

CONVENCIÓN SOBRE EL COMERCIO INTERNACIONAL DE ESPECIES  
AMENAZADAS DE FAUNA Y FLORA SILVESTRES



Trigésima tercera reunión del Comité de Fauna  
Ginebra (Suiza), 12 – 19 de julio de 2024

Reglamentación del comercio

COMERCIO DE CORALES PÉTREOS (SCLERACTINIA SPP.)

1. Este documento ha sido preparado por la Secretaría en nombre de la copresidencia del grupo de trabajo del Comité de Fauna sobre *Comercio de corales pétreos*.
2. En su 19ª reunión (CoP19, Ciudad de Panamá, 2022), la Conferencia de las Partes adoptó las Decisiones 19.177 y 19.178 sobre *Comercio de corales pétreos (Scleractinia spp.)* como sigue:

**Dirigida al Comité de Fauna**

**19.177** El Comité de Fauna deberá:

- a) *teniendo en cuenta el documento CoP19 Doc. 46 y su Anexo, brindar asesoramiento sobre posibles enmiendas de la Resolución Conf. 11.10 (Rev. CoP15), sobre Comercio de corales pétreos, en consulta con las naciones que tienen arrecifes de coral y con expertos en arrecifes de coral, y presentar un informe con recomendaciones al Comité Permanente;*
- b) *formular las recomendaciones necesarias para revisar las Directrices para la preparación y presentación de informes anuales CITES y las Directrices para la presentación y presentación del informe anual CITES sobre el comercio ilegal, a fin de asegurarse de que ofrezcan la suficiente claridad sobre la utilización de los términos y unidades apropiados para el comercio de corales pétreos; y*
- c) *en consulta con las naciones que tienen arrecifes de coral y con expertos en arrecifes de coral, proporcionar asesoramiento sobre los factores de conversión utilizados en el análisis del comercio de corales para el proceso del Examen del comercio significativo de la CITES e informar a la 20ª reunión de la Conferencia de las Partes.*

**Dirigida al Comité Permanente**

**19.178** El Comité Permanente deberá:

- a) *examinar las posibles enmiendas propuestas por el Comité de Fauna en la Resolución Conf. 11.10 (Rev. CoP15), sobre Comercio de corales pétreos; y*
  - b) *examinar cualquier recomendación del Comité de Fauna sobre el párrafo b) de la Decisión 19.177 y formular sus propias recomendaciones, según proceda.*
3. En su 32ª reunión (AC32; Ginebra, junio de 2023), el Comité de Fauna examinó los documentos [AC32 Doc. 23.1](#) y [AC32 Doc. 23.2](#), que fueron presentados por la Presidencia del Comité de Fauna y Suecia, en nombre de la Unión Europea, respectivamente. En el anexo del documento [AC32 Doc. 23.1](#) figuraban propuestas de enmienda de la Resolución Conf. 11.10 (Rev. CoP15) sobre *Comercio de corales pétreos* en respuesta a las diferentes cuestiones planteadas (que se incluyen en el anexo 1 del presente documento para facilitar la consulta). En el documento [AC32 Doc. 23.2](#) se proponen enmiendas de las

*Directrices para la preparación y presentación de informes anuales CITES* a fin de abordar las cuestiones relativas a la presentación de informes sobre el comercio de corales pétreos (incluidas en el anexo 2 del presente documento para facilitar la consulta).

4. El Comité de Fauna estableció un grupo de trabajo durante la reunión sobre el comercio de corales pétreos con el mandato de redactar una Notificación a las Partes relativa a la aplicación de la Decisión 19.177, solicitando el asesoramiento de las naciones con arrecifes de coral y de expertos en corales (véase el acta resumida [AC32 SR](#))
5. El Comité también creó un grupo de trabajo conjunto entre períodos de sesiones con el mandato de (véase el acta resumida [AC32 SR](#)):
  - a) examinar las respuestas a la Notificación a las Partes sobre la aplicación de la Decisión 19.177, solicitando el asesoramiento de las naciones con arrecifes de coral y de expertos en corales;
  - b) formular recomendaciones sobre posibles enmiendas a la Resolución Conf. 11.10 (Rev. CoP15) sobre *Comercio de corales pétreos*; y
  - c) asesorar sobre los factores de conversión utilizados para analizar el comercio de corales para el proceso del Examen del comercio significativo;
  - d) proponer posibles revisiones de las *Directrices para la preparación y presentación de informes anuales CITES* y de las *Directrices para la preparación y presentación del informe anual CITES sobre el comercio ilegal*; y
  - e) presentar sus conclusiones a la 33ª reunión del Comité de Fauna.
6. El 12 de julio de 2023, a solicitud del Comité de Fauna, la Secretaría emitió la Notificación a las Partes [No. 2023/081](#) en la que se invitaba a las Partes, especialmente a las naciones con arrecifes de coral, a expresar su interés en participar en el grupo de trabajo entre períodos de sesiones del Comité de Fauna sobre el comercio de corales pétreos y se invitaba además a los expertos en corales pétreos y a otros interesados a expresar su interés en contribuir a la labor del grupo de trabajo.
7. Se recibieron respuestas detalladas de las siguientes Partes: Alemania, Australia, China, Colombia, Estados Unidos de América, México, Nueva Zelandia, Reino Unido de Gran Bretaña e Irlanda del Norte (incluidas las Islas Caimán) y la Unión Europea. Las siguientes organizaciones no gubernamentales proporcionaron respuestas detalladas: Ornamental Aquatic Trade Association (OATA), Ornamental Fish International y Pro Vision Reef. También se recibió una respuesta de un particular. Todas las respuestas recibidas se incluyen en el anexo 3 del presente documento en la lengua recibida.
8. Se acordó que el grupo de trabajo estuviera integrado por:

Copresidencia: representante de América Central, del Sur y el Caribe (Sr. Gongora) y representante suplente de Asia (Sr. Diesmos);

Partes: Australia, Brasil, China, Estados Unidos de América, Francia, India, Indonesia, Malasia, Maldivas, Nueva Zelandia, Países Bajos, Reino Unido de Gran Bretaña e Irlanda del Norte (incluidas las Islas Caimán), Unión Europea;

OIG y ONG: Organización de las Naciones Unidas para la Alimentación y la Agricultura, Programa de las Naciones Unidas para el Medio Ambiente-Centro de Monitoreo de la Conservación Mundial, Asociación de Zoológicos y Acuarios, Centro para la Diversidad Biológica, European Pet Organisation, Indonesian Coral, Shell and Ornamental Fish Association, Ornamental Aquatic Trade Association (OATA), Ornamental Fish International, Pet Advocacy Network, Pro Vision Reef; y

Expertos independientes: Prof. Morgan S. Pratchett, Facultad de Ciencias e Ingeniería, Universidad James Cook, Australia; Prof. Andrew L. Rhyne, Departamento de Biología y Biología Marina, Universidad Roger Williams, Estados Unidos de América.
9. El grupo de trabajo no ha tenido ocasión de reunirse y seguirá celebrando consultas antes de la reunión del Comité de Fauna. Tal vez pueda presentar oralmente información actualizada.

## Recomendaciones

10. Se invita al Comité de Fauna a considerar la posibilidad de establecer de un grupo de trabajo durante la reunión para examinar las propuestas de enmienda de la Resolución Conf. 11.10 (Rev. CoP15) y las secciones 3 y 6 a) de las *Directrices para la preparación y presentación de los informes anuales CITES* y la sección 4 a) de las *Directrices para la preparación y presentación del informe anual CITES sobre el comercio ilegal* y cualquier otra recomendación del grupo de trabajo entre períodos de sesiones.

ANEXO AL DOCUMENTO AC32 DOC. 23.1

PROPUESTA DE ENMIENDAS A LA RESOLUCIÓN CONF. 11.10 (REV. COP15)  
SOBRE *COMERCIO DE CORALES PÉTREOS*

**Conf. 11.10**

**Comercio de corales pétreos**

**(Rev. CoP15)**

CONSCIENTE de que los corales pétreos ~~(de los órdenes *Scleractinia*, así como de los corales no escleractinios dentro de los géneros *Distichopora*, *Heliopora*, *Millepora*, *Stylaster* y *Tubipora*, *Helioporacea*, *Milleporina*, *Scleractinia*, *Stolonifera*, y *Stylasterina*)~~ son objeto de comercio internacional como especímenes intactos para los acuarios y como objetos curiosos;

RECONOCIENDO que la roca, los fragmentos, la arena de coral y otros productos de coral son también objeto de comercio;

TOMANDO NOTA de las características singulares de los corales, a saber que sus esqueletos son persistentes, que pueden llegar a mineralizarse con el tiempo y que son los cimientos de los arrecifes y que, como consecuencia de la erosión, los fragmentos de coral pueden llegar a formar parte de depósitos minerales y sedimentarios;

TOMANDO NOTA también de que la roca de coral puede actuar como un importante sustrato para la fijación de corales vivos, y que la extracción de roca puede tener repercusiones perjudiciales para los ecosistemas de los arrecifes;

CONSCIENTE, no obstante, de que solo puede identificarse fácilmente la roca de coral no puede identificarse fácilmente salvo la perteneciente al orden *Scleractinia*, o en el caso de los corales no escleractinios, a nivel de género (*Distichopora*, *Heliopora*, *Millepora*, *Stylaster* o *Tubipora*), y que, por consiguiente, no es fácil emitir dictámenes sobre la extracción no perjudicial del medio silvestre, en virtud del párrafo 2 a) del Artículo IV de la Convención;

TOMANDO NOTA, no obstante, de que a efectos prácticos de aplicación de la Convención, toda la roca de coral puede declararse en el comercio como "*Scleractinia spp.*", independientemente de que la roca de coral contenga corales escleractinios, corales no escleractinios o una composición mixta, para facilitar la identificación y la declaración.

TOMANDO NOTA de que en el párrafo 3 del Artículo IV se estipula el control de las exportaciones de especímenes de las especies incluidas en el Apéndice II, a fin de determinar que esas especies se mantengan a un nivel compatible con su función en el ecosistema;

TOMANDO NOTA de que las evaluaciones previstas en el párrafo 3 del Artículo IV sobre los impactos de la explotación de corales sobre los ecosistemas de donde se extraen no pueden realizarse adecuadamente sólo mediante el control de las exportaciones

ACEPTANDO que los fragmentos de coral y la arena de coral no pueden reconocerse fácilmente;

RECONOCIENDO asimismo que a menudo es difícil identificar los corales vivos o muertos a nivel de especie debido a la falta de una nomenclatura normalizada y la carencia de guías de identificación completas y accesibles para los que no son especialistas;

RECONOCIENDO que los corales pétreos fosilizados no están sujetos a las disposiciones de la Convención;

TOMANDO NOTA de que ha sido difícil aplicar y observar las disposiciones de la Convención en relación

con el comercio de los corales;

## LA CONFERENCIA DE LAS PARTES EN LA CONVENCION

1. ADOPTA las definiciones de arena de coral, fragmentos de coral, roca de coral, coral vivo y coral muerto que figuran en el Anexo a la presente resolución;
2. RECOMIENDA que las Partes presten mayor atención a la aplicación del párrafo 3 del Artículo IV cuando autoricen la exportación de corales y que adopten principios y prácticas de un enfoque basado en el ecosistema, en vez de confiar únicamente en el control de las exportaciones; e
3. INSTA:
  - a) a las Partes interesadas y otros órganos de los Estados del área de distribución y consumidores a colaborar y prestar apoyo, en coordinación con la Secretaría, a fin de preparar, con carácter prioritario, guías accesibles y prácticas para reconocer los corales y la roca de coral en el comercio y distribuir las a las Partes por conducto de los medios adecuados; y
  - b) a las Partes, a lograr una sinergia con otros acuerdos o iniciativas ambientales multilaterales para trabajar en favor de la conservación y el uso sostenible de los ecosistemas de los arrecifes de coral.

## Anexo

## Definiciones

*Arena de coral* – material compuesto enteramente o en parte de fragmentos finamente triturados de coral muerto de un tamaño inferior a 2 mm de diámetro y que puede contener, entre otras cosas, restos de Foraminífera, conchas de moluscos y crustáceos y algas coralinas. No es identificable a nivel de género. De conformidad con la Resolución Conf. 9.6 (Rev. CoP16), sobre Comercio de partes y derivados fácilmente identificables, la arena de coral no se considera fácilmente identificable y, por ende, no está cubierta por las disposiciones de la Convención.

*Fragmentos de coral (inclusive grava y cascotes)* – fragmentos no consolidados de coral muerto digitado quebrantado y de otro material entre 2 y 30 mm medido en cualquier dirección, que no es identificable a nivel de género. De conformidad con la Resolución Conf. 9.6 (Rev. CoP16), sobre Comercio de partes y derivados fácilmente identificables, los fragmentos de coral no se consideran fácilmente identificables y, por ende, no están cubiertos por las disposiciones de la Convención.

*Roca de coral<sup>1</sup> (el término colectivo utilizado para la ~~también~~ roca viva y sustrato)* – material duro consolidado: > 3 cm de diámetro, formado por fragmentos de especímenes en su mayoría/en parte no identificables de coral muerto, y que también puede contener arena cementada, algas coralinas y otras rocas sedimentadas. El término ‘roca de coral’ no debería utilizarse en los permisos; en su lugar debería utilizarse el término ‘roca viva’ o ‘sustrato’. Al contrario de los corales fósiles, la ‘roca de coral’ se recolecta de los ecosistemas de arrecifes de coral vivos, principalmente en arrecifes poco profundos cerca de la costa en profundidades inferiores a 1 metro.

“Roca viva” es el término dado a las grandes piezas de roca de coral (normalmente > 1 kg cada una) a las que se adhieren especímenes vivos de especies de invertebrados y algas coralinas no incluidas en los Apéndices de la CITES. La roca viva no debería estar cubierta por las especies de coral incluidas en los Apéndices de la CITES. La roca viva se utiliza como decoración y hábitat en los acuarios y normalmente se transporta y que se en cajas húmedas en condiciones de humedad, a fin de mantener los organismos adjuntos vivos, pero no en agua. La roca viva está sujeta a las disposiciones de la Convención.

“Sustrato” es el término dado a las pequeñas piezas de roca de coral (normalmente < 0.5 kg cada una), a las que se adhieren invertebrados (especies no incluidas en los Apéndices de la CITES. El sustrato se utiliza como pedestal (base) para los invertebrados adheridos, como las anémonas marinas o los corales blandos y, por ende, se transporta en agua como los corales vivos. El sustrato no debería estar cubierto por el coral vivo o muerto incluido en los Apéndices de la CITES. La roca de coral no es identificable a nivel de género pero es reconocible a nivel de orden. La definición excluye los especímenes definidos como coral muerto. Determinar si el sustrato está sujeta a las disposiciones de la Convención depende de la interpretación de las Partes del coral fósil; las Partes que estiman que el sustrato es coral fosilizado no consideran que esté

sujeto a las disposiciones de la Convención.

*Coral muerto* – piezas de coral que están muertas en el momento de su exportación, pero que pueden haber estado vivas en el momento de su recolección, y en las cuales la estructura de los coralitos (el esqueleto del pólipo individual) todavía está intacta; por consiguiente, los especímenes son identificables a nivel de especie o de género.

*Coral vivo* – piezas de coral vivo transportadas en agua y que son identificables a nivel de especie o de género.

ANEXO AL DOCUMENTO AC32 DOC. 23.2

**Enmiendas sugeridas a las Directrices para la preparación y presentación de los informes anuales CITES**

En la sección 3 " **En lo que respecta a los corales pétreos**", añadir un párrafo final como sigue:

Los corales vivos deben comunicarse como "LIV" con la unidad "número de especímenes". La roca de coral (como roca viva) debe notificarse utilizando el código de términos comerciales "COR" con la unidad kilogramos (kg). La roca de coral (como sustrato) y los corales muertos deben declararse como "COR" con la unidad "número de especímenes".

En la sección 6a), actualizar las explicaciones de "vivos" y "corales (en bruto)" en la tabla terminológica:

Descripción	Código de comercio	Unidad preferida	Alternativa Unidad adicional	Explicación
Vivo	LIV	no.	(kg) ( <u>además del número</u> )	animales o plantas vivos, excluyendo los jaramugos vivos – véase FIG. <u>Nota: los corales pétreos vivos deben registrarse como "número de especímenes"; toda la roca de coral (roca viva y sustrato) debe registrarse como "COR".</u>
Coral (en bruto)	COR	<u>nº. kg (para roca viva); no. (para sustrato y corales muertos)</u>	kg	coral, en bruto o no trabajado y roca de coral (también roca viva y sustrato) [como se define en la Resolución Conf. 11.10 (Rev. CoP15)]. La roca de coral debe registrarse como " <i>Scleractinia</i> spp." <del>Nota: el comercio debe registrarse por número de piezas, sólo si los especímenes de coral se transportan en agua.</del> La roca viva (transportada húmeda en cajas) debe registrarse en kg; el sustrato de coral debe registrarse como número de piezas (ya que se transportan en agua como sustrato al que están pegados corales no CITES).; <u>Los corales muertos también deben indicarse en número de piezas.</u>

Australia

**RE: NOTIFICATION TO THE PARTIES NO. 2023/81 – CONCERNING ‘CONSULTATION ON TRADE IN STONY CORALS’**

**RELEVANT PAPERS:** [Notification to the Parties 2023 2023/081](#) and [AC32 Agenda Paper 23.2 Reporting of trade in stony corals \(Scleractinia spp.\)](#)

**Response from Australia to Animals Committee’s intersessional working group on trade in stony corals for reporting to the 33<sup>rd</sup> meeting of the Animals Committee**

via E-mail (27/9/23) to [karen.gaynor@cites.org](mailto:karen.gaynor@cites.org)

Australia welcomes the opportunity to contribute to discussion and outcomes relating to trade in, and reporting of, stony corals. This document provides our preliminary responses to the six issues listed in the Secretariat’s Notification to Parties 2023/81.

**Call for intersessional working group participants:**

Considering our status as a significant coral-exporting nation that is pursuing innovative approaches to traceability of live coral, and having access to one of the few available datasets that could support the design of an alternative conversion factor (Item (c) below), we wish to reiterate our commitment to participating in the Animals Committee’s intersessional working group.

**Item (a)**

*a) possible amendments to Resolution Conf 11.10 (Rev. CoP15) on Trade in stony corals as shown in Annex 1, aimed at clarifying terms, codes and definitions used in trade and to achieve global consistency in permitting and reporting;*

Australia supports most of the proposed amendments to Resolution Conf 11.10 (Rev CoP15) and Annex definitions as set out in Annex 1 of the Notification.

We propose some additional, minor textual amendments to the Resolution Conf 11.10 (Rev CoP15) and Annex, aimed at further reducing any potential for ambiguity:

- In paragraph 3 of the Annex to the Resolution, we propose the following deletion:
  - ⊖ Unlike fossil corals, ‘coral rock’ is harvested from living coral reef ecosystems, ~~mostly from shallow reef flats near the shoreline at less than 1 m depth.~~
  - ⊖ We consider the second clause of this sentence to be unnecessary in helping to distinguish ‘coral rock’ from fossil corals, as the description does not necessarily reflect the habitat from which coral rock is harvested (for example, this description would not apply in Australia). The key point, and main distinction between the products, is that ‘coral rock’ is harvested from living coral reef ecosystems, which is captured in the first part of the sentence. The additional clause is, on our view, somewhat redundant and could introduce further confusion.
- Also in paragraph 3 of the Annex, for the proposed addition, ‘The term ‘coral rock’ should not be used on permits; which should instead refer to ‘live rock’ or ‘substrate’, suggest replacing ‘or’ with ‘and’ to read, ‘The term ‘coral rock’ should not be used on permits; which should instead refer to ‘live rock’ ~~or~~ and ‘substrate’. The word ‘or’ in this context could be taken to mean that the

two terms are interchangeable. This runs counter to the intent of the proposed amendments to the Resolution which is seeking to clarify the distinction between the two terms (in terms of their size).

- In paragraph 4 of the Annex to the Resolution, for the proposed addition, “...Live rock should not be covered by CITES-listed coral species.” suggest as an alternative “...Live rock should not have CITES-listed coral species attached or encrusting.”, to avoid confusion with the term ‘covered’ which more typically relates to the idea of whether a particular product is subject to the provisions of the Convention.
- In paragraph 5 of the Annex to the Resolution, For the proposed addition, “...Substrate should not be covered by CITES-listed live or dead coral.” again, suggest as an alternative “...Substrate should not have CITES-listed live or dead coral attached or encrusting”, to avoid confusion with the term ‘covered’ which more typically relates to the idea of whether a particular product is subject to the provisions of the Convention.

We note that previous deliberations have failed to come to a consensus definition of fossilised corals and the difficulty in establishing a means of distinguishing fossilised corals from non-fossilised coral in international trade (as documented in [CoP13 Prop.36](#)). We further note that the suggested amendments to the Annex of Resolution Conf 11.10 proposes to leave the interpretation of fossilised coral to individual Parties. The resulting consequence being that where Substrate is considered by a Party to be fossilised coral and designated as such, it will not be subject to the Convention’s provisions and will go unreported. Australia considers this to be an issue worth exploring by the intersessional working group, with a view to gathering evidence as to how much of a problem not having Substrate fully covered by the provisions of the Convention. Australia currently includes a line for reporting Substrate on its CITES permits and will continue to record and monitor the export of Substrate for environmental reasons.

#### **Item (b)**

*b) possible revisions to the Guidelines for the preparation and submission of CITES annual reports and Guidelines for the preparation and submission of the CITES annual illegal trade report as shown in Annex 2 to this Notification;*

#### **Proposed amendments to trade term codes and explanation text**

Australia notes that current wording of *the Guidelines* gives rise to ambiguity and can lead to coral reporting errors when coral trade terms are incorrectly reported as raw coral instead of live coral. These errors are compounded when the alternative unit option is used, rather than the preferred unit, triggering the application of the 1999 Green and Shirley conversion factors and leading to over-inflation of export quantities.

Australia therefore supports the intent behind the proposed revisions to *the Guidelines* in Annex 2 as a step towards clarifying definitions associated with coral product terms and codes to minimise possible confusion around interpretation and use of these codes.

We note that some of the textual amendments currently proposed in Annex 2 will require some further discussion and edits to avoid creating more confusion:

- having ‘coral rock as live rock’ and ‘coral rock as substrate’ as a single product code (‘COR’) is complicated, and the proposed amendments may make it even more confusing. We would welcome in the intersessional working group a discussion as to

whether having two separate product codes for these two, separate products might address these challenges.

- various terms are used in the explanations in section 6a), which creates additional confusion. For example, the explanation for coral (raw) refers to raw or unworked coral and coral rock (live rock and substrate), which, if the clause in parentheses is overlooked, may lead the interpreter to believe that 'raw' live coral (product code LIV) should actually be reported under product code COR.

### **Proposed amendments to reporting units**

Australia strongly supports the intent behind the proposed amendment to section 6a) to have reporting of live coral (LIV) in kilograms. Whilst noting that Australia currently does not have this requirement in place, we can see strong scientific merit in requiring reporting in kilograms and are supportive of working towards this objective, including domestically. NB, Australia understands the proposed amendment to mean reporting of live coral weights as an accurate, measured weight, as opposed to a conversion from number of pieces.

- drafting amendments may be required to clarify the intent here and eliminate any potential for ambiguity.

Reporting in measured weight will provide a scientifically sound means of being able to reconcile exported quantities with original harvest quotas (which are all set and reported in kilograms). Simply put, the fisheries management unit for coral stocks and coral harvest is kilograms: the reporting unit for trade in said animal should be kilograms. As a scientific and environmental standard related to CITES' objective of ensuring that international trade in coral specimens does not threaten the survival of the species, just reporting numbers of pieces of coral provides less insight as to whether the level of international trade in stony corals is sustainable. Ideally, to fully understand impact of harvest on natural stocks, reporting both numbers of pieces of coral and weight would be the most accurate. However, Australia understand this dual requirement may be hard to implement globally. Therefore, measured weight, by virtue of being relatable to stocks and harvest quotas (all measured and assessed in kilograms), would be the most informative in this regard.

We also note that reporting using different units of measure between live coral and coral rock (substrate) continues to leave the guidelines and country reporting open to misunderstandings. Introducing a precisely defined and mandatory single unit of measure across these two categories may go some way to reducing the likelihood of future problems.

While we support the introduction of weight as a reporting unit for live coral, we note that the proposed amendment to the header of table in Section 6a) to change 'Alternative unit' to 'Additional unit' is likely to be difficult to implement in practice for the following reasons:

- there are many pages of other product codes that need to use the header 'Alternative unit'.
- within the LIV category itself, there are other taxa (e.g. live animals for zoological trade) for which the proposal to report in kilograms and number would be unworkable.
- the CITES permit template has only one field for 'unit', so there is currently no way to use two units simultaneously on permits.

One alternative that Australia can propose to get around these practical impediments and reach a similar intent, would be to update the text in Section 3 and table in Section 6a) of the

*Guidance* to introduce a new trade code for live corals, with a preferred unit of kilograms. Whether this code would include an alternative unit of ‘number of pieces’ could be a matter for discussion by the working group. Noting that this option would also require the update of conversion factors so as to be able to convert measured weights to number of pieces on a more accurate basis than is currently possible with the Green & Shirley (1999) values.

**Item (c)**

*c) the appropriateness of current conversion factors used to analyze trade in wild stony corals for the CITES Review of Significant Trade process and potential alternative conversion factors and methodologies;*

Australia notes that although the *Guidelines for the preparation and submission of CITES annual reports (Notification No. 2019/072)*, advises that the preferred unit of measurement for live (‘LIV’) corals is number of pieces and the preferred unit of measure for raw corals (‘COR’) is kilograms, parties are able to report corals in either kilograms or number of pieces. This has necessitated the derivation and use of conversion factors to be able to make comparisons between products, or to be able to compare exports (reported in number of pieces) to original harvest quotas (most often in kilograms). The conversion factors currently being applied are those derived by Green and Shirley (1999):

<i>Term</i>	<i>Converted to</i>	<i>Conversion factor</i>
<i>live corals (kg)</i>	<i>live corals (pieces)</i>	<i>206.1 ± 13.1g</i>
<i>raw corals (pieces)</i>	<i>raw corals (kg)</i>	<i>580g ± 121g</i>

The Green & Shirley conversion factors were calculated based on the composition of coral trade (species and size classes) occurring in the 1980s and 90s. Since that time there have been significant changes to both the species composition and nature of pieces being traded internationally. It is now almost universally acknowledged that Green & Shirley (1999) conversion factors are no longer fit-for-purpose. Application of irrelevant conversion factors results in misleading trade data, and distorted data that cannot be reconciled with original harvest quotas.

Recognising that existing CITES permits templates only allow for reporting in one unit, rendering it impossible to introduce reporting in both measured weight and number of pieces and make conversion factors redundant, Australia strongly supports a move to examine methodologies for deriving updated conversion factors.

To this end, Australia can offer a dataset of weight conversion metrics recently calculated by Prof. Morgan Pratchett using data from the Queensland coral harvest fishery<sup>1</sup>. These data are estimates of average weight per piece calculated from fishery data over the period 2010-11 to 2015-16, where the annual reported harvest weight (in kg) was divided by the total number of retained pieces for each species or family level group (Table 1). To our knowledge, this dataset is the only one of its kind and the only independent source of information currently available to the intersessional working group for the purposes of bringing conversion factors

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<sup>1</sup> *‘Expert advice for the assessment of Australian coral fisheries – Queensland Coral Fishery 2006-07 to 2019-20’*, Department of Agriculture, Water and the Environment (DAWE), Wildlife Trade Assessments Section of the Wildlife Trade Office, Canberra, 2021.

into line with the current composition of trade in aquarium corals (preferred species and size-classes).

Australia also notes that, for any new conversion factors that are developed by the working group, explicit provisions should be made to review said factors at regular intervals going forward. This will ensure that necessary revisions can be made to reflect future changes in the live coral fishery and market demands.

**Table 1:** Estimated weight conversions for species and genera of coral relevant to the current international marine aquarium trade. Extracted from Tables 4.2 and 8.1 of '[Expert advice for the assessment of Australian coral fisheries – Queensland Coral Fishery 2006-07 to 2019-20](#)', Department of Agriculture, Water and the Environment (DAWE), Wildlife Trade Assessments Section of the Wildlife Trade Office, Canberra, 2021.

Species	Weight conversion (pieces to kilograms)
<i>Acropora</i> spp.	0.23
<i>Micromussa lordhowensis</i>	0.14
<i>Homophyllia</i> cf. <i>australis</i>	0.06
<i>Trachyphyllia geoffroyi</i>	0.06
<i>Acanthophyllia deshayensiana</i>	0.11
<i>Catalaphyllia jardinei</i>	0.10
<i>Fimbriaphyllia ancora</i>	0.12
<i>Euphyllia glabrescens</i>	0.09
<i>Duncanopsamia axifuga</i>	0.10
<i>Cycloseris cyclolites</i>	0.06
<i>Montipora</i> spp.	0.18
<i>Paragoniastrea australensis</i>	0.11
<i>Blastomussa wellsii</i>	0.11
<i>Euphyllia</i> sp.	0.12
<i>Homophyllia bowerbanki</i>	0.13
<i>Cynarina lacrymalis</i>	0.07
<i>Blastomussa merleti</i>	0.17
<i>Micromussa amakusensis</i>	0.13

#### Item (d)

*d) appropriate units of measure of stony corals in trade, e.g. number of specimens or kilogrammes;*

Australia notes that there is a strong scientific and environmental case for having trade in stony corals reported in kilograms (actual measured weights). This will provide a more scientifically sound means to reconcile exported quantities with original harvest quotas (which are all set and reported in kilograms).

Australia therefore strongly supports the intent behind the proposed amendment to section 6a) to move to reporting of live coral (LIV) in kilograms.

Australia notes that reporting of live coral in kilograms as a preferred weight will result in a break in the time-series of data on number of pieces of live coral. Given there are already

conversion issues with reporting pieces, a transition towards kilograms should support more accurate reporting and insight moving forward.

Australia disagrees with the assertion that it is not practical to weigh individual pieces or collections of pieces for export. We note that, in the case of the Queensland coral harvest fishery, industry is already weighing pieces at the species level to comply with new regulations to report catches by weight at the landing point and submit an accurate weights notice. We also have report that some industry practitioners already weigh their shipments by placing packing boxes on scales pre-filled with water bags and then add pieces as required to make up the order.

The intersessional working group should consider conducting a full review of current and possible alternative units of measure for each key product code. This review could consider impacts of changes to units of measure on existing and future CITES trade data and consider the practicality of implementing different units of measure for different coral products for key stakeholders, including industry, CITES, and relevant Management Authorities and Scientific Authorities.

**Item (e)**

*e) any other issues relating to definitions and reporting of coral rock in international trade to provide sufficient clarity and avoid confusion in relation to what 'coral rock' means, what forms of coral rock are subject to the provisions of the Convention and how coral rock should be reported in trade; and*

Nil under this item.

**Item (f)**

f) any other issues related to the implementation of the Convention with respect to trade in stony corals.

Nil under this item.

People's Republic of China

**Suggestions for "Trade in stony corals"**

China CITES Management Authority(CCMA), National Forestry and Grassland Administration (NFGA):

"Letter from the National Endangered Species Management Office forwarding CITES Secretariat Notice No. 2023/081" has been received. After research, the following opinions are provided.

1. **It is recommended to** modify the unit of live coral trade in the *Proposed Revisions to the Guidelines for the Preparation and Submission of CITES Annual Reports* to two units of weight or quantity to facilitate management.

**Modification Reason:** Most of the coral species are colonies living, which means that the quantity of corals can vary during the trade process. Furthermore, in the process of converting the weight of living corals into quantity due to variations in the size and weight of individual coral colonies, it is suggested to using two units, weight or quantity, to manage the coral trade

2. **It is recommended that** modifying the definition of *live coral* and *dead coral* from relying on whether it can be " identifiable to the level of species or genus" to relying on whether it can be " identifiable to the level of family, genus, or species."

**Modification Reason:** Due to changes in the coral classification system, identifying the genus and species level of some coral taxa can be challenging. Therefore, it is recommended to consider using the family, genus or species as the identification criterion.

3. **It is recommended that** adding a definition for coral rocks that are larger than 0.5 kg but smaller than 1 kg in the *Proposed Revisions to Guidelines for the Compilation and Submission of CITES Annual Reports* annex, or modifying the definitions of "live rock" or "substrate".

**Modification Reason:** In the various definitions of coral reef stones provided in the annex, there is no specific definition for coral stones that are larger than 0.5 kg but smaller than 1 kg. It is recommended that either adding a new definition or modifying the existing definitions to address this gap in management.

4. **It is recommended to** modify "**Coral Fragment**" to be "**Coral Skeleton Fragment**".

**Modification Reason:** The term "Coral Fragment" is widely used in coral reef ecological restoration research and typically represents live coral branches or fragments. Using it to refer to "unconsolidated fragments of broken finger-like dead coral and other materials measuring between 2 and 30 mm in any direction" here in CITES Secretariat Notification No. 2023/081 may not be appropriate. Therefore, it is recommended to modify it to "Coral Skeleton Fragment."

## CONVENCIÓN SOBRE EL COMERCIO INTERNACIONAL DE ESPECIES AMENAZADAS DE FAUNA Y FLORA SILVESTRES (CITES)

*Notificación a las Partes No. No. 2023/081 Ginebra, 12 de julio de 2023*

*Consulta sobre el comercio de corales pétreos*

Dirección de Asuntos Marinos, Costeros y Recursos Acuáticos

### I. TEXTO NOTIFICACIÓN No. 2023/081

1. A petición del Comité de Fauna y de conformidad con la Decisión 19.177, la Secretaría invita a las Partes, especialmente a las naciones de arrecifes de coral, y a los expertos en corales pétreos y otros interesados pertinentes a formular observaciones y proporcionar información sobre lo siguiente:
  - a) posibles enmiendas a la Resolución Conf. 11.10 (Rev. CoP15), sobre Comercio de corales pétreos, como se muestra en el Anexo 1 de esta Notificación, encaminadas a aclarar los términos, los códigos y las definiciones utilizados en el comercio y a lograr una coherencia global en la concesión de permisos y la presentación de informes;
  - b) posibles revisiones de las Directrices para la preparación y presentación de informes anuales CITES y de las Directrices para la preparación y presentación del informe anual CITES sobre el comercio ilegal, como se muestra en el Anexo 2 de esta Notificación;
  - c) la idoneidad de los actuales factores de conversión utilizados para analizar el comercio de corales pétreos silvestres para el proceso de Examen del comercio significativo de la CITES y de factores de conversión alternativos y metodologías potenciales; (los factores de conversión utilizados para analizar el comercio de corales para el proceso de examen del comercio significativo de la CITES; y)
  - d) unidades de medida apropiadas de los corales pétreos en el comercio, p. ej., el número de especímenes o kilogramos;
  - e) cualquier otra cuestión relacionada con las definiciones y la presentación de informes de los corales pétreos en el comercio internacional para proporcionar suficiente claridad y evitar confusión en relación con qué significa 'roca de coral', qué formas de roca de coral están sujetas a las disposiciones de la Convención y cómo debería notificarse la roca de coral en el comercio; y
  - f) cualquier otra cuestión relacionada con la aplicación de la Convención respecto del comercio de corales pétreos.
2. Las respuestas deberían remitirse a [karen.gaynor@cites.org](mailto:karen.gaynor@cites.org) antes del **1 de octubre de 2023** a fin de permitir que sean consideradas por el Grupo de trabajo entre reuniones sobre comercio de corales pétreos del Comité de Fauna para que presente un informe en la 33ª reunión del Comité de Fauna.

3. A petición del Comité de Fauna, la Secretaría invita además a las Partes, especialmente a las naciones de arrecifes de coral, a expresar su interés en participar en el Grupo de trabajo entre reuniones sobre comercio de corales pétreos del Comité de Fauna enviando un correo electrónico a la [karen.gaynor@cites.org](mailto:karen.gaynor@cites.org) a más tardar el **1 de octubre de 2023** e invita además a los expertos en corales pétreos y a otros interesados a expresar su interés en contribuir a la labor del grupo de trabajo enviando un correo electrónico a la [karen.gaynor@cites.org](mailto:karen.gaynor@cites.org) a más tardar el **1 de octubre de 2023**.

## II. RESPUESTA COLOMBIA

Desde el Ministerio de Ambiente y Desarrollo Sostenible, como Autoridad Administrativa de CITES de Colombia, a continuación, se permite informar a la Secretaría de CITES que se tienen las siguientes observaciones:

*Literal a) posibles enmiendas a la Resolución Conf. 11.10 (Rev. CoP15), sobre Comercio de corales pétreos, como se muestra en el Anexo 1 de esta Notificación, encaminadas a aclarar los términos, los códigos y las definiciones utilizados en el comercio y a lograr una coherencia global en la concesión de permisos y la presentación de informes;*

### P.P.5

“CONSCIENTE, no obstante, de que solo puede identificarse fácilmente la roca de coral ~~no puede identificarse fácilmente salvo la~~ perteneciente al orden Scleractinia, o en el caso de los corales no escleractinios, a nivel de género (Distichopora, Heliopora, Millepora, Stylaster o Tubipora), y que, por consiguiente, no es fácil emitir dictámenes sobre la extracción no perjudicial del medio silvestre, en virtud del párrafo 2 a) del Artículo IV de la Convención;”

### COL:

“CONSCIENTE, no obstante, de que solo es posible puede identificarse fácilmente a nivel de especie la roca de coral ~~no puede identificarse fácilmente salvo la~~ perteneciente al orden Scleractinia, pero e en el caso de los corales no escleractinios, sólo se puede llevar a cabo la identificación a nivel de género (Distichopora, Heliopora, Millepora, Stylaster o Tubipora), y que, por consiguiente, no es fácil emitir dictámenes sobre la extracción no perjudicial del medio silvestre, en virtud del párrafo 2 a) del Artículo IV de la Convención;”

**Comentario Colombia:** Con el fin de mejorar la redacción de este párrafo, sugerimos aclarar que se refieren a que solo es posible identificar fácilmente a nivel de especie la roca de coral perteneciente al orden Scleractinia, pero en el caso de los corales no escleractinios, solo se puede llevar la identificación a nivel de género (Distichopora, Heliopora, Millepora, Stylaster o Tubipora).

**Comentario Colombia:** Analizar la pertinencia de establecer la diferencia en la categoría coral muerto, entre húmedo (muerte reciente) y seco, dado que, según las definiciones presentadas, el coral pudo extraerse para su comercialización con la intención de transportarse como coral vivo y luego morir durante el proceso de transporte, no obstante, al ser extraído para comercializar como coral vivo el proceso de identificación a nivel de especie es más fácil de realizar. Por otro lado, se ha evidenciado que el coral muerto y seco sin señales de vida reciente en las estructuras, también tiene un importante interés para temas decorativos de acuarios y la construcción, pero desde su origen este se maneja en la condición señalada y requiere de muchos menos cuidados facilitando su comercio y tráfico, sin embargo, en estos casos sus características están menos conservadas dificultando los temas de identificación.

*Literal b) posibles revisiones de las Directrices para la preparación y presentación de informes anuales CITES y de las Directrices para la preparación y presentación del informe anual CITES sobre el comercio ilegal, como se muestra en el Anexo 2 de esta Notificación*

**Comentario Colombia:** Considerando lo comentado referente literal a), se recomienda que en los informes a presentar, se tenga en consideración el seguimiento y la importancia de determinar las posibles tasas de mortalidad de los corales vivos sujetos a comercio y transporte, en este sentido no solo sería importante clasificar a los corales con la descripción de "LIV" y sus otros aspectos al momento de iniciar su comercio, sino también su estado final de recepción, dado que esta información ayudará a determinar aspectos de efectividad y potenciales futuras necesidades de nuevos requerimientos por parte de solicitantes en caso de mortalidades recurrentes.

*Literal c) la idoneidad de los actuales factores de conversión utilizados para analizar el comercio de corales pétreos silvestres para el proceso de Examen del comercio significativo de la CITES y de factores de conversión alternativos y metodologías potenciales; (los factores de conversión utilizados para analizar el comercio de corales para el proceso de examen del comercio significativo de la CITES; y)*

**Comentario Colombia:** No se tienen observaciones ni recomendaciones.

*Literal d) unidades de medida apropiadas de los corales pétreos en el comercio, p. ej., el número de especímenes o kilogramos.*

## **Anexo 2. Posibles enmiendas a las Directrices para la preparación y presentación de los informes anuales CITES**

En la sección 3 "En lo que respecta a los corales pétreos", añadir un párrafo final como sigue:

Los corales vivos deben comunicarse como "LIV" con la unidad "número de especímenes". La roca de coral (como roca viva) debe notificarse utilizando el código de términos comerciales "COR" con la unidad kilogramos (kg) y la unidad "número de especímenes". La roca de coral (como sustrato) y los corales muertos deben declararse como "COR" con la unidad "número de especímenes".

**Comentario Colombia:** Con relación a las unidades a utilizar referentes a los corales pétreos, se recomienda utilizar la unidad número de especímenes además de la unidad kilogramos (kg) para la roca viva, como se maneja con el coral vivo (*live*). Lo anterior considerando que en ambos casos la comercialización corresponde a organismos vivos.

Literal e) cualquier otra cuestión relacionada con las definiciones y la presentación de informes de los corales pétreos en el comercio internacional para proporcionar suficiente claridad y evitar confusión en relación con qué significa 'roca de coral', qué formas de roca de coral están sujetas a las disposiciones de la Convención y cómo debería notificarse la roca de coral en el comercio; y

**Anexo 2. Posibles enmiendas a las Directrices para la preparación y presentación de los informes anuales CITES**

En la sección 6a), actualizar las explicaciones de "vivos" y "corales (en bruto)" en la tabla terminológica:

Descripción	Código de comercio	Unidad preferida	Alternativa Unidad adicional	Explicación
live	LIV	no.	(kg) (además del número)	animales o plantas vivos, excluyendo los jaramugos vivos – véase FIG. <u>Nota: los corales pétreos vivos deben registrarse como "número de especímenes"; toda la roca de coral (roca viva y sustrato) debe registrarse como "COR".</u>
Coral (en bruto)	COR	no. kg (para roca viva); no. (para sustrato y corales muertos)	Kg	coral, en bruto o no trabajado y roca de coral (también roca viva y sustrato) [como se define en la Resolución Conf. 11.10 (Rev. CoP15)]. La roca de coral debe registrarse como "Scleractinia spp." <u>Nota: el comercio debe registrarse por número de piezas, sólo si los especímenes de coral se transportan en agua.</u> La roca viva (transportada húmeda en cajas) debe registrarse en kg; el sustrato de coral debe registrarse como número de piezas (ya que se transportan en agua como sustrato al que están pegados corales no CITES); <u>Los corales muertos también deben indicarse en número de piezas.</u>

**Comentario Colombia:** Con relación a la terminología utilizada de "coral (en bruto)", llamamos la atención a que no se utiliza en ningún otro apartado ni corresponde a ninguna de las definiciones del Anexo 1. Este "coral (en bruto)" hace referencia a la "Roca de coral" por lo que se recomienda unificar el uso para evitar posibles confusiones.

Literal f) cualquier otra cuestión relacionada con la aplicación de la Convención respecto del comercio de corales pétreos.

**Comentario Colombia:** No se tienen observaciones ni recomendaciones.

**European Union's reply to notification 2023/081**

*In response to notification 2023/081 concerning consultation on trade on stony corals please see below a report at EU level*

- a) **Possible amendments to Resolution Conf 11.10 (Rev. CoP15) on Trade in stony corals as shown in Annex 1 to this Notification, aimed at clarifying terms, codes and definitions used in trade and to achieve global consistency in permitting and reporting.**

Please see attached EU comments in red (New text is underlined and text to be removed is ~~struck-out~~)

- b) **possible revisions to the Guidelines for the preparation and submission of CITES annual reports and Guidelines for the preparation and submission of the CITES annual illegal trade report as shown in Annex 2 to this Notification.**

Please see attached EU comments in red (New text is underlined and text to be removed is ~~struck-out~~)

- c) **the appropriateness of current conversion factors used<sup>1</sup> to analyse trade in wild stony corals for the CITES Review of Significant Trade process and potential alternative conversion factors and methodologies.**
- d) **appropriate units of measure of stony corals in trade, e.g., number of specimens or kilogrammes.**
- e) **any other issues relating to definitions and reporting of coral rock in international trade to provide sufficient clarity and avoid confusion in relation to what 'coral rock' means, what forms of coral rock are subject to the provisions of the Convention and how coral rock should be reported in trade.**
- f) **any other issues related to the implementation of the Convention with respect to trade in stony corals.**

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<sup>1</sup> Conversion factors are available in the Table in Box 2 on p. 3 of AC32 Doc. 14.2 Annex 1. <https://cites.org/sites/default/files/documents/AC32-14-02.pdf>. Source of conversion factors: Green, E.P. and Shirley, F. 1999. The global trade in corals. Cambridge, UK. <https://www.biodiversitylibrary.org/item/119170#page/6/mode/1up>

## POSSIBLE AMENDMENTS TO

RESOLUTION CONF. 11.10 (REV. COP15) *ON TRADE IN STONY CORALS***Conf. 11.10 Trade in stony corals****(Rev. CoP15)**

AWARE that stony corals (in the orders *Scleractinia*, *as well as non-scleractinian corals within the genera Distichopora, Heliopora, Millepora, Stylaster and Tubipora, Helioporacea, Milleporina, Scleractinia, Stolonifera, and Stylasterina*) are in international trade as live or dead specimens in the aquaria and as dead specimens in the curio trade. ~~intact specimens for aquaria and as curios.~~

RECOGNIZING that coral rock, fragments, sand and other coral products are also traded.

NOTING the unique nature of corals, namely that their skeletons are persistent, that they may become mineralized in time and that they are the foundation of reefs, and that, following erosion, fragments of coral may form part of mineral and sedimentary deposits;

NOTING also that coral rock may act as an important substrate for the attachment of live corals and that the removal of rock may have a detrimental impact on coral reef ecosystems.

AWARE, however, that coral rock can ~~not~~ only be readily identified ~~other than~~ to the order *Scleractinia*, or in the case of non-scleractinian corals, to the genus level (*Distichopora, Heliopora, Millepora, Stylaster or Tubipora*), and that accordingly non-detriment findings under Article IV, paragraph 2 (a), of the Convention cannot be readily applied;

NOTING however, that for practical purposes of implementing the Convention, all coral rock can be reported in trade as “*Scleractinia* spp.” irrespective of whether the coral rock contains ~~S~~scleractinian corals, non-scleractinian corals, or a mixed composition, for ease of identification and reporting.

NOTING that Article IV, paragraph 3, requires the monitoring of exports of specimens of each species in Appendix II, in order to assess whether the species is being maintained at a level consistent with its role in the ecosystem;

NOTING that assessments under Article IV, paragraph 3, of the impacts of harvesting corals on the ecosystems from which they are derived cannot be adequately made by monitoring exports alone;

ACCEPTING that coral fragments and coral sand cannot be readily recognized;

RECOGNIZING also that it is ~~frequently~~ usually difficult to identify live or dead corals to the species level owing to the lack of a standard nomenclature and the lack of comprehensive and accessible identification guides for the non-specialist;

RECOGNIZING that stony corals that are fossilized are not subject to the provisions of the Convention;

NOTING that it has been difficult to apply and enforce the provisions of the Convention to trade in corals;

#### THE CONFERENCE OF THE PARTIES TO THE CONVENTION

1. ADOPTS the working definitions of coral sand, coral fragments, coral rock, live coral and dead coral provided in the Annex to this Resolution;
2. RECOMMENDS that Parties give much greater emphasis to the implementation of Article IV, paragraph 3, when permitting the export of corals and that they adopt the principles and practice of an ecosystem approach, rather than relying on the monitoring of exports alone; and
3. URGES:
  - a. interested Parties and other bodies from range and consumer States to collaborate and provide support, coordinated by the Secretariat, to produce as a priority accessible and practical guide to recognizing corals and coral rock in trade and to make these widely available to Parties through appropriate media; and
  - b. Parties to seek synergy with other multilateral environmental agreements and initiatives to work for the conservation and sustainable use of coral reef ecosystems.

#### Annex

#### Definitions

*Coral sand* – material consisting entirely or in part of finely crushed ~~and eroded~~ fragments of dead coral no larger than 2 mm in diameter and which may also contain, amongst other things, the remains of Foraminifera, ~~bryozoans, echinoderms,~~ mollusc and crustacean shell, and coralline algae. Not identifiable to the level of genus. In accordance with Resolution Conf. 9.6 (Rev. CoP16) on Trade in readily recognizable parts and derivatives, coral sand is not considered readily recognizable, and is therefore not covered by the provisions of the Convention.

*Coral fragments* (including gravel and rubble) – unconsolidated fragments of ~~broken finger-like~~ dead coral and other material between 2 and 30 mm measured in any direction, which is not identifiable to the level of genus. In accordance with Resolution Conf. 9.6 (Rev. CoP16) on Trade in readily recognizable parts and derivatives, coral fragments are not considered readily recognizable, and are therefore not covered by the provisions of the Convention.

*Coral rock*<sup>1</sup> (*the collective term used for ~~also~~ live rock and substrate*) – hard consolidated material, >3 cm in diameter, formed of fragments of mostly/partly unidentifiable specimens of dead coral

and which may also contain cemented sand, coralline algae and other sedimentary rocks. The term ‘coral rock’ should not be used on permits; which should instead refer to ‘live rock’ or ‘substrate’. Unlike fossil corals, ‘coral rock’ is harvested from living coral reef ecosystems, mostly from shallow reef flats near the shoreline at less than 1 m depth.

‘Live rock’ is the term given to large pieces of coral rock (usually > 1 kg each) to which are attached live specimens of invertebrate species and coralline algae not included in the CITES Appendices. Live rock should not be covered with by CITES-listed coral species. Live rock is used as decoration and habitat in aquariums and is usually and which are transported in moist condition, in order to keep the attached organisms alive., but not in water, in crates. Live rock is subject to the provisions of the Convention.

‘Substrate’ is the term given to small pieces of coral rock (usually < 0.5 kg each), to which are attached invertebrates (of species not included in the CITES Appendices. Substrate is used as pedestal (base) for attached invertebrates, such as sea anemones or soft corals and is therefore and which are transported in water to keep these organisms alive, like live corals. Substrate should not be identifiable as covered by CITES-listed live or dead coral. Coral rock is not identifiable to the level of genus but is recognizable to the level of order. The definition excludes specimens defined as dead coral. Whether substrate is subject to the provisions of the Convention depends on Parties interpretation of fossil coral; Parties that consider substrate to be fossilized coral do not consider it to be subject to the Convention’s provisions.

*Dead coral* – pieces of coral that are dead when exported, but that may have been alive when collected, and in which the structure of corallites (the skeleton of the individual polyp) is still intact; specimens are therefore identifiable to the level of species or genus.

*Live coral* – pieces of live coral transported in water and that are identifiable to the level of species or genus.

***Possible amendments to the  
Guidelines for the preparation and submission of CITES annual reports.***

In section 3 “**Regarding stony corals**” add a final paragraph as follows:

Live corals should be reported as ‘LIV’ with the unit ‘number of specimens. Coral rock (as live rock) should be reported using the trade term code ‘COR’ with the unit kilograms (kg). Coral rock (as substrate) and dead corals should be reported as ‘COR’ with the unit ‘number of specimens.

In section 6a), update the explanations of ‘live’ and ‘corals (raw)’ in the terminology table:

Description	Trade term code	Preferred unit	Alternative unit	Explanation
live	LIV	no.	(kg) <u>(in addition to the no.)</u>	live animals and plants, excluding live fingerling fish – see FIG. <b>NB:</b> <u>live stony corals should be recorded as ‘number of specimens’; all coral rock (live rock and substrate) should be reported as ‘COR’.</u>
coral (raw)	COR	<del>no.</del> <u>kg (for live rock); no. (for substrate and dead corals)</u>	<del>kg</del>	raw or unworked coral and coral rock ( <del>also</del> live rock and substrate) [as defined in Resolution Conf. 11.10 (Rev. CoP15)]. Coral rock (live rock and substrate) should be recorded as ‘Scleractinia spp.’ <b>NB:</b> <del>the trade should be recorded by number of pieces only if the coral specimens are transported in water.</del> Live rock (transported moist in boxes) should be reported in kg; coral substrate should be reported as number of pieces (since these are transported in water as the substrate to which non-CITES corals are attached); <u>dead corals should also be reported as number of pieces.</u>



# NOTIFICATION TO THE PARTIES

No. 2023/081

Geneva, 12 July 2023

CONCERNING:

## Consultation on trade in stony corals

1. At the request of the Animals Committee and pursuant to Decision 19.177, the Secretariat invites Parties, especially coral reef nations, and stony coral experts and other relevant stakeholders to provide comments and information on the following:
  - a) possible amendments to Resolution Conf 11.10 (Rev. CoP15) on *Trade in stony corals* as shown in Annex 1 to this Notification, aimed at clarifying terms, codes and definitions used in trade and to achieve global consistency in permitting and reporting;
  - b) possible revisions to the *Guidelines for the preparation and submission of CITES annual reports* and *Guidelines for the preparation and submission of the CITES annual illegal trade report* as shown in Annex 2 to this Notification;
  - c) the appropriateness of current conversion factors used<sup>1</sup> to analyze trade in wild stony corals for the CITES Review of Significant Trade process and potential alternative conversion factors and methodologies;
  - d) appropriate units of measure of stony corals in trade, e.g. number of specimens or kilogrammes;
  - e) any other issues relating to definitions and reporting of coral rock in international trade to provide sufficient clarity and avoid confusion in relation to what 'coral rock' means, what forms of coral rock are subject to the provisions of the Convention and how coral rock should be reported in trade; and
  - f) any other issues related to the implementation of the Convention with respect to trade in stony corals.

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<sup>1</sup> Conversion factors are available in the Table in Box 2 on p. 3 of AC32 Doc. 14.2 Annex 1. <https://cites.org/sites/default/files/documents/E-AC32-14-02.pdf>. Source of conversion factors: Green, E.P. and Shirley, F. 1999. *The global trade in corals*. Cambridge, UK. <https://www.biodiversitylibrary.org/item/119170#page/6/mode/1up>

2. Responses should be sent to [karen.gaynor@cites.org](mailto:karen.gaynor@cites.org) before **1 October 2023** to allow for consideration by the Animals Committee's intersessional working group on trade in stony corals for reporting to the 33rd meeting of the Animals Committee.
3. At the request of the Animals Committee, the Secretariat further invites Parties, especially coral reef nations, to express an interest in participating in the Animals Committee's intersessional working group on trade in stony corals by sending an email to [karen.gaynor@cites.org](mailto:karen.gaynor@cites.org) by **1 October 2023** and further invites stony coral experts and other stakeholders to express their interest in contributing to the work of the working group by sending an email to [karen.gaynor@cites.org](mailto:karen.gaynor@cites.org) by **1 October 2023**.

POSSIBLE AMENDMENTS TO  
RESOLUTION CONF. 11.10 (REV. COP15) ON *TRADE IN STONY CORALS*

## Conf. 11.10 Trade in stony corals

(Rev. CoP15)

AWARE that stony corals (in the orders Scleractinia, as well as non-scleractinian corals within the genera *Distichopora*, *Heliopora*, *Millepora*, *Stylaster* and *Tubipora*, ~~Helioporacea, Milleporina, Scleractinia, Stolonifera, and Stylasterina~~) are in international trade as specimens for aquaria and as curios;  <sup>1</sup>

RECOGNIZING that coral rock, fragments, sand and other coral products are also traded;

NOTING the unique nature of corals, namely that their skeletons are persistent, that they may become mineralized in time and that they are the foundation of reefs, and that, following erosion, fragments of coral may form part of mineral and sedimentary deposits;

NOTING also that coral rock may act as an important substrate for the attachment of live corals and that the removal of rock may have a detrimental impact on ecosystems;  <sup>4</sup>

AWARE, however, that coral rock can ~~not only~~ be readily identified ~~other than~~ to the order Scleractinia, or in the case of non-scleractinian corals, to the genus level (*Distichopora*, *Heliopora*, *Millepora*, *Stylaster* or *Tubipora*), and that accordingly non-detriment findings under Article IV, paragraph 2 (a), of the Convention cannot be readily applied;

NOTING however, that for practical purposes of implementing the Convention, all coral rock can be reported in trade as "Scleractinia spp." irrespective of whether the coral rock contains cleractinian corals, non-scleractinian corals, or a mixed composition, for ease of identification and reporting.  <sup>8</sup>

NOTING that Article IV, paragraph 3, requires the monitoring of exports of specimens of each species in Appendix II, in order to assess whether the species is being maintained at a level consistent with its role in the ecosystem;

NOTING that assessments under Article IV, paragraph 3, of the impacts of harvesting corals on the ecosystems from which they are derived cannot be adequately made by monitoring exports alone;

ACCEPTING that coral fragments and coral sand cannot be readily recognized;

RECOGNIZING also that it is ~~frequently~~ usually difficult to identify live or dead corals to the species level owing to the lack of a standard nomenclature and the lack of comprehensive and accessible identification guides for the non-specialist;

RECOGNIZING that stony corals that are fossilized are not subject to the provisions of the Convention;

NOTING that it has been difficult to apply and enforce the provisions of the Convention to trade in corals;

### THE CONFERENCE OF THE PARTIES TO THE CONVENTION

1. ADOPTS the working definitions of coral sand, coral fragments, coral rock, live coral and dead coral provided in the Annex to this Resolution;

# Summary of Comments on Notification to the Parties 2023

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Page: 3

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Number: 1 Author: bert.hoeksema Subject: Sticky Note Date: 7/14/2023 2:47:55 PM

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The word "intact" can be ambiguous because dead coral in the curio trade does not have live tissue and is therefore not intact.

My suggestion: "as live or dead specimens in the aquarium industry and as dead specimens in the curio trade".

Number: 2 Author: bert.hoeksema Subject: Highlight Date: 7/14/2023 2:43:57 PM

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Number: 3 Author: bert.hoeksema Subject: Highlight Date: 7/14/2023 2:44:08 PM

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Number: 4 Author: bert.hoeksema Subject: Sticky Note Date: 6/14/2024 9:41:08 AM

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"coral-reef ecosystems"

There are also other organisms that are reef forming

Number: 5 Author: bert.hoeksema Subject: Highlight Date: 7/14/2023 2:47:57 PM

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Number: 6 Author: bert.hoeksema Subject: Highlight Date: 7/14/2023 2:48:12 PM

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Number: 7 Author: bert.hoeksema Subject: Highlight Date: 7/14/2023 2:49:47 PM

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Number: 8 Author: bert.hoeksema Subject: Sticky Note Date: 7/14/2023 2:50:23 PM

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scleractinian

The adjective does not start with a capital

2. RECOMMENDS that Parties give much greater emphasis to the implementation of Article IV, paragraph 3, when permitting the export of corals and that they adopt the principles and <sup>2</sup>practice of an ecosystem approach, rather than relying on the monitoring of exports alone; and 1
3. URGES:
  - a) interested Parties and other bodies from range and consumer States to collaborate and provide support, coordinated by the Secretariat, to produce as a priority accessible and practical guides to recognizing corals and coral rock in trade and to make these widely available to Parties through appropriate media; and
  - b) Parties to seek synergy with other multilateral environmental agreements and initiatives to work for the conservation and sustainable use of coral reef ecosystems.

## Annex

## Definitions

*Coral sand* – material consisting entirely or in part of finely <sup>4</sup>crushed <sup>3</sup> fragments of dead coral no larger than 2 mm in diameter and which may also contain, amongst other things, the remains of Foraminifera, <sup>6</sup>mollusc and crustacean shell, and coralline algae. Not identifiable to the level of genus. In accordance with Resolution Conf. 9.6 (Rev. CoP16) on *Trade in readily recognizable parts and derivatives*, coral sand is not considered readily recognizable, and is therefore not covered by the provisions of the Convention. 5

*Coral fragments (including gravel and rubble)* – unconsolidated fragments <sup>8</sup>broken-finger-like <sup>9</sup>dead coral and other material between 2 and 30 mm measured in any direction, which is not identifiable to the level of genus. In accordance with Resolution Conf. 9.6 (Rev. CoP16) on *Trade in readily recognizable parts and derivatives*, coral fragments are not considered readily recognizable, and are therefore not covered by the provisions of the Convention. 7

*Coral rock*<sup>1</sup> (*the collective term used for ~~also~~ live rock and substrate*) – hard consolidated material, >3 cm in diameter, formed of fragments of mostly/partly unidentifiable specimens of dead coral and which may also contain cemented sand, coralline algae and other sedimentary rocks. The term ‘coral rock’ should not be used on permits; which should instead refer to ‘live rock’ or ‘substrate’. Unlike fossil corals, ‘coral rock’ is harvested from living coral reef ecosystems, mostly from shallow reef flats near the shoreline at less than 1 m depth.

‘*Live rock*’ is the term given to large pieces of coral rock (usually > 1 kg each) to which are attached live specimens of invertebrate species and coralline algae not included in the CITES Appendices. <sup>11</sup>the rock should not be covered by CITES-listed coral species. Live rock is used as decoration and habitat in aquariums and is usually and which are transported in moist condition, in order to keep the attached organisms alive, but not in water, in crates. Live rock is subject to the provisions of the Convention. 10

‘*Substrate*’ is the term given to small pieces of coral rock (usually < 0.5 kg each), to which are attached invertebrates (of species not included in the CITES Appendices. Substrate is used as pedestal (base) for attached invertebrates, such as sea anemones or soft corals and is therefore and which are transported in water to keep these organisms alive. <sup>13</sup>live corals. Substrate should not be <sup>14</sup>covered by CITES-listed live or dead coral. Coral rock is not identifiable to the level of genus but is recognizable to the level of order. The definition excludes specimens defined as dead coral. Whether substrate is subject to the provisions of the Convention depends on Parties interpretation of fossil coral; Parties that consider substrate to be fossilized coral do not consider it to be subject to the Convention’s provisions. 12  
15

*Dead coral* – pieces of coral that are dead when exported, but that may have been alive when collected, and in which the structure of corallites (the skeleton of the individual polyp) is still intact; specimens <sup>16</sup>therefore identifiable to the level of species or genus. 17

*Live coral* – pieces of live coral transported in water and that are identifiable to the level of species or genus.

# Page: 4

 Number: 1	Author: bert.hoeksema	Subject: Sticky Note	Date: 7/14/2023 2:52:02 PM
practice of			
 Number: 2	Author: bert.hoeksema	Subject: Highlight	Date: 7/14/2023 2:51:47 PM
 Number: 3	Author: bert.hoeksema	Subject: Sticky Note	Date: 7/14/2023 2:53:11 PM
crushed and eroded			
 Number: 4	Author: bert.hoeksema	Subject: Highlight	Date: 7/14/2023 2:52:49 PM
 Number: 5	Author: bert.hoeksema	Subject: Sticky Note	Date: 7/14/2023 2:58:22 PM
add "echinoderms" because of sea-urchin spines and holothurian sclerites, and of bryozoan skeletons,  ... the remains of Foraminifera, bryozoans, echinoderms, mollusc and ...			
 Number: 6	Author: bert.hoeksema	Subject: Highlight	Date: 7/14/2023 2:53:30 PM
 Number: 7	Author: bert.hoeksema	Subject: Sticky Note	Date: 7/14/2023 2:59:06 PM
dead coral			
 Number: 8	Author: bert.hoeksema	Subject: Cross-Out	Date: 7/14/2023 2:58:27 PM
 Number: 9	Author: bert.hoeksema	Subject: Highlight	Date: 7/14/2023 2:58:31 PM
 Number: 10	Author: bert.hoeksema	Subject: Sticky Note	Date: 7/14/2023 3:06:31 PM
I am not sure what "covered" means. Perhaps it should be "Live rock should not be identifiable at species level".			
 Number: 11	Author: bert.hoeksema	Subject: Highlight	Date: 7/14/2023 3:00:49 PM
 Number: 12	Author: bert.hoeksema	Subject: Sticky Note	Date: 7/14/2023 3:03:40 PM
I am not sure if it is necessary to add "like live corals". This could lead to confusion.			
 Number: 13	Author: bert.hoeksema	Subject: Cross-Out	Date: 7/14/2023 2:38:39 PM
 Number: 14	Author: bert.hoeksema	Subject: Highlight	Date: 7/14/2023 3:04:07 PM
 Number: 15	Author: bert.hoeksema	Subject: Sticky Note	Date: 7/14/2023 3:06:15 PM
Substrate should not be identifiable as CITES-listed live or dead coral.			
 Number: 16	Author: bert.hoeksema	Subject: Highlight	Date: 7/14/2023 2:40:27 PM
 Number: 17	Author: bert.hoeksema	Subject: Sticky Note	Date: 7/14/2023 2:40:36 PM
are therefore			

**Possible amendments to the  
Guidelines for the preparation and submission of CITES annual reports**

In section 3 “**Regarding stony corals**” add a final paragraph as follows:

Live corals should be reported as ‘LIV’ with the unit ‘number of specimens’. Coral rock (as live rock) should be reported using the trade term code ‘COR’ with the unit kilograms (kg). Coral rock (as substrate) and dead corals should be reported as ‘COR’ with the unit ‘number of specimens’.

In section 6a), update the explanations of ‘live’ and ‘corals (raw)’ in the terminology table:

Description	Trade term code	Preferred unit	Alternative Additional unit	Explanation
live	LIV	no.	(kg) (in addition to the no.)	live animals and plants, excluding live fingerling fish – see FIG. <b>NB:</b> <u>live stony corals should be recorded as ‘number of specimens’; all coral rock (live rock and substrate) should be reported as ‘COR’.</u>
coral (raw)	COR	<del>no. kg</del> (for live rock); no. (for substrate and dead corals)	kg	raw or unworked coral and coral rock ( <del>also</del> live rock and substrate) [as defined in Resolution Conf. 11.10 (Rev. CoP15)]. Coral rock (live rock and substrate) should be recorded as ‘Scleractinia spp.’ <b>NB:</b> <del>the trade should be recorded by number of pieces only if the coral specimens are transported in water.</del> Live rock (transported moist in boxes), should be reported in kg; coral substrate should be reported as number of pieces (since these are transported in water as the substrate to which non-CITES corals are attached); <u>dead corals should also be reported as number of pieces.</u>

**Thea Henriette Carroll**

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**From:** María de los Ángeles Cauich García <ma.cauich@semarnat.gob.mx>  
**Sent:** samedi, 30 septembre 2023 01:06  
**To:** Karen Gaynor  
**Cc:** Mexico - Md Luz Mar?a Ortiz [SEMARNAT GOB]; Blanca Alicia Mendoza Vera; hesiquio.benitez@conabio.gob.mx; enrique.castaneda@profepa.gob.mx; gabriela.lopez@conabio.gob.mx; edy.hernandez@inecc.gob.mx; martha.mondragon@semarnat.gob.mx; leonel.urbano@semarnat.gob.mx; miguel.flores@semarnat.gob.mx  
**Subject:** Respuesta México CITES Notificación 2023/081 Consulta Comercio Corales Pétreos  
**Attachments:** Notificacion 2023-081 Consulta Comercio Corales Pétreos México.docx; Respuesta Notif. 2023-081 Factores Conversión Corales México.docx

You don't often get email from ma.cauich@semarnat.gob.mx. [Learn why this is important](#)

**ESTIMADA KAREN GAYNOR**  
**OFICIAL CIENTÍFICO**  
**SECRETARÍA CITES**

Con el gusto de saludarla y esperando se encuentre con bien, en apego al párrafo 2 de la Notificación a las Partes No. 2023/081 "Consulta sobre el comercio de corales pétreos", y en mi carácter de Titular de la Autoridad Administrativa CITES de México, a continuación le comparto en los documentos adjuntos, los comentarios a las posibles enmiendas a la Res. 11.10 (Rev. CoP 15) sobre el comercio de corales pétreos, y a las Directrices para la preparación y presentación de los informes anuales CITES, así como los insumos relacionados con la idoneidad de los actuales factores de conversión utilizados para analizar el comercio de corales pétreos silvestres.

Adicionalmente, le comparto las siguientes observaciones sobre incisos c) y d) de la Notificación:

c) idoneidad de los actuales factores de conversión utilizados para analizar el comercio de corales pétreos silvestres para el proceso de Examen del comercio significativo de la CITES y de factores de conversión alternativos y metodologías potenciales; los factores de conversión utilizados para analizar el comercio de corales para el proceso de examen del comercio significativo de la CITES:

- Para el caso de los corales pétreos y sus múltiples opciones de comercialización, el término más usado es "corales en bruto" sin encontrarse el término "coral pétreo", pero sí la referencia a varios grupos taxonómicos de los corales pétreos.
- En el caso particular de los corales del orden "Scleractinia", se reportan los términos "cuerpos" (animales muertos, substancialmente enteros, inclusive el pescado entero, tortugas disecadas, mariposas disecadas, reptiles en alcohol, trofeos de caza disecados enteros, etc.); "tallas"; "vivo" y "corales en bruto".
- Con esta gran variedad no es posible aplicar los factores de conversión. En la referencia que sirve de base para establecer los factores de conversión, se indica que la mayoría de los registros comerciales identifican la mercancía a niveles mayores a especie, esto es género, familia, etcétera, tal es el caso de los corales del orden Anthipatharia y Scleractinia; en el caso de éste último, se reconocen un total de 119 géneros.
- Se reconoce que a principios de la década de los 90, más del 90% de los corales comercializados eran muertos, pero que el comercio de ejemplares vivos se ha incrementado y que estas tendencias siguen cambiando. Por todo lo anterior, y teniendo como base los datos de hace más de 20 años, se sugiere revisar esos factores de conversión para tener una base más actualizada que permita genera factores útiles en estos tiempos.

- Además, en la documentación de los embarques de coral debe figurar el nombre científico (género y especie) o al menos a nivel de género, e incluso, en los casos que sea posible, a nivel de especie. En este sentido, la Secretaría CITES ha elaborado una serie de recomendaciones que se resumen en la Notificación a las Partes número 1999/41, que expresa que los corales deben comercializarse empleando el nombre completo de la especie (género y especie), excepto los especímenes vivos de los géneros Acropora, Lobophyllia, Montastrea, Physogyra y Turbinaria, que podrán describirse en los permisos indicando sólo el género, y también cuando se trate de roca base o de arena y grava de coral (que no incluyan grandes piezas de coral), en los que podrá admitirse que en los permisos se cite el nombre de un género o de un taxón superior, debido a que en estos casos no sea posible definir con mayor exactitud el nombre científico.
- Lo anterior es importante, ya que si no se conoce el nombre de la especie comercializada, la Autoridad Científica no podrá dictaminar si el comercio es perjudicial para la especie.

d) unidades de medida apropiadas de los corales pétreos en el comercio, p. ej., el número de especímenes o kilogramos:

- Se considera que se debe seguir usando la unidad de medida preferida como la adicional (kg), tanto en corales vivos (live – LIV), como en lo que hasta ahora se define como “Coral (en bruto)”, y que se sugiere cambiar a “coral pétreo” (COR). La amplia gama de tamaños en los corales pétreos comercializados (desde menos de a 2 mm de diámetro en el caso de la arena de coral pétreo), hasta la posibilidad de diferenciar organismos a nivel de especie, medirlos y pesarlos, hace pertinente el uso de ambas unidades de medida y usar, en cada caso, una como preferida y otra como adicional.

Saludos cordiales.

## ATENTAMENTE



**Biól. María de los Ángeles Cauich García**  
Directora General de Vida Silvestre

Av. Ejército Nacional 223 Col. Anáhuac I Sección,  
CP. 11320, Alcaldía Miguel Hidalgo, Ciudad de México.

Secretaría de Medio Ambiente y Recursos Naturales  
Subsecretaría de Política Ambiental y Recursos Naturales  
Dirección General de Vida Silvestre

*De conformidad con el artículo segundo del “ACUERDO por el que se establecen los Lineamientos para el intercambio de información oficial a través de correo electrónico institucional, como medida complementaria de las acciones para el combate de la enfermedad generada por el virus SARS-CoV2 (COVID-19)”, publicado en el Diario Oficial de la Federación (DOF) el 17 de abril de 2020, mismo que establece que el correo electrónico institucional se utilizará preferentemente como medio de notificación de la información oficial entre los servidores públicos de las dependencias y entidades de la Administración Pública Federal, siempre que la ley o cualquier disposición normativa vigente no exija formalidad distinta en su tratamiento y efectos.*



Libre de virus. [www.avast.com](http://www.avast.com)

POSIBLES ENMIENDAS  
A LA RESOLUCIÓN CONF. 11.10 (REV. COP15) SOBRE COMERCIO DE CORALES PÉTREOS

## Conf. 11.10

## Comercio de corales pétreos (Rev. CoP15)

CONSCIENTE de que los corales pétreos (de los órdenes Scleractinia, así como los Octocorales (géneros *Heliopora* y *Tubipora*) e Hidrocorales (géneros *Distichopora*, *Millepora* y *Stylaster*), que por su estructura córnea o esqueleto calcáreo, Helioporacea, Milleporina, Scleractinia, Stolonifera, y Stylasterina) son objeto de comercio internacional como especímenes intactos para los acuarios y como objetos curiosos;

RECONOCIENDO que la roca, los fragmentos, la arena de coral pétreo y otros productos de coral pétreo son también objeto de comercio;

TOMANDO NOTA de las características singulares de los corales pétreos, a saber, que sus esqueletos son persistentes, que pueden llegar a mineralizarse con el tiempo y que son los cimientos de los arrecifes y que, como consecuencia de la erosión, los fragmentos de coral pueden llegar a formar parte de depósitos minerales y sedimentarios;

TOMANDO NOTA también de que la roca de coral pétreo puede actuar como un importante sustrato para la fijación de corales vivos, y que la extracción de roca puede tener repercusiones perjudiciales para los ecosistemas de los arrecifes;

CONSCIENTE, no obstante, de que solo puede identificarse fácilmente la roca de coral pétreo no puede identificarse fácilmente salvo la perteneciente al orden Scleractinia, o en el caso de los corales no escleractinios, a nivel de género (*Distichopora*, *Heliopora*, *Millepora*, *Stylaster* o *Tubipora*), y que, por consiguiente, no es fácil emitir dictámenes sobre la extracción no perjudicial del medio silvestre, en virtud del párrafo 2 a) del Artículo IV de la Convención;

TOMANDO NOTA, no obstante, de que a efectos prácticos de aplicación de la Convención, toda la roca de coral pétreo puede declararse en el comercio como "Scleractinia spp.", independientemente de que la roca de coral pétreo contenga corales pétreos escleractinios, corales no escleractinios o una composición mixta, para facilitar la identificación y la declaración.

TOMANDO NOTA de que en el párrafo 3 del Artículo IV se estipula el control de las exportaciones de especímenes de las especies incluidas en el Apéndice II, a fin de determinar que esas especies se mantengan a un nivel compatible con su función en el ecosistema;

TOMANDO NOTA de que las evaluaciones previstas en el párrafo 3 del Artículo IV sobre los impactos de la explotación de corales pétreos sobre los ecosistemas de donde se extraen no pueden realizarse adecuadamente sólo mediante el control de las exportaciones

ACEPTANDO que los fragmentos de coral pétreo y la arena de coral pétreo no pueden reconocerse fácilmente;

RECONOCIENDO asimismo que a menudo generalmente es difícil identificar los corales pétreos vivos o muertos a nivel de especie, debido a la falta de una nomenclatura normalizada y la carencia de guías de identificación completas y accesibles para los que no son especialistas;

RECONOCIENDO que los corales pétreos fosilizados no están sujetos a las disposiciones de la Convención;

CONSCIENTE de que es importante la investigación científica de las especies de coral pétreo para su conocimiento y conservación, las muestras biológicas sin fines de lucro con los fines antes descritos no están sujetas a las disposiciones de ésta Convención;

TOMANDO NOTA de que ha sido difícil aplicar y observar las disposiciones de la Convención en relación con el comercio de los corales pétreos;

**Commented [PFPA1]:** Existen más de 4 mil especies de corales divididos en dos clases Hydrozoa y Antozoa. Más de la mitad de estos corales son reconocidos como "corales pétreos". Por ello, se sugiere que en todos los casos se refiera en este documento a los corales como "corales pétreos". De igual forma se sugiere incluir a todos los grupos taxonómicos que se requiera, eliminando el término "corales no escleractinios" que puede causar confusiones.

## LA CONFERENCIA DE LAS PARTES EN LA CONVENCION

1. **ADOPTA** las definiciones de arena de coral **pétreo**, fragmentos de coral **pétreo**, roca de coral **pétreo**, coral **pétreo** vivo y coral **pétreo** muerto que figuran en el Anexo a la presente resolución;
2. **RECOMIENDA** que las Partes presten mayor atención a la aplicación del párrafo 3 del Artículo IV cuando autoricen la exportación de corales **pétreos** y que adopten principios y prácticas de un enfoque basado en el ecosistema, en vez de confiar únicamente en el control de las exportaciones; e
3. **INSTA**:
  - a) a las Partes interesadas y otros órganos de los Estados del área de distribución y consumidores a colaborar y prestar apoyo, en coordinación con la Secretaría, a fin de preparar, con carácter prioritario, guías accesibles y prácticas para reconocer los corales **pétreos** y la roca de coral **pétreo** en el comercio y distribuir las a las Partes por conducto de los medios adecuados; y
  - b) a las Partes, a lograr una sinergia con otros acuerdos o iniciativas ambientales multilaterales para trabajar en favor de la conservación y el uso sostenible de los ecosistemas de los arrecifes de coral.

**Commented [PFPA2]:** NOTA: es importante aclarar que la definición "Coral (en bruto)" sería aplicable tanto al coral pétreo vivo como al muerto, por lo que se sugiere cambiar de "en bruto" a "muerto". El término "(en bruto)" haría referencia a piezas de coral pétreo que se usarían en trabajos manuales o artesanías y joyas en los que se aplicaría a corales específicos, como el coral negro y otros utilizados para adornos, mismos que entrarían en otras definiciones como "Talla" (CAR) o "Joyas" (JWL), de acuerdo con la sección 6a) (6. Terminología; a) Descripción de los especímenes y unidades de cantidad) de las "Directrices para la preparación y presentación de los informes anuales CITES".

**Commented [PFPA3]:** NOTA: aunque normalmente la sección de definiciones está ordenada de manera alfabética, se sugiere cambiar el orden, de tal forma que esta sección tenga un orden lógico que facilite el entendimiento de dichas definiciones.

**Commented [PFPA4]:** Esta nota no tiene ninguna referencia a pie de página.

## Anexo

## Definiciones

**Coral pétreo vivo** – piezas de coral **pétreo** vivo transportadas en agua y que son identificables a nivel de **especie o de género o categoría superior perteneciendo a orden Scleractinia**.

**Coral pétreo muerto** – piezas de coral **pétreo** que están muertas en el momento de su exportación, pero que pueden haber estado vivas en el momento de su recolección, y en las cuales la estructura de los coralitos (el esqueleto del pólipo individual) todavía está intacta; por consiguiente, los especímenes son identificables a nivel de **especie o de género o categoría superior perteneciendo a orden Scleractinia**.

**Arena de coral pétreo** – material compuesto enteramente o en parte de fragmentos finamente triturados de coral **pétreo** muerto de un tamaño inferior a 2 mm de diámetro y que puede contener, entre otras cosas, restos de **Fforaminiferosa**, conchas de moluscos y crustáceos y algas coralinas. No es identificable a nivel de género. De conformidad con la Resolución Conf. 9.6 (Rev. CoP16), sobre **Comercio de partes y derivados fácilmente identificables**, la arena de coral **pétreo** no se considera fácilmente identificable y, por ende, no está cubierta por las disposiciones de la Convención.

**Fragmentos de coral pétreo (inclusive grava y cascotes)** – fragmentos no consolidados de coral **pétreo** muerto digitado quebrantado y de otro material entre 2 y 30 mm medido en cualquier dirección, que no es identificable a nivel de género. De conformidad con la Resolución Conf. 9.6 (Rev. CoP16), sobre **Comercio de partes y derivados fácilmente identificables**, los fragmentos de coral **pétreo** no se consideran fácilmente identificables y, por ende, no están cubiertos por las disposiciones de la Convención.

**Roca de coral pétreo (el término colectivo utilizado para la también roca viva y sustrato)** – material duro consolidado: > 3 cm de diámetro, formado por fragmentos de **especímenes en su mayoría/en parte no identificables** de coral **pétreo** muerto, y que también puede contener arena cementada, algas coralinas y **otras rocas sedimentadas e invertebrados y generalmente se transporta en agua**. El término 'roca de coral **pétreo**' no debería utilizarse en los permisos; **en su lugar debería utilizarse el término 'roca viva' o 'sustrato'**. Al contrario de los corales **pétreos** fósiles, la 'roca de coral **pétreo**' se recolecta **de en** los ecosistemas de arrecifes de **roca de coral pétreo** vivos, principalmente en arrecifes poco profundos cerca de la costa en profundidades **menores a 10 metros inferiores a 1 metro**.

"Roca viva" es el término dado **a las piezas de roca o piedra grandes piezas de roca de coral** (normalmente **> 4 kg 250 gr cada una**) a las que se adhieren especímenes vivos de especies de invertebrados (**juveniles y adultos**) y algas coralinas no incluidas en los Apéndices de la CITES. **La roca viva no debería estar cubierta por las especies de coral pétreo incluidas en los Apéndices de la CITES. La roca viva se utiliza como decoración y hábitat en los acuarios y normalmente se transporta y que se en cajas húmedas en condiciones de humedad, a fin de mantener los organismos adjuntos vivos, pero no en agua. La roca viva NO está sujeta a las disposiciones de la Convención ya que se trata de una roca o piedra cubierta con organismos que no deben estar incluidos en los Apéndices de la CITES.**

"Sustrato" es el término dado a las pequeñas piezas de roca de coral (normalmente < 0.5 kg cada una), a las que se adhieren invertebrados (especies no incluidas en los Apéndices de la CITES. El sustrato se utiliza como pedestal (base) para los invertebrados adheridos, como las anémonas marinas o los corales blandos y, por ende, se transporta en agua como los corales vivos. El sustrato no debería estar cubierto por el coral vivo o muerto incluido en los Apéndices de la CITES. La roca de coral no es identificable a nivel de género pero es reconocible a nivel de orden. La definición excluye los especímenes definidos como coral muerto. Determinar si el sustrato está sujeto a las disposiciones de la Convención depende de la interpretación de las Partes del coral fósil; las Partes que estiman que el sustrato es coral fosilizado no consideran que esté sujeto a las disposiciones de la Convención.

**Commented [PFFPA5]:** Nota: Se sugiere eliminar el término "sustrato" porque se refiere a una función, mientras que los otros conceptos se refieren a los contenidos biológicos, adicionalmente, existen contradicciones en su definición.

Anexo 2

**Posibles enmiendas  
a las Directrices para la preparación y presentación de los informes anuales CITES**

En la sección 3 " En lo que respecta a los corales pétreos", añadir un párrafo final como sigue:

Los corales vivos deben comunicarse como "LIV" con la unidad "número de especímenes". La roca de coral (como roca viva) debe notificarse utilizando el código de términos comerciales "COR" con la unidad kilogramos (kg). La roca de coral (como sustrato) y los corales muertos deben declararse como "COR" con la unidad "número de especímenes".

Se sugiere sustituir el párrafo anterior por el siguiente:

Los corales pétreos vivos deben comunicarse como "LIV", la unidad reportada puede ser número de piezas o fragmentos acompañada de kilogramos. Los corales pétreos deben declararse como "COR" con la unidad número de piezas y kilogramos.

En la sección 6a), actualizar las explicaciones de "vivos" y "corales (en bruto)" en la tabla terminológica:

Descripción	Código de comercio	Unidad preferida	Alternativa Unidad adicional	Explicación
live (corales pétreos vivos)	LIV	no.	(kg) (además del número)	animales o plantas vivos, excluyendo los juveniles <del>jaramugos de peces</del> vivos – véase FIG. Nota: los corales pétreos vivos deben registrarse como "número de especímenes, piezas o fragmentos"; toda la roca de coral <del>pétreo (roca viva y sustrato)</del> debe registrarse como "COR".

**Commented [PFFPA6]:** Como se indica en la nota del punto 1 de los resultandos de la Resolución Conf. 11.10 (Rev. CoP15): "1. ADOPTA las definiciones de arena de coral pétreo, fragmentos de coral pétreo, roca de coral pétreo, coral pétreo vivo y coral pétreo muerto que figuran en el Anexo a la presente resolución", se sugiere hacer un cambio en la definición "Coral (en bruto)" ya que el término "coral en bruto" sería aplicable tanto al coral pétreo vivo como al muerto, por lo que se sugiere cambiar de "en bruto" a "coral pétreo", diferenciándolo del vivo (live – LIV). El término "(en bruto)" haría referencia a piezas de coral pétreo que se usarían en trabajos manuales o artesanías y joyas en los que se aplicaría a corales específicos como el coral negro y otros utilizados para adornos, mismos que entrarían en otras definiciones como "Talla" (CAR) o "Joyas" (JWL) de acuerdo con la sección 6a) (6. Terminología; a) Descripción de los especímenes y unidades de cantidad) de las "Directrices para la preparación y presentación de los informes anuales CITES".

**Commented [PFFPA7]:** No hay figura en este anexo

**Commented [PFFPA8]:** Dado que no siempre es posible identificar o diferenciar especímenes, se sugiere el uso del término pieza o fragmento. De acuerdo a lo indicado en las definiciones propuestas, se sugiere eliminar la referencia a roca viva como comercio de coral, ya que se refiere a roca o piedra que no esté cubierta por las especies de coral pétreo incluidas en los apéndices de la CITES.

Coral <b>pétreo</b> (en bruto)	COR	no. <b>kg</b> (para <b>roca viva y</b> <b>corales</b> <b>pétreos</b> <b>muertos</b> )	Kg <b>no.</b> ( <b>además</b> <b>del peso en</b> <b>kg</b> )	<p>Coral pétreo se refiere principalmente a lo definido como arena de coral pétreo y fragmentos de coral pétreo, <b>en bruto o no trabajado y roca de coral (también roca viva y sustrato) [como se define en la Resolución Conf. 11.10 (Rev. CoP15)]</b>. La roca de coral <b>pétreo</b> debe registrarse como "<i>Scleractinia</i> spp."</p> <p>Nota: el comercio debe registrarse por número de piezas, sólo si los especímenes de coral se transportan en agua.</p> <p><b>La roca viva (transportada húmeda en cajas) debe registrarse en kg; el sustrato de coral debe registrarse como número de piezas (ya que se transportan en agua como sustrato al que están pegados corales no CITES);</b></p> <p><b>Los corales <b>pétreos</b> muertos también deben indicarse en número de piezas.</b></p>
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**Respuesta a la Notificación a las Partes 2023/081,  
respecto a comercio en corales pétreos**

**Factores de conversión.** La CONABIO revisó la publicación en la que se basan los factores de conversión (Green y Shirley, 1999) empleados para convertir número de piezas y peso total de corales e identificamos que a pesar de que el peso por pieza de coral parece tener una distribución normal (ver Figura 1), los autores refieren que existen diferencias de peso por género. Tomando esto en cuenta, utilizar el promedio de valores entre géneros para las conversiones puede ocasionar subestimaciones o sobreestimaciones del peso de los ejemplares en comercio internacional.

Por tanto, si el comercio se reporta a nivel de género o especie, se sugiere aplicar el factor de conversión más apropiado para dicho género o especie en comercio si está disponible y no el promedio de valores entre géneros (Tabla 9 de la publicación, Figura 2).

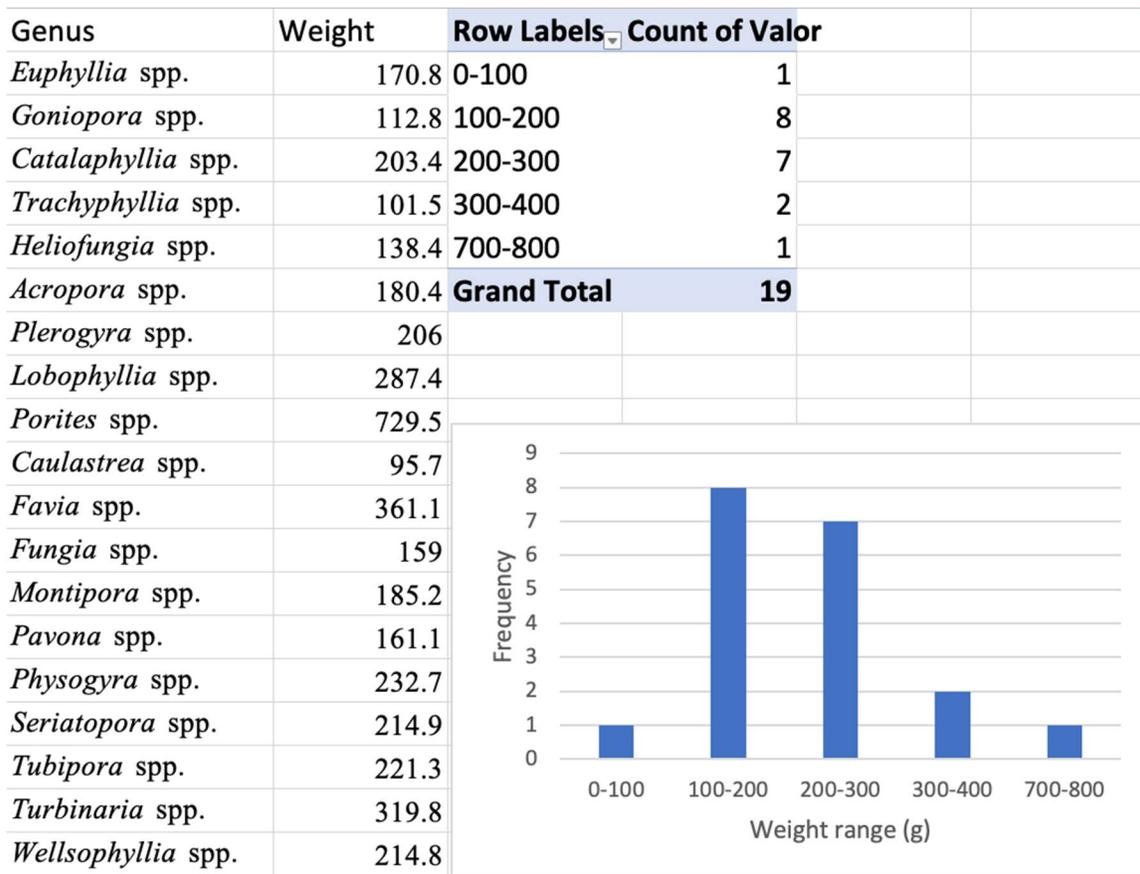


Figura 1. Gráfica de frecuencias a partir de los datos proporcionados en la publicación de Green y Shirley (1999) con el peso promedio por género de los corales en comercio internacional.

**Table 9. The mean weights and dimensions of pieces of live coral in the aquarium trade**

	Weight (g)	Height (mm)	Area (cm <sup>2</sup> )	n
<i>Euphyllia</i> spp.	170.8 ± 19.3	71.9 ± 3.9	169.6 ± 24.8	114
<i>Goniopora</i> spp.	112.8 ± 28.3	51.5 ± 3.9	138.8 ± 15.3	120
<i>Catalaphyllia</i> spp.	203.4 ± 54.0	56.0	-	9
<i>Trachyphyllia</i> spp.	101.5 ± 15.1	44.9 ± 2.4	121.4 ± 17.0	84
<i>Heliofungia</i> spp.	138.4 ± 45.1	19.1 ± 2.6	192.2 ± 24.4	28
<i>Acropora</i> spp.	180.4 ± 35.0	96.5 ± 10.5	259.2 ± 42.1	27
<i>Plerogyra</i> spp.	206.0 ± 39.0	66.5 ± 1.6	170.7 ± 30.7	24
<i>Lobophyllia</i> spp.	287.4 ± 77.9	75.2 ± 45.0	260.7 ± 66.7	31
<i>Porites</i> spp.	729.5 ± 145.0	72.0 ± 6.6	241.3 ± 81.8	13
<i>Caulastrea</i> spp.	95.7 ± 40.4	74.1 ± 5.9	181.1 ± 54.3	20
<i>Favia</i> spp.	361.1 ± 70.1	54.3	236.0	6
<i>Fungia</i> spp.	159.0 ± 27.8	14.0 ± 2.3	153.4 ± 55.8	36
<i>Montipora</i> spp.	185.2 ± 60.6	68.0	166.0 ± 31.8	8
<i>Pavona</i> spp.	161.1 ± 33.4	67.6 ± 5.5	126.0 ± 37.2	8
<i>Physogyra</i> spp.	232.7 ± 73.8	99.7 ± 10.8	226.9 ± 90.5	16
<i>Seriatopora</i> spp.	214.9 ± 95.9	92.7 ± 17.0	116.8 ± 19.6	6
<i>Tubipora</i> spp.	221.3 ± 79.0	67.5 ± 4.7	338.8 ± 54.7	40
<i>Turbinaria</i> spp.	319.8 ± 138.1	71.2 ± 18.2	230.8 ± 31.9	6
<i>Wellsophyllia</i> spp.	214.8 ± 39.2	42.5 ± 2.8	241.3 ± 28.8	26
<b>All Genera</b>	<b>Maximum</b>	1703.0	144.0	793.2
	<b>Minimum</b>	27.8	5.0	4.7
	<b>Median</b>	166.4	56.0	154.8
	<b>Mean</b>	206.1 ± 13.1	58.6 ± 3.1	180.1 ± 10.1

**Notes:**

Area was calculated as an ellipse from the longest horizontal surface axis and the axis perpendicular to the longest surface horizontal axis. Measurements were obtained from specimens in nine of the top ten genera in the live trade (shaded in order, see Figure 8). Means are given with ± 95% confidence interval.

Figura 2. Tabla con valores de peso, área y tamaño de los principales géneros de coral en comercio internacional.

**Referencias:**

Green, E.P. and Shirley, F. 1999. The global trade in corals. Cambridge, UK.

## Consultation on trade in stony corals

1. At the request of the Animals Committee and pursuant to Decision 19.177, the Secretariat invites Parties, especially coral reef nations, and stony coral experts and other relevant stakeholders to provide comments and information on the following:

- a) possible amendments to Resolution Conf 11.10 (Rev. CoP15) on Trade in stony corals as shown in Annex 1 to this Notification, aimed at clarifying terms, codes and definitions used in trade and to achieve global consistency in permitting and reporting;
- b) possible revisions to the Guidelines for the preparation and submission of CITES annual reports and Guidelines for the preparation and submission of the CITES annual illegal trade report as shown in Annex 2 to this Notification;
- c) the appropriateness of current conversion factors used<sup>1</sup> to analyze trade in wild stony corals for the CITES Review of Significant Trade process and potential alternative conversion factors and methodologies;
- d) appropriate units of measure of stony corals in trade, e.g. number of specimens or kilogrammes;
- e) any other issues relating to definitions and reporting of coral rock in international trade to provide sufficient clarity and avoid confusion in relation to what 'coral rock' means, what forms of coral rock are subject to the provisions of the Convention and how coral rock should be reported in trade; and
- f) any other issues related to the implementation of the Convention with respect to trade in stony corals.

### **New Zealand response (submitted by New Zealand (NZ) CITES Management Authority (MA))**

The trade in stony corals is particularly relevant for the NZ CITES MA. They overwhelmingly make up the taxa with the greatest number of seizures/surrenders of CITES-listed species coming through New Zealand borders. As an example, during 2017-2019, New Zealand saw over 2.3 tonnes of illegally imported *Scleractinia* coral.

With the goal of trying to make the work more efficient, but also removing human errors in identification, the NZ CITES MA team decided to no longer separately weigh and record species of stony coral but instead record imports under the order, *SCLERACTINIA*. This avoids officers having to separate coral into smaller taxa and weigh them which takes up a lot of time.

One significant change proposed to Resolution Conf 11.10 (Rev. CoP15) is the unit of measurement for coral (raw) seizures. Currently the preferred unit is no., with kg being the alternate. The proposed change would remove kg as a unit for recording coral substrate and dead coral altogether. This would mean counting individual coral pieces, which is much less efficient than weighing a bag on a weighing scale. Additionally, one piece of coral may break into multiple pieces. The lowest common denominator would appear to be weight rather than pieces.

<sup>1</sup> Conversion factors are available in the Table in Box 2 on p. 3 of AC32 Doc. 14.2 Annex 1.

<https://cites.org/sites/default/files/documents/EAC32-14-02.pdf>. Source of conversion factors: Green, E.P. and Shirley, F. 1999. The global trade in corals. Cambridge, UK.

<https://www.biodiversitylibrary.org/item/119170#page/6/mode/1up>

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Given the volumes of stony coral that we see entering New Zealand, our preference would be to have kg remain as the unit.

Contact details: New Zealand CITES Management and Scientific Authorities

Department of Conservation, 18-32 Manners Street, Wellington 6011, New Zealand

Email: [cites@doc.govt.nz](mailto:cites@doc.govt.nz)

**Response of the United Kingdom of Great Britain and Northern Ireland to Notification No. 2023/081 (12<sup>th</sup> July 2023)**

**Summary:** Possible amendments to [Res Conf 11.10 \(Rev. CoP15\)](#) are suggested. In essence we are supportive of those which add clarity and/or reiterate whether certain specimens are covered or not by the provisions of the Convention. Several amendments presented in [Notification 2023/081](#), however, do not in our view add clarity, indeed the definitions become less clear and more convoluted as a result. As ever, the UK supports better guidance to enable Parties to effectively implement the Convention.

**a) possible amendments to Resolution Conf 11.10 (Rev. CoP15) on *Trade in stony corals* as shown in Annex 1 to this Notification, aimed at clarifying terms, codes and definitions used in trade and to achieve global consistency in permitting and reporting**

## Annex

## Definitions

*Coral sand* – material consisting entirely or in part of finely crushed fragments of dead coral no larger than 2 mm in diameter and which may also contain, amongst other things, the remains of Foraminifera, mollusc and crustacean shell, and coralline algae. Not identifiable to the level of genus. In accordance with Resolution Conf. 9.6 (Rev. CoP16) on *Trade in readily recognizable parts and derivatives*, coral sand is not considered readily recognizable, and is therefore not covered by the provisions of the Convention.

*Coral fragments (including gravel and rubble)* – unconsolidated fragments of broken finger-like dead coral and other material between 2 and 30 mm measured in any direction, which is not identifiable to the level of genus. In accordance with Resolution Conf. 9.6 (Rev. CoP16) on *Trade in readily recognizable parts and derivatives*, coral fragments are not considered readily recognizable, and are therefore not covered by the provisions of the Convention.

### UK comments

- This is in line with the current Resolution that accepts coral fragments and coral sand cannot be readily recognised, and thus as such are not covered by CITES provisions. The UK considers the additional underlined text provides further clarity.
- Where specimens in trade are readily recognisable - see [Resolution Conf 9.6 \(Rev. CoP16\)](#) on *Trade in readily recognizable parts and derivatives* - then they should be subject to the provisions of CITES.

*Coral rock*<sup>1</sup> (*the collective term used for also live rock and substrate*) – hard consolidated material, >3 cm in diameter, formed of fragments of mostly/partly unidentifiable specimens of dead coral and which may also contain cemented sand, coralline algae and other sedimentary rocks. The term 'coral rock' should not be used on permits; which should instead refer to 'live rock' or 'substrate'. Unlike fossil corals, 'coral rock' is harvested from living coral reef ecosystems, mostly from shallow reef flats near the shoreline at less than 1 m depth.

### UK comments

- The UK considers the original text was quite clear, however the UK supports the amendments in brackets after '*Coral rock*<sup>1</sup>' and 'The term 'coral rock' should not be used on permits'.
- The UK considers the other proposed additions are unnecessary, noting that coral 'fragments' is already defined above and new text introduces some ambiguity by allowing 'partly unidentifiable specimens of dead coral'. Would prefer the additional text 'mostly/partly unidentifiable specimens' be excluded,

- We do not support the inclusion of the new text ' Unlike fossil corals, 'coral rock' is harvested from living coral reef ecosystems, mostly from shallow reef flats near the shoreline at less than 1 m depth noting that some Parties (including UK) consider substrate to be fossilized coral
- Taking our comments into account would mean the text would read: *Coral rock*<sup>1</sup> (*the collective term used for ~~also~~ live rock and substrate*) – hard consolidated material, >3 cm in diameter, formed of fragments of ~~mostly/partly unidentifiable specimens of~~ dead coral and which may also contain cemented sand, coralline algae and other sedimentary rocks. The term 'coral rock' should not be used on permits; which should instead refer to 'live rock' or 'substrate'. ~~Unlike fossil corals, 'coral rock' is harvested from living coral reef ecosystems, mostly from shallow reef flats near the shoreline at less than 1 m depth.~~

*'Live rock'* is the term given to large pieces of coral rock (usually > 1 kg each) to which are attached live specimens of invertebrate species and coralline algae not included in the CITES Appendices. Live rock should not be covered by CITES-listed coral species. Live rock is used as decoration and habitat in aquariums and is usually and which are transported in moist condition, in order to keep the attached organisms alive., but not in water, in crates. Live rock is subject to the provisions of the Convention.

#### UK comments

- **The UK recommends the following definition for 'Live rock'** (changes from definitions in Res Conf 11.10 underlined and ~~struck through~~): *'Live rock' is the term given to pieces of coral rock to which are attached live specimens of invertebrate species and coralline algae not included in the CITES Appendices and which are. Live rock should not be covered by CITES-listed coral species. Live rock is transported moist, but not in water, in crates. Live rock is subject to the provisions of the Convention.*
- The UK does not consider the proposed amendments add increased clarity, although we tacitly support the inclusion of 'Live rock should not be covered by CITES-listed coral species', which although it reiterates the previous sentence, is emphatic and helpful. We do not support the other amendments. To avoid any misinterpretation, we support the inclusion of the final sentence 'Live rock is subject to the provisions of the Convention.'
- The UK recommends that 'usually > 1 kg each' is not included; although potentially a useful indicator and guide to the size of pieces of live rock, we would note it is an approximation and smaller pieces may be shipped that still meet the definition. One result might be the use of the incorrect term on a permit based on size alone (one of which is subject to the provisions of the Convention, the other which might not be).
- It would be preferable to specify that live rock is only shipped moist and not submerged to ensure live CITES-listed aquatic species, including corals, cannot be shipped under an erroneous parts/derivatives code. The aquarium trade has informed the UK CITES Authorities that shipping live rock submerged is economically unviable due to comparatively high shipping costs. If this does occur it should arouse suspicions of non-compliance. Notwithstanding previous comments, we consider that 'transported moist' is clear and preferable to 'transported in moist condition'.

*'Substrate'* is the term given to small pieces of coral rock (usually < 0.5 kg each), to which are attached invertebrates (of species not included in the CITES Appendices. Substrate is used as pedestal (base) for attached invertebrates, such as sea anemones or soft corals and is therefore and which are transported in water to keep these organisms alive, like live corals. Substrate should not be covered by CITES-listed live or dead coral. Coral rock is not identifiable to the level of genus but is recognizable to the level of order. The definition excludes specimens defined as dead coral. Whether substrate is subject to the provisions of the Convention depends on Parties interpretation of fossil coral. Parties that consider substrate to be fossilized coral do not consider it to be subject to the Convention's provisions.

#### UK comments

- **We support retaining the original definition in Res Conf 11.10:** *‘Substrate’ is the term given to pieces of coral rock to which are attached invertebrates (of species not included in the CITES Appendices) and which are transported in water like live corals. Coral rock is not identifiable to the level of genus but is recognizable to the level of order. The definition excludes specimens defined as dead coral.*
- The UK considers that the proposed amendments are less clear than the original wording and recommends the additions are not supported. The amendments, by including indefinite words such as ‘large’ and ‘small’ creates a potential need for these to be defined in this context, which seems an unnecessary and time-consuming task.
- It is possible that with the addition for ‘Substrate’ of ‘(usually <0.5 kg each)’ and for ‘Live rock’ of ‘(usually > 1 kg each)’ could create a cavity between 0.5 kg and 1 kg, which despite the differences between their use and application could cause problems, and we think these approximations should not be used. As mentioned above, it could lead to use on permits of the incorrect term based on size alone (one of which is subject to the provisions of the Convention, the other which potentially might not be).
- The UK does not consider mention of a potential use for substrate is strictly necessary and does not support the inclusion of ‘Substrate is used as pedestal (base) for attached invertebrates, such as sea anemones or soft corals.’
- The UK considers final additional underlined sentence introduces subjective uncertainty about Parties decisions in relation to fossilised – ‘Whether substrate is subject to the provisions of the Convention depends on Parties interpretation of fossil coral; Parties that consider substrate to be fossilized coral do not consider it to be subject to the Convention’s provisions.’ Res Conf 11.10 (Rev CoP15) currently recognises *‘that stony corals that are fossilized are not subject to the provisions of the Convention’* and *‘Rock that does not contain any corals or in which the corals are fossilized is not subject to the provisions of the Convention.’* However, should the final sentence be accepted, for consistency we recommend it refers to ‘the provisions of the Convention’ rather than ‘the Convention’s provisions.’ Agreeing a definition for ‘fossilised coral’ would, in our view, be a better outcome.

**b) possible revisions to the *Guidelines for the preparation and submission of CITES annual reports and Guidelines for the preparation and submission of the CITES annual illegal trade report* as shown in Annex 2 to this Notification;**

Description	Trade term code	Preferred unit	Alternative Additional unit	Explanation
live	LIV	no.	(kg) (in addition to the no.)	live animals and plants, excluding live fingerling fish – see FIG. NB: <u>live stony corals should be recorded as ‘number of specimens’; all coral rock (live rock and substrate) should be reported as ‘COR’.</u>
coral (raw)	COR	no: kg (for live rock); no. (for substrate and dead corals)	kg	raw or unworked coral and coral rock (also live rock and substrate) [as defined in Resolution Conf. 11.10 (Rev. CoP15)]. Coral rock (live rock and substrate) should be recorded as ‘Scleractinia spp.’ NB: <u>the trade should be recorded by number of pieces only if the coral specimens are transported in water.</u> Live rock (transported moist in boxes), should be reported in kg; coral substrate should be reported as number of pieces (since these are transported in water as the substrate to which non-CITES corals are attached); <u>dead corals should also be reported as number of pieces.</u>

## UK comments

- The UK is not supportive of changing the general title “Alternative unit” to “Additional unit”, this appears overly prescriptive and may not always be possible (e.g., due to physical or capacity limitations or other restrictions). Prefer to retain title as ‘Alternative unit’.
- LIV: the UK supports the new explanation text for trade term LIV but is not convinced by the new ‘Alternative unit’ text in brackets, i.e. (*in addition to the no.*) noting that this would apply to all live animals and plants and not just corals. Although we do recognise that if Parties reported number of specimens and weight this could enable better, more thorough and taxa-specific estimations of conversion rates but only if weights can be reported accurately. We note concerns from trade organisations that the recording of live coral in kilograms as well as numbers would not capture the weight of either the coral or the substrate/base, just the combined weight. Coral bases can vary due to the density, size and type used. Therefore, this may not shed light on actual harvest of coral but would likely lead to an increase in work for exporters.
- COR: the UK supports the amendments of the preferred unit, which correspond better with the definitions of ‘live rock’ and ‘substrate’. *However*, the UK does not support the preferred unit for dead coral as proposed, noting that dead corals are not usually transported in water and therefore reporting weight in these cases would be preferable to no. of pieces. Accordingly we do not support the deletion of “*NB: the trade should be recorded by number of pieces only if the coral specimens are transported in water*” and do not agree to the addition of “dead corals should also be reported as number of pieces”.

**c) the appropriateness of current conversion factors used to analyse trade in wild stony corals for the CITES Review of Significant Trade process and potential alternative conversion factors and methodologies;**

**d) appropriate units of measure of stony corals in trade, e.g. number of specimens or kilogrammes;**

**e) any other issues relating to definitions and reporting of coral rock in international trade to provide sufficient clarity and avoid confusion in relation to what ‘coral rock’ means, what forms of coral rock are subject to the provisions of the Convention and how coral rock should be reported in trade;**

**f) any other issues related to the implementation of the Convention with respect to trade in stony corals.**

## UK Comments

**Fossil Coral:** Although there has been an annotation exempting fossil corals from the provisions of the Convention for many years, agreeing a definition of what constitutes a fossil coral has not been possible. However, based on a study commissioned by JNCC from the Universities of Newcastle & Edinburgh (way back in 2001)<sup>1</sup> the UK has taken the line that nearly all coral substrate could be considered fossil and thus exempt from the provisions of the Convention. The UK considers it would be beneficial to try and agree a ‘working definition’ of what constitutes a ‘fossil coral’ rather than leaving it to Parties different interpretations.

**Re-exports:** it may also be interesting to facilitate greater understanding of the trade in stony corals and challenges for implementation and NDFs, to carry out an analysis of international trade in stony corals that

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<sup>1</sup> Le Tissier, M. D.A. & Scoffin, M. D.A. (2001) ‘*Distinguishing fossilised and non-fossilised corals in international trade*’. Report submitted by the United Kingdom Scientific Authority (fauna) for consideration by the coral working group of the CITES Animals Committee (17<sup>th</sup> meeting, Hanoi, 30 July – 3 August 2001). Centre for Coastal Management, University of Newcastle Upon Tyne.

transit through third countries that also export their own corals. For example, trade in source code F corals from Cambodia and the Philippines (exported via Micronesia), wild corals exported from Cambodia via Korea and Vietnam, Australian origin corals re-exported from Indonesia, and trade in source C corals from Micronesia re-exported from the Marshall Islands.

Cayman Islands (UK)

**From:** Bothwell, John <[John.Bothwell@gov.ky](mailto:John.Bothwell@gov.ky)>  
**Sent:** Wednesday, 12 July, 2023 8:13 PM  
**To:** Karen Gaynor <[karen.gaynor@cites.org](mailto:karen.gaynor@cites.org)>  
**Subject:** Notification 2023/081 Trade In Stony Corals

Dear Ms Gaynor,

Thank you to the Secretariat for undertaking the arduous task of reconsidering Conf. Res. 11.10 regarding the trade in stony corals (Notification 2023/081). I would like to proffer a few comments, from the perspective of a regulator associated with low level trade in corals.

- 1) Accepting that corals in trade can often only be referred to as *Scleractinia spp.* is a welcome change and fully endorsed. This will relieve a lot of the challenge in properly regulating this trade.
- 2) By now having this general category the inability to identify coral products – sand, fragments, or anything else – to the species or even genus level is no longer an impediment to accurate management of the trade. This means that sand and fragments can again be brought under CITES control, recognising the threat that their procurement has on live corals and other CITES-listed species so that non-detriment findings for their trade will be an important guarantor of sustainable harvest of these products just as CITES is supposed to be.
- 3) Coral Rock is a useful term, but I appreciate the Convention wishing to move away from it as it is so broad. However I think it still has utility precisely for describing the type of unidentifiable but clearly or known to be pieces of coral that it currently covers. We encounter a small / occasional trade in ‘coral rock’ that has been worked into curios or art of various descriptions.
- 4) We similarly encounter a regular but very small trade in coral samples for scientific purposes – not identifiable as coral by anything other than the label on the sample container.
- 5) Substrate is a problematically broad term much like coral rock before it. A better term might be “live rock – small”. This more accurately describes the material being referred to in the draft Resolution.
- 6) Live rock and ‘substrate’ should be covered by the Convention. I recognise that the problem is that live rock & substrate may not even be actual coral much less taken from the wild for the purpose of export. However some will be and presents a threat to endangered CITES-listed corals, perhaps just not a primary threat. By including it all in two simple categories of ‘Live Rock (large/small) – *Scleractinia spp.*’ The tracking is eased but still gives a useful indication of level of trade and it can be determined if the exports and imports are being properly reported by all parties and whether the level of trade is such that it is a potential threat to coral reefs.

I would therefore suggest some alternate terms:

- A) Coral Sand - material consisting entirely or in part of finely crushed fragments of dead coral no larger than 2 mm in diameter, which is not identifiable to the level of genus, to be permitted and reported in trade as “*Scleractinia spp.*” irrespective of whether the coral sand contains Scleractinian corals, non-scleractinian corals, or a mixed composition, or other material, or coral fragments, for ease of identification and reporting.
  - i) Code SND; reported in kilograms, secondarily in other volume measurements, e.g., cubic yards
- B) Coral fragments – unconsolidated fragments of broken dead coral and other material between 2 and 30 mm measured in any direction, which is not identifiable to the level of genus, to be permitted and reported in trade as “*Scleractinia spp.*” irrespective of whether

the coral fragments contain Scleractinian corals, non-scleractinian corals, or a mixed composition, or other material, for ease of identification and reporting.

- i) Code FRG; reported in kilograms, secondarily in pieces
- C) Coral Rock – hard consolidated material, >3 cm in diameter, formed of fragments of mostly/partly unidentifiable specimens of dead coral and which may also contain cemented sand, coralline algae and other sedimentary rocks. – Includes jewellery and art pieces but excludes Live Rock.
  - i) Code RCK; reported in pieces, secondarily in kilograms
- D) Live Rock (Large) - pieces of coral rock (usually > 1 kg each) to which are attached live specimens of plant or algae or invertebrate species and coralline algae. Live rock (Large) is used as decoration and habitat in aquariums and is usually transported in moist condition, in order to keep the attached organisms alive. To be permitted and reported in trade as “Scleractinia spp.” irrespective of whether the Live Rock (Large) contains Scleractinian corals, non-scleractinian corals, or a mixed composition, or other material, for ease of identification and reporting.
  - i) Code LRL; reported in kilograms, secondarily in pieces
- E) Live Rock (Small) - pieces of coral rock (usually < 0.5 kg each), to which are attached live specimens of plant or algae or invertebrate species and coralline algae. Live Rock (Small) is usually used as a pedestal (base) for individual attached invertebrates, such as sea anemones or soft corals and is therefore usually transported in water to keep these organisms alive, like live CITES-listed corals. To be permitted and reported in trade as “Scleractinia spp.” irrespective of whether the Live Rock (Small) contains Scleractinian corals, non-scleractinian corals, or a mixed composition, or other material, for ease of identification and reporting.
  - i) Code LRS; reported in pieces, secondarily in kilograms
- F) Dead Coral – No Change - identifiable to the level of species or genus, and covered by the convention
  - i) Code COR; reported in pieces, secondarily in kilograms
- G) Live Coral – No Change - identifiable to the level of species or genus, and covered by the convention
  - i) Code LCR; reported in pieces, secondarily in kilograms
- H) Coral – All other specimens of coral not included above, and includes scientific samples, identifiable to the level of genus.
  - i) Code CRL; reported in pieces, secondarily in kilograms

While the trade which the Cayman Islands routinely see is very, very, small on a global scale I submit that a system of categories similar to the above covers everything in trade with sufficient specificity and simplicity to be useful.

The Cayman Islands would be willing to participate in the Animals Committee’s intersessional working group on trade in stony corals, in any or all capacities as a coral reef nation, a CITES Party (indirectly) and a stakeholder in the trade. Recognising that our participation in the trade is very limited and expressing our confidence that even without our direct participation in the working group that the Secretariat and the Animals Committee will produce a proposed revision to Res. Conf. 11.10 (and Res. Conf. 9.6 if necessary) that advances trade in stony corals for all parties while protecting corals and other CITES-listed species.

**John Bothwell** – Manager, Legislation Implementation & Coordination Unit

Secretary, CITES Scientific Authority  
Secretary, National Conservation Council  
Department of Environment, Cayman Islands

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DEPARTMENT OF  
ENVIRONMENT  
CAYMAN ISLANDS GOVERNMENT

United States of America



# United States Department of the Interior



FISH AND WILDLIFE SERVICE  
International Affairs  
5275 Leesburg Pike, MS: IA  
Falls Church, VA 22041-3803

September 30, 2023

IN REPLY REFER TO:  
FWS/DMA/ TRE 1-12 d.

CITES Secretariat  
International Environment House  
11 Chemin des Anémones  
CH-1219 Châtelaine, Geneva  
Switzerland

VIA EMAIL: [karen.gaynor@cites.org](mailto:karen.gaynor@cites.org), [info@cites.org](mailto:info@cites.org)

Dear Karen,

Enclosed please find the U.S. response to Notification to the Parties No. 2023/81 – *Trade in stony coral*. The United States, as a coral reef nation, would also like to express its interest in participating in the Animals Committee's intersessional working group on trade in stony corals.

Please let me know if you have any questions regarding the response. Thank you for your efforts on this issue.

Sincerely,

Naimah Aziz  
Head, Division of Management Authority  
U.S. Fish and Wildlife Service

Enclosure

**U.S. responses to Notification to the Parties No. 2023/81:**  
*Consultation on trade in stony corals*

**\*The CITES Notification text is in BOLD below\***  
\*U.S. responses are in regular text below\*

Consultation on trade in stony corals

At the request of the Animals Committee and pursuant to Decision 19.177, the Secretariat invites Parties, especially coral reef nations, and stony coral experts and other relevant stakeholders to provide comments and information on the following:

**a) possible amendments to Resolution Conf 11.10 (Rev. CoP15) on *Trade in stony corals* as shown in Annex 1 to this Notification, aimed at clarifying terms, codes and definitions used in trade and to achieve global consistency in permitting and reporting;**

The United States supports a closer scrutiny of the Definitions Section in order to ensure that the proposed changes do not introduce new ambiguities. For example, more clarity may be required in terms of distinguishing between live rock and substrate. There also may be some confusion among Parties on differing interpretations of fossil coral and substrate.

**b) possible revisions to the *Guidelines for the preparation and submission of CITES annual reports and Guidelines for the preparation and submission of the CITES annual illegal trade report* as shown in Annex 2 to this Notification;**

The United States does not support the proposed change in Section 6a) to change a column heading in the 'Description of specimens and units of quantity' table found in Section 6a of the Guidelines for the preparation and submission of CITES annual reports (November 2022). The proposal to rename the "Alternative unit" heading as "Additional unit" would affect all Descriptions and Trade term codes, and that is beyond the scope of this working group. If the only reason for this proposed change is to include the unit of measure KG in addition to NO for stony corals only, then that can be added to the Explanation: e.g., "NB: live stony corals should be recorded as 'number of specimens; live stony corals can also be recorded in kilograms but only in addition to 'number of specimens'; all coral rock (live rock and substrate) should be reported as 'COR'."

**c) the appropriateness of current conversion factors used to analyze trade in wild stony corals for the CITES Review of Significant Trade process and potential alternative conversion factors and methodologies;**

Nothing to report.

**d) appropriate units of measure of stony corals in trade, e.g. number of specimens or kilogrammes;**

The United States supports the proposed changes to the 'Preferred unit' language.

**e) any other issues relating to definitions and reporting of coral rock in international trade to provide sufficient clarity and avoid confusion in relation to what 'coral rock' means, what forms of coral rock are subject to the provisions of the Convention and how coral rock should be reported in trade; and**

Nothing to report.

**f) any other issues related to the implementation of the Convention with respect to trade in stony corals.**

Nothing to report.



**Ornamental Aquatic Trade Association**  
ornamentalfish.org



**Ornamental Fish International**  
ofish.org

## **Notification No. 2023/081 concerning Consultation on trade in stony corals**

Joint submission from the Ornamental Aquatic Trade Association (OATA)  
and Ornamental Fish International (OFI)

### Introduction

- The international trade in coral products supports livelihoods in 142 countries around the world.
- Live corals are sourced in various ways with some species being wild harvested (many with quotas), whilst others are maricultured, often on or near coral reefs. For many species, farmers conduct asexual reproduction by “fragging” small pieces of living coral from larger, mature colonies. These are then grown on and sold into the aquarium trade.
- Coral trade is considered low volume but high value when compared to other uses of coral, for example as construction material.
- Maricultured coral can contribute to reef restoration efforts.
- Given the global importance of the coral trade for people and the environment, it is important that international regulations are practical, easy to understand, and properly reflect the way the trade operates.
- Below are some suggested edits to the proposed definitions in Notification No. 2023/081 and some considerations when recording coral units to reflect the reality of the coral trade.

### Coral fragments

With our proposed changes incorporated, we believe the definition should read:

*“Coral fragments (including gravel/rubble) – unconsolidated fragments of broken finger-like dead coral and other material between 2 and 30 mm measured in any direction, ~~which is not identifiable to the level of genus.~~ In accordance with Resolution Conf. 9.6 (Rev. CoP16) on Trade in readily recognizable parts and derivatives, coral fragments are not considered readily recognizable, and are therefore not covered by the provisions of the Convention”*

Our proposed changes to the definition:

- 1) “Fragment” or “Frag” is the term most commonly used in the ornamental trade for a piece of live coral intended for an aquarium. It refers to a piece of living coral which has been cut from a larger colony but will continue to grow. Coral gravel/rubble traded for ornamental aquariums is typically shipped dry and sold at different grain sizes for use as decoration for the base of an

aquarium or as a construction material for coral bases (see substrate definition below). Given the clear distinction between these terms and potential confusion for those operating in the trade, it would be beneficial to rename “Coral fragments” to “Coral gravel/rubble”.

- 2) Coral gravel is traded as dry, dead pieces of coral found near coral reefs or mined inland, in a variety of grain sizes. Some pieces of coral gravel can still be identified down to genus level long after they have been part of a living colony through the shape of their corallites (structures on the skeleton) regardless of the size of individual pieces. As such, the ability to identify to genus level is irrelevant to reef conservation as they are not impacting on current live coral stocks. Therefore, we suggest removing the phrase “*which is not identifiable to the level of genus*”. Any conservation benefit of leaving coral gravel in situ does not change with identification of the genus and identifiable pieces of coral this size do not hold more value than unidentifiable pieces. This distinction does little more than create an administrative burden with no added value for the conservation of coral species. Additionally, as coral gravel is shipped dry, the harvesting of gravel does not provide a route for those attempting to smuggle live, CITES listed coral species and so identification of any genus found in coral gravel would not prevent any illicit trade. If there is danger of overharvesting coral gravel, this would be more effectively dealt with at a national/local level through regulation and enforcement.

#### Live rock

With our proposed changes incorporated, we believe the definition should read:

*‘Live rock’ is the term given to large pieces of coral rock (usually > 1 kg each) to which are attached live specimens of invertebrate species and coralline algae. ~~not included in the CITES Appendices. Live rock should not be covered by CITES-listed coral species.~~ Live rock is used as decoration and habitat in aquariums and is usually and which are transported in a moist condition (but not submerged in water) in order to keep the ~~attached~~ associated organisms alive, ~~but not in water, in crates.~~ Live rock is subject to the provisions of the Convention.*

Our proposed changes to the definition:

- 1) Live rock is utilised in aquariums to provide both decoration and filtration and so it is shipped in various sizes. It is not shipped submerged in seawater as the required bacteria can survive if kept only moist and shipping large quantities of live rock submerged in water would be economically unviable. The phrase “(usually > 1 kg each)” is removed because, although it is a useful indicator, it can be difficult to measure and smaller pieces may be shipped that still meet the rest of the definition. The important part of the updated definition is the method of shipping (see point 3 below).
- 2) We propose the removal of the phrase “*Live rock should not be covered by CITES-listed coral species.*” because live rock will accumulate many species whilst submerged and it would be impossible to ensure there is not a recently settled coral polyp of a listed species attached. Additionally, as live corals (both CITES and non-listed) are shipped submerged, the updated definition (see point 3 below) means that live rock is only shipped moist, never submerged in seawater. Any rock with live coral attached would be considered a substrate (see substrate definition below) and shipped submerged in sea water. Therefore, live rock would never be intentionally covered in CITES listed coral species and used as a route for smuggling live corals as they would not survive the shipping process.

- 3) A specification of only shipping live rock moist (not submerged) is retained in the proposed definition as it would prevent deliberate mislabelling of those wishing to ship live coral, as shipping live rock submerged is economically unviable due to the high costs of shipping. This would prevent those attempting to trade in CITES listed species under the guise of shipping live rock from doing so. Large pieces of rock with attached invertebrate species such as corals would be considered substrate and would have to be shipped submerged, which would incentivise collectors to remove as little rock as possible.
- 4) In addition to this we believe there should be an exception for synthetic live rock which should also be clearly defined. As synthetic live rock would only use non-CITES listed or synthetic materials, it should not be considered in the same way as live rock harvested from coral reefs or associated ecosystems. However, as it may be cured in situ or near to coral reefs, it may have similar attached species to live rock. We propose the following definition for synthetic live rock:

*“Synthetic live rock can exist in various forms. Some is shipped entirely dry, whilst some is created, left to become “live” near reef habitats and shipped moist in the same way live rock is. Synthetic live rock can be made from materials such as sand, coral fragments, cement or synthetic materials. It can be identified by its composite structure and occasionally by the shape of the pieces.”*

#### Substrate

With our proposed changes incorporated, we believe the definition should read:

*‘Substrate’ is the term given to small pieces of coral rock (usually < 0.5 kg each), to which are attached invertebrates (of species not included in the CITES Appendices. Substrate is used as pedestal (base) for attached invertebrates, such as sponges or sea anemones or soft corals and is therefore and which are transported in water to keep these organisms alive, like live corals. Substrate should not be covered by CITES-listed live or dead coral. Coral rock is not identifiable to the level of genus but is recognizable to the level of order. The definition excludes specimens defined as dead coral. Whether substrate is subject to the provisions of the Convention depends on Parties interpretation of fossil coral; Parties that consider substrate to be fossilized coral do not consider it to be subject to the Convention’s provisions. Coral substrate is not considered readily recognizable, and is therefore not covered by the provisions of the Convention.*

Our proposed changes to the definition:

- 1) Live corals (both CITES and non-listed) are shipped attached to a base, termed substrate. Substrate may be a piece of live rock but might also be synthetic and made from a variety of materials (including coral gravel above), especially for farmed individuals. Substrate is always shipped submerged in seawater to ensure the survival of the coral. Therefore, the phrase “(usually > 0.5 kg each)” is removed because it would be impractical to measure substrate when submerged, and detrimental to separate from the live attached coral to weigh. In addition, pieces smaller than 0.5kg may be shipped. The important part of the updated definition is that the shipping of substrate submerged is included.
- 2) Additionally, substrate is only present to support living invertebrates. If it is only shipped submerged, there is an incentive to produce smaller bases or only harvest the smallest amounts

of live rock from natural environments to limit weight. Therefore, requiring invertebrates to be attached to substrate and it being shipped submerged would decrease the likelihood of illegal live rock harvest.

- 3) We propose the term *“sea anemones or soft corals”* is removed and replaced with *“sponges or corals”*. Sea anemones are typically not shipped with a substrate and so this could be confusing. Additionally, all corals require substrate for shipping and so this should be clear within the definitions.
- 4) We suggest the phrase *“Substrate should not be covered by CITES-listed live or dead coral”* is removed to allow sustainable farming of coral species to continue. If this phrase remains in the definition, it would impact those farming CITES listed coral species. Sustainably farmed corals are often grown on bases made of non-CITES listed material such as coral gravel/rubble and sand held together with cement. In some cases, bases can often be indistinguishable from live rock depending on the materials used and any other species (e.g. algae, sponges) which may have colonised the base. The inclusion of the phrase *“Substrate should not be covered by CITES-listed live or dead coral”* would mean that coral farmers would not be able to sell their corals grown on bases of this type. Coral farming substantially relieves pressure from natural ecosystems and provides financial incentive for local people to protect these areas and therefore should be supported by the Convention.
- 5) We suggest the phrase *“Whether substrate is subject to the provisions of the Convention depends on Parties interpretation of fossil coral; Parties that consider substrate to be fossilized coral do not consider it to be subject to the Convention’s provisions”* is removed as the provisions of CITES should be consistent across all Parties. This phrase could also lead to illogical situations. For example, if a party decided that substrate was subject to the provision of CITES it could request that a farmed, non-CITES listed coral species, on a base made of cement and non-CITES listed coral fragment has CITES paperwork.

#### Considerations regarding units of recording trade in live coral specimens

The trade in live coral (both CITES and non-listed species) is highly varied, with many different species traded and various sizes. Therefore, it is essential that defined, appropriate measurement units are used when recording coral trade to accurately record amounts harvested and to allow for easier analysis of the trade in the future. In addition, a clear set of guidelines will ensure adherence by all parts of the supply chain. There are benefits and issues with using either weight or pieces when recording coral trade.

#### **Weight**

This is better for some species, such as *Acropora* spp., as colonies can vary in size. It is also useful for species with dense, heavier skeletons or those which may have limited substrate attached as it is likely to more accurately record the quantity of coral harvested.

However, there are issues with the comparison of landed weight vs wet weight and the inclusion of any attached substrate which makes assessing the actual weight of coral harvested difficult. Additionally, weight is less suitable for individuals with light skeletons or solitary corals and so even a relatively low quota could lead to over harvesting.

#### **Pieces**

This is better for solitary corals or those with lighter skeletons such as *Scolymia* spp. as it is a more accurate representation of the actual harvest of these species. Additionally, most corals harvested for the aquarium trade will have a maximum size at collection. Therefore, the total weight harvested can be estimated from pieces - it will not be more than the maximum weight of a colony multiplied by the number of individuals taken.

Issues can arise from recording coral trade in pieces as some species are traded by the polyp. This could lead to a situation where one piece is collected from the wild before it is fragged into multiple pieces for sale in aquariums, which makes analysing harvest levels difficult. This becomes more of an issue as quotas are reduced and so more fragging occurs to meet demand. Differences in number of pieces could be highlighted with a tick box on exporter forms to identify if a specimen is going to be sold by the polyp and not per landed piece.

A possible method to accurately record coral trade is the use of species-specific units if some of the issues above can be rectified. Another solution is the recording of both measurement units for all species, but data is analysed and decisions made on species-specific units.

## CITES Notification to the Parties No. 2023/081, Geneva, 12 July 2023

### Consultation on trade in stony corals Submission by Pro-Vision Reef Inc., Australia

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## **PART 1: INTRODUCTION**

1. Pro-Vision Reef Inc. is the peak body representing licence holders in the Queensland Coral and Queensland Marine Aquarium Fish fisheries. Our mission is to engender community and market confidence in the marine aquarium industry on the Great Barrier Reef and in the Coral Sea through commitment to the highest standards of environmental performance. Our association contributes in a practical way to driving down ecological risk in the fisheries and assisting achievement of management objectives for the fisheries through Pro-Vision Reef's *Stewardship Action Plan*.<sup>1</sup> We work in collaboration with government fishery managers and scientists from the ARC Centre of Excellence for Coral Reef Studies at James Cook University.
2. We welcome the review of Resolution 11.10 Rev.CoP15, *Trade in stony corals*, the Guidelines and other issues related to international coral trade. As non-CITES specialists, our experience allows ProVision Reef to present a unique industry perspective on the history and values of global coral trade as well as the irregularities and the obstacles that industry may encounter when meeting fisheries management objectives and CITES requirements.
3. As non-CITES specialists, we experienced significant difficulties when trying to understand the reason for exaggeration of Australian raw coral export data that only came to our attention when our annual Queensland harvest of ~93 tonnes was suddenly reported in UNEP-WCMC reports to an Australian total between 327-410 tonnes of Raw Coral gross exports (plus live coral) for each year 2014-2016.<sup>2</sup> Other non-CITES specialists, such as harvesters, traders, low-level government staff, in developing nations will certainly encounter the same difficulties.
4. While this submission describes the reasons for errors in the reporting of Raw Coral by Australia, the CITES Trade Database reveals that such misreporting is a widespread global issue. As well as considering a coral traceability program, the AU government is implementing a new database at the end of 2023. We welcome their invitation to review how the coral data section will report accurately. However, future global accuracy will depend on the necessary amendments to the Resolution and Guidelines. Other Parties, particularly Pacific coral exporting Parties, may need appropriate education and assistance.
5. The CITES Trade Database is the basis for ecological and livelihood decisions which can have profound negative consequences. Decisions based on inaccurate data may seriously compromise or invalidate non-detriment findings. It may also provide a false base for policy and/or legislative development and may also hide corruption or illegal wildlife trade. Such fisheries will face an increasing number of challenges and possible permanent closure based on falsehood.
6. Pro-Vision Reef welcomes and supports Document CoP19 Doc. 46, submitted by the European Union and its Member States. We agree with most of the EU analysis, however, in our view, the suggested amendments to both the Resolution and the Guidelines are insufficient to correct those elements of the current Annex and the Guidelines that cause confusion and serious data distortion.

This submission has been prepared by Pro-Vision Reef Inc.  
For further confirmation, contact Roslyn Paterson, Secretary  
[ros@marinearts.com.au](mailto:ros@marinearts.com.au)

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<sup>1</sup> <https://www.provisionreef.org.au/stewardship-action-plan/stewardship-action-plan-2013/#:~:text=Stewardship%20Action%20Plan%202013%3A%20Mitigating,on%20the%20Great%20Barrier%20Reef.>

<sup>2</sup> AC31 Inf. 1, 13.4 Excel 08.06.2020 ... Gross direct exports of Appendix-II animal species, 2014-2018, raw data (submitted by the Secretariat and prepared by UNEP-WCMC) (filtered by PVR for gross exports of AU coral); 08.06.2020. Excel

**PART 2: DISCUSSION**

**(a) Possible amendments to Resolution Conf 11.10 (Rev. CoP15 on Trade in stony corals as shown in Annex 1 to this Notification, aimed at clarifying terms, codes and definitions used in trade and to achieve global consistency in permitting and reporting. (To be read in conjunction with Part 3.)**

combined with

**(b) Possible revisions to the Guidelines for the preparation and submission of CITES annual reports and the CITES annual illegal trade report as shown in Annex 2 to this Notification. (To be read in conjunction with Part 4.)**

7. Pro-Vision reef recommends the following suggested solutions to clarify the Resolution and the Guidelines. Most suggestions apply to both documents, so they have been combined. Column 1 provides a Reference number as well as an abbreviation indicating the applicable document that we recommend for amendment (R – Resolution; A – Resolution Annex; G – Guidelines).\*

Number + Document to amend*	Problem	Suggested solution	Additional comments by Pro-Vision Reef
1. A, G	<ul style="list-style-type: none"> <li>Live coral pieces are frequently incorrectly reported as Raw coral because this is the only specific coral term. If reported by number of pieces or with a blank unit, the coral conversion factor is triggered and converts the number of pieces to kg. units and distorts the data [1 unit (piece) = .58kg].</li> </ul>	<ul style="list-style-type: none"> <li>Separate live coral from the all-encompassing term LIV, by creating the new term Coral live (code CLI – unit number).</li> </ul>	<ul style="list-style-type: none"> <li>This will separate Coral live from the over-arching LIV term used for all other Live specimens. (Code FIG<sup>3</sup> is an existing example of live specimens separated from the code LIV.)</li> <li>When no other coral choice or instruction is visible, many users will enter data under coral (raw), the only coral term that they see.</li> </ul>
2 G	<ul style="list-style-type: none"> <li>The Guidelines contain no instruction that live coral should be reported under the all-encompassing term LIV.</li> </ul>	<ul style="list-style-type: none"> <li>Add instruction to the Guidelines that Coral live must be reported under CLI, not LIV.</li> </ul>	<ul style="list-style-type: none"> <li>The only relevant mention in the Guidelines is in the SAMPLE REPORT FORMATS table on page 18 showing an Acropora species correctly entered as the Trade Term LIV.</li> </ul>
3. A, G	<ul style="list-style-type: none"> <li>In eCITES reporting drop-down menus, the first and only visible coral trade term is Coral (raw). There is no mention in the Annex or Guidelines that Coral live should be reported under LIV.</li> </ul>	<ul style="list-style-type: none"> <li>Prefixing each coral trade term with the word 'Coral' will automatically display every coral product in alphabetic sequence.</li> </ul>	<ul style="list-style-type: none"> <li>User confusion can be reduced by presenting the terms for live and dead coral as a choice close to each other, preferably presented alphabetically in an eCITES drop-down menu. Users do not search for 'LIV' if they do not know the requirements.</li> </ul>
4. A, G	<ul style="list-style-type: none"> <li>Limited correlation between the terms in the Annex Definitions and the Guidelines. Terms such as Coral rock, Coral (raw), Scleractinia spp, and 'raw or unworked coral' are confusing and are not easy to match in both documents.</li> </ul>	<ul style="list-style-type: none"> <li>Discontinue the term coral rock in both documents. Issue no further permits for Coral rock.</li> <li>Replace with three new terms with specific mandatory units and no alternative unit option:                             <ul style="list-style-type: none"> <li>Coral substrate (CSU – unit number)</li> <li>Coral live rock (CLR – unit kg)</li> <li>Coral dead (CDE – unit kg)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Additional new terms can be added as required, e.g., Coral aquacultured (CAQ), Coral maricultured (CMA), Coral captive-born (CBO), Coral captive-bred (CBR), Coral -Ranched (CRA).</li> </ul>

<sup>3</sup> FIG (fingerlings) - live juvenile fish for the aquarium trade, aquaculture, hatcheries, consumption or for release, including live European eels (*Anguilla anguilla*) up to 12cm in length; (preferred unit-kg; alternative unit-no.)

<p>5. A, G</p>	<ul style="list-style-type: none"> <li>Limited correlation means that users, particularly non-specialists, must repeatedly cross-reference between the Resolution and the Guidelines to understand what CITES actually requires.</li> </ul>	<p>The clarity would be improved by the inclusion of other beneficial information in both the Resolution and the Guidelines, such as:</p> <ul style="list-style-type: none"> <li>whether or not the coral term is 'subject to the provisions of the Convention', including the reason. For example, <i>substrate is not readily recognizable and is therefore not covered by the provisions of the Convention</i> Conf. 9.6 (Rev. CoP X);</li> <li>whether or not coral is 'transported in water'.</li> </ul>	<p>Examples of reasons for why a coral term is, or is not, subject to the provisions of the Convention:</p> <ul style="list-style-type: none"> <li>Conf. 11.10 (Rev. CoP15) <i>Trade in stony corals</i>;</li> <li>Conf. 12.3 (Rev. CoP19) <i>Permits and certificates</i>;</li> <li>Conf. 9.6 (Rev. CoP19) <i>Trade in readily recognizable parts and derivatives</i>.<sup>4</sup></li> </ul>
<p>6. G</p>	<ul style="list-style-type: none"> <li>The Guidelines define raw coral (COR) as '<i>raw or unworked coral and coral rock (also live rock and substrate) [as defined in Resolution Conf. 11.10 (Rev. CoP15)]</i>'. Both descriptions, '<i>raw coral</i>' and '<i>unworked coral</i>' are meaningless as they can apply equally to live and dead coral, also Scleractinia spp.</li> </ul>	<ul style="list-style-type: none"> <li>Discontinue the descriptions, '<i>raw or unworked coral</i>' and call coral products by their real terms, namely live coral, dead coral, live rock and substrate. These terms do not need descriptions.</li> <li>It is important to retain those terms that are not covered by the convention, e.g. coral fragments, coral sand.</li> <li>Retain coral fossils as 'excluded from CITES with no need to be reported (together with Coral sand and Coral fragments).</li> </ul>	
<p>7. A, G</p>	<ul style="list-style-type: none"> <li>Reporting Coral substrate remains unresolved, contentious and confusing.</li> <li>After unsuccessful attempts by the 2003 Coral Working Group, Parties were invited to determine how they would interpret the annotation exempting fossil corals from the provisions of the Convention.<sup>5</sup></li> <li>This unusual reporting flexibility contributes to the inconsistency of Importer and Exporter data for Substrate.</li> <li>Exporters are fearful of seizures if they do not meet such uncertain import document requirements.</li> <li>Combined reporting of Substrate and Live rock, including confusion about the correct units, makes it almost impossible to analyse and separate these in the data.</li> <li>ALSO INCLUDE RES. 9.6 AND RES 12.3 FOR REVISION</li> </ul>	<ul style="list-style-type: none"> <li>Any suggestion to review a definition of fossil coral as the determinant for reporting Coral Rock must be avoided. The WG made a clear decision in 2004.</li> <li>The most obvious solution is to add Coral substrate to coral sand and coral fragments in Paragraph 6 of the Preamble and in Section 3(a) of Res.Conf.9.6(Rev.CoP19) <i>Trade in readily recognizable parts and derivatives</i>.</li> <li>Discontinue the term coral rock in both the Resolution and Guidelines.</li> <li>Issue no further permits for Coral rock.</li> <li>Replace with three new terms with specific mandatory units and no alternative unit option: <ul style="list-style-type: none"> <li>Coral substrate (CSU – unit number)</li> <li>Coral live rock (CLR – unit kg)</li> <li>Coral dead (CDE – unit kg)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li><b>Please see Part 2(e) for a summarised history of the Working Group process.</b></li> <li>The 2003 Coral Working Group (WG) did not reach consensus on a fossil coral definition. However, they agreed <b><u>that removal of coral rock that had minimal impact (coral substrate) would be exempt from CITES controls, but that live rock would be retained under the regulation of the Convention.</u></b></li> <li>A proposed amendment to Res.Conf.12.3-Permits and certificates to change '<i>coral rock</i>' to '<i>live rock</i>'. <b>(supported by the Secretariat)</b> was unsuccessful.</li> <li>This would have resulted in the separation of Live rock (reported) and substrate (not reported), consistent with the WG determination about substrate.</li> <li>After 2006, no further relevant CITES documents can be found.</li> </ul>
<p>8. A, G</p>	<ul style="list-style-type: none"> <li>Conversion factors are unnecessary, outmoded, static, not species specific, average only. Since conversion factors were introduced, incorrect reporting, mainly Raw Coral with a blank</li> </ul>	<ul style="list-style-type: none"> <li>Specify the required mandatory unit for each coral trade term.</li> <li>Discontinue the alternative unit option for all coral terms.</li> </ul>	<ul style="list-style-type: none"> <li>The data distortion created by some forms of misreporting can provide opportunity for a Party to distort CITES Trade data in their favour.</li> </ul>

<sup>4</sup> <https://cites.org/sites/default/files/documents/COP/19/resolution/E-Res-09-06-R19.pdf>

<sup>5</sup> Notification No. 2005/065 <https://cites.org/sites/default/files/eng/notif/2005/065.pdf>

	unit, has significantly compromised long-term global data, particularly during the transition from dead coral specimens to live aquaria corals. SINCE 2000.		<ul style="list-style-type: none"> <li>Any revision of conversion factors for live rock, substrate, and dead corals will require significant human resources and is unnecessary.</li> <li>Conversion factors may be required for live coral and for live coral fragments (fragged).</li> </ul>
9. A, G	<ul style="list-style-type: none"> <li>It is important that users are aware that there are three relevant resolutions that apply to coral trade: <ul style="list-style-type: none"> <li>Conf. 11.10 (Rev. CoP15) <i>Trade in stony corals</i>;</li> <li>Conf. 12.3 (Rev. CoP19) <i>Permits and certificates</i>;</li> <li>Conf. 9.6 (Rev. CoP19) <i>Trade in readily recognizable parts and derivatives</i>.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Provide links in the Annex to the Resolutions so that users are aware of all applicable resolutions. <ul style="list-style-type: none"> <li>Conf. 11.10 (Rev. CoP15) <i>Trade in stony corals</i>;</li> <li>Conf. 12.3 (Rev. CoP19) <i>Permits and certificates</i>;</li> <li>Conf. 9.6 (Rev. CoP19) <i>Trade in readily recognizable parts and derivatives</i></li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>It is likely that most non-specialists assume that Conf. 11.10 is the only Resolution applying to coral.</li> </ul>
10. R	<ul style="list-style-type: none"> <li>Industry is recognised for its valuable contribution to advanced scientific coral knowledge and coral reef health and restoration projects.</li> <li>Coral reef science would be considerably poorer if the coral harvest industry is reduced or closed by unbalanced media reports.</li> </ul>	<ul style="list-style-type: none"> <li>The Resolution preamble should include recognition of the vital contribution of the coral harvest industry to scientific research and future coral reef restoration.</li> </ul>	<ul style="list-style-type: none"> <li>Coral harvesters and aquarists have played the major role in understanding and development of equipment to keep coral healthy, to propagate and to spawn ex situ. Most recent scientific coral research would not have been possible without the innovative special life support equipment developed by the aquarium industry. (<b>Attachment 6</b>)</li> </ul>
11. G	The Guidelines show a Sample Report Format table (page 18) that includes several optional headings that could be important for comparison purposes.	<ul style="list-style-type: none"> <li>Remove the 'optional' option from the Columns: Description of specimen, Number of original export permit and Number of import permit.</li> </ul>	
12. G	Some of the codes in the Key do not match the unit. For example, Code KGM is the code for kilogram-meter.	<ul style="list-style-type: none"> <li>As we are not familiar with codes in other countries, some of these codes may need checking to ensure they are used correctly.</li> </ul>	

7. Some global statistics and notes on coral misreporting are included in **Attachment 4**:

***(c) The appropriateness of current conversion factors used to analyze trade in wild stony corals for the CITES Review of Significant Trade process and potential alternative conversion factors and methodologies.***

8. The coral conversion factors developed by Green & Shirley are applied to coral in the CITES Trade Database prior to the UNEP-WCMC preparation of the gross export tables for the UNEP-WCMC reports, such as the *Selection of species for inclusion in the Review of Significant Trade following CoP18: Summary report*.<sup>6</sup> Green and Shirley warned that, 'any error in this conversion factor will therefore have skewed the results proportionately'.<sup>7</sup> The conversion factors are:<sup>8</sup>

<sup>6</sup> UNEP-WCMC. 2020. Selection of species for inclusion in the Review of Significant Trade following CoP18: Summary output. UNEP-WCMC, Cambridge. <https://cites.org/sites/default/files/eng/com/ac/31/Docs/E-AC31-13-04-A1.pdf>

<sup>7</sup> <https://archive.org/details/globaltradeincor99gree> Green, E.P. and Shirley, F. 1999. *The Global Trade in Coral*, World Conservation Monitoring Centre

<sup>8</sup> <https://cites.org/sites/default/files/eng/com/ac/31/Docs/E-AC31-13-04-A1.pdf> page 4

Trade term code	Converted to	Conversion factor
live corals (kg)	live corals (pieces)	206.1 ± 13.1g
raw corals (pieces)	raw corals (kg)	580g ± 121g

9. Incorrect combinations of term and units produce extremely flawed data. For example:
- Each piece of Live coral incorrectly reported as raw coral with a blank unit is automatically converted to a weight of 580g, regardless that most live coral is a significantly smaller size.
  - Each piece of Dead raw coral reported using the alternative unit i.e., number, instead of kg. is converted to a weight of .580g, regardless that pieces can sometimes be extremely large and heavy.

**Example 1 - Australian live coral incorrectly reported as raw coral with blank unit:**

10. The errors that led to Australia's incorrect data occurred because:
- Live coral was incorrectly reported as Raw Coral.
  - The reported Raw Coral data retained the blank unit indicating number of pieces (that originally applied to the incorrectly reported Live coral data).
  - The blank unit field triggered the coral conversion factor to convert the (blank) raw coral to kg units.
  - Because the live coral data field was empty (having been incorrectly reported as Raw Coral), UNEP-WCMC methodology then substituted the missing live coral data with Importer reported quantities.
  - Importer quantities were also substituted to replace missing data from overdue AU annual reports.
  - Live rock and Substrate were reported as Scleractinia spp. without precise units of measure.
11. UNEP-WCMC Gross exports of AU raw coral (after conversion) shows average gross exports per year 2014 to 2016 as 359593kg. Queensland Fisheries coral harvest data since 2012 shows the average annual harvest as only 93.44 tonnes. This data exaggeration has had an extremely adverse impact on international perception of Australian coral export trade, resulting in species bans and an international country-wide ban on imports of AU coral.

**Example 2 - Solomon Island dead coral reported by the alternative unit of number of pieces:**

12. Solomon Islands exports dead raw coral pieces with an extrapolated average weight per piece of 3.5 kg. Permits are issued using unit (no.) instead of the required kg. unit for dead coral. Each piece is then converted to a weight of .58kg. The term/unit combination (dead coral/number) differs from the Australian term/unit combination (raw coral/ number) and gives a converse result. Figure 1 shows the result of the conversion factor, as well as the result if the estimated average weight of 3.5 kg per piece is applied to the numbers reported as exported.
13. CITES Trade database, Solomon Island Raw coral exports by number to ALL COUNTRIES 2010 – 2019 (Attachment 5, Sheet 1)

**Figure 1: Solomon Islands exports of Raw Coral (number) to ALL countries 2010 to 2019:**

Raw Coral exported by number of pieces to ALL COUNTRIES	Exporter quantity	Importer quantity	Unit
CITES trade database	518181	152411	number
After conversion @ 1pc = .58kg	300545	88398	kg
Average per year	30055	8840	kg
If average estimated weight of 3.5 kg/piece is applied to the number of pieces (1 <sup>st</sup> row above) - Total weight shipped 10 years	1,813,633	533,438	kg
<b>Estimated average weight of raw coral exported per year</b>	<b>181,363</b>	<b>53,350</b>	<b>kg</b>

14. CITES Trade database download: Solomon Island Raw coral exports by number to ALL COUNTRIES 2010 – 2019 (Attachment 5, Sheet 2)

**Figure 2: Solomon Islands exports of Raw Coral (number) to UNITED STATES ONLY 2010 to 2019:**

Raw Coral exported by number of pieces to UNITED STATES ONLY	Importer reported quantity	Exporter reported quantity	Unit
CITES trade database	461,213	135,905	number
Total SB exports Raw Corals to United States (kg) - AFTER CONVERSION to kg @ 1=.58 kg (kg)	267,504	78,825	kg
Average weight per year (kg)	26,750	7,883	kg
Average per year (kg)	26,750	7,883	kg

**15. PANJIVA<sup>9</sup> Commercial shipping trade data download : Solomon Island Raw coral exports by number to ALL COUNTRIES 2010 – 2019 (Attachment 5, Sheet 3)**

Commercial shipping data (Panjiva reports a total estimated exports for the years 2010 to 2019 were the approximate equivalent of 122 20' forty-foot containers with a reported total cargo weight (net weight) of containing a reported total weight of 1,806,027 kg, with an estimated average of 14803 kilograms per container. The estimated average weight of raw coral exports per year is 180,602 kg per year.

**16. When compared with SB exports of raw coral to US only, Panjiva report demonstrates a possible extraordinary data inaccuracy that is presumed to be the reason why these high export volumes for Solomon Islands raw coral specimens (perceived to be low volume) do not appear to receive CITES attention in the UNEP-WCMC Technical Report – *Selection of Species for inclusion in the Review of Significant Trade*; the CITES National Legislation Project and in Annual Reports and Illegal Trade Reports. This may also reveal why Importing Parties continue to issue import permits without questioning the SB non-detriment findings. (Attachment 5)**

**Example 3 – live coral reported as kg. instead of number of pieces:**

**17. There are few instances of live corals being reported by kg. weight. However, when it occurs, the conversion factor of 206.1 grams per kg changes the reported quantity to 4.852 pieces (=1000/206.1). 1000 kg of live coral is converted to 4852 pieces. However, there is insufficient data to assess the accuracy of this conversion.**

***(d) Appropriate units of measure of stony corals in trade, e.g., number of specimens or kilograms***

**The blank field option for units of measure is unsound scientific reporting. It has caused multiple errors with serious consequences and should be discontinued:**

**16. The Expert assessment of coral trade reporting by Andy Bruckner, Director of Coral Reef Conservation Protection and Restoration at NOAA states, *For commercial transactions, the primary definition for units are "piece" for live coral and weight (in kg) for raw coral.* .<sup>10</sup>**

**17. Bruckner also reports that, *The data on trade for CITES-listed stony corals also provides a valuable indication of the variation in volumes of coral traded through time. This follows recent changes in demand for curios and aquarium specimens, including decreases in raw coral for curios, increases in both volume***

<sup>9</sup> **Note 1:** Panjiva Inc. is a global trade data company (New York). It is a subscription-based website with import and export details on commercial shipments worldwide. Currently Pro-Vision can access only the record of containers of coral imports to the United States, and does not subscribe to the trade data of other nations.

**Note 2:** Each record is identified by individual Bill of Lading number, arrival dates, container numbers and shipment details. Weights and HS codes are not explicitly accurate, but each container shipment is a record of actual trade that has occurred.

<sup>10</sup> Pavitt, A., Malsch, K., King, E., Chevalier, A., Kachelriess, D., Vannuccini, S. & Friedman, K. 2021. CITES and the sea: Trade in commercially exploited CITES-listed marine species. FAO Fisheries and Aquaculture Technical Paper No. 666. Rome, FAO. <https://doi.org/10.4060/cb2971en> and <https://www.fao.org/3/cb2971en/cb2971en.pdf> (Page 32 No.3, No. 6)

*and species diversity for home aquaria, and lower levels of trade associated with the global financial crisis from 2008 to 2010.*

18. Dead corals are often large and heavy. Since the original Resolution 11.10 (CoP 2000) *Trade in hard corals*, the correct unit for raw coral was always kg<sup>11</sup>. Prior to 2017, the Guidelines<sup>12</sup> correctly showed the Preferred Unit for COR (raw) as 'kg' and the Alternative Unit as 'no.'. However, this was incorrectly and inexplicably reversed in the 2017 Guidelines and the preferred unit was changed to 'number'.
19. The Guidelines state, *If no unit is specified, this will be reflected as 'blank' in the CITES Trade Database, but will be assumed to mean "number" (e.g. number of live animals)* (pp. 5 and 12). This option is a primary source of errors and should be discontinued.
20. If each coral product has a separately defined term with its own mandatory unit and no alternative option, raw coral conversion factors would be unnecessary. Live corals which are recorded as numbers, would require a new conversion rate.

### **Reporting live corals:**

21. Weighing live coral pieces is impractical because of variable water content and potential product damage. The cost of weighing all export coral pieces would render industry unviable and the risk that excess handling may damage product integrity may be too great.<sup>13</sup>
22. There is no consistency in live coral sizes between countries or exporters. Accordingly If conversion factors for live corals are continued, they need to be updated to reflect the change in the live coral fishery. Weights and sizes for the same species also vary widely between different locations within the same reef, region and country.
23. We suggest that if conversion factors for live corals are continued, one possible method would be to group a predetermined list of species within three possible categories. For example, a preliminary method may be:
  - Category 1 may include pieces of smaller species with a low conversion factor;
  - Category 2 may include pieces of medium species with a higher conversion factor;
  - Category 3 may include pieces of larger species with an even higher conversion factor.

As statistics become available, it will be possible to refine the species groups and to establish where the weight breaks for each category should occur.

24. Coral harvesting is already a labour intensive and heavily regulated industry. Making business operations even more difficult for live coral harvesters may lead to misreporting and short-cuts that may contribute to unlawful activities and incorrect data. Other outcomes can include closure of business operations and the possible closure of a fishery.

### **Reporting 'fraggd' live corals:**

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<sup>11</sup> Doc 11.37 - Identification and reporting requirements for trade in specimens of hard coral (2000)

<https://cites.org/sites/default/files/eng/cop/11/doc/37.pdf>

<sup>12</sup> Guidelines for the preparation and submission of CITES annual reports (February 2011)

<https://cites.org/sites/default/files/eng/notif/2011/E019A.pdf>

<sup>13</sup> Pavitt, A., Malsch, K., King, E., Chevalier, A., Kachelriess, D., Vannuccini, S. & Friedman, K. 2021. CITES and the sea: Trade in commercially exploited CITES-listed marine species. FAO Fisheries and Aquaculture Technical Paper No. 666. Rome, FAO.

<https://doi.org/10.4060/cb2971en> and <https://www.fao.org/3/cb2971en/cb2971en.pdf> (Page 32 No.3, No. 6)

25. Fragging is becoming a large and growing part of coral exports. Fragging is the cutting of harvested live coral pieces into smaller sizes and gluing them onto artificial (usually ceramic) plugs. One piece of coral can be cut into any number of smaller pieces, some only thumbnail size. This results in no change to the total weight harvested, but this greatly increases the number of live corals reported in trade. Given that the weight of a 'fragged' live coral piece may often be extremely small, the only way that they can be reported is by number of pieces.
26. When each fragged piece is incorrectly reported as raw coral with a blank unit, the reported weight of each tiny piece is converted to 580 grams. As frags only weigh a few grams, this is clearly incorrect and dramatically inflates the weight of raw coral in trade.
27. Fragged corals are clearly distinguishable from the larger wild harvested corals. A conversion factor could be developed in a similar fashion to the previously described method for calculating the conversion factor for live corals.

***(e) Any other issues relating to definitions and reporting of coral rock in international trade to provide sufficient clarity and avoid confusion in relation to what 'coral rock' means, what forms of coral rock are subject to the provisions of the Convention and how coral rock should be reported in trade:***

**Incorrect substrate reporting :**

**28.**

- Coral (raw) is the term used for live rock and substrate (both called Coral rock and reported as Scleractinia spp.) and Dead coral.
- **Coral (raw) reported by species name contravenes the Annex Definitions of live rock and substrate - 'to which are attached live specimens of invertebrate species and coralline algae not included in the CITES Appendices'. A piece of substrate with a live coral attached does not meet the definition of 'substrate'. It should not be reported as either 'coral (raw)' or as 'substrate', but as either live or dead coral.**
- **Similarly, Resolution Conf. 12.3 (Rev. CoP19) *Permits and certificates*, Part XI. 19 (b) that refers to *trade in specimens that are readily recognizable as coral rock*, then states *where the genus cannot be readily determined, the scientific name for the specimens should be 'Scleractinia'*. This is another contradiction of the definition of coral rock. Any specimen that is identifiable to genus level is either live coral or dead coral. It is not coral rock.**
- **The probable cause of this conundrum appears to be that the definition of Coral rock includes only substrate and live rock. However, for reporting purposes, Coral (raw) includes substrate, live rock and dead coral. Coral (raw) should not be the 'umbrella' for these three coral terms, when each one is a distinctly different product needing different unit/term combinations:**
  - **Coral substrate – number of pieces**
  - **Coral live rock – kg**
  - **Coral dead - kg**
- The CITES Trade database includes thousands of entries by most, if not all, coral trade Parties where live coral pieces are incorrectly reported as raw corals despite having an attached live coral piece. It is unknown how many such specimens are recorded twice, once (incorrectly) as a coral piece and again as coral substrate, that then is converted to kg at 0.58kg per piece.
- The integrity of existing global coral trade data is of questionable value and there is probably no method to correct past mistakes or accurately analyse past data.

**29.** A detailed interpretation of the documentation of the 2003 Animals Committee Coral Working Group (WG) between 2003 and 2006, including references, is reported in **Attachment 1**.

**30.** Pro-Vision Reef fully agrees with the determination of the WG that substrate is exempt from the provisions of the Convention. Multiple reasons are provided in the following list:

- Parties' differing definition of 'fossil coral' prevented a determination that substrate was exempt from CITES by the 2003 Animals Committee Working Group (WG).

- However, independent of any fossil coral decision for substrate, the 2003 Coral Working Group determined that the removal of coral substrate had minimal impact on coral reefs and would be exempt from CITES controls;
- the Secretariat supported the proposed amendment to Resolution Conf. 12.3 on Permits and certificates to change all 'coral rock' terms to 'live rock';
- the exclusion of substrate from the proposed amendment was consistent with the WG determination that Substrate removal had minimal impact on coral reefs and would be exempt from CITES.
- The withdrawal of the proposed amendment to Res. Conf. 12.3 led to the subsequent decision to allow Parties to choose whether or how they would report Substrate.
- The decision of the EC in 2005 was not to report substrate. This is a correct decision, but is inconsistent with current US (undocumented) requirement that substrate must be reported. This results in inflated, inconsistent and inaccurate substrate reporting. Live corals sent to the US appear to be incorrectly reported both by species and as substrate and the quantity in trade reports is doubled, significantly inflating gross export numbers.
- The difficulty of weighing pieces packed in water places an additional burden on an already heavily regulated industry and overworked inspectors for little or no benefit; but with serious risks for business viability.
- Most of what has been reported as substrate, by the Annex definition was never substrate at all. It is simply live coral on a base.

**Pro-vision Reef sees no reason to justify the continued reporting of substrate.**

#### **Consequences:**

31. Seventeen years later:
  - Coral term descriptions in Resolution Conf. 11.10 Annex remain unchanged; .
  - The proposed amendment to Resolution Conf. 12.3 to change all Coral rock terms to live rock supported by the Secretariat did not occur.
  - The footnote since 2000 continues to (incorrectly) state: *Rock that does not contain any corals or in which the corals are fossilized are not subject to the Provisions of the Convention.*
  - The Guidelines make no distinction between reporting live rock and substrate.
  - There is no confidence in a data analysis of raw coral and Scleractinia spp.
32. AU Exporters report that products have been seized in Los Angeles if a CITES-listed coral specimen has an attached substrate base, regardless of how small it may be, but this substrate base has not been listed on the AU Specimen Export Record (SER). Despite any official notification from US Fish and Wildlife, we understand that, unless the number of Substrate *Scleractinia* spp. specimens listed on the SER matches the number live coral pieces, the US inspectors must open and inspect every box and coral piece. **(Attachment 3).**
33. Many live coral specimens have no substrate attached. Some corals just have new growth on old skeletons. However, to avoid the risk of seizure and associated financial loss if substrate reporting is not seen to comply with US requirements, the only option for AU exporters is to list on the SER an equivalent number of 'Substrate' pieces for every piece of live coral reported.
34. The attached AU SER lists 666 Scleractinia spp. as Common Name – Hard Coral on Coral Fragments, and Description –substrate. Both these descriptions are clear contraventions of the Annex definitions of both coral fragments and substrate, i.e., (a) that coral fragments are fossils and are not subject to the provisions of the convention, and (b) that substrate has no CITES-listed species attached. **(Attachment 2).**

**Suggested solution:**

35. The most obvious solution is to amend Resolution Conf. 9.6 (Rev. CoP19) *Trade in readily recognizable parts and derivatives*, by adding 'coral substrate' to the terms 'coral sand' and 'coral fragments' in Paragraph 6 of the Preamble and in Section 3 (a).

**36. Revisions will also be required to resolutions 12.3 and 11.10.**

***(f) Any other issues related to the implementation of the Convention with respect to trade in stony corals.***

**Late lodgement of annual reports:**

36. Late lodgement of annual reports has significant impact on the accuracy of gross export data and the impacts on industry. It is a serious concern to ProVision Reef that at the time of writing, industry can only monitor Australian coral trade for errors or illegal trade based on the last annual report for 2019 that was only lodged on 22<sup>nd</sup> December 2022, two to three years after the due date. The 2020 report is still outstanding.

**Review of Significant Trade and overdue annual reports:**

37. Resolution Conf. 12.8 (Rev. CoP18) *Review of Significant Trade in specimens of Appendix-II species*<sup>14</sup> should clarify, particularly for non-CITES specialists, that a Recommendation by the Standing Committee to suspend trade can be invoked not only for detrimental trade in Appendix-II species, but also for having failed, for *three consecutive years and without having provided adequate justification, to provide the annual reports required under Article VIII, paragraph 7 (a), of the Convention within the deadline (or any extended deadline) provided in the present Resolution.*

**Inclusion of Import and Export numbers as identifying information for trade transactions in the CITES Trade Database:**

38. Export permit numbers are required in the Sample Report Format on Page 18 of the Guidelines. Import permit numbers are not mandatory. If possible, their inclusion in the CITES Trade Database would facilitate the correlation of Importer and Exporter reported quantities in the Comparative Tabulation reports, facilitating both data comparison/matching and the identification of serious discrepancies in Importer and Exporter reported quantities.

**Pro-Vision Reef seeks clarification about the source of EU coral import data:**

39. The Guidelines, (2) General Principles, Sample report format) states that:

- *the data in the report should record the actual trade that took place, i.e. the quantity of specimens that entered or left the country. If it is not possible to report the actual exports and re-exports, the data on such trade should come from each permit and certificate issued, and*
- *N.B. The annual report should state clearly whether the data used for the records of imports and exports/re-exports are based on "actual trade", and if not possible, on "permits/certificates issued".*

However, this information does not show on the CITES Trade Database, so stakeholders do not have the detail necessary to interpret the results.

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<sup>14</sup> <https://cites.org/sites/default/files/documents/COP/19/resolution/E-Res-12-08-R18.pdf>

40. As the EU importer must have an approved import permit before quantities of species to be shipped are known, AU exporters must exaggerate potential shipment quantities to ensure that an EU import permit will cover the quantity of specimens available at time of export. Is the EU reported data derived from the quantities on the AU export permit, the EU import permit, the Specimen Export Record or permit acquittals? Does each country have different methods for entering import data? Can this be standardised? (**Attachment 3**)

**Nations with difficulties meeting CITES obligations have significant negative impact on the viability of heavily regulated and compliance-focused businesses in other nations:**

41. We recognise the sovereignty of developing nation Parties, as well as their extremely difficult livelihood needs and operational limitations, especially when compared with those of advantaged countries such as Australia. However, it is a serious concern that despite multiple capacity-building programs and very significant foreign aid over multiple decades, some Parties appear reluctant to meet CITES responsibilities by continuing to trade as if CITES does not exist. Examples include:
- multiple failures to acknowledge and respond to questions such as import permit requirements prior to export;
  - failure to develop reasonable, genuine non-detriment findings, and to publish the NDF and the supporting management plans;
  - failure to implement and enforce genuine compliance regimes;
  - regressive changes to national legislation that may seriously compromise and negate their status and commitment to the National Legislation Project;
  - continued export trade despite prohibiting legislation;
  - annual reports lodged only in response to a recommendation by the Standing Committee to suspend trade with that State in specimens of the species concerned;
  - extremely under-reported exporter data compared with importer reported data, often with very little or non-existent correlation between exporter and importer reported quantities;
  - continued trade in specimens listed in the Review of Significant Trade;
  - possible illegal trade
42. It is also a concern that Parties authorising Import permits appear to regard sovereign rights of the Exporter as more important than CITES.
43. No matter how advantaged an exporting country is, no business can survive the inequity of such leniency, differences in the standards and application of CITES non-detriment findings, the constant concern about possible seizures and low international export prices, while simultaneously being required to meet extremely unforgiving domestic and international regulations, including species bans and country-wide bans, particularly those based on incorrect data.

**Submission of enforcement-related information by the public and non-governmental organizations to the CITES Secretariat:**

44. The status of the long-standing CITES Notification No. 2004/078 concerning *Submission of enforcement-related information by the public and non-governmental organizations to the CITES Secretariat*<sup>15</sup> (December 2004) is uncertain. Any such public individual or non-governmental organization seeking to submit enforcement-related information directly to the Secretariat needs confidence that their concerns will be acknowledged and dealt with appropriately, without threat to their personal safety, permits or licenses, their livelihoods and the future of the whole of their industry. Is there a Resolution that considers this concern?

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<sup>15</sup> <https://cites.org/sites/default/files/eng/notif/2004/078.pdf>

**Non-detriment findings (NDF's) are not easy to access:**

45. Pro-Vision Reef suggests the possibility that each Party profile could include a link to their relevant non-detriment findings, including management plans, for the species applicable to each Party.

**PART 3: SUGGESTED AMENDMENTS TO RESOLUTION CONF. 11.10 (Rev. CoP15)  
(to be read in conjunction with PART 2a)**

**(Pro-Vision Reef - NOTES:**

1. In this Part 3, each different trade term for coral is prefixed with the word Coral, to simplify coral reporting by all users and to minimise errors. We suggest a new coral term for Coral live to separate this product from the all-encompassing LIV category. With increased use of eCITES permitting, all coral terms should sort alphabetically, and are clearly visible to all users.
2. The recommendations and proposed amendments are drafted in accordance with the possibility that the issues related to the reporting of Coral substrate will be resolved by a determination that Coral substrate is not subject to the provisions of the Convention.
3. We have accepted most of the Draft Suggested Amendments in the Notification, and then added new suggestions. Pro-Vision Reef suggested amendments are shown in bold.
4. We have also included codes and units in each definition.

## **Resolution**

**Amend:**

- NOTING however, that for practical purposes of implementing the Convention, all coral rock **live rock** can be reported in trade as "Scleractinia spp." ~~irrespective of whether the coral rock contains Scleractinian corals, nonscleractinian corals, or a mixed composition,~~ for ease of identification and reporting. **Pro-Vision Reef comment: note that the definition of coral rock has no attached CITES species.**
  - RECOGNIZING that stony corals that are fossilized or **are not readily recognizable** are not subject to the provisions of the Convention;
- Add:**
- RECOGNIZING the vital contribution of the coral harvest industry to scientific research and coral reef restoration through the development of ex situ breeding systems and the raising of public awareness.

## **Annex**

## **Definitions**

Coral sand (**Code CSD/unit kg/no permits required**) – material consisting entirely or in part of finely crushed fragments of dead coral no larger than 2 mm in diameter and which may also contain, amongst other things, the remains of Foraminifera, mollusc and crustacean shell, and coralline algae. Not identifiable to the level of genus. In accordance with Resolution Conf. 9.6 (Rev. CoP16) on *Trade in readily recognizable parts and derivatives*, coral sand is not considered readily recognizable, and is therefore not covered by the provisions of the Convention.

**AMENDED NAME:**

Coral fragments **dead** (including gravel and rubble) (**Code CFD/unit kg/no permits required**) – unconsolidated fragments of broken finger-like dead coral and other material between 2 and 30 mm measured in any direction, which is not identifiable to the level of genus. In accordance with Resolution Conf. 9.6 (Rev. CoP16) on *Trade in readily recognizable parts and derivatives*, coral fragments are not considered readily recognizable, and are therefore not covered by the provisions of the Convention.

**NEW:**

*Coral fragments live (Code CFL/unit is undecided, pending WG decision for conversion factor)* Fraggged corals are the product of cutting harvested live coral pieces into smaller sizes and gluing them onto artificial (usually ceramic) plugs. One piece of coral can be cut into any number of smaller pieces, some only thumbnail size. The weight of a 'fraggged' live coral piece may often be extremely small, the only way that they can be reported is by number of pieces. Fraggged corals are clearly distinguishable from the larger wild harvested corals. They are transported in water and are subject to the provisions of the Convention.

**CORAL ROCK (deletion of this term):**

~~**Coral rock1 (the collective term used for also live rock and substrate)**— hard consolidated material, >3 cm in diameter, formed of fragments of mostly/partly unidentifiable specimens of dead coral and which may also contain cemented sand, coralline algae and other sedimentary rocks;~~ which should instead refer to 'live rock' or 'substrate'. Unlike fossil corals, 'coral rock' is harvested from living coral reef ecosystems, mostly from shallow reef flats near the shoreline at less than 1 m depth. **(Delete all coral rock definition and continue with only 'live rock' and 'substrate'.**

(Pro-Vision comment - NOT AGREED TO ABOVE: We propose that 'coral rock' be discontinued as a coral term and replaced with new terms defining 'coral live rock' and 'coral substrate'. Note: Both these new terms clarify the description of coral rock, so it does not really need to remain.

**If retained, the definition should explicitly clarify that permits for coral rock should not be issued.**

**Coral rock (CRO/no permits to be issued)** is hard consolidated material, >3 cm in diameter, formed of ~~fragments of~~ mostly/partly unidentifiable specimens **remains** of dead coral, **cemented sand, coralline algae and other sedimentary rocks.** It may have attached live specimens of invertebrate species and coralline algae but does not have any attached specimens included in the CITES Appendices. Unlike fossil corals, 'coral rock' is harvested from living coral reef ecosystems, ~~mostly from shallow reef flats near the shoreline at less than 1 m depth.~~ Although it is the collective term used for live rock and substrate, it should not be used on permits, which should instead refer to 'coral live rock' or 'coral substrate'.

**NEW:**

**Coral live rock (CLR/unit kg)** is the term given to large pieces of coral rock (usually > 1 kg each) - to which are attached live specimens of invertebrate species and coralline algae, **but does not have any attached specimens included in the CITES Appendices.** **Live rock is hard consolidated material, formed of fragments of mostly/partly unidentifiable specimens of dead coral and which may also contain cemented sand, coralline algae and other sedimentary rocks.** ~~Live rock should not be covered by have attached CITES-listed coral species.~~ Live rock is used as decoration and habitat in aquariums. It is usually and which are transported in moist condition, in order to keep the attached organisms alive, but not in water. in crates. Live rock is subject to the provisions of the Convention.

**NEW:**

**Coral substrate (CSU/unit number (however, this is undecided awaiting WG consideration))** is the term given to small pieces of coral rock (usually < 0.5 kg each), to which are attached **live specimens of invertebrates (of species and coralline algae** not included in the CITES Appendices. **Coral** substrate used as pedestal (base) for

attached invertebrates, such as sea anemones or soft corals and is therefore ~~and which are~~ transported in water to keep these organisms alive, like live corals. **Coral substrate should not have attached CITES-listed coral species.** Coral rock is not identifiable to the level of genus but is recognizable to the level of order. The definition excludes specimens defined as dead coral. ~~Whether substrate is subject to the provisions of the Convention depends on Parties interpretation of fossil coral; Parties that consider substrate to be fossilized coral do not consider it to be~~ Coral substrate is not subject to the Convention's provisions.

**AMENDED:**

~~Dead coral~~ **Coral dead** (CDE/unit kg) – pieces of coral that are dead when exported, but that may have been alive when collected, and in which the structure of corallites (the skeleton of the individual polyp) is still intact; specimens are therefore identifiable to the level of species or genus. Dead coral is subject to the provisions of the Convention **and must be reported by weight in kg. It is readily recognizable and is not transported in water. Coral dead is subject to the Convention's provisions.**

**AMENDED:**

~~Live coral~~ **Coral live** (CLI/unit number, pending WG decision about conversion factor) – pieces of live coral are subject to the provisions of the Convention. **They are readily identifiable to the level of species or genus and are transported in water.**

**FURTHER ADDITIONS TO ANNEX:**

**INCLUDE:**

**Note:** Additional resolutions that are relevant to reporting trade in stony corals, are:

- Resolution Conf. 12.3 (Rev. CoP19) *Permits and certificates*, and
- Resolution Conf. 9.6 (Rev. CoP19) *Trade in readily recognizable parts and derivatives*.

**AMEND FOOTNOTE:**

Footnote: ~~Coral Rock~~ **Coral live rock** that does not contain any corals or in which the corals are fossilized **is** subject to the provisions of the Convention. **Coral substrate is not subject to the provisions of the Convention.**

**PART 4: SUGGESTED AMENDMENTS FOR POSSIBLE REVISIONS TO THE GUIDELINES FOR ANNUAL REPORTS AND ANNUAL ILLEGAL TRADE REPORT  
(to be read in conjunction with PART 2)**

Pro-Vision Reef suggested amendments are shown in blue and bold.

*Regarding stony corals, Parties should make every effort to report trade at the species level or, if this is not practical, at the genus level at least. A list of coral taxa where identification to genus level is acceptable but which should be identified to species level where feasible was published in Notification to the Parties No. 2013/035 of 16 August 2013.*

*However, Parties should note that for shipments where coral rock (including live rock and substrate) [as defined in Resolution Conf. 11.10 (Rev. CoP15)], but excluding dead corals, cannot be identified to the level of genus, the trade should be recorded as ‘COR’ with the unit kilograms (kg) and may be recorded at the level of order (‘Scleractinia spp.’) [see Resolution Conf. 11.10 (Rev. CoP15)].*

However, Parties should note that for shipments where live rock and substrate (both coral rock.) as defined in Resolution Conf.11.10 (Rev. CoP.... Cannot be identified to the level of genus, the trade should be recorded as Scleractinia spp.

Trade term	Code	Preferred unit	Alternative unit	Description <b>PRELIMINARY WORK ONLY</b> <b>NOTE: While awaiting decisions about Coral terms in the Annex, we have only done preliminary work on this column. When decisions have been made about proposed changes to coral terms, the descriptions in the Guidelines should be updated to match the definitions in the Guidelines.</b>
Coral - dead	CDE	kg	none	Dead coral are pieces of coral that are dead when exported, but that may have been alive when collected, and in which the structure of the corallites (the skeleton of the individual polyp) is still intact; specimens are therefore identifiable to the level of species or genus. <ul style="list-style-type: none"> <li>• Covered by the provisions of the Convention.</li> <li>• Dead coral is not transported in water.</li> </ul>
Coral - live	CLI	number of specimens	none	Live coral are pieces of live coral that are identifiable to the level of species or genus. <ul style="list-style-type: none"> <li>• Covered by the provisions of the Convention.</li> <li>• Live coral is transported in water.</li> </ul>
Coral – live rock	CLR	kg	none	Coral live rock is the term given to large pieces of coral rock (usually > 1 kg each) to which are attached live specimens of invertebrate species and coralline algae not included in the CITES Appendices. Live rock is used as decoration and habitat in aquariums. <ul style="list-style-type: none"> <li>• Covered by the provisions of the Convention.</li> <li>• Live rock is usually transported in moist condition to keep the attached organisms alive, but not in water.</li> </ul> <p><u>Note: The term ‘Coral rock’ is discontinued and may no longer be used on permits.</u></p>
Coral - substrate	CSU	number of specimens	none	Coral substrate is the term given to small pieces of coral rock (usually < 0.5 kg each), to which are attached invertebrates of species not included in the CITES Appendices. Substrate is a pedestal (base) for attached invertebrates, such as sea anemones or soft corals and is therefore:

				<ul style="list-style-type: none"> <li>• Substrate is not covered by the provisions of the Convention.</li> <li>• transported in water to keep these organisms alive, like live corals.</li> </ul> <p><del>Whether substrate is subject to the provisions of the Convention depends on Parties interpretation of fossil coral; Parties that consider substrate to be fossilized coral do not consider it to be subject to the Convention's provisions.</del></p>
Coral live fragments	CLF	(no of specimens)		<p>Coral live fragments are small pieces of coral cut or trimmed from one larger specimen that may be cut into any number of live coral fragments. They may be recognized at species level and are therefore:</p> <ul style="list-style-type: none"> <li>• Perhaps covered by the provisions of the Convention.</li> <li>• Coral live fragments are transported in water</li> </ul>
Coral dead fragments	CDF	<u>None (not reportable)</u>	none	<p>Coral fragments (including gravel and rubble) are unconsolidated fragments of broken finger-like dead coral and other material between 2 and 30mm measured in any direction, which is not identifiable to the level of genus. In accordance with Resolution Conf. 9.6 (Rev.CoP16) on Trade in readily derivatives, coral fragments are not considered readily recognizable, and are therefore:</p> <ul style="list-style-type: none"> <li>• Not considered readily recognizable, so are not covered by the provisions of the Convention.</li> <li>• Coral fragments are not transported in water.</li> </ul>
Coral sand	CSD	<u>None (not reportable)</u>	none	<p>Coral sand is material consisting entirely or in part of finely crushed fragments of dead coral no larger than 2mm in diameter and which may also contain, amongst other things, the remains of Foraminifera, mollusc and crustacean shell, and coralline algae. Not identifiable to the level of genus. In accordance with Resolution Conf. 9.6 (Rev. CoP16) on Trade in readily recognizable parts and derivatives, coral sand is not considered readily recognizable, and is therefore:</p> <ul style="list-style-type: none"> <li>• not considered readily recognizable, so is not covered by the provisions of the Convention,</li> <li>• Coral sand is not transported in water.</li> </ul>
Coral captive-born	CBO			Undetermined
Coral captive-bred	CBR			Undetermined
Coral aquaculture	CAQ			Undetermined
Coral mariculture	CMA			Undetermined
Coral fossil	CFO	<u>None (not reportable)</u>		Parties have different interpretations of the definition of fossil coral. Fossils are not subject to the provisions of the Convention.

**Note:** The codes in the Key to Units of measure may need to be checked to ensure they are used correctly. Eg. KGM is kilogram-meter.

## PART 5: SUPPORTING DOCUMENT ATTACHMENTS:

### ***Attachment 1: Summary of the history of the Animals Committee Coral Working Group between 2003 and 2006:***

37. In August 2003 the Animals Committee established an intersessional Working Group (WG)<sup>16</sup> to *consider and recommend a practical means of distinguishing fossilized corals from non-fossilized corals in international trade*. Proposal CoP13 Prop. 36,<sup>17</sup> which contained an amendment of the annotation to five genera of coral. This proposal was the result of Decision Conf. 12.62,<sup>18</sup>
38. After consultation with Parties, the WG report<sup>19</sup> was presented to CoP13 (October 2004). The report stated:
- ***C3 Despite the variety of approaches suggested to the group however, no consensus was possible on a definition of fossil corals that satisfied the range of interests represented on the group. Moreover, the group considered that none of the suggested approaches offered a solution that would provide unambiguous guidance to CITES authorities.....those examples of coral rock in trade that had no impact on coral reefs (namely coral rock taken from land) or had minimal impact (coral substrate), would be exempt from CITES controls. However, live rock, whose removal may potentially have the greatest impact on coral reefs, would be retained under the regulation of the Convention and its export would be governed by the provisions of Part X of Resolution Conf. 12.3. 4.***
- C.6 It was considered that this approach would enable all those involved in the trade and its regulation to be clear about which specimens in trade were, or were not, exempt from CITES controls.*
39. While the pursuit of ‘a practical means of distinguishing fossilized corals from non-fossilized corals in international trade’ may have been the initial primary purpose to incorporate an additional five species of Live rock into Scleractinia spp., it also unnecessarily captured the reporting of live rock and substrate under the same umbrella. Pro-Vision Reef can find no documents stating that other options were considered.
40. Independent of not having an agreed fossil definition, the Working Group determined that the removal of coral substrate had minimal impact on coral reefs and would be exempt from CITES controls; but that live rock whose removal may potentially have the greatest impact on coral reefs would be retained under the regulation of the Convention, *governed by the provisions of Part X of Resolution Conf. 12.3.*
41. This determination resulted in a draft amendment<sup>20</sup> to Resolution Conf. 12.3 on Permits and Certificates, proposing that all references to ‘coral rock’ be changed to ‘live rock’. Document CoP13 Doc. 38 (2004),<sup>21</sup> included **the Comment from the Secretariat stating that *The Secretariat supported the proposed amendment to Resolution Conf. 12.3 on Permits and certificates.***
42. The exclusion of ‘substrate’<sup>22</sup> in the draft resolution is consistent with the Working Group’s determination that the removal of coral rock that had minimal impact (coral substrate) would be exempt from CITES controls, but that live rock would be retained under the regulation of the Convention.
43. However, the amendment to the Resolution did not proceed after *The Chairman of the Animals Committee working group on corals further explained that the proposal built on Resolution Conf. 11.10*

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<sup>16</sup> AC19 WG11 Doc. 1

<sup>17</sup>  
<sup>18</sup>

<sup>19</sup> AC20 WG 5 Doc. 1

<sup>20</sup>..Prop. 38

<sup>21</sup> <https://cites.org/sites/default/files/eng/cop/13/doc/E13-38.pdf> Document CoP13 Doc. 38, Annex

<sup>22</sup>

*(Rev. CoP12) on Trade in stony corals, acknowledging that the proposal, as presented, would be difficult for some Parties to accept, owing to different understandings of the definition of fossil coral.<sup>23</sup>*

44. Subsequent Decision 13.95<sup>24</sup> instructed *Those Parties involved in the trade in stony corals should, by the end of 2005, determine how they will interpret the annotation exempting fossil corals from the provisions of the Convention and provide this interpretation to the Secretariat for distribution to the Parties.*<sup>25</sup> With live rock already under CITES control, the (unstated) choice only applied to reporting substrate.
45. Notification No. 2006/063 summarises the responses from Parties (China, European Community, Mexico, Switzerland and the United States). The most succinct response was from the EC. Consistent with the previous Working Group interpretation, they interpreted coral rock substrate as fossils and so exempted from CITES, and that live rock is not a fossil and therefore is covered by the Convention.
46. After 2006, no further associated CITES documents can be found. The issue remains unresolved. Because some Parties report substrate and some do not, comparative analysis is impossible.

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<sup>23</sup> <https://cites.org/sites/default/files/eng/cop/13/rep/E13-ComIRep17.pdf> CoP13 Com. | Rep. 17 (Rev. 1) (page 2)

<sup>24</sup>

<sup>25</sup>

## Attachment 2: Examples - AU Specimen Export Record (SER) of AU coral exported to United States

As well as the 666 live corals exported, the AU exporter is required to show the equivalent number of 666 *Scleractinia* spp., shown as substrate, thus doubling the number of export pieces reported. Despite any official notification from US Fish and Wildlife, we understand that, unless the number of Substrate *Scleractinia* spp. specimens listed on the SER matches the number live coral pieces, the US inspectors must open and inspect every box and coral piece.

The SER lists the 666 *Scleractinia* spp. as Common Name – Hard Coral on Coral Fragments, and Description as substrate. This is a contravention of the Annex definition of substrate, i.e., that substrate has no CITES-listed species attached. However, the exporter has no choice because of risk of seizure of the product or shipment if the paperwork is not seen to comply with US requirements.

CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES OF WILD FAUNA AND FLORA		Original - Specimen Export Record				
<input checked="" type="checkbox"/> Export <input type="checkbox"/> Re-export <input type="checkbox"/> Other		1. Permit No.: PMS1022-AU-000108-000012 2. Valid Until: 14/06/2022 3. Purpose: T Page 1 of 2				
4. Importer (Name, Address and Country) USA 90502		5. Exporter (Name, Address and Country) Australia				
Item	Scientific name	Common Name	App Source	Description	Qty	Unit
1	<i>Acanthastrea lordhowensis</i>	Acan	II W	Live Coral	290	No
2	<i>Acanthastrea bowerbanki</i>	Lobed Brain	II W	Live Coral	30	No
3	<i>Echinophyllia echinata</i>	Chalice	II W	Live Coral	30	No
4	<i>Euphyllia ancora</i>	Hammer	II W	Live Coral	10	No
5	<i>Euphyllia divisa</i>	Frowspawn	II W	Live Coral	2	No
6	<i>Euphyllia glabrescens</i>	Torch	II W	Live Coral	5	No
7	<i>Favia maritima</i>	Open brain	II W	Live Coral	10	No
8	<i>Goniastrea australensis</i>	Maze	II W	Live Coral	33	No
9	<i>Gonopora somaliensis</i>	Flowerpot	II W	Live Coral	55	No
10	<i>Lobophyllia hemprichii</i>	Lobed brain	II W	Live Coral	40	No
11	<i>Scolymia australis</i>	Doughnut	II W	Live Coral	46	No
12	<i>Symphylia recta</i>	Open brain	II W	Live Coral	2	No
13	<i>Trachyphyllia geoffroyi</i>	brain	II W	Live Coral	84	No
14	<i>Tubastraea faulkneri</i>	Orange Sun	II W	Live Coral	6	No
15	<i>Tubipora musica</i>	Organ pie	II W	Live Coral	10	No
16	<i>Turbinaria peltata</i>	ruffled ridge	II W	Live Coral	13	No
17	<i>Scleractinia</i> sp.	Hard Coral on Coral Fragments	II W	Substrate	666	No
				TOTAL	1332	
12. Conditions and statements: 1. Not valid unless a copy of the original Multiple Consignment Authority is attached. 2. Must meet conditions of attached Multiple Consignment Authority. 3. Species not listed on Multiple Consignment Authority are not to be exported. 4. Exporter name and address must match attached Multiple Consignment Authority. 5. The export of specimens is not a valid export unless the permit holder has signed and dated this document.						
13. Issuing Authority for Permit/Certificate Australian Government Department of Agriculture, Water and the Environment Minister / Delegate of Minister: Susan Cooper Signature: Sloope						
14. Permit Holder Name: SYMONS WOODS Signature: [Signature] Date of issue: 20/07/2022 Export Declaration number: AEX20C44 Date of export: 20/07/2022				15. Official Seal DEPARTMENT OF AGRICULTURE, WATER AND THE ENVIRONMENT 001		

### Attachment 3: Example - AU Specimen Export Record (SER) of AU coral exported to Europe

Example of AU Specimen Export Record (SER) issued in advance to support the application for the EU import permit, showing a quantity of 215 number of specimens. However, only the circled 82 pieces were exported.

We refer to the Guidelines, (2) General Principles, Sample report format that states:

- the data in the report should record the actual trade that took place, i.e. the quantity of specimens that entered or left the country. If it is not possible to report the actual exports and re-exports, the data on such trade should come from each permit and certificate issued, and
- N.B. The annual report should state clearly whether the data used for the records of imports and exports/re-exports are based on "actual trade", and if not possible, on "permits/certificates issued".

Pro-Vision Reef questions:

- Whether the importing Party reports the quantity as the 82 pieces sent with the shipment (circled) or the 215 pieces listed on the Specimen Export Record used for the import permit application?
- how do all other EU Parties report – the number on the import permit, or the Specimen Export Record?

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

CITES Management Authority  
GPO Box 787  
Canberra ACT 2601, Australia

Australian Government

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**Environment Protection and Biodiversity Conservation Act 1999**

**Specimen Export Record No. 27103**

No.: PWS2015-AU-002120  
Valid to: 3/06/2016  
Page: 1 / 1

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76344 Eggenstein  
Germany

Queensland 4670  
Australia

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**This is an original, uniquely numbered CITES Permit. The following conditions apply.**

- Not valid unless a copy of the original multiple consignment authority is attached.
- Must meet conditions of attached multiple consignment authority.
- Species not listed on multiple consignment authority not to be exported.
- Exporter name and address must match attached multiple consignment authority.
- The export of specimens is not a valid export unless the permit holder has signed and dated this document.

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Scientific name	Common name	Product Description	App/Source	Origin	Quantity	Unit
<i>Platygyra Sp.</i>	Maze	Live Coral	11W	AU	20	NO
<i>Pocillopora Sp.</i>	Pocillopora	Live Coral	11W	AU	10	NO
<i>Psammocora Sp.</i>	Psammocora	Live Coral	11W	AU	10	NO
<i>Scleractinia spp.</i>	Coral Substrate	Fragments	11W	AU	40	NO
<i>Scolymia australis</i>	Scoly	Live Coral	11W	AU	100	NO
<i>Symphylia sp.</i>	Open brain	Live Coral	11W	AU	15	NO
<i>Tubastrea sp.</i>	Sun Coral	Live Coral	11W	AU	20	NO

Total pieces 82

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This permit has been issued under s303CG of the Environment Protection and Biodiversity Conservation Act 1999

**Permit Holder**

Name: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: 08 / 02 / 2016

**Minister / Delegate of Minister**

001

Australian Government  
Department of Sustainability, Environment, Water, Population and Communities

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Distribution: Original - To accompany shipment    Pink - Complete & return to DEW within 2 weeks of Export    SERPCTES - 11/10

**Attachment 4: Some global statistics and notes on the misreporting of Coral live as Coral raw by number of pieces:**

8. **Figure 3: CITES Trade database – Numbers of pieces of coral reported by ALL exporting and importing Parties for 5 years 2015 to 2019 inclusive:**

Coral live specimens probably incorrectly reported as Raw coral with the unit Number of pieces (prior to conversion to kg.)	
Excluding: Scleractinia spp. as some of these could be Substrate; App III, re-exports, all other data rows	
<b>Importer qty.</b>	<b>Exporter qty.</b>
745186 (no.)	504828 (no.)
(after conversion) 432208 (kg)	(after conversion) 292800 (kg)

9. **Figure 4: CITES Trade database since 2000 – list of coral trading Parties incorrectly reporting Live coral as Raw coral as number of pieces since 2000:**

Importer countries			Exporter countries
AE	GR	NZ	AU
AR	HK	PE	BM
AT	ID	PL	BS
AU	IE	PT	CU
BG	IL	QA	DO
BH	IN	RO	FJ
BN	IR	RS	HT
BR	IT	RU	ID
CA	JP	SA	MY
CH	KR	SE	SB
CN	KW	SG	SD
CY	LB	SM	TG
CZ	LU	SX	TO
DE	MO	TR	US
DK	MX	TW	VN
ES	MY	US	
FR	NL	UZ	
GB	NO	ZA	

6. Pro-Vision Reef analysed a Trade database global coral trade report downloaded on 5 September 2023. (Details: 2017-2021; All countries (exp and imp); Wild; App II; commercial; Cnidaria, re-exports removed). Figure 1 demonstrates the multiple ways in which each term/unit combination can be interpreted, particularly when the alternative unit is used.

Figure 1: Pro-Vision Reef analysis of global coral trade data 2017-2021

**Figure 5 – Analysis of each term/unit combinations and its multiple possible data interpretations**

Specimens	Trade term	Unit	Pro-Vision Reef analysis of term/unit combinations.
Scleractinia	raw corals	kg	<ul style="list-style-type: none"> <li>probably Live rock correctly reported as COR by kg,</li> <li>possibly substrate incorrectly reported, or</li> <li>dead corals incorrectly reported as Scleractinia by kg instead of by species name, or</li> <li>a combination of both.</li> </ul> Note - Without a species name, they are definitely not Live coral pieces incorrectly reported as raw coral by kg.

Scleractinia	raw corals	Number of specimens	<ul style="list-style-type: none"> <li>• dead coral incorrectly reported as Number (the alternative unit);</li> <li>• live coral incorrectly reported as COR with a blank unit, indicating number</li> <li>• substrate reported as pieces, or</li> <li>• a combination of both (<u>possibly also inflated by US requirement to report Substrate, or perhaps the way EU reports imports [from EU permit or Export invoice].</u>)</li> </ul>
Scleractinia	live	kg	<ul style="list-style-type: none"> <li>• probably live rock (COR) incorrectly reported as LIV instead of COR.</li> </ul>
Scleractinia	live	Number of specimens	<ul style="list-style-type: none"> <li>• possibly Substrate (COR) pieces correctly reported by number, but incorrectly reported as LIV.</li> </ul>
Assorted species	raw corals	Number of specimens	<ul style="list-style-type: none"> <li>• probably Live coral pieces incorrectly reported as Raw Coral (COR).</li> </ul> <p><b>Note – Specimens with assorted coral species names cannot be Raw coral (as per Annex definition that Substrate and Live Rock have no CITES-listed specimens attached). <u>The exception is dead corals.</u></b></p>
Assorted species	raw corals	kg	<ul style="list-style-type: none"> <li>• probably dead corals correctly reported by kg;</li> <li>• live coral pieces incorrectly reported as raw coral by kg, , OR</li> <li>• a combination of both.</li> </ul> <p><b>Note – Specimens with assorted coral species names cannot be Raw coral (as per Annex definition that Substrate and Live Rock have no CITES-listed specimens attached). <u>The exception is dead corals.</u></b></p>
Assorted species	live	Number of specimens	<ul style="list-style-type: none"> <li>• live coral correctly reported as LIV by number of pieces</li> </ul>
Assorted species	live	kg	<ul style="list-style-type: none"> <li>• possibly Live coral incorrectly reported by kg, but live coral usually is not sold by kg.</li> </ul> <p>Note - This will trigger the coral conversion factor to convert kg. to number.</p>

### **Attachment 5: Comparison of CITES Trade database with commercial shipping data (Panjiva)**

- Sheet 1:** CITES Trade Database, Solomon Islands exports of Raw coral by number of pieces to ALL countries 2010 TO 2019
- Sheet 2:** CITES Trade Database, Solomon Islands exports of Raw coral by number of pieces UNITED STATES only 2010 TO 2019
- Sheet 3:** PANJIVA Commercial shipping trade data download : Solomon Island Raw coral exports by number to United States only 2010 – 2019

**Note:** These three spreadsheets are large Excel files. These are provided in a document separate from the Pro-Vision Reef submission.

### **Attachment 6: ‘Coral’ magazine: Independent professional advocacy of industry’s ex situ coral breeding**

**CORAL, Volume 20, No.4 Jul/Aug 2023, Extract:**

- Matt Pederson; Don Gilson, Managing Director, Dr. Luchang Shao, Lead Coral Spawning Scientist at Interfish, Qld, Australia; SMASHING FLOWERPOTS: SEXUAL PROPAGATION SUCCESS WITH GONIOPORA CORALS

*The aquarium-keeping pursuit is perhaps one of the most exciting journeys of discovery and anyone can participate, even the amateur scientist at home. Every so often the aquarium world is jolted by a profound breakthrough in aquatic husbandry. We recognize this as one of those times. **When it comes to the flowerpot corals of the genus Goniopora, they have gone from being truly “cut flowers” that lived only months in captivity, to now thriving reef aquarium inhabitants that can be asexually propagated and shared. This dramatic shift in husbandry success all occurred in the span of less than two decades. And now, the aquarists at Inter-Fish have smashed through the final frontier of Goniopora husbandry, revealing their success in creating sexually propagated (captivebred) Gonipora corals for the first time in aquarium history.***

**CORAL, Volume 20, No.5 Sep/Oct 2023, Extracts:**

- Danilo Ronchi<sup>26</sup> and Dr. Dieter Brockmann<sup>27</sup>, *FARMING FOR THE FUTURE*:

*It should be made quite clear that the fragmentation method was developed by marine aquarists and not by scientists. None of the scientific experiments and projects dealing with coral fragmentation would be possible without this initial work by dedicated aquarists. This applies to numerous projects including basic studies of photosynthesis, coral diseases, and reproductive cycles, as well as the repopulation of damaged reefs. Even today, the coral offshoots required in large numbers that are produced under specified conditions, are still often produced through the fragmentation methods pioneered by the aquarium hobby. Only in the most recent years are we starting to see the next evolution in coral production for both the aquarium hobby and science through the captive, sexual-propagation of corals. It remains for us to appeal for support for coral farms and for aquarists to avoid the purchase of wild-collected corals as much as possible. To return to the title of this article: coral farms are most certainly the right way forward for the reef aquarium hobby! (Page 38).*

- Amanda Meckley, Vice President ACI Aquaculture and associate editor of Coral Magazine, *CORAL AQUACULTURE THE ACI WAY*:

*While coral farming at scale is new, innovative, and arguably still in its infancy, aquarists have been farming corals in some fashion for many decades too! And once again, well before the scientific community coined the now popular phrase "micro-fragging" in relation to coral restoration efforts, aquarium industry professionals and home aquarists were already cutting and growing corals, and selling and sharing frags amongst each other. The aquarists of those earlier times probably didn't anticipate that the same aquarium-mastered techniques and tools would soon be used in future ocean conservation. Credit where it's due: **the equipment, technology, and husbandry advancements in "RAS" or closed aquaculture systems today are heavily influenced by our cutting-edge hobby and industry.** While the worlds of aquaculture and coral restoration play catch up, it is an exciting time to be in the coral farming industry serving the aquarium trade. Though it may be amusing to make comments such as "we already invented that," it is important to work together with research facilities and universities to find solutions to the challenges that all aquarists face. (page 48)*

Additional note:

- **Dr. Jamie Craggs**, co-founder of Coral Spawning Lab<sup>28</sup> and Principal Aquarium Curator and Living Collections Manager at Horniman Museum UK, **pioneered ex situ coral sexual reproductive research in *Acropora* spp. in equipment developed by the aquarium industry, with his spawning systems now being used by scientists all over the world. In the future, a strong aquarium industry utilising coral industry expertise and well-established coral holding facilities will continue to make substantial environmental contributions to coral restoration through the ex situ grow out of corals.** Examples of these advancements in technology and technical knowledge are:
  - the existing biobank of coral species being held by recreational and commercial aquarists throughout the world at no cost to the community;
  - the first unprecedented successful captive-breeding of certain coral species are now being offered for sale in Australian aquarium stores.

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<sup>26</sup> Danilo Ronchi, aka DaniReef, Italian hydraulic engineer; reef aquarium and photography hobbyist; author 'Marine Aquarium' published 2006, since 2007 author of blog danireef.com prompted him to begin to write about marine aquariums in 2006 and he published his first book "Marine Aquarium". Since 2007, Danilo has been writing an aquarium reportage blog danireef.com; now part of reefs.com.

<sup>27</sup> Dr Dieter Brockmann, molecular biologist specialist; aquarium hobbyist for 35 years, focused on reproduction of hermatypic stony corals; Dieter Brockmann has undertaken several extensive study tours to Indo-Pacific and Caribbean coral reefs. His research findings have been published in numerous articles in national and international journals and magazines, as well as conveyed to large audiences in countless lectures. He is the editor, marine aquarium section, of the monthly magazine "Das Aquarium/Germany", and member of the " International Society for Reef Studies".

<sup>28</sup> <https://www.coralspawninglab.org/>

**Thea Henriette Carroll**

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**From:** Morf Nadja <Nadja.Morf@irm.uzh.ch>  
**Sent:** jeudi, 20 juillet 2023 15:06  
**To:** Karen Gaynor  
**Subject:** comment regarding consultation on trade in stony corals

You don't often get email from nadja.morf@irm.uzh.ch. [Learn why this is important](#)

Dear Karen,

To distinguish CITES from non-CITES species, different genetic methods can be applied, even for the calcite skeleton of corals.

e.g.: Genetics can be used to identify the species of precious corals seized from illegal traffic see: [Coral-ID: A forensically validated genetic test to identify precious coral material and its application to objects seized from illegal traffic - ScienceDirect](#)

Applying genetic methods to stony coral might also facilitate to differentiate CITES from non-Cites species.

Best regards,  
Nadja

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