamboo. It is a solitary species that lives on average around 3.6 years. It forms monogamous pair bonds during the breeding season, when the males are highly territorial and sing to defend their territory. The female lays two to four eggs at 24-hour intervals, followed by an incubation period of 13-15 days.

The supporting statement states that it is a widespread species, native to 15 countries, occurring from India, Nepal and southern China in the north, to Indonesia (as far east as East Java and East Kalimantan) in the south. The species has also been introduced to the Hawaiian Islands of O'ahu and Kaua'I (United States of America). The proponents report that South-East Asian populations are thought to be in decline, with local extinctions having already occurred in places such as Java, Sumatra and West Kalimantan as a direct result of the cage bird trade.

The Secretariat notes that in 2021 the species was classified as Least Concern on the IUCN Red List of Threatened Species, with a decreasing population trend. This assessment was that the species has an extremely large range, and hence does not approach the thresholds for Vulnerable categorization. Despite the fact that the population trend appears to be decreasing, the decline is not believed to be sufficiently rapid to approach the thresholds for Vulnerable under the population trend criterion. The population size has not been quantified, but it is not believed to approach the thresholds for Vulnerable under the population size criterion.

There are no population estimates presented in the proposal for the species across its range, but according to the IUCN assessment it is believed to be large as the species is described as common in at least some parts of its range and is well above 10,000 individuals.

The proponents identify capture to supply the demand for the species for use in bird singing competitions and as pets in multiple Southeast Asian countries as the primary threat to the conservation of the species. The supporting statement provides strong evidence that the species is in high demand in trade, but the vast majority of the trade appears to be domestic. However, the species has been recorded for sale on several online trade platforms and some limited data was extracted from TRAFFIC's Wildlife Trade Information System (WiTIS). A total of 615 seizure "incidents" are reported as recorded between January 2009 and May 2022, concentrated in the Southeast Asian region involving *C. malabaricus*, but it is not clear how many specimens were involved.

Concerning the scale of the international trade demand for the species, the supporting statements claims that at least 78 (13%) of the total seizure incidents in the WiTIS database concerning *C. malabaricus* involved international smuggling. Of these, 42 were bound for Indonesia from Malaysia (all Indonesia-bound shipments were reported to have been transported from Malaysia). Fifteen shipments were found to have been sent from Malaysia to Thailand. There were 12 international seizures with unspecified trade routes. Anecdotal evidence from traders also suggests that smuggling of the birds occurs internationally.

To demonstrate that the species is in demand internationally, the proponents present some limited trade records in *C. malabaricus* from the CITES Trade Database, including the import of 5,768 live individuals reported by importers between 1998 and 2004, mostly exported from range States to European countries. However, no trade is reported since 2004.

According to the proponents, trade in *C. malabaricus* is specifically listed as protected in five of the species' range states (Bangladesh, Cambodia, India, Malaysia, Thailand) and additionally receives broader protection under the regulatory framework for wildlife under four countries (China, Indonesia, Myanmar, Singapore).

Additional considerations (including relevant CoP recommendations)

There is some taxonomic uncertainty over the number of subspecies recognised, with a number of these being island endemics, with small populations and limited distributions, making them particularly vulnerable to over-exploitation. However, the proposal is to list the species, so all known and future subspecies identified would be covered by the proposed listing.

While China supported the proposal, it is not in favour of including the Chinese population.

Provisional conclusions

On the basis of the information in the supporting statement, it appears that the species is in high demand in trade, and although the harvest appears to be driven primarily by domestic rather than international trade, evidence has been presented to demonstrate that wild specimens of the species are known to be traded internationally. Although the evidence is not strong, taking a precautionary approach, it is the Secretariat's view that regulation of trade in the species could 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.

Proposal 9

***Pycnonotus zeylanicus* (Straw-headed bulbul)**

Proposal: Transfer from Appendix II to Appendix I

Proponents: Malaysia, Singapore and United States of America

Provisional assessment by the Secretariat

CITES background

P. zeylanicus was included in Appendix II at CoP10 (1997) (see CoP10 Prop. 49).

Purpose and impact of the proposal

The present proposal seeks to transfer *P. zeylanicus* from Appendix II to Appendix I. If the proposal is adopted, international commercial trade in specimens of *P. zeylanicus* of wild origin will be prohibited. International trade in specimens of the species will be regulated in accordance with the provisions of Article III of the Convention.

If *P. zeylanicus* is included in Appendix I, breeding operations wishing to commercially export and trade in specimens of this species would need to be registered with the Secretariat in accordance with Resolution Conf. 12.10 (Rev. CoP15) on *Registration of operations that breed Appendix-I animal species in captivity for commercial purposes.*

Compliance with listing criteria

Concerning inclusion of the species in Appendix I, the proponent asserts that it meets criteria A i), A ii) (small wild population with aggravating factors) and C i) (marked decline in the population size in the wild, which has been observed as ongoing or as having occurred in the past but with a potential to resume) in Annex 1 of Resolution Conf. 9.24 (Rev. CoP17).

The straw-headed bulbul is a sedentary, non-migratory species that can be found in a range of habitats. It occurs in successional habitats bordering rivers, streams, marshes and other wet areas, usually bordered by broadleaf evergreen forest and secondary growth, where it can often be found feeding on the ground as well as in the trees. It occurs most frequently in lowlands, but has been recorded at elevations of up to 1,600 m. It has a reported generation length of 6.4 years. Breeding occurs between January and September, with a breeding pair generally laying two eggs in a clutch.

The wild population is estimated to be small, with the latest IUCN Red List Assessment for the species conducted in 2020 placing global estimates in the region of 1,000–2,499 individuals. These numbers are well below the threshold of less than 5,000 individuals for a low-productivity species, to be considered a small wild population, as mentioned in the general guidelines provided in Annex 5 of Resolution Conf. 9.24 (Rev. CoP17) and could provide justification for inclusion of the species in Appendix I. Concerning the aggravating factor of a reduction in the areas and quality of habitat, the proponents argue that as it is predominantly a lowland species, its habitat is decreasing throughout its range, primarily due to logging and development, including clearance for agricultural plantations. Expansions of residential and industrial areas throughout its range have also contributed to its habitat loss.

P. zeylanicus occurs in Southeast Asia, where the species was once widespread and common, with a range extending from southernmost Myanmar and Thailand through Peninsular Malaysia to the islands of Borneo, Sumatra, Java. However, it is now thought to be limited to Singapore, parts of Malaysia (Peninsular Malaysia, Sarawak and Sabah), remote parts of Kalimantan in Indonesia and possibly Brunei.

The proponents argue that there has been a marked decline in the *P. zeylanicus* population in the wild. This is supported by published Red List assessments undertaken by IUCN since 1988. The species was first assessed in 1988 as Near Threatened (NT); reassessed as Vulnerable every four years from 1994 to 2012; Endangered in 2016 and Critically Endangered in 2018. *P. zeylanicus* has most recently been assessed for the IUCN Red List of Threatened Species in 2020, when it was listed as Critically Endangered. The justification presented for the assessment is that “This species is declining extremely rapidly across its range as a result of trapping of wild birds for the cage-bird trade, compounded by habitat loss within its rather specific habitat type.” The proponents present the results of recent surveys indicating that the extant sub-populations are continuing to decrease and

note that the only sub-population that is increasing is found in Singapore, which was estimated to have 202 individuals in 2016.

The current population trend is assessed by IUCN as decreasing, with a justification that “persecution for the pet trade and habitat destruction continue to threaten populations across the species' range, and according to some commentators cited in the supporting statement these factors are suspected to be driving a rapid and on-going decline that exceeds 80% in the previous three generations (15 years)”, based on information from the Asian Songbird Trade Specialist Group. These levels of decline exceed the threshold of 50% or more in the last 10 years or three generations, whichever is the longer, for a marked decline, as mentioned in the general guidelines provided in Annex 5 of Resolution Conf. 9.24 (Rev. CoP17). As the population is small, a percentage decline of 20% or more in the last 5 years or 2 generations (whichever is the longer) is considered more appropriate, and it is likely that this threshold is also met. The marked decline would appear to provide justification for inclusion of the species in Appendix I.

The CITES trade database indicates that international commercial trade has been recorded in 704 live specimens of *P. zeylanicus* (exporter- and importer- reported; excluding 7 specimens exported for scientific purposes) since the species was listed in Appendix II in 1997. All were declared as wild caught, except for three individuals declared by Kuwait (the importer) as captive bred. All exported birds originated from Malaysia and were imported by Indonesia, Netherlands, Singapore, Kuwait and Taiwan. Most of this trade took place prior to 2000. In the last two decades, only 46 live birds were recorded. While these numbers may seem relatively small, for a species with a population of not more than 2,500 individuals, any off take from the wild population may be significant.

The proponents assert that another sign that the population is decreasing is the decline in the number of birds available at market in recent years, coupled with sharp increases in the commercial value of specimens. It has also been reported that wild-caught straw-headed bulbuls are considered superior and can fetch higher prices than captive-bred birds. The proponents present several incidents of illegal trade and seizures despite bans on trade in live birds due to concern of the Avian influenza virus.

Additional considerations (including relevant CoP recommendations)

P. zeylanicus has been bred in captivity with some success, notably in Singapore and Peninsular Malaysia. To date, there are eight captive breeders in Peninsular Malaysia actively conducting commercial captive breeding for this species, under a special permit system.

All range States were consulted, and non-proponent Parties Myanmar and Thailand are said to have indicated their support for the proposal.

Provisional conclusions

Based on the information in the supporting statement and the current IUCN Red List assessment, the wild population appears to be small and has shown a marked decline in almost all sub-populations across its range, which has been attributed to trade impacts, compounded by habitat loss. Therefore, the Secretariat is of the view that the species appears to meet Criteria A i), A ii) and C i) in Annex 1 of Resolution Conf. 9.24 (Rev. CoP17).

Proposal 10

***Phoebastria albatrus* (Short-tailed albatross)**

Proposal: Transfer from Appendix I to Appendix II

Proponent: United States of America

Provisional assessment by the Secretariat

CITES background

P. albatrus was included in Appendix I in 1975.

Purpose and impact of the proposal

This proposal seeks to transfer *P. albatrus* from Appendix I to Appendix II. If the proposal is adopted, international trade in all specimens of the species will be regulated in accordance with the provisions of Article IV of the Convention.

This proposal has been prepared by the United States of America in the context of Resolution Conf. 14.8 (Rev. CoP17) on *Periodic Review of species included in Appendices I and II*. At its 31st meeting (online, 2021), the Animals Committee agreed, with reference to the criteria in Resolution Conf. 9.24 (Rev. CoP17), that it would be appropriate to transfer the species from Appendix I to Appendix II. In accordance with paragraph 2 i) i) of Resolution Conf. 14.8 (Rev. CoP17). the United States of America as a range State is therefore submitting the proposal for consideration at the present meeting.

Compliance with listing criteria

Concerning inclusion of the species in Appendix II, the proponent asserts that it no longer meets the criteria for inclusion in Appendix I and should be transferred from Appendix I to Appendix II in accordance with the provisions of Annex 1 of CITES Resolution Conf. 9.24 (Rev. CoP17).

P. albatrus is a colonially-nesting, monogamous, annual breeding pelagic seabird that has a lifespan from 12-45 years. Their monogamous bond is formed around 6 years of age, taking roughly 2 years to form, with breeding following shortly.

According to the supporting statement *P. albatrus* has a widespread distribution, occurring all along the North Pacific Ocean, with the species using the west North Pacific for foraging grounds, as well as the Bering Sea, and the Gulf of Alaska. Southern and north-eastern Japan is used during breeding, and the Aleutian Islands during moulting periods. Historically, there were 15 known islands that *P. albatrus* used for breeding that are subject to a range of extrinsic factors that have affected the population. Only eight islands are currently inhabited. It nests on isolated, offshore, windblown islands, with limited human access. The species prefers flat, open grassy landscapes for nesting, but due to soil erosion *P. albatrus* now often nests on gently sloping to near vertical cliffs, with scarce vegetation.

In terms of status and trends, the supporting statement notes that *P. albatrus* was assessed in the IUCN Red List of Threatened Species as Vulnerable since 2008. The Secretariat notes that in 2018 the species was assessed as Vulnerable, with an increasing population trend.

The total population size was estimated by an opinion of USFWS in 2018 to be 5,856 individuals, following the breeding season from 2016-2017, which is just above the general threshold for a small population of 5,000 individuals suggested in Annex 5 of Resolution Conf. 9.24 (Rev. CoP17). The Secretariat notes that the IUCN Red List assessment does not give an estimate for the total population, but states that the number of “mature individuals” was 1,734 in 2018. This seems at odds with the claim by the proponents that the populations are steadily increasing at a yearly rate of 8.5%, where they give a most recent estimate of the breeding population (presumably equivalent to “mature individuals”) from 2014 of roughly 1,928 individuals.

With reference to paragraph A v) in Annex 1 of Resolution Conf. 9.24 (Rev. CoP17), the species is slow to mature and has significantly low annual reproduction rates meaning that the species may have a high vulnerability to intrinsic factors.

Regarding extrinsic factors, the supporting statement highlights that *P. albatrus* is vulnerable to volcanic eruptions, typhoons and nuclear accidents. For example, Torishima island has experienced volcanic eruptions, most recently in 2002, with 1902 and 1939 being the most catastrophic, destroying a large portion of the initial breeding habitats by burying nest sites and vegetation. In 1995, Torishima island also experienced a typhoon before the breeding season of the species which destroyed most of the vegetation. The distribution of *P. albatrus* coincides with their historic range, but their populations have decreased significantly and a northward shift in distribution has been noted that is presumed to be associated with *P. albatrus* following changes in squid distribution which is primarily caused by climatic and oceanic changes.

Historically, *P. albatrus* was exploited directly for their feathers, which were used for hats, quilts, pillows and writing quills. Their bodies were also used for rendering fat and processed into fertiliser, while their eggs were consumed by local inhabitants of the Aleutian Islands. Colonies were exploited to near extinction between 1887 and 1933, but there is no longer a commercial harvest, and no national use is permitted other than use for recovery actions, education and scientific purposes. There are some indirect mortalities as a result of bycatch from commercial fisheries and contaminants as a result of human activities.

As the CITES trade database shows, the level of commercial trade in *P. albatrus* during the period 1975 to 2019 has been minimal, consisting of only pre-convention specimens traded in 2004, with all other trade being for scientific purposes.

Additional considerations (including relevant CoP recommendations)

This proposal is consistent with other proposals accepted by the Conference of the Parties under the Periodic Review of the Appendices, which sought to transfer populations to Appendix II that may still meet the biological criteria for inclusion in Appendix I, but where international trade is not considered to be a threat, such as *Lichenostomus melanops cassidix* (CoP17 Prop. 18) and *Zyzomys pedunculatus* (CoP18 Prop. 17).

Provisional conclusions

Based on the available information in the proposal and the IUCN Red List assessment, it appears that the wild population of *P. albatrus* is small but increasing and it has a restricted area of distribution during the breeding season. Noting the discrepancies in the various available population estimates and trends available, the Secretariat notes that even the maximum population estimate is barely above the general threshold, and the species is slow to mature and has significantly low reproduction rates. Taking account of the above, the Secretariat finds that the species may continue to meet the biological criteria for inclusion of a species in Appendix I, in particular Criterion A i), iii) and iv). Furthermore, although the proponents state that there is no perceived threat from international trade, the Secretariat notes that it was the high trade demand for this species historically that drove it close to extinction.

In summary, taking a precautionary approach, the Secretariat finds that the species may still meet the biological criteria for inclusion in Appendix I.

Proposal 11

***Caiman latirostris* (population of Brazil) (Broad-snouted caiman)**

Proposal: Transfer from Appendix I to Appendix II

Proponent: Brazil

Provisional assessment by the Secretariat

CITES background

C. latirostris was included in Appendix I in 1975.

The population of Argentina was transferred to Appendix II at CoP10 (1997), subject to the resolution on ranching applicable at the time.

Purpose and impact of the proposal

The proposal seeks to transfer *C. latirostris* (population of Brazil) from Appendix I to Appendix II and would mean that specimens of the species from all sources could be traded internationally from that country. However, the supporting statement states that farming is the only management type proposed or allowed following requirements of national laws and management plans. Regarding international trade, the Brazilian CITES Administrative Authority is said to have effective mechanisms to control all segments of the production chain. The supporting statement states that Brazil will practice zero quota of "ranched or harvested individuals", which presumably means that international trade will only be allowed in specimens bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), although this is not made clear in the supporting statement.

Compliance with listing criteria

The contention of the proponent is that the species in Brazil does not satisfy the criteria for inclusion in Appendix I detailed in in Annex 1 of Resolution Conf. 9.24 (Rev. CoP17). They also contend that in terms of precautionary measures in Annex 4 of the Resolution, the species is likely to be in demand for trade but its management in Brazil is such that the implementation of the requirements of the Convention, in particular Article IV, is satisfactory and appropriate enforcement controls and compliance with the requirements of the Convention are in place.

The supporting statement states that the national Programme for Conservation Biology and Management of Brazilian Crocodilians implements a nationwide monitoring by systematic surveys applying a set of standard methodologies although the data on distribution and abundance in Table 1 of the supporting statement are drawn from a wide variety of different published references using different abundance metrics: crude sightings and densities per (presumably linear) kilometre and per square kilometre. The total population of the species in Brazil is estimated as 400,000 to 800,000 individuals, based on a density of 1-2 individuals per hectare and a high probability of occurrence in 40,000 hectares. This is considerably above the guideline for a small wild population given in the definitions in the listing criteria.

C. latirostris is found in a large number of small Atlantic coastal drainages from the eastern tip of Brazil to the border with Uruguay. The supporting statement says that the extension of occurrence (which is used in the listing criteria) in Brazil is 2.6 million km^2, the area of occupation is estimated to be >20.000 km^2 but that there is a high probability to find the species in only 4,000 km^2. Even allowing for the often linear distribution of the species, there is a great degree of variation between these figures. As reported by Zucoloto et al (2021)[2] the species has low population densities and genetic diversity in Brazil with a limited number of effective breeders.

[2] *Zucoloto R.B, Bomfim G.C, Fernandes F.M. C , Schnadelbach A.S, Piña C. I. and Verdade L.M. (2021) Effective population size of broad-snouted caiman (Caiman latirostris) in Brazil: A historical and spatial perspective. Global Ecology and Conservation. Volume 28, https://doi.org/10.1016/j.gecco.2021.e01673*

As noted by Filogonio et al (2010)[3] few studies have dealt with the status or dynamics of Brazilian populations of *Caiman latirostris* in the wild. It is therefore difficult to know if a marked decline in the population size in the wild has occurred.

Caiman latirostris was listed as Endangered in the IUCN Red List of Threatened Species in 1990 but reclassified to Lower Risk/least concern in 1996. It is not immediately clear if this was due to an improved conservation status or better access to information. Nevertheless, Siroski et al (2020)[4] report the species widely dispersed in Brazil among many small habitat patches over a very large area but at relatively low density. Although the species is found in the area of Brazil with the greatest human population and where considerable habitat alteration has taken place, it has also been found to be quite adaptable and has colonized various man-made habitats.

Under Annex 3 of Resolution Conf. 9.24 (Rev. CoP17), the listing of a species in more than one Appendix should be avoided in general in view of the enforcement problems it creates. However, when split-listing does occur, this should generally be on the basis of national or regional populations, As the Argentinian population of this species has already been transferred to Appendix II with no notable implementation problems reported, this does not appear to be a concern in the case of the present proposal.

Concerning the precautionary measures in Annex 4 of the Resolution, although a list of applicable legislation is presented, the provisions of these laws applying to *C. latirostris* are not well explained. The five farms from which it seems trade will be permitted have to be licensed and registered in a national database and submit annual reports – although the contents of the latter are not specified. It seems that they must also have annual licenses for the transport of and trade in *C. latirostris* specimens. Although again it is not clear, it seems that animals from the farms must be taken to registered slaughterhouses where the Ministry of Agriculture and the State Sanitary Authority are responsible for monitoring meat trade and meat sanitary quality. All skins from the farms must be tagged in accordance with Resolution Conf. 11.12 [Rev. CoP15 presumably].

Illegal trade is said to be restricted to local trade for human consumption in the São Francisco River basin in northeastern Brazil and illegal trade of skins has not been documented in the recent years. No significant evidence was found to contradict this statement.

Although strictly speaking there are no other range States for this Brazilian population of the species, the supporting statement does say that Management Authorities of Broad-snouted caiman range States (Argentina, Uruguay, Paraguay, Bolivia) should be consulted for comments and suggestions. No views of the other range States were recorded in the statement.

Additional considerations (including relevant CoP recommendations)

The proponents provide details of five farms trading in meat and skin for national utilization. Only one of these farms is included in the Register of operations that breed Appendix-I animal species for commercial purposes under Resolution Conf. 12.10 (Rev. CoP15) and therefore permitted to export specimens for commercial purposes. This farm was registered in January 2020 and no trade has been reported from it so far. According to the CITES Trade Database, Brazil has reported exporting a little over 100 skins (and a small number of leather products) of *C. latirostris* during the past 20 years. These were reported as bred in captivity and exported for commercial trade purposes. If they had been bred in captivity for commercial purposes, they should have only been from registered farms – of which there were none during the period when the exports occurred.

Siroski *et al* (2020) report that there are 17 farms for *C. latirostris* in six Brazilian states (Alagoas, Minas Gerais, Río de Janeiro, São Paulo, Santa Catarina, Espírito Santo) which does not accord with the information in the supporting statement.

If the present proposal is adopted, the proponent expects it to result in the social development of local communities through the management for conservation of broad-snouted caiman populations, with the legal

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[3] *Filogonio, R. I, Assis, V. B., Passos, L.F. and Coutinho, M.E. (2010) Distribution of populations of broad-snouted caiman (Caiman latirostris, Daudin 1802, Alligatoridae) in the São Francisco River basin, Brazil. Braz. J. Biol. 70 (4) https://doi.org/10.1590/S1519-69842010000500007*

[4] *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*

(international) trade of skins and leather adding value to the species and becoming an important incentive to promote natural habitat conservation. As the exports would need to come from largely closed-cycle captive breeding facilities it is hard to understand how these objectives will be achieved.

At CoP14 (2007) the Brazilian population of the much more widespread crocodilian *Melanosuchus niger* was transferred from Appendix I to Appendix II. No significant implementation challenges have been reported since this transfer.

Provisional conclusions

The Secretariat finds that although there seems to be little quantitative information available to make a judgement, populations in the wild of *C. latirostris* in Brazil do not seem to have a small population, a restricted area of distribution or to have exhibited a marked decline in the population size.

Concerning the precautionary measures, there is a lack of clarity about what trade is envisaged in future and what legislation applies to the species making the adequacy of appropriate enforcement controls and compliance difficult to assess.

Proposal 12

***Crocodylus porosus* (population of Palawan Islands, Philippines) (Saltwater crocodile)**

Proposal: Transfer from Appendix I to Appendix II with a zero export quota for wild specimens

Proponent: Philippines

Provisional assessment by the Secretariat

CITES background

C. porosus was included in Appendix II in 1975. With the exception of the population of Papua New Guinea, the species was transferred to Appendix I at CoP2 (1979). Subsequently, the populations of Australia, Indonesia and Malaysia were transferred from Appendix I to Appendix II – sometimes subject to annotations relating to ranching or export quotas. Currently only the population of Malaysia has a restriction on its Appendix II listing by annotation. In that case, wild harvest is restricted to the State of Sarawak with a zero quota for wild specimens for the other States of Malaysia. No change in the zero quota may be made unless approved by the Conference of the Parties.

At CoP16 (2013) Thailand proposed the transfer of its population of *Crocodylus porosus* from Appendix I to Appendix II with a zero quota for wild specimens, but this was rejected.

Purpose and impact of the proposal

The proposal seeks to transfer *C. porosus* (population of Palawan Islands, Philippines) from Appendix I to Appendix II with a zero export quota for wild specimens.

The supporting statement refers to the population of the ”Palawan Islands”, which is presumed to relate to the population in the Province of Palawan, which is an administratively separate part of the Philippines. It may be noted that there was a proposal to divide the Province of Palawan into three in 2021 which was rejected by a plebiscite.

The transfer of the population of *C. porosus* in Palawan Islands, Philippines from Appendix I to Appendix II, with a zero export quota for wild specimens, is stated as an interim measure (anticipated as taking a minimum of 2 years) prior to a formal ranching programme to trade commercially in all specimens of the species internationally. If the present proposal is adopted, it would mean that the captive breeding operation situated in Palawan which is currently included in the register of operations that breed Appendix-I animal species for commercial purposes under Resolution Conf. 12.10 (Rev. CoP15) would no longer need to be so in future. It is noted that two other registered operations for this species occur in other parts of the Philippines. In addition, any further captive breeding operations for the species which exist or may be set up in Palawan would also not be subject to registration under the Resolution but could export specimens subject to a certificate of captive breeding under Article VII.5 if the Management Authority of the Philippines was satisfied that the specimens had been bred in captivity in accordance with Resolution 10.16 (Rev.).

It seems likely that some specimens of this species from the population of Palawan Islands, Philippines interexchange with the population in Sabah, Malaysia. The species is also found in the wild elsewhere in the Philippines (52 localities on Luzon and Mindanao islands), but no interchange between these populations and that of the Palawan Islands is believed to take place.

Compliance with listing criteria

Concerning the biological criteria for Appendix I in Annex 1 of Resolution Conf. 9.24 (Rev. CoP17), the wild population of *C. porosus* in in Palawan Islands, Philippines suffered significant declines due to over-harvesting and in 1992 was estimated to number less than 200, however there seems little doubt that the population has increased since then. Extrapolating from surveys during 2014 to 2019 of 19 of around 51 rivers in which the species is said to be found, the visible population is estimated at around 3,000 individuals. Including small animals not likely to have been surveyed and scattered individuals in non-surveyed waterways and vegetated swamps. The total population is crudely estimated at 6,000 individuals. This is close to the guideline for a small wild population of some low-productivity species.

The current population of *C. porosus* in Palawan Islands, Philippines is stated to be restricted to 56 locations in the southern and eastern part of the main island of Palawan. This is an area of around 5,000 km^2, although in view of the species' dependence on rivers and tidal areas, the actual area of occupancy is likely to be smaller than this. However, the species does not seem to exhibit any of the aggravating factors associated with a restricted area of distribution mentioned in paragraph B i)-iv) of Annex 1 to Resolution Conf. 9.24 (Rev. CoP17). The supporting statement states that habitat modelling estimates that 11,373 km^2 of suitable habitat exists in the whole of the Philippines. Palawan Province has the highest area coverage of this suitable habitat. The supporting statement does not say how large an area this is although "93% of [the] land [is] legislated as protected areas… with well-established management plans".

does not show an ongoing or inferred or projected marked decline in the population size in the wild. Although it exhibited such a decline in the past due to unregulated over-harvesting, this situation no longer applies, and the marked decline does not seem to have the potential to resume under adequate management.

Under Annex 3 of Resolution Conf. 9.24 (Rev. CoP17), the listing of a species in more than one Appendix should be avoided in general in view of the enforcement problems it creates. However, when split-listing does occur, this should generally be on the basis of national or regional populations, The populations of Australia, Indonesia, Malaysia and Papua New Guinea of this species have already been transferred to Appendix II with no notable implementation problems reported; however, this would be the first time that a sub-national population of this species is transferred from Appendix I to Appendix II. Indeed, the inclusion of sub-national populations in different Appendices would only seem to occur in the case of *Vicugna vicugna* and, most notably, American crocodile *Crocodylus acutus* in Colombia, where certain national sub-populations were transferred from Appendix I to Appendix II at CoP17 (2016). The latter case was also with a view to ranching the specimen and was agreed by the meeting of the Conference of the Parties by consensus.

The principal precautionary measure applied is the zero export quota for wild specimens *C. porosus* which is referenced in paragraph A. 2 iii) of Annex 4 to Resolution Conf. 9.24 (Rev. CoP17, Annex 4) based on management measures described in the supporting statement of the amendment proposal, provided that effective enforcement controls are in place.

The supporting statement lists a number of legislative provisions relating to *C. porosus* at national and provincial level and these would seem to prohibit the collection and/or trade of the species including byproducts and derivatives. Illegal acts are punishable by fines of 100 USD-20,500 USD or imprisonment. It is not specified how often such infringements have been prosecuted, but the Enforcement Team of the Philippine Operation Group on Ivory and Illegal Wildlife Trade won an UNEP Asia Environmental Enforcement award in 2020 for making a number of key arrests during the nomination period (United Nations Environment Programme, 2021)[5]. The supporting statement says that there are no (post-CITES accession) records of illegal trade in crocodile skins, products or meat originating from the Philippines, but there are some indications of illegal trade

Provisional conclusions

The Secretariat finds that the wild population of *C. porosus* in Palawan Islands, Philippines appears to be close to meeting the Appendix I criteria for a small population in the wild and restricted area of distribution. However, the populations are increasing to the extent that conflict is arising with local human populations. The proposal is designed to develop management methods to mitigate this issue. The precautionary measures appear to be met.

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5 *United Nations Environment Programme (2021) Environmental Enforcement Awards recognize 8 winners on the frontline of protecting our planet.* https://www.unep.org/news-and-stories/press-release/environmental-enforcement-awards-recognize-8-winners-frontline

Proposal 13

***Crocodylus siamensis* (population of Thailand) (Siamese crocodile)**

Proponent: Thailand

Provisional assessment by the Secretariat

CITES background

C. siamensis was included in Appendix I in 1975.

Thailand held a reservation against the inclusion of this species in Appendix I until 1987.

At CoP16 (2013), Thailand made an identical proposal for the transfer of the population of Thailand from Appendix I to Appendix II with a zero quota for wild specimens. This was rejected in Committee I. At the request of Thailand, the debate was reopened in the Plenary and Thailand amended its proposal to add the word "Thailand to provide a report of progress to the Secretariat" and "Thailand offered third parties to oversee the implementation of their re-introduction programme" to the annotation. Following a vote, the amended proposal was rejected.

Purpose and impact of the proposal

The proposal seeks to transfer *C. siamensis* (population of Thailand) from Appendix I to Appendix II with a zero export quota for wild specimens.

Commercial trade in accordance with Article IV (e.g. for ranched specimens) or Article VII (e.g. for specimens bred in captivity) would be possible and breeding operations that produce, and export specimens of this species would no longer have to be registered under the provisions of Resolution Conf. 12.10 (Rev. CoP15).

The rationale for the proposal is not clearly explained but may be linked to the objective of re-introducing the species into the wild. Release and re-introduction are said to be in line with a national plan for crocodile conservation and sustainable utilization for Thailand – although only a draft of such a plan from 1997 is referenced. Captive bred Siamese crocodiles were released in Pang Sida National Park in 2005/2006 and six specimens were also released in Khao Ang Rue Nai Wildlife Sanctuary in 2020. Other releases are planned and more than 7,000 animals from private farms are designated for re-introduction programmes.

Compliance with listing criteria

Concerning the population size in the wild, *C. siamensis* was previously widely found in lowland regions of Thailand but suffered very significant declines in numbers and range due to persecution, habitat loss and collecting to stock commercial crocodile farms (Platt et al. 2002)[6]. The supporting statement says that the current wild population is approximately between 100 – 200 which is no larger than that reported by Thailand to CoP16 in 2013. Although Siamese crocodiles may not be considered a low-productivity species, it appears that the productivity in the wild in Thailand has not been significant in recent years and the current population is well below the guideline figure of 5,000 individuals. The area of distribution is said to be 5,652 km^2. Within this area, the distribution is fragmented, with the species found in six protected areas and one area outside a protected area. This distribution includes three sites which were not recorded in the supporting statement submitted to CoP16, but on the other hand one site mentioned in the proposal to CoP16 is no longer noted as an area of distribution. It is unclear if this is due to extinction or oversight. One of the sites seems to be comprised of re-introduced specimens and re-introduction has also occurred at a second site. Although empirical data is lacking, it seems that the population of the species in Thailand has exhibited a marked historical decline, but not a marked recent decline.

In terms of precautionary measures, the proponent cites Annex 4 paragraph A 2 a) ii) and iii), mentioning that even though the species is likely to be in demand for international commercial trade, its management is such that implementation of the Convention is secured and appropriate enforcement controls and a zero quota are

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6 *Platt, S.G., McCaskill, L., Rainwater, T.R., Temsiripong, Y., As-singkily, M., Simpson, B.K. and Bezuijen, M.R. (2019). Siamese Crocodile Crocodylus siamensis. in Crocodiles. Status Survey and Conservation Action Plan. Fourth Edition, ed. by S.C. Manolis and C. Stevenson. Crocodile Specialist Group: Darwin.*

in place to ensure that wild populations of the Siamese crocodile do not become endangered by international commercial trade.

Listing of a species in more than one Appendix should be avoided in general in view of the enforcement problems it creates. Although several crocodilian species are split-listed in the CITES Appendices, *C. siamensis* is not one of them.

As the proposal is restricted to the Thai population, consultation with other Parties is not formally required. Nevertheless, the proponent says that they will be consulting Cambodia, Lao PDR, and Vietnam, but no views from these Parties are reported.

Additional considerations (including relevant CoP recommendations)

The supporting statement indicates that in 2020 there were 928 captive breeding facilities for this species registered with the Thai authorities holding in total some 731,457 *C. siamensis* specimens and producing approximately 200,000 animals annually. However, only 29 of these are also registered with the Secretariat under Resolution Conf. 12.10 (Rev. CoP15) on *Registration of operations that breed Appendix-I animal species in captivity for commercial purposes.* According to the CITES Trade Database, in recent years, Thailand has exported around 10,000 skins of this species annually together with over 200 tonnes of meat and oil, bodies and leather products. Virtually all are shown as being sourced from the establishments in the Register of operations that breed Appendix-I animal species for commercial purposes, although until 2016 Thailand also reported some trade in leather products from specimens taken from the wild.

If the proposal is adopted the 29 captive breeding facilities would no longer be subject to the oversight through registration by the Secretariat under the provisions of Resolution Conf. 12.10 (Rev. CoP15) and it would be for Thailand to assure itself of compliance with Conf. 10.16 (Rev.) on *Specimens of animal species bred in captivity* prior to allowing exports.

Provisional conclusions

The Secretariat is of the opinion that the population of this species in Thailand appears to continue to meet the criteria for listing in Appendix I. The rationale for the proposal to transfer the population from Appendix I to Appendix II is not clear.

Proposal 14

***Physignathus cocincinus* (Chinese water dragon)**

Proposal: Inclusion in Appendix II

Proponents: European Union and Viet Nam

Provisional assessment by the Secretariat

CITES background

This is the first time that *P. cocincinus* has been proposed for inclusion in the Appendices.

Purpose and impact of the proposal

The proposal seeks to include *P. cocincinus* in Appendix II, in accordance with Article II, paragraph 2(a) of the Convention. If the proposal is adopted, international trade in all specimens of this species will be regulated in accordance with the provisions of Article IV of the Convention.

Compliance with listing criteria

The proponents consider that *P. cocincinus* satisfies both criterion A and B in Annex 2(a) of Resolution Conf. 9.24 (Rev.CoP17).

Criterion A states that it can be inferred or projected, that the regulation of trade in the following species is necessary to avoid it becoming eligible for inclusion in Appendix I in the near future. In this context the near future is defined in Annex 5 of the Resolution as a percentage decline of 50% or more in the last 10 years or three generations, whichever is the longer. The supporting statement mentions that the Cambodian Management Authority considers that three generations corresponds to 18 years and that such a 50% decline has occurred in this time in at least one site in the country, based on interviews with local hunters. The species is found from southern China through Viet Nam, Lao PDR, Cambodia to eastern Thailand. By adding the area of the provinces mentioned in Section 3.1 of the supporting statement the species is found in provinces covering over 1 million km^2. However, in view of its limited habitat preferences - riparian areas along rocky streams in evergreen forests from 43-820m above sea level - its area of occupancy is likely to be much smaller. For instance, it is said to occur in provinces of China covering 811 km^2 but its area of occupancy in the country may be below 500 km according to Stuart, B. *et al* (2019). Given the very wide distribution of the species and its patchy exploitation, it is not clear that a 50% decline in the wild population could be expected in 10-18 years.

Criterion B states that listing in Appendix II 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. *P. cocincinus* is sedentary and occurs in linear habitat and is reportedly very easy to collect. Harvesting pressure may therefore add to that posed by habitat loss. On the other hand, the species can be found near villages and agricultural areas and even urban areas where the species has been introduced. Stuart, B. et al (2019)[7] describe the species as locally abundant, although it is subject to ongoing declines as a result of harvesting of both adults and eggs for food, and juveniles for the international pet trade.

The supporting statement says that all range States were consulted on the proposal during October and November 2021 but does not indicate if any replies were received or their nature.

Additional considerations (including relevant CoP recommendations)

P. cocincinus is used to an apparently limited extent in parts of its range for medicinal purposes. It is more widely used for food and as a pet in national and international trade. In terms of international trade, the United States of America and European Union (likely to be major markets for the pet trade) have kept import records in recent years. Between 2010 and 2020 an annual average of around 7,000 specimens were imported to the European Union and 73,000 to the United States of America between 1999 and 2017.However imports to the

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[7] *Stuart, B., Sumontha, M., Cota, M., Panitvong, N., Nguyen, T.Q., Chan-Ard, T., Neang, T., Rao, D.-q. & Yang, J. 2019. Physignathus cocincinus. The IUCN Red List of Threatened Species 2019: e.T104677699A104677832. https://dx.doi.org/10.2305/IUCN.UK.2019-.RLTS.T104677699A104677832.en. Accessed on 02 August 2022*

United States of America have declined very considerably over the past 10 years (Figure 4 of the supporting statement).

The species only seems to be specifically protected in Cambodia and Thailand.

Although there is another closely related species: *Intellagama* (*Physignathus*) *lesueurii* it is easy distinguished from *P. cocincinus* in particular by having a prominent eye stripe.

Provisional conclusions

In the view of the Secretariat, there is limited empirical evidence to judge if the species meets the criteria for inclusion in Appendix II, but it could be argued that in view of the uncertainty regarding its status and the impact of trade on its conservation, inclusion in Appendix II may be in the best interest of the conservation of the species.

Proposal 15

***Cyrtodactylus jeyporensis* (Jeypore hill gecko)**

Proposal: Include in Appendix II

Proponent: India

Provisional assessment by the Secretariat

CITES background

This is the first time that *C. jeyporensis* has been proposed for inclusion in the Appendices.

Purpose and impact of the proposal

The proposal seeks to include *C. jeyporensis* in Appendix II, in accordance with Article II, paragraph 2(a) of the Convention. If the proposal is adopted, international trade in all specimens of the species will be regulated in accordance with the provisions of Article IV of the Convention.

Compliance with listing criteria

The supporting statement states that inclusion of *C. jeyporensis* in Appendix II satisfies criterion A of Annex 2a of Resolution Conf. 9.24 (Rev. CoP17) on *Criteria for amendment of Appendices I and II,* where 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.

C. jeyporensis is an endemic species found only in Eastern Ghats of India and has been recorded in a total of four localities, one of which is an extirpated historic locality. The Jeypore hill gecko is nocturnal and lives below rock boulders in high hills of the Eastern Ghats in both primary and second forests and hills with coffee plantations. Its known distribution does not fall under any protected areas.

According to the supporting statement, there is a paucity of information on the species including population size as well as biological characteristics to infer productivity of the species. After its first discovery in Jeypore Hills, Koraput District, in 1878, it was only rediscovered again in 2010. Several surveys in the locality of the original description did not yield any sightings and it was deemed locally extinct in the area (Agarwal et al., 2012). Given that the species has only been found in three distinct localities (Deomali, near the type locality and two places near Aaraku valley, Andhra Pradesh), it can be inferred that the species has a restricted geographic distribution.

There are no published population estimates or population trends for the species. The IUCN Red List of Threatened Species categorizes the species as Endangered with an unknown population trend. The supporting statement cites two surveys by national research teams from Indian Institute of Science and Zoological Survey of India in 2012 and 2021 in two localities. In the Aaraku valley, Andhra Pradesh, where a population was observed by researchers in 2012, but when the site was revisited in 2021, no specimens were observed even though the survey happened at the same time of the year. In Paderu Hill, six individuals were originally found in 2013, but only one individual was observed in 2021. The proponent references these surveys to infer that the species is undergoing population decline and while no information is provided to project population size or change in area of distribution in the near future, the low numbers of recorded individuals suggests a low population size

Despite there being no official report of live trade of the species and any collection or obtaining of the species requiring prior permission in India, according to the supporting statement there are sales of the species occuring outside of India and provides evidence in the form of seven advertisements on social media: one from the Czech Republic, one from and Canada and one from outside India but an unknown location and four from unknown locations.

The supporting statement states that the morphology of the species may render the species attractive to pet trade and in addition to the existing threats of habitat loss, habitat degradation, forest fires and mining activities among others, collection for pet trade may be a major concern for its survival

Additional considerations (including relevant CoP recommendations)

None.

Provisional conclusions

On the basis of the information in the supporting statement, to the Secretariat it appears that given the restricted area of distribution and low number of specimens recorded, any level of trade of *C. jeyporensis* could have an impact on the population of the species and may warrant regulation to avoid it becoming eligible for inclusion in Appendix I in the near future.

Proposal 16

***Tarentola chazaliae* (Helmethead gecko)**

Proposal: Inclusion in Appendix II

Proponents: Mauritania and Senegal

Provisional assessment by the Secretariat

CITES background

This is the first time that *T. chazaliae* has been proposed for inclusion in the Appendices.

Purpose and impact of the proposal

The proposal seeks to include *T. chazaliae* in Appendix II, in accordance with Article II, paragraph 2(a) of the Convention. If the proposal is adopted, international trade in all specimens of this species will be regulated in accordance with the provisions of Article IV of the Convention.

Compliance with listing criteria

The proposal contends that the species satisfies both criterion A and B of Annex 2 a) of Resolution Conf. 9.24 (Rev. CoP17).

Precise information about the size of the population in the wild does not seem to be available. Wilms, T. *et al* (2013) refenced in the supporting statement, states that it is known from 10 locations. However, de Melo, J.P. (2016) mentions 108 observations of the species, 19 from fieldwork for that study and the rest from already published national atlases. The species was also found in thirteen locations in the 338 km^2 Souss-Massa National Park in Morocco at the northern edge of its range Elbahi A, *et al* (2022)[8]. Information about any possible decline in the population size in the wild is inferred from expected loss of suitable habitat.

The species is found in a narrow range, generally up to 20 km inland from the coast of southern Morocco, through Western Sahara, to northern Mauritania – a distance of approximately 1,500 km, giving an area of occupancy of 30,000km^2, although this figure is given as 20,000 km^2 in the supporting statement.

Information about the conservation status of the species in the wild is based almost entirely on Wilms, T. et al (2013) but as mentioned by the proponents this assessment dates from 2004. The predicted decline in the species is premised on the expected almost total transformation of the coastal zone in the northern half of the species' range (in Morocco and Western Sahara) through urbanization and habitat fragmentation in the coming ten or 20 years. This decline was predicted to result in a population decline close to or possibly exceeding 30%. This would not appear to meet the guideline for a recent decline given in Annex 5 of Resolution Conf. 9.24 (Rev. CoP17). Further, no evidence is presented to suggest that the prediction about habitat loss for the species has actually occurred since it was made in 2004.

Much of the loss of habitat was predicted to occur in Morocco, but the supporting statement does not state if Morocco was consulted over the proposal or if they contributed any information about the species in their territory.

The species is in international commercial trade. The scale of this trade is not clear. Imports to the United States of America averaged 244 specimens per year during the period 2006-2012, but the USA also re-exported an average of 75 specimens each year during this period, but almost all of these were reported as bred in captivity in Germany. Of the 330 specimens recorded as exported from the Netherlands to the United States of America during the period 2000-2017 all were reported as bred in captivity (Janssen. and Leupen,

[8] *Elbahi A, Lawton C, Oubrou W, El Bekkay M, Hermas J, Dugon M (2022) Reptile biodiversity in Souss-Massa National Park: an internationally important hotspot in the Mediterranean region. Biodiversity Data Journal 10: e79088. https://doi.org/10.3897/BDJ.10.e79088*

2019)[9]. The supporting statement also refers to the seizure of more than 500 helmethead geckos in Sweden in 2018 and states that these were wild-caught.

In Morocco, capture, sale, acquirement or export is prohibited without a permit. No information is provided on the legal status in other range States.

Additional considerations (including relevant CoP recommendations)

The proponents place this species in the family Phyllodactylidae, but in its standard nomenclatural references, the Conference of the Parties has not yet recognized the Phyllodactylidae at family rank and consequently under present circumstances this species should be treated under family Gekkonidae.

The morphology of the species is very distinctive with scales and bony formations above the eye giving a helmeted appearance. It is therefore unlikely to be confused with other species in the genus or with other geckos.

Provisional conclusions

Information about both the decline of this species in the wild and the extent to which specimens are taken from the wild in international commercial trade is equivocal. The Secretariat is of the opinion that, on the basis of the information provided by the proponent, there does not seem to be strong evidence that the species meets the criteria for inclusion in Appendix II.

[9] *Janssen, J. and Leupen, B.T.C. (2019). The role of the Netherlands in the Reptile trade. Monitor Conservation Research Society, Big Lake Ranch, Canada*

Proposal 17

***Phrynosoma platyrhinos* (Desert horned lizard)**

Proposal: Inclusion in Appendix II

Proponents: United States of America

Provisional assessment by the Secretariat

CITES background

This is the first time that *P. platyrhinos* has been proposed for inclusion in the Appendices.

Purpose and impact of the proposal

The proposal seeks to include *P. platyrhinos* in Appendix II, in accordance with Article II, paragraph 2(a) of the Convention. If the proposal is adopted, international trade in all specimens of this species will be regulated in accordance with the provisions of Article IV of the Convention.

Compliance with listing criteria

The proposal contends that the species satisfies both criterion A and B of Annex 2 a) of Resolution Conf. 9.24 (Rev. CoP17).

No range-wide population studies seem to have been conducted on the species. The total adult population size is unknown but estimated to be greater than 100,000 and to lie between 100,000 and 1 million individuals (NatureServe. 2021), This is much larger than the guideline for a small population size in Annex 5 of Resolution Conf. 9.24 (Rev. CoP17).

The supporting statement states that the species is found in northwestern Mexico (northern Baja California state) and in the southwestern United States of America (Arizona, California, Oregon, Idaho, Nevada and Utah). The “extent of the range” is estimated to be between around 207,000 and 2.5 million km2. Given the wide range between these two figures, the former may refer to the area of occupancy rather than the extent of occurrence of the species. Although there seems to be little empirical data, both the extent of occurrence and the area of occupancy are judged to be probably relatively stable or slowly declining (NatureServe, 2021). The species is adversely affected by urbanization, changes in agricultural practice, energy development (placement of solar panels), recreational off-road vehicle use.

Surveys and population monitoring are not occurring in much of the species’ range. This would have helped determine whether the species is likely to undergo a marked decline in its population size in the wild during the next 10 years or three generations. Anecdotal comments suggest that the species’ status is stable in Arizona and Utah, declining In Nevada and unknown in other parts of its range. Overall, the population size is said to be probably relatively stable or slowly declining (NatureServe, 2021).

The proponents consulted Mexico as the other range state for the species was consulted on the proposal and provided comments on trade, population, distribution, threats, conservation status, and regulatory protections pertaining to the species. This information is not provided in the supporting statement but are said to be found on a referenced website. Attempts to locate this information on the website were not successful. The supporting statement does provide access to comments from the United States of America’s Association of Fish and Wildlife Agencies which noted “Regulations prohibiting commercial collection of desert horned lizards exist in all states where the species is found in the wild. It is uncertain if listing the species in the CITES appendices would add to the conservation of the species in the United States of America”. The supporting statement claims that inclusion of the species in CITES Appendix II would allow Federal level regulations in the United States of America. It says this would complement those already existing at State level by ensuring that specimens entering international trade are acquired legally and sustainably and that international trade is not detrimental to the survival of the species.

Additional considerations (including relevant CoP recommendations)

P. platyrhinos is in international trade almost exclusively for the pet market. In the United States of America, the number of wild-caught specimens in trade between 2013 and 2017 averaged around 1,642 per year.

However, this includes imported and exported specimens, so it is not possible to know if these specimens originated from Mexico or the United States of America.

Provisional conclusions

The Secretariat finds it unlikely that criterion A in Annex 2 a) of Resolution Conf. 9.24 (Rev. CoP17) is met. Concerning criterion B, it is difficult to infer or project 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.

Proposal 18

***Phrynosoma* spp. (Horned lizards)**

Proposal: Include in Appendix II

Proponent: Mexico

Provisional assessment by the Secretariat

CITES background

Phrynosoma coronatum blainvillei was included in Appendix II in 1975.

At CoP6 (1987) Switzerland proposed the deletion of the population of *Phrynosoma coronatum blainvillei* in the United States of America from Appendix II as part of the Ten Year Review of the Appendices for species that had not been in trade since their listing. The proposal was not adopted.

At CoP8 (1992), the United States of America proposed the inclusion of the whole of the species *P. coronatum* in Appendix II. This proposal was adopted.

Following taxonomic changes adopted at CoP15 (2010), the inclusion of *P. coronatum* in the Appendices was split into *P. coronatum, P. blainvillii, P. cerroense,* and *P. wigginsi*.

Purpose and impact of the proposal

The proposal seeks to include *P. asio, P. braconnieri, P. modestum, P. orbiculare, P. platyrhinos, P.solare* and *P. taurus* in Appendix II in accordance with Article II paragraph 2(a) of the Convention and all other species of *Phrynosoma* in accordance with Article II paragraph 2(b) of the Convention.

If the proposal is adopted, international trade in all specimens of *Phrynosoma* species will be regulated in accordance with the provisions of Article IV of the Convention.

Compliance with listing criteria

The supporting statement suggests that the inclusion of *Phrynosoma* spp. in Appendix II satisfies the following criteria of Resolution Conf. 9.24 (Rev. CoP17) on *Criteria for amendment of Appendices I and II:*

- criterion A of Annex 2a: *P. asio, P. braconnieri, P. modestum, P. orbiculare, P. platyrhinos, P.solare* and *P. taurus.*

- criterion A of Annex 2b ('look-alike' criterion): *P. bauri, P. blainvillii* , *P. brevirostris, P. cerroense, P. cornutum, P. coronatum, P. diminutum, P. ditmarsi, P. douglasii, P. goodei, P. hernandesi, P. mcallii, P. ornatissimum* and *P. sherbrookei.*

The genus *Phrynosoma* is endemic to North America and is found in Canada, United States of America, Mexico. An anecdotal record of one species, *P. asio*, in Guatemala has not been confirmed. The proponent notes that the species are found in various protected areas. There is no taxonomic consensus within the genus, and while the supporting statement proposes 21 species (Uetz *et al.* 2020), it notes that other references recognize 12 or 17 species. The distribution of the species is summarized below in Table 1:

Table 1. Distribution of the *Phrynosoma* species being proposed to meet criterion A of Annex 2a of Resolution Conf. 9.24 (Rev. CoP17).

Species	USA	Mexico
P. asio		Oaxaca, Guerrero, Michoacán, Colima, Chiapas, Morelos, Jalisco
P. braconnieri		southern tip of the central Mexican plateau; semi-arid portions of Puebla and Oaxaca
P. modestum	southeast Colorado, west Texas, southern New Mexico, southeastern Arizona	Mexican highlands of Chihuahua and Coahuila south to Aguascalientes, San Luis Potosi and Zacatecas

P. orbiculare		Sierra Madre Occidental and Oriental and the Mexican plateau south to Puebla and Veracruz, and west of Chihuahua and extreme eastern Sonora
P. platyrhinos	E Oregon, S Idaho, Nevada, E Utah, SW California, W Arizona	Baja California Norte
P. solare	southwestern New Mexico and Arizona	Sonora, northern Sinaloa
P. taurus		Morelos, Puebla, Oaxaca, Guerrero

According to the proponent, the horned lizard faces a variety of threats including habitat destruction, livestock, invasive species, climate change, legal and illegal harvest for pet trade.

The supporting statement provides evidence that each of the species being proposed for listing under Appendix II are in international trade. The vast majority of the specimens are traded as live specimens and the main species under trade is *P. playrhinos*. The proponents provide information from the U.S. Fish and Wildlife Service's Law Enforcement Management Information System ("LEMIS") from 2006 to 2015, which shows that 21,393 live specimens of at least nine Phrynosoma species were exported, including *P. asio, P. braconnieri* (endemic to Mexico), *P. modestum, P. platyrhinos*, and *P. taurus* with the majority of the specimens being sourced from the wild. The supporting statement provides export data from Mexico from SEMARNAT between 2019 and 2021, which shows that *P. asio* and *P. taurus* were exported for commercial purposes and the number of *Phrynosoma* spp. specimens being exported has been increasing since 2018.

The only reference to legal international trade of *P. orbiculare* in the supporting statement is for scientific and non-commercial purposes. However, the supporting statement provides seizure data from 2000 to 2020 which includes *P. orbiculare* and provides details that it was sold in European countries with prices between 100-200 Euros. Sales of other species, such as *P. taurus,* were recorded with a price of 500 Euros. The supporting statement also provides advertisements of *Phrynosoma* species for sale on online platforms as evidence of international pet trade.

There is limited information on the population size, trend, and distribution of the seven species being proposed for listing under criterion A of Annex 2a in Resolution Conf 9.24 (Rev. CoP17). Four out of the seven proposed species are endemic to Mexico while the remaining three are found in the United States of America and Mexico. Two of the species, *P. asio* and *P. taurus*, have population density estimates of 1.012 individual/ha and 0.28 individual/ha, respectively, but no information on area of distribution is provided. The supporting statement reports that in Agua Prieta and Naco, Sonora, only a few individuals of *P. modestum*, are being observed when they were collected in large numbers in the 1970s. However, it also notes that the species remains common in other states. There are no studies on the population size of *P. platyrhinos* but is estimated to be greater than 100,000 individuals (Hammerson et al., 2019; NatureServe 2011, cited within the supporting statement).

The supporting statement says that all species of *Phrynosoma* resemble each other except to experts and that species identification is particularly difficult with juvenile specimens. The supporting statement for CoP19 Prop. 17 says that adult *P. platyrhinos* can be distinguished from other species in the genus.

The proponents indicate that consultations were held with United States of America and Canada, but the results are not specified in the supporting statement.

Additional considerations (including relevant CoP recommendations)

Given the differences in views about the number of species in the genus, if the present proposal is adopted it would be helpful to also designate a standard nomenclatural reference for the genius in Resolution Conf. 12.10 (Rev. CoP15).

Provisional conclusions

On the basis of the information in the supporting statement, it appears to the Secretariat that the seven species of *Phrynosoma* species proposed for listing are in international trade. However, the evidence in the supporting statement that the seven species will become eligible for listing under Appendix I in the near future is not clear.

Proposal 19

***Tiliqua adelaidensis* (Pygmy bluetongue lizard)**

Proposal: Include in Appendix I

Proponent: Australia

Provisional assessment by the Secretariat

CITES background

T. adelaidensis (Pygmy bluetongue lizard) was included in Appendix III at the request of Australia with effect from 22 June 2022. This is the first time that this species has been proposed for inclusion in the other Appendices.

Purpose and impact of the proposal

The proposal seeks to include *T. adelaidensis* in Appendix I, in accordance with Article II paragraph 1 of the Convention. If the proposal is adopted, international trade in all specimens of these species will be regulated in accordance with the provisions of Article III of the Convention.

Compliance with listing criteria

This species is endemic to Australia. Notwithstanding its fully protected legal status there, it is known to be in international trade and the proponents contend that the status of the species that trade has or may have a detrimental impact on the status of the species. Altherr S, *et al* (2019), notes at least 17 specimens in trade in Germany, the Russian Federation and the United Kingdom of Great Britain and Northern Ireland at around 6,000-9,000 USD each.

The proponent contends that the species qualifies for Appendix I as it has a restricted area of distribution with several aggravating factors including fragmented occurrence at very few locations, a high vulnerability to intrinsic and extrinsic factors and an observed decrease in the area of distribution, area of habitat, and the number of subpopulations. On the basis of an inferred decrease in the area and quality of habitat, the species is also claimed to have exhibited a marked decline in the population size in the wild.

The extent of occurrence is said to be around 14,000 km^2 but, within this zone, the actual area of occupancy is said to be around 30 km^2 split between 33 discrete sites between which there is no connectivity for the species. In 2000 there were ten known populations; since then, an additional 22 populations have been discovered (Duffy *et al.* 2012), but during the intervening time some populations have also been lost due to housing development or other causes (Fenner *et al,* 2018). The species has highly vulnerability extrinsic factors such as habitat loss and changes in land use (farming) practices. Overall, there does not appear to be clear evidence of a decrease in the number of subpopulations, area of distribution or area of habitat since the species was rediscovered in 1992.

Lack of precise knowledge of the status of the species means that it is difficult to determine if the species has exhibited a marked decline in the population size in the wild. The supporting statement claims that the population is estimated at under 10,000 and probably around 5,000 individuals in the wild, but there is no indication of the source of these estimates. There is little evidence that the species has declined by 50% or more in the last 10 years or three generations. The historical status of the species is poorly known. Although good evidence is lacking, the species probably exhibited a widespread decline in population since after 1836 and there were no reports of the species at all between 1959 and 1992. A decline to 5%-30% of baseline may be inferred from the decrease in the area and quality of habitat.

Additional considerations (including relevant CoP recommendations)

The recent listing of the species in Appendix III should assist in addressing any ongoing illegal trade in specimens of this species from Australia. Inclusion of the species in Appendix I would mean that any holders of such specimens breeding the species for commercial purposes in Australia or other Parties would need to register under Resolution Conf. 12.10 (Rev. CoP15) on *Registration of operations that breed Appendix-I animal species in captivity for commercial purposes*. This would maintain international oversight over trade in specimens being bred for commercial purposes.

Provisional conclusions

T. adelaidensis is in international trade and in the Secretariat's view it would appear to meet the biological criteria for Appendix I in Annex 1 of Resolution Conf. 9.24 (Rev. CoP17) on *Criteria for amendment of Appendices I and II* as it has a restricted and fragmented area of distribution, and the population size can be inferred to have undergone a marked historical decline - evidence for a recent decline is less clear.

Proposal 20

***Epicrates inornatus* (Puerto Rican boa)**

Proposal: Transfer from Appendix I to Appendix II

Proponent: United States of America

Provisional assessment by the Secretariat

CITES background

E. inornatus was included in Appendix I in CoP1 (1977).

After CoP15 (2010), *E. inornatus* was selected for review under Resolution 14.8 (Rev. CoP15) on *Periodic Review of species included in Appendices I and II* during the period from CoP15 to CoP17 (2016). The United States of America offered to conduct the review and provided it at the 27th meeting of the Animals Committee as AC27 Doc. 24.3.7. At its 27th meeting (Veracruz, 2014), the Animals Committee agreed that with reference to the criteria in Resolution Conf. 9.24 (Rev. CoP16), it would be appropriate to transfer the subspecies from Appendix I to Appendix II. In accordance with paragraph 2 i) i) of Resolution Conf. 14.8 (Rev. CoP17). The United States of America as a range State is therefore submitting the proposal for consideration at the present meeting.

Purpose and impact of the proposal

The proposal seeks to transfer *E. inornatus* from Appendix I to II.

If the proposal is adopted, international trade in all specimens of the species will be regulated in accordance with the provisions of Article IV of the Convention.

Compliance with listing criteria

The supporting statement states that *E. inornatus* no longer meets the biological criteria of Annex 1 of Resolution Conf. 9.24 (Rev. CoP16) on *Criteria for amendment of Appendices I and II* and does not appear to meet the affected by trade criteria in Annex 5 of that Resolution.

E. inornatus is endemic to the main island of Puerto Rico and has a wide but not uniform distribution within the island. According to the proponent, the species is considered relatively common and according to cited personal communications, is found in all municipalities.

According to the supporting statement, the species is a habitat generalist and is reported to be found in a wide range of habitats including moist forest, dry forests, montane and low land forests, karst landscapes, caves as well as altered environments such as plantations, rural gardens and urban areas.

While there are no published population estimates, the species has been described as common and widespread in Puerto Rico (Tolson & Henderson 1993 and Rodriquez et al., 2018 cited in the supporting statement). The supporting statement reports that the density of the species is estimated between 1.24 to 5.6 animals/ha and a population model estimates the population size of more than 30,000 animals, which would mean that the species no longer meets the small wild population criterion of paragraph A in Annex 1 of Resolution Conf. 9.24 (Rev. CoP17). Furthermore, the species is thought to be a single population unit with no evolutionary significant units or unique genetic clusters identified within the species (Tucker et al., 2020 and Peunte-Rolon et al., 2013 cited within the supporting statement).

The supporting statement notes that there is no long-term population monitoring studies to establish population trends, but that the species has recovered from the historic decline following deforestation in the early 20th century (Reynolds and Henderson 2018 cited within the supporting statement). It states that the population is more abundant today than at the time of listing due to an increase in forested areas, which suggests some resilience to habitat disturbances.

The information from the CITES Trade Database in the supporting statement states that there is no record of export of the species from Puerto Rico during the period from 1974 to 2014. There is a low number of captive-bred specimens traded from non-range countries, Canada, United Kingdom and Germany being the top trading

countries, with 195 specimens traded during the same period with 54% for scientific/zoological purposes, 28% unknown purposes, and 14% for commercial purposes. The proponents state that there is no other information to suggest that the species is being significantly impacted by trade. The Secretariat further confirms that no export of the species from Puerto Rico is recorded in the CITES Trade Database since 2014 and no records of trade is found in the database after 2013.

The supporting statement reports that there is small scale unregulated local hunting of the species and a few reported cases of collection of the species for sale through online platforms. According to the proponents, the extent of illegal hunting is uncertain, but provides anecdotal information of prosecution of illegal harvest of the species.

In Puerto Rico, the species is currently protected under the Commonwealth of Puerto Rico Law No. 241, which offers protection against possession, transportation, taking, destruction, hunting, and killing of the species. In the United States of America, the species is listed under the Endangered Species Act; however, there is a proposal to remove the species from the Federal List of Endangered and Threatened Wildlife.

Additional considerations (including relevant CoP recommendations)

The nomenclature of the species is correct under the current standard nomenclature (Resolution Conf. 12.11 (Rev. CoP18), however, the species is being renamed *Chilabothrus inornatus* as part of nomenclature updates in CoP19 Doc. 84.1 Annex 5.

Provisional conclusions

On the basis of the information in the supporting statement, the Secretariat finds that *E. inornatus* may no longer meet the biological criteria for an Appendix I listing, there is little or no international trade of the species from the wild in Puerto Rico and limited international trade from captive-bred specimens from other countries.

Proposal 21

***Crotalus horridus* (Timber rattlesnake)**

Proposal: Include in Appendix II

Proponent: United States of America

Provisional assessment by the Secretariat

CITES background

This is the third time a proposal to include *C. horridus* in the Appendices has been submitted. The United States of America previously submitted a proposal at CoP10 (1997) to include the species in Appendix II (see CoP10 Prop. 10.63). At CoP10, the United States of America withdrew the proposal following concerns expressed by the Netherlands (on behalf of the Member States of the European Union) and Switzerland, that conservation problems for this species were not caused by international trade, proposing that the United States of America consider an Appendix III listing instead. The United States of America re-submitted the same proposal to CoP11 (1999) (see CoP11 Prop. 11.44), but it was also withdrawn.

The only other species of *Crotalus* listed in the Appendices is *Crotalus durissus*, which was listed in Appendix III at the request of Honduras in 1987.

Purpose and impact of the proposal

The proposal seeks to include *C. horridus* in Appendix II, in accordance with Article II paragraph 2(a) of the Convention. If the proposal is adopted, international trade in all specimens of this species will be regulated in accordance with the provisions of Article IV of the Convention.

Compliance with listing criteria

Concerning inclusion of the species in Appendix II, the proponent asserts that it meets Criterion B in Annex 2a of Resolution Conf. 9.24 (Rev. CoP17), where 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.

C. horridus is a species that is endemic to North America. It is generally terrestrial and found in a variety of habitat types, including temperate forests, inland wetlands, rocky areas, and pastureland. It is a long-lived species (in excess of 30 years) with a high age at maturity and low annual fecundity (range: 2 to 7 years, average: 3 years, with an average clutch size of 9 neonates).

The supporting statement documents the decrease in its population size and distribution, noting that a number of states in the United States of America classify the species as Vulnerable, Threatened, or Endangered. The species' distribution is said to be increasingly fragmented and continuing to decline range-wide and the proposal claims that that "there is no population of *C. horridus* large enough to support any degree of harvest."

While the supporting statement clearly demonstrates a significant use of the species in the live pet trade, skin trade, venom trade, in rattlesnake roundups and for sale as novelty items, it remains unclear what, if any, demand exists internationally. The primary threats to the species are identified in the supporting statement as roadways and road mortality, human development, persecution, poaching and illegal collecting, habitat loss and habitat fragmentation. Habitats are increasingly becoming more fragmented by roadways and residential development as well as agricultural development, creating substantial migration barriers that hinder gene flow.

The supporting statement indicates that the total population size is unknown, but it provides an estimated global abundance of 100,000 to >1,000,000 individuals (NatureServe, 2014). According to the IUCN Red List of Threatened Species, *C. horridus* is classified as "Least Concern" with a decreasing population trend, but this assessment is from 2007. The supporting statement reports an assessment from 2014, which claimed an observed long-term global population decline of 30 to 50% and a projected short-term decline of 10 to 30% over three *C. horridus* generations (20 to 30 years). This assessment of a long-term population decline is based on a series of historical reports on local population including counts of snakes turned in by snake hunters and interviews conducted at several local community-sponsored rattlesnake hunts. The assessment of the projected short-term population decline is based on the view that "Area of occupancy, number of subpopulations, and

especially population size probably is still declining," Neither of these figures would at present meet the guidelines for a marked decline outlined in Annex 5 of Resolution Conf. 9.24 (Rev. CoP17).

Concerning data on international trade, the proponent outlines some export data extracted from the United States of America Fish and Wildlife Service Law Enforcement Management Information System (LEMIS) database between 2013 and 2019. The proponents report that the LEMIS data shows that almost all live specimens in trade were declared as captive bred, while parts and derivatives were reportedly taken from the wild, of which 83% was declared as for commercial purposes and 17% for scientific purposes. The supporting statement reports that “recent trade volume is relatively low [total N = 35 (15 live, 20 specimens)] compared to past trade volumes in *C. horridus*. However, the full details of the trade are not provided in order for Parties to be able to verify the scale and nature of the international trade in this species.

The species *C. horridus* is not listed or afforded direct national protection; however, the proponent indicates that many local authorities in the United States of America provide various legal protections, with 18 of the 31 states where it is found in the United States of America directly prohibiting harvest. The proponents refer to several species management initiatives and programmes, including protection, secrecy, and patrolling management programmes, are underway to prevent uncontrolled wild harvest of vulnerable and endangered *C. horridus* populations, as well as some limited population monitoring programmes, but these are at the state-level and vary across the species range.

The proponent states that “Inclusion of the species in Appendix II would complement State and other domestic measures and regulate any trade in this species nationally”, however, a CITES Appendix II listing would have no impact on domestic trade.

Additional considerations (including relevant CoP recommendations)

The supporting statement claims that *C. horridus* is not considered easy to breed and captive breeding programmes for the species conservation have proven difficult (Puskar 1999).

The supporting statement states that “under most circumstances, *C. horridus* parts and derivatives are distinguishable from other similar species in trade” but does not provide any further details.

Provisional conclusions

In the view of the Secretariat, based on the information in the supporting statement, it appears *C. horridus* is under significant pressure from a range of threats and the population may be declining as a result. However, it is difficult to determine whether Criterion B in Annex 2a of Resolution Conf. 9.24 (Rev. CoP17) is met, as it remains unclear if regulation of international trade in the species is required to ensure the conservation of the species.

Proposal 22

***Chelus fimbriata* (Matamata turtle) and *Chelus orinocensis* (Orinoco matamata turtle)**

Proposal: Include in Appendix II

Proponents: Brazil, Colombia, Costa Rica, Peru.

Provisional assessment by the Secretariat

CITES background

This is the first time that *C. fimbriata* and *C. orinocensis* have been proposed for inclusion in the Appendices.

Purpose and impact of the proposal

The proposal seeks to include *C. fimbriata* and *C. orinocensis* in Appendix II, in accordance with Article II paragraph 2 (a) of the Convention. If the proposal is adopted, international trade in all specimens of this species will be regulated in accordance with the provisions of Article IV of the Convention.

Compliance with listing criteria

Previously, *C. fimbriata* was the only recognized species in the genus, with *C. orinocensis* only identified very recently (Vargas-Ramírez *et al.*, 2020).

Concerning inclusion of the species in Appendix II, the proponent asserts that both *C. fimbriata and C. orinocensis* meet criteria A and B in Annex 2a of Resolution Conf. 9.24 (Rev. CoP17) as follows:

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; or

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.

The proponents also state that the proposal is in line with the precautionary measure in Annex 4 of Resolution Conf. 9.24 (Rev. CoP17), which states that “When considering proposals to amend Appendix I or II, the Parties shall, by virtue of the precautionary approach and in case of uncertainty either as regards the status of a species or the impact of trade on the conservation of a species, act in the best interest of the conservation of the species concerned and adopt measures that are proportionate to the anticipated risks to the species.”

From captive populations, the supporting statement indicates that sexual maturity is reached between 5 and 7 years; nesting is done as solitary on sandy beaches on the shores of the bodies of water where it lives, it produces 12 – 28 eggs, the nesting season is synchronized with the end of the season of rains and beginning of the dry period, possibly to guarantee the birth and survival of the offspring before the rainy season, since the incubation period is 200 days.

In 2011, IUCN evaluated the global conservation status of *C. fimbriata*, when it was considered a single species, as being in the category of Least Concern. However, with the description of the new species *C. orinocensis* in 2020, this resulted in two distinct species, each with different and separate distribution patterns. *C. fimbriata* is found in the Amazon Basin and Mahury River drainage, while *C. orinocensis* has a more restricted distribution, being found in the Orinoco, Río Negro and Essequibo basins. The proponents assert that this reduction in the area of distribution, for both species, will have a direct impact by reducing the population estimate for *C. fimbriata* and increasing their vulnerability to threats from habitat loss and overexploitation. The population size of both species is unknown, but the supporting statement claims that sightings are very rare.

The main threats to the species identified in the proposal are “activities that cause the deterioration and contamination of the environment, the loss and habitat fragmentation, and directly overexploitation through collection of the wild of large numbers mainly hatchlings and juveniles for trafficking internationally, during the breeding season.” Matamata are also consumed locally by indigenous communities.

The proponents claim that there is a growing international demand for these species and although their trade is regulated under the legislation of each country, illegal trade occurs, as evidenced by several seizures in Peru and Colombia. Some of these seizures were made at international airports indicating that the specimens were destined for international markets. Examples of legal trade levels from range States presented in the proposal indicate that there is an increasing demand for the species, particularly in the pet trade in Europe and the United States of America. The statement mentions that ranching operations exist and presumably this has an impact on the wild populations.

In Colombia, Venezuela and Brazil, the export of matamatas is prohibited. In Peru, the commercialization of *C. fimbriata* is permitted under the Forestry and Fauna Law (Law No. 29763) and the Regulations for the Management of Wild Fauna, which establishes the conditions for the management of species such as *C. fimbriata* in “zoocriaderos” as well as its management in wild areas.

The supporting statement indicates that consultations were not applicable in this case, but there are other known range States apart from those mentioned as proponents.

Additional considerations (including relevant CoP recommendations)

The proposal states that there are currently two commercial *ex situ* producers of matamata and two *in situ* management programmes in native communities in Peru. The total volume of specimens exported has maintained an upward trend, with an average annual increase of 50% since 2010, going from less than a thousand specimens to more than 18 thousand specimens in the year 2018.

The current CITES standard nomenclatural reference for chelonians in Resolution Conf. 12.11 (Rev. CoP18) on *Standard nomenclature* recognises *C. fimbriatus* but not ***C. orinocensis***. If the proposal is adopted, it would be helpful to designate an additional standard nomenclatural refence to address this issue.

Provisional conclusions

On the basis of the information in the supporting statement, it isn’t clear to the Secretariat if either species meet criterion A of Annex 2a of Resolution Conf. 9.24 (Rev. CoP17) as there is little information to determine whether it may become eligible for inclusion in Appendix I in the near future. However, it does appear that there is sufficient evidence to suggest that both *C. fimbriata* and *C. orinocensis* meet criterion B of Annex 2a of Resolution Conf. 9.24 (Rev. CoP17).

Proposal 23

***Macrochelys temminckii* (Alligator snapping turtle) *and Chelydra serpentina* (Common snapping turtle)**

Proposal: Include in Appendix II

Proponent: United States of America

Provisional assessment by the Secretariat

CITES background

M. temminckii and *Chelydra serpentina* were included in Appendix III in 2006 and 2016 respectively at the request of the United States of America.

Purpose and impact of the proposal

The proposal seeks to include *M. temminckii* and *Chelydra serpentina* in Appendix II, in accordance with Article II paragraph 2(a) and 2(b) of the Convention. if the proposal is adopted, international trade in all specimens of this species will be regulated in accordance with the provisions of Article IV of the Convention.

Compliance with listing criteria

Concerning inclusion of the species in Appendix II, the proponent asserts that *M. temminckii* meets Criterion B in Annex 2 a) of Resolution Conf. 9.24 (Rev. CoP17) - 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 addition, the proponents assert that *Chelydra serpentina* meets Criterion A in Annex 2 b) of Resolution Conf. 9.24 (Rev. CoP17) - the specimens of the species in the form in which they are traded (juveniles) 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.

M. temminckii and *C. serpentina* are two aquatic freshwater turtles, that occupy different microhabitats and may rarely be found occurring together. *M. temminckii* has a long generation length (up to 55 years) and a lifespan that may exceed 80 years. The proposal does not mention the generation length or lifespan for *C. serpentina*, but these are likely to be similar to those of *M. temminckii*. Adults of *M. temminckii* are generally found in deep waters of large rivers and tributaries, while hatchlings use shallower waters with structure and canopy cover; juveniles need small streams with mud or gravel bottoms. *C. serpentina* is found in a variety of freshwater habitats (e.g., rivers, lakes, reservoirs, ponds, marshes), but slow-moving waterways with soft mud or sand bottoms and plenty of aquatic vegetation are preferred habitats. *C. serpentina* juveniles are generally found in shallower and vegetated microhabitats compared to adults. Both species exhibit slow life history traits - late maturity, long adult lifespan, extended reproductive lives – making them especially vulnerable to human-mediated activities and changes, including habitat loss/degradation, consumption for food/medicine, invasive species impacts, climate change, and collection for the international pet trade.

M. temminckii is endemic to the United States of America and confined to river systems that drain into the Gulf of Mexico, though some introduced populations exist outside its natural range (e.g., Republic of Korea). *C. serpentina* has a more widespread distribution; its range including Canada. It has also been introduced to parts of the western United States of America, as well as other countries [e.g., Taiwan (Province of China) and Japan].

The proponent states that despite inclusion in Appendix III, as well as domestic regulations on wild harvest, the national population of *M. temminckii* has not recovered from past harvest practices, largely due to the species' slow life history and low reproductive output. The proposal provides information on the breeding biology of both species. In the case of *M. temminckii*, males attain sexual maturity at 11-21 years, and females at 13-21 years. Females lay only one clutch of eggs per year (9-61 eggs; average: 27.8 eggs). The nest predation rate is high (100% in some populations); juvenile-to-adult survival rate is estimated to be only 5%, with most mortality occurring in the first two years. Populations of *M. temminckii* are therefore heavily reliant on high adult survivorship, particularly of females, such that any less than 98% of adult female survivorship per year results in population declines. The proponents highlight that these characteristics make the species particularly susceptible to over-exploitation.

The population size is estimated at around 360,000 individuals for *M. temminckii*. The most recent IUCN Red List of Threatened Species assessment for *M. temminckii* was in 1996, when it was listed as Vulnerable, but this assessment clearly needs updating. In addition, models of future conditions and viability cited in the supporting statement indicate that *M. temminckii* will likely decline throughout a large portion of its range over the next 30-50 years and face quasi-extirpation in many areas within the next 50 years, based on the current and future threats that the species faces, including legal and illegal harvest.

The total population size for *C. serpentina* is unknown; although an estimate from 2013 of 10,000 to >1,000,000 individuals is noted in the supporting statement. Harvest for international trade is not thought to currently pose a significant threat to its conservation status. The proponent notes that most international commercial trade is indicated to be captive-born or captive-bred specimens; however, it states that, as captive breeding facilities are not necessarily closed systems, "this trade is also particularly problematic for enforcing Appendix II measures for *M. temminckii*."

The proponent states that alterations to the habitat of *M. temminckii*, such as damming rivers, channelization, dredging, deadhead logging, and stream bank erosion can have negative impacts on all life stages. Changes in water quality (e.g., from agricultural and urban development runoff) can also impact the suitability of habitat (USFWS 2021b).

M. temminckii was historically harvested in large numbers in the United States of America for domestic consumption, with harvest levels peaking in the 1960s and 1970s. International trade began to rise steadily in the 1990s; up to 23,780 alligator snapping turtles are said to have been exported from the United States of America per year prior to 2006, when the species was included in Appendix III. Since that time, international exports from the United States of America have remained high and relatively consistent, averaging around 34,000 individuals per year during the period 2006 to 2020. The near entirety of this trade comprises live (predominantly immature) turtles, largely originating from the United States of America.

The extent to which demand for international trade drives the legal and illegal harvest of *M. temminckii* is unclear. An examination of the CITES trade database indicates that, since 2006, commercial exports of mostly wild specimens of live alligator snapping turtles reported to have been exported from the United States of America totalled over 500,000 individuals; although importers reported lower numbers for the same time period (just under 250,000 individuals). Trade numbers have remained relatively consistent over time, generally ranging between 30,000 and 44,000 individuals exported. It is clear, therefore, that there is a demand for the species in international trade. Given the potential contribution of international trade to wild harvest, combined with *M. temminckii*'s slow life history and low, declining national population numbers, the proponents are of the view that inclusion of this species in Appendix II will ensure that future use is sustainable and international trade is not detrimental to wild populations.

The proposal states that there are currently no federal regulations in the United States of America specific to *M. temminckii* or *C. serpentina* at a national level, but the United States of America Food and Drug Administration for health reasons prohibits turtles with a carapace length of less than 4 inches for sale, held for sale, or offered for any other type of commercial or public distribution. However, it then states that there is an exemption if the live turtles are intended for export only. Presumably this is to accommodate captive facilities, which would export juveniles.

There is limited information on the extent of illegal trade in *M. temminckii*, but the proposal states that it is known to occur. For example, between 2006 and 2020, a total of 3,726 live individuals (and one carapace) were reported as seized in international trade (source code "I" – "confiscated or seized"), in the CITES trade database.

The proposal to list *C. serpentina* in Appendix II is because commercial trade is dominated by immature individuals, which are highly similar in appearance to immature specimens of *M. temminckii*. Although it is possible to tell adults apart, hatchlings to subadults can be easily confused, presenting enforcement challenges.

Unlike *M. temminckii*, commercial trade in *C. serpentina* reported as source code "W" represents only a small fraction of live animal trade (less than 2% of all exports). Between 2017 and 2020, exports reported from the United States of America totalled 773,205 individuals, while importer reported quantities indicate total live, commercial exports from the United States of America were even higher, at 901,858 individuals. It should also be noted that harvest of *C. serpentina* is prohibited in Canada.

Additional considerations (including relevant CoP recommendations)

The proposal states that some authorities in the United States of America recognize two species of alligator snapping turtle: *M. suwanniensis* and *M. temminckii* (USFWS 2020, 2021a). However, the current accepted CITES standard nomenclature for turtles (Fritz & Havaš 2007) does not currently recognize any subdivision of *M. temminckii*.

Both *M. temminckii* and *C. serpentina* are known to be bred and raised in farming facilities (within their range States but also in China) to supplement domestic and international demand. Most recent *M. temminckii* exports (2006-2020) may have been hatched in these captive facilities, which may alleviate some pressure on wild populations. However, these facilities may also pose concerns for both species, for example, harvest of adult individuals for breeding stock or removal of eggs from the wild for raising in captivity, as it is not known if these facilities meet the requirements of Resolution Conf. 10.16 (Rev.) on *Specimens of animal species bred in captivity*.

Provisional conclusions

On the basis of the information in the supporting statement, there is an international trade demand for specimens of *M. temminckii* and the species is vulnerable to overexploitation, particularly in light of its slow life history and low, declining national population numbers. Therefore, the Secretariat considers that regulation of trade in *M. temminckii* may be 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, as outlined in Criterion B in Annex 2 a) of Resolution Conf. 9.24 (Rev. Cop17). Considering the enforcement challenges posed by the inability to tell immature *M. temminckii* apart from *C. serpentina*, it may be appropriate to also include *C. serpentina* in Appendix II in line with Annex 2 b) of Resolution Conf. 9.24 (Rev. CoP17).

Proposal 24

***Graptemys barbouri, G. ernsti, G. gibbonsi, G. pearlensis* and *G. pulchra* (Broad-headed map turtles)**

Proposal: Include in Appendix II

Proponent: United States of America

Provisional assessment by the Secretariat

CITES background

Graptemys spp. was included in Appendix III at the request of United States of America in 2006.

This is the second time that these species have been proposed for the inclusion *Graptemys* in Appendix II. A proposal to list *Graptemys* spp. was submitted by the United States of America to CoP10 (1997) (see CoP10 Prop. 10.59). At the meeting, the United States of America amended its proposal to exclude the three species of *Graptemys* that had been included in the proposal for look-alike reasons (*G. geographica G. ouachitensis* and *G. pseudogeographica*). Concerns were raised that most international trade in the genus was in two of the three species that had been removed from the proposal and an Appendix-III listing would be more appropriate. The amended proposal was rejected.

Purpose and impact of the proposal

The proposal seeks to include *G. barbouri, G. ernsti, G. gibbonsi, G. pearlensis* and *G. pulchra* in Appendix II, in accordance with Article II paragraph 2(a) of the Convention. If the proposal is adopted, international trade in all specimens of this species will be regulated in accordance with the provisions of Article IV of the Convention.

Compliance with listing criteria

Concerning inclusion of the species in Appendix II, the proponent asserts that they meet criterion B in Annex 2 a) of Resolution Conf. 9.24 (Rev. CoP17), whereby the regulation of international trade is required to ensure that the harvest of specimens is not reducing wild populations to a level at which their survival might be threatened by continued harvesting or other influences.

The proposal indicates that *Graptemys* comprises 14 recognized species. The current proposal seeks to include five species that it states are endemic to the United States of America and restricted to river systems in the states of Alabama, Mississippi, Louisiana, Florida, Tennessee, and Georgia.

The supporting statement provides details on the distribution and biological characteristics of each of the five species mentioned. It provides some local population estimates for some species but there is no full population estimate available for any species. the IUCN Red List of Threatened Species also does not present any estimates of the number of mature adults for any species of *Graptemys.*

The following table summarises the red list assessment and population trends for the *Graptemys* species that have been proposed for inclusion in Appendix II.

Species	Red List assessment (2010)	Population trend
G. barbouri	VU	Decreasing
G. ernsti	NT	Decreasing
G. gibbonsi	EN	Decreasing
G. pearlensis	EN	Decreasing
G. pulchra	NT	Unknown

The proponent states that “criterion B, Annex 2a of Resolution Conf. 9.24 (Rev. CoP17), is met for *G. barbouri, G. ernsti, G. gibbonsi, G. pearlensis,* and *G. pulchra*, and the regulation of international trade is required to ensure that the harvest of specimens is not reducing wild populations to a level at which their survival might be threatened by continued harvesting or other influences”. However, the proposal has not demonstrated that the five species mentioned are being harvested from the wild for the purpose of international trade.

It would appear that several other species of *Graptemys* may meet the criteria for inclusion in Appendix II, but the supporting statement does not provide sufficient evidence to demonstrate that *G. barbouri, G. ernsti, G. gibbonsi, G. pearlensis,* or *G. pulchra* meet the criteria.

The proposal highlights the main threats to freshwater turtles in a broad sense. The main threats that are specifically identified in the proposal for the five species proposed for inclusion in Appendix II include habitat degradation, overharvesting and predation. Channel modification, dredging, barge traffic and pollution are threats to their riverine habitat and overgrowth of sandy spoil mound sites may change the distribution of nests by increasing clumping.

Concerning levels of international trade, the Secretariat extracted the direct exports of the five species concerned in the proposal, as reported by the exporting Party and the importing Party from the CITES trade database and found very different levels of trade to those reported in the supporting statement. There appears to have been no commercial trade reported in any of the five species since 2006, when the genus *Graptemys* was listed in Appendix III. The only reported trade in wild specimens during this period was for breeding or scientific purposes. The data extracted for the five species in the proposal is summarized below.

Reports of direct trade in *G. barbouri* from the CITES trade database 2006 to 2020 (data extracted 2 August 2022)

Year	Importer	Exporter	Importer reported quantity	Exporter reported quantity	Term	Purpose	Source
2006	JP	US		1	live	T	F
2007	JP	CH	5	5	live	T	C
2008	JP	CH	2	5	live	T	C
2016	CN	IT		25	live	T	C
2017	CN	IT		20	live	T	C
2017	HK	CH	2	2	live	T	F
2018	AT	US	2	2	live	B	F
2020	CN	DE		9	live	T	C
Total			**11**	**69**			

Reports of direct trade in *G. ernesti* from the CITES trade database 2006 to 2020 (data extracted 2 August 2022)

Year	Importer	Exporter	Importer reported quantity	Exporter reported quantity	Term	Purpose	Source
2013	CA	US		2		S	W
Total				**2**			

Reports of direct trade in *G. gibbonsi* from the CITES trade database 2006 to 2020 (data extracted 2 August 2022)

Year	Importer	Exporter	Importer reported quantity	Exporter reported quantity	Term	Purpose	Source
2006	DE	US		4	live	T	C
2006	JP	US		35	live	T	C
2006	JP	US		5	live	T	F

2006	TW	US		15	live	T	F
2013	CA	US		2	specimen	S	W
2015	HK	CH	5	5	live	T	C
2016	CN	IT		27	live	T	C
2017	CN	IT		45	live	T	C
2018	CN	IT		2	live	T	C
2020	CN	DE		22	live	T	C
Total			**5**	**162**			

Reports of direct trade in *G. pearlensis* from the CITES trade database 2006 to 2020 (data extracted 2 August 2022)

Year	Importer	Exporter	Importer reported quantity	Exporter reported quantity	Term	Purpose	Source
2018	AT	US	1		live	B	F
2018	AT	US	5	6	live	B	W
Total			**6**	**6**			

Reports of direct trade in *G. pulchra* from the CITES trade database 2006 to 2020 (data extracted 2 August 2022)

Year	Importer	Exporter	Importer reported quantity	Exporter reported quantity	Term	Purpose	Source
2015	HK	CH	3	3	live	T	C
2018	AT	US	10	10	live	B	F
Total			**13**	**13**			

The proponent also states that trade data collected by the U.S. Fish and Wildlife Service and housed in the Law Enforcement Management Information System was analysed for years 2005-2022. This analysis revealed the export of 1.5 million turtles described as *Graptemys* spp., or their parts, were exported from the United States of America into 36 countries during these years. However, it is not clear which species this trade refers to, or whether the specimens were taken from the wild or captive bred.

When the Secretariat examined the CITES trade database for all *Graptemys* species (including *Graptemys* spp.), it showed that during the period 2006 to 2020 (following the inclusion of *Graptemys* spp. in Appendix III), it was evident that large quantities of these turtles had been exported. However, the only wild specimens that were exported were of *G. geographica, G. ouachitensis* and *G. pseudogeographica* and none of the species subject to the present proposal.

Additional considerations (including relevant CoP recommendations)

Most species of *Graptemys* are thought to do well in captivity and virtually all reported trade in the five species listed in this proposal comes from source codes C (with some specimens also traded under source code F).

The proposal points out that it is difficult to differentiate between *Graptemys* species, particularly at the hatchling stage and hybrids are common. As this is not a proposal for a genus listing, there could be significant enforcement challenges.

Provisional conclusions

On the basis of the information available in the supporting statement, and the information in the CITES trade database, the Secretariat considers that it is not apparent that the regulation of international trade in *G. barbouri, G. ernsti, G. gibbonsi, G. pearlensis* and *G. pulchra* is required to ensure that the harvest of specimens is not reducing wild populations to a level at which their survival might be threatened by continued harvesting or other influences, as set out in criterion B in Annex 2 a) of Resolution Conf. 9.24 (Rev. CoP17).

Proposal 25

***Batagur kachuga* (Red-crowned roofed turtle)**

Proposal: Transfer from Appendix II to Appendix I

Proponent: India

Provisional assessment by the Secretariat

CITES background

B. kachuga was included in Appendix II in 2003, under the genus listing of *Batagur* spp. (formerly *Kachuga* spp.). In 2013 the genus listing was deleted and changed to individually listed species.

Currently all known species of the genus *Batagur* are included in Appendix II, with the exception of the two species listed in Appendix I: *B. affinis* and *B. baska* (both were originally included under *B. baska* at the time of entry into force of the Convention in 1975). Under the Appendix-II listing, there is also an annotation indicating "zero quota for wild specimens for commercial purposes" for *B. homeonsis* and *B. trivittata*. The other two species listed in Appendix II are *B. dhongoka* and *B. kachuga.*

Purpose and impact of the proposal

The proposal seeks to transfer *B. kachuga* from Appendix II to Appendix I. If it is adopted, international commercial trade in specimens of *B. kachuga* of wild origin will be prohibited. International trade in all specimens of the species will be regulated in accordance with the provisions of Article III of the Convention.

If *B. kachuga* is included in Appendix I, breeding operations wishing to commercially export and trade in specimens of this species would need to be registered with the Secretariat in accordance with Resolution Conf. 12.10 (Rev. CoP15) on *Registration of operations that breed Appendix-I animal species in captivity for commercial purposes.*

Compliance with listing criteria

Concerning inclusion of the species in Appendix I, the proponent asserts that it specifically meets criterion C ii) in Annex 1 of Resolution Conf. 9.24 (Rev. CoP17) because it faces a high-risk of extinction and is detrimentally affected by extrinsic factors, including habitat loss from pollution and hydrological projects, and overharvest for illegal consumption and the illegal international pet trade.

The proponent states that *B. kachuga* is or may be affected by trade because live specimens of the species, particularly males, are recorded to have been found in international trade and recent records show that trade is ongoing. The supporting statement concludes that due to the ongoing decline in the species' population and continued threats to the species, both of which are expected to continue into the future, any trade in the species will have a detrimental impact on its status.

B. kachuga is a large, riverine turtle with selective habitat requirements (inhabits large swift-flowing rivers with sandy bottoms) and slow recruitment (generation time estimated over 25 years). It has a restricted range, being found only in the Ganga lowlands of northern India and Bangladesh. The supporting statement claims that the species is now known with certainty to exist only in the National Chambal Sanctuary, with 50 nests over 100 km and is likely to be extinct now in Bangladesh (Praschag *et al.* 2019).

The proponents claim that it is threatened by exploitation for consumption, international pet trade due to its brilliant coloration, and systemic impacts on its main river habitat, as a result of pollution and hydrological projects, which have been documented to have caused steep population declines (Praschag *et al*. 2019). The supporting statement lacks information on the biology of *B. kachuga* in the wild, but it is said to have a generation length of 25 years.

The supporting statement indicates that the available habitat for *B. kachuga* is decreasing as a result of major hydrological projects and their impacts on river flow dynamics, nesting beaches, and water pollution (Das 1991, 1997; Choudhury et al. 2000). Other impacts include those associated with thermal biology and fitness, as well as entanglement in fishing nets.

The proponent states that in the past 12-13 years, there are no reliable records of *B. kachuga,* except from the Chambal River (Praschag et al. 2019), where the population of adult breeding females is estimated to be about 500. Based on Praschag et al. (2019), the proponent claims that, despite a lack of quantitative data, an inferred population reduction of at least 80% in the past 50 years, and ongoing, is realistic.

In terms of status and trends, the supporting statement notes that the IUCN classifies *B. kachuga* as Critically Endangered due to an observed, estimated, inferred or suspected population size reduction of ≥80% over the last 10 years or three generations, whichever is the longer, where the reduction or its causes may not have ceased or may not be understood or may not be reversible, based on exploitations and/or a decline in habitat.

The CITES Trade Database shows very limited levels of trade in the species since 2000, including the import of live captive-bred turtles for commercial trade purposes in 2005 and 2006 (6 and 8 turtles, respectively) into Japan from Lebanon, which reportedly originated in Kazakhstan (UNEP-WCMC). It seems possible that this reported trade is due to mistaken species identification.

Year	Importer	Exporter	Origin	Importer reported quantity	Exporter reported quantity	Term	Purpose	Source
2005	JP	LB	KZ	6		live	T	C
2006	JP	LB	KZ	8		live	T	C
2008	IN	SG	XX		1	live	Z	U
2012	AT	SG	XX		1	live	Z	U
2018	US	HK		2		live	E	I

The supporting statement notes that the species has been afforded the highest legal protection from hunting and trade in India since 1986 and part of its distribution lies within protected areas including the National Chambal Sanctuary. However, it says, illegal offtake and trade of the species has continued.

Concerning illegal trade, the supporting statement notes that a 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). It also reports on a number of cases of confiscations of confirmed specimens of *B. kachuga* in 2017.

Additional considerations (including relevant CoP recommendations)

Since at least 1999, India has banned the export for commercial purposes of wild-taken specimens of *B. kachuga*. (CITES Notification to the Parties No. 1999/39; CITES Notification to the Parties. No. 2018/031)

Provisional conclusions

The Secretariat finds that, based on the information in the supporting statement, there does appear to be some limited international trade in this species. The species also appears to be highly vulnerable to extrinsic factors that has resulted in a marked decline in the population size in the wild. Therefore, the species may meet criterion C ii) in Annex 1 of Resolution Conf. 9.24 (Rev. CoP17).

Proposal 26

***Cuora galbinifrons* (Indochinese box turtle)**

Proposal: Transfer from Appendix II to Appendix I

Proponents: European Union and Viet Nam

Provisional assessment by the Secretariat

CITES background

C. galbinifrons was included in Appendix II at CoP11 (2000), when it was covered by the listing of the genus *Cuora*. At the time of listing, *C. galbinifrons* was considered to include two subspecies (*C. galbinifrons bourreti* and *C. galbinifrons picturata).*

At CoP16 (2013), Viet Nam submitted a proposal to transfer the species *Cuora galbinifrons* from Appendix II to Appendix I. This proposal was rejected following the adoption of the proposal that placed a zero quota on trade in wild specimens of *C. galbinifrons* for commercial purposes.

At CoP16, Viet Nam requested the inclusion of *C. galbinifrons* in the Periodic Review of the Appendices. The review was carried out by Viet Nam and presented at the 28th meeting of the Animals Committee (AC28, Tel Aviv, 2015). At AC28 the Committee agreed with the recommendation resulting from the review, to transfer *C. galbinifrons* to Appendix I.

However, since then, at CoP17 (2016), the Conference of the Parties has adopted a standard nomenclatural reference which considers *C. bourreti* and *C. picturata*, which were considered as part of the species *C. galbinifrons,* to be separate species. At CoP18, (2019), Viet Nam submitted a proposal to transfer *C. bourreti* and *C. picturata* from Appendix II to Appendix I. Both of these proposals were adopted.

If *C. galbinifrons* is included in Appendix I, operations breeding the species for commercial purposes would need to be registered with the Secretariat in accordance with Resolution Conf. 12.10 (Rev. CoP15) on *Registration of operations that breed Appendix-I animal species in captivity for commercial purposes*.

Purpose and impact of the proposal

The proposal seeks to transfer *C. galbinifrons* from Appendix II to Appendix I. If it is adopted, international commercial trade in specimens of *C. galbinifrons* of wild origin will be prohibited. International trade in all specimens of the species will be regulated in accordance with the provisions of Article III of the Convention.

If *C. galbinifrons* is included in Appendix I, breeding operations wishing to commercially export and trade in specimens of this species would need to be registered with the Secretariat in accordance with Resolution Conf. 12.10 (Rev. CoP15) on *Registration of operations that breed Appendix-I animal species in captivity for commercial purposes.*

Compliance with listing criteria

Concerning inclusion of the species in Appendix I, the proponent asserts that it meets criterion A v) in Annex 1 of Resolution Conf. 9.24 (Rev. CoP17) because of its small population in the wild with high intrinsic vulnerability; and criterion C i), past and ongoing marked decline due to overexploitation.

C. galbinifrons is a medium-sized terrestrial turtle that inhabits upland, moist, closed-canopy primary forest, usually between 300 and 1700 m altitude. It is confirmed to occur in Hainan and Guangxi in PR China, in northern Lao PDR and in northern Viet Name at least as far south as Quang Binh province Between Minh Hoa and Bo Trach districts. The supporting statement reports that little is known of the biology of *C. galbinifrons* in the wild, with most observations coming from captive held specimens. The species is stated to be slow-growing with low fecundity, with animals taking about 10 to 15 years to mature, and females producing a single clutch of 1-3 eggs per year.

No overall population size is available for the species, but there are some estimates available for population densities. The values ranged from 0.057 individuals per km in Northern Lao PDR to 0.7862 animal per square km inside a protected area with suitable habitats in China. Elsewhere for *C. galbinifrons*, only anecdotal and

relative population density data is available, but the proponents note that all recent indications are that the species requires an extensive search effort for an encounter. Whilst documented market trade volumes may have been several orders of magnitude greater than total reported legal trade volumes in the past, trade volumes had reported to have "collapsed" due to the species increasing rarity (Li et al., 2020).

The primary threat to *C. galbinifrons* is reported to be for the pet and human consumption trade. However, as trade would have included *C. bourreti* and *C. picturata* until 2016, and trade in the species has been subject to a zero quota since 2013, there are no accurate trade data available to demonstrate this. Habitat loss and degradation are additional threats to the species.

In terms of status and trends, the supporting statement notes that *C. galbinifrons* has been assessed in the IUCN Red List of Threatened Species as Critically Endangered since 2000. The initial assessment prepared included *C. bourreti* and *C. picturata* as subspecies of *C. galbinifrons*. An updated Red List Assessment of *C. galbinifrons* (excluding the two subspecies) as Critically Endangered under Red List Criteria A2bd+4bd was published in 2020 (Li et al., 2020) which noted that the species was rare and continuing to decline.

The supporting statement notes that the species is afforded full legal protection in all three range States and presents some new information on the levels of illegal trade in *Cuora* species, noting that, until 2017, *C. bourreti* and *C. picturata* were treated as subspecies of *C. galbinifrons.* It reports that 29 cases of illegal trade with 260 turtles were seized in the period 2017 to 2021. This species was listed in the Government Decree No. 64/2019/ND-CP of Viet Nam as a priority protection species and the proponents infer that uplisting of *C. galbinifrons* to Appendix I would have allowed a high penalty to have been applied for seized animals imported into Vietnam.

The supporting statement also states that consultations took place with the P.R. China and Lao People's Democratic Republic, which are the other range States for this species, but their responses, if any, are not included.

Additional considerations (including relevant CoP recommendations)

At the 18th meeting of the Animals Committee (AC18, San José, 2002), *C. galbinifrons* was selected for the Review of Significant Trade pursuant to Resolution Conf. 12.8 (Rev. CoP13). The Standing Committee, at its 58th meeting (SC58, Geneva, July 2009), adopted a recommendation to suspend trade in *C. galbinifrons* from Lao People's Democratic Republic and Viet Nam (see SC58 summary record). The recommendation for Viet Nam was withdrawn at the 62nd meeting of the Standing Committee (Geneva, July 2012) as no commercial exports had taken place since 2001 [see document SC62 Doc.27.2 (Rev.1)]. The recommendation to suspend exports of *C. galbinifrons* from the Lao People's Democratic Republic remained in effect until the 70th meeting of the Standing Committee (Sochi, October 2018), when the recommendation to suspend trade was lifted on the basis of the written notice from the Lao People's Democratic Republic that it had no intention of authorizing export of this species.

Provisional conclusions

The Secretariat, on the basis of the information in the supporting statement, considers that the wild population of *C. galbinifrons* does not appear to have a restricted area of distribution, but anecdotal evidence appears to suggest that the population is small and declining. Owing to ongoing overharvesting for trade and ineffective implementation of existing protection measures, the species does seem to have undergone a marked decline in population size in the wild, thereby meeting criterion C i) in Annex 1 of Resolution Conf. 9.24 (Rev. CoP17).

Proposal 27

***Rhinoclemmys* spp. (Neotropical wood turtles)**

Proposal: Include in Appendix II

Proponents: Brazil, Colombia, Costa Rica and Panama

Provisional assessment by the Secretariat

CITES background

This is the first time that species of the genus *Rhinoclemmys* have been proposed for inclusion in the Appendices.

Purpose and impact of the proposal

The proposal seeks to include in Appendix II all species of the genus *Rhinoclemmys* in Appendix II, in accordance with Article II paragraph 2(a) and 2(b) of the Convention. If the proposal is adopted, international trade in all species of these taxa will be subject to the provisions of Article IV of the Convention.

According to the supporting statement, this would imply the inclusion of 9 species in Appendix II.

Compliance with listing criteria

The supporting statement refers to Article II, paragraphs 2(a) and 2(b) of the Convention. It does not specify however how the proposal to include the genus *Rhinoclemmys* satisfies the criteria of Annex 2a or Annex 2b of Resolution Conf. 9.24 (Rev. CoP17) on *Criteria for amendment of Appendices I and II*.

Species of the genus *Rhinoclemmys* occur from Mexico to Brazil and Ecuador.

Of the nine species in the genus, five have been assessed in the IUCN Red List of Threatened Species as 'Near Threatened', however these assessments require updating as the most recent one is dated 2007. From the supporting statement and the IUCN assessments, it seems that the main threats to species of the genus *Rhinoclemmys* are extrinsic (e.g. habitat degradation) and intrinsic (e.g. slow growth rate and low reproductive rate). This supporting statement says that no *Rhinoclemmys* species are currently known to be endangered primarily as a result of overexploitation through international trade.

Further, turtles of the genus *Rhinoclemmys* are listed in different categories of threat in the national legislation of range States such as Colombia, Ecuador, Mexico and Venezuela.

The trade information contained in the supporting statement points mostly to domestic consumption of turtles for sustenance and medicinal purposes. There is little information in the proposal that could point towards any demand in specimens for international trade. According to trade data from the United States of America, in the five years from 2011 and 2016, around 11,000 specimens of *Rhinoclemmys* species were imported annually, over 90% being *R. pulcherrima*, mostly animals declared as captive-bred in Nicaragua. More recent records of international trade seem to be lacking.

Additional considerations (including relevant CoP recommendations)

Provisional conclusions

Species in this genus do appear to be in international trade. From the supporting statement, it seems that species of the genus *Rhinoclemmys* are mostly threatened by intrinsic vulnerabilities, and that their use is mostly limited for consumption at the national level by relevant range States. The proposal does not appear to satisfy the criteria for including the genus *Rhinoclemmys* in Appendix II, and its supporting statement is unclear as to how strict regulation international trade in species of the genus would avoid utilization incompatible with their survival.

Proposal 28

***Claudius angustatus* (Narrow-bridged musk turtle)**

Proposal: Include in Appendix II

Proponent: Mexico

Provisional assessment by the Secretariat

CITES background

This is the first time that *C. angustatus* has been proposed for inclusion in the Appendices.

Purpose and impact of the proposal

The proposal seeks to include the species *C. angustatus* in Appendix II, in accordance with Article II paragraph 2(a) of the Convention. If the proposal is adopted, international trade in all specimens of the species will be regulated in accordance with the provisions of Article IV of the Convention.

Compliance with listing criteria

The supporting statement suggests that the inclusion of *C. angustatus* Appendix II satisfies Criterion A of Annex 2a of Resolution Conf. 9.24 (Rev. CoP17) on *Criteria for amendment of Appendices I and II*.

The species *C. angustatus* is a semi-aquatic turtle that occurs in Mexico, Belize and Guatemala. It has been assessed by the IUCN Red List of Threatened Species as 'Near threatened'; however, this assessment was published in 1996 and requires updating. Further, the species is respectively listed as 'Endangered' and 'Near threatened' under Mexico and Guatemala's national legislations.

From the supporting statement, it seems that the main threats to the species are extrinsic, mostly due to illegal trade for meat consumption and habitat degradation.

According to the supporting statement, Mexico has only authorized trade from captive bred specimens of *C. angustatus* from five management facilities registered in accordance with the national legislation. However, no information on management of these taxa from other range States of these species is provided.

The trade information contained in the supporting statement is focused largely on data from the Management and Enforcement Authorities of Mexico. According to the former, no permits for specimens from the wild has been authorized, however there are indications that wild specimens have been harvested and laundered as captive bred specimens. From 2013 to 2019, Mexico's Management Authority authorized the export of 11,218 captive bred live individuals of *C. angustatus*.

According to the supporting statement, the main importers of specimens of *C. angustatus* are China and the United States of America.

The supporting statement suggests that the main specimens in international trade of *C. angustatus* are individuals for pet trade and meat for consumption; noting that most of the meat specimens are of wild origin.

While most of the legal trade seems to be of captive-bred specimens, the supporting statement points towards potentially detrimental levels of illegal trade of wild source. A volume of 7,434 turtles were seized by Mexico's Enforcement Authority between 2010 and 2021.

Regarding similar species, the proponents mention that juveniles of the species *C. angustatus* could be difficult to distinguish from that of species of the genus *Staurotypus*. The latter is also subject to a proposal for inclusion in Appendix II at the present meeting (see CoP19 Doc. 30).

In Section 10 (Consultations), the supporting statement indicates that Guatemala and Belize had been consulted over the proposal on 29 March 2022, but that there had been no response at the time of submitting the proposal.

Additional considerations (including relevant CoP recommendations)

In Section 1 (‘Taxonomy’) of the supporting statement, the proponents use the adopted standard reference ‘Fritz & Havas (2007)’ as the taxonomic reference for *C. angustatus* (see Resolution Conf. 12.11 [Rev. CoP18]).

Provisional conclusions

The Secretariat finds that the Information on the conservation status and trade of *C. angustatus* is documented for its Mexican populations; however, there are considerable information gaps for populations of the species in other parts of the species’ range in Belize and Guatemala. While legal trade of *C. angustatus* specimens in Mexico seems to be overwhelmingly from legally registered captive breeding operations, the information on illegal trade of the supporting statement points towards levels of harvest and export that could be detrimental to the wild populations of the species, at least in Mexico. Based on the supporting statement, it is not clear that the regulation of trade in the species is necessary to avoid it becoming eligible for inclusion in Appendix I in the near future, however there are some indications that it can be inferred or projected that regulation of trade in the species is required to ensure that the harvest from the wild is not reducing the wild population to a level which its survival might be threatened by continued harvesting, at least in Mexico.

Proposal 29

***Kinosternon* spp. (except the species included in Appendix I) (Mud turtles)**

Proposal: Include *Kinosternon cora* and *K. vogti* in Appendix I and all other species of *Kinosternon* spp. in Appendix II

Proponents: Brazil, Colombia, Costa Rica, El Salvador, Mexico, Panama and United States of America

Provisional assessment by the Secretariat

CITES background

This is the first time that species of the genus *Kinosternon* have been proposed for inclusion in the Appendices.

Purpose and impact of the proposal

The proposal seeks to:

a) include *K. cora* and *K. vogti* in Appendix I, in accordance with Article II, paragraph 1, of the Convention; and,

b) include the remaining 20 species of the genus *Kinosternon* in Appendix II, in accordance with Article II, paragraph 2, of the Convention.

If the proposal is adopted international trade in specimens of *K. cora* and *K. vogti* will be regulated in accordance with the provisions of Article III of the Convention; and international trade in specimens of the remaining 20 species of the genus *Kinosternon* will be regulated in accordance with the provisions of Article IV of the Convention.

Compliance with listing criteria

The supporting statement suggests that the inclusion in Appendix II of species of the genus *Kinosternon* satisfies the following criteria of Resolution Conf. 9.24 (Rev. CoP17) on *Criteria for amendment of Appendices I and II*:

- *K. cora* and *K. vogti* satisfy biological Criteria A i) ii) iii) and v) of Annex 1, and biological Criteria B i) iii) and iv) of Annex 1 for inclusion in Appendix I;

- *K. abaxillare*, *K. alamosae*, *K. chimalhuaca*, *K. hirtipes* and *K. oaxacae* satisfy Criterion A of Annex 2a for inclusion in Appendix II;

- *Kinosternon angustipons, K. creaseri, K. dunni, K. durangoense, K. herrerai, K. sonoriense, K. steindachneri* and *K. stejnegeri* satisfy Criterion A of Annex 2b for inclusion in Appendix II (look-alike criterion); and,

- *K. acutum, K. baurii, K. flavescens, K. integrum, K. leucostomum, K. scorpioides* and *K. subrubrum* satisfy Criterion B of Annex 2a for inclusion in Appendix II.

The genus *Kinosternon* is endemic to the Americas and it covers, according to the taxonomic reference used by the proponents (Rhodin *et al.*, 2021)[10], a total of 22 species. Of these, 17 have been assessed at the global level by the IUCN Red List of Threatened Species, as follows: *K. vogti* as 'Critically Endangered'; *K. angustipons, K. abaxillare,* and *K. dunni* as 'Vulnerable'; *K. acutum, K. herrerai* and *K. sonoriense* as 'Near Threatened'; *K. baurii, K. chimalhuaca, K. creaseri, K. flavescens, K. hirtipes, K. integrum* and *K. subrubrum* as 'Least Concern'; and, *K. alamosae*, *K. durangoense* and *K. oaxacae* as 'Data Deficient'. The remaining five

[10] *Turtle Taxonomy Working Group [TTWG: Rhodin, A.G.J., J.B. Iverson, R. Bour, U. Fritz, A. Georges, H.B. Shaffer, & P.P. van Dijk]. 2021. Turtles of the world: Annotated Checklist and Atlas of Taxonomy, Synonomy, Distribution, and Conservation Status. 8th Edition. Chelonian Research Monographs 8. 472 p.*

species of the genus (*i.e. K. cora*, *K. leucostomum*, *K. scorpioides, K. steindachneri* and *K. stejnegeri*) have not been assessed by the IUCN.

K. vogti and *K. cora* (the latter only described in 2020) are endemic to Mexico, have a limited wild population a restricted area of distribution and in the case of *K. vogti* at least, seem to exhibit a marked decline in population size. From the supporting statement, it seems that the main threats to the species of the genus are habitat destruction, consumption by humans, and unregulated and illegal harvest for pet trade at the national and international level. Other threats, identified as secondary by the proponents, are the introduction of invasive alien species, wildfires, pollution, droughts, and deforestation.

According to the supporting statement, range States such as Mexico, Brazil and Costa Rica have allowed the establishment of captive breeding operations of mud turtles of the genus *Kinosternon*. In the case of Mexico and Brazil, these operations have been granted permits for export for commercial purposes, whereas in the case of Costa Rica most of the mud turtles are bred for conservation and education purposes, with less than 10% of the captive bred specimens destined for commercial trade.

The supporting statement suggests that the main specimens in international commercial trade of species of the genus *Kinosternon* are live specimens traded as pets, and for food and medicinal purposes.

The trade information contained in the supporting statement is focused primarily on data from Mexico and the United States of America with a small amount of data from Argentina, El Salvador and Peru. From the information provided, it seems that the main importers of mud turtles are countries in Asia (e.g., China, Republic of Korea and Japan), followed by Europe (e.g. France, Germany and Spain) and United States of America (mostly as re-exporter). The majority of the legal trade reported is of wild specimens, with a considerable amount of 25,743 specimens of *K. leucostomum* imported by China within a two-year period.

Examples of illegal trade are provided in the supporting statement. For example, within the period 2010-2022 a total of 14,035 individuals of the genus *Kinosternon* were seized by Mexico's Enforcement Authority. The illegal origin of these specimens seems to be confirmed by the fact that no permits for wild specimens had been granted during that time frame by Mexico's Management Authority.

According to the supporting statement, species of the genus *Kinosternon* are difficult to differentiate at the intraspecific level by non-experts which would indicate compliance with Criterion A of Annex 2b of Resolution Conf. 9.24 (Rev. CoP17). Reference to Criterion B of Annex 2a in relation to *K. acutum, K. baurii, K. flavescens, K. integrum, K. leucostomum, K. scorpioides* and *K. subrubrum i*s not clearly explained in the supporting statement.

Additional considerations (including relevant CoP recommendations)

The current adopted CITES standard reference for reptiles (*i.e.* Fritz & Havas, 2007)[11] recognizes a total of 18 species covered by the genus *Kinosternon*.

In Section 1 ('Taxonomy') of the supporting statement, the proponents state that they followed "to the extent possible" the standard reference 'Fritz & Havas (2007)'. However, given recent taxonomic changes and the description of new species in the last four years, they propose a new standard nomenclature reference (*i.e.* Rhodin *et al.*, 2021) for species of the genus *Kinosternon*.

The Secretariat has consulted with the nomenclature specialist of the Animals Committee aspects relating to the nomenclature of the genus *Kinosternon*. Should the proposal be adopted at the present meeting, the Secretariat recommends that 'Rhodin *et al.*, 2021'[12] be adopted as the standard nomenclature reference for the genus *Kinosternon*, and that Resolution Conf. 12.11 (Rev. CoP18) on *Standard nomenclature* be revised accordingly.

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[11] *FRITZ, U. & HAVAŠ, P. (2007): Checklist of Chelonians of the World. Vertebrate Zoology, 57 (2): 149-368. Dresden. ISSN 1864-5755 [without its appendix]*

[12] *Turtle Taxonomy Working Group [TTWG: Rhodin, A.G.J., J.B. Iverson, R. Bour, U. Fritz, A. Georges, H.B. Shaffer, & P.P. van Dijk]. 2021. Turtles of the world: Annotated Checklist and Atlas of Taxonomy, Synonomy, Distribution, and Conservation Status. 8th Edition. Chelonian Research Monographs 8. 472 p.*

Provisional conclusions

The two species proposed for inclusion in Appendix-I (*K. cora* and *K. vogti*) are endemic species to Mexico and would seem to meet the listing criteria in several respects. Regarding the species proposed for listing in Appendix II, whilst there are information gaps relating to the population trends and conservation status of these species of mud turtles, there are indications that trade in some species needs to be regulated in order to avoid eligibility for an Appendix-I listing in the near future or to ensure that harvest of wild specimens is not detrimental to the wild populations and that the genus-level approach for the remaining species may be reasonable considering the difficulty in distinguishing individuals at the intraspecific level.

Proposal 30

***Staurotypus salvinii* and *S. triporcatus* (Giant musk turtle and Mexican musk turtle)**

Proposal: Include in Appendix II

Proponents: El Salvador and Mexico

Provisional assessment by the Secretariat

CITES background

This is the first time that species of the genus *Staurotypus* have been proposed for inclusion in the Appendices.

The standard nomenclature reference 'Fritz & Havas (2007)'[13] in Resolution Conf. 12.18 (Rev. CoP18), recognizes that the genus *Staurotypus* as comprising *S. triporcatus* and *S. salvinii*; both covered by the proposal.

Purpose and impact of the proposal

The proposal seeks to include *S. triporcatus* and *S. salvinii* in Appendix II, in accordance with Article II paragraph 2(a) and 2(b) of the Convention, respectively. If the proposal is adopted, international trade in all specimens of these taxa will be regulated in accordance with the provisions of Article IV of the Convention.

Compliance with listing criteria

The supporting statement suggests that the inclusion in Appendix II of *S. triporcatus* and *S. salvinii* satisfy the criteria for inclusion in Appendix II in accordance with Article II of the Convention, as follows:

a) *S. triporcatus* satisfies, according to the proponents, Criterion A of Annex 2a of Resolution Conf. 9.24 (Rev. CoP17) on *Criteria for amendment of Appendices I and II*, for inclusion of species in Appendix II; and,

b) *S. salvinii* satisfies, according to the proponents, criterion A of Annex 2b of Resolution Conf. 9.24 (Rev. CoP17) (the so-called 'look-alike' criterion).

According to the supporting statement, *S. triporcatus* is distributed in Mexico, Guatemala and Belize and *S. salvinii* occurs in Mexico (lowland Pacific drainages of Oaxaca and Chiapas), Guatemala, El Salvador and Belize. They are both predominantly aquatic species.

The supporting statement largely focuses on *S. triporcatus* as this is the species cited to meet Criterion A of Annex 2a of Resolution Conf. 9.24 (Rev. CoP17). *S. salvinii* is addressed in detail in Section 9 ('Information on similar species') as it is the species proposed for inclusion in Appendix II by association under the 'look-alike' criterion; and in further details in Annex VI of the supporting statement.

Both *S. triporcatus* and *S. salvinii* species have been assessed in the IUCN Red List of Threatened Species as 'Near Threatened'; however, these assessments were published in 1996 and require updating. From the supporting statement and the IUCN assessments, it seems that the main threats to these species are due to extrinsic (*e.g.* decrease in the area of distribution, and illegal trade and harvest for meat consumption) and intrinsic vulnerabilities (*e.g.* decline of mature individuals). Further, *S. triporcatus* is categorized as "Threatened" under Mexico's national legislation, supported by a risk assessment dated 2019, and S. *salvinii* "Under special protection".

According to the supporting statement, Mexico has only authorized trade from captive bred specimens of *S. triporcatus* from management facilities registered in accordance with the national legislation; under which a

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[13] *FRITZ, U. & HAVAŠ, P. (2007): Checklist of Chelonians of the World. Vertebrate Zoology, 57 (2): 149-368. Dresden. ISSN 1864-5755 [without its appendix]*

total of 14 facilities have been registered (known as UMA and PIMVS). However, no information on management of these taxa from other range States of these species is provided.

The trade information contained in the supporting statement is focused largely on data for *S. triporcatus*, and it is based on export permits issued by Mexico from 2000 onwards, as well as import and re-export data for the period 2015 to 2020 from the LEMIS database administered by the United States of America. The volumes of legal trade from Mexico from 2000 onwards Is of 24,000 individuals, the majority of which seem to be captive bred. The data from the United States of America also suggest that imported specimens are sourced from captive bred operations, however there is some indication of wild trade. Re-exports from the United States of America are mostly to China.

The supporting statement suggests that the main specimens in international trade of *S. triporcatus* are meat and, to a considerably lesser degree, individuals for pet trade.

While the majority of the legal trade seems to be of captive-bred specimens of *S. triporcatus*, the supporting statement points towards potentially detrimental levels of illegal trade of wild source. A considerable volume of 15,000 individuals of *S. triporcatus* destined to China were confiscated by Mexico's Enforcement Authority in 2020. Additionally, the information on online trade points towards some demand for wild specimens, particularly in Asian markets.

The proponents consulted other range States for these species and the support of Honduras for the proposal is reported. The views of Guatemala and Belize are not known.

In Section 10 (Consultations), the supporting statement indicates that all range States had been consulted over the proposal on 29 March 2022. Resulting from these consultations, El Salvador confirmed interest in co-sponsoring the proposal with Mexico, and Honduras expressed support for the proposal. No responses were received from Belize and Guatemala at the time of submitting the proposal.

Additional considerations (including relevant CoP recommendations)

In Section 1 ('Taxonomy') of the supporting statement, the proponents use the adopted standard reference 'Fritz & Havas (2007)' as the taxonomic reference for these two species (see Resolution Conf. 12.11 [Rev. CoP18]).

The Secretariat has consulted with the nomenclature specialist of the Animals Committee aspects relating to the nomenclature of *S. triporcatus* and *S. salvinii*.

Provisional conclusions

Information on the conservation status and trade of *S. triporcatus* is documented for the Mexican populations but its status in Guatemala and Belize is not well considered in the supporting statement and overall the case for the species meeting the listing criteria does not appear strong.

If *S. triporcatus* is included in Appendix II, the proposal to include *S. salvinii* by association in accordance with the 'look-alike' criterion seems reasonable considering the difficulties in differentiating live specimens from those of *S. triporcatus*.

Proposal 31

***Sternotherus* spp. (Musk turtles)**

Proposal: Include in Appendix II

Proponent: United States of America

Provisional assessment by the Secretariat

CITES background

This is the first time any species of the genus *Sternotherus* have been proposed for inclusion in the Appendices.

Purpose and impact of the proposal

The proposal seeks to include *Sternotherus* spp. in Appendix II, in accordance with Article II paragraph 2(a) of the Convention. If the proposal is adopted, international trade in all specimens of species of this genus will be regulated in accordance with the provisions of Article IV of the Convention.

Compliance with listing criteria

The proponent asserts that the genus meets criterion B in Annex 2 a) of Resolution Conf. 9.24 (Rev. CoP17), whereby 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.

The supporting statement says that there are six recognised species of *S. carinatus, S. depressus, S. intermedius*, *S. minor, S. odoratus* and *S. peltifera.* However, Fritz and Havaš (2007), which is the current accepted standard reference for turtles does not recognise *S. intermedius* as a valid species and *S. peltifera* is identified as a sub-species of *S. minor* (*S. minor peltifer*). All species are endemic to the United States of America, with the exception of *S. odoratus,* which is also found in Canada and possibly Mexico.

Sternotherus species are highly aquatic, small-bodied freshwater turtles, rarely leaving the water except during rains or the nesting season, though some species will emerge from the water to bask more regularly than others. Fallen trees, overhanging banks, and submerged logs and rocks provide important sites for both shelter and basking. Slow-moving, permanent, freshwater bodies with soft substrates tend to dominate their preferred habitat. They get their name from the musky, foul smelling secretion that is produced from two glandular openings on each side of their body near their carapace, when they are handled.

The supporting statement indicates that turtles from the genus *Sternotherus* are vulnerable to population declines because they lay few eggs per clutch and are slow to reproduce, especially when adults are removed from a population. Coupled with their reliance on adult survivorship, the proponent states that they are more vulnerable to commercial harvest and international trade and are unlikely to withstand harvest of adults and subadults without intense management than many of the larger freshwater turtles (family Emydidae and Trionychidae) that are now widely bred in captivity.

The supporting statement contains useful information regarding all *Sternotherus* species, including photographs, IUCN status and distribution. The most recent IUCN Red List of Threatened Species assessment and population trend, where assessed, for each species are as follows:

Species	Red List assessment	Population trend
S. carinatus	Least Concern	Unknown
S. depressus	Critically Endangered	Decreasing
S. minor	Least Concern	Unknown
S. odoratus	Least Concern	Stable
S. peltifera	Least Concern [as a sub-species of *S. minor*]	Unknown

According to the proponent, *Sternotherus* are threatened mainly by habitat loss and degradation, but are also highly susceptible to collection for the pet trade. Their life history (late maturity, long lifespan of up to 30 years in

the wild, low recruitment, and reliance on low adult mortality), like other turtle species, makes them highly susceptible to anthropogenic threats.

The supporting statement presents limited information on the population sizes and trends of the species concerned, but while most species appear to be relatively abundant, there is some evidence of population decreases, mostly due to habitat loss, but at least in part due to harvesting for international trade.

In the United States of America, musk turtles are collected from the wild for the pet trade. Legal export of *S. odoratus* from Canada is expected to be very low and related to conservation or scientific purposes. The Critically Endangered *S. depressus* is currently legally protected in the United States of America from collection and prohibited from trade, but illegal collection for the pet trade remains a concern for the species. The extent to which other *Sternotherus* species are subject to illegal trade is unknown.

The supporting statement presents trade data collected from the United States of America' Fish and Wildlife Service Law Enforcement Management Information System (LEMIS) for the period 2013 through 2019. During that time, the vast majority of *Sternotherus* specimens in trade were reported to be live animals (mostly destined for east Asia). An average of over 200,000 live *Sternotherus* were reported to have been exported annually from the United States of America for commercial purposes, almost half of which were specimens of *S. carinatus.* Notably, 640 individuals of the critically endangered *S. depressus* were amongst those reported in trade. Sixty percent of all these specimens were declared as sourced from the wild; the remainder were reported as captive-bred or ranched [noting that "ranched" in this context is defined as "directly removed from the wild and reared in a controlled environment or are progeny from gravid females captured from the wild"]. The United States of America believes that most of the individuals exported as captive-bred specimens are actually wild-caught and regulation of the trade would help to ensure that the acquisition of specimens entering international trade were acquired sustainably as well as legally and will not be detrimental to the survival of the species.

The supporting statement suggests that Musk turtles in the genus *Sternotherus* are very similar to the American mud turtles in the genus *Kinosternon*, which are the subject of Prop. 29, which seeks to include *Kinosternon cora* and *K. vogti* in Appendix I and all other species of *Kinosternon* spp. in Appendix II.

Additional considerations (including relevant CoP recommendations)

None.

Provisional conclusions

On the basis of the information in the supporting statement, the Secretariat finds that although the main threats facing this genus of musk turtles seem to be habitat loss and degradation, there is clearly a demand for at least some of the species in international trade. Regulation of trade in some or all of the species may be 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. The Secretariat suggests that the genus *Sternotherus* could meet the requirements for listing under criterion B of Annex 2a of Resolution Conf. 9.24 (Rev. CoP17).

Proposal 32

***Apalone* spp. (Softshell turtles)**

Proposal: Include in Appendix II (except the subspecies included in Appendix I)

Proponent: United States of America

Provisional assessment by the Secretariat

CITES background

The subspecies *A. s. atra* was included in Appendix I in 1975.

Three species of *Apalone* were listed in Appendix III in November 2016 at the request of the United States of America: *A. ferox, A. mutica* and *A. spinifera* (except the subspecies included in Appendix I). These are the only recognised species within the genus *Apalone*.

Purpose and impact of the proposal

The proposal seeks to include in Appendix II all species of the genus *Apalone*, in accordance with Article II paragraph 2(a) of the Convention, with the exception of the subspecies *A. s. atra*, which is currently listed in Appendix I. If the proposal is adopted, international trade in all species of these taxa will be regulated in accordance with the provisions of Article IV of the Convention. Specimens of *A. s. atra* will continue to be regulated under Article III of the Convention.

Compliance with listing criteria

Concerning inclusion of the species in Appendix II, the proponent asserts that the species meet criterion A in Annex 2 a) of Resolution Conf. 9.24 (Rev. CoP17), whereby 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 criterion B in Annex 2 a) of Resolution Conf. 9.24 (Rev. CoP17) whereby 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.

The genus *Apalone*, comprises highly aquatic freshwater turtles. The proposal indicates that *A. ferox* and *A. spinifera* both use most freshwater habitat types, but *A. ferox* prefers shallower still waters and can also be found in brackish waters. *A. mutica* is restricted to riverine habitats with sandbars, and only occupies lakes during periods of flooding when they are connected to rivers. Detailed comparative accounts of the three species, including distribution, the IUCN Red List of Threatened Species status (all are assessed as Least Concern), population size, range, generation length/reproduction, habitat, threats and protection status are provided in the Annex to the proposal.

The proposal indicates that most *Apalone* species are restricted to the United States of America, though the range of the spiny softshell, *A. spinifera*, extends into southern Canada and northern Mexico. *A. mutica* and *A. spinifera* have also been introduced in France.

In terms of population size, there is very limited information available. The proposal indicates that few population studies have been conducted and populations size is often inferred by the volume in trade and/or the prevalence of availability in food and pet markets. However, neither of these data are readily available for *Apalone* species. For *A. ferox*, only partial quantitative population estimates or trade data are available, but van Dijk (2011) noted the species to be “common” or “very common” throughout most of its range. For A. *mutica*, the only information on population size is that it “can reach high densities, up to 1.2 individuals per linear meter with a basking aggregation of 88 animals (Plummer 1977, Trauth et al. 2004)” and that “there have been anecdotal reports of declining populations”. For *A. spinifera*, some data from several turtle trapping studies indicating the percentage that was of this species provides very limited information, but IUCN assessed the population trend for this species as Stable (it is unknown for the other two species).

One of the main threats identified in this proposal is habitat alterations, such as river training structures, levees, dams, and wing dikes, which can alter river hydrology and habitat. Such alterations may drown nesting areas or

change water clarity and the ability of turtles to ambush their prey. Anthropogenic changes to coastline habitat can also limit access to turtle nesting sites.

Commercial exploitation is identified as a significant threat by the proponent. The supporting statement indicates that data from the United States of America's Law Enforcement Management Information System (LEMIS) database between 1999 and 2008, showed that over 135,000 specimens of *A. spinifera* and well over 10,000 specimens of *A. ferox* were exported annually during this period, with a steeply increasing trend for the former. No data is presented for *A. mutica*, but numbers were thought to be considerably lower.

Since the Appendix III inclusion in 2016, data on exports has been collected in the CITES trade database. The Secretariat extracted data on the direct exports of each of the three species and it is presented in table A) for *A. ferox* and B) *A. spinifera* (data extracted on 2 August 2022). There were no records of any trade in *A. mutica.*

A) Records of direct exports of *A. ferox* from CITES trade database between 2017 and 2019 (extracted on 2 August 2022)

Year	Importer	Exporter	Importer reported quantity	Exporter reported quantity	Term	Purpose	Source
2017	CA	US		80	bodies	T	I
2017	CA	US		191	meat	T	R
2017	DE	US	20	250	live	T	F
2017	DE	US		20	live	T	W
2017	HK	US		1275	live	T	F
2017	JP	US	300	250	live	T	F
2017	JP	US		50	live	T	W
2017	MO	US		25790	live	T	F
2017	NL	US	450		derivatives		
2017	NL	US		200	live	T	W
Total			**770**	**28,106**			
2018	CN	US	63605	63605	live	T	F
2018	MO	US		4730	live	T	F
2018	NL	US		200	live	T	W
2018	NL	US	200		live		
Total			**63,805**	**68,535**			
2019	BE	US	170		live		W
2019	CN	US	40000		specimens	T	F
2019	HK	US	9300		live	T	F
2019	IT	US	50		live		
2019	MA	CH		1	live	P	O
2019	MX	US	850		live	T	F
2019	NL	US	200		live		
Total			**50,570**	**1**			

Excluding the trade in derivatives and meat, the data shows reported trade of 125,195 individuals of *A. ferox* by importers and 96,452 individuals by exporters during this period. The purpose and source codes were not always indicated, and specimens are predominantly a mixture of wild and farmed, with some suggestion that the species is being ranched and captive bred. On the basis of the available trade data which it has examined itself, the Secretariat has concluded that there a clear demand for this species in international trade and significant volumes of trade are taking place.

B) Records of direct exports of *A. spinifera* from CITES trade database between 2017 and 2020 (extracted on 2 August 2022)

Year	Importer	Exporter	Importer reported quantity	Exporter reported quantity	Term	Purpose	Source
2017	GB	US		70	live	T	F
2017	GB	US		125	live	T	W
2017	HK	US		180	live	T	F
2018	AT	US	1	1	live	B	W
2019	BE	US	40		live		
2019	IT	US	46		live		
2019	MA	CH		1	live	P	O
2019	MX	US	150		live	T	F

The data shows reported trade of 237 individuals of *A. spinifera* by importers and 377 individuals by exporters during this period. The purpose and source code was not always indicated and specimens are predominantly a mixture of wild and farmed.

Most of the large volumes of trade are in farmed specimens (source code F) and the proponent states that commercial turtle farming has become a lucrative aquaculture business in the south-eastern United States of America. The supporting statement claims that while farms can help to satiate demand via legal trade, most require the capture of wild individuals for parental breeding stock and to increase genetic diversity. While these species can be bred in captivity, they are easily caught and trapped in the wild, and it remains unknown if the supply can meet the current commercial demand, thereby, making wild populations vulnerable to over-exploitation and resulting in illegal trade to meet demand.

Additional considerations (including relevant CoP recommendations)

There appear to be some potential lookalike issues concerning *Apalone* species, notably the difficulty differentiating between *A. spinifera* and *A. mutica*.

Provisional conclusions

On the basis of the information in the supporting statement, the Secretariat finds that it is not clear if any of the species meet criterion A of Annex 2a of Resolution Conf. 9.24 (Rev. CoP17), as there is no information to determine whether it may become eligible for inclusion in Appendix I in the near future. However, the Secretariat is of the opinion that it does appear that there is sufficient evidence to suggest that *A. ferox* and *A. spinifera* meet criterion B of Annex 2a of Resolution Conf. 9.24 (Rev. CoP17).

As a result of potential lookalike issues concerning *A. spinifera* and *A. mutica*, the inclusion of the latter species may be justified under Annex 2b of Resolution Conf. 9.24 (Rev. CoP17).

Proposal 33

***Nilssonia leithii* (Leith's softshell turtle)**

Proposal: Transfer from Appendix II to Appendix I

Proponent: India

Provisional assessment by the Secretariat

CITES background

N. leithii was included in Appendix II at CoP16 (2016) under the name *Aspideretes leithii*. However, the name was amended to *N. leithii* to follow the nomenclature adopted at CoP16 in relation to other species of the genus *Nilssonia* (Praschag *et al.* 2007).

There is one other species in the genus *Nilssonia* currently included in Appendix II – *N. formosa*

There are 3 species of *Nilssonia* currently listed in Appendix I (*N. gangetica, N. hurum* and *N. nigricans*).

Purpose and impact of the proposal

The proposal seeks to transfer *N. leithii* from Appendix II to Appendix I. If it is adopted, international commercial trade in specimens of *N. leithii* of wild origin will be prohibited. International trade in all specimens of the species will be regulated in accordance with the provisions of Article III of the Convention.

If *N. leithii* is included in Appendix I, breeding operations wishing to commercially export and trade in specimens of this species would need to be registered with the Secretariat in accordance with Resolution Conf. 12.10 (Rev. CoP15) on *Registration of operations that breed Appendix-I animal species in captivity for commercial purposes.*

Compliance with listing criteria

Concerning inclusion of the species in Appendix I, the proponent asserts that it meets criteria A i) and v); Criterion B i) and v) and C i) in Annex 1 of Resolution Conf. 9.24 (Rev. CoP17).

A: The wild population is small, and is characterized by:

(i) an inferred decline in the number of individuals and the quality of habitat; and

(v) a high vulnerability to intrinsic or extrinsic factors, such as habitat loss.

B: The wild population has a restricted area of distribution and is characterized by:

(i) fragmentation; and

(iv) an inferred decrease in the area of distribution, area of habitat, number of subpopulations, number of individuals, and the quality of habitat.

C: There has been a marked decline in the population size in the wild, which has:

(i) occurred in the past and has been observed as ongoing.

The proponent states that *N. leithii* is or may be affected by trade because it is illegally harvested for both domestic and international food markets, live animals as well as its calipee (dried, processed carapacial cartilage). Furthermore, due to the ongoing decline in the species' population and continued threats to the species, both of which are expected to continue, the proponents are of the view that any trade in the species will have a detrimental impact on its status. The proponents state that the species faces a high risk of extinction with rapid declines in population due to loss of habitat and overexploitation for consumption and illegal trade of live animals as well as the calipee.

N. leithii is endemic to peninsular India, where it occurs in rivers and reservoirs. It is generally distributed in the east-west-flowing rivers arising from the low hills of Peninsular India, with isolated records from large reservoirs and occasional encounters in estuarine habitats. Little is known of the reproductive behaviour or the population status of the species.

According to the supporting statement, the species is now restricted to the states of Karnataka, Tamil Nadu and Kerala, with local extinctions having taken place. The habitat of the species is in decline due to sand mining, pollution and hydrological alteration of rivers and so the geographic range of the species is shrinking.

The proponent states that according to Praschag et al. (2021), the population continues a large-scale decline, caused by habitat loss and illegal collection and trade both locally and internationally; and that despite a lack of quantitative data, an inferred population reduction of at least 90% in the past 30 years, and ongoing, is realistic. This determination was used in the most recent the IUCN Red List of Threatened Species assessment in 2018 when *N. leithii* was assessed as Critically Endangered. The level of decline observed in this assessment exceeds the threshold of 50% or more in the last 10 years or three generations, whichever is the longer, for a marked decline, as mentioned in the general guidelines provided in Annex 5 of Resolution Conf. 9.24 (Rev. CoP17).

The supporting statement claims that *N. leithii* is harvested for both the domestic and international (East Asian) food markets, but it does not provide any data to support this assertion. It is claimed that trade shifted from live animals to calipee in recent years (Das et al. 2014) which appears to mainly cater to demand for it as an ingredient in soups and traditional medicines in East and South-East Asian countries (Sengottuvel, WCS, 2020). The proposal uses the IUCN Red List assessment to state that seizures from illegal trade have been reported from Maharashtra and Karnataka, but there is no information to suggest that these specimens were destined for the international market.

N. leithii is protected under Schedule IV of the India's WildLife (Protection) Act (1972), whereby hunting and collection of the species is prohibited. Commercial utilization of the species requires authorization and cannot occur from wild populations. The species is listed on CITES Appendix II, but owing to its protected status in India, there are no legal trade records available for the species on the CITES Trade Database.

Additional considerations (including relevant CoP recommendations)

This species is found in captivity in some of the zoos in India and there are no reported breeding operations in the country.

N. leithii looks similar to the other two species of *Nilssonia* listed in Appendix I (*N. gangeticus* and *N. hurum*. According to the supporting statement, the juveniles and adults can be readily distinguished, but it is very difficult to identify the species from its calipee, for which this species is in demand. There is no information provided on any lookalike issues with those *Nilssonia* species found in Appendix II.

Provisional conclusions

On the basis of the information in the supporting statement, the Secretariat finds that *N. leithii* seems to be a critically endangered species with an inferred small population size and limited distribution, and there appears to have been a marked decline in the population size in the wild in recent years. It is difficult to determine, however, based on the information presented, if it is a species with a high vulnerability to intrinsic or extrinsic factors. Overall, it appears to meet the biological criteria for inclusion in Appendix I.

Proposal 34

Centrolenidae spp. (Glass frogs)

Proposal: Include in Appendix II

Proponents: Argentina, Brazil, Costa Rica, Côte d'Ivoire, Dominican Republic, Ecuador, El Salvador, Gabon, Guinea, Niger, Panama, Peru, Togo and United States of America.

Provisional assessment by the Secretariat

CITES background

Currently no species of the family Centrolenidae is included in the CITES Appendices.

At CoP18 (2019), Costa Rica, El Salvador and Honduras proposed the inclusion in Appendix II of four genera of the family Centrolenidae: *Centrolene*, *Cochranella*, *Hyalinobatrachium* and *Sachatamia* (CoP18 Prop. 38) but this proposal was rejected by the Conference of the Parties.

Purpose and impact of the proposal

The proposal seeks to include in Appendix II all species of the family Centrolenidae, in accordance with Article II of the Convention. If the proposal is adopted, international trade in all specimens of this family will be subject to the provisions of Article IV of the Convention.

According to the supporting statement, this would imply the inclusion of 158 species in Appendix II.

Compliance with listing criteria

The supporting statement suggests that the species of the family Centrolenidae satisfy criteria for inclusion in Appendix II in accordance with Article II of the Convention, as follows:

a) criterion B of Annex 2a of Resolution Conf. 9.24 (Rev. CoP17):

-Cochranella euknemos
-Cochranella granulosa
-Espadarana prosoblepon
-Hyalinobatrachium aureoguttatum
-Hyalinobatrachium fleischmanni
-Hyalinobatrachium iaspidiense
-Hyalinobatrachium mondolfii
-Hyalinobatrachium valerioi
-Sachatamia albomaculata
-Sachatamia ilex
-Teratohyla pulverata
-Teratohyla spinosa

b) the remaining species of the family Centrolenidae satisfy Criterion A of Annex 2b of Resolution Conf. 9.24 (Rev. CoP17) (the 'look-alike' criterion).

Glass frogs are distributed throughout the neotropics, from Mexico to the Plurinational State of Bolivia, with an isolated group of species occurring in south-eastern Brazil and north-eastern Argentina (Guayasamin et al., 2009). They are nocturnal and arboreal.

The main known threats to wild populations of the glass frogs concerned are habitat loss and fragmentation, contamination of wetlands, and climate change. Trade, on the other hand, seems to be a developing threat for these taxa, specifically within the exotic pet trade.

According to the supporting statement, of the 158 species covered by the family 153 have been assessed by the IUCN Red List of Threatened Species, as follows: 10 as 'Critically Endangered'; 28 as 'Endangered'; 21 as 'Vulnerable'; 11 as 'Near Threatened'; 55 as 'Least Concern'; and 28 as 'Data Deficient'. Of the species of

glass frogs assessed, 71% are in a state of decline in the wild, and nine of them confirmed to be in international trade. However, it is habitat degradation, climate change and the chytrid fungus the primary known threats to glass frogs throughout their range.

Amongst the 158 species glass frogs covered by the proposal, only 12 are proposed for inclusion on the basis of concerns that regulation of trade "*is required to ensure that the harvest of specimens from the wild is not reducing the wild population to a level at which [their] survival might be threatened by continued harvesting or other influences*" [i.e. criterion B of Annex 2a of Resolution Conf. 9.24 (Rev. CoP17)]. The supporting statement provides varying levels of information, particularly in that which relates to international trade. For ease of reference, the Secretariat has summarized this information in the following table:

Species	**IUCN Red List of Threatened Species status (year)**	**Evidence of international trade** A: Medium B: Low C: None	**Comments on the supporting statement**
Hyalinobatrachium aureoguttatum	Least concern (2019)	A —Medium	The supporting statement presents some evidence of online trade in the European Union (particularly in the Netherlands and Spain), but the level and source of this trade is unclear. Based on the assessment of the online offers, it does seem that pairs of the species can reach prices of over 100 USD.
Hyalinobatrachium fleischmanni	Least concern (2019)	A —Medium	The supporting statement presents some evidence of online trade in the European Union, but the level and source of this trade is unclear. It also points towards some online offers of potentially illegally-sources specimens of the species.
Hyalinobatrachium valerioi	Least concern (2019)	A —Medium	The supporting statement presents evidence of online trade in the European Union (particularly in Germany, the Netherlands and Spain) and the United States of America, with individuals reaching up to USD 150 each. The levels of this trade is however unclear, and it is based on an assessment of online trade, the methodology of which is unclear.
Sachatamia albomaculata	Least concern (2019)	A —Medium	The supporting statement presents evidence of online trade in the European Union, and it states that it is the species that reaches the highest prices in the market per individual (up to EUR 350). The levels of this trade is however unclear, and it is based on an assessment of online trade, the methodology of which is unclear. There is also evidence presented of illegal trade, and the supporting statement cites a seizure that took place in 2014 in Costa Rica.
Cochranella euknemos	Least concern (2019)	B —Low	The supporting statement provides some evidence of online trade, potentially of illegal sources.
Cochranella euknemos	Least concern (2019)	B —Low	The supporting statement provides some evidence of online trade, potentially of illegal sources.

Cochranella granulosa	Least concern (2019)	B —Low	The supporting statement provides some evidence of online trade, but the level and source of this trade is unclear.
Cochranella granulosa	Least concern (2019)	B —Low	The supporting statement provides some evidence of online trade, but the level and source of this trade is unclear.
Hyalinobatrachium iaspidiense	Data deficient (2004)	B —Low	The supporting statement provides some evidence of online trade, but the level and source of this trade is unclear.
Hyalinobatrachium mondolfii	Least concern (2004)	B —Low	The supporting statement provides some evidence of online trade, but the level and source of this trade is unclear.
Teratohyla pulverata	Least concern (2019)	B —Low	The supporting statement provides some evidence of online trade, but the level and source of this trade is unclear.
Espadarana prosoblepon	Least concern (2019)	C —None	The supporting statement mentions population decline in its range in Costa Rica and Panama, and significant population loss in Ecuador. However these are related to extrinsic threats posed by chytridiomycosis. The supporting statement presents some evidence of online trade in the European Union, but the level and source of this trade is unclear.
Sachatamia ilex	Least concern (2019)	C —None	No evidence of trade provided in the supporting statement.
Teratohyla spinosa	Least concern (2019)	C —None	No evidence of trade provided in the supporting statement.

The firmest evidence of international trade is from LEMIS database administered by the United States of America, which indicates that some of the trade is illegal. The proponents note that most of the range States prohibit trade in wild specimens of these species. The supporting statement also notes that glass frogs are sold online, having identified 75 active advertisements. These offers are hosted in websites based in the United States of America, Europe and Japan. However precise information on international trade remains scarce.

The majority of specimens in international trade are from the wild. There are some records of captive-bred glass frogs to North America from Nicaragua and Canada. Germany, Costa Rica, Ecuador and Panama also exported specimens declared as captive-bred. The proponents and available literature point towards the challenges of distinguishing amongst species of these genera, in addition to there being a lack of identification guides useful for non-experts.

Additional considerations (including relevant CoP recommendations)

In contrast to the proposal on glass frogs submitted for consideration at CoP18 (CoP18 Prop. 38) which covered only 4 genera, this proposal now covers all 12 genera of the family Centrolenidae. Additionally, on this occasion the proponents have provided a standard nomenclature reference for all the family Centrolenidae. This seems to suggest that some of the feedback received to proposal CoP18 Prop. 38, including that by the Secretariat (see document CoP18 Doc. 105 Annex 2), has been taken into consideration.

The Conference of the Parties has not adopted a standard nomenclatural reference for the family Centrolenidae The supporting statement proposes Taylor (1951) as a suitable standard nomenclature reference, but this only recognizes 119 species covered by the family. It seems rather that the proponents are

referring to the 158 species of the family Centrolenidae recognized by American Museum of Natural History (AMNH, 2022)[14] Amphibian Database.

Should the proposal be adopted a standard nomenclatural reference should also be adopted such as a time-stamped version of the AMNH (2022) Amphibian Database.

Provisional conclusions

The main threats faced by glass frogs of the family Centrolenidae seem to be diseases, habitat loss and fragmentation and climate change. However, some species of the family do appear to be in international trade. The Secretariat suggests that evidence that twelve of the species meet criterion B of Annex 2a of Resolution Conf. 9.24 (Rev. CoP17) is not strong. Should any of these species be included in Appendix II, then in view of the difficulty of identifying individual species, the family-level approach for an Appendix II listing may be warranted.

[14] *AMNH. 2022. Amphibian Species of the World 6.1, an online reference. Available at: https://amphibiansoftheworld.amnh.org/Amphibia/Anura/Centrolenidae*

Proposal 35

***Agalychnis lemur* (Lemur leaf frog)**

Proposal: Include in Appendix II with a zero export quota for wild-taken specimens traded for commercial purposes

Proponents: Colombia, Costa Rica, European Union and Panama.

Provisional assessment by the Secretariat

CITES background

This is the first time that *A. lemur* has been proposed for inclusion in the Appendices.

At CoP15 (2010), proposal CoP15 Prop. 13 on the inclusion of the genus *Agalychnis* in Appendix II was adopted but was limited to the five recognized species of *Agalychnis* under the standard nomenclature at the time - Frost (2004).

At that time *A. lemur* was classified under *Phyllomedusa* and was not included in the Appendices.

Purpose and impact of the proposal

The proposal seeks to include *A. lemur* in Appendix II with a zero export quota for wild-taken specimens traded for commercial purposes in accordance with Article II paragraph 2(a) of the Convention. If the proposal is adopted, this would be included under the genus listing of *Agalychnis* spp. in Appendix II, which would include *A. annae, A. callidryas, A. lemur, A. moreletii, A. saltator, A. spurrelli* and *A. terranova* (if the updated standard reference for *Agalychnis* spp. is adopted at CoP19).

If the proposal is adopted, a zero export quota will be established for *A. lemur* for source code W (wild-taken) specimens traded for commercial purposes. International trade in all other specimens will be regulated in accordance with the provisions of Article IV of the Convention.

Compliance with listing criteria

The supporting statement states that inclusion of *A. lemur* in Appendix II satisfies criterion B of Annex 2a of Resolution Conf. 9.24 (Rev. CoP17) on *Criteria for amendment of Appendices I and II,* where 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.

Under the current standard nomenclature for amphibians, Frost (2015), the genus *Agalychnis* includes 15 species including *A. lemur*. The updated standard nomenclature changes proposed by the Animals Committee does not include the inclusion of *A. lemur* as a member of the genus *Agalychnis* (CoP19 Doc. 84.1). However, the widespread adoption in scientific, hobbyist and trade communities of its transfer from *Phyllomedusa* into *Agalychnis* may create implementation challenges, and consideration must be given to clarifying this case, possibly through an annotated updated version of the standard reference for the genus *Agalychnis*, or an annotation in the Appendices (AC31 Doc. 37).

A. lemur is a moderate-sized tree frog found in sloping areas in humid lowland and montane primary forest in Costa Rica, Panama and Colombia. The Lemur Leaf Frog is nocturnal and occurs in the upper forest canopy near rivers. Despite reports that the species prefers undisturbed forest (Savage, 2002), surveys in Costa Rica in 2012-2017 has recorded the species in secondary forest and at forest edges (Salazar-Zunlga et al. 2019).

The supporting statement states that while historically reported to be a relatively common species, the species now only occurs in a number of locations and that it has undergone 80-95% decline over the past two decades according to the the IUCN Red List of Threatened Species assessment. Given the steep population decline, *A. lemur* is currently classified as Critically Endangered by the the IUCN Red List of Threatened Species.

According to the supporting statement, the species appears to have been extirpated from two of the three mountain ranges in Costa Rica and is now only found in three locations. In addition, it is thought to occur in a few sites in west Panama, and not known whether it still occurs in Colombia.

The supporting statement states that the precise cause of the steep decline remains unknown (Rodriguez et al., 2019), but the main suspected causes are chytridiomycosis, an infectious disease caused by the fungus *Batrachochytrium dendrobatidis* (Bd), and habitat loss and fragmentation.

While the species is known to be in international pet trade and, in the past, collection from the wild was noted, it is unknown if collection from the wild for international trade is occurring. The evidence of international trade of the species found in the USFWS LEMIS data, provided by the proponents, showed that *A. lemur* specimens for commercial purposes were captive-bred individuals and wild sourced specimens were solely for scientific purposes.

All three range States are co-proponents of the proposal, and each range State affords levels of protection from either harvest and/or export.

Although there are no records of licensed captive breeding facilities of the species, a number of ex situ breeding programmes are in place for *A. lemur* for conservation with a number of established captive breeding populations existing in the United States of America, Panama, the United Kingdom of Great Britain and Northern Ireland and Sweden. This demonstrates that captive breeding is possible for the species.

Additional considerations (including relevant CoP recommendations)

None.

Provisional conclusions

On the basis of the information in the supporting statement, the Secretariat considers that it appears *A. lemur* has undergone population decline and range contraction and is under threat due to infectious disease and habitat fragmentation. The species may require international trade regulation 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.

A zero annual export quota for wild-taken specimens traded for commercial purposes is proposed, but it is unclear to the Secretariat why, if the species were included in Appendix II, the provisions of Article IV would be insufficient to regulate the trade.

Proposal 36

***Laotriton laoensis* (Lao warty newt)**

Proposal: Include in Appendix II with a zero export quota for wild-taken specimens traded for commercial purposes

Proponent: European Union

Provisional assessment by the Secretariat

CITES background

This is the first time that *L. laoensis* has been proposed for inclusion in the Appendices.

Purpose and impact of the proposal

The proposal seeks to include *L. laoensis* in Appendix II with a zero export quota for wild-taken specimens traded for commercial purposes in accordance with Article II paragraph 2(a) of the Convention. If the proposal is adopted, a zero export quota will be established for all source code W (wild-taken) specimens traded for commercial purposes. All other specimens of the species will be regulated in accordance with the provisions of Article IV of the Convention.

Compliance with listing criteria

The supporting statement states that inclusion of *L. laoensis* in Appendix II satisfies criteria A and B of Annex 2a of Resolution Conf. 9.24 (Rev. CoP17) on *Criteria for amendment of Appendices I and II*.

L. laoensis, first described in 2002, is endemic to Lao People's Democratic Republic and has a restricted geographic distribution in a small continuous area in northern Lao PDR, which is not within any protected areas. The estimated distribution is approximately 4560 - 4800 km^2 between elevations of 1160 m and 1430 m a.s.l. Despite field surveys and interviews, no additional new populations around the known range have been found since the original description of the species.

The Lao warty newt is a relatively large newt (up to 24.6 cm) and is found closely associated with small to medium sized shallow streams, which are likely sub-populations with restricted gene flow. The total population of the species and the total number of sites are unknown. A mark-recapture analysis showed that they are locally abundant with 1200 individuals being found within a 4.7 km stream transect. The adults are mostly aquatic, and females lay eggs in water, which develop into terrestrial juveniles, before it reaches the mostly aquatic adult phase.

The international demand for this species in pet trade started since its description in 2002 due to its novelty and unique color pattern. The supporting statement states that after its discovery, commercial collectors visited villages in Lao DPR to obtain the newts (Rowley and Stuart 2014). In 2008. the Lao warty newt was listed as a Category I species in the Lao Wildlife and Aquatic Law of Lao PDR and commercial trade was prohibited.

Evidence cited in the supporting statement and a survey conducted for the supporting statement suggests that the species continues to be harvested in the wild and that demand is high for the species. The supporting statement estimates that the population has undergone a 50% decline in the last 10 years. Further, the IUCN SSC Amphibian Specialist Group states that the population trend is decreasing, and the species is classified as Endangered by the IUCN Red List of Threatened Species.

Additional considerations (including relevant CoP recommendations)

The supporting statement notes that since *L. laoensis* shares characteristic morphological traits with the species in the genus *Paramesotriton*, which is listed in Appendix II, the international trade may focus on the non-listed *L. laoensis*.

L. laoensis was first described as *Paramesotriton laoensis* but has since between reclassified under its own genus, *Laotriton*, based on morphological and genetic evidence. *L. laoensis* is the only species in the genus *Laotriton*.

The supporting statements indicates that Lao PDR, the only range State of the species, is a co-proponent, however, the Secretariat has not received a formal proposal from Lao PDR.

Provisional conclusions

On the basis of the information in the supporting statement, to the Secretariat it appears that the species has a restricted geographical range and that the level of international trade, since its description in 2002, could warrant regulation to ensure that the wild populations are not reduced to a level that might threaten their survival.

A zero annual export quota for wild-taken specimens traded for commercial purposes is proposed, but it is unclear why, if the species were included in Appendix II, the provisions of Article IV would be insufficient to regulate the trade in it.

NOTE: For assessments of amendment proposals for commercially exploited aquatic species, Proposals 37 to 42, the listing criteria in Resolution Conf. 9.24 (Rev. CoP17) should be read in conjunction with the definitions, explanations and guidelines in Annex 5 of the Resolution, including the footnote with respect to application of the definition of 'decline' for commercially exploited aquatic species. That footnote suggests that for a commercially exploited marine species a population decline to 5-20% of the baseline would warrant inclusion in Appendix I, depending on its productivity, and a decline to a range of between 5 % and 10 % above that, e.g. 10-30%, would fulfil criterion A in Annex 2a of Resolution Conf. 9.24 (Rev. CoP17) for inclusion of a species in Appendix II. When considering these percentages, account needs to be taken of taxon-and case-specific biological and other factors that are likely to affect extinction risk.

Proposal 37

Carcharhinidae spp. (Requiem sharks)

Proposal: Include in Appendix II

Proponents: Bangladesh, Colombia, Dominican Republic, Ecuador, El Salvador, European Union, Gabon, Israel, Maldives, Panama, Senegal, Seychelles, Sri Lanka, Syrian Arab Republic and United Kingdom of Great Britain and Northern Ireland

Provisional assessment by the Secretariat

CITES background

Carcharhinus longimanus was included in Appendix II on 14 September 2014 after an entry into effect delay of 18 months and *C. falciformis* was included in Appendix II on 4 October 2017 after an entry into effect delay by 18 months.

At CoP15 (2010), the species *C. plumbeau*, *C. obscurus* and *C. longimanus* were proposed for inclusion in Appendix II but the proposal was rejected by the Conference of the Parties.

Purpose and impact of the proposal

The proposal seeks to include *C. amblyrhynchos, C. obscurus, C. porosus, Glyphis gangeticus, C. plumbeus, C. borneensis, C. hemiodon, C. leiodon, Negaprion acutidens, C. perezi, Isogomphodon oxyrhynchus, C. signatus, Nasolamia velox, C. acronotus, C. dussumieri, C. obsoletus, C. cerdale, Lamiopsis tephrodes* and *Lamiopsis temminckii* in Appendix II, in accordance with Article II paragraph 2(a) and all other species of Carcharhinidae spp. (35 species) in accordance with Article II paragraph 2(b) of the Convention.

If the proposal is adopted, international trade in specimens of all species of Carcharhinidae will be regulated in accordance with the provisions Article IV of the Convention.

Compliance with listing criteria

The supporting statement suggests that the inclusion of Carcharhinidae spp. in Appendix II satisfies the following criteria of Resolution Conf. 9.24 (Rev. CoP17) on *Criteria for amendment of Appendices I and II:*

- criteria A and B of Annex 2a: *C. acronotus, C. amblyrhynchos, C. borneensis, C. cerdale, C. dussumieri, C. hemiodon, C. leiodon, C. obsoletus, C. obscurus, C. perezi, C. plumbeus, C. porosus, C. signatus, , Glyphis gangeticus, Isogomphodon oxyrhynchus, Lamiopsis tephrodes,L. temminckii, Nasolamia velox and Negaprion acutidens,*

- criterion A of Annex 2b: *C. altimus, C. albimarginatus, C. amblyrhynchoides, C. amboinensis, C. cautus, C. brachyurus, C. brevipinna, C. coatesi, C. fitzroyensis, C. galapagensis, C. humani, C. isodon, C. leucas, C. limbatus, C. macloti, C. melanopterus, C. sealei, C. sorrah, C. tilstoni, C. tjutjot, Glyphis garricki, G. glyphis, Loxodon macrorhinus, Negaprion brevirostris, Prionace glauca, Rhizoprionodon acutus, R. lalandii, R. longurio, R. oligolinx, R. porosus, R. taylor, R. terraenovae, Scoliodon laticaudus, S. macrorhynchos, Triaenodon obesus* and other putative species of the family Carcharhinidae.

The proponents report that all 19 species are assessed to be Critically Endangered or Endangered on the IUCN Red List of Threatened Species partially due to international trade for their products. The 19 proposed species have varying levels of information, rates of population decline and evidence of international trade. While none of the species has a precise global population size, information provided in the supporting

statement on population trends is summarized below by species. The species with evidence of being in international trade based on the supporting statement are shown in bold below.

***C. amblyrhynchos**:* The species inhabits coral reef habitats in coastal water in the Indian and Pacific Oceans and has low productivity. The proponents refer to a recent global survey of reef-associated sharks, which showed that *C. amblyrhynchos* were not detected on reef in 8/40 countries and rarely sighted in the remaining countries suggesting widespread decline. the IUCN Red List of Threatened Species estimated that the species have undergone a global population reduction of 59% in the last three generations.

***C. obscurus**:* This is a large shark of up to 420 cm in total length and is a coastal and pelagic species with patchy global distribution. The productivity is reported to be low with late age-at-maturity and a long reproductive cycle. The IUCN Red List of Threatened Species estimates a median reduction of 75.8% with the highest probability of >80% reduction over the last three generations.

***C. porosus**:* This is a small coastal shark of <150 cm total length in Central and South America and according to the proponents is in decline by over 90% in at least part of its range in ten years. The IUCN Red List of Threatened Species estimated that the species have undergone a global population reduction of >80% in the last three generations.

***Glyphis gangeticus**:* The species is considered to be the world's most threatened shark according to the proponents and is considered extremely rare, but still detected in random surveys of fin markets. Records of the species are reported to be sparse, and the IUCN Red List of Threatened Species estimated that the species have undergone a global population reduction of >80% in the last three generations. It Is estimated that there are <250 mature individuals of the shark remaining with the species being locally extinct in parts of its range.

***C. plumbeus**:* the IUCN Red List of Threatened Species estimated that the species have undergone a global population reduction of 50-79% in the last three generations. Region specific population trend shows declines in multiple parts of its range with decline ranging from 60-88.9% over the last three generations.

C. borneensis: This species was presumed extinct until rediscovery in 2004. Based on landing data of all carcharhinid sharks, the IUCN Red List of Threatened Species estimates that the population have declined by 36–82% over the last three generations.

C. hemiodon: This species is a small shark (up to 102 cm in total length) and is now very rare, with population decline likely occurring over three generations ago. The proponents note that there is a lack of reliable records of the shark since the 1960s and estimates the number of mature individuals at less than 250.

***C. leiodon**:* This is an endemic species to the Arabian seas region and rediscovered in 2009. There is a limited number of specimens reported and due to difficulty in differentiating this species from others in the family Carcharhinidae, the species may have been confused with other species. Based on other similar species in the Arabian seas region, population decline of 50-80% is suspected over the last three generations.

***Negaprion acutidens**:* The species is found in the Indo West Pacific and a baited remote underwater video system survey found that it is rare in much of its range in Asia and Africa but common in Australia and in some island nations of the Pacific and Indian Oceans. The survey did not record sufficient numbers of the species to make quantitative estimates of the species. The IUCN Red List of Threatened Species estimates populations decline of 50-79% over the last three generations.

C. perezi: The species is a reef-dwelling shark found throughout the Western Central Atlantic. The IUCN Red List of Threatened Species estimates a population reduction of 52.5% over the last three generations.

Isogomphodon oxyrhynchus: This species is distributed in the Western Central and Southwest Atlantic and a demographic analysis showed a population decline of 18.4% per year between 1992 and 2002, which was deemed equivalent to over 99% population reduction over the last three generations.

C. signatus: This medium-sized (up to 280 cm total length) species occurs in the Northwest, Western Central, and Southwest Atlantic and the IUCN Red List of Threatened Species suspects a 50-79% population decline in the past three generations.

Nasolamia velox: Even though it is recorded as being found in international trade based on Table 4, there is no record of the species in the cited references. The species is found in Eastern Central and Southeast Pacific

and is assessed as Endangered in the IUCN Red List of Threatened Species, with population declines of 50-79% over the last three generations.

C. acronotus*:* This is a small (to 137 cm total length) species found in the Western Central and Southwest Atlantic Oceans from North Carolina to Brazil, including the Gulf of Mexico and Caribbean Sea. The IUCN Red List of Threatened Species assessment estimates a population reduction of 50-79% over the last three generations.

C. dussumieri*:* This is a small-sized shark (up to 100 cm total length) with low reproductive capacity that is distributed primarily in the Western Indian Ocean from at least the Arabian/Persian Gulf to the southeastern coast of India. The IUCN Red List assessment estimates a population decline of 50-70% over the past three generations.

C. obsoletus: The species is known from three type specimens with the last being collected in 1934. This small shark is suspected to have fewer than 50 individuals remaining, and the IUCN Red List of Threatened Species estimates a population reduction of >80% over the last three generations.

C. cerdale: The species is a small shark that inhabits coastal areas and estuaries in Eastern Central and Southeast Pacific from the Gulf of California, Mexico to Peru. The IUCN Red List of Threatened Species estimates a population reduction of >80% over the past three generation lengths. Anecdotal evidence from across its range suggests that while once common, the species has become increasingly rare.

Lamiopsis tephrodes: The species is found in Western Central and Northwest Pacific in Thailand, Indonesia and Malaysia, inshore on the continental shelf. The IUCN Red List of Threatened Species assessment estimates suspects a population reduction of 50–79% over the past three generations (20 years) based on reconstructed catches data of other shark species as there is little information on historic or current catches.

Lamiopsis temminckii: This species is a rare and poorly known species distributed in the northern Indian Ocean from Pakistan to Thailand. The IUCN Red List of Threatened Species estimates suspects a population reduction of 50–79% over the last three generations (20 years).

The supporting statement reports that the key products the Carcharhinidae species are caught for are fins, meat, oil and skin, with fins and some meat being exported internationally. There is insufficient information to determine if the species of Carcharhinidae are lookalikes for fins, but all species are likely to be look alike species for trade in meat.

Additional considerations (including relevant CoP recommendations)

The regulation of the harvest of these species would appear to fall under other international agreements and coordination with regional fisheries management organizations and regional fishery bodies may be needed if the proposal is adopted.

Provisional conclusions

On the basis of the information in the supporting statement, the Secretariat finds that there is evidence of international trade in *C. amblyrhynchos, C. obscurus, C. porosus, Glyphis gangeticus, C. plumbeus, C. leiodon, Negaprion acutidens, C. acronotus, C. dussumieri, and Lamiopsis temminckii.* The Secretariat considers that for *C. amblyrhynchos, C. obscurus, C. porosus, G. gangeticus, C. hemiodon, C. obsoletus,* and *Isogomphodon oxyrhynchus* there is evidence of declining population trends which may make them eligible for inclusion in Appendix I in the near future (criterion A of Annex 2a), however, the Secretariat finds that there is insufficient information for the other species if regulation of trade is required to ensure the long-term conservation of their *wild populations (criterion B of Annex 2a).*

There is limited information to determine if the species of Carcharhinidae are lookalikes for fins, but all species are likely to be look alike species for trade in meat.

Proposal 38

Sphyrnidae spp. (Hammerhead sharks)

Proposal: Include in Appendix II

Proponents: Brazil, Colombia, Ecuador, European Union and Panama

Provisional assessment by the Secretariat

CITES background

Sphyrna lewini, *S. mokarran* and *S. zygaena,* were proposed for inclusion in Appendix II at CoP15 (2010), but the proposal was rejected by the Conference of the Parties.

S. lewini was included in Appendix III on 26 September 2012 at the request of Costa Rica.

S. lewini, S. mokarran and *S. zygaena* were included in Appendix II on 14 September 2014 after a 18 month entry into effect delay.

This is the first time that the other species of the family Sphyrnidae have been proposed for inclusion in the Appendices.

Purpose and impact of the proposal

The proposal seeks to include *Sphyrna tiburo* in Appendix II, in accordance with Article II paragraph 2(a) and all other species of Sphyrnidae spp. not already in the Appendices in accordance with Article II paragraph 2(b).

If the proposal is adopted, international trade in all species of Sphyrnidae will be regulated in accordance with the provisions Article IV of the Convention.

Compliance with listing criteria

The supporting statement suggests that inclusion of *S. tiburo* in Appendix II satisfies criteria A and B of Annex 2a and *S. media, S. tudes, S. corona*, *S. gilberti* and *Eusphryra blochii* meets criterion A of Annex 2b of Resolution Conf. 9.24 (Rev. CoP17) on *Criteria for amendment of Appendices I and II*.

S. tiburo is a coastal species that is distributed in the Western Atlantic and Eastern Pacific Oceans. The proponents report that *S. tiburo* is a viviparous species with a brood size that is correlated with maternal size and ranges from 4 – 16 pups, with a short gestation period of about 4.5- 5 months. The supporting statement states that the generation length is estimated to be 12 years and maximum observed ages range between stocks with 5-6 years and 7-8 years in the Gulf of Mexico to 16 years and 17.9 years in the Southeast Atlantic for males and females, respectively. The proponents classify *S. tiburo* as a productive species due to their relatively high intrinsic rate of increase (mean r of 1.304 per year; 05% confidence interval = 1.150 – 1.165 per year).

The supporting statement notes that compiling species-specific information on population trends is challenging due to the species inhabiting varying levels of depth and turbidity and not surfacing to breathe. No quantitative estimates of population sizes are presented. The IUCN Red List of Threatened Species estimates a global population reduction of 50-79% over the last three generations. When broken down by geographically discrete species units, the assessment places the Southwest Atlantic and Pacific population at >80% reduction and the Northwest Atlantic population, based on a small portion of the distribution, at stable with 40% increase over three generations. The supporting statement provides a number of studies that show that *S. tiburo* found in the Eastern Pacific is no longer being found in parts of its range despite their historical presence. For the southwest Atlantic and Caribbean population, the information in the supporting statement shows anecdotal evidence of decline and very low recent records indicate extirpations in parts of its range. The proponents explain that due to the Gulf of Mexico and Atlantic populations being assessed together in a stock assessment and no conclusion being reached, the status is currently unknown.

The proponents note that while *S. tiburo* is harvested for meat and fins, the majority of meat is used locally as there is limited financial incentive for international trade. Information provided by the supporting statement states that recent studies have shown that *S. tiburo* is found in the international shark fin trade. The proponents

note that at the time of listing of *S. lewini, S. mokarran* and *S. zygaena,* it was believed that only these three Sphyrnidae species were in international trade. The studies cited in the supporting statement showed that between 2014-2015, *S. tiburo* composed 0.06% of fins sampled and suggests the entry into the fin market may be relatively new as the demand for smaller, less-expensive fins has increased.

The proponents state that while the hammerhead sharks are easy to distinguish from other sharks, visually distinguishing between fins of species of Sphyrnidae is challenging. The proponents further note that as fins from smaller hammerhead sharks like *S. tiburo* are now found in international fin trade, the three CITES-listed species of Sphyrnidae species may be exposed to illegal trade if their fins are hidden with non-listed species.

With regard to taxon- and case-specific biological and other factors that are likely to affect extinction risk, the supporting statements provide genetic evidence that *S. tiburo* is likely to be a species complex with at least three geographically discrete species units: two in the Western Atlantic and one in the Eastern Pacific. The proponent also indicates that given the species' coastal distribution, the species is susceptible to a wide range of fisheries and caught as both bycatch and targeted fisheries while also being subject to habitat degradation.

Three species of Sphyrnidae are already included in Appendix II, two of which were included under Article 2 paragraph 2(b) as look-alike species, i.e. "not reasonable to expect an informed non-expert to be able to make a firm identification", it seems reasonable to include all species of Sphyrnidae if the proposal is adopted. The proposal to include the three species of Sphyrnidae currently listed in Appendix II at CoP16 (Johannesburg, 2013) noted that "the majority of the hammerhead fins that were misidentified were found to be of another species of hammerhead, demonstrating that fin traders are able to differentiate between hammerhead fins and other shark species, but not always to the species level". Furthermore, when reviewing the proposal, the 4th FAO expert advisory panel in their assessment of the amendment proposals noted "it is not clear why the other species in the family Sphyrnidae were not proposed to be listed as "look-alikes" (FAO 2013[15]

Additional considerations (including relevant CoP recommendations)

The regulation of the harvest of these species would appear to fall under other international agreements and coordination with regional fisheries management organizations and regional fishery bodies may be needed if the proposal is adopted.

Provisional conclusions

On the basis of the information in the supporting statement, the Secretariat considers that there is evidence of declining population trends and extirpation from historic range, which may make *S. tiburo* eligibility for inclusion on Appendix I in the near future. In view of the difficulties of distinguishing fins of this species from other species in the genus, the remaining unlisted species in the genus may warrant inclusion under criterion A of Annex 2b of Resolution Conf. 9.24 (Rev. CoP17).

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[15] *FAO. 2013. Report of the fourth FAO Expert Advisory Panel for the Assessment of Proposals to Amend Appendices I and II of CITES Concerning Commercially-exploited Aquatic Species, Rome, 3–8 December 2012. FAO Fisheries and Aquaculture Report No. R1032. Rome, FAO. 161 pp.*

Proposal 39

***Potamotrygon albimaculata, P. henlei, P. jabuti, P. leopoldi, P. marquesi, P. signata and P. wallacei* (Freshwater stingrays)**

Proposal: Include in Appendix II

Proponent: Brazil

Provisional assessment by the Secretariat

CITES background

In 2010, Decision 15.85 directed to the range States of species in the family Potamotrygonidae (South American freshwater stingrays) encouraged them to consider the listing of endemic and threatened species of freshwater stingrays (Potamotrygonidae) in CITES Appendix III as needing the cooperation of other Parties in the control of trade.

In 2016, Decision 17.247 encouraged range States of freshwater stringrays (family Potamotrygonidae) to include all species of concern, as identified by the Animals Committee, in Appendix III, and consider options for including species in Appendix II. The species of priority concern as identified by the Animals Committee included the following noting that the priority species identified include both undescribed species and clusters of species (AC28 Doc. 18):

- *P.* "*aiereba*" species complex (Amazon and Orinoco basins)
- *P. leopoldi* (Amazon basin)
- *P. schroederi* (Amazon and Orinoco basins)
- *P. brachyura* (other catchment basins)
- *P.* "*motoro*" species complex (all catchments)

At CoP16 (2013), *P. motoro* and *P. schroederi* were proposed for inclusion in Appendix II (CoP16 Prop. 48), but this proposal was rejected.

At CoP17 (2016), *P. motoro* (CoP17 Prop. 45) was proposed for inclusion in Appendix II, but this proposal was also rejected.

Potamotrygon spp. (population of Brazil) was included in Appendix III on 3 January 2017 at the request of Brazil.

Purpose and impact of the proposal

The proposal seeks to include *P. leopolidi* and *P. wallacei* in Appendix II, in accordance with Article II paragraph 2(a) of the Convention and all other species of *Potamotrygon* spp. in accordance with Article II paragraph 2(b) of the Convention.

If the proposal is adopted, international trade in specimens of all species of *Potamotrygon* will be regulated in accordance with the provisions Article IV of the Convention.

Compliance with listing criteria

The supporting statement suggests that inclusion of *Potamotrygon* spp. in Appendix II satisfies the following criteria of Resolution Conf. 9.24 (Rev. CoP17) on *Criteria for amendment of Appendices I and II:*

- criterion A and B of Annex 2a: *P. leopolidi* and *P. wallacei*

- criterion A of Annex 2b (look alike criterion): *P. albimaculata, P. henlei, P. jabuti, P. marquesi,* and *P. signata*

P. wallacei and P. leopoldi are endemic freshwater stringrays species in Brazil. *P. wallacei* is found in the middle Negro River basin in Amazonas State, Brazil and inhabits specific habitats such as black water small streams with low pH and dissolved oxygen levels. *P. leopoldi* is endemic to Xingu River and its two tributaries, the Iriri and Curua rivers, and inhabits areas with substrates with rocks, pebbles and sand. The supporting statement reports that both species have slow growth, late sexual maturation, and low fecundity with *P. leopoldi*

having a gestation time of four months, age of maturation of 3-4 years for males and 5-6 years for females, average uterine fecundity of 4.84 embryos/female, which correlates with mother's body size, and with a generation time estimated at 7.3 years. It reports that *P. wallecei* has a gestation time of three months, average uterine fecundity of 2 embryos/female, which correlates with mother's body size, with a generation time estimated at 3.9 years.

The supporting statement reports that population estimates are difficult to quantify due to the accessibility of their distribution and provides the following information on population trends for each species:

P. leopoldi: The proponent reports that the mean natural mortality rate of the species is 0.27 (range 0.19 to 0.36) prior to the construction of the Power Plant. It further states that with the addition of hypothetical fishing mortalities, only fishing mortality of lower than 0.15 would allow the species to remain in equilibrium, but a fishing mortality is estimated up to 0.15

P. wallcei: The proponent reports a mean natural mortality rate of 0.52 (range 0.32 to 0.64) and that natural mortality of the first-year class is 0.75 with the fishing mortality having a value of 0.7. It is reported that the population trend was estimated to be decreasing in 30% of its distribution and stable in 70% of its distribution. It further states that in the region of the Itu-Bafuana- Daraqua River System, the population is decreasing by 4.17% per year was estimated.

The supporting statement reports that *P. leopoldi* is considered the most valuable Brazilian stingray due to its distinct dorsal pattern and are the most popular. *P. wallacei*, according to the proponents, have been in the international ornamental fish trade since the end of 1970s. Both species are being bred in captivity outside the range State and the proponent notes that specimens may be sourced from the wild to supplement or start founding stock for captive breeding facilities. The supporting statement states that captive-bred hybrids are fertile and that *P. leopoldi* hybrids from captive breeding facilities, which show more elaborate dorsal patterns are in higher demand than those from the wild.

The proponents note that since the inclusion of the species in Appendix III, there are no records of export of *P. leopoldi* from Brazil despite records of capture. The majority of exports of *P. leopoldi* are of live specimens from Asian countries and are of source code C or F. There are no records of trade in *P. wallacei* in the CITES trade database, however, the supporting statement reports that *P. wallacei* was only described in 2016 and has been traded as *P. histrix.*

With regard to taxon- and case-specific factors, the supporting statement notes that *P. wallacei* has high habitat specificity and is a sedentary species, which renders it highly vulnerable to extrinsic factors. In the case of *P. leopoldi*, the proponents state that part of its habitat was comprised by the installation of the Belo Monte Hydroelectric Power Plant in 2011, which has reduced the reproductive potential of the species. In addition to capture of juveniles for international trade as ornamental species, the proponents report that adult *P. leopoldi* are also targeted fisheries for food. The proponents suggests that both species have population structure with *P. leopoldi* having at least two different populations at Xingu River and *P. wallacei* having at least 13 populations in Middle Rio Negro.

Additional considerations (including relevant CoP recommendations)

P. marquesi is not included in the current adopted standard reference and will need its own nomenclatural reference if the present proposal is accepted.

Provisional conclusions

On the basis of the information in the supporting statement, it appears to the Secretariat there is insufficient evidence that the populations of *P. leopolidi* and *P. wallacei* are declining at an extent that would make them eligible for inclusion in Appendix I in the future and it is unclear if they meet criterion B of Annex 2a in Resolution Conf. 9.24 (Rev. CoP17).

Proposal 40

Rhinobatidae spp. (Guitarfishes)

Proposal: Include in Appendix II

Proponents: Israel, Kenya, Panama and Senegal

Provisional assessment by the Secretariat

CITES background

This is the first time that species in the family Rhinobatidae have been proposed for inclusion in the Appendices.

It should be noted that species in the genus *Glaucostegus* spp. (family Glaucostegidae) which were included in Appendix II in 2019 have the common name giant guitarfishes but theses should not be confused with the species in the family Rhinobatidae which is the subject of the present proposal.

Purpose and impact of the proposal

The proposal seeks to include *Acroteriobatus variegatus, Pseudobatos horkelii, Rhinobatus albomaculatus, R. irvinei, R. rhinobatos* and *R. schlegelii* in Appendix II, in accordance with Article II paragraph 2(a) of the Convention and all other species of Rhinobatidae in accordance with Article II paragraph 2(b).

If the proposal is adopted, international trade in all specimens of species of the family Rhinobatidae would be regulated in accordance with the provisions of Article IV of the Convention.

Compliance with listing criteria

The supporting statement suggests that the inclusion of Rhinobatidae spp. in Appendix II satisfies the following criteria of Resolution Conf. 9.24 (Rev. CoP17) on Criteria for amendment of Appendices I and II:

Criterion A of Annex 2a: *Acroteriobatus variegatus, Pseudobatos horkelii, Rhinobatus albomaculatus, R. irvinei, R. rhinobatos* and *R. schlegelii*

Criterion A of Annex 2b (look alike criterion): *Acroteriobatus andysabini, A. annulatus, A. blochii, A. leucospilus, A. ocellatus, A. omanensis, A. salalah, A. stehmanni, A. zanzibarensis, P. buthi, P. glaucostigma, P. lentiginosus, P. leucorhynchus, P. percellens, P. planiceps, P. prahli, P. productus, R. annandalei, R. austini, R. borneensis, R. holcorhynchus, R. hynnicephalus, R. jimbaranensis, R. lionotus, R. manai, R. nudidorsalis, R. penggali, R. punctifer, R. ranongensis, R. sainsburyi* and *R. whitei*.

There is a lack of information about the biological characteristics of the species being proposed, but the proponent reports that all species that have been studied show low fecundity, late sexual maturity and long generation lengths, conservatively suggesting low productivity. *R. rhinobatos* is reported to mature at four years and has a maximum age of 24 years, which places the generation length at 14 years (Bascusta et al. 2008) and *P. horkellii* is reported to have a generation length of 18.5 years (Lessa et al. 1986).

According to the supporting statement, species of *Acroteriobatus* are mainly distributed in the western Indian Ocean with some in the southeastern Atlantic, species of *Pseudobatos* are found in the amphi-American region, and *Rhinobatus* are found in the Indo-western Pacific and eastern Atlantic. The species mainly inhabit nearshore and inshore areas and occur in relatively shallow water from the shoreline to a depth of 100 m with only a few species including *R. schlegelii* being found at depth of over 200 m.

The population trends and status of those said to qualify for Appendix II under Annex 2a are summarized based on the information provided in the supporting statement:

A. variegatus: There are no data provided for the population trend for this species. The supporting statements provides an estimate of 60% catch rate decline based on guitarfish and wedgefish landings in Tamil Nadu (Rage & Zacharia 2009). The IUCN Red List of Threatened Species estimates a population reduction of approximately 60% over the last three generations.

P. horkelii: The proponents report an approximately 99% decline scaled over three generations based on landing data in 1984 and 2001 in Rio Grande do Sul, Brazil, and 94% decline over three generations based on catches from research trawls in the 1980s to early 1990 and between 2013 and 2017 in Uruguay. The IUCN Red List of Threatened Species estimates a population reduction of >80% over the last three generations.

R. albomaculatus: There are no data provided for the population trend for this species. The supporting statement states that the species has become increasingly rare and that there have been limited records of the species in the past decade. Interviews with fishers in Ghana showed that the species have declined by 40-60% (Seidu et al., 2022 referenced in the supporting statement). The IUCN Red List of Threatened Species estimates a population reduction of >80% over the last three generations.

R. irvinei: There are no data provided for the population trend for this species. The supporting statement states that a population reduction of >80% over the past three generations is suspected based on levels of exploitation and datasets for landings and catch rates of all sharks and rays in the region.

R. rhinobatos: This species has a wide range and data are available from parts of its range. The supporting statement reports that in parts of its range in western and central regions of the Mediterranean, the species has been extinct since the 1990s despite being prevalent in the 1970s and 1980s. Species-specific data exists in Mauritanian waters, and shows an annual rate of decrease of 4.6%, which is estimated to be a 85% reduction in population over three generations (Meissa & Gascuel 2015 referenced in the supporting statement). In Ghana, fishers have reported that *R. rhinobatos* and *Glaucostegus cemiculus* have declined by 80-90% based on their recollection (Siedu et al. 2022). The proponents report that the species is no uncommon in Turkey, Lebanon and Israel. The IUCN Red List of Threatened Species estimates a population reduction of >80% over the last three generations.

R. schlegelii: There is no data provided for the population trend for this species. The supporting statement states that the species is rare in Japan and virtually disappeared from the Republic of Korea over the past 20-25 years but does not provide a source for the information. The IUCN Red List of Threatened Species estimates a population reduction of >80% over the last three generations.

The main threats to the species reported in the supporting statement are unsustainable capture rates and habitat deteriorations, which is exacerbated by their affinity to inshore waters. The proponents note that guitarfish are often caught as bycatch, but target fisheries also exist in several countries and are used commercially mainly for their meat, skin, fins, and some derivatives. The supporting statement reports that while meat is used domestically or consumed in nearby countries, the fins and skin of Rhinobatidae species enter the international fin trade, but are not well documented Only anecdotal evidence is provided for the international trade in meat to nearby countries and international fin trade for the six species being proposed for inclusion in Appendix II. The proponents note that inclusion of the species in Appendix II will enable better data collection. The proponents further state that as parts and derivatives (especially fins) of the species in the family are similar, the entire family is proposed for listing.

With regard to taxon-and case-specific biological and other factors that are likely to affect extinction risk, in two of the species being proposed, *R. horkelii* and *R. rhinobatos*, the supporting document provides information that pregnant females migrate to shallow coastal waters to give birth. The proponents state that this seasonal migration to shallow waters makes the species, especially pregnant females, particularly vulnerable to capture by gillnets. In addition, the species are vulnerable to an increased exploitation and decrease in quality of habitat due to their affinity to shallow coastal water.

Rhinobatidae species are distributed over about 110 range States and the proponents consulted range States through a Notification to the Parties No. 2022/040. Colombia, European Union, Japan, Republic of Korea and the United States of America provided responses, which are included in the amendment proposal as Annex 2.

Additional considerations (including relevant CoP recommendations)

The supporting statement provides a standard reference for the family Rhinobatidae (cited within the supporting statement; Last et al., 2016) with supplementary standard references for seven newly described species: *Acroteriobatus andysabini* and *A. stehmanni* (Weigmann et al. 2021), *A. omanensis* (Last et al. 2016b), *Pseudobatos buthi* (Rutledge 2019), *Rhinobatos austini* (Ebert & Gon 2017), *R. manai* (White et al. 2016), and *R. ranongensis* (Last et al. 2019).

The regulation of the harvest of these species would appear to fall under other international agreements and coordination with regional fisheries management organizations and regional fishery bodies may be needed if the proposal is adopted.

Provisional conclusions

On the basis of the information in the supporting statement, the Secretariat considers that for some of the species proposed under Criterion A of Annex 2a (*P. horkelii* and *R. rhinobatos*) there is evidence of declining population trends which may make them eligible for inclusion on Appendix I in the near future. Due to the similarity of appearance in trade, inclusion of the other species under Criterion A of Annex 2b may be warranted.

Proposal 41

***Hypancistrus zebra* (Zebra pleco)**

Proposal: Include in Appendix I

Proponent: Brazil

Provisional assessment by the Secretariat

CITES background

H. zebra was included in Appendix III on 3 January 2017 at the request of Brazil. Otherwise, this is the first time that this species has been proposed for inclusion in the Appendices.

Purpose and impact of the proposal

The proposal seeks to include *H. zebra* in Appendix I, in accordance with Article II paragraph 1 of the Convention.

If the proposal is adopted, international commercial trade in specimens of *H. zebra* of wild origin will be prohibited. International trade in all specimens of the species will be regulated in accordance with the provisions of Article III of the Convention.

If *H. zebra* is included in Appendix I, breeding operations wishing to commercially export and trade in specimens of this species would need to be registered with the Secretariat in accordance with Resolution Conf. 12.10 (Rev. CoP15) on *Registration of operations that breed Appendix-I animal species in captivity for commercial purposes*.

Compliance with listing criteria

The supporting statement suggests that inclusion of *H. zebra* in Appendix I satisfies paragraphs B subparagraph iii) and iv) and paragraph C subparagraph i) and ii) of Annex 1 of Resolution Conf. 9.24 (Rev. CoP17) on *Criteria for amendment of Appendices I and II*.

H. zebra is an endemic species in Brazil and is found in the Amazon basin, restricted to the middle and lower parts of the Xingyu River basin. According to the supporting statement, *H. zebra* is a small, around 8-10 cm, benthic associated species. It is found in shallow water in crevices and cavities among submerged rocks in the Xingu River and therefore not uniformly distributed across the river basin. The species' occurrence range is calculated at 6,930km^2 and an occupation area of 528 km^2, which includes potential habitat, according to the supporting statement.

The supporting statement reports that the species has a slow growth rate, low fertility and a generation time of 2.5 years with a maximum longevity of 5 years in the natural environment. It is reported that the clutch size is 8-30 eggs and females reach sexual maturity between the first and second year.

The proponent report that the installation of the Belo Monte Dam in 2016 has impacted the population upstream of the dam and has reduced water flow downstream of the dam, which has reduced the area of distribution and the quality of habitat for the species. However, the supporting statement reports that despite the installation of the dam, the species can still be found, and many juveniles specimens were seized by Federal Police in Brazil between 2021-2022 indicating that the species is reproducing in the basin after the installation of the dam.

While there is no published population size, the proponents state that the species is not rare, but experienced a sharp decline between 1990 and 1997 based on anecdotal information. Due to the impact of the dam, which deteriorated habitat quality and made the species more vulnerable to catch, the proponents estimate that in the period of 10 years (2016-2026), there will be population decline of more than 80%. However, no quantitative data are presented to support the predicted decline.

The species is considered endangered in Brazil since 2005 and capture, transport, and sale of wild-caught specimens of *H. zebra* are prohibited. In addition, captive breeding of the species in Brazil is prohibited. The proponent reports that the species has been bred in captivity in small scale since late 1990s in Europe and the

United States of America, starting in 2000 on a large scale in Indonesia, and currently on a large scale in Ukraine and the Czech Republic. Despite the protection in Brazil and captive breeding outside the range State, the supporting statement states that illegal trade occurs to countries bordering Brazil, to Colombia and Peru. It provides seizure records of the species by the Brazilian Institute of the Environment and Renewable Natural Resources (IBAMA) between 2006 and 2019, which adds up to 4115 individuals. The proponents further state that between 2003 and 2020, *H. zebra* was the most seized species making up 44.6% of the seizures of ornamental fish in the Brazilian Amazon made by the Federal police and IBAMA (Beltrao et al. 2021).

The CITES Trade Database shows that the majority of recorded trade since the listing of the species in Appendix III in 2017 is live specimens being exported from Indonesia for commercial purposes with the source code F.

Additional considerations (including relevant CoP recommendations)

There is extensive captive breeding of the species outside the range State, which seems to supply the legal international trade in the species.

Provisional conclusions

On the basis of the information in the supporting statement, the Secretariat considers that the species has a restricted area of distribution (paragraph B of Annex 1), but it is unclear if the population has high vulnerability to either intrinsic or extrinsic factors and if there is a projected decrease in area of distribution, number of individuals, or quality of habitat. There is insufficient information to determine if there has been a marked decline in the population size in the wild (paragraph C of Annex 1) and if it can be inferred based on the decrease in quality of habitat or levels or patterns of exploitation.

Proposal 42

***Thelenota* spp. (Sea cucumbers)**

Proposal: Include in Appendix II

Proponents: European Union, Seychelles and United States of America

Provisional assessment by the Secretariat

CITES background

This is the first time that the species of the genus *Thelenota* have been proposed for inclusion in the Appendices.

Purpose and impact of the proposal

The proposal seeks to include in Appendix II the genus *Thelenota* in accordance with Article II paragraph 2(a) of the Convention.

If the proposal is adopted, international trade in all species of *Thelenota* will be regulated in accordance with the provisions of Article IV of the Convention.

Compliance with listing criteria

The supporting statement notes that the genus comprises three species (*T. ananas, T. anax* and *T. rubralineata*) and that their inclusion in Appendix II satisfies criteria A and B of Annex 2a of Resolution Conf. 9.24 (Rev. CoP17) on *Criteria for amendment of Appendices I and II*.

The three species of *Thelenota* have a wide distribution with *T. ananas* and *T. anax* being found throughout the Indo-Pacific, excluding Hawaii, and *T. rubralineata* being distributed in the east Pacific. They are all reef-associated species and found in shallow water depth of 10-30 m. According to the information in the supporting statement, *T. ananas* has late sexual maturity and low potential fecundity, however, the species generation length is unknown. Very little is known about the other two species' biology and with no information on age at maturity, generation length and fecundity.

There is a lack of population surveys and fisheries statistics presented for the three species in the supporting statement, but it provides the following information on population data:

T. ananas: In New Caledonia (France), the species has declined more than 60% over the past 30 years, with 10-30 individuals/ha being found in the 1980s to 6 individuals/ha in 2009. Similarly, the proponents report that in Tonga the occurrence declined from 48 in 1984 (from 1 hour search period at 21 sites) to 4 in 2004 (100 m transects, after a fishing moratorium) and in French Polynesia it was reported to be present "but in low numbers" following the lifting of a sea cucumber fishing moratorium. The proponents report that the species is considered overexploited with severely depleted populations throughout much of its range and provides references that show that the catch per unit effort and size of specimens have declined in India and that the species is heavily depleted in Indonesia. The support statement also provides evidence of decline in the Red Sea, which shows a decline from 48.1 individual/100m^2 in 2000 to 56 individuals/100m^2 in 2006, but no individuals being recorded in 2016. In 2013, the IUCN Red List of Threatened Species concluded that the species has declined 80-90% in at least 50% of its range and overexploited in at least 30% of its range.

T. anax: According to the supporting statement, this species is naturally relatively uncommon and generally found at low densities but is being increasingly targeted as other species decline. The proponents report that in Papua New Guinea the species' density decreased from 1 to 0.7 individuals/ha from 1992 to 2006 and in Malaysia there is a decrease in population and average size of the species. In Tonga, occurrences varied over a 20-year period, which includes a fishing moratorium with 48 occurrences in 1984 (1 h search period at 21 sites) during inactive fisheries, to 21 in 1996 with an active fishery to 41 in 2004 (100 m transects) 7 years after a fishing moratorium. The proponents cite a study conducted in Samoa that did not find any records whereas in Guam the species was found in only one site out of 74. Based on the information provided, it can be inferred that the species is very rare and occurs at very low density.

T. rubralineata: The supporting statements reports that this species is rare and not often recorded in surveys. The proponents report that where found, the recorded density is 1 individual/220m^2 to less than 1 individual/ha (Indonesia), less than 0.1 individual/ha and only 4 specimens were found in 1000 survey dives (Papua New Guinea). The highest density is reported to be 45 individuals/ha in the Solomon Islands. While the information in the supporting statement shows that the species is rare, population decline cannot be quantified or inferred based on the information.

The proponents state that import/export data for *Thelenota* species are limited and that there are no reliable estimates of the volume in trade, but that all three species are harvested and traded internationally for food. The supporting statement reports that *T. ananas* is one of the highest valued sea cucumber species in international trade with prices ranging up to USD 219 per kilogram and *T. anax* is the largest sea cucumber species harvested for commercial purpose and prices range from USD 31 per kilogram, which is a 70% increase in 5 years. The supporting statement reports that 9.3% of exports from the Queensland fishery is comprised of *T. ananas*. *T. anax* is reported to be the most exported species by volume in Fiji in 2014 according to the supporting statement. No quantifiable reports of *T. rubralineata* being traded internationally are included in the supporting statement, but the proponents predict that *T. rubralineata*, while currently not an important commercial species, may become more popular after the depletion of other species.

With regards to taxon- and case-specific factors that are likely to affect extinct risk, all three species are reef-associated and will be impacted by declines in reefs. The species are also highly vulnerable to harvest as they are easy to capture and are slow growing and long-lived species.

Additional considerations (including relevant CoP recommendations)

The three species of *Thelenota* are distinguishable by their external morphology including their large papillae. The supporting statement provides references to an identification guidebook on commercially valuable sea cucumbers by FAO and identification cards for Pacific Island sea cucumber species by the Secretariat of the Pacific Community.

The proponents state that there is no information on commercial captive breeding and artificial propagation of *Thelenota* species.

The regulation of the harvest of these species would appear to fall under other international agreements and coordination with regional fisheries management organizations and regional fishery bodies may be needed if the proposal is adopted.

Provisional conclusions

On the basis of the information in the supporting statement, the Secretariat considers that it appears that *T. ananas* has undergone population decline that may meet the marked decline criteria and, while *T. anax* shows decline. it is unclear if the species have declined to 30% of baseline, although it may do so in the near future. There is limited information on *T. rubralineata* to assess its population decline and to assess whether the species is in international trade.

Proposal 43

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

Proposal:

Amend Annotation #1 to read as follows: All parts and derivatives, except: […] b) seedling or tissue cultures obtained in vitro~~, in solid or liquid media,~~ transported in sterile containers;

Amend Annotation #4 to read as follows: All parts and derivatives, except: […] b) seedling or tissue cultures obtained in vitro~~, in solid or liquid media,~~ transported in sterile containers;

Amend Annotation #14 to read as follows: All parts and derivatives except: […] b) seedling or tissue cultures obtained in vitro~~, in solid or liquid media,~~ transported in sterile containers; […] f) finished products packaged and ready for retail trade~~,~~; this exemption does not apply to wood chips, beads, prayer beads and carvings.

Amend paragraph f) of the text in French of Annotation #14 to read as follows: f) les produits finis conditionnés et prêts pour la vente au détail; cette dérogation ne s'applique pas aux copeaux ~~en~~ de bois, aux perles, aux grains de chapelets et aux gravures.

Amend the parenthetical annotation to Appendix I Orchidaceae in the Appendices to read as follows: ORCHIDACEAE Orchids (For all of the following Appendix-I species, seedling or tissue cultures obtained in vitro~~, in solid or liquid media,~~ and transported in sterile containers are not subject to the provisions of the Convention only if the specimens meet the definition of 'artificially propagated' agreed by the Conference of the Parties)

Proponent: Canada

Provisional assessment by the Secretariat

CITES background

This proposal was submitted by Canada following the results of the Standing Committee Working Group on Annotations of which it was Chair. This Working Group was formally re-established at the 72nd meeting and at the 74th meeting, reported the result of its discussions with respect to *inter alia* the condition of transport in "solid or liquid media, transported in sterile containers". The Committee endorsed the recommendations contained in paragraphs 6-7, 15 and 21 of SC74 Doc. 81, and agreed to propose to CoP19 an amendment to paragraph 5 of the interpretation section of the Appendices, to the parenthetical annotation of ORCHIDACEAE in Appendix I, and to paragraph b) of Annotation #1, Annotation #4 and Annotation #14.

Additional background information on this topic and the implementation of Decision 18.322 is contained in document CoP19 Doc. 85.1.

Purpose and impact of the proposal

Amended wording to annotations #1, #4and #14 and the current annotation for Orchidaceae listed in Appendix I.

Compliance with listing criteria

As mentioned in the supporting statement, these amendments are proposed to reflect the technical evolution in the propagation and transport of seedling or tissue cultures obtained in vitro while maintaining the original intent of the exemption. As such, they are technical and linguistic measures which, whilst they amend the Appendices, are not designed to alter the level of protection for any species. As such it is difficult to apply the trade and biological criteria in Resolution Conf. 9.24 (Rev. CoP17) to the proposal.

Additional considerations (including relevant CoP recommendations)

None.

Provisional conclusions

The Secretariat notes that the amendments proposed are the result of thorough technical consultations held by the Standing Committee Working Group on Annotations and were endorsed at the 74th meeting of the Standing Committee. The condition of transport “in solid or liquid media, transported in sterile containers” mentioned in section 5 of the interpretation section is also used in the parenthetical annotation to Appendix I *Orchidaceae* and in annotations #1, #4 and #14.

The Secretariat notes that it is important to ensure consistent use of similar language throughout the Appendices as suggested in this amendment proposal, which reflects the evolution in the propagation and transport of certain flora specimens rather than any need to amend the level of protection afforded to any particular species in the Appendices.

Proposal 44

***Handroanthus* spp., *Roseodendron* spp. and *Tabebuia* spp. (Trumpet trees)**

Proposal: Include in Appendix II with annotation #17 (Logs, sawn wood, veneer sheets, plywood and transformed wood)

Proponent: Colombia, European Union and Panama

Provisional assessment by the Secretariat

CITES background

Currently, no species of the genera *Handroanthus*, *Roseodendron* and *Tabebuia* are included in the Appendices.

A proposal to include these taxa in CITES Appendix II was submitted for consideration in CoP18 (2019) with annotation #6 but was withdrawn by the proponent (Brazil) before discussion.

Purpose and impact of the proposal

The proposal seeks to include in Appendix II with annotation #17 ("Logs, sawn wood, veneer sheets, plywood and transformed wood") all species of trumpet trees of the genera *Handroanthus*, *Roseodendron* and *Tabebuia*, in accordance with Article II of the Convention. If the proposal is adopted, international trade in logs, sawn wood, veneer sheets, plywood and transformed wood of all species of these three genera will be subject to the provisions of Article IV of the Convention.

According to the supporting statement, this would imply the inclusion of 113 species in Appendix II, as follows: 35 species of the *Handroanthus*, 2 species of *Roseodendron*, and 76 species of the genus *Tabebuia*.

Compliance with listing criteria

The supporting statement suggests that the species of the genera *Handroanthus*, *Roseodendron* and *Tabebuia* satisfy the following criteria for inclusion in Appendix II in accordance with Article II of the Convention:

a) criterion B of Annex 2a of Resolution Conf. 9.24 (Rev. CoP17); and,

b) criterion A of Annex 2b of Resolution Conf. 9.24 (Rev. CoP17) (the so-called 'look-alike' criterion).

The supporting statement does not include a species-level breakdown as to how each of the 113 species covered by the three genera satisfy the criteria cited above. It does however mention that "*species to be known in trade (evidently including, but not limited to* H. serratifolius *and* H. impetiginosus*)*" satisfy "*the criteria*" in Annex 2a of Resolution Conf. 9.24 (Rev. CoP17).

The genera *Handroanthus*, *Tabebuia* and *Roseodendron* together comprise 113 species of trees (occasionally shrubs) native to the Americas. According to the supporting statement, the timber, generally traded as "ipê", is of increasing economic importance as it is hard and durable and is mainly exported as decks, sawn wood and floorings for use in furniture and construction.

The supporting statement includes in Annex 1 an overview of the global assessments by the International Union for Conservation of Nature and Natural Resources (IUCN) published as of 2022. Of the genera covered by the proposal: around 20 species of the genus *Handroanthus* have been assessed, with *H. grandiflorus* standing out as 'Critically endangered'; around 27 species of the genus *Tabebuia* have been assessed, with *Tabebuia buchii* standing out as 'Critically endangered'; and two species of the genus *Roseodendron*, *R. chryseum* and *R. donnell-smithii*, have been assessed respectively as 'Near threatened' and 'Least concern'.

The proposal cites deforestation and logging for both domestic and international trade as the main threats to trumpet trees. According to a publication (Forest Trends, 2022)[16], trumpet tree populations have severely declined over the last thirty years, and at least two-thirds of the species exported as ipê from the Amazon Basin between 2017 and 2021 are reportedly *Handroanthus serratifolius* and *H. impetiginosus*. The main importers are the European Union, United States of America and Canada.

Regarding volumes of timber of trumpet trees legally exported from range States, the supporting statement relies mostly on the information from Brazil (Annex 5 of the proposal), noting that information on trade at the species-specific level is difficult to acquire as specimens of trumpet trees are reported under common names such as "*ipe*". However, the proposal does point to concerning amounts of increase in trade in "*ipe*" timber products, with a 500% increase in exports from the Amazon Basin from 1998 to 2004.

Illegal trade is also a source of concern, with specific information provided for Brazil and Colombia, and significant levels of seized timber for species of the genus *Handroanthus* and *Tabebuia*.

According to the supporting statement, the main specimens in international trade are sawn wood, beams, round wood, squared wood.

Additional considerations (including relevant CoP recommendations)

The Secretariat notes that the supporting statement would benefit from updated biological and trade information for all species concerned, as well as strengthened species-specific trade information, as the proposal largely relies on the information available for two out of the 113 species covered by the three genera concerned. Although it is implied throughout the supporting statement that the proponents consider the majority of the species to meet at least Criterion A of Annex 2b of the Resolution (the so-called 'look-alike' criterion), the lack of clarification as to how each of the species proposed for inclusion in Appendix II satisfy the inclusion criteria of Resolution Conf. 9.24 (Rev. CoP17) could hamper decision-making processes by Parties considering the proposal

Annotation #17 *("Logs, sawn wood, veneer sheets, plywood and transformed wood"*) would seem to be appropriate for any inclusion of these species in the Appendices as it seems to cover the commodities that first appear in international trade as exports from range States, in accordance with Resolution Conf. 11.21 (Rev. CoP18) on *Use of annotations in Appendices I and II*.

The Secretariat has consulted with the nomenclature specialist of the Plants Committee aspects relating to the nomenclature of the genera *Handroanthus*, *Roseodendron* and *Tabebuia*. The supporting statement does not propose a standard nomenclature reference for the three genera proposed for inclusion in Appendix II.

In Annex 1 to the proposal the proponents have included a taxonomy and nomenclature for the three genera; which the nomenclature specialist of the Plants Committee has noted was obtained from *Royal Botanic Garden Kew's Plants of the World Online* (POWO, 2022)[17]. The latest revision seems to be Grose & Olmstead (2007)[18], but at least eight species of *Tabebuia* and six species of *Handroanthus* were not listed in this publication; in the view of the nomenclature specialist of the Plants Committee, It is thus not suitable as a standard reference. The supporting statement also contains a 'ined.' name in *Handroanthus* that is listed under another name in the paper. Grose & Olmstead (2007) could be proposed as a standard reference for *Roseodendron* spp. as the accepted names and synonymy of the two species in the proposal correspond to that in the publication.

Should the proposal be adopted, the names and names and synonyms for the three genera as included in Annex 1 of the proposal would be added to the CITES Checklist database. Additionally, *Tabebuia del-riscoi* and *Tabebuia perelegans* should be flagged as hybrid taxa.

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16 *Forest Trends. 2022. Demand for luxury decks in Europe and North America is pushing ipe to the brink of extinction across the amazon basin and threatening the forest frontier. Forest policy trade and finance initiative. Available at : https://www.forest-trends.org/wp-content/uploads/2022/03/Demand-for-Luxury-Decks-in-Europe-and-NA-is-Pushing-Ipe-to-the-Brink-of-Extinction.pdf*

17 *POWO. 2022. (Royal Botanic Gardens Kew's Plants of the World Online database). Available at: https://powo.science.kew.org/*

18 *Grose, S.O. & Olmstead, R.G. 2007. Taxonomic revisions in the polyphyletic genus Tabebuia s.l. (Bignoniaceae). Systematic Botany 32(3): 660–670. https://www.jstor.org/stable/25064275.*

Provisional conclusions

On the basis of the information available, it seems to the Secretariat that at least some species of the genus *Handroanthus* (e.g. *H. serratifolius* and *H. impetiginosus*) could be harvested from the wild to a level that wild populations could be threatened by harvesting and other influences. It seems also that specimens of the species of the three genera concerned are indistinctly traded under the common commercial name “ipe” and that inclusion of remaining species as look-alikes may consequently be justified.

Proposal 45

***Rhodiola* spp. (Stonecrops)**

Proposal: Include in Appendix II with annotation #2 (All parts and derivatives except: a) seeds and pollen; and b) finished products packaged and ready for retail trade.)

Proponents: China, European Union, Ukraine, United Kingdom of Great Britain and Northern Ireland and United States of America

Provisional assessment by the Secretariat

CITES background

This is the first time that species of genus *Rhodiola* are proposed for inclusion in the Appendices.

Purpose and impact of the proposal

The proposal aims to include in Appendix II with annotation #2 (*All parts and derivatives except: a) seeds and pollen; and b) finished products packaged and ready for retail trade*) all species of the genus *Rhodiola*, in accordance with Article IV of the Convention.

According to the supporting statement, this would imply the inclusion of 58 species in Appendix II.

If the proposal is adopted, international trade in all readily recognizable *Rhodiola* specimens, except seeds and pollen, and finished products packaged and ready for retail trade, would be regulated according to Article IV of the CITES Convention.

Compliance with listing criteria

The supporting statement suggests that the species of the genus *Rhodiola* satisfy the criteria for inclusion in Appendix II in accordance with Article II of the Convention, as follows:

a) *R. rosea* and *R. crenulata* satisfy Criterion B of Annex 2a of Resolution Conf. 9.24 (Rev. CoP17); and,

b) the remaining 56 species of the genus *Rhodiola* satisfy Criterion A of Annex 2b of Resolution Conf. 9.24 (Rev. CoP17) (look alike criterion).

According to the taxonomic reference used by the proponents (Ohba, 2003)[19], the genus *Rhodiola* covers 58 species of plants. The species of the genus *Rhodiola* have a wide distribution spanning across the northern hemisphere.

According to the supporting statement, *R. rosea* has a circumpolar holarctic distribution. *R. crenulata* occurs in China and Himalayan States (Nepal, Bhutan). *Rhodiola* seems to be capable to adapt to a wide variety of altitudinal ranges and habitats, from coastal cliffs, meadows and grasslands, all the way to rock crevices, gravel slopes and fissures in alpine mountains. Soil conditions and pH ranges are equally wide. Its intrinsic vulnerability stems from its long, slow growing lifecycle (estimated at over 80 years), which may take up to 20 years to reach maturity. Additionally, *Rhodiola* pollination and dispersal distances seem short, which may limit sexual reproduction once the distance between male and female individuals exceeds certain thresholds, and seedling survival and seed germination rates appear to be low. Yet, artificial propagation is reported to be easy, even though still rare.

Its extrinsic vulnerability stems from the harvested parts, which include either its rhizomes, or the entire plant, which implies that harvest will in most cases be mortal to the harvested specimen. Further threats in discrete areas of their ranges may include habitat fragmentation due to infrastructure developments or climate changes (in particular at higher elevations).

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[19] *Ohba, H. 2003. Rhodiola. In: Eggli, U. (Ed.). Illustrated Handbook of Succulent Plants. Crassulaceae. Springer, Berlin. Pp. 210–227.*

Total population sizes are unknown. Indications of population trends seem to mostly exist for discrete areas in the Russian Federation and Bhutan. There appear to remain sizeable stocks in certain areas, some of which are dense clumps or thickets. Yet, other studies suggest that remaining populations are patchy, critically low in density, and among the rarest of locally collected medicinal plant species.

The genus is not assessed in the IUCN Red List of Threatened Species, with the exception of a least concern listing for *R. marginata* (endemic to Bhutan). *Rhodiola rosea* is listed in the Red Book of the Russian Federation as a Category 3b species (Rare; small populations occur sporadically spread across a large area), with some regional populations listed as endangered, vulnerable or rare. Estimates and filed studies suggest dramatic declines of up to 90% of some populations during the 1970s and 1980s. Other national or subnational assessments list *R. rosea* as vulnerable, threatened, or locally extinct in China, and various European and North American countries and regions. *R. crenulata* is considered to be endangered in China, with population declines observed since the 1980s.

International trade data is incomplete and uncertain, but the proposal suggests that substantial trade exists, mainly from the two species *R. rosea* and *R. crenulata*. Annual international trade volume might be equivalent to hundreds of tons of fresh *Rhodiola* material, which seems to be mainly wild harvested in China and the Russian Federation. China also seems to manufacture 75% of all *Rhodiola* extracts. The USA, the UK, Australia, Canada and the Republic of Korea appear to be major importing Parties of *Rhodiola* end products.

Regarding identification of the species of *Rhodiola* specimens in trade, the supporting statement suggests that this could prove challenging as the specimens are traded under the commercial names “big flower”, “small flower” and “rose red”. It also appears that the identification in trade of specimens of *Rhodiola* is achieved only through DNA barcoding techniques, which is not practical for enforcement officers.

Finally, the proponents state that international trade in *Rhodiola* species is predicted to further grow in the future, since its use in traditional herbal medicine (e.g. to treat fatigue, sleep disorders and depression) appears to be diversifying into larger numbers of products traded in various trade chains, including industrial products, beverages, cosmetics, and food products. The proposal also suggests a rise in patent protections for *Rhodiola* products, and of wholesale market prices (from ca. USD 0.73/kg in 2002 to about USD 5.47/kg in 2018).

There appears to be some national regulations to safeguard the species in some range States. For example, many European populations, and some populations in the Russian Federation seem to be protected. Yet, that is not the case throughout the range of these species, and those protected exclude many of the most harvested regions and populations.

Additional considerations (including relevant CoP recommendations)

Regarding nomenclature, the European Union and its Member States have submitted for consideration at the present meeting of the Conference of the Parties document CoP19 Doc. 84.3 on *Standard nomenclature for* Rhodiola *spp.* The document notes that the nomenclature of the genus *Rhodiola* remains unresolved, and that a pending publication will rehabilitate to the rank of species of three taxa previously considered synonyms. For further information, the Secretariat draws the attention of the Parties to its comments on document CoP19 Doc. 84.4.

Provisional conclusions

In the Secretariat’s view, the supporting statement provides evidence to suggest that regulation of trade in *Rhodiola rosea* and *R. crenulata* may be 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. If this is the case, the genus-level approach for the species of *Rhodiola* seems reasonable, considering that intraspecific identification of specimens of the genus through anatomical methods seems very challenging.

Proposal 46

***Afzelia* spp. (African populations) (Pod mahoganies)**

Proposal: Include in Appendix II with annotation #17 (Logs, sawn wood, veneer sheets, plywood and transformed wood.)

Proponents: Benin, Côte d'Ivoire, European Union, Liberia and Senegal

Provisional assessment by the Secretariat

CITES background

This is the first time that species of the genus *Afzelia* have been proposed for inclusion in the Appendices.

Purpose and impact of the proposal

The proposal seeks to include in Appendix II with annotation #17 ("Logs, sawn wood, veneer sheets, plywood and transformed wood") the African populations[20] of the genus *Afzelia*, in accordance with Article II of the Convention.

According to the supporting statement, this would imply the inclusion of 7 species in Appendix II.

If the proposal is adopted, international trade in logs, sawn wood, veneer sheets, plywood and transformed wood of the African populations of the species of the genus *Afzelia* spp. will be regulated in accordance with the provisions of Article IV of the Convention. As these proposed Appendix-II listings will be limited to African populations of the genus *Afzelia*, trade in specimens of cultivated and naturalized populations outside the genus' range in Africa would not be covered by the provisions of Article IV of the Convention.

When reference is made to "African populations", the Secretariat assumes that this refers to the African region as used by CITES.

Compliance with listing criteria

The supporting statement suggests that the inclusion in Appendix II of African populations of species of the genus *Afzelia* satisfy the criteria for inclusion in Appendix II in accordance with Article II of the Convention, as follows:

a) *A. africana*, *A. bipindensis*, *A. pachyloba* and *A. quanzensis* satisfy criterion B of Annex 2a of Resolution Conf. 9.24 (Rev. CoP17); and,

b) *A. bella, A. parviflora* and *A. peturei* in accordance with Article II satisfy criterion A of Annex 2b of Resolution Conf. 9.24 (Rev. CoP17) (the 'look-alike' criterion).

Afzelia is a widespread genus of tropical trees, with seven species native to Africa and four species native to South-East Asia[21] , and are known to be prized both nationally and internationally for their high-quality timber, which is highly durable, stable in humidity, resistant to insect attack, and aesthetically decorative. As a result, according to the proponents, *Afzelia* timber has high market value and African populations continue to be intensively logged to meet high international demand.

The Secretariat notes that with the exception of *A. quanzensis* and *A. peturei*, the African species of the genus *Afzelia* have been assessed by the International Union for Conservation of Nature and Natural Resources (IUCN) at the global level, as follows: *A. africana, A. bipindensis* and *A. pachyloba* as 'Vulnerable'; and *Afzelia bella* and *A. parviflora* as 'Least concern'. These Red List assessments were made on the basis of

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[20] *When reference is made to the term 'African populations', the Secretariat assumes that the proponents refer to the major geographical region of Africa as recognized by the Convention, and the Parties recognized under such a classification.*

[21] https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:331326-2

unsustainable harvest and population decline trends. Further, according to the supporting statement, African species of *Afzelia* are in decline due to intense overexploitation of their timber for international trade.

According to the supporting statement, timber of species of the genus *Afzelia* has high-quality properties comparable to *Tectona grandis* (teak) and species of the genus *Tieghemella*. The wood of species of pod mahoganies is highly sought after the international market for construction and industrial uses, including boat building and precisions machinery. Their wood is also prized for their aesthetics, and the species of *Afzelia* are also traded for use in furniture, flooring, veneer and musical instruments.

The main importers of Afzelia specimens have been identified as the United States of America and the European Union in the proposal. The trade information provided by the proponents is largely based on an analysis of trade under the common name 'African mahogany' and the Harmonised System (HS) codes. This could potentially lead to an overestimation of the volumes of *Afzelia* actually found in international trade. Nonetheless, the 2010-2019 trade analysis in Section 6.2 ('Legal trade') of the supporting statement could point towards considerable amounts of exports *Afzelia* from range States.

According to the supporting statement, the main specimens of *Afzelia* in trade is timber, noting further that the wood of all seven African species of the genus is morphologically indistinguishable, meaning that species of the genus *Afzelia* are often traded interchangeably.

Additional considerations (including relevant CoP recommendations)

It is unclear from the supporting statement how, should the proposal be adopted, specimens of species of *Afzelia* native to Asia will be differentiated in trade from specimens of the seven African species of the genus covered by the proposal. Section 8.4 ('Captive breeding and artificial propagation') of the supporting statement indicates that there are known plantation trials within Africa for species of the genus *Afzelia*, for example in Cote d'Ivoire, Sudan, and Mozambique; but it does not provide information as to whether there are plantations of species of the genus outside Africa and, if so, how would their specimens be differentiated in international trade from those originating in Africa. The Secretariat considers annotation #17 *("Logs, sawn wood, veneer sheets, plywood and transformed wood"*) to be a viable option for the purposes of this proposal, as it seems to cover the commodities that first appear in international trade as exports from range States, in accordance with Resolution Conf. 11.21 (Rev. CoP18) on *Use of annotations in Appendices I and II*.

The Secretariat has consulted with the nomenclature specialist of the Plants Committee (Ms. Klopper) aspects relating to the nomenclature of the genus *Afzelia*. The supporting statement proposes Donkpegan *et al.* (2020)[22] as the standard nomenclature reference for the genus *Afzelia* if the present proposal is adopted. While not necessarily a taxonomic reference, as they list accepted species for both African and Asian populations of the genus, it can be suitable as a standard reference. Regarding synonymy, the proposal follows that of *Royal Botanic Garden Kew's Plants of the World Online* (POWO, 2022)[23].

It is unclear from the supporting statement how, should the proposal be adopted, specimens of species of *Afzelia* native to Asia will be differentiated in trade from specimens of the seven African species of the genus covered by the proposal. The supporting statement also indicates that there are plantation trials within Africa for species of the genus *Afzelia*, but it does not provide information as to whether there are plantations of African species of the genus outside Africa and, if so, how would their specimens be differentiated in international trade from those originating in Africa.

Provisional conclusions

On the basis of the information in the supporting statement, the Secretariat considers that that African populations of species in this genus including *A. africana, A. bipindensis, A. pachyloba* and *A. quanzensis* are under significant pressure from the demand for timber in the international market and that regulation of trade in these 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. The genus-level approach for the species of the genus *Afzelia* native to Africa seems reasonable to the Secretariat,

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[22] *Donkpegan, A.S.L., Doucet, J.L., Hardy, O.J., Heuertz, M. & Piñeiro, R. 2020. Miocene diversification in the savannahs precedes tetraploid rainforest radiation in the African tree genus Afzelia (Detarioideae, Fabaceae). Frontiers in Plant Science 11(June): 1–14. https://doi.org/10.3389/fpls.2020.00798*

[23] *POWO. 2022. (Royal Botanic Gardens Kew's Plants of the World Online database). Available at: https://powo.science.kew.org/*

considering that intraspecific identification of species of the genus through anatomical methods seems very challenging.

Proposal 47

***Dalbergia sissoo* (North Indian rosewood)**

Proposal: Delete from Appendix II

Proponents: India and Nepal

Provisional assessment by the Secretariat

CITES background

All species of the genus *Dalbergia* are included in the Appendices, as follows:

- Appendix I: *Dalbergia nigra*
- Appendix II: *Dalbergia* spp.[#15] (except for the species listed in Appendix I).

Annotation #15 reads:

> *All parts and derivatives, except:*
>
> *a) Leaves, flowers, pollen, fruits, and seeds;*
>
> *b) Finished products to a maximum weight of wood of the listed species of up to 10 kg per shipment;*
>
> *c) Finished musical instruments, finished musical instrument parts and finished musical instrument accessories;*
>
> *d) Parts and derivatives of* Dalbergia cochinchinensis*, which are covered by Annotation # 4; and*
>
> *e) Parts and derivatives of* Dalbergia *spp. originating and exported from Mexico, which are covered by Annotation # 6.*

Dalbergia nigra has been included in Appendix I since CoP8 (1992).

Dalbergia cochinchinensis, *D. granadillo*, *D. retusa*, *D. stevensonii and "Dalbergia* spp. (populations of Madagascar)" have been included in Appendix II since CoP16 (2013).

All other species of the genus *Dalbergia,* notably including *D. sissoo*, have been included in Appendix II with annotation #15 since CoP17 (2016).

At CoP18 (2019) annotation #15, which applies to *Dalbergia, sissoo,* was amended to allow, *inter alia*, exemptions from CITES controls for musical instruments and other finished products. Further, paragraph 8 of the interpretation section of the Appendices was amended to include definitions of the terms and expressions used in the amended annotation #15, namely: 'finished musical instruments', 'finished musical instrument accessories', 'finished musical instrument parts', 'shipment', and 'ten (10) kg per shipment'.

At CoP18 (2019) also, the deletion of *Dalbergia sissoo* from Appendix II was proposed by Bangladesh, Bhutan, India and Nepal (CoP18 Prop. 51). The proposal was rejected by the Conference of the Parties.

India has a reservation in place for the Appendix II listing of *Dalbergia* spp.[#15] valid since 2 January 2017. Furthermore, through Notification No. 2018/031 of 26 March 2018, India informed Parties that it had set a ban on exportations for "*commercial purposes of all wild-taken specimens of species included in Appendices I, II and III […]*". In the Notification, India specifies the following exemption from this general ban: the export of cultivated varieties of plant species included in Appendices I and II; and all products (except logs, timber, stumps, roots, bark, chips, powder, flakes, dust and charcoal) produced from wild sourced (W) *Dalbergia sissoo* and *Dalbergia latifolia* and authorized for export by a CITES Comparable Certificate issued by the competent authorities of India.

Purpose and impact of the proposal

The proposal seeks to delete *Dalbergia sissoo* from Appendix II, citing that the species does not satisfy Article II, paragraphs 2 (a) or (b) of the Convention or criteria in Annex 2a and Annex 2b of Resolution Conf. 9.24 (Rev. CoP17) on *Criteria for amendment of Appendices I and II*.

If the proposal is adopted, *D. sissoo* will be deleted from the Appendices, through the inclusion of the following text (underlined) in the Appendix II listing of *Dalbergia* spp.:

*"*Dalbergia *spp. #15 (except for the species listed in Appendix I and* Dalbergia sissoo*)*"

Compliance with listing criteria

The supporting statement suggests that *Dalbergia sissoo* does not satisfy criteria A and B in Annex 2a and criteria A and B in Annex 2b of Resolution Conf. 9.24 (Rev. CoP17) for listing under Appendix II. For reference, Annex 2b of the Resolution relates to species that are similar in appearance to those referred to in Annex 2a (so-called 'look-alike' species).

According to the supporting statement, *D. sissoo* is native to 11 countries in Asia and South Africa and has been introduced as an exotic species in around 35 countries in Africa, Asia, the Caribbean, North and South America and Oceania.

North Indian rosewood is said to be fast growing and abundantly found in the wild throughout its natural range in India. This seems to be further confirmed by the fact that the species has been successfully introduced in various countries throughout the world, and it is known to be invasive in Australia and the United States of America[24].

The Secretariat notes that the conservation status of the species throughout its range was assessed at the global level in 2019 by the International Union for Conservation of Nature and Natural Resources (IUCN) as 'least concern' (Lakhey *et al.*, 2020)[25]. The justification behind this assessment being: the species' wide cultivation and plantation throughout the world in tropical and sub-tropical areas; its large extent of occurrence (EOO) of more than 4,000,000 km^2; its frequent cultivation; and its listing in Appendix II of the Convention. Although it was previously affected by *Dalbergia* die-back disease, the disease is subsiding.

National assessments in India suggest that its populations of North Indian rosewood do not fall under any threatened categories. According to the proposal, the main threats to the species are bacterial, fungal and insect borne diseases. The impacts of both harvest and trade on wild populations in India are quoted to be negligible, citing that it is extensively available in commercial plantations in India (where it represents the second most important cultivated tree), and that illegal trade in trees removed from wild populations is rarely reported in India. The proposal does not provide information on plantations from other known range States.

According to the supporting statement, Indian rosewood is used at the local level for a variety of purposes (including medicinal ones), but its wood is the product most valued in international trade. The main specimens in international trade are handicraft items, furniture, veneer, plywood and musical instruments.

The proponents suggest that the wild populations of *D. sissoo* in India are not threatened by international trade. There is also a formal agroforestry industry in place that seems capable of meeting the demands of the international market. However, there are considerable information gaps related to the conservation status, management and production of the species throughout the species' range States other than India.

Further, the supporting statement states that since the listing of *Dalbergia sissoo* in Appendix II, exports of furniture and handicrafts have fallen by almost 50%, which has had negative implications of livelihoods in India. However, the supporting statement does not refer to experiences in the implementation of annotation #15, as well as the amendments adopted to it at CoP18, which derived in cautionary exemptions for musical

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[24] *Global Invasive Species Database. 2019. Species profile:* Dalbergia sissoo*. Downloaded from: http://www.iucngisd.org/gisd/species.php?sc=1186*

[25] *Lakhey, P., Pathak, J. & Adhikari, B. 2020. Dalbergia sissoo. The IUCN Red List of Threatened Species 2020: e.T62022617A62022619. https://dx.doi.org/10.2305/IUCN.UK.2020- 3.RLTS.T62022617A62022619.en*

instruments and other finished products. It is unclear if range States have opted for these exemptions when exporting specimens of *Dalbergia sissoo*.

Regarding the issue of similarity to other species in trade, the proponents state that "Dalbergia sissoo *is easy to identify in its living condition, and is unlikely to be confused with other species. Further, its wood can also be distinguished from other species of Dalbergia by its wood anatomical features, gene sequences and also by using technologies like DART TOFMS, Near-Infrared and Raman Spectroscopy*". Section 11 of the supporting statement provides further information methodologies to distinguish wood of *Dalbergia sissoo* from that of other species of the genus *Dalbergia*, from weed density, gene sequencing, and spectrometry.

The proponents consulted 43l range and consumer States of Dalbergia sissoo on 14 May 2022.Two supported the proposal, no other replies to this consultation are reported.

wished to be a co-proponent of the proposal.

Additional considerations (including relevant CoP recommendations)

There seem to be inconsistencies regarding the information on the natural distribution of the species. While the literature suggests that *Dalbergia sissoo* occurs in the foothills of the Himalayas from eastern Afghanistan through Pakistan to India and Nepal[26], the range States mentioned in the proposal, as well as those currently reflected in the Checklist of CITES Species, suggest a wider natural distribution.

In contrast, the *CITES Dalbergia Checklist* (Cowell, 2022), which will be considered for adoption at the present meeting (see document CoP19 Doc. 84.1), reflects relevant distribution information from the latest IUCN Red List of Threatened Species for this species at the global level (published in 2020) and suggests a more restricted distribution with the species being recognized native to eight range States: Afghanistan, Bangladesh, Bhutan, India, Iran, Myanmar, Nepal and Pakistan.

Provisional conclusions

On the basis of the information in the supporting statement, it appears to the Secretariat that international trade of specimens of *Dalbergia sissoo* from the wild is not necessarily reducing its wild populations to a level at which survival might be threatened by continued harvest or other influences.

However, it seems that specimens of *Dalbergia sissoo* in the form in which they are traded may well resemble specimens of some of the other 275 *Dalbergia* species listed in Appendix II, such that enforcement officers who encounter specimens of CITES-listed species are unlikely to be able to distinguish between them.

The proponents have given detailed information on identification techniques to distinguish *Dalbergia sissoo* from other *Dalbergia* species. However, it is uncertain how these methods and technologies can be readily made available for enforcement officers and other CITES Authorities in distinguishing specimens of *Dalbergia* covered by CITES controls.

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[26] *Wang, B.Y. et al. 2011. Genetic diversity and differentiation in* Dalbergia sissoo *(Fabaceae) as revealed by RAPD. Genetics and Molecular Research, 10 (1): 114-120.*

Proposal 48

***Dipteryx* spp. (Cumaru)**

Proposal: Include in Appendix II with annotation "Logs, sawn wood, veneer sheets, plywood, transformed wood and seeds"

Proponents: Colombia, European Union and Panama.

Provisional assessment by the Secretariat

CITES background

At the request of Costa Rica, its population of *D. panamensis* was included in Appendix III on 13 February 2003 and at the request of Nicaragua, its population of *D. panamensis* was included in Appendix III on 13 September 2007.

This is the first time that any other species of the genus *Dipteryx* spp. have been proposed for inclusion in the Appendices.

Purpose and impact of the proposal

The proposal seeks to include in Appendix II with an annotation (designating '*Logs, sawn wood, veneer sheets, plywood, transformed wood and seeds*') all species of cumaru of the genus *Dipteryx*, in accordance with Article II of the Convention.

According to the supporting statement, this would imply the inclusion of 14 species in Appendix II.

If the proposal is adopted, trade in logs, sawn wood, veneer sheets, plywood and transformed wood and seeds of all *Dipteryx* species will be regulated in accordance with Article IV of the Convention.

As resolved in Resolution Conf. 9.25 (Rev. CoP18) on *Implementation of the Convention for species in Appendix III* if the present proposal is adopted the species from the genus included in Appendix III shall be deleted from that Appendix.

Compliance with listing criteria

The supporting statement suggests that the species of the genus *Dipteryx* satisfy the criteria for inclusion in Appendix II in accordance with Article II of the Convention, as follows:

a) *D. alata*, *D. micrantha, D. odorata* and *D. oleifera* satisfy criterion B of Annex 2a of Resolution Conf. 9.24 (Rev. CoP17); and,

b) *D. charapilla*, *D. ferrea, D. lacunifera, D. magnifica, D. polyphylla, D. punctata, D. rosea, D. tetraphylla, D. trifoliolata* and *D. casiquiarensis* satisfy criterion A of Annex 2b of Resolution Conf. 9.24 (Rev. CoP17) (the 'look-alike' criterion).

The genus *Dipteryx* is comprised by 14 neotropical tree species known to occur in the following countries or dependent territories*: Bolivia (Plurinational State of), Brazil, Colombia, Costa Rica, Ecuador, French Guiana (France)*, Guyana, Honduras, Nicaragua, Panama, Paraguay, Peru, Suriname and Venezuela (Bolivarian Republic of). According to the supporting statement, the species is also known to occur in Bahamas, Dominica and Trinidad and Tobago, although it is uncertain if they are introduced or native populations.

The standard nomenclature reference proposed (Carvalho *et al*., 2020)[27] recognizes the only species currently listed in the Appendices (*D. panamensis*, Appendix III) as a synonym for *D. oleifera*. Throughout the supporting statement *D. panamensis* is therefore referred to as *D. oleifera*.

Species of the genus *Dipteryx* are valuable sources of timber for the international decking and flooring market, as well as of an array of coumarin products, such as its seeds known as 'tonka beans' used for food and medicinal purposes. The supporting statement documents the conservation status and trends in trade for all species of the genera, with particular emphasis on those four species the proponents consider meet the criterion B of Annex 2a of Resolution Conf. 9.24 (Rev. CoP17).

Threats to cumaru tree species are said to be targeted and unregulated logging; illegal harvest of timber and seeds; habitat loss; and, intrinsic vulnerabilities, such as their known slow growth rate, taking some species between 47 to 177 years to reach what could be considered a commercial size. Global populations of species of *Dipteryx* are said to be declining with eight species having been assessed thus far in the IUCN Red List of Threatened Species, notably with respect to the present proposal, *D. alata* has been classified as 'Vulnerable', *D. oleifera* (syn. *D. panamensis*) and as 'Least Concern' and *D. odorata* as 'Data deficient'.

Trade data documented by the supporting statement is mostly at the genus level, with exports of *Dipteryx* from range States such as Brazil and Peru representing between 26% to 80% of national exports of wooden flooring. The main importers of cumaru wood identified throughout the proposal being: China, the European Union, France, Germany, Japan, and the United States of America.

Regarding the ten species proposed for inclusion in accordance with the 'look-alike' criterion, the proposal suggests that distinction between species of the genus *Dipteryx* at the intraspecific level is not possible through macroscopic and microscopic identification of wood anatomy methods. However, distinction at the interspecific level from wood of other tree species similar in international trade, such as species of the genera *Handroanthus*, *Tabebuia*, *Roseodendron* (collectively known as "ipê") is possible based on microscopic wood characteristics.

While the proposal mentions harvest and uses of cumaru seeds (tonka beans) for medicinal, aromatic, and food purposes, little information is provided on the international trade of these specimens, nor on their identification and differentiation from seeds of other tree species found in international trade. Little information is provided on the international trade in tonka beans, and it is unclear if these specimens warrant regulation under the provisions of Article IV of the Convention.

The proposal mentions consultations distributed by the European Union to all range States, but no further information on the outcomes of these consultations is detailed.

Additional considerations (including relevant CoP recommendations)

Following consultation by the Secretariat with the nomenclature specialist of the Plants Committee the nomenclature reference proposed by the proponent for the genus *Dipteryx* (Carvalho, 2020) would be suitable if the proposal is adopted.

Further, the European Union and its Member States have submitted for consideration at the present meeting of the Conference of the Parties document CoP19 Doc. 84.2 on Standard nomenclature for *Dipteryx* spp. The document outlines taxonomic uncertainty regarding the genus *Dipteryx*, including nomenclatural discrepancies and ambiguities. The Secretariat draws the attention of the Parties to its comments on document CoP19 Doc. 84.2.

Provisional conclusions

The Secretariat finds that, on the basis of the information in the supporting statement, it appears that species of the genus *Dipteryx* are under significant pressure from the demand for wood from the international market of wooding and decking, and there are concerns on their conservation status and declining population trends. Little specific information is presented on the status of the species purported to satisfy criterion B of Annex 2a of Resolution Conf. 9.24 (Rev. CoP17) – *D. alata*, *D. micrantha, D. odorata* and *D. oleifera* - although *D. alata*

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27 Carvalho, C.S., de Fraga, N.C., Cardoso, D.B.O.S. and Lima, H.C. 2020. Tonka, baru and cumaru: Nomenclatural overview, typification and updated checklist of Dipteryx (Leguminosae). Taxon. 69(3), pp.582-592.

has been classified as ‘Vulnerable’ in the IUCN Red List of Threatened Species which may support the proponents’ claim.

The Secretariat also finds that if criterion B of Annex 2a of Resolution Conf. 9.24 (Rev. CoP17) is deemed to be met for some or all of these species, then in view of the similarity between the specimens of the species in trade the criteria in Annex 2 b of Resolution conf. 9.24 (Rev. CoP17) is also met for the rest of the species in the genus.

The proposal introduces a new annotation to the Appendices by adding the word “and seeds” to an existing annotation #17. To the extent possible, the Secretariat recommends for new listings to align with already existing annotations. The Secretariat also notes that there seems to be a lack of information as to whether seeds of the genus *Dipteryx* (also known as ‘tonka beans’) are found in international trade to a level that could warrant regulation under Article IV of the Convention, in addition to the challenges posed by their identification in international trade and by a further different new annotation.

Proposal 49

***Paubrasilia echinata* (Brazil wood)**

Proposal: Transfer from Appendix II to Appendix I with 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."

Proponent: Brazil

Provisional assessment by the Secretariat

CITES background

P. echinata is listed in Appendix II at CoP14 (2007) with annotation #10 which designates “logs, sawn wood and veneer sheets, including unfinished wood articles used for the fabrication of bows for stringed musical instruments”.

It was originally listed under the name *Caesalpinia echinata*, which was changed to *P. echinata* following the adoption of a new standard nomenclatural refence at CoP18 (2019).

Purpose and impact of the proposal

The proposal seeks to transfer *P. echinata* from Appendix II to Appendix I, in accordance with Article II, paragraph 1 of the Convention.

An annotation[28] has been proposed to limit the parts and derivatives to be covered, designating "*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 Resolution Conf. 16.8”*, although the proposal does not refer to the most recent version of Resolution Conf. 16.8 revised by the Conference of the Parties at its 17th meeting (CoP17, Johannesburg 2016).

If the proposal is adopted, international trade in specimens of *P. echinata* will be regulated in accordance with the provisions of Article III of the Convention, with the terms of the annotation and with any applicable resolutions including Resolution Conf. 16.8 (Rev. CoP17) on *Frequent cross-border non-commercial movements of musical instruments*.

Compliance with listing criteria

The supporting statement indicates that the transfer of *P. echinata* from Appendix II to I is proposed in accordance with the following criteria of Annex 1 to Resolution Conf. 9.24 (Rev. CoP17):

- criterion A, subparagraphs i) and v), meaning that the wild population is small and characterized by *“an observed, inferred or projected decline in the number of individuals or the area and quality of habitat”* and *“a high vulnerability to either intrinsic or extrinsic factors”*; and,

- criterion B, subparagraphs iii) and iv), meaning that the wild population has a restricted area of distribution and is characterized by “*a high vulnerability to either intrinsic or extrinsic factors*” and “*an observed, inferred or projected decrease in*” either the area of distribution or habitat, the number of subpopulations or individuals, the quality of habitat, or the recruitment.

P. echinata is endemic to Brazil, where it is also the national tree. The species was last assessed at the global level under the the IUCN Red List of Threatened Species in 1998 and categorized as ‘Endangered’, with deforestation identified as its main threat at the time.

According to the supporting statement, the habitat of Brazil wood (the Atlantic Forest) has been reduced to only 12.4% of its original cover 500 years ago. The size of *P. echinata’s* native populations have been reduced by logging for wood; by agriculture and forestry activities and deforestation for urban development. The largest

[28] *See paragraph 5 c) of Resolution Conf. 11.21 (Rev. CoP18) on* Use of annotations in Appendices I and II.

populations are now found in forested areas in fully protected conservation units or in cocoa-cabruca agroforestry systems in southern Bahia and in rapid decline due to the accelerated transformation of cocoa plantations into pastures.

However, the proposal shows considerable information gaps regarding the status of natural populations in the remaining fragments of the species habitat.

The supporting statement further indicates that while the current listing in Appendix II of *P. echinata* with annotation #10 covers bow blanks (an unfinished product prior to the fabrication bows), other finished musical instruments remain outside of CITES controls. The main internationally commercialized products of Brazil wood, according to the proponent, are bow blanks and bows for violin, viola, cello and double bass.

According to the supporting statement itself, at the national level in Brazil (only known range State of Brazil wood), a transfer from Appendix II to I would "*not bring great changes since the Brazilian legislation does not allow the exploitation of the species in nature, allowing only planting registered with the environmental agency or material considered pre-convention and obtained in accordance with the Brazilian legislation*". Section 6.5 of the supporting statement ('Actual or potential trade impacts') indicates the proponent's interest in including under CITES controls trade of finished bows as well.

The supporting statement also sheds light on the illegal trade of *P. echinata* throughout its range in Brazil, as well as challenges in the traceability of the supply chain of its specimens.

Additional considerations (including relevant CoP recommendations)

None.

Provisional conclusions

On the basis of the information in the supporting statement, in the opinion of the Secretariat it appears *P. echinata* has undergone a significant historical decline in its population size. It seems to be under significant pressure from a range of threats at present, especially habitat loss, but there is a lack of evidence to determine if the wild population is small or has a restricted area of distribution as claimed by the proponent.

The Secretariat notes that the annotation proposed for the transfer of *P. echinata* from Appendix II to I is a substantive one and, as it contains a combination of inclusionary and exclusionary language, it meets the description in paragraph 5 c) of Resolution Conf. 11.21 (Rev. CoP18). Further, Paragraph 7 of the same Resolution urges Parties submitting proposals that contain substantive annotations to "*consult with the Secretariat, the Standing Committee and, as appropriate, the Animals Committee or Plants Committee, to ensure that the annotation is appropriate and can be readily implemented*". To the best of the Secretariat's knowledge, these consultations have not taken place.

The implementation of the annotation proposed appears to present a number of significant challenges and requires further consideration. The Secretariat will make further proposals in this regard after hearing the views of Parties and inter-governmental bodies consulted under paragraph 1 b) of Resolution Conf. 10.13 (Rev. CoP18) on *Implementation of the Convention for tree species*.

Proposal 50

***Pterocarpus* spp. (African populations) and *Pterocarpus erinaceus* and *P. tinctorius* (Padauk)**

Proposal: Include in Appendix II with annotation #17 (Logs, sawn wood, veneer sheers, plywood and transformed wood) and amend annotations of *Pterocarpus erinaceus* and *P. tinctorius*, already listed in Appendix II, to annotation #17

Proponents: Côte d'Ivoire, European Union, Liberia, Senegal and Togo

Provisional assessment by the Secretariat

CITES background

Three species of this genus are listed under Appendix II, as follows:

- *Pterocarpus erinaceus*;
- *Pterocarpus santalinus* with annotation #7 (*Logs, woodchips, powder and extracts*); and,
- *Pterocarpus tinctorius* with annotation #6 (*Logs, sawn wood, veneer sheets and plywood*).

Pterocarpus santalinus was included in Appendix II in CoP9 (1994).

Pterocarpus erinaceus was included in Appendix II at CoP17 (2017).

Pterocarpus tinctorius was included in Appendix II at CoP18 (2019).

This is the first time that any other species in the genus *Pterocarpus* has been proposed for inclusion in the Appendices.

Purpose and impact of the proposal

The purpose of the proposal is twofold:

a) to include the African populations[29] of the genus *Pterocarpus* with annotation #17 ("Logs, sawn wood, veneer sheets, plywood and transformed wood"), in accordance with Article II, paragraph 2(a) of the Convention; and,

b) to amend the current listings in Appendix II of *Pterocarpus erinaceus* and *Pterocarpus tinctorius* such that both are included in Appendix II with annotation #17 ("Logs, sawn wood, veneer sheets, plywood and transformed wood").

If the proposal is adopted, international trade in logs, sawn wood, veneer sheets, plywood and transformed wood of the African populations of the genus *Pterocarpus* will be regulated in accordance with the provisions of Article IV of the Convention. As these proposed Appendix-II listings will be limited to African populations, trade in specimens of cultivated and naturalized populations of the genus *Pterocarpus* outside their range in Africa would not be covered by the provisions of Article IV of the Convention.

Additionally, the international trade in logs, sawn wood, veneer sheets, plywood and transformed wood of all populations of *P. erinaceus* and *P. tinctorius* will be regulated in accordance with the provisions of Article IV of the Convention. In the case of *P. erinaceus*, this would entail a reduction in the scope of the regulation of trade under the Convention, as the species is currently listed in Appendix II without an annotation. In the case of *Pterocarpus tinctorius*, this would entail an expansion of the scope of CITES controls, as in addition to the specimens currently regulated under its listing with annotation #6 (*Logs, sawn wood, veneer sheets and plywood*), trade in transformed wood would also be regulated in accordance with the provisions of Article IV of the Convention.

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[29] *When reference is made to the term 'African populations', the Secretariat assumes that the proponents refers to the major geographical region of Africa as recognized by the Convention, and the Parties recognized under such a classification.*

Further, if the proposal is adopted, it would have no consequences to the current listing of *P. santalinus* in Appendix II.

Therefore, if the proposal is adopted, the listing of the genus *Pterocarpus* in Appendix II would read:

- *Pterocarpus* spp. #17 (African populations)
- *P. erinaceus* #17
- *P. santalinus* #7
- *P. tinctorius* #17

When reference is made to “African populations”, the Secretariat assumes that this refers to the African region as used by CITES.

Compliance with listing criteria

The proposal suggests that the inclusion of African populations of species of the genus *Pterocarpus* satisfies criterion B of Annex 2a, and criterion A of Annex 2b (look-alike criterion) of Resolution Conf. 9.24 (Rev. CoP17). Additionally, Section 2 of the supporting statement (‘Overview’) suggests that the proposal also meets Criterion A of Annex 2a of Resolution Conf. 9.24 (Rev. CoP17).

The genus *Pterocarpus* includes around 46 species, but only twelve species of the genus *Pterocarpus* are distributed in Africa (two of which are already included in Appendix II).

With the exception of *P. soyauxii*, all species covered by the proposal have been assessed at the global level in the IUCN Red List of Threatened Species, as follows: *Pterocarpus officinalis* and *P. tessmannii* as ‘Near threatened’ and *P. angolensis, P. brenanii, P. lucens, P. mildbraedii, P. osun, P. rotundifolius* and *P. santalinoides* as ‘Least concern’. With the exception of that of *P. lucens* (assessed in 2010), all these assessments date between 2018 and 2021, and therefore can be considered recent. As these assessments are global, they are also an indication of the conservation status of infraspecific taxa (*e.g.,* subspecies).

According to the supporting statement, the main threats to the African populations of species of *Pterocarpus* include overexploitation of timber and illegal logging and habitat conversion.

The supporting statement includes information that could point to concerns on illegal trade, however information on legal trade seems scarce. Nonetheless, the Secretariat believes that it is important to note that the wood products of *Pterocarpus* species covered in the proposal could prove challenging to differentiate by enforcement officers from those of species of *Pterocarpus* already listed in Appendix II.

According to the supporting statement, the main specimens of African populations of *Pterocarpus* in trade are logs and other wood products.

The proponents consulted all non-proponent African range States for these species. Two supported the proposal, one offered possible support and one was opposed. Others range Sates did not respond.

Additional considerations (including relevant CoP recommendations)

The Secretariat considers annotation #17 *(“Logs, sawn wood, veneer sheets, plywood and transformed wood”*) seems like a viable option for the purposes of this proposal, as it seems to cover the commodities that first appear in international trade as exports from range States, in accordance with Resolution Conf. 11.21 (Rev. CoP18) on *Use of annotations in Appendices I and II*.

The Secretariat has consulted with the nomenclature specialist of the Plants Committee on aspects relating to the nomenclature of the African populations of the genus *Pterocarpus*. The supporting statement does not propose a standard nomenclature reference for the African species of *Pterocarpus* proposed for inclusion in Appendix II, but it follows the nomenclature of the *African Plant Database* (version 4.0.0)[30], available at:

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30 African Plant Database (version 4.0.0). Conservatoire et Jardin botaniques de la Ville de Genève and South African National Biodiversity Institute, Pretoria, "Retrieved July, 2022", from <http://africanplantdatabase.ch>.

https://africanplantdatabase.ch/. Should the proposal be adopted at the present meeting, this taxonomic reference may be appropriate to be adopted as the standard nomenclature reference for the genus *Pterocarpus*, and that Resolution Conf. 12.11 (Rev. CoP18) on *Standard nomenclature* and the CITES Checklist database be revised accordingly.

Provisional conclusions

On the basis of the information in the supporting statement, the Secretariat finds that it is uncertain if the African populations of species of *Pterocarpus* are under significant levels of international trade to an extent to make them eligible for inclusion in Appendix I in the near future, or that regulation of trade in these species is required to ensure the long-term conservation of their wild populations.

However the Secretariat notes there is a possibility that specimens of these species, in the form in which they are traded, resemble specimens of *Pterocarpus* species already included in Appendix II.

The supporting statement does not include information as to whether there are plantations of the *Pterocarpus* species covered by the proposal outside of their native range in Africa. It draws attention to the possible misidentification risks at the intraspecific level within the species covered by the proposal, however it is unclear if these risks also apply to species (and populations thereof) of *Pterocarpus* not covered by the proposal, noting that the genus has a pantropical distribution and is comprised by around 46 species.

Proposal 51

***Khaya* spp. (African populations) (African mahoganies)**

Proposal: Include in Appendix II with annotation #17 (Logs, sawn wood, veneer sheets, plywood and transformed wood.)

Proponents: Benin, Côte d'Ivoire, European Union, Liberia and Senegal

Provisional assessment by the Secretariat

CITES background

This is the second time a proposal to include the species of the genus *Khaya* in Appendix II has been submitted for the consideration of the Conference of the Parties.

At CoP9 (1994) a proposal to include the whole genus in Appendix II without annotation was made (see CoP9 Prop. 100) but was withdrawn by the proponent before the Conference of the Parties could take a decision.

Purpose and impact of the proposal

The proposal seeks to include in Appendix II with annotation #17 ("Logs, sawn wood, veneer sheets, plywood and transformed wood") the African populations of the genus *Khaya*, in accordance with Article II paragraph 2(a) of the Convention.

According to the supporting statement, this would imply the inclusion of 5 species in Appendix II.

If the proposal is adopted, international trade in logs, sawn wood, veneer sheets, plywood and transformed wood of African populations of the genus *Khaya* will be regulated in accordance with the provisions of Article IV of the Convention. As this proposed Appendix-II listing will be limited to African populations, trade in specimens of cultivated and naturalized populations of species of the genus *Khaya* outside their range in Africa would not be covered by the provisions of Article IV of the Convention.

When reference is made to "African populations", the Secretariat assumes that this refers to the African region as used by CITES.

Compliance with listing criteria

The supporting statement suggests that the inclusion in Appendix II of African populations[31] of species of the genus *Khaya* satisfies criterion B of Annex 2a of Resolution Conf. 9.24 (Rev. CoP17).

According to the nomenclature followed by the supporting statement (POWO, 2022)[32], the genus *Khaya* is comprised by five tree species: *K. anthotheca, K. grandifoliola, K. ivorensis, K. madagascariensis* and *K. senegalensis*. However, throughout the supporting statement, the proponents also refer to *K. comorensis* as sixth species on the basis of a publication currently in press (see also the section ahead on 'Notes to Parties and Proponents').

African mahogany species of the genus *Khaya* are native to Africa, in particular: sub-tropical Madagascar, the Comoros and continental Africa, covering a range of around 31 States. Species of the genus *Khaya* occur in a variety of habitat types, from closed forest to savanna.

The Secretariat notes that the conservation status of the five species of the genus *Khaya* have been assessed by the International Union for Conservation of Nature and Natural Resources (IUCN) as 'Vulnerable'. As noted by the proponents, these assessments require updating as they were compiled in 1998, with the exception of *K. madagascariensis* which was updated in 2020. The Red List assessments for tree species of the genus *Khaya* were made on the basis of over-exploitation of the species for timber, loss of mature trees leading to poor natural regeneration, and genetic erosion of wild populations. The supporting statement also identifies

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[31] *When reference is made to the term 'African populations', the Secretariat assumes that the proponents refers to the major geographical region of Africa as recognized by the Convention, and the Parties recognized under such a classification.*

[32] *POWO. 2022. (Royal Botanic Gardens Kew's Plants of the World Online database). Available at: https://powo.science.kew.org/*

deforestation and unregulated and illegal harvest as additional threats to African mahoganies of the genus *Khaya*. Further, species of the genus *Khaya* seem threatened by intrinsic factors such as poor regeneration and short-term seed viability.

According to the supporting statement, the overall density of three of the species concerned (*K. ivorensis, K. madagascariensis* and *K. senegalensis*) is low, however there is lack of information regarding the population size of the other two species of the genus (*K. anthotheca and K. grandifoliola*).

Timber of species of the genus *Khaya* has become, according to the proponents, a commercial substitute for mahogany of the genus *Swietenia*. The main importers of *Khaya* specimens are identified to be China, the United States of America and the European Union. Regarding imports, over the period 2015-2019: China imported 'Acajou' products equivalent to a total weight of 25,435,347 kg, of which 23,646,533 kg was imported from *Khaya* spp. range States; 47,968 kg were imported from the European Union; and 1,740,846 kg were imported from other countries.

According to the supporting statement, the main specimens of *Khaya* in trade are lumber, sawn wood, veneer, plywood, machined wood and mouldings.

Additional considerations (including relevant CoP recommendations)

The Secretariat considers that annotation #17 *("Logs, sawn wood, veneer sheets, plywood and transformed wood"*) seems like a viable option for the purposes of this proposal, as it seems to cover the commodities that first appear in international trade as exports from range States, in accordance with Resolution Conf. 11.21 (Rev. CoP18) on *Use of annotations in Appendices I and II*.

The Secretariat has consulted with the nomenclature specialist of the Plants Committee (Ms. Klopper) aspects relating to the nomenclature of the genus *Khaya*. The supporting statement does not propose a standard nomenclature reference for the genus *Khaya*, but it follows the nomenclature of the *Royal Botanic Garden Kew's Plants of the World Online* (POWO, 2022), available at: https://powo.science.kew.org/. The database recognizes five species of the genus *Khaya*: *K. anthotheca, K. grandifoliola, K. ivorensis, K. madagascariensis* and *K. senegalensis*. Should the proposal be adopted at the present meeting, it may be appropriate that 'POWO, 2022' be adopted as the standard nomenclature reference for the genus *Khaya*, and that Resolution Conf. 12.11 (Rev. CoP18) on *Standard nomenclature* and the CITES Checklist database be revised accordingly. The European Union and its member States have submitted for consideration at the present meeting of the Conference of the Parties document CoP19 Doc. 84.3 on *Standard nomenclature for Khaya spp.* The document notes that the nomenclature of the genus *Khaya* remains unresolved, and that a pending publication will rehabilitate to the rank of species of three taxa previously considered synonyms. For further information, the Secretariat draws the attention of the Parties to its comments to document CoP19 Doc. 84.3.

Provisional conclusions

The trade information provided by the proponents largely is based on an analysis on the basis of common names (*e.g.* 'African mahogany' and '*Acajou d'Afrique*') in trade and Harmonised System (HS) codes, which the Secretariat considers could potentially lead to an overestimation of the volumes of *Khaya* specimens actually found in international trade. Nonetheless, the Secretariat notes that the 2010-2019 trade analysis could point towards considerable amounts of exports of *Khaya* from range States.

On the basis of the information of the supporting statement, it appears that the level of trade of African populations of species of the genus *Khaya* could warrant regulation to ensure that the wild populations are not reduced to a level that might threaten their survival. The Secretariat notes that species of *Khaya* are known to be cultivated outside their native range in Africa, where plantations have thus far been identified in: Australia, Brazil, Cuba, Fiji, Indonesia, Malaysia, Puerto Rico, South Africa, and Sri Lanka.

It is unclear, therefore, how specimens of plantations originating outside Khaya's native range in Africa will be distinguished in international trade from specimens of Khaya originating from its native range in Africa.

Proposal 52

Orchidaceae spp. (Orchids)

Proposal: Amend Annotation #4, with the 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 *P. lobbii*'

Proponent: Switzerland

Provisional assessment by the Secretariat

CITES background

All *Orchidaceae* are listed in the Appendices I or II of the CITES Convention. The *Orchidaceae* family is listed in Appendix II. Proposals to transfer individual orchid species from Appendix II to Appendix I, or to amend the annotation of the Appendix II family listing were made at CoPs 2 (1979), 12 (2002), 13 (2004), 14 (2007), and 15 (2010).

At present, the Appendix II-listed species are annotated with annotation #4, which exempts seeds (including seedpods), spores and pollen (including pollinia); seedling or tissue cultures obtained in vitro, in solid or liquid media, transported in sterile containers; cut flowers of artificially propagated plants; and fruits, and parts and derivatives thereof, of naturalized or artificially propagated plants of the genus *Vanilla*.

Appendix II-listed orchids are furthermore annotated with footnote 10, which exempts artificially propagated hybrids of the genera *Cymbidium*, *Dendrobium*, *Phalaenopsis* and *Vanda*, if conditions as indicated under a) and b) of said footnote, are met.

All five species addressed by the present proposal (*B. striata, C. cooperi, G. elata, P. amabilis, P. lobbii*) are included in the Appendix II family listing. A possible exemption of finished cosmetic products ready for retail trade from these species was discussed in documents PC23 Doc. 32 and PC24 Doc. 28 submitted by Switzerland. These documents contained executive summaries of in-depth studies undertaken by Switzerland with regard to trade in these five species. The executive summaries state that trade in the five species is largely from artificially propagated sources, even though trade from the wild seems to be ongoing for some of these species, in particular *Gastrodia elata*.

In document PC25 Doc. 37 in the framework of Decision 18.327, the Secretariat reviewed 8 case studies and 19 summaries prepared by Switzerland with regard to the conservation impacts of possible amendments to Annotation #4. Case studies contained comprehensive information on trade, and conservation of species, while summaries contained less detailed information largely restricted to products in trade. The Secretariat review suggested that most international trade in *G. elata* is from cultivated sources, yet wild specimen seemed to command highest prices, and it seemed unclear what share of international trade was still from wild. Available information for *B. striata, C. cooperi, P. amabilis, P. lobbii* did not allow conclusions with regard to the conservation impact of possible exemptions of specimen of these species from CITES regulations.

The wording of potential exemptions for cosmetic products was further discussed in document PC25 Doc. 38 submitted by Switzerland. Document PC25 Doc. 38 Add. reflects intersessional discussions with CITES Parties on the proposed amendments. Further discussions took place in the Standing Committee's working group on Annotations as reflected in the proposal CoP19 Prop. 43.

Purpose and impact of the proposal

The proposal aims to exempt finished cosmetic products ready for retail trade of *Bletilla striata, C. cooperi, G. elata, P. amabilis* and *P. lobbii* from CITES regulations. Cosmetics are defined in the Guidelines for the preparation and submission of CITES annual reports as '*any product or mixture of products which is applied to an external part of the body only (e.g. skin, hair, nails, genitals, lips or teeth or the mucous membranes of the oral cavity) with the intent to clean, odorise, change the appearance or protect. Cosmetics may include the following: make-up, perfume, skin cream, nail polish, hair colourants, soap, shampoo, shaving cream, deodorant, sunscreens, toothpaste*'. If adopted, products containing parts and derivatives of these species that

conform with the definition of cosmetics as contained in *the Guidelines for the preparation and submission of CITES annual reports* would no longer be regulated under CITES.

Article VII (5) of the Convention, and Resolution Conf. 11.11 (Rev. CoP18) *on Regulation of trade in plants* state that trade in specimen of an artificially propagated plant species shall require certificates of artificial propagation in lieu of permits required under the provisions of Article IV. Even though the supporting statement suggests that the proposed amendment to annotation #4 would concern trade chains entirely derived from artificial propagation, it also suggests that an exemption would nevertheless reduce unnecessary administrative burden placed on both enforcement authorities and industry stakeholders.

Compliance with listing criteria

The conservation status of the five species covered by the proposal seems unclear. *G. elata* was assessed as vulnerable in the IUCN Red List of Threatened Species in 2004. Information contained in PC23 Doc. 32 suggests that populations in some areas might be further dwindling due to harvest for commercial trade. Yet, it may be plausible that trade from wild sources might be destined for national trade or medicinal products, rather than international commercial trade chains. *B. striata, C. cooperi, P. amabilis, P. lobbii* seem to not have been assessed in the international red list.

The supporting statement for the present proposal notes that there is no evidence that wild harvested plants were used in the manufacture of cosmetic products and that the wild populations of these species would not be detrimentally affected by the suggested exemption. It further notes that trade for cosmetics products is likely to be from artificially propagated sources, since the cosmetic industry relies heavily on a regular and consistent supply of specimens of uniform quality, and this can only be achieved with large scale artificial propagation.

Additional considerations (including relevant CoP recommendations)

Regarding the two main principles to be followed as standard guidance when drafting annotations for plants contained in paragraph 6 b) of Resolution Conf. 11.21 (Rev. CoP18) on *Use of annotations in Appendices I and II*, it seems plausible that finished cosmetic products are not the commodities that first appear in international trade as exports from range States, and that cosmetic products may not dominate the demand from the wild resource.

Regarding paragraph 5 c) of Resolution Conf. 11.21 (Rev. CoP18), which recommends Parties to consider the enforceability of the annotations, and noting that the proposal suggests that unambiguous species-specific labelling of finished cosmetic products appears impractical, it seems unclear whether cosmetic products containing specimen of any of the five species affected by the present proposal could be clearly identified and distinguished from cosmetic products containing specimen of other orchid species.

Provisional conclusions

The Secretariat finds that the preliminary analysis suggests that the conservation status of the five species affected by the present proposal is rather unclear, and that demand for cosmetic products may not be the dominating demand from the wild resource, and that finished cosmetic products ready for retail trade may not be the commodities that first appear in international trade.

The Secretariat also finds that information on the enforceability of potential exemptions of such products of only five orchid species from CITES regulations seems unclear. Noting that the proposal suggests that most or all trade of these species for cosmetic products is from artificial propagation, the Secretariat questions how far the effect of reducing administrative burden through the exemption balances with the additional identification efforts needed to distinguish finished cosmetic products regulated under CITES from those exempted from such regulation.