

Tridacna squamosa Lamarck, 1819

FAMILY: Tridacnidae

COMMON NAMES: Fluted Clam, Fluted Giant Clam, Scaly Clam (English)

GLOBAL CONSERVATION STATUS: Listed as Lower Risk/Conservation Dependent in the 2004 IUCN Red List of Threatened Species (IUCN, 2004).

SIGNIFICANT TRADE REVIEW FOR: Australia, Comoros, Egypt, Fiji, India, Japan, Kenya, Kiribati, Madagascar, Malaysia, Marshall Islands, Mauritius, Micronesia, Mozambique, Myanmar, New Caledonia (France), Niue, Palau, Papua New Guinea, Pitcairn Islands (United Kingdom), Saudi Arabia, Somalia, Sri Lanka, Tonga, United Republic of Tanzania, Vanuatu, Viet Nam.

Range States selected for review

Range State	Exports* (1994-2003)	Urgent, possible or least concern	Comments
Australia	Minimal trade	Least concern	Minimal trade
Comoros	None	Least concern	No trade reported
Egypt	Minimal trade since 1999	Least concern	Minimal trade since 1999
Federated States of Micronesia	Minimal trade	Least concern	Minimal trade
Fiji	2,851 live wild, 1,097 live captive	Least concern	Current status unknown though level of export low. Significant trade reported at family or genus level.
India	Minimal trade	Least concern	Minimal trade
Japan	Minimal trade	Least concern	Minimal trade
Kenya	Minimal trade	Least concern	Minimal trade
Kiribati	Minimal trade	Least concern	Minimal trade
Madagascar	Minimal trade	Least concern	Minimal trade
Malaysia	Minimal trade	Least concern	Minimal trade
Marshall Islands	5,077 live wild, 6,935 live captive	Possible concern	Commercial harvest banned; nevertheless considerable trade continues to be reported
Mauritius	Minimal trade	Least concern	Minimal trade
Mozambique	Minimal trade	Least concern	Minimal trade
Myanmar	None	Least concern	No trade reported
New Caledonia	1,539 shells	Least concern	Continuing relatively low level of export of shells of wild origin, reported to be by-product of considerable domestic market for meat.
Niue	None	Least concern	No trade reported
Palau	Minimal trade	Least concern	Minimal trade
Papua New Guinea	Minimal trade	Least concern	Minimal trade
Pitcairn	None	Least concern	No trade reported
Saudi Arabia	None	Least concern	No trade reported
Somalia	None	Least concern	No trade reported
Sri Lanka	None	Least concern	No trade reported
Tonga (non-Party)	10,110 live wild	Possible concern	Exports of wild specimens banned since 1993 but reports by importing countries show continuing trade in significant large volumes of wild specimens. Considerable trade reported at generic level. No known population monitoring but overfished in areas.
United Republic of Tanzania	Minimal trade	Least concern	Minimal trade
Vanuatu	3,752 live wild	Least concern	Very little recent trade recorded.
Viet Nam	74,579 live wild, 37,004 kg wild shells	Urgent concern	Consistently traded in significant quantities of wild-sourced specimens; exports declined in 2003; no population monitoring or basis for non-detriment findings was available

* Excluding re-exports

SUMMARY

Tridacna squamosa, Fluted (Giant) Clam or Scaly Clam, occurs from the Red Sea and East African coast across the Indo-Pacific to the Pitcairn Islands. It is reasonably abundant, but its status in the Indian Ocean is poorly known. Globally the IUCN (2004) classifies *T. squamosa* as Lower Risk/Conservation Dependent.

The CITES Animals Committee selected 27 countries and territories for review of trade in *T. squamosa*. No trade was reported from seven (Comoros, Myanmar, Niue, Pitcairn, Saudi Arabia, Somalia, Sri Lanka), which were therefore excluded from further review and categorized as Least Concern. Of the remaining 20, recorded trade in the species during at least the last five years of the period under review was at a low level in 14 and therefore were identified as countries of Least Concern (Australia, Egypt, Federated States of Micronesia, India, Japan, Kenya, Kiribati, Madagascar, Malaysia, Mauritius, Mozambique, Palau, Papua New Guinea, United Republic of Tanzania). Analysis focused on the remaining countries and territories: Fiji, the Marshall Islands, New Caledonia, Tonga, Vanuatu and Viet Nam.

Recent reported exports from Fiji are low and classified as of Least Concern, although additional exports of giant clams continue to be recorded at the genus or family level. Annual trade in a few hundred wild-collected shells of the species from New Caledonia continues to be reported. This is said to be a by-product of collection for domestic use for food, so that trade here is also considered of Least Concern, although it should be noted that insufficient monitoring appears to be in place to establish non-detriment findings.

Continuing export from the Marshall Islands of *T. squamosa* reported as wild-sourced appears inconsistent with a ban on commercial harvest there. No information was available on the basis for non-detriment findings, so that the species is considered of Possible Concern in the Marshall Islands.

Although Tonga (a non-Party) adopted, in 1993, a ban on export of giant clams unless they were from farmed sources, imports from Tonga reported as from wild sources continue. Trade in large volumes of specimens reported as taken from the wild was reported every year except 1994 and 1998, as were significant quantities of specimens reported at the generic level. For these reasons and Tonga reporting exports at generic levels and inconsistent units, a Possible Concern category has been assigned to trade in *T. squamosa* from Tonga.

Recent recorded export from Vanuatu is very low and in the most recent year for which reasonably complete data are available (2003) virtually no specimens of giant clams were recorded at genus or family level. For this reason, current trade from Vanuatu is considered of Least Concern.

Given the continued and high levels of trade in the species from Viet Nam, lack of population status information and the absence of advice on the nature of the management arrangements, it is difficult to judge if there is adequate information to determine whether trade is non-detrimental. Trade is therefore considered of Urgent Concern.

Ongoing trade in giant clam species recorded to the family level hinders accurate analysis of the impact of trade on specific species.

SPECIES CHARACTERISTICS

T. squamosa reaches a maximum shell size of 45cm (Table 1) but reaches maturity at sizes of six to 16 cm. Along with *T. maxima* it is the most widespread of the giant clams its range, extending from the Red Sea and East African coast across the Indo-Pacific to the Pitcairn Islands. It has been introduced in Hawaii (UNEP-WCMC 2006). It is reasonably abundant (Munro 1989), but its status in the Indian Ocean is poorly known (Wells, 1997). Globally the IUCN (2004) classifies *T. squamosa* as Lower Risk/Conservation Dependent.

General information on the biology of *T. squamosa* and other giant clam species is provided in the accompanying introduction.

Table 1. Maximum shell length observed and size and age at first year of sexual maturity

Species	Maximum Shell length	First year of sexual maturity				Remarks
		Age (y.)	Male Size (cm)	Hermaphrodite Age (y.)	Hermaphrodite Size (cm)	
<i>T. squamosa</i>	40-45	4	6	6	16	Commonly found amongst branching corals (staghorn, <i>Acropora</i> spp.); some shells have bright yellow or orange areas; wide distribution (ref. <i>T. maxima</i>).

(Source: Raymakers *et al.*, 2003)

INTERNATIONAL TRADE

Tridacna squamosa is a popular food item. Over the period 1994-2003, exports of *T. squamosa* were recorded for 34 countries and territories. These included 20 of the 27 countries and territories selected for inclusion in the review of trade in this species. No trade was reported from the other seven (Comoros, Myanmar, Niue, Pitcairn, Saudi Arabia, Somalia, Sri Lanka), which were therefore excluded from further review and trade was categorized as Least Concern. Of the remaining 20, 14 exported minimal numbers of *T. squamosa* and therefore were also identified as countries with trade of Least Concern (Australia, Federated States of Micronesia, India, Japan, Kenya, Kiribati, Madagascar, Malaysia, Mauritius, Mozambique, Palau, Papua New Guinea, United Republic of Tanzania). Exports from Egypt were relatively high, but none were recorded since 1999 and therefore current trade levels are of Least Concern. Analysis thus focused on Fiji, the Marshall Islands New Caledonia, Tonga, Vanuatu and Viet Nam. Of the other 16 countries recording exports but not selected for review, only the Solomon Islands appeared to be exporting significant quantities of *T. squamosa*.

Table 2: Exports excluding re-exports of *T. squamosa* by significant trading range States 1994-2003

Term	Unit	Source	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	Total
Fiji													
Live		C			38	227	22	550	184	76			1097
Shells		C							100				100
Live		F									162		162
Live		W	280	49	137	1040	156	305	127	160	597		2851
Shells		W					2			42		101	145
Marshall Isl.													
Live		C	125		10		175	330	235	1341	2612	2107	6935
Live		F										1011	1011
Live		R							135	106	51		292
Live		W	50	253	65		270	381	403	1435	2212	8	5077
Shells		W							49	3	50		102
Shells	G	W								140			140
New Caledonia													
Shells		W					218	211	269	258	318	265	1539
Philippines													
Live		C		6	15							900	921
Carvings		W				1	113				4	1	119
Live		W	5		2								7
Shells		W	12	14		14	3	2	2	1	24	15	87
Shells	kg	W					5				5		10
Solomon Islands													
Live		C		158	261	531	1	688	262	822	506	314	3543
Shells		C							15				15
Live		F								200	325	1047	1572
Carvings		W	12										12
Live		W	859	3478	2837	1326	24	837	140	552	343	417	10813
Tonga													
Live		C		279	392	70			158	1300	840	1214	4253
Live	kg	C							30	158			188
Shells		C										200	200
Live		F								147	531		678
Live		R							200			62	262
Live		W		761	1926	254		226	1573	1663	2474	1233	10110
Live	kg	W				4			181	261			446
Shells		W					1						1
Shells	kg	W							4500				4500

Term	Unit	Source	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	Total
Viet Nam													
Live		C									500	71	571
Live		W				110	3750	8900	23700	15081	18654	4384	74579
Shells	kg	W							17004	10000	10000		37004
Vanuatu													
Live		W					3	300	2415	1015		19	3752
Shells		W	17			73	149	48	32	26	7		352

(Source: CITES trade statistics derived from the *CITES Trade Database*, UNEP World Conservation Monitoring Centre, Cambridge, UK)

COUNTRY ACCOUNTS

Fiji (*CITES Party since 1997*)

Status:

Overfished, especially near population centres (Wells, 1997; Vuki, 2000).

Management and trade:

Although Fiji provided export data for giant clams in their CITES annual reports beginning in 1998, these have not been incorporated into the CITES trade database by UNEP-WCMC as there are questions concerning the data. Queries have been sent to Fiji's CITES Management Authority, and the data will be incorporated into the database once the questions have been resolved (Caldwell *in litt.*, 2006). Information below on CITES-reported trade is therefore based solely on data from CITES Parties reporting imports from Fiji. The ability of CITES data to support assessment of the potential impacts of recent trade levels on wild populations is hindered further by the failure to report some imports to the species level. Significant quantities of giant clams have been reported simply as "Tridacnidae spp." precluding accurate analysis of the impact of trade on specific species.

Reported imports of *T. squamosa* from Fiji over the period were largely of live, wild sourced specimens. Maximum recorded export, of just over a thousand specimens, was in 1997. Just under 600 were recorded in 2002, with few recorded in trade since then, although trade of around 1,000 specimens a year in giant clams recorded as *Tridacnidae* spp. has continued.

There is no information was available on the domestic market for, or level of collection of, *T. squamosa* specifically, but this species is known to be used along with other giant clam species. Clams are collected for subsistence purposes and considered as 'high status food' for use on special occasions or as a reserve food when times are difficult. In the 1980s, giant clam meat was sold in municipal markets and directly to restaurants, supermarkets and other outlets, and was considered to be expensive relative to other seafood products (Wells, 1997). In 2003, clam meat from wild stocks was being sold in markets (Raymakers *et al.*, 2003) and in 2004 clam meat was still served in at least one restaurant (Parry-Jones *in litt.*, 2006).

There is no regulation of domestic harvest of giant clams, although exploitation guidelines were drawn up by the Fisheries Division in 1984 (Wells, 1997). Available information indicates that domestic use and sale is also unregulated. Export of wild giant clam meat was banned in 1988 under the Fisheries Act (Cap. 1.58) of 1942, amended in 1992. The Act includes a clause allowing the Permanent Secretary responsible for fisheries to make exceptions for meat from verified mariculture sources. It is therefore possible that the classification of 'wild' in trade data may refer to clams from hatcheries that are placed on the reefs to grow out (Parry-Jones *in litt.*, 2006). It is not clear whether the export ban also applies to the export of live specimens. No information was available with regard to population monitoring.

Mariculture: Production for enhancement of wild stocks and for the aquarium trade was underway in the 1990s (Bell *et al.*, 1997; Wells, 1997); operations are presumably continuing given the data on captive-bred exports. Records of trade in wild rather than captive-bred specimens may be a result of misreporting by importing Parties.

In view of the very small amount of recent trade from Fiji recorded as *T. squamosa*, the country is considered of Least Concern. However, the identity of the clams recorded at genus or family level in trade should be established.

Marshall Islands (Not a Party to CITES)

Status:

Widespread but in low to very low numbers (Wells, 1997).

Management and trade:

As the Marshall Islands is not a CITES Party, all reported trade is based on records from importing Parties only. *T. squamosa* is one of the main species of giant clam reported in trade from the Marshall Islands with exports of wild-sourced live specimens apparently peaking in 2002 at just over two thousand. Small quantities of shells were also exported between 2000 and 2002.

Small-scale mariculture enterprises supplying *T. squamosa* to the marine aquarium trade have been operating since at least the 1990s (Foyle *et al.*, 1997). Exports of live animals reported as captive-bred or farmed have been increasing, from a few hundred in 1999 and 2000 to over 3,000 in 2003.

Commercial harvest is apparently prohibited by law, but giant clams are collected for subsistence purposes as food (Hart *et al.*, 1998; Raymakers *et al.* 2003).

Mariculture: Several small-scale operations were producing farmed *T. squamosa* in the 1990s, for the aquarium trade and for re-seeding depleted areas (Wells, 1997).

No information was available on population monitoring.

The trade reported throughout the period 1994-2003 in specimens recorded as wild collected appears inconsistent with a ban on commercial harvest. However, records of trade in wild rather than captive-bred specimens may be a result of misreporting by importing Parties. Nevertheless, in the absence of information on population monitoring and stock status, it is not possible to assess whether or not current export levels are detrimental to the species' survival in the Marshall Islands. Trade from the Marshall Islands of *T. squamosa* is therefore of Possible Concern.

New Caledonia (France)

Status:

Occurs naturally (Wells, 1997).

Management and trade

Recorded exports of *T. squamosa* comprised only shells during the period 1994-2003. Annual export of wild-sourced shells averaged around 250 between 1998 and 2003. New Caledonian authorities have advised that these shells are effectively a byproduct of domestic harvest of clams for meat consumption (Constantin *in litt.*, 2004).

Giant clams are traditionally fished for meat in New Caledonia. Domestic commercial markets for clam meat are poorly documented and difficult to separate from subsistence use. Quantities sold locally (i.e. excluding subsistence consumption) are estimated at two to three tonnes per year. Many restaurants have giant clam meat on their menu. There seems to be no local demand for live specimens of giant clams or export of these for the aquarium markets (Baillon *et al.*, 2002).

Information on legislation relevant to giant clams is incomplete. Non-commercial fisheries are not regulated in the *Province des Iles*, although the customary Kanak tenure system may have some relevance. It is understood that giant clams may only be collected by free divers without any underwater air supply device, e.g. scuba and hookah, and only for personal consumption (e.g. sport, leisure). Harvest and trade of giant clams are also regulated through the national licensing and reporting system (Raymakers *et al.*,

2003). In the Northern Province, giant clams are on the list of protected fauna under *Délibération N°23 & N°85-2001/BPN*, but under Article 2 of this regulation, fishing for giant clam species is allowed with an easily acquired "hunting" permit. In 2002 draft legislation was under consideration in the South Province to restrict harvest to licensed professional fishermen and thereby prohibit harvest by non-professionals. It is understood that similar provisions are being drafted for the Northern Province. "Commercial" export of shells is not permitted, but personal exports of up to 6 valves per family is permitted. In 2003 the maximum size of exportable shells was set at 25 cm to provide some protection for breeding adults (Raymakers *et al.*, 2003).

Very little scientific research has been carried-out on wild populations, with baseline information on which to base management plans and information on population monitoring lacking. New Caledonian authorities acknowledge that there is 'little objective basis on which to base any estimation of the risks involved in the export of clams on the current stocks'. The preliminary results of a study conducted in the Northern Province to evaluate clam resources do not yet provide insight on the abundance of the resource but indicate that less than 5% of fishers target clams (Raymakers *et al.*, 2003). The current knowledge of their abundance and recruitment does not provide sufficient basis to set-up adequate management measures ensure that exports are non-detrimental, as required under CITES (Constantin *in litt.*, 2004).

Mariculture: Experiments on artificial breeding of giant clams, including *T. squamosa* were conducted by IFREMER (Institut français de recherche pour l'exploitation de la mer) in New Caledonia from 1993 to 1999, but were not successful for this species (although they were for some other species).

The small amount of recent trade in the species from New Caledonia, and the fact that the exported product appears to be a by-product of domestic consumption means that such trade can currently be considered of Least Concern.

Tonga (Not a Party to CITES)

Status:

Overfished especially near population centres (Anon., 1995; Wells, 1997).

Management and trade:

Since Tonga is not a CITES Party, all reported trade is based on records from importing Parties only. The ability of CITES data to support assessment of the potential impacts of recent trade levels on wild populations is hindered further by the failure to report some imports to species level. Significant quantities of giant clams imported from Tonga have been reported simply as "Tridacnidae spp." precluding accurate analysis of the impact of trade on specific species. In addition, the majority of trade in meat, which is typically reported by weight, was reported without any units attached; between 1999 and 2003 imports from Tonga of "Tridacnidae" meat were reported as between 4,500 and 8,000 annually. It must therefore be assumed that this represents the number of specimens rather than the total weight of the shipments.

Substantial trade in *T. squamosa* from Tonga was reported during the period 1994-2003. Most trade was in live animals, with intermittent reports of shells. Both live and shell product is variously reported in kg and numbers of specimens. Reported trade in live animals from the wild averaged 1,700 specimens a year between 2000 and 2003 while that in animals reported as captive-bred averaged around 1,000 specimens a year over the same period.

Substantial imports of "Tridacnidae" meat have been seized in New Zealand, primarily items carried as personal effects from Tonga by people visiting relatives. It is not known whether this includes specimens of *T. squamosa*.

In Tonga, giant clams are harvested for domestic use, the shell is used for decorative purposes and specimens are also exported live for the aquarium trade. A representative of the Ministry of Fisheries estimated that 20-50 fishermen were engaged in giant clam harvesting for domestic use (Raymakers *et al.*, 2003), but local demand for clam meat as a food source is relatively limited (Tacconi and Tisdell, 1992). Small-scale enterprises supply *T. squamosa* to the marine aquarium trade (Foyle *et al.*, 1997; Hart *et al.*, 1998).

Tridacnidae were protected under the Fisheries Act 1989 because of concern about over-fishing (Anon., 1991). More specific legislation covering harvest and sale of, as well as domestic/international trade in Tridacnidae products, is the Fisheries (Conservation and Management) Regulation, 1993, which came into force in 1994. Harvesting of wild giant clams for commercial export is banned, but local consumption and the souvenir trade is permitted. Clams produced on farms may be exported. There are limitations regarding the types of fishing gear used. Scuba and hookah are prohibited for the harvest of *T. squamosa*. There is also a minimum size shell length of 180 mm. There are no harvest and/or export quotas for Tridacnidae. Enforcement is the responsibility of the Ministry of Fisheries, which does not consider poaching to be a problem, although there are indications that measures should be strengthened.

Protected areas in Ha'atafu, Pangaimotu, Hakautapu and Malinoa and other sanctuary areas have been established since 1988 and provide suitable habitat for Tridacnidae, but poaching has been reported (Chesher, 1993).

Wild Tridacnidae populations are apparently not currently monitored.

Mariculture: Although there is no commercial "mariculture operation" in Tonga, commercial imports of live clams from Tonga have been reported that have been declared as either captive born (F) or captive-bred (C). The juvenile giant clams are first generation specimens (i.e. 'F') born in a State-owned hatchery run for a conservation programme that is being carried-out to restock Tongan waters (CITES Management Authority Tonga, 2002). The Ministry of Fisheries has stated that:

1. There is a giant clam sanctuary: Some large clams were collected and placed in a protected area in the hope that it will increase the chance of natural reproduction.
2. Artificial seed production of giant clam ("ranching"): juvenile clams are protected by coastal village communities until they reach marketable size. Some of these clams are already 10 years old and are sexually mature. Some communities are using these as an attraction for tourists.

Reported imports of specimens declared as being of wild origin continue despite the 1993 ban on exports of wild stocks. There are also additional reported imports of clams declared as captive-born or bred although available information indicates that there is currently no commercial clam breeding facility operating in Tonga (information from the Ministry of Fisheries indicates that ranching rather than captive breeding is taking place). For these reasons, trade from Tonga in *T. squamosa* has been categorized as Possible Concern.

Vanuatu

Status:

Patchy or rare, probably naturally rather than as a result of over-exploitation (Wells, 1997).

Management and trade:

Vanuatu exported 2,415 and 1,015 specimens of wild-sourced live product in 2000 and 2001 respectively. A further 19 specimens were exported in 2003 despite the introduction of a ban on trade in 2001.

All giant clam species are prized subsistence foods for the local Ni-Vanuatu population (Zann and Ayling, 1988).

An export ban on giant clams was declared in 2001, but harvest for domestic use is still legal and is believed to still occur. A protected area has been established for giant clams around the island of Efate and its offshore islands, which has been closed to giant clam fishing since 2000.

No information was available on population monitoring.

Mariculture: There is no commercial aquaculture in Vanuatu but giant clam artificial breeding started in the late 1990s (Adams *et al.*, 2001) with the main aim of enhancing depleted stocks such as *T. squamosa* (Zann and Ayling, 1988).

Recorded trade in *T. squamosa* from Vanuatu has been at a low level compared with that for other giant clams (*T. crocea* and *T. maxima*) and has recently been at a very low level indeed. Some clams are still reported in trade at genus or family level. However, virtually none were so reported in the most recent year for which data were available (2004). In view of this, trade from Vanuatu is considered of Least Concern.

Viet Nam

Status:

Known from the Hon Mun and Phu Quoc proposed marine protected areas (ADB 1999; BirdLife International *et al.*, 2001a, b).

Management and trade:

Viet Nam has exported significant quantities of live product and shells from the wild since 1998 and exports of live, wild-sourced product have averaged 12,400 specimens a year. Exports declined to just over 4,000 specimens in 2003 after peaking at 23,700 in 2000. Exports of shells from the wild averaged 12 tonnes between 2000 and 2002, but were zero in 2003.

No information was available on legislation, management activities or population monitoring.

Mariculture: no information was available.

Given the large quantities of this species reported as exports from the wild during the review period and the lack of available information on stocks and management activities, export of *T. squamosa* from Vietnam is categorized as of Urgent Concern.

PROBLEMS IDENTIFIED THAT ARE NOT RELATED TO THE IMPLEMENTATION OF ARTICLE IV, PARAS 2(a), 3, or 6(a)

As noted above, the ongoing reporting of trade in giant clam species to the genus (e.g. *Tridacna*) or family level (Tridacnidae spp.) (see Annex) prevents a full assessment of trade levels, and therefore of the potential impact of international trade on wild populations. However, it is important to note that the quality of reporting by some countries has improved significantly, e.g. Indonesia, Viet Nam and Philippines. Reporting of trade from Cook Islands, Fiji, French Polynesia, Tonga, Vanuatu, Samoa and Solomon Islands continues to contain significant information only at the genus or higher level, often in conjunction with reporting by importing Parties. Reporting of trade at the species level would facilitate more accurate analysis of the impact of trade on specific species. Additional reporting problems that hinder accurate aggregation of data across years and species include: variations in the unit of measurement cited; difficulty in estimating the number of specimens involved when reports are made in "kg", which is common in the case of meat and shells; inconsistencies between records provided by importing and exporting countries.

Concerns regarding illegal trade in Tridacnidae have been noted, from Indonesia, and merit further review.

Trade from the Solomon Islands (not a Party and not selected for review) continues to be of concern. The entire family Tridacnidae was included in Phase 3 of the Review of Significant Trade review. Recommendations concerning export from the Solomon Islands were made in 1996, at which time the Secretariat's policy was to recommend against accepting export permits issued by the Solomon Islands. In July 1996 the Minister for Agriculture and Fisheries in the Solomon Islands explained by letter that the country prohibited the export of wild clams, and that those exported were cultured clams produced by a number of village-based farms from clams supplied by an ICLARM (now WorldFish Center) hatchery, which the Minister considered met the CITES definition of bred in captivity. In view of this, the Secretariat considered its recommendation to be no longer applicable. However, more recent sources, including the Food and Agriculture Organization of the United Nations (FAO) (Anon. 2002) and the South Pacific

Commission, through its aquaculture portal (<http://www.spc.org.nc/aquaculture>, viewed March 3rd 2006) note that aquaculture activity had ceased by 2000 at the latest owing to civil unrest. Since then, Parties have recorded imports from the Solomon Islands of specimens of wild origin of all of the species of giant clam under review here. The nature of the specimens currently in trade from the Solomon Islands should be verified.

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