

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



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

Species conservation and trade

Terrestrial species

CONSERVATION OF AMPHIBIANS (AMPHIBIA SPP.)

1. This document has been prepared by the Secretariat.
2. At its 19th meeting (CoP19; Panama City, 2022), the Conference of the Parties adopted Decisions 19.197 to 19.199 on *Conservation of amphibians (Amphibia spp.)* as follows:

Directed to the Secretariat

19.197 *The Secretariat shall, subject to availability of external resources and in close consultation with the Animals Committee:*

- a) *conduct one or more interdisciplinary workshops for CITES Authorities and other relevant authorities and stakeholders about amphibian species in international trade, including but not limited to the following objectives:*
 - i) *identify amphibian species that are in international trade and evaluate whether certain species or groups should be recommended for possible listing in the Appendices;*
 - ii) *share existing national legislation relevant to the trade in amphibians;*
 - iii) *evaluate whether current levels of trade are compatible with the conservation of these species in the wild;*
 - iv) *compile further data on harvesting levels of amphibians subject to high volumes of international trade;*
 - v) *explore the emerging threat of diseases to traded amphibians, including amphibian chytrid fungus and rana viruses; and*
 - vi) *examine current enforcement efforts to deter and detect illegal and unreported trade and identify additional actions needed; and*
- b) *explore modalities to implement this Decision in a cost-effective manner, including through the organization of online events; and*
- c) *report on the progress in the implementation of paragraph a) and b) above to the Animals Committee, including any relevant recommendations.*

Directed to the Animals Committee

19.198 *The Animals Committee shall:*

- a) *consider the report submitted by the Secretariat as per Decision 19.197; and*
- b) *make recommendations to the Standing Committee and the 20th meeting of the Conference of the Parties, as appropriate.*

Directed to the Standing Committee

19.199 *The Standing Committee shall consider any report submitted by the Animals Committee as per Decision 19.198 and develop recommendations for consideration of the 20th meeting of the Conference of the Parties, as appropriate.*

Implementation of Decision 19.197

3. Thanks to generous contributions from the European Union and Switzerland, the Secretariat was able to implement Decision 19.197 on *Conservation of amphibians (Amphibia spp.)*, including the preparatory work and two online technical workshops, as detailed below.
4. The preparatory work included the production of a background document entitled [A summary of the status, management and trade in amphibians \(Amphibia spp.\) to support implementation of Decision 19.197](#). The Secretariat collaborated with the International Union for Conservation of Nature (IUCN) and the IUCN Species Survival Commission Amphibians Specialist Group to prepare the background document, which included the following key sections:
 - a) Section 1 – *Amphibian Trade Assessment*: A review of CITES and non-CITES listed amphibian species in international trade drawing largely from data recorded by the United States of America from 2015 to 2020, inputs received through a survey circulated via [Notification to the Parties No. 2023/101](#) and a literature review. This section in the background document responds to paragraph a) i) of Decision 19.197 and examines which amphibian species are being traded internationally and the volumes of such trade, providing a compilation of all species recorded in trade based on available records during the study period;
 - b) Section 2 – *National Legislation Governing International Trade in Amphibians*: Legislative summary and exploration of potential and confirmed cases of illegal amphibian trade. This section includes a summary of national legislation relevant to the trade in both CITES and non-CITES listed amphibians, largely guided by input received through the survey circulated via Notification to the Parties No. 2023/101, and responds to paragraphs a) ii) and vi) of Decision 19.197. This section also compares trade data against the regulatory controls described by respondents to the Notification to infer potential violations in the international trade in amphibians; and
 - c) Section 3 – *Emerging Threat of Amphibian Diseases*: The spread of amphibian pathogens through the international trade in amphibians is discussed. This section responds to paragraph a) v) of Decision 19.197 and explores the emerging threat of pathogens to amphibians, including amphibian chytrid fungus and rana viruses, the role of international trade in spreading these pathogens and increasing extinction risks, and biosecurity opportunities to help reduce harm.

Technical workshops

5. On 20 October 2023, the Secretariat published [Notification to the Parties No. 2023/121](#) announcing *Online workshops on conservation of amphibians (Amphibia spp.)* and inviting CITES Management and Scientific Authorities, other relevant authorities and stakeholders to register for one of the online workshops. The Notification also invited Parties and organizations to submit to the Secretariat any additional documentation relevant to the discussions, prior to the workshop.
6. The Secretariat convened two online workshops from 27 to 28 November 2023 and from 30 November to 1 December 2023 to consider the conservation of amphibian taxa involved in international trade. A total of 144 participants attended the workshops, including representatives from 27 Parties and 25 observer organizations. The first workshop targeted the regions of North America and Central and South America and the Caribbean, and was conducted in English with interpretation into Spanish. The second workshop

targeted the regions of Africa, Asia, Europe, and Oceania, and was conducted in English only. Interpretation into French was not provided, due to the limited representation of participants from primarily French-speaking countries. All documents considered by the workshop are available at [here](#).

7. The objective of the workshops was to provide participants with an opportunity to identify amphibian species in trade, share existing national legislation relevant to the trade in amphibians; evaluate whether current levels of trade in amphibians are compatible with their conservation in the wild; explore the emerging threat of diseases to traded amphibians; examine current enforcement efforts to deter and detect illegal and unreported trade and identify additional actions needed; and identify – and where possible fill – data or knowledge gaps. The results of the workshop, presented in the workshop report, will be made available as an information document at the present meeting.
8. Several presentations (available [here](#)) were made during the workshop, including a detailed presentation on the background document referred to in paragraph 4 above, a presentation on the Global Amphibians Assessment by the IUCN and presentations by Pro Wildlife and the United Nations Environment Programme – World Conservation Monitoring Centre (UNEP-WCMC) on trade in frog legs imported into the European Union.
9. The workshop participants considered the background information [and presentations](#), and the following discussion topics, which were either included in Annex 4 of the background study or submitted in advance by participants:
 - Conversion factors of amphibians (reported in units of mass versus units of number).
 - Use of trade terms and variability in interpretation.
 - Anomalous reporting of amphibian countries/regions of origin and/or sources and incorrect species identification of traded amphibians.
 - Spread of emerging infectious diseases through the international trade in amphibians.
 - Most traded species online.
 - Traceability of captive-bred amphibian specimens.
 - The importance of amphibians in their ecosystems.
 - The importance of working with communities.
 - Reducing demand for amphibians.
 - What kind of information do law enforcement and Management Authorities expect from Scientific Authorities?
 - How can trade and species-use information for red list categorization be improved?
 - What funding mechanisms are available to address gaps in amphibian population information?
 - Sustainability and regulation of trade in frogs' legs.
 - Review of international trade in amphibians claimed as captive bred/farmed.
10. Concerning the implementation of Decision 19.197, the workshop participants discussed each of the elements of paragraph a) individually, to determine whether or not they had been implemented, or if more work was needed, as well as to identify possible sources of additional information and develop draft recommendations. The workshop concluded that sections i), v) and vi) have been implemented; section ii) is incomplete; and sections iii) and iv) have not been implemented.
11. Participants were also requested to review the draft non-detriment finding (NDF) guidance in advance of the workshop and consider whether modules 1 and 2 are applicable to amphibians, or if the amphibians workshop would like to propose any amendments to address any gaps, which could be considered at the NDF international expert workshop scheduled to take place in December 2023.

Workshop outcomes

12. Concerning the review of the draft NDF guidance, at the request of the workshop participants, the Secretariat referred the following issues to the NDF international expert workshop for its consideration which were then incorporated into the guidance:
 - concerns about how to address cumulative pressures on amphibians;
 - the specific role in the ecosystem of amphibians (e.g., in terms of improving water quality); and
 - international trade in species as potential disease agents.
13. The main discussions and conclusions are summarised in the paragraphs below.

Paragraph a) i) of Decision 19.197 – Identify amphibian species that are in international trade and evaluate whether certain species or groups should be recommended for possible listing in the Appendices

14. To assist the workshop discussions, the Secretariat produced a “Species Prioritization Matrix” (see Annex), that consisted of a combined list of species found in ten different tables in the background study; a presence/absence record for each species in each table; a total number of occurrences in the ten tables listed; if the species is listed in a CITES Appendix and its conservation status from the IUCN Red List. Species lists were extracted from the following list of tables in the background study for inclusion in the priority list:

Table No. in background study	Title of table
Table 1	Top 20 illegally traded amphibian taxonomical units recorded by the United States from 2015-2020 and their IUCN Red List conservation status.
Table 2	Top 20 amphibian taxonomical units traded as live animals recorded by the United States of America (United States) from 2015-2020 and their IUCN Red List conservation status.
Table 3	Summary of 50 most frequently traded amphibian species across both the United States’ Law Enforcement Management Information System (LEMIS) and CITES databases combined (2015-2020).
Table 4	Seventeen species of amphibians likely threatened by international trade that are not presently CITES-listed as per Challender et al. 2023. ¹
Table 5	The top 5 traded Critically Endangered amphibian species recorded in numbers of live animals by the United States from 2015-2020.
Table 6	The top 5 traded Endangered amphibian species recorded in numbers of live animals by the United States from 2015-2020.
Table 7	The top 5 traded Vulnerable amphibian species recorded in numbers of live animals by the United States from 2015-2020.
Table 8	Amphibian species present in trade noted by CITES Party respondents to the questionnaire distributed through CITES Notification to the Parties No. 2023/101.
Table 10	Examples of possible illegal and/or unreported international amphibian trade based on responses from respondents to CITES Notification to the Parties No. 2023/101 compared with LEMIS data.
Table 11	Global illegal trade in amphibians which took place on or between 01/01/2015 and 31/12/2020, as captured by TRAFFIC’s Wildlife Trade Portal (WiTiS).

15. The workshop participants reviewed the Species Prioritization Matrix and recommended that the Animals Committee invite the Secretariat to continue to develop it by including additional columns with updated red list assessments, a list of range States and captive-breeding information concerning priority species and submit it to the Animals Committee along with the study and the report from the workshop.
16. The [revised Species Prioritization Matrix](#), in the form of an Excel workbook and contained in the Annex to the present document, has been produced to include the updated red list assessments and a list of range States for the non-CITES listed species that were prioritized. Information concerning the updated red list assessments can be found on the tab titled “species in all tables”, where Columns O, P and Q indicate, a) where there has been a change in the red list assessment, b) whether this change is genuine or non-genuine and c) the reason for the change respectively. A new tab titled “non-CITES R.S.” has been created in the revised species prioritization matrix to indicate the range States for the non-CITES priority species identified. In the limited time available since the workshop, it was not possible to include information on captive breeding for the list of priority species identified in the matrix.

¹ <https://www.nature.com/articles/s41559-023-02115-8>

17. Parties are encouraged to take into consideration the Species Prioritization Matrix if they are considering developing a possible amendment proposal under Article XV of the Convention and Resolution Conf. 9.24 (Rev. CoP17) on *Criteria for amendment of Appendices I and II*; to work with consumer Parties and to consult with other range States as recommended in Resolution Conf. 8.21 (Rev. CoP16) on *Consultation with range States on proposals to amend Appendices I and II*. Parties could furthermore consider Appendix-III listings for species that meet the criteria set out in Resolution Conf. 9.25 (Rev. CoP18) on *Implementation of the Convention for species in Appendix III*, and in consultation with other range States, as a possible way of generating more awareness of, and data on, trade in nationally protected species.
18. In the context of the discussions on Decisions 19.186 to 19.188 on *Identifying information on species at risk of extinction affected by international trade* (see document [PC27 Doc. 24 / AC33 Doc. 29](#)), the Animals Committee could make recommendations on how the information collected through this workshop can be made available to Parties.

Paragraph a) ii) of Decision 19.197 – Share existing national legislation relevant to the trade in amphibians

19. Implementation of paragraph a) ii) of Decision 19.197 was considered incomplete by the workshop. The Secretariat noted that there was a limited response to Notification to the Parties No. 2023/101 of 18 August 2023 relating to national legislation relevant to the trade in amphibians. Workshop participants recommended that the Animals Committee invite the Secretariat to reach out to range States of priority non-CITES listed species to obtain additional information on national legislation protecting those species, including legislation covering the protection of amphibian habitats.

Paragraph a) iii) of Decision 19.197 – Evaluate whether current levels of trade are compatible with the conservation of these species in the wild; and Paragraph a) iv) of Decision 19.197 – Compile further data on harvesting levels of amphibians subject to high volumes of international trade

20. The workshop concluded that these parts of the Decision have not been implemented and may need to be renewed at the 20th meeting of the Conference of the Parties. However, it is evident that information on current levels of trade and on harvesting levels of non-CITES listed amphibian species subject to high volumes of international trade is limited. The species identified in the background study as being subject to high volumes of international trade were mostly bred in captivity, although one, *Lithobates forreri*, is primarily collected from the wild. More data is required on which species are captive bred. Parties could also be invited to share information about amphibian breeding farms operating on their respective territories.

Paragraph a) v) of Decision 19.197 – Explore the emerging threat of diseases to traded amphibians, including amphibian chytrid fungus and rana viruses

21. The workshop concluded that this part of the Decision has been implemented and proposed that Parties be invited to implement biosecurity measures to avoid the spread of pathogens, such as:
 - a) diagnostic testing upon import/export;
 - b) maintaining closed system amphibian breeding operations;
 - c) packing animals in lower densities to reduce the risk of pathogen transmission; and
 - d) disinfection of shipping materials to prevent spreading infectious material through water (to be treated before disposal), cartons, containers and substrates.
22. Noting that paragraph 2 e) of Resolution Conf. 10.21 (Rev. CoP19) on *Transport of live specimens* recommends that “the Standing Committee and the Secretariat, in consultation with the Animals and Plants Committees and IATA, regularly review, revise and approve amendments to the *CITES guidelines for the non-air transport of live animals and plants*”, further consideration should be given to the ways in which live animals may be shipped in a manner that reduces the risk of disease transmission during trade.

Paragraph a) vi) of Decision 19.197 – Examine current enforcement efforts to deter and detect illegal and unreported trade and identify additional actions needed

23. The workshop concluded that this part of the Decision has been implemented and proposed the following:

- a) there is a need to identify existing identification materials for amphibians, which need to be simple and fit for purpose, as part of the implementation of Decisions 19.142 to 19.144 on *Materials for the identification of specimens of CITES-listed species*, and consider the practicality of identification materials for use by customs and law enforcement officers, in view of the sensitivity of amphibians to being handled and the way in which they are packaged;
- b) additional training needs for customs and law enforcement officers should be considered; and
- c) awareness about the guidance for annual reporting, in particular the units of measurement and codes used for reporting to customs officers, needs to be raised (see considerations in paragraph 25).

Other considerations

24. The workshop noted that the units of measure used to record amphibian specimens in trade vary, with large numbers of shipments being recorded either in kilograms or numbers of animals. The workshop concluded that there is a need to compile information on conversion factors between number and live weight of traded amphibians, and to reach out to breeders and exporters to gain a better understanding of real live trade, rather than basing conversion factors on scientific literature.
25. Concerning trade terms, issues were noted in two types of trade in particular: (i) high volume trade for food, where products in trade may be referred to as legs (LEG), meat (MEA) or live animals (LIV), and (ii) trade in scientific specimens is described either as specimen (SPE), body (BOD) or live animals (LIV). This creates much uncertainty about what is actually in trade and the potential impact on wild amphibian populations. For example, a shipment of “500 SPE” may just refer to skin swabs, which may not actually have removed animals from the wild. Conversely, it could also have been a shipment of 500 actual frogs. While the guidelines on annual reporting include instructions about which trade terms to use and which units of measurement to use for each trade term, (e.g., frog legs should be referred to as LEG and recorded in kg), there appears to be a need for a common understanding of trade terms. For example, frog legs may be traded as LEG, whereas the shipment may actually concern live animals destined for consumption as legs. The Animals Committee may wish to consider whether changes to the guidance on annual reports and annual illegal trade reports are required in response to the challenges raised during the workshop, or if there may instead be a need to raise awareness among Parties and customs officers about the availability of the existing guidance.
26. Concerns about incorrect species identification of traded amphibians were noted, with genetic analyses having shown that a majority of large volume shipments of frogs’ legs between Asia and Europe, but also between Brazil and other Latin American countries and the United States of America, did not contain the species mentioned on the label. While largely an issue with frog legs, other types of shipments were also affected, for example, bodies for dissections in biology classes. However, for the most part, it concerns species that are neither threatened, nor CITES-listed. The workshop considered that this type of misidentification is likely mostly unintentional, and a symptom of the inherent challenges of identifying amphibians in trade to the species level.
27. To improve the traceability of captive-bred amphibian species, the workshop suggested that Parties could consider indicating the life stages or sizes of animals in trade (akin to the size restrictions that are regularly applied to tortoises/turtles in trade).
28. The workshop proposed several possible ways to improve data recording with regard to international trade in amphibians including the following:
 - a) development/collation of a table of conversion factors for amphibians;
 - b) standardization of the way in which shipments are recorded to improve accuracy, including by recording trade to the level of individual animals involved in a shipment, and producing guidance, as required, on the terms to be used for amphibians and their parts and derivatives in trade; and
 - c) indication of the life stage or size of animals being traded as part of the trade data, to help strengthen traceability and confidence that the animals in trade are generally coming from the sources described.

Recommendations from the workshop to be considered by the Animals Committee

29. The *Online workshops on conservation of amphibians (Amphibia spp.)* proposed that the Animals Committee consider the following recommendations:
- a) encourage Parties to share non-detriment findings for amphibian species for inclusion on the CITES website;
 - b) invite Parties to implement biosecurity recommendations to avoid spread of pathogens, such as:
 - i) diagnostic testing upon import/export ;
 - ii) maintaining closed system amphibian breeding operations;
 - iii) packing animals in lower densities to reduce pathogen transmission;
 - iv) disinfection of shipping materials to prevent spreading infectious material through water (to be treated before disposal), cartons, containers and substrates;
 - c) encourage Parties developing a possible listing proposal under Resolution Conf 9.24 (Rev. CoP17) to take note of Resolution Conf 12.11 (Rev. CoP19) on *Standard nomenclature* and to contact the nomenclature specialist of the Animals Committee in the early drafting stage to confirm the appropriate use of CITES-adopted amphibian nomenclature in the proposal;
 - d) invite Parties to consider Appendix-III listings for species that meet the criteria set out in Resolution Conf. 9.25 (Rev. CoP18) on *Implementation of the Convention for species in Appendix III*, and in consultation with other range States, as a possible way of generating more awareness of, and data on, trade in nationally protected species;
 - e) encourage Parties to record trade in amphibians to the level of individual species involved in a shipment; and
 - f) encourage Parties to indicate the life stage or size of animals being traded as part of the trade data, to help strengthen traceability and confidence that the animals in trade are generally coming from the sources described.

Observations of the Secretariat and suggested way forward

30. The Secretariat notes that paragraph a) ii) and iii) of Decision 19.197 were considered incomplete by the workshop and that the workshop participants recommended further actions in this regard, mainly relating to further information to be collected on national legislation and levels of trade and harvesting of non-CITES listed amphibian species. The Secretariat proposes that the Animals Committee consider inviting Parties to collect the outstanding information and submit it to the Secretariat for consolidation and submission to the Animals Committee, rather than directing decisions in this regard to the Secretariat.
31. With regards to the issues discussed in paragraph 25 relating to the use of trade terms, the Secretariat proposes that the following guidance included in the *Guidelines for the preparation and submission of CITES annual reports* and in the *Guidelines for the preparation and submission of CITES annual illegal trade reports* relating to trade terms: BOD, LEG, LIV, MEA and SPE, be taken into consideration when discussing whether there is a need to make changes to the trade term codes:

Description	Trade term code	Preferred unit	Alternative unit	Explanation
body	BOD	no.	kg	substantially whole dead animals, including whole fish, stuffed turtles, preserved butterflies, reptiles in alcohol, whole stuffed hunting trophies, etc. If referring to specimens of sharks and rays (<i>Elasmobranchii spp.</i>), the preferred unit is kg.
frog legs	LEG	kg		frog legs
live	LIV	no.	kg	live animals and plants, excluding live fingerling fish – see FIG

meat	MEA	kg		meat, including flesh of fish if not whole (see 'body'), fresh or unprocessed meat as well as processed meat (e.g. smoked, raw, dried, frozen or tinned) The code for meat (MEA) should be used in preference for trade in eels for human consumption.
specimen (scientific)	SPE	kg/l/ml/ no.		scientific specimens – includes blood, tissue (e.g. kidney, spleen, etc.), histological preparations, preserved museum specimens, etc.

32. The Secretariat notes the recommendations in paragraph 28 and is of the view that some recommendations could benefit from further clarification. In this regard the Secretariat proposes the following:

- a) recommendation a) should specify CITES-listed amphibian species. The Secretariat proposes that the recommendation be amended to read: *a) encourage Parties to share non-detriment findings for CITES-listed amphibian species for inclusion on the CITES website;*
- b) recommendation f) may be challenging to implement if the trade reporting format does not provide for the information to be captured: The Secretariat proposes that the recommendation be amended to read: *f) encourage Parties to indicate the life stage or size of animals being traded as part of the trade data, if feasible, to help strengthen traceability and confidence that the animals in trade are generally coming from the sources described.*

33. On the basis of the progress made with the implementation of Decision 19.197, the recommendations from the workshop, and the observations of the Secretariat in paragraphs 30 and 31, the Secretariat proposes that the Animals Committee considers submitting the following draft decisions for consideration by CoP20:

Directed to Parties

20.AA Parties are invited to:

- a) collect information on the priority species identified in the [revised species prioritization matrix](#) for amphibians concerning:
 - i) national legislation protecting those species, including legislation covering the protection of amphibian habitats;
 - ii) current levels of trade;
 - iii) harvesting levels of amphibians subject to high volumes of international trade; and
 - iv) captive breeding; and
- b) provide the information to the Secretariat.

Directed to the Secretariat, in close consultation with the Animals Committee and relevant experts

20.BB Taking into account document AC33 Doc. 32, the Secretariat shall, subject to availability of external funding, and in close consultation with the Animals Committee and relevant experts,

- a) update [the revised species prioritization matrix](#) with information from Parties under Decision 20.AA and make this information available to Parties;
- b) develop a table of conversion factors for amphibian specimens in trade;
- c) identify existing identification materials for amphibians, particularly those for use by customs and law enforcement officers, in view of the sensitivity of amphibians to being handled and the way in which they are packaged; and
- d) report its findings, with draft recommendations to the Animals Committee.

Directed to the Animals Committee

20.CC *The Animals Committee shall:*

- a) *consider the report submitted by the Secretariat as per Decision 20.BB; and*
- b) *make recommendations to the 21st meeting of the Conference of the Parties.*

Recommendations

34. The Animals Committee is invited to:

- a) consider the key outcomes of the online workshops and agree the recommendations contained in paragraph 29 as amended by the Secretariat in paragraph 32;
- b) consider whether any changes to trade term codes for body (BOD), frog legs (LEG), live (LIV), meat (MEA) and specimens (SPE) taking into consideration paragraphs 25 and 31;
- c) in the context of the discussions on Decision 19.186 to 19.188 on *Identifying information on species at risk of extinction affected by international trade* ([PC27 Doc. 24 / AC33 Doc. 29](#)), make recommendations on how to make the material in this document available to Parties on the CITES website;
- d) include any identification materials for amphibians, particularly those for use by customs and law enforcement officers, in view of the sensitivity of amphibians to being handled and the way in which they are packaged, in the mandate of the proposed Animals Committee working group on identification materials, should it be established after CoP20;
- e) agree to propose the draft decisions in paragraph 33 to the 20th meeting of the Conference of the Parties (CoP20);
- f) agree that Decisions 19.197 and 19.198 can be proposed for deletion at CoP20; and
- g) agree that the Chair of the Animals Committee include in their report to the 78th meeting of the Standing Committee the recommendations agreed by the Animals Committee pursuant to Decision 19.199.