

**THE EXPORT AND RE-EXPORT
OF CITES-LISTED BIRDS
FROM THE SOLOMON ISLANDS**

Chris R. Shepherd
Carrie J. Stengel
Vincent Nijman

A TRAFFIC SOUTHEAST ASIA REPORT



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Cover: The Papuan Hornbill *Rhyticeros plicatus* is native to the Solomon Islands, and also found in Papua New Guinea and Indonesia, where many of the bird species featured in this report originate.

Credit: © Brent Stirton/Getty Images/WWF

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Chris R. Shepherd
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Cardinal Lories *Chalcopsitta cardinalis* at a location described as a “breeding facility” in the Solomon Islands in 2011. Over 5000 individuals of this endemic species were imported from the Solomon Islands between 2000-2010; 80% of which were declared as captive-bred.

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The Yellow-crested Cockatoo *Cacatua sulphurea* is a Critically Endangered species native to Indonesia. Eight hundred individuals declared as captive-bred were imported to Malaysia from the Solomon Islands between 2002-2004.
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ABBREVIATIONS AND ACROYNMS

AVA	Agri-Food & Veterinary Authority, Singapore's CITES Scientific Authority and Management Authority
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
ECD	Environment and Conservation Division of the Ministry of Environment, Conservation and Meteorology of the Solomon Islands; the country's CITES Scientific Authority and Management Authority
IUCN	International Union for Conservation of Nature
MA	Management Authority (as relating to a country Party to CITES)
PERHILITAN	<i>Jabatan Perlindungan Hidupan Liar dan Taman Negara Malaysia</i> , Malaysia's Department of Wildlife and National Parks
SA	Scientific Authority (as relating to a country Party to CITES)
UNEP	United Nations Environment Programme
WCMC	World Conservation Monitoring Centre (now referred to as UNEP-WCMC)

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Ariel view of Marova Lagoon, the largest saltwater lagoon in the world; located in the Western Province of the Solomon Islands.
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EXECUTIVE SUMMARY

Large numbers of birds, including more than 68 000 wild-caught and reportedly captive-bred CITES-listed individuals, were imported from the Solomon Islands in the 2000s. The vast majority were imported by Malaysia and Singapore and often re-exported, particularly in the case of Singapore. In terms of species composition, there were a few species native to the Solomon Islands, however the majority (77%) were non-native species from Indonesia and Papua New Guinea. 13 736 individuals of these non-native species were exported as “captive-bred”. However, it is unclear how the parent stock of these captive-bred birds was acquired as there is no documented export of these CITES-listed species to the Solomon Islands. In terms of the number of individual birds involved in the trade, the majority of exports were species native to the Solomon Islands (54 793). Of these native bird species, 13 692 were declared as wild-caught and 41 101 were reportedly captive-bred. These large numbers of native and non-native captive-bred birds suggest the existence of commercial breeding facilities on the Solomon Islands capable of housing thousands of breeding pairs.

However, in 2006, CITES reported the Solomon Islands was “not known to have substantial bird breeding facilities” and a comprehensive State of the Environment report published by the Ministry of Environment, Conservation and Meteorology (the Solomon Islands’ CITES Scientific Authority and Management Authority) in 2008 makes no mention of captive-breeding or captive-breeding facilities for birds. Meanwhile the Environment Conservation Division (ECD) informed TRAFFIC researchers (in litt.) that although there were registered bird breeders in the islands, they were not breeding birds, only taking them from the wild. Furthermore, the ECD wrote: “There are no breeding facilities, only some confusion with storing facilities. Most of the exported birds were captured and kept in holding sites only.”



Solomons Cockatoos *Cacatua ducorpsii* at a location described as a “breeding facility” in the Solomon Islands in 2011. Over 20 000 of this native species were imported from the Solomon Islands between 2000-2010; nearly 75% of which were declared as captive-bred. © TRAFFIC Southeast Asia

Given the official confirmation of a lack of suitable bird breeding facilities in the Solomon Islands, these data lead to the inescapable conclusion that large numbers of wild-caught birds have been laundered into the global wildlife trade through being declared as captive-bred.

Over the past decade, Singapore and Malaysia combined have accounted for 93% of all birds imported from the Solomon Islands, with significant amounts being re-exported elsewhere, such as Taiwan. The vast majority, if not all the birds declared as captive-bred are in fact sourced from the wild. This has grave implications for maintaining healthy populations of birds in the wild.

In light of the above, TRAFFIC makes the following recommendations:

- The CITES Standing Committee should evaluate the captive breeding operations of the Solomon Islands and consider recommendations that address the concerns raised in this report. In the event the Standing Committee makes recommendations and the Solomon Islands fails to comply, TRAFFIC then recommends the Standing Committee consider a trade suspension.
- The CITES Management Authority of the Solomon Islands should investigate species' origins, including whether individuals were wild-caught versus legitimately captive-bred as well as the origin and legality of non-native stock.
- The CITES Management Authorities of Indonesia and Papua New Guinea—the range States of the majority of non-native bird species exported from the Solomon Islands—should contact their counterparts in the Solomon Islands as well as in Singapore and other export destinations, to investigate the potential laundering of birds. This recommendation is extended to the Management Authority of Taiwan and all other importers of birds declared as originating from the Solomon Islands.
- All countries reporting data to CITES based on permits issued should take steps to provide more accurate information. Reporting should reflect the actual numbers of permits used to ensure transparency in the international wildlife trade and to enable the UNEP-WCMC CITES trade database to be used to its fullest potential.

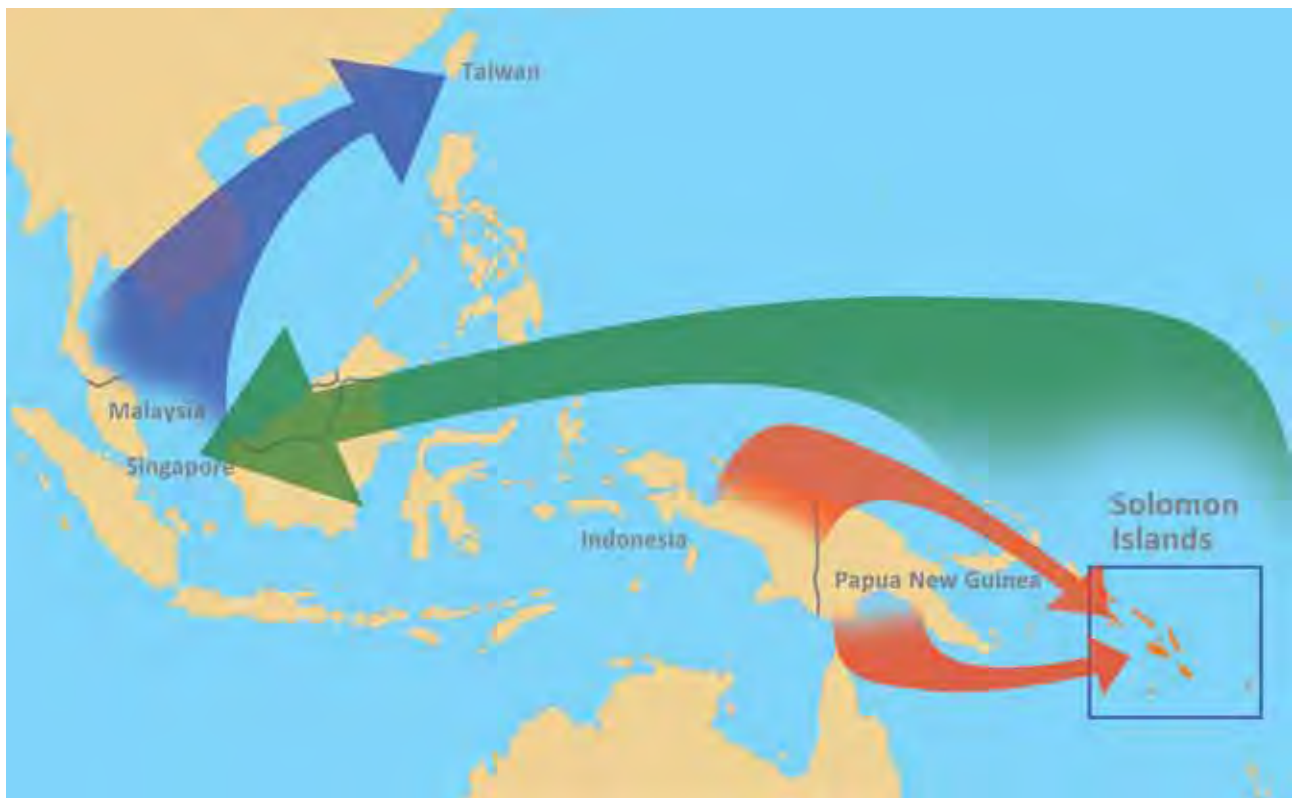


One hundred and fifty Yellow-streaked Lories *Chalcopsitta sintillata* were exported from the Solomon Islands to Malaysia (50) and Singapore (100) in 2003 and 2005, respectively.
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INTRODUCTION

The Solomon Islands is a former British protectorate that gained independence in 1978. Situated in the Pacific east of Papua New Guinea, the Solomon Islands archipelago consists of several large volcanic islands, as well as smaller outlying islands and atolls covering a land mass of nearly 30 000 km² (Figure 1). All of the archipelago's islands lie within Solomon Islands territory, with the exception of two (Bougainville and Buka) that are part of Papua New Guinea. Honiara is the capital and main economic centre of the Solomon Islands and is located on the island of Guadalcanal. Most of the inhabitants of the Solomon Islands are ethnic Melanesians.

Figure 1. The Solomon Islands in relation to major trading locations discussed within this report.



Richard Thomas / TRAFFIC

Ethnic tensions on Guadalcanal occurred in 2000 between indigenous people and settlers from Malaita, who arrived on the islands after the Second World War. This led to a period of political instability, with the ethnic unrest severely damaging the nation's economy. The closure of the country's major gold mine left the country heavily reliant on timber exports. There is limited investment in the country at present, making the Solomon Islands strongly dependent on development aid.

The Solomon Islands is a major exporter of wildlife, including many species listed in the Appendices of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Export of wildlife from the Solomon Islands has been permitted since 1987 (Leary, 1991). For the period 2000-2006, the Solomon Islands was the seventh largest source of wildlife in a number of shipments imported into the USA (Smith *et al.*, 2009), illustrating the nation's significance in the global wildlife trade.

The Solomon Islands has been of global importance in the export of marine species and invertebrates (Wabnitz *et al.*, 2003), with a large proportion of marine aquarium organisms from the Solomon Islands exported to Fiji and re-exported to other countries (Lal and Kinch, 2005). In recent years, the export of wildlife from the Solomon Islands, in particular the

wild-caught Indo-Pacific Bottlenose Dolphins *Tursiops aduncus*, has received considerable attention and has highlighted some of the challenges in establishing Non-Detriment Findings of species exported from the country (Parsons *et al.*, 2010). To date there has been no comprehensive review of non-marine wildlife trade from the Solomon Islands.

Many specimens exported from the Solomon Islands are declared as captive-bred, including those from species groups such as corals, clams, and reptiles. Among the species groups exported, birds are one of the most numerous. Both native and non-native birds are exported from the Solomon Islands and declared as either captive-bred or wild-caught.

There are some 264 bird species native to the Solomon Islands, 71 of which are endemic to the Solomon Archipelago. Forty-six of these are considered globally threatened (Anon, 2011). Many species, especially parrots and cockatoos, are exported from the Solomon Islands to a variety of countries, including some that act as transit points where birds are then re-exported to further destinations.

The volume of wildlife trade from the Solomon Islands is substantial, and has significant implications for the nation's natural resource management. While few comprehensive studies have been conducted on the extent of this trade, Leary's (1991) review of the terrestrial wildlife trade is the most detailed. This study concluded that between 1987 (when the Solomon Islands government announced that the export of Solomon Islands fauna was to be permitted) and 1990, the wildlife export trade was rapidly growing. Leary (1991: 22) noted that the "extent of illegal trade, *i.e.*, trade without export permits, is unknown but it appears likely that at least some illegal trade in Solomon Islands parrots is occurring". DeRoller (2008) noted that during the late 1980s the export of birds from the Solomon Islands was five-fold that of butterflies. Using data on butterflies from Leary (1991), this suggests annual exports of 20 000 to 25 000 birds.



Three hundred and fifty Brown Lorries *Chalcopsitta duivenbodei* were imported declared as captive-bred from the Solomon Islands between 2000-2010.

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Aims of the study

The aim of this report is to present data on the number and species composition of birds exported from the Solomon Islands since 2000. It focuses on a number of key species groups (parrots, birds-of-paradise, mynas and hornbills) and the main bird trade partners of the Solomon Islands. Given the prevalence of captive-bred individuals in reported exports of birds from the Solomon Islands, this report also covers the veracity of this trade and the country's reporting to the CITES authorities. Recommendations to the Solomon Islands CITES Management Authority, its main trading partners and the CITES Secretariat are made to allow for the proper regulation of this trade.



Cardinal Lorries *Chalcopsitta cardinalis* photographed at a purported captive breeding facility in the Solomon Islands, 2011.

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Background: legislation and suspension of wildlife trade

Laws covering the protection and regulation of wildlife trade, including the import and export of birds, are implemented through the *Wildlife Protection and Management Act* (1998) of the Solomon Islands. All native species of parrots and cockatoos (Psittacidae) are listed under Schedule I, which prohibits export, with the exception of the following species listed under Schedule II: Solomons Cockatoo *Cacatua ducorpsii*, Cardinal Lory *Chalcopsitta cardinalis*, Eclectus Parrot *Eclectus roratus*, Yellow-bibbed Lory *Lorius chlorocerus* and Rainbow Lorikeet *Trichoglossus haematodus*.

Part III, *Regulation of Export and Import of Specimens* of the *Wildlife Protection and Management Act* (1998) of the Solomon Islands, clearly states that “No person shall export or attempt to export any plant or animal specimen specified in Schedule II, unless he is an approved person and has a valid permit to export such specimen for commercial purposes or otherwise”. Under this Act, any person who contravenes this provision is guilty of an offence and liable to a fine not exceeding USD3000 or imprisonment for a term not exceeding three months.



Solomons Cockatoos *Cacatua ducorpsii* photographed at a purported captive breeding facility in the Solomon Islands, 2011.

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The Act also states that the Director of the Environment and Conservation Division of the Ministry of Environment Conservation and Meteorology shall not grant a permit to export a specimen unless he is satisfied that the specimen was not obtained or exported in contravention of any Solomon Islands law. Export consignments require a “General Export Permit for Wildlife” issued by the Environment and Conservation Division of the Ministry of Environment Conservation and Meteorology.

In August 2006, the Government suspended trade in the country’s native wildlife. The suspension was necessary to give time to develop essential regulations for both the Environment Act (1998) and the Wildlife Protection and Management Act (1998). Since the suspension order has been in place, the Environment and Conservation Division has not processed any new permits for export but has revalidated expired permits to allow any existing stock possessed by traders to be exported (Ministry of Environment, Conservation and Meteorology 2008).

On 26 March 2007, the Solomon Islands deposited its instrument of accession to CITES, making it the 171st Party. The Convention entered into force in the Solomon Islands on 24 June 2007. The Environment and Conservation Division (ECD) of the Ministry of Environment, Conservation and Meteorology has been designated as the CITES Scientific Authority and Management Authority of the Solomon Islands.

CITES allows trade between Parties and non-Parties (*e.g.* the Solomon Islands prior to 2007) if comparable documentation is provided by competent authorities of the non-Party. CITES requires that permits and certificates issued by States not Party to the Convention should not be accepted by Parties unless, according to CITES Resolution 9, they contain “in the case of export of specimens of a species included in Appendix I or II, certification to the effect that the competent scientific institution has advised that the export will not be detrimental to the survival of the species (in case of doubt a copy of such advice should be required) and that the specimens were not obtained in contravention of the laws of the State of export”.

As stated in the Solomon Islands *State of the Environment* report (Ministry of Environment, Conservation and Meteorology 2008), the object of the *Wildlife Protection and Management Act* (1998) is to regulate the international trade in the country’s wildlife resources. Any individual or organization involved in wildlife trade must have an “approved management programme” and be named within a specific “register”. Prior to the ban, a special permit equivalent to a CITES permit, issued by the ECD, had to accompany any consignment of wildlife intended for export. An application had to be submitted in a specified form for approval by ECD and include information on the wildlife to be exported including the export value of the consignment.



Eclectus Parrots *Eclectus roratus* photographed at a purported captive breeding facility in the Solomon Islands, 2011. © TRAFFIC Southeast Asia

METHODS

Data on international trade were retrieved from the United Nations Environment Programme-World Conservation Monitoring Centre (UNEP-WCMC) CITES trade database. This database contains records of import, export and re-export of CITES-listed species as reported by the Parties. The purpose of this database is to allow global statistics to be derived for analysis.

This report focuses on the commercial trade in live CITES-listed bird species from the Solomon Islands (hence excluding dead specimens, bird derivatives or birds imported from the Solomon Islands for scientific purposes, zoo purposes, etc.) for the period 2000-2010 (data from 2011 onwards were not yet available at the time of analysis). Data in the UNEP-WCMC CITES trade database are provided by CITES Parties, and when trade is between Parties both the importing and exporting Party submit reports. Given that for most of the 2000s the Solomon Islands was not a Party to CITES, trade to and from the Solomon Islands was reported by the exporting or importing Parties and not the Solomon Islands itself.

According to Article VIII of CITES, Parties may submit data to the UNEP-WCMC based on actual trade or on the number of permits issued. This is further clarified in the Notification to the Parties No. 2011/019 of 17 February 2011: “As far as possible, 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, data on such trade should come from each permit and certificate issued.”

Given Singapore’s prominence in the trade of live birds from the Solomon Islands, on 27 April 2011 an advanced draft version of this report was sent to the Agri-Food & Veterinary Authority (AVA) which acts as the country’s CITES MA and SA, for verification and comments. In response, AVA noted that information provided by Singapore to UNEP-WCMC is based on the number of permits issued rather than the actual import or export taking place. Hence “actual” figures may be lower than the quantities recorded in the database. According to AVA, there were no imports of birds from the Solomon Islands in 2000, 2006 and 2009 (*in litt.* Agri-Food & Veterinary Authority of Singapore to Chris R. Shepherd, Deputy Regional Director of TRAFFIC Southeast Asia on 13 May 2011). Actual records were requested from the Singapore CITES MA, however data were unavailable due to the confidentiality of the information (*in litt.* Agri-Food & Veterinary Authority of Singapore to Chris R. Shepherd, Deputy Regional Director of TRAFFIC Southeast Asia on 23 May 2011).

This report relies on data contained in the UNEP-WCMC CITES trade database as provided by Parties.

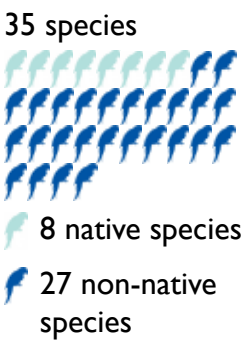
In the period 2000-2010 no CITES-listed bird species were exported from the Solomon Islands as “pre-convention” (code O). A small number of species traded were listed at the sub-specific level in the UNEP-WCMC CITES trade database, for instance the Citron-crested Cockatoo *Cacatua sulphurea citrinocristata* and the Eleonora Cockatoo *Cacatua galerita eleonora*. To be consistent with both Solomon Islands legislation and CITES nomenclature in general, these were all treated at the species level.

Additional information was obtained from published and unpublished literature and through discussions with conservation organizations and Management Authorities in various countries, including the Solomon Islands.

RESULTS AND DISCUSSION

Species composition, numbers and origin

2000-2010



According to the UNEP-WCMC CITES trade database, from 2000-2010, importing countries reported receiving 68 479 captive-bred and wild-caught birds, representing 35 species, from the Solomon Islands (Table 1). There has been a rise and fall in the number of species imported from the Solomon Islands, with only 5 species reported in 2000, peaking at 26 species in 2005 and dropping again to 5 or 6 species in recent years. Only four species were consistently imported throughout the decade. Eight of the imported species were native to the Solomon Islands, while 26 were endemic to Indonesia and/or Papua New Guinea. One species, the Monk Parakeet *Myiopsitta monachus* originates from South America, but has feral populations occurring in North America and Europe. There are no records of the 27 non-native species included in this report being introduced to the Solomon Islands (Anon., 2011).

Despite the relatively larger number of non-native species traded (27 non-native species vs. 8 native species), the majority of birds imported from the Solomon Islands were native. About two-thirds of the native species were recorded as captive-bred (41 101 captive-bred vs. 13 692 wild-caught). All but 20 individuals of the recorded non-native species were declared as captive-bred. In 2002, Poland imported 20 “wild-caught” Blue-eyed Cockatoos *Cacatua ophthalmica* from the Solomon Islands however this species is only found in Papua New Guinea.

There are no records of any CITES-listed bird species being exported to the Solomon Islands in the UNEP-WCMC CITES trade database apart from the re-export of four Solomons Cockatoos and six Yellow-bibbed Lorries, originating from the Solomon Islands that were returned to the Solomon Islands from South Africa and the USA in 1997 and 1998, respectively.

In a similar manner to changes in numbers of species over the ten year period, total amounts increased from 406 birds in 2000 to a peak of 20 536 birds in 2005, followed by a sharp decline to 1830 in 2006 and a subsequent increase to 3770 in 2007. In recent years numbers have tapered off to 1040 in 2009 and 345 in 2010 (Figure 2).

Figure 2. Numbers of birds imported from the Solomon Islands in the period 2000-2010 showing the numbers of captive-bred and wild-caught individuals for each year. Note the significant drop in 2006 coinciding with the wildlife trade ban imposed by the Solomon Islands Government.



Table 1. Species composition and numbers of CITES-listed birds imported from the Solomon Islands from 2000-2010.
 Key: SB=Solomon Islands; PNG=Papua New Guinea; ID=Indonesia; LC=Least Concern; NT=Near Threatened; VU=Vulnerable; EN=Endangered; CR=Critically Endangered

Species	Captive-bred	Wild-caught	Range SB/PNG/ID	Red List Status
White Cockatoo <i>Cacatua alba</i>	740	0	ID	VU
Solomons Cockatoo <i>Cacatua ducorpsii</i> ^a	10649	5345	SB, PNG	LC
Sulphur-crested Cockatoo <i>Cacatua galerita</i>	1060	0	PNG, ID	LC
Blue-eyed Cockatoo <i>Cacatua ophthalmica</i>	40	20	PNG	VU
Yellow-crested Cockatoo <i>Cacatua sulphurea</i> ^b	800	0	ID	CR
Black Lory <i>Chalcopsitta atra</i>	280	0	ID	LC
Cardinal Lory <i>Chalcopsitta cardinalis</i> ^a	4502	1301	SB, PNG	LC
Brown Lory <i>Chalcopsitta duivenbodei</i>	350	0	PNG, ID	LC
Yellow-streaked Lory <i>Chalcopsitta sintillata</i>	150	0	PNG, ID	LC
Duchess Lorikeet <i>Charmosyna margarethae</i> ^c	0	240	SB, PNG	NT
Papuan Lorikeet <i>Charmosyna papou</i>	150	0	PNG, ID	LC
Red-flanked Lorikeet <i>Charmosyna placensis</i>	70	0	PNG, ID	LC
King Bird-of-paradise <i>Cicinnurus regius</i>	10	0	PNG, ID	LC
Magnificent Bird-of-paradise <i>Diphyllodes magnificus</i>	10	0	PNG, ID	LC
Eclectus Parrot <i>Eclectus roratus</i> ^a	6406	1644	SB, PNG, ID	LC
Blue-streaked Lory <i>Eos reticulata</i>	1410	0	ID	NT
Red Lory <i>Eos rubra</i>	1150	0	ID	LC
Violet-necked Lory <i>Eos squamata</i>	450	0	ID	LC
Singing Parrot <i>Geoffroyus heteroclitus</i> ^c	13	352	SB, PNG	LC
Hill Myna <i>Gracula religiosa</i>	2900	0	ID	LC
Yellow-bibbed Lory <i>Lorius chlorocercus</i> ^a	15254	3190	SB, PNG	LC
Chattering Lory <i>Lorius garrulus</i>	1700	0	ID	VU
Black-capped Lory <i>Lorius lory</i>	1150	0	PNG, ID	LC
Monk Parakeet <i>Myiopsitta monachus</i>	200	0	-	LC
Greater Bird-of-paradise <i>Paradisaea apoda</i>	20	0	PNG, ID	LC
Lesser Bird-of-paradise <i>Paradisaea minor</i>	8	0	PNG, ID	LC
Red Bird-of-paradise <i>Paradisaea rubra</i>	8	0	ID	NT
Blue Bird-of-paradise <i>Paradisaea rudolphi</i>	10	0	PNG	VU
Dusky Lory <i>Pseudeos fuscata</i>	250	0	PNG, ID	LC
Pesquet's Parrot <i>Psittichas fulgidus</i>	60	0	PNG, ID	VU
Papuan Hornbill <i>Rhyticeros plicatus</i> ^d	660	280	SB, PNG, ID	LC
Twelve-wired Bird-of-paradise <i>Seleucidis melanoleucus</i>	10	0	PNG, ID	LC
Olive-headed Lorikeet <i>Trichoglossus euteles</i>	200	0	ID	LC
Rainbow Lorikeet <i>Trichoglossus haematodus</i> ^a	3617	1340	SB, PNG, ID	LC
Ornate Lorikeet <i>Trichoglossus ornatus</i>	550	0	ID	LC

Source: UNEP-WCMC CITES Trade Database, IUCN. a) Species native to Solomon Islands listed in Schedule II of Wildlife Protection and Management Act (WMPA); b) CITES Appendix I (all other species Appendix II); c) Species native to Solomon Islands listed in Schedule I of WMPA; d) Species native to Solomon Islands

In August 2006, a ban was imposed on the export of birds and all other wildlife. The Solomon Islands government revalidated expired permits to allow for the clearance of existing stock possessed by exporters. Therefore it is reasonable to assume that imports from the Solomon Islands since 2007 refer to existing stock. While it is unclear if this ban continues to be enforced, the Fourth National Report to the Convention on Biological Diversity, states: “The enactment of the Wildlife Protection and Management Act 1998 and the accession of Solomon Islands to CITES has effectively reduced and ended the export of birds from the country.” (Government of Solomon Islands, 2011).

Species and species groups imported from the Solomon Islands

The 35 species exported from the Solomon Islands belonged largely to two species groups: parrots and cockatoos (26 species) and birds-of-paradise (7 species), with two additional species (Hill Myna *Gracula religiosa* and Papuan Hornbill) making up the remainder. While imports were reported from 17 countries in total, in most years 3 to 8 countries reported imports; with Malaysia reporting in 6 years and Singapore reporting in 10 years of the time period 2000-2010.

Parrots

Parrots and cockatoos are extremely popular in the global pet trade as they are brightly coloured, attractive birds that often become tame and mimic human speech in captivity. These birds have been traded for hundreds of years, and in the case of some species, such as the Yellow-crested Cockatoo *Cacatua sulphurea*, capture for trade has caused alarming declines in wild populations. It has been argued that parrots have been subjected to more exploitation than any other group of birds (Snyder *et al.*, 2000).

There are 11 species of parrots and cockatoos native to the Solomon Islands, where capture of wild birds for the pet trade has been highlighted as a serious threat (Snyder *et al.*, 2000). A total of 26 species of parrots and cockatoos were reportedly imported from the Solomon Islands from 2000-2010. Of these, seven species are native to the Solomon Islands. All 26 parrot species, with the exception of the Monk Parakeet (which, as previously mentioned, is native to South America) are found in the region, mostly originating from nearby Papua New Guinea and Indonesia.

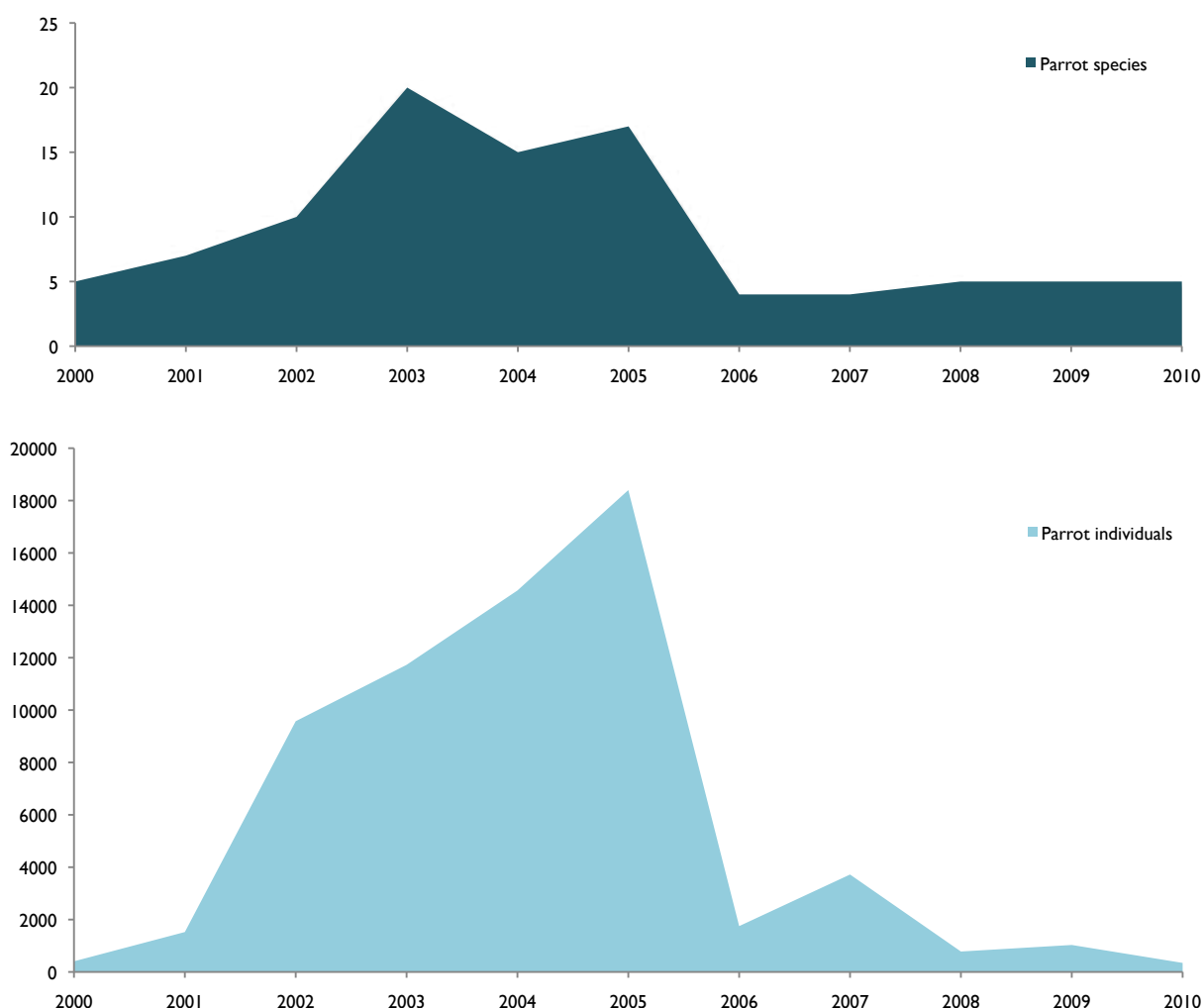


Over 800 Yellow-crested Cockatoos *Cacatua sulphurea* declared as captive-bred were imported from the Solomon Islands between 2002-2004.

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Whilst the number of exported parrots and cockatoos is striking, the large increase in numbers of specimens reported as captive-bred from year to year is also notable. For example, in 2001 nearly 2000 parrots and cockatoos were exported as captive-bred. This quantity in itself is significant; but the following year the figures more than tripled to almost 7000 and then increased further to 12 000 in 2003 (Figure 3). Many species of parrots and cockatoos are high maintenance, slow to breed (with a small number of young produced at a time) and late to mature, making high commercial turn-over difficult. The likelihood of breeding over 15 000 Yellow-bibbed Lorries and over 10 500 Solomons Cockatoos within a ten year period (with peaks of 5870 and 3825 individuals in 2004, respectively) is very slim. To investigate further claims of captive-bred birds from the Solomon Islands, additional information about breeders and breeding facilities was requested from the ECD. Regarding breeders it was reported that while there are registered breeders, they are not breeding birds, only taking them from the wild (*in litt.* Environment and Conservation Division of the Ministry of Environment, Conservation and Meteorology of the Solomon Islands, to Chris R. Shepherd of TRAFFIC Southeast Asia on 13 July 2011). In response to questions on the numbers of breeding facilities, when they were registered, if they were producing and if so, what species, the EDC responded “There are no breeding facilities, only some confusion with storing facilities. Most of the exported birds were captured and kept in holding sites only.” (*in litt.* Environment and Conservation Division of the Ministry of Environment, Conservation and Meteorology of the Solomon Islands, to Chris R. Shepherd, Deputy Director of TRAFFIC Southeast Asia on 20 July 2011).

Figure 3. Imports of parrots and cockatoos from the Solomon Islands showing a rise in both the number of different species that were imported (lower line) and total number of birds (upper line). For each year the percentage of captive-bred individuals ranged between 65 (2002) and 100 (2007 onwards).



Source: UNEP-WCMC CITES Trade Database

Birds-of-paradise

All 46¹ species of birds-of-paradise are confined to Indonesia, Papua New Guinea and Australia. They are best known for the plumage of the males, which often includes highly elongated and elaborate feathers extending from the beak, wings and head.

The breeding rituals of the birds-of-paradise are almost as elaborate as the males' plumage. Most birds-of-paradise are lek breeders, meaning males gather in traditional display areas visited by females for copulation only (Frith and Beehler, 1998). Maintaining and breeding birds-of-paradise in captivity is difficult and only a few specialized facilities have managed it successfully (Todd and Berry, 1980; Searle, 1980; Hundgen *et al.*, 1991; Sheppard, 1995; Jensen and Hammer, 2003). Moreover, most female birds-of-paradise nest solitarily and rear their young (between one and three per clutch) alone, being reluctant to build their nests near males (Frith and Beehler, 1998). Males kept together may fight with fatal results (Sheppard,



Male Greater Bird-of-paradise *Paradisaea apoda*
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1995; Frith and Beehler, 1998). Males will destroy nests when allowed in a female's enclosure (Sheppard, 1995). Captive-breeding in small numbers has been achieved in several zoos where intensive management and knowledge of individual behaviour patterns of their birds is known. Females are kept in aviaries with visual access to one or more males, and males, whilst separated, should be in visual contact with other males to stimulate one another to display. When females exhibit nest building behaviour they should be allowed access to males but never vice versa. Females reach maturity at about one year of age, males at two years. However, males take four to seven years to gain the full adult plumage needed for courting. Given the maintenance and time investment, captive-breeding for commercial purposes and selling the second generation offspring to international buyers is extremely difficult to achieve.

Despite the difficulties in breeding these birds, 76 declared captive-bred individuals of seven species were exported in 2005. This was the only year that captive-bred birds-of-paradise were exported from the Solomon Islands and were subsequently imported to Singapore. That same year, Singapore imported another 94 captive-bred birds-of-paradise from Guinea, Ivory Coast, and Liberia, and re-exported 72 individuals to Denmark, Japan, Malaysia and Taiwan (Table 2). There are no records of any imports of birds-of-paradise into the Solomon Islands, Guinea, Ivory Coast, or Liberia (in 2005 all but the Solomon Islands were Party to CITES).



Given the difficulties in breeding these birds described above, the only plausible explanation is that they represent wild-caught individuals, sourced directly from neighbouring Indonesia and Papua New Guinea (range States for all seven imported species).

Female Greater Bird-of-paradise *Paradisaea apoda*
© Olivier S. Caillabet/TRAFFIC Southeast Asia

¹ Taxonomy followed by CITES, used herein; however, it should be noted there is ongoing debate and reorganization of the *Paradisaeidae* family. Therefore according to the source, the number of species and genera may vary.

Table 2. Overview of import and re-export of birds-of-paradise in 2005; all specimens are reported as captive-bred (source code C) i.e. are at least second generation offspring.

Species	Quantity	Exporter	Record of Import	Importer / Re-Exporter	Quantity	Importer / Re-Exporter	Quantity	Importer
Lesser Bird-of-paradise <i>Paradisaea minor</i>	34	Liberia	no	Singapore	14	Denmark		
				Singapore	20	Japan		
				Singapore	10	Malaysia		
Greater Bird-of-paradise <i>Paradisaea apoda</i>	8	Solomon Islands	no	Singapore	12	Taiwan		
	6	Ivory Coast	no	Singapore				
	2	Guinea	no	Singapore				
Red Bird-of-paradise <i>Paradisaea rubra</i>	20	Solomon Islands	no	Singapore				
	8	Solomon Islands	no	Singapore				
	12	Ivory Coast	no	Singapore				
Blue Bird-of-paradise <i>Paradisaea rudolphi</i>	30	Liberia	no	Singapore	10	Malaysia		
				Singapore	4	Taiwan		
	10	Solomon Islands	no	Singapore			1	Croatia
King Bird-of-paradise <i>Cicinnurus regius</i>	10	Solomon Islands	no	Singapore				
Magnificent Bird-of-paradise <i>Cicinnurus magnificus</i>	10	Solomon Islands	no	Singapore				
Twelve-wired Bird-of-paradise <i>Seleucidis melanoleucus</i>	5	Ivory Coast	no	Singapore				
	5	Guinea	no	Singapore	2	Taiwan		
	10	Solomon Islands	no	Singapore				

Source: UNEP-WCMC CITES Trade Database

Hill Mynas

Two countries, Malaysia and Singapore, reported imports of Hill Mynas from the Solomon Islands. Hill Mynas are popular cage birds and, like many species of parrots and cockatoos, they have the ability to mimic human speech. The Hill Myna is found from India to China, and throughout Southeast Asia, south to Palawan and the Greater Sundas, Indonesia (MacKinnon and Phillipps, 1993). Note that the species occurs in both Malaysia and Singapore. This species is not native to the Solomon Islands.

From 2000-2010, 2900 Hill Mynas reported as originating from the Solomon Islands were imported by Singapore and Malaysia. This number is substantially less than either country reportedly re-exported during this time period. Singapore imported a single shipment of 1300 captive bred Solomon Islands-sourced Hill Mynas in 2005, yet reported exporting a total of 3960 captive-bred Solomon Islands-sourced Hill Mynas from 2003-2007 (mainly to Japan and Taiwan). Likewise, Malaysia reported exporting a larger number of captive-bred Solomon Islands-sourced Hill Mynas (1848 individuals) than were imported (1600 individuals). This included 20 “wild-caught” birds, even though the species is not known to naturally occur in the Solomon Islands.



Hill Myna *Gracula religiosa*

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In 2006, a significant trade review of this species was carried out by the CITES Secretariat, which called for clarification from Malaysia regarding the re-export of the Solomon Islands-sourced wild-caught birds, as the Solomon Islands are not a range State for the species. The review suggested the trade of Hill Mynas from the Solomon Islands should be investigated further, as the Solomon Islands was “not known to have substantial breeding facilities” (AC22 Doc. 10.2, Annex 3). Malaysia has since ceased imports of this species from the Solomon Islands.

Papuan Hornbill

While there are approximately 57 species of hornbills worldwide, only one, the Papuan Hornbill, is found on the Solomon Islands. Alternatively known as Blyth's Hornbill, this species is also native to Indonesia and Papua New Guinea (BirdLife International, 2008). Hornbills generally reproduce slowly, have relatively small clutch sizes and take a long time to mature. The Papuan Hornbill has been described as an irregular breeder in captivity (Gregson, 2001) and to the best

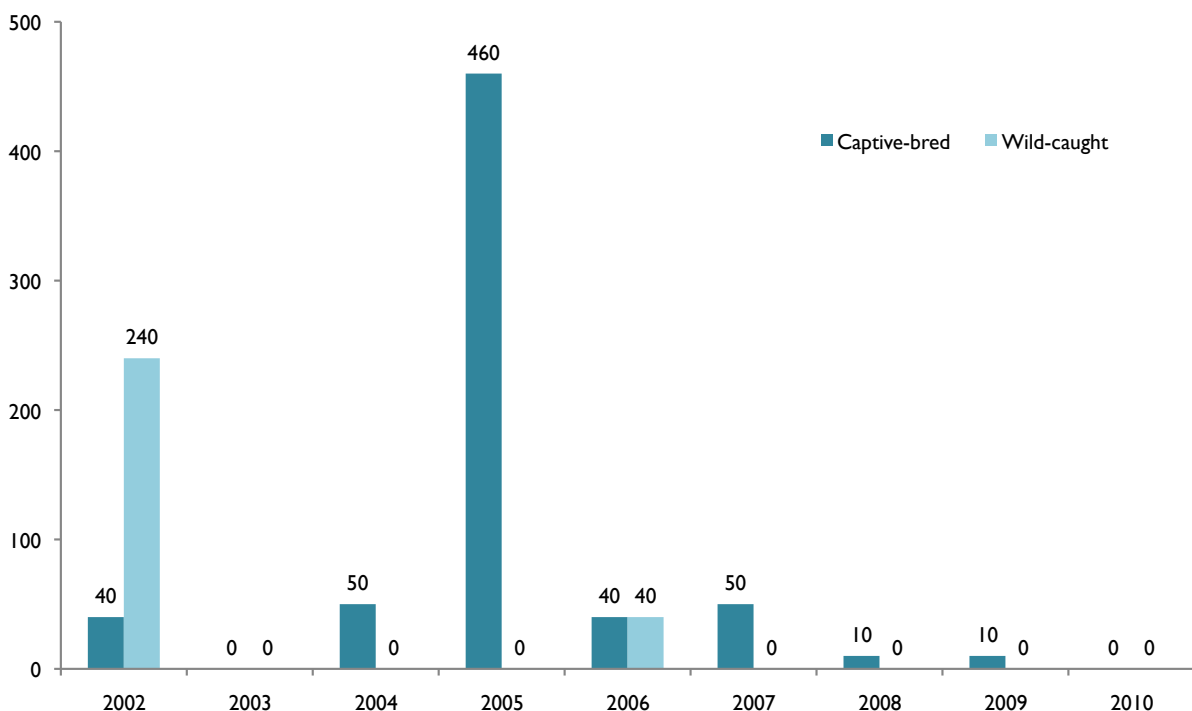


Papuan Hornbill *Rhyticeros plicatus*
© Brent Stirton/Getty Images/WWF

of TRAFFIC's knowledge this species has never been bred in substantial numbers.

From 2002-2010, a total of 940 Papuan Hornbills were imported from the Solomon Islands, 660 of which were reported as captive-bred (Figure 4). Of these, 460 were imported by Singapore from the Solomon Islands in 2005 alone. In all, 890 of the 940 Papuan Hornbills exported from the Solomon Islands were imported by Singapore, with the remainder imported by South Africa (20 individuals) and the former Yugoslavia (30 individuals).

Figure 4. Declared as captive-bred and wild-caught Papuan Hornbills *Rhyticeros plicatus* imported from the Solomon Islands showing large fluctuations between years both in the total numbers imported and the

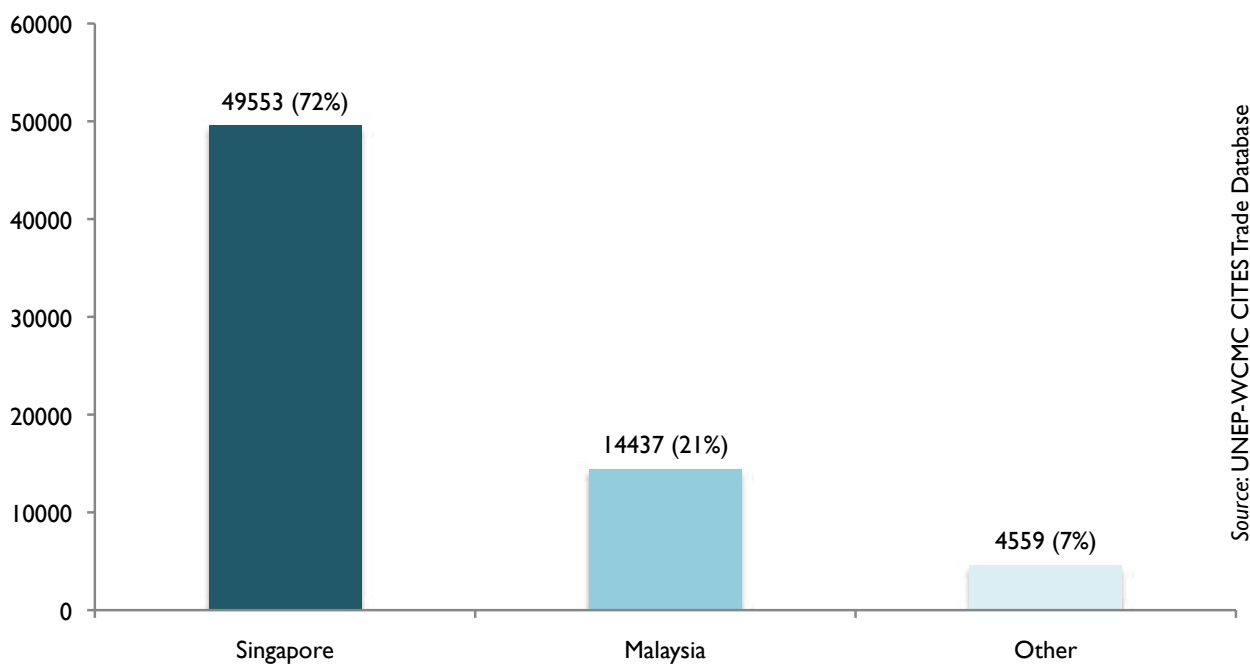


Source: UNEP-WCMC CITES Trade Database

Singapore and Malaysia as significant importing countries

While over the last decade 17 locations have imported birds directly from the Solomon Islands, in terms of trade volumes, two locations stand out: Singapore and Malaysia. Singapore was responsible for 72% of all imports and Malaysia for 21%; only seven percent of the exported birds went to the other 15 locations combined (Figure 5). Singapore and Malaysia also stand out for another reason. While other locations imported mainly wild-caught birds or only a small number of captive-bred individuals, Singapore and Malaysia reported the vast majority of their Solomon Islands-sourced birds as captive-bred: 42 835 of 49 553 and 11 067 of 14 437, respectively.

Figure 5. Imports of birds from the Solomon Islands (2000–2010) to Singapore, Malaysia and 15 other locations, highlighting the role of Singapore and Malaysia in this trade.



For several species, Singapore was the main importer. For instance 890 of the 940 Papuan Hornbills, 12 524 out of 15 929 Solomons Cockatoos and 6019 out of 8000 Eclectus Parrots went to Singapore. Of the birds imported from the Solomon Islands that are considered threatened (i.e. listed as Critically Endangered, Endangered or Vulnerable by IUCN), Singapore and Malaysia were major importers (Table 3). Five of the seven threatened species were imported into Malaysia and four to Singapore, with several hundred individuals being imported of each species; all reported to be the result of captive-breeding.

The only other countries during this period to receive threatened birds from the Solomon Islands were Poland (20 individuals) and Panama (50 individuals). Especially worrying is the import of 800 Critically Endangered Yellow-crested Cockatoos (endemic to Indonesia) by Malaysia from 2002-2004. The import of 1700 Endangered Chattering Lories *Lorius garrulus* (again endemic to Indonesia) into Malaysia and Singapore from 2003-2005 is also cause for concern.

Table 3. IUCN Red List status of threatened birds imported from the Solomon Islands (note that none of these species are native to the Solomon Islands).

Species	IUCN	Importing Country	Captive-bred	Wild-caught
Yellow-crested Cockatoo <i>Cacatua sulphurea</i>	CR	Malaysia	800	0
White Cockatoo <i>Cacatua alba</i>	VU	Singapore	350	0
		Panama	50	0
		Malaysia	34	0
Blue-eyed Cockatoo <i>Cacatua ophthalmica</i>	VU	Malaysia	40	0
		Poland	0	20
Chattering Lory <i>Lorius garrulus</i>	VU	Singapore	950	0
		Malaysia	750	0
Blue Bird-of-paradise <i>Paradisaea rudolphi</i>	VU	Singapore	10	0
Pesquet's Parrot <i>Psitttrichas fulgidus</i>	VU	Singapore	30	0
		Malaysia	30	0

Source: UNEP-WCMC CITES Trade Database, IUCN

In 2004, the Department of Wildlife and National Parks (PERHILITAN), Peninsular Malaysia's lead CITES Management Authority, alerted TRAFFIC to the relatively large numbers of birds (and reptiles), being exported from the Solomon Islands. According to PERHILITAN, frequent shipments of birds and reptiles from the Solomon Islands were being sent to Malaysia, mainly to the state of Johor. The amount and composition of species in the trade led the Department to suspect that the trade may be illegal. In response to these concerns, Malaysia froze the trade of wildlife from the Solomon Islands, until it could be proven that such trade was being conducted legally. The trade freeze is still in force. According to PERHILITAN, the majority of the shipments in 2004 involved CITES Appendix II-listed Indonesian birds, including Olive-headed Lorikeet *Trichoglossus euteles*, Rainbow Lorikeet, Chattering Lory, Blue-streaked Lory *Eos reticulata* and Sulphur-crested Cockatoo. Of these species, only the Rainbow Lorikeet is native to the Solomon Islands with the remaining species being confined largely to Indonesia and/or Papua New Guinea. PERHILITAN stated that, according to the Ministry of Environment Conservation and Meteorology of the Solomon Islands, all of these birds had been captive-bred in the Solomon Islands. However, due to the relatively large quantities being exported, PERHILITAN felt it was likely that these birds were coming from the wild in Indonesia, and being "laundered" through the Solomon Islands.



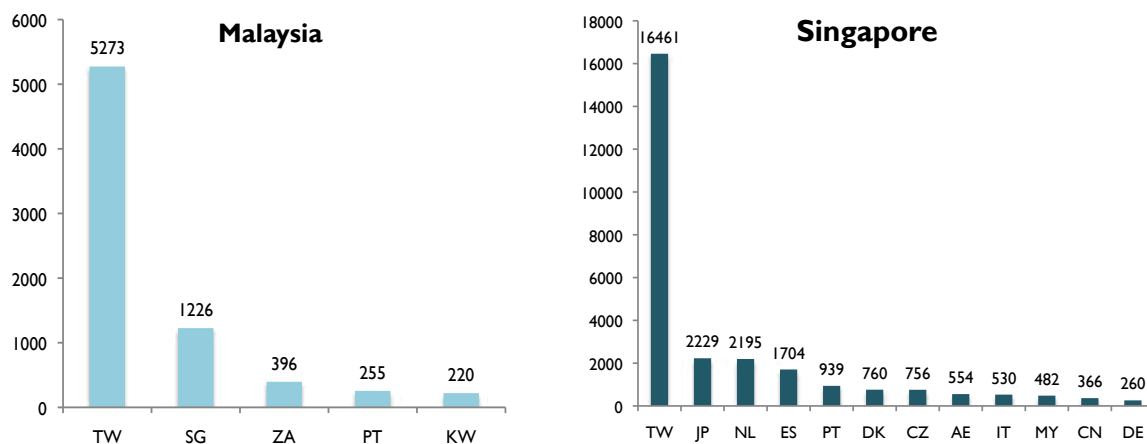
Chattering Lory *Lorius garrulus*
© Carrie J. Stengel/TRAFFIC Southeast Asia

Re-exports of birds from the Solomon Islands by Singapore and Malaysia

The UNEP-WCMC CITES trade database allows for Parties to indicate the source country of specimens that are re-exported. Focusing on Singapore and Malaysia, the most significant importers of birds from the Solomon Islands, it appears Taiwan was the next or end destination for many species (Figure 6). For both Singapore and Malaysia, Taiwan was the main importer for eight of the 13 species re-exported by both countries (Table 4).

Figure 6. Locations that received 200 or more re-exported birds (origin: Solomon Islands) from Singapore and Malaysia from 2000-2010.

Malaysia: (TW) Taiwan; (SG) Singapore; (IT) Italy; (NL) Netherlands; (ZA) South Africa; (PT) Portugal; (KW) Kuwait
Singapore: (TW) Taiwan; (JP) Japan; (NL) Netherlands; (ES) Spain; (PT) Portugal; (DK) Denmark; (CZ) Czech Republic; (AE) United Arab Emirates; (IT) Italy; (MY) Malaysia; (CN) China; (DE) Germany.



Source: UNEP-WCMC CITES Trade Database

For Malaysia the total number of re-exported birds originating from the Solomon Islands was smaller, equal to or only slightly more than the number imported where the Solomon Islands was declared as the source. For Singapore however, three species were re-exported in significantly larger numbers than were reportedly imported (Table 4).

Since 2000, 250 Sulphur-crested Cockatoos were imported from the Solomon Islands, however during that time more than three times that number of birds (858), reportedly originating from the Solomon Islands, were re-exported by Singapore. Hill Mynas declared as Solomon Islands-sourced were also re-exported in quantities that were three times the number of reported imports. From 2000, 1300 birds were exported to Singapore, yet 3960 were re-exported. Similarly, 800 Red Lories (again endemic to Indonesia) were imported by Singapore from the Solomon Islands, yet in that same period, more than twice that number (1677) were re-exported, again all reportedly originating from the Solomon Islands.

Table 4. Bird species re-exported from Singapore and Malaysia with Solomon Islands as source country for the period 2000-2010 showing both the numbers that were imported from the Solomon Islands and main importer from Singapore and Malaysia. Restricted to species for which >200 individuals of a species were re-exported from either or both countries.

Species	Singapore				Malaysia			
	Imported from SB	Re-exported from SG	Main Importer	Number	Imported from SB	Re-exported from MY	Main Importer	Number
White Cockatoo <i>Cacatua alba</i>	350	596	Taiwan	316	340	66	South Africa	40
Solomons Cockatoo <i>Cacatua ducorpsii</i>	12 524	5121	Taiwan	2738	1304	260	Taiwan	191
Sulphur-crested Cockatoo <i>Cacatua galerita</i>	250	858	Taiwan	600	810	637	Taiwan	382
Yellow-crested Cockatoo <i>Cacatua sulphurea</i>	0	7	Malaysia	7	800	279	Portugal	106
Cardinal Lory <i>Chalcopsitta cardinalis</i>	4630	1450	Taiwan	717	662	189	Taiwan	189
Brown Lory <i>Chalcopsitta duivenbodei</i>	100	100	Japan	70	250	92	Taiwan	52
Eclectus Parrot <i>Eclectus roratus</i>	6019	3715	Taiwan	2802	1481	451	Taiwan	303
Blue-streaked Lory <i>Eos reticulata</i>	500	700	Taiwan	670	910	421	Taiwan	336
Red Lory <i>Eos rubra</i>	800	1677	Taiwan	1435	350	406	Taiwan	371
Hill Myna <i>Gracula religiosa</i>	1300	3960	Japan	1425	1600	1828	Singapore	1108
Yellow-bibbed Lory <i>Lorius chlorocercus</i>	16 374	7035	Taiwan	4403	1300	353	Taiwan	321
Chattering Lory <i>Lorius garrulus</i>	950	1088	Taiwan	908	750	865	Taiwan	810
Rainbow Lorikeet <i>Trichoglossus haematodus</i>	3320	999	Taiwan	546	1237	917	Taiwan	862
Papuan Hornbill <i>Rhyticeros plicatus</i>	890	336	Netherlands	123	0	-	-	-

Source: UNEP-WCMC CITES Trade Database

Captive-breeding in the Solomon Islands

A TRAFFIC source, who has requested anonymity, stated that according to the ECD, only eight CITES-listed bird species were bred in captivity for commercial purposes in the Solomon Islands from 2004-2010: White Cockatoo *Cacatua alba*, Solomons Cockatoo, Cardinal Lory, Eclectus Parrot, Singing Parrot *Geoffroyus heteroclitus* and Yellow-bibbed Lory. However, records in the UNEP-WCMC CITES trade database show that 33 of the 34 CITES-listed species exported from the Solomon Islands were declared as captive-bred.

As previously highlighted, breeding many of these species in captivity is difficult. Successful commercial-scale captive-breeding facilities require significant time and monetary investments. In the comprehensive Solomon Islands *State of the Environment* report (Ministry of Environment, Conservation and Meteorology, 2008) there is no mention of captive-breeding or captive-breeding facilities for birds, and as previously noted, according to the ECD, no such facilities exist.

Based on this information and our data analysis it is clear the overwhelming majority, if not all, captive-breeding claims are false and that species exported from the Solomon Islands as “captive-bred” are in fact wild-caught. This represents a major breach of CITES regulations.

This breach is not unique to the Solomon Islands bird trade, and the CITES Standing Committee is aware of these challenges in implementing the Convention. At the 61st meeting of the Standing Committee a working group was established with the mandate to evaluate captive-breeding issues (among other similar circumventions of CITES). The findings of this working group are to be reported and recommendations given at the upcoming 62nd meeting of the Standing Committee.



Male (above) and female (left) Eclectus Parrots *Eclectus roratus* in a purported captive-breeding facility in the Solomon Islands, 2011.

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CONCLUSION

Since 2000, more than 68 000 captive-bred and wild-caught CITES-listed birds were imported from the Solomon Islands, with a peak of over 20 500 birds imported in 2005; the year before the Solomon Islands Government imposed a ban on all wildlife exports.

While there was a significant trade in a small number of bird species native to the Solomon Islands, the majority of the species imported from the Solomon Islands were non-native species that occur naturally in Indonesia and/or Papua New Guinea, yet there has been no documented export of CITES-listed birds from any country to the Solomon Islands. The quantities of birds produced by, and imported from, the Solomon Islands imply the existence of breeding facilities capable of housing thousands of breeding pairs; including species that are notoriously difficult to breed. The Solomon Islands *State of the Environment* (2008) report contains no mention of captive-breeding or captive-breeding facilities and recent feedback from the ECD confirms there are currently no breeding facilities and only non-functioning registered breeders. This indicates that during the study period, when the largest exports of captive-bred birds were being imported from the Solomon Islands, most, if not all, of the birds were actually wild-caught. Based on this information it can be concluded that large numbers of wild-caught birds have been and may continue to be laundered into the global wildlife trade through the Solomon Islands. Singapore and Malaysia stand out as trading partners with the Solomon Islands. In combination, the two countries account for 93% of all birds imported from the Solomon Islands, with significant numbers being re-exported to other locations such as Taiwan. For at least four species of birds, Singapore has reportedly re-exported numbers significantly larger than were imported. The import of 170 individuals of seven species of birds-of-paradise declared as captive-bred into Singapore in 2005 is extraordinary, given the extreme difficulty of breeding these species in captivity.

It is critically important to address falsified claims of captive-breeding as the laundering of wild-caught species into commercial trade circumvents the law and undermines the fundamental purpose of CITES. In light of the above, TRAFFIC makes the following recommendations:

RECOMMENDATIONS

- The CITES Standing Committee should evaluate the captive breeding operations of the Solomon Islands and consider recommendations that address the concerns raised in this report. In the event the Standing Committee makes recommendations and the Solomon Islands fails to comply, TRAFFIC then recommends the Standing Committee consider a trade suspension.
- The CITES Management Authority of the Solomon Islands should investigate species' origins, including whether individuals were wild-caught versus legitimately captive-bred as well as the origin and legality of non-native stock.
- The CITES Management Authorities of Indonesia and Papua New Guinea—the range States of the majority of non-native bird species exported from the Solomon Islands—should contact their counterparts in the Solomon Islands as well as in Singapore and other export destinations, to investigate the potential laundering of birds. This recommendation is extended to the Management Authority of Taiwan and all other importers of birds declared as originating from the Solomon Islands.
- All countries reporting data to CITES based on permits issued should take steps to provide more accurate information. Reporting should reflect the actual numbers of permits used to ensure transparency in the international wildlife trade and to enable the UNEP-WCMC CITES trade database to be used to its fullest potential.
- Singapore, and other countries reporting data to CITES based on permits issued, should take steps to provide CITES with more accurate information. Reporting should reflect the actual numbers of permits used to ensure transparency in the international wildlife trade and to enable the database to be used to its fullest potential.

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Over 3600 Rainbow Lorikeets *Trichoglossus haematodus* were imported, declared as captive-bred, from the Solomon Islands from 2000-2010.

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TRAFFIC, the wildlife trade monitoring network, works to ensure that trade in wild plants and animals is not a threat to the conservation of nature.

For further information contact:

The Director
TRAFFIC Southeast Asia
Unit 3-2, 1st Floor
Jalan SS 23/11, Taman SEA
Petaling Jaya, Selangor
Malaysia
Telephone: (603) 7880 3940
Fax: (603) 7882 0171
Email: tsea@po.jaring.my

The Executive Director
TRAFFIC International
219a Huntington Road
Cambridge CB3 0DL
United Kingdom
Telephone: (44) 1223 277427
Fax: (44) 1223 277237
Email: traffic@traffic.org

