



# **Cook Islands report on the Trade in Endangered Species of Wild Fauna and Flora**

**2022**

Rarotonga, Cook Islands, April 2023



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## Table of Contents

List of Abbreviations and Definitions .....	4
Background.....	5
Export permits.....	6
Import permits.....	13
Capacity Development.....	14
Recommendations .....	15
Next Steps .....	16
Annexes.....	17

## List of Abbreviations and Definitions

Appendix I species	Species threatened with extinction. Trade in specimens of these species is permitted only in exceptional circumstances.
Appendix II species	Species which although not necessarily now threatened with extinction may become so unless trade is strictly regulated.
Appendix III species	Species which any Party identifies as being subject to regulation within its jurisdiction for the purpose of preventing or restricting exploitation, and as needing the cooperation of other Parties in the control of trade.
CITES	Convention of International Trade in Endangered Species of Wild Fauna and Flora
NES	The National Environment Service
Party	A State or a Regional Economic Integration Organization that has consented to be bound by the Convention and for which the Convention is in force.
Permit	An official document issued by a Management Authority of a Party to authorize the export of a specimen of a species included in Appendix I or II, the export of a specimen of a species included in Appendix III from the State that included the species therein, or the import of a specimen of a species included in Appendix I. A permit must conform to the requirements of the Convention and the Resolutions of the Conference of the Parties to be valid.

## Background

Unregulated trade in wildlife has become a major factor in the decline of many species of animals and plants in the Cook Islands and around the world. To combat this, the Convention of International Trade in Endangered Species of Wild Fauna and Flora (CITES) was established in 1975. It is an international agreement between 184 member countries to ensure the international trade of wild animals and plants does not threaten the survival of the species<sup>1</sup>.

The trade can involve live animals and plants, food products, wildlife products and certain medicines, whether for personal, commercial or scientific purposes. The endangered status of many prominent species, paired with habitat loss and trade, may cause these species to become extinct. CITES therefore requires international cooperation to ensure that the trade of wild animals and plants between borders is sustainably managed to safeguard species from over-exploitation and protect these resources for the future.

The Cook Islands is not a member of the CITES, however, the Convention provides provisions for non-member states to trade species under it. It is through this non-member status that the Cook Islands is able to issue a CITES permit to countries that are a party to the Convention, such as New Zealand, Australia, Canada etc.

Worldwide, 36,000 species are protected by the CITES. These species are listed in Appendices I, II and III of the CITES and are updated regularly. Each Appendices stipulates different degrees of protection according to the need. Appendix I accounts for species threatened with extinction, with international trade of these species being prohibited. Examples of species included within Appendix I are humpback whales, turtles, dolphins etc. Appendix II accounts for species that are not necessarily threatened with extinction, but will become so unless trade is regulated and controlled – an example of this is corals and clams. Appendix III accounts for species that a Party wants to regulate the trade of, and requires assistance from other Parties to control international trade of said species. For example, endemic gecko species, such as *Mokopirirakau kahutarae*, found in New Zealand are on Appendix III.

The Cook Islands National Environment Service (NES) is the agency who manages the movement of species in the Cook Islands and is authorized to issue CITES permits. Any persons planning to take any wild animals and plants, or parts thereof, out of the Cook

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<sup>1</sup> More information on CITES can be found at <https://cites.org/eng>

Islands must apply for a CITES export permit from NES. Taking specimens out of the country without a permit may be subject to confiscation or result in a fine by the receiving airport or port.

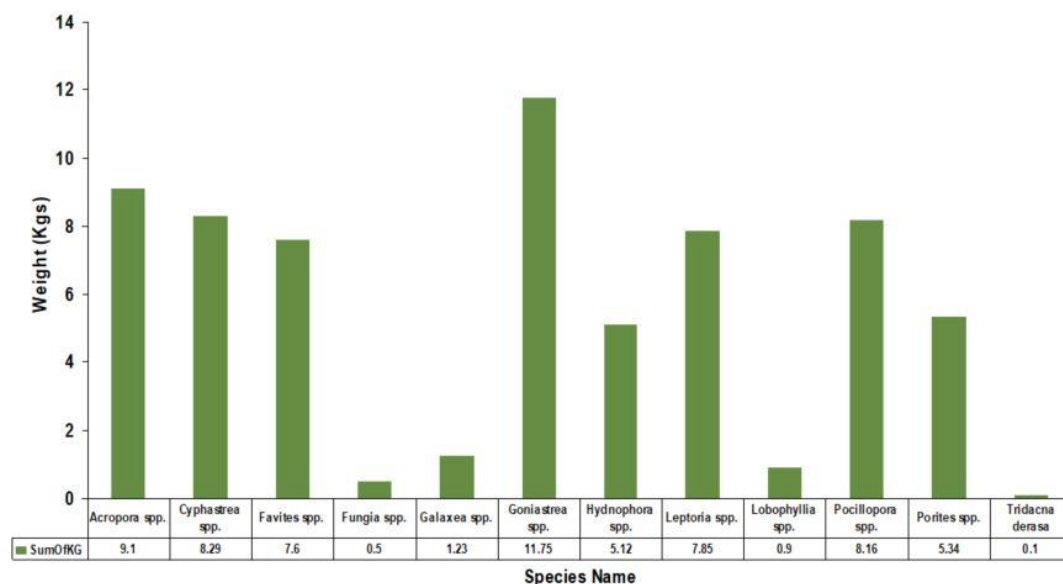
## Export permits

### CITES species

In 2022, the NES issued a total of 90 CITES export permits, of which 87 were issued from the Rarotonga office and 3 from the Aitutaki office. Of these permits, 73 were issued for travellers to New Zealand, 12 for Australia, 3 for the United States of America, 1 for Canada and 1 for Japan. One permit was issued for commercial purposes, one for research purposes (for 0.5kg of coral, namely 0.25kg *Acropora* sp. and 0.25kg *Porites* sp., issued for travel to the USA) and the remaining 88 permits were issued for personal use. A list of commonly exported species from the Cook Islands that are regulated by the CITES can be found in Annex 1.

A total of 66kg of CITES Appendix II species were exported out of the Cook Islands (Fig.1). Of the total figure, 65.9kg comprised of various coral species and 0.1kg of *Tridacna derasa* shell, locally known as pa'ua (Table 1). Of the 65.9kg of coral species exported, *Goniastrea* sp., commonly known as Sunflower Coral had the highest total weight exported at 11.75kg, followed by *Acropora* sp., the Staghorn Coral at 9.1kg (Fig. 2).

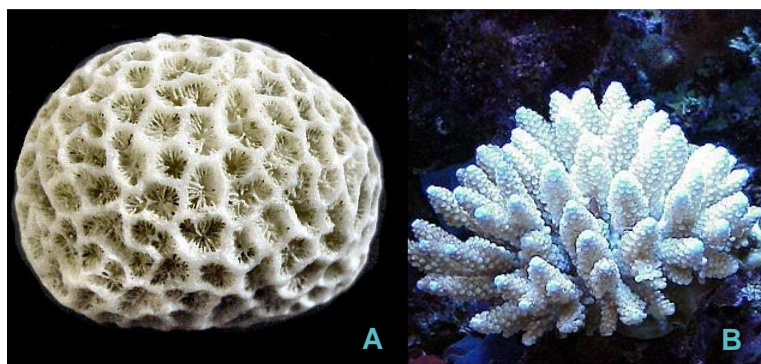
**Export of CITES Appendix II species**



**Figure 1.** Export of CITES Appendix II species by weight (kg), 2022

**Table 1.** Total weight of each CITES Appendix II species exported in 2022

Scientific name	Type	Total weight exported per species (kg)
<i>Acropora</i> spp.	Coral	9.10
<i>Cyphastrea</i> spp.	Coral	8.30
<i>Favites</i> spp.	Coral	7.60
<i>Fungia</i> spp.	Coral	0.50
<i>Galaxea</i> spp.	Coral	1.23
<i>Goniastrea</i> spp.	Coral	11.75
<i>Hydnophora</i> spp.	Coral	5.13
<i>Leptoria</i> spp.	Coral	7.86
<i>Lobophyllia</i> spp.	Coral	0.90
<i>Pocillopora</i> spp.	Coral	8.16
<i>Porites</i> spp.	Coral	5.35
<i>Tridacna derasa</i>	Shell	0.10
Total		<b>65.97</b>



**Figure 2.** CITES Appendix II species with the highest export by weight (kg) in 2022; **A:** *Goniastrea* sp., Sunflower Coral at 11.5kg; **B:** *Acropora* sp., Staghorn Coral at 9.1kg.

In May 2020, export of the *Tridacna* spp. (both flesh and shells) was declared prohibited by the NES as per recommendation from the Ministry of Marine Resources (MMR) due to significant declines in pa'ua populations throughout the Cook Islands. In December 2022, a permit to export pa'ua shell was issued for personal use, with New Zealand listed as the final destination of the permit holder. Issuing of this permit was an oversight due to human error. All CITES signatories have undergone training to strengthen species identification and will undergo refresher training moving forward to ensure a permit for pa'ua will not be issued again, as per the current moratorium on export of pa'ua.

In addition to the 66kg of CITES Appendix II species exported, there were 31 pieces of coral exported (Table 2). The specimens may have been recorded in this way by the CITES signatory who issued the permit, as the specimen itself may have been so small that it did not amount to

much on the scale to determine an accurate weight. The highest number of coral pieces exported was 8, for *Cyphastrea spp.*, the Golfball coral, followed by 6 pieces for *Acropora spp.*, the Staghorn coral.

**Table 2.** Total number of pieces exported for CITES Appendix II species in 2022.

Scientific name	Type	Total number of pieces exported (zero kg recorded)
<i>Acropora spp.</i>	Coral	6
<i>Cyphastrea spp.</i>	Coral	8
<i>Galaxea spp.</i>	Coral	1
<i>Goniastrea spp.</i>	Coral	2
<i>Hydnophora spp.</i>	Coral	3
<i>Leptoria spp.</i>	Coral	3
<i>Lobophyllia spp.</i>	Coral	3
<i>Pocillopora spp.</i>	Coral	4
<i>Porites spp.</i>	Coral	1
Total		<b>31</b>

### Non-CITES species

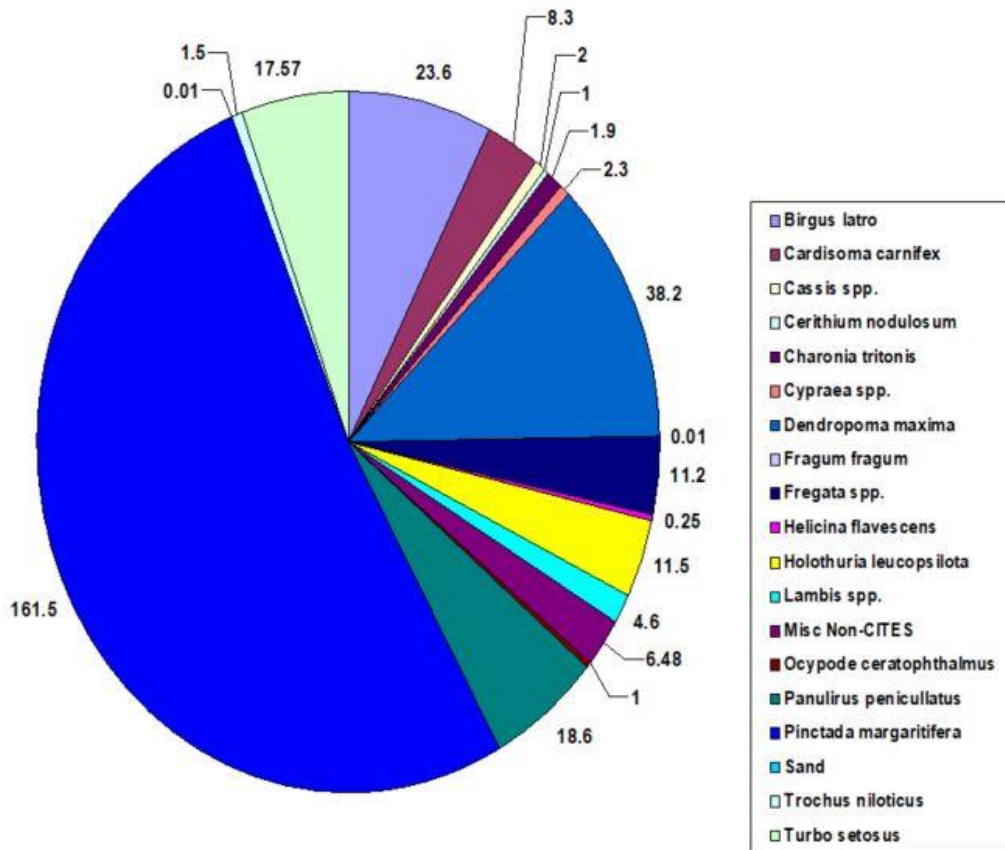
A CITES permit is not required for the species reported below; however, a permit may be obtained to assist with customs declarations at the receiving port. A list of commonly exported species from the Cook Islands that are not regulated by the CITES can be found in Annex 2.

A total of 311.5kg of non-CITES species were exported from the Cook Islands in 2022 (Table 3). However, this does not include the total number of pieces exported that had no weight recorded.

Figure 3 illustrates that the species with the highest export in 2022 was *Pinctada margaritifera*, the Black-lipped Pearl Oyster, amounting to just over half of the total export of non-CITES species at 161.5kg. This amount was largely due to a single commercial permit issued for 150kg of pearl shells. The remaining non-CITES species exported include various shells, species harvested and exported for consumption, as well as a Miscellaneous Non-CITES category which covers assorted shells that were brought in with CITES-listed coral for a permit. Either, the CITES signatory who issued the permit was uncertain of the species name or, the shell/s were brought in in such a small amount that the scales did not pick up a weight for the shell/s – likely both are the case. Similarly, a permit issued for CITES-listed coral also included 0.01kg of sand and was recorded as such.



**Total weight of Non-CITES Species exported from Cook Islands**



**Figure 3.** Total Weight (kg) of All Non-CITES Species Exported from the Cook Islands in 2022

**Table 3.** Total Weight (kg) of each Non-CITES species exported as shells or for consumption in 2022

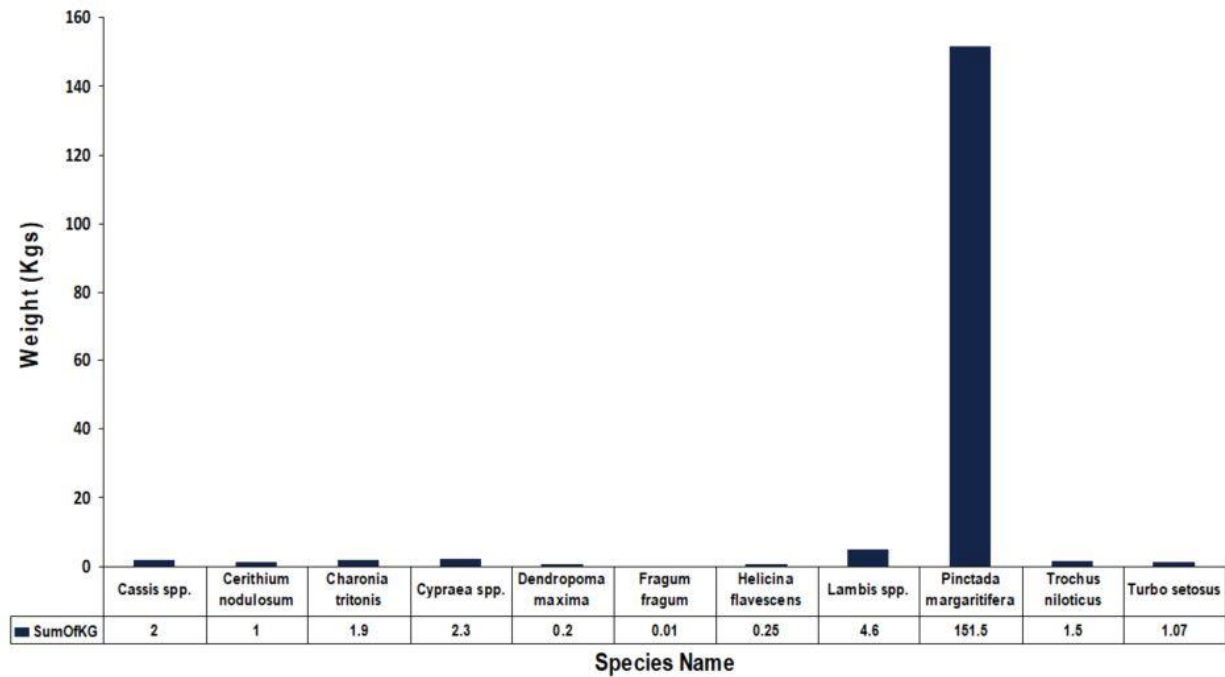
Species name	Type	Species exported as shells, including sediment (kg)	Species exported for consumption as flesh/ tissue or gonads (kg)	Species exported for consumption as whole pieces (kg)	Total weight (kg)
<i>Birgus latro</i>	Whole	-	-	23.60	23.60
<i>Cardisoma carnifex</i>	Whole	-	-	8.30	8.30
<i>Cassis</i> spp.	Shell	2.00	-	-	2.00
<i>Cerithium nodulosum</i>	Shell	1.00	-	-	1.00
<i>Charonia tritonis</i>	Shell	1.90	-	-	1.90
<i>Cypraea</i> spp.	Shell	2.30	-	-	2.30
<i>Dendropoma maxima</i>	Flesh/Tissue	-	38.00	-	38.00
	Shell	0.20	-	-	0.20

<i>Fragum fragum</i>	Shell	0.01	-	-	0.01
<i>Fregata</i> spp.	Flesh/Tissue	-	11.20	-	11.20
<i>Helicina flavescens</i>	Shell	0.25	-	-	0.25
<i>Holothuria leucopsilota</i>	Flesh/Tissue	-	0.50	-	0.50
	Gonads	-	11.00	-	11.00
<i>Lambis</i> spp.	Shell	4.60	-	-	4.60
Misc. Non-CITES	Assorted shell	1.59	-	-	1.59
	Shell	4.89	-	-	4.89
<i>Ocypode ceratophthalmus</i>	Flesh/Tissue	-	1.00	-	1.00
<i>Panulirus penicillatus</i>	Whole	-	-	18.60	18.60
<i>Pinctada margaritifera</i>	Flesh/Tissue	-	10.00	-	10.00
	Shell	151.50	-	-	151.50
Sand	Sediments	0.01	-	-	0.01
<i>Trochus niloticus</i>	Shell	1.50	-	-	1.50
<i>Turbo setosus</i>	Flesh/Tissue	-	16.50	-	16.50
	Shell	1.07	-	-	1.07
Totals		<b>172.82kg</b>	<b>88.2kg</b>	<b>50.5kg</b>	<b>311.52kg</b>

## Shells

As noted in Table 3 above, 172.82kg of assorted shells, 88.2kg of assorted seafood and bird meat, and 50.5kg of seafood such as lobsters was exported out of the Cook Islands. The *P. margaritifera* species had the greatest amount exported out of the Cook Islands, with 151.5kg of its total 161.5kg being pearl shells (Figure 4). The second most-exported shell is *Lambis* spp. at 4.6kg however; these shells did not originate from the wild, and rather were purchased from a local store.

### Non-CITES Shell Species Exported from Cook Islands



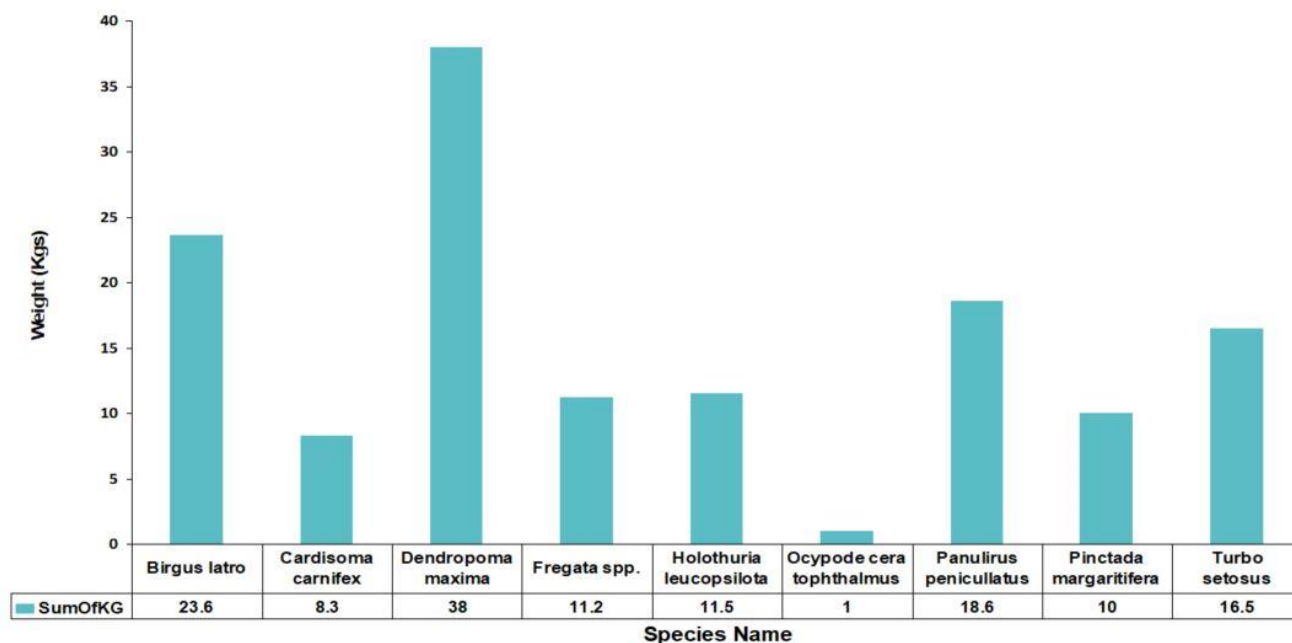
**Figure. 4** Non-CITES shells exported from the Cook Islands by weight (kg), 2022

#### Species exported for Consumption

Species exported for consumption largely consists of seafood such as *P. margaritifera* flesh or *Turbo setosus* flesh, locally known as korori and ariri respectively. Weights of these seafood were recorded, with some species such as crayfish and coconut crabs also recorded as numbers of whole specimens exported. Species exported for consumption also includes *Fregata* spp., frigate bird. Most species exported for consumption were harvested from the Pa Enuu, though this information was not captured on the permits.

A total of 88.2kg of frozen flesh/tissue was exported in 2022; with the greatest amount being 38kg of *Dendropoma maxima*, the Great Worm Snail or ungakoa followed by *Turbo setosus*, Rough Turban or ariri, at 16.50kg, while *Birgus latro*, coconut crab or unga, has the highest number of whole specimens exported at 23.6kg (Fig. 5)

### Non-CITES Species Exported from Cook Islands for Consumption



**Figure 5.** Total weight (kg) of Non-CITES Species Exported from the Cook Islands in 2022 for the intended use of Consumption

### Total number of pieces exported

As indicated earlier, some of the permits issued did not list weight (kg); rather they noted the number of pieces exported. The CITES signatory who issued the permit may have recorded the data this way for a number of reasons, such as – the container holding the flesh/tissue was larger than the scales and therefore unable to be weighed, or the shells were so small that their weight was not picked up by the scale. This does however give rise to issues when determining the trade of species out of the country as the values recorded as kilograms likely do not reflect the true amount of species being exported, as it does not account for the number of pieces.

For example, the total number of pieces exported for *Dendropoma maxima* (ungakoa) is 15 pieces (Table 4). If we assume that these 15 pieces represent 15 lots of 2L containers of ungakoa, that would amount to approximately 30kg, which then increases the total export from 38kg to 68kg. Similarly, if we assume that each of the 45 pieces of *Panulirus penicillatus*, also known as Golden Rock Lobster or Koura tai, weighs at least 1kg on average, then that increases the total export from 18.6kg to 63.6kg.

**Table 4.** Total number of pieces exported for non-CITES species in 2022.

Species	Type	Total number of pieces exported (zero kg recorded)
<i>Birgus latro</i>	Whole	12
<i>Cardisoma carnifex</i>	Flesh/Tissue	6
<i>Cerithium nodulosum</i>	Shell	10
<i>Dendropoma maxima</i>	Flesh/Tissue	15
	Shell	2
<i>Linckia</i> spp.	Whole	1
Misc. Non-CITES	Flesh/Tissue	10
	Shell	15
<i>Panulirus penicillatus</i>	Whole	45
<i>Pinctada margaritifera</i>	Flesh/Tissue	11
<i>Trochus niloticus</i>	Shell	12
<i>Turbo setosus</i>	Shell	5
Total		<b>144</b>

If we disregard the commercial permit for pearl shells, it is evident that species exported for consumption make up most of the total weight of the 88 permits issued for personal use, as seen in Fig. 5 in comparison with Fig. 4 for shells. This is also supported by the total number of pieces of species exported for consumption as seen in Table 4. The reason for the increased trade of these species is likely due to demand from Cook Islanders living overseas, as the permits issued for the species intended for consumption are typically locals. Conversely, permits issued for shells are often issues to tourists.

The raw data for all export permits issued in 2022 is included in Annex 3.

## Import permits

The Cook Islands do not issue import permits for CITES or non-CITES species to enter the Cook Islands.

## Capacity Development

In November 2022, 4 NES staff were added to the existing list of CITES signatories, bringing the total number of signatories up to 9. Only the eight signatories based at the Rarotonga NES office and the Aitutaki NES officer have the authority to issue a CITES export permit from the Cook Islands.

All CITES signatories were taken through various CITES trainings in 2022, such as species identification and weighing of different specimens, to understand the process of issuing a CITES permit. The training was imperative for both new and existing signatories to strengthen their knowledge on CITES requirements, enhance skills and ensure consistency in issuing of the permit.

## Recommendations

Several recommendations on managing the trade in endangered species of wild fauna and flora in the Cook Islands are listed below:

- It is recommended that the NES CITES signatories undergo regular training to strengthen their species identification skills in determining which specimens are CITES-listed species. This will ensure that species are recorded accurately and that permits for any export-prohibited species are not issued.
- Standardize measurements for recording weight rather than the number of pieces. This may require investing in a larger weighing scale and/or hanging scale capable of recording weight of bigger pieces.
- For seafood items, determine how many individual specimens fill up a container to gauge an idea of how much is being harvested from the lagoon e.g. how many individual ariri fill up a 2L container?
- Permits issued in the future to note which island/s the specimens were obtained from
- The Cook Islands Report on the Trade in Endangered Species of Wild Fauna and Flora 2023 to include data modelling to indicate trends in species harvest and export, and what that may mean for population dynamics and biodiversity management if trends remain the same

## Next Steps

In 2023, the NES will be undertaking a gaps analysis to explore commitments and operational requirements that come with ratifying the CITES Convention, which would make the Cook Islands a Party. This will be done in partnership with the South Pacific Regional Environment Programme (SPREP).

In the interim, NES will be updating its internal CITES database and will release an online application form for CITES permits. The online form will be released in April 2023 and be accessible via the NES website.



## Annexes

Annexes as well as the report are available via the Cook Islands Environment Data Portal:

Cook Islands Report on the Trade in Endangered Species of Wild Fauna and Flora 2022

<https://cookislands-data.sprep.org/resource/cook-islands-report-trade-endangered-species-wild-fauna-and-flora-2022>

Annex 1: Commonly exported CITES-listed species from the Cook Islands

<https://cookislands-data.sprep.org/resource/annex-1-commonly-exported-cites-listed-species-cook-islands>

Annex 2: Commonly exported non-CITES species

<https://cookislands-data.sprep.org/resource/annex-2-commonly-exported-non-cites-species>

Annex 3: Raw data for all CITES export permits issued in 2022

<https://cookislands-data.sprep.org/resource/annex-3-raw-data-all-cites-export-permits-issued-2022>

**National Environment Service**

**2023**