

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



Nineteenth meeting of the Conference of the Parties
Panama City (Republic of Panama), 14 - 25 November 2022

Interpretation and implementation matters

Regulation of trade

TRADE IN STONY CORALS

1. This document has been submitted by the European Union and its Member States*

Background

2. Stony corals (or corals of the orders Helioporacea, Milleporina, Scleractinia, Stolonifera, and Stylasterina) are widely traded internationally as live corals, dead corals or 'coral rock'¹. Coral rock, which is used in the marine aquarium industry, is the hard substrate made by stony corals and other marine organisms, usually with various kinds of encrusting algae and invertebrates attached to it. The need for regulation of trade in coral rock arises from its ecological function as a habitat or substrate for other organisms, rather than a requirement to regulate trade in a specific species. Non-detriment findings for coral rock need to take into account the impact of harvest of the rock on the ecological functioning of the whole coral reef in the area of harvest.
3. Resolution Conference 11.10 (Rev. CoP15) on *Trade in stony corals* provides a working definition of coral rock, as "also live rock and substrate - hard consolidated material, >3cm in diameter, formed of fragments of dead coral and which may also contain cemented sand, coralline algae and other sedimentary rocks". However, there remains 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. In accordance with paragraph 19b) of Resolution 12.3 (Rev. CoP18) on *Permits and Certificates* and the *Guidelines for the preparation and submission of CITES annual reports* (Notification 2021/044), trade in coral rock where the genus cannot be readily determined should be reported at the order level as "Scleractinia". The vast majority of trade in raw, stony corals reported in kg, is reported as Scleractinia (99%).

Issues identified with trade in coral rock

4. *Definitions*

The term 'coral rock' is used in CITES and is defined in Res. Conf. 11.10 (Rev. CoP15). However, the term is not particularly meaningful because the international trade in coral rock is either in 'live rock' or 'substrate', each of which has a separate definition. Coral rock also contains dead coral, which has an additional distinct definition related to its use in the souvenir and curio trade, creating further confusion. Permits are required for trade in 'live rock', but the need for permits for 'substrate' may depend on whether a Party considers it to be fossilized. The European Union (EU) recognizes all categories of coral rock except live rock to be

* The geographical designations employed in this document do not imply the expression of any opinion whatsoever on the part of the CITES Secretariat (or the United Nations Environment Programme) concerning the legal status of any country, territory, or area, or concerning the delimitation of its frontiers or boundaries. The responsibility for the contents of the document rests exclusively with its author.

¹ Note that not all species of these orders are CITES-listed.

fossilized, and therefore not subject to the provisions of the Convention². The EU considers that all of these terms should be better defined, and that further guidance is needed on the various coral parts and derivatives in trade that are subject to the provisions of the Convention.

5. *Use of the term 'Scleractinia' in trade*

Coral rock (live rock or substrate) does not comprise only species of the order Scleractinia. Some species of four other coral orders can also form coral rock (Table 1). In the case of these non-scleractinian corals, identification of coral rock is usually possible to the level of genus (Table 1). However, based on the reporting requirement in Resolution 12.3 (Rev. CoP15) as noted above, Scleractinia spp. is used as a “container concept” for coral rock, with very little trade in non-scleractinian coral rock being reported (i.e. genus level trade in raw corals of *Tubipora*, *Heliopora*, *Stylaster*, *Distichopora* and *Millepora* reported in kg). Whilst it is not suggested to change the current approach of reporting trade in coral rock as Scleractinia spp., it should be recognized that other orders are involved in the trade (see Figure 1).

Table 1. Orders that comprise coral rock, and the level of identification that is possible.

| Class | Order | Family | Genus | Level of identification possible |
|----------|--------------|---------------|---------------------|----------------------------------|
| Anthozoa | Scleractinia | 24 families | | Order |
| Anthozoa | Stolonifera | Tubiporidae | <i>Tubipora</i> | Genus |
| Anthozoa | Helioporacea | Helioporidae | <i>Heliopora</i> | Genus |
| Hydrozoa | Stylasterina | Stylasteridae | <i>Stylaster</i> | Genus |
| Hydrozoa | Stylasterina | Stylasteridae | <i>Distichopora</i> | Genus |
| Hydrozoa | Milleporina | Milleporidae | <i>Millepora</i> | Genus |



Figure 1. Live rock made of dead *Heliopora* sp. (blue coral) in international trade as Scleractinia. Photo taken at Schiphol Airport, the Netherlands, by Bert W. Hoeksema.

6. *Reporting of coral rock in trade*

Any trade in live stony corals should be reported at the species level, or to the genus level where identification is acceptable in line with Notification 2013/035. According to the CITES Trade Database³, in the five years 2016-2020, exporters reported direct trade in 104 303 live corals as 'Scleractinia spp.', with importers also reporting 1 652 946 live coral imports at the level of Scleractinia spp. (Figure 2). It is not clear if the data represent trade in live corals (as it was reported under the term code LIV) that was reported, and possibly permitted, at an inappropriate taxonomic level, or if the data represent trade in coral rock (live rock) reported at the order level of Scleractinia spp., which was erroneously reported under the term code LIV instead of COR.

² As outlined in [Notification 2006/063](#)

³ Data downloaded 08/06/2022

In addition, direct exports of ‘Scleractinia spp.’ reported as live corals by weight totaled 1 163 388 kg according to exporters over the same five-year period, with importers reporting 179 246 kg of live corals in trade; all of which should have been reported as COR. Amendments may therefore be needed to the *Guidelines for the preparation and submission of CITES annual reports*⁴ to provide additional clarification that coral rock (live rock) should not be reported as LIV, and that all live rock and substrate should be reported as COR to allow for more effective analysis of levels and patterns of trade.

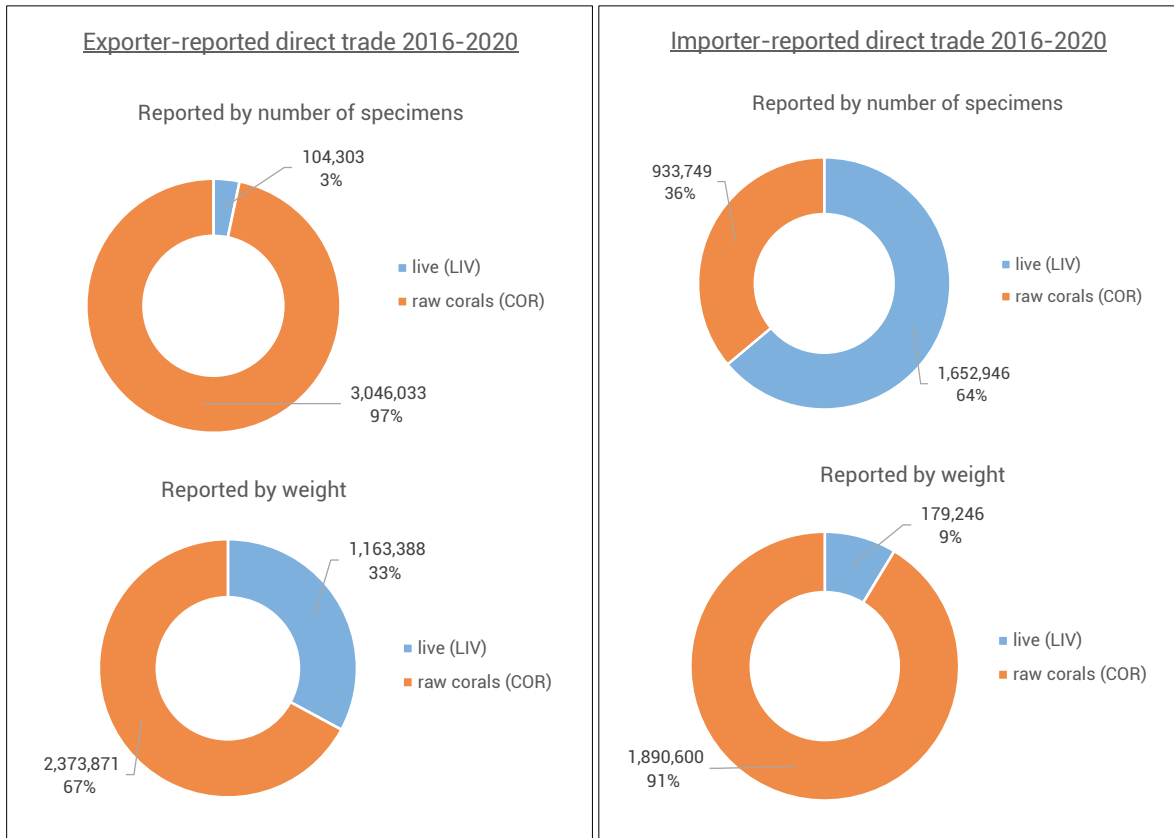


Figure 2. Direct trade in coral specimens reported as ‘Scleractinia spp.’ by number of specimens and by weight over the period 2016-2020, according to exporters and importers.

7. Identification of stony corals

Identification of stony corals in international trade is also problematic because of the various coral products traded. Through paragraph 3b) of Res. Conf. 11.10 (Rev. CoP15), Parties are requested to collaborate with, and provide support to, the Secretariat in the development of practical guides to recognizing corals and coral rock in trade. According to the CITES identification sheets held within the CITES Virtual College, CITES Checklist and Species+, there are few identification resources available for corals in general and coral rock is not well represented within these. To facilitate the process of identification of corals and in particular the types of ‘coral rock’ by non-specialists, an identification guide and key has been developed by the European Union.

Recommendations

- It is recommended that the Conference of the Parties takes note of the issues outlined above in relation to trade in stony corals and directs the Animals Committee to provide advice on possible amendments to Res. Conf 11.10 (Rev. CoP15) on *Trade in stony corals* and the *Guidelines for the preparation and submission of CITES annual reports* and provides advice on any identification guides produced for stony corals submitted to it. The following draft decisions are proposed for consideration and adoption by the Conference of the Parties:

⁴ At the time of writing, the current version of the Guidelines was issued May 2021 (Notif. No 2021/044 Annex 1)

Directed to the Animals Committee

19.AA The Animals Committee shall:

- a) review the suggested amendments to the definitions of stony corals in Res. Conf. 11.10 (Rev. CoP15) as outlined in Annex 1 (new text is underlined and text to be removed is ~~struck out~~), and report with recommendations to the 20th meeting of the Conference of the Parties.
- b) if requested, review any identification guides for trade in stony corals, such as the ID guide developed by the European Union and provide advice as needed.

Directed to the Animals Committee and Standing Committee

19.BB The Animals Committee and the Standing Committee shall make recommendations, as necessary, to revise the *Guidelines for the preparation and submission of CITES annual reports* to ensure they provide sufficient clarity on the use of appropriate terms and units for trade in stony corals.

PROPOSED 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 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 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 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 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 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 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.

*Coral rock*¹ (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.

'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.

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.