PROBLEMS WITH IMPLEMENTATION OF CITES ARTICLE IV IN SOUTHEAST ASIA

REVIEW NO. 1:

INDONESIA

TRAFFIC SOUTHEAST ASIA

August 1993

CONTENTS

TABLES

TRAFFIC SOUTHEAST ASIA

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Implementation of the provisions of Article IV of CITES can be monitored and evaluated, providing an appropriate criterion for evaluating the adherence to, and effectiveness of, the Convention amongst Southeast Asian Parties. TRAFFIC Southeast Asia is currently examining, as part of an overall monitoring of CITES implementation in the region, compliance with Article IV. Article IV is designed to ensure that trade in Appendix II-listed species is correctly regulated and not detrimental to the species.

INTRODUCTION

Indonesia's biodiversity is thought to be the second highest in the world. An archipelagic nation of 13,667 islands covering only 1,909,569 km^2 (1.3% of the earth's land surface), Indonesia contains nearly 10% of the world's forests and almost 40% of all the forests of Asia. Indonesia has 515 mammal species (12% of the world total; 165 are endemic), 1,519 birds (16% of the world's total, 258 are endemic), 7,000 fish species (25% of the world's total), 511 reptile species (10% of the world's total; 150 are endemic), and 270 amphibian species (7% of the world's total; 100 are endemic) (WCMC, 1992; WWF, 1992; Wartaputra, 1991).

As steward and caretaker of such natural wealth, Indonesia has an enormous responsibility to manage its resources for the benefit of its people and for the future. It is government policy to make use of wildlife resources for economic development, and Indonesia has long been involved in large-scale wildlife trade, notably in wild birds, reptiles, reptile skins, and corals. Table 1 presents recent overall figures for Indonesian wildlife exports.

Indonesia recognised early the need for global cooperation in managing its wildlife trade, and joined the Convention on International Trade in Endangered Species of Fauna and Flora (CITES) in 1978. Since then there have been few studies about wildlife trade in this country, and fewer reviews of CITES implementation. The first of the latter was produced by the WWF's Indonesia Programme in 1980, and examined the state of wildlife trade in Indonesia from 1978 data. As this was the year that Indonesia joined the Convention, this report serves as a useful baseline reference. The next report (Callister, 1989) appeared 9 years later as a section on Indonesia in a WWF-UK report on problems in CITES implementation in four selected countries. All other studies and reviews have been on specific groups or species, such as marine turtles (Groombridge and Luxmoore, 1989), pythons (Groombridge and Luxmoore, 1991), monitor lizards (Luxmoore and Groombridge, 1990), crocodiles (Messel *et. al.*, 1992), and parrots (Bishop, 1992; Lambert, 1992; Milton and Marhadi, 1987; Nash, 1990, 1991). Where applicable, the findings and recommendations of these reviews are discussed in this document.

Table 1. Recent Figures of Indonesian Wildlife Exports
(source: Edwards & Nash 1992, PHPA compilation, 1991 CITES report)

	1986	1987	1988	1989	1990	1991
Psittacines	58,987	66,299	71,258	72,771	63,674	79,694
Reptiles (incl. skins)	699,574	936,246	1,989,088	2,083,624	1,171,909	1,939,275
Primates	10,560	10,857	11,402	15,027	10,645	14,356
Corals (pieces)	n/a	n/a	n/a	n/a	n/a	1,137,508

n/a = data not available for this report

One of the principal mechanisms of CITES for the regulation of international wildlife trade is that provided by Article IV of the Convention, Regulation of Trade in Specimens of Species included in Appendix II, which outlines the conditions required for export of Appendix II-listed species. As a Party to the Convention, Indonesia is bound to abide by this and all other Articles.

Implementation of Article IV is essential to the proper and effective implementation of CITES. Poor implementation of Article IV severely reduces the effectiveness of CITES trade controls, with possible disastrous consequences for excessively-traded species. Through an analysis of existing documentation and field observations gathered between December 1991 to May 1993, TRAFFIC Southeast Asia has identified serious problems in the application of this Article by Indonesia's authorities.

These problems relate to three of the Article's main points: (see Box, following page)

- paragraph 2(a), which states that export permits can only be granted for Appendix II species when a Scientific Authority of the State of export has advised that such export will not be detrimental to the survival of that species;

- paragraph 2(b), which states that a Management Authority of the State of export must be satisfied that the specimen was not obtained in contravention of the laws of that State for the protection of fauna and flora; and

- paragraph 3, which states that the Scientific Authority will monitor exports, and will advise the Management Authority on limiting exports as appropriate.

This review contains a summary of relevant trade regulatory practices in Indonesia; a listing and explanation of problems with Article IV implementation; a discussion on the impact of these problems on species conservation; conclusions and recommendations; and relevant data tables. This work is a result of TRAFFIC Southeast Asia's efforts to examine the implementation of CITES in the region. It is aimed at presenting evidence of problems with Article IV, in the hope that all relevant parties and organisations, including those involved in the implementation of CITES, will endeavour to assist Indonesia in recognising and addressing these problems in an effective and timely manner.

CITES Article IV (in part)

Regulation of Trade in Specimens of Species included in Appendix II

1. All trade in specimens of species included in Appendix II shall be in accordance with the provisions of this Article.

2. The export of any specimen of a species included in Appendix II shall require the prior grant and presentation of an export permit. An export permit shall only be granted when the following conditions have been met:

   (a) a Scientific Authority of the State of export has advised that such export will not be detrimental to the survival of that species;

   (b) a Management Authority of the State of export is satisfied that the specimen was not obtained in contravention of the laws of that State for the protection of fauna and flora; and

   (c) a Management Authority of the State of export is satisfied that any living specimen will be so prepared and shipped as to minimise the risk of injury, damage to health or cruel treatment.

3. A Scientific Authority in each Party shall monitor both the export permits granted by that State for specimens or species included in Appendix II and the actual exports of such specimens. Whenever a Scientific Authority determines that the export of specimens of any such species should be limited in order to maintain that species throughout its range at a level consistent with its role in the ecosystems in which it occurs and well above the level at which that species may become eligible for inclusion in Appendix I, the Scientific Authority shall advise the appropriate Management Authority of suitable measures to be taken to limit the grant of export permits for specimens of that species.

INDONESIA'S WILDLIFE TRADE REGULATORY SYSTEM

Trade regulatory procedures in Indonesia have been described in detail in Callister (1989), Nash (1990, 1991), Luxmore & Groombridge (1990), Noerdjito *et. al.* (1991), Edwards and Nash (1992), and Edwards & Jenkins (1992), and these will not be repeated in detail here. The following is a summary of procedures and their application as specifically relevant to this review.

Legislative Basis

The current legislation used with respect to wildlife trade is the Act of the Republic of Indonesia on Conservation of Living Resources and Ecosystems (1990), with Chapter VI, Articles 26-28 providing the legal basis for the utilisation of unprotected wildlife, and Chapter VIII, Article 36 providing for commercial utilisation of wild species of plants and animals. While intentional trade in "protected" species is liable to punishment by imprisonment up to a maximum of 5 years and a fine up to a maximum of Rp. 100,000,000 (US$50,000), and trade in protected species through negligence is liable to one year's imprisonment and a Rp. 50,000,000 (US$25,000) fine, there are no similar provisions within the Act for violation of any of the Articles relating to trade in "non-protected" species, including CITES-listed species. Such provisions, as stated in Article 36 of the Act, are to be regulated by a Government Regulation. Until such time as these Government Regulations are produced, the Act does not provide any basis for protecting, or managing utilisation of unprotected species, whether CITES-listed or not.

Responsibilities

PHPA The Directorate General of Forest Protection and Nature Conservation (PHPA), under the Ministry of Forestry, is the designated CITES Management Authority and has overall responsibility for the conservation and the management of wild resources. The main office is located in Jakarta, and outside of the capital PHPA is represented by regional and sub-regional Resource Conservation offices which report directly to the local Regional Director of Forestry. PHPA has the authority to issue annual capture quotas, and the Director General of PHPA approves and issues the quotas and authorizes all export/CITES permits.

LIPI The Centre for Biological Research and Development of the Indonesian Institute of Sciences Research (LIPI) is the designated CITES Scientific Authority, and the Director of LIPI reports directly to the Cabinet. LIPI is responsible for approving, coordinating, supervising and also conducting research on Indonesia's flora and fauna, and for advising PHPA on the status of species which are or may be subject to trade. The main LIPI office is in Bogor (near Jakarta).

Quotas

The quota system in Indonesia is the main practical basis for the regulation of wildlife trade in the country. National capture quotas are set annually by the Management Authority, usually in cooperation with traders, and with some input from the Scientific Authority. The Scientific Authority produces its own quota proposal which is presented and discussed in a meeting with the Management Authority and representatives of the trading community usually held early in the calendar year. The Management Authority subsequently establishes the annual capture quotas by Decree of the Director General of PHPA. The annual quota is a

total allowable catch limit irrespective of exports. Wartaputra (1992, *in litt.* to Mr. C. Stuffman) states that the quota is established for the utilization of non-protected species. The quota decrees specify that the capture quota for that year is appended to the decree. The quota Decree for 1993 states that all trade must be within the limits imposed by the quota, or more specifically, that all permits issued (eg. catch, transport, export) are based on the quota. Previously, the quota decrees stated that capture of species not listed in the quota could occur if in accordance with existing procedure (which involves obtaining prior approval from LIPI). The quota applies to the calendar year of issue. The quotas are province-specific and are applied where possible to the subspecies level.

Capture/Transport Permits

Within the framework of the national quota system, capture permits are issued by the Management Authority (or its representative regional and sub-regional offices, or by the Regional Forestry Office) to traders on request, for the capture of wildlife. Traders require a transport permit, obtained from the same sources as the capture permits, to allow transport of specimens across provincial boundaries (eg. when traders/suppliers send wildlife to Jakarta-based exporters). Legal exports require appropriate capture and transport permit documentation (Callister, 1989).

Issuance of capture/shipping permits is done according to a Decree of the Minister of Forestry (No. 556, dated 28 October 1989) and a subsequent Decree of the Director General of PHPA (No. 25, dated 29 March 1990).

Export Permits

Export permits may only be obtained from the central PHPA office in Jakarta, and export permits require the signature of the Director General of PHPA. Export permits require prior grant of appropriate capture and transport permits. The same "CITES" export permit is used for both CITES-listed and non-CITES species.

APPLICATION OF THE REGULATORY SYSTEM

Establishment of the Annual Capture Quota

The procedure for the establishment of the annual quota is sufficiently central to implementation of Article IV of the Convention in Indonesia to merit a more complete description:

Edwards & Nash (1992) state:

> "According to the Management Authority, capture quotas are based on an evaluation of prior capture records. The average capture rate for the prior three years is calculated for each species. On this basis an "effective capture effort per unit" is determined. The trend in the effective capture effort is assessed across the three years. Trends in the market value of each species, which is maintained for 93 species in trade, are also assessed. If the capture rate is down and the market value is stable or decreasing each year, then the capture quota is reduced from the prior year. If the capture rate is increasing and the market value is increasing or stable, the capture quota is increased."
>
> "According to LIPI, PHPA convenes a meeting in late November or December to propose annual capture quotas. The meeting is attended by representatives of the University of Indonesia, Bandung Technical Institute, Bogor Agricultural institute and the Research and Development Branch of the Ministry of Forestry. LIPI (the CITES Scientific Authority) is usually represented at this meeting by ecologists, mammalogists, ornithologists, herpetologists, entomologists and an ichthyologist (who is also the head of the Scientific Authority). PHPA may circulate proposed capture quotas before the meeting."
>
> "During the meeting the quota for each species is reviewed. Participants can propose different quotas. Recommendations from LIPI representatives carry no special influence over the decision-making process. Following the meeting, PHPA prepares draft capture quotas and submits a copy to LIPI for comment. Following this comment period, PHPA prepares the annual decree and the capture quotas become final."

Wartaputra (1992) explained on behalf of the Management Authority that the capture quota "is set by the Scientific Authority and incorporated into a Decree by the Directorate General of Forest Protection and Nature Conservation (PHPA) which is the CITES Management Authority for Indonesia".

Wijaya & Ramono (1991) state that the quota is a capture limit based on (a) data from field reports of regional PHPA offices; (b) a review of the three previous years of capture; and (c) a review by a team composed of LIPI, Forestry's Centre for Research and Development, and PHPA. However, the 1993 quota Decree makes specific reference to the 1993 LIPI quota proposal, and to wildlife trade statistics for 1984-1992.

LIPI (Noerdjito, *pers. comm.*) explained that LIPI scientists present what they believe should be the annual capture quota, for submission to the Management Authority. This quota proposal is said to be produced by first composing a table of information on the ranges of species and subspecies which are/may be traded. In LIPI's view, species/subspecies with a very small geographical range may not be traded, and species/subspecies with a wide range are further examined as to what type of habitats they inhabit. Threats to habitats are evaluated, including the amount of forest/habitat conversion or utilisation within the range of

the species and/or subspecies. Methods of capture are also considered in determining the capture limits. On this basis, species or subspecies are chosen which may be subject to a limited harvest.

LIPI is said to consider other information, including monitoring data for a number of quota-listed specimens which are traded in the domestic markets of Denpasar, Surabaya, Malang, Surakarta, Semarang, Yogyakarta, Jakarta, Bogor, and Bandung; population census data, if available; and field investigations on methods of capture, trade, smuggling, etc. LIPI also monitors the availability of Indonesian birds in Singapore, and market prices [on the basis that species which offer little profit need not be traded] (Noerdjito, *pers. comm.*). However, the quality and reliability of the census reports has often been disputed by foreign scientists, and trade monitoring data has not been published in any form by LIPI. It may be that monitoring is done on a very informal basis.

Purpose of the national quotas and the status of listed and unlisted species

Confusion also exists as to the purpose of the quotas, and the status of the species included and not included in the quotas. Callister (1989) explains that by limiting the catch/exports of any species, the quotas are in accordance with paragraph 3 of Article IV which calls for exports to be limited "to maintain that species throughout its range at a level consistent with its role in the ecosystems in which it occurs..." and for "suitable measures to be taken to limit the grant of export permits of that species", as required.

LIPI maintains that the quotas comprise the total allowable catch, and as such are not export quotas; allowing for domestic trade and mortality, the actual exports must be less than the catch quotas (by 15%). LIPI also maintains that species not listed in the quotas may not be captured/traded without prior agreement from LIPI, and that a species not listed in the quotas effectively has a "zero" quota (Noerdjito, *pers. comm.*). LIPI views this system as fulfilling most of their responsibilities with regard to CITES Article IV.

PHPA uses the capture quotas as evidence of effective trade management, but confuses the matter by having claimed at different times that the quotas are export quotas (thus not relevant as domestic trade limits), or that they are domestic trade limits (and not relevant as export limits). The quota decrees themselves clearly do not mention export limits (with the exception of the 1993 quota for CITES-listed species, which is ambiguously titled as a 'capture quota... for international trade') and can be assumed to be, as interpreted by LIPI, the total allowable catch, of which a portion is available for export.

PHPA states that according to Indonesian regulations trade in non-quota species is permissible if approval is first obtained from LIPI on a case-by-case basis (essentially a specific non-detriment finding, as opposed to the general one theoretically provided by the quotas). However, LIPI informed TRAFFIC Southeast Asia that at least in 1992 no approval was sought by PHPA for trade and export of non-quota species (Noerdjito, *pers. comm.*), yet in 1992 PHPA permitted the capture and export of 34 CITES Appendix II psittacine species/subspecies not listed in the quotas (see Table 7). [Note: an additional 43 species/subspecies of Indonesian psittacines not listed in the quotas were observed in Southeast Asian trade in 1992 by TRAFFIC Southeast Asia]

Broad (1993), reporting on the IUCN-sponsored *Consultative Meeting on Sustainable Use of Wildlife as an Integral Part of Nature Conservation in Indonesia* held in Jakarta on July 12-14 1993, noted that PHPA representatives explained the quotas establish capture limits for each species included in the quota, and that the capture of species not listed in the quota document and which do not have specific 'protected' status is *unlimited*, subject to issuance of capture permits.

This latest interpretation is at odds with previous explanations of the quota system by PHPA (eg. Wartaputra 1992 *in litt.* to C. Stuffman), with LIPI's understanding of the purpose of the quotas, as well as with Department of Forestry instructions in various provinces (eg. Decree No. 4 of the Head of the Regional Forestry Office for Irian Jaya, dated 1 March 1986, which states non-protected wildlife which may be traded is listed in the annual quota issued by the Director General of PHPA).

Overview of Application

It appears from the above sections that the Management and Scientific Authorities have very different procedures for establishing what each considers the optimal catch quota, which makes it difficult to determine precisely how quotas are chosen. PHPA concentrates on trade information and traders' demands, and LIPI focusses more on more theoretical biological and/or ecological factors. As a directorate in a growth-focussed department (Forestry), it is not surprising that PHPA favours methods which encourage the highest possible output with the greatest short-term economic benefit. The traders, who have the greatest influence on PHPA trade policy, have the most to gain from high levels of trade. Unfortunately, LIPI's alternative system is highly theoretical in nature, and is based on very little in the way of dependable and verifiable scientific field observations.

It has often been alledged that quotas represent the traders' demands. However, traders appear to be unwilling to obtain quotas prematurely for species that they may not personally obtain, which might explain why quotas are not established for more species earlier in the year, species which will undoubtedly only be traded/exported should they be obtainable (TRAFFIC Southeast Asia noted over 450 species and subspecies of Indonesian birds in trade in 1992-93). Overall, the following may be said:

- PHPA, with the guidance of the trading community, establishes the annual capture quota at a level traders believe can be maintained, for species which the traders believe will form the bulk of their trade. PHPA officials depend extensively on the traders for opinions on population status, relative abundance, and market demands.

- The quotas are set at the subspecies level at the insistence of LIPI, and by province (Indonesia has 27 provinces) as well. For example, trade in a certain species may only be allowed for one or more particular subspecies, which may be further restricted by specifying the province(s) where the subspecies may be captured from. However capture and shipping permits are inconsistently issued, and officers involved in the checking of shipments and issuing of all permits do not have the ability to indentify subspecies, and in most cases, species of non-protected wildlife. This creates a system whereby PHPA must accept at face value the claims of the traders concerning species/subspecies identification and point of capture.

- LIPI provides input at the annual quota meetings with its own official quota proposal, but does not significantly influence the final outcome (although its main influence appears to have been the adoption of a subspecies-specific quota system, and the selection of which subspecies to list in the quotas). The quota meetings result in a draft proposed quota, which undergoes final changes by PHPA before being signed as a Decree by the Director General of PHPA. While the quotas are supposedly the result of input from all sides, the final version appears to be heavily influenced by the traders, and made official by PHPA.

- The quotas are applied as both capture quotas and export quotas, yet export (and by extension capture) is allowed by PHPA for species not listed in the quotas (and/or not permitted for capture). The quotas are perceived as targets to be reached, and surpassing quotas, or ignoring them, is not subject to any sanction.

Differences over interpretation of methodology and procedure in determining and establishing the quotas, confusion over defining their function and purpose, and the inconsistent application of the management system have contributed towards the present situation, one which has severe implications on Indonesia's ability to implement the provisions of Article IV. It is of considerable importance that the CITES Scientific and Management Authorities disagree on such fundamental issues as the purpose, determination and application of the annual capture quotas. In fact, LIPI in 1991 expressed concern to the CITES Secretariat that the quota issued by PHPA did not agree with the LIPI recommendation (M. Amir *in litt.*, 1991).

Both authorities claim to utilise a standard methodology in determining quotas, yet both produce quota proposals which do not seem to comply with their own methodology (for instance LIPI has been known to suggest quotas for fully protected species, and thus contrary to the Act of 1990, and PHPA issues permits for species which are not listed in the quotas, such as the many hundreds of fig-parrots of the genus *Cyclopsitta* which are routinely traded every year and for which quotas were not established prior to 1992). The quota system itself, based on subspecies and precise areas of capture, goes well beyond the ability of PHPA or any other government body to apply it usefully, and the use of capture/shipping permits is not strictly enforced, and their own officers cannot identify non-protected wildlife to species and subspecies level.

Table 2 illustrates the results of the quota establishment process for 1991, the most recent year for which CITES annual report data are available.

Table 2. Establishment of the 1991 Quotas for Psittacines, and 1991 Export Figures.
(source: LIPI proposal; 1991 quota Decree; CITES annual report)

Species	LIPI Proposal	1991 Quota	Reported Exports
Alisterus sp.			40
Alisterus chloropterus	500	1450	1001
Alisterus amboinensis	-	1500	1952
Aprosmictus jonquillaceus	-	500	260
Aprosmictus erythropterus	250	1000	500
Cacatua galerita	-	-	2
Cacatua alba	-	4500	6851
Cacatua goffini	-	5000	7287
Cacatua sulphurea	-	5000	5748
Cacatua moluccensis	-	-	26
Cacatua sanguinea	-	500	229
Chalcopsitta sintillata	-	1000	403
Chalcopsitta duivenbodei	-	750	1041
Chalcopsitta atra	-	1000	405
Charmosyna wilheminae	-	-	90
Charmosyna josefinae	-	750	225
Charmosyna multistriata	-	-	395

Table 2. Cont'd

Species	LIPI Proposal	1991 Quota	Reported Exports
Charmosyna placentis	250	1000	671
Charmosyna pulchella	250	500	434
Cyclopsitta diophthalma	50	-	462
Cyclopsitta gulielmiterti	-	-	88
Eos bornea	3000	5000	9971
Eos squamata	500	2000	3929
Eos semilarvatus	-	-	20
Eos reticulata	-	-	1890
Eos histrio	-	1000	25
Eos cyanogenia	-	1000	209
Geoffroyus geoffroyi	50	200	120
Loriculus galgulus	500	750	2615
Loriculus flosculus	-	500	55
Loriculus pusillus	-	-	2126
Loriculus stigmatus	-	750	570
Loriculus sp.			50
Lorius garrulus	-	5900	6294
Lorius lory	-	-	1
Neopsittacus pullicauda	-	-	200
N. musschenbroekii	-	1000	451
Oreopsittacus arfaki	-	-	640
Prioniturus platurus	-	360	66
Pseudeos fuscata	-	1750	1240
Psittacula longicauda	100	1000	358
Psittacula alexandri	-	-	5396
Psittaculirostris desmarestii	-	1500	1028
Psittaculirostris edwardsii	-	1000	826
Psittaculirostris salvadorii	-	600	365
Tanygnathus sumatranus	-	-	14
Tanygnathus heterurus	-	-	20
T. megalorhynchos	-	2000	737
Trichoglossis iris	-	300	250
Trichoglossus euteles	-	1500	60
Trichoglossus flavoviridis	-	600	360
Trichoglossus goldei	-	1000	376
Trichoglossus flavoviridis	-	600	40
Trichoglossus haematodus	2000	9000	9903

PROBLEMS WITH ARTICLE IV IMPLEMENTATION IN INDONESIA

This section provides an overview of the specific problems with CITES Article IV implementation which result from confusion over the establishment and application of Indonesia's wildlife trade management system, and provides evidence of these problems.

Problem 1: **the advice of LIPI concerning annual quotas for CITES-listed and non-CITES species has frequently been ignored by the Management Authority, in contradiction with paragraph 2(a) of Article IV:**

a) **the Management Authority has established capture quotas for CITES-listed species which are consistently higher than those suggested by the Scientific Authority, in contradiction with paragraph 2(a) of Article IV;**

b) **the Management Authority has also established quotas on a large number of CITES-listed species which the Scientific Authority believes should not be traded, in contradiction with paragraph 2(a) of Article IV;**

The annual quota is determined by the Management Authority, with a limited and non-binding input from the Scientific Authority and other agencies. The view of LIPI, as the Scientific Authority, is that its national capture quota proposal is its "non-detriment finding" required under of paragraph 2(a) of Article IV. LIPI maintains that trade should only be allowed for the species listed in its proposal, and trade in the quantities mentioned in its proposal will not be detrimental to the survival of those species (Noerdjito, *pers. comm.*). LIPI considers that acceptance of quotas which differ from those it proposes constitute an undermining of LIPI's role and responsibility as the CITES Scientific Authority. Tables 5 and 6 demonstrate that the Scientific Authority's quota submissions for 1991, 1992, and 1993 have often been ignored by the Management Authority. This clearly contradicts the assertion by Wartaputra (1992) that the capture quota "is set by the Scientific Authority" and incorporated into a Decree of PHPA.

- In 1991 PHPA established a quota for 27 psittacine species besides those recommended by the Scientific Authority, and of the 11 recommended species/subspecies accepted by PHPA, 7 were increased in quantity

- In addition, for *Eos bornea* LIPI proposed a reduction of 25% from the 1990 quota of 5,300 specimens; PHPA reduced the 1991 quota by 6% to 5,000, and subsequently reported exports of 9,971. For *Eos squamata* LIPI called for a reduction of 25% from the 1990 quota of 2,400; PHPA reduced the 1991 quota by 15% to 2,000, and reported the export of 3,929 specimens.

- It is important to observe that in 1991 the Scientific Authority specifically stated in its original recommendation that no trade should occur in the following species:

	Quota	Exports
Alisterus amboinensis	1,500	1,952
Aprosmictus jonquillaceus	500	260
Cacatua sanguinea	500	229
Charmosyna josefinae	750	225
Charmosyna papou	1,500	1,228
Charmosyna placentis	1,000	671
Charmosyna pulchella	500	434
Eos cyanogenia	1,000	209
Neopsittacus musschenbroeki	1,000	451
Tanygnathus megalorhynchos	2,000	737
Trichoglossus euteles	1,500	60
Trichoglossus flavoviridis	600	360
Trichoglossus iris	300	250

(note: LIPI ultimately compromised and proposed a quota of 250 each for *Charmosyna placentis* and *C. pulchella.*)

- In 1992 PHPA established no capture quotas on psittacines besides those proposed by LIPI, but established quotas on 3 reptile species which were not recommended by LIPI. Of the 13 psittacine quotas accepted, PHPA increased the allowable catch for 3 species, and increased the allowable catch for 6 of the 7 LIPI recommendations for reptiles. In practice PHPA allowed the export of 34 psittacine species/subspecies not listed in the quotas. (In addition, in 1992 TRAFFIC Southeast Asia observed 79 Indonesian psittacine species and subspecies in trade, of which only 12 corresponded to the species/subspecies listed in the quotas.)

- In 1993 PHPA established a quota for 44 psittacine species/subspecies, 34 more than were recommended by LIPI. Of the 8 species/subspecies recommended by LIPI and accepted by PHPA, the allowable catches for 4 of these were increased. For reptiles PHPA established a quota for 11 Appendix II species besides those recommended by LIPI, and increased quotas on 6 of the 15 LIPI-proposed species that were accepted. (TRAFFIC Southeast Asia has so far noted 51 psittacine species/subspecies in trade in 1993, of which only 22 conform with the species/subspecies in the quotas.)

Problem 2: **the Management Authority regularly provides capture and export permits for CITES-listed species in excess of numbers allowed under the quotas, in violation of Indonesian regulations and in contradiction with paragraphs 2(a) and 2(b) of Article IV;**

Since the early 1980s when trade data became available, quotas have been routinely surpassed. Quotas have often been viewed by traders and government personnel as targets to be achieved and if possible surpassed. Quotas which were surpassed were usually increased the following year. In one instance quotas were increased in mid-year.

- In at least one region (Irian Jaya) in 1989-1990, government personnel were encouraged to issue capture permits in excess of the quotas, or to issue permits for non-quota species, to encourage "national development" and "non-oil exports".

- Callister (1989) noted that for 1987 PHPA issued permits for export in excess of the quotas for 27 out of 41 species/subspecies (66%) of psittacines. Again for psittacines, in 1988 PHPA issued export permits in excess of the quotas for 16 species/subspecies (41%); in 1989 PHPA issued export permits in excess of the quotas for 14 species/subspecies (39%); in 1990 PHPA issued export permits in excess of the quotas for 5 species/subspecies (12%) (source: PHPA data in Edwards & Nash, 1992).

- For 1991, PHPA issued export permits in excess of the quotas for 10 species (26%) of psittacines: *Alisterus amboinensis* (+452), *Cacatua alba* (+2,351), *Cacatua goffini* (+2,287), *Cacatua sulphurea* (+748), *Chalcopsitta duivenbodei* (+291), *Eos bornea* (+4,971), *Eos squamata* (+1,929), *Loriculus galgulus* (+1,865), *Lorius garrulus* (+394), and *Trichoglossus haematodus* (+903) (source: CITES 1991 annual report data).

- For 1992, an incomplete review of export permits issued between August and December indicates that PHPA has issued export permits in excess of the quotas for at least 8 psittacine species (61% of the psittacine species exported under quota) (=*Alisterus amboinensis, Alisterus chloropterus, Cacatua alba, Cacatua sulphurea, Charmosyna pulchella, Eos bornea, Eos squamata*, and *Trichoglossus haematodus*). A full review of the year's permits would be likely to reveal additional species for which export permits were issued in excess of the quotas.

Problem 3: **the Management Authority does not obtain the approval of the Scientific Authority for permitting the capture and export of non-quota species as required under Indonesian regulations, and for CITES Appendix II species this contradicts paragraphs 2(a) and 2(b) of Article IV;**

LIPI informed TRAFFIC Southeast Asia that at least in 1992 no approval was sought by PHPA for trade and export of non-quota species (Noerdjito, *pers. comm.*), yet in 1992 PHPA permitted the capture and export of 34 CITES Appendix II psittacine species/subspecies not listed in the quotas (see Table 5), and an additional 44 species/subspecies of Indonesian psittacines not listed in the quotas were observed in trade in 1992 (TRAFFIC Southeast Asia data). This suggests that trade in 78 of the 93 psittacine species and subspecies evidenced in trade (84%) in 1992 did not conform to basic Indonesian requirements (ie. pre-approval by LIPI/listing in the quota), and for Appendix II-listed species, was in contradiction with paragraphs 2(a) and 2(b) of Article IV. It is also relevant to mention that in the latter half of 1992 alone, PHPA issued export permits for 3,209 *Lorius garrulus* for which no capture/export quota was established in 1992. This is a species which is under review by the CITES Animals Committee's Significant Trade project in order to assess if certain species are adversely affected by current levels of international trade. At the 8th Conference of the Parties in March 1992, the Animals Committee noted that *Lorius garrulus* was probably threatened (CITES Doc. 8.30).

A review of a number of Indonesian CITES export permits issued between July and August 1992 revealed 36 permits were issued which contained 16 Appendix II reptile species not listed in the quotas.

Problem 4: **the Management Authority allows export of specimens for which capture permit and transport permit documentation is incomplete, in violation of Indonesian procedures, and for Appendix II-listed species in contradiction with paragraph 2(b) of Article IV;**

The most complete official record of domestic and export trade would be obtained by analysing the data from quotas, catch permits, transport permits, and export permits. It has not been possible to obtain for this review documentation which combines all records for CITES-listed species for the whole country. However, to illustrate Problem 4, Tables 8-10 contain quota, catch permit, transport permit and export information for Appendix II psittacines from Irian Jaya province for the years 1990, 1991 and 1992 respectively.

Regulations require that valid capture and shipping permits are required before an export permit can be issued. In 1991, export permits were issued for *Charmosyna rubronotata* (151), *C. multistriata* (395), *Cyclopsitta gulielmiterti* (88) and *Neopsittacus pullicauda* (200), despite the fact that no capture and shipping permits were issued for those species. Similarly in 1992, export permits were issued for a total of 350 *Psittaculirostris salvadorii*, despite the fact that capture and shipping permits were not issued.

There is also the problem that export permits are provided for numbers larger than the number allowed to be captured, and larger than those recorded on shipping permits. For example, the number of Irian Jaya psittacine species exported in excess of capture permit limits were 17 in 1990, 16 in 1991, and at least 10 in 1992 (from incomplete export data). The number of Irian Jaya psittacine species which were exported in numbers greater than what was recorded on transport permits were 21 in 1990 (out of 24), 26 in 1991 (out of 28), and at least 14 in 1992 (out of 30; from incomplete export data). See Tables 8-10 for details.

In 1990, of psittacine species limited in range to Irian Jaya, export permits were issued for 12,416 specimens, while only 5,601 specimens (45%) were included in Indonesian transport permits. In 1991, export permits were issued for at least 11,908 specimens of psittacines endemic to Irian Jaya, with only 5,849 specimens (49%) appearing on Indonesian transport permits. In 1992, export permits were issued for at least 12,586 specimens of Irian Jaya psittacines (August-December data only), with only 4,413 (35%) specimens appearing on transport permits. From this it may be observed that more than half of the Appendix II psittacine specimens originating from Irian Jaya Province in 1990 and 1991 were exported in contravention of Indonesian wildlife trade regulations, and that this situation was likely repeated in 1992.

For Indonesian psittacines overall, Table 7 illustrates species and subspecies which were observed in trade in 1991, 1992 and 1993, compared to their presence in PHPA records. From this table it may also be observed that Indonesian species and subspecies are observed in trade despite their absence from capture/shipping records.

Problem 5: **a far greater range of CITES-listed species is in local and international trade than is recorded by the Management Authority, suggesting that large-scale illegal trade continues unabated.**

Again using psittacines as an example, 9 CITES-listed species/subspecies were observed in trade by TRAFFIC Southeast Asia in late 1991 (17%) which were not in PHPA records. In 1992, 44 species/subspecies were observed in trade (47%) which were not in any PHPA permit records. No permit data is available yet for 1993, but observations by TRAFFIC Southeast Asia so far (January-May) confirm

trade in 31 of the 46 CITES-listed species/subspecies provided with quotas, and trade in an additional 40 species/subspecies not listed in the quotas.

Table 7 includes the psittacine species observed in trade by TRAFFIC Southeast Asia in 1991, 1992 and 1993, together with official data and the quotas

Problem 6: the Scientific Authority does not monitor either export permits or actual exports, in contradiction with paragraph 3 of Article IV.

LIPI does not receive any permit copies or permit information from the Management Authority, nor is LIPI involved with examining exports (Noerdjito, *pers. comm.*; Noerdjito *et. al.*, 1991).

ARTICLE IV, INDONESIA, AND SPECIES CONSERVATION

Loss of habitat and excessive trade are the two main factors threatening wild species in Indonesia. While the former generally has a greater impact (the rate of forest loss in Indonesia is second only to Brazil (Collins *et. al.*, 1991)), the combination of habitat loss and uncontrolled trade can be critical. While only a few species have become extinct in Indonesia in recent times (eg. Javan Wattled Lapwing *Vanellus macropterus*, Caerulean Paradise Flycatcher *Eutrichomyias rowleyi*), a number of subspecies have disappeared (eg. Javan and Balinese subspecies of the Tiger *Panthera tigris*), many species exist in critically low numbers (eg. Javan Rhinoceros *Rhinoceros sondaicus*), and a great many more species and subspecies simply have not been recorded in decades.

The introduction of this review highlighted the enormous wealth of biodiversity occurring in Indonesia. It is appropriate at this point to recall that Indonesia has 49 threatened mammal species (10% of the world's threatened mammals), 135 threatened birds (15% of the world's threatened birds), 13 threatened reptiles (9% of the world's threatened reptiles), 29 threatened fishes (23% of the world's threatened fishes), and 70 threatened plants (1% of the world's threatened plants)(WCMC, 1992). While Indonesia claims to have some 366 protected area sites with a total area of some 175,000 Km^2 (WWF, 1992), many of these exist on paper only, and even those under direct management are often subject to large-scale encroachment and resource extraction.

The Government of Indonesia justifiably promotes the utilisation of wildlife for economic development. However, its utilisation strategies do not appear to be linked with protected area management in a way to ensure sustainability of wild stocks. An appropriate example involves Indonesia's Saltwater Crocodiles *Crocodylus porosus* (CITES App. I temporarily downlisted to App. II) and New Guinea Freshwater Crocodiles *Crocodylus novaeguineae* (App. II), for which PHPA has been very active at promoting and developing a crocodile skin industry. While all government efforts have been focussed on ranching based on capturing wild stock (including setting up a "demonstration" ranch to develop better production methods), not a single protected area important for crocodile breeding habitat has been gazetted/established by PHPA during this time.

Domestic wildlife trade is in realistic terms outside any PHPA control. In 1992 and 1993, TRAFFIC Southeast Asia examined 13 bird markets in 10 Indonesian cities, noting some 369 Asian bird species and subspecies in domestic trade alone (additional species of Indonesian origin have been observed in trade in neighbouring countries). In 1992 only 37 domestically-traded species and subspecies out of 288 observed were included in the 1992 capture quotas, and in 1993 only 44 species/subspecies out of 261 observed in trade were listed in the 1993 capture quotas. Furthermore, regulations require the correct use of capture and shipping permits for all wildlife trade, yet such documentation rarely exists for domestically-traded species/specimens. Not only birds are for sale in the bird markets: wild primates, civets, otters, and small felids are commonly traded as well. Most of the 41 market surveys conducted by TRAFFIC Southeast Asia in Indonesia revealed protected species for sale.

In terms of numbers, Indonesia's domestic trade is far greater in volume than its export trade. For instance, the total 1992 bird capture quotas (CITES-listed and non-CITES species) is for 88,750 individuals, which probably represents less than three months' worth of trade at Jakarta's Jalan Pramuka bird market (the largest of Jakarta's three bird markets). Most Indonesian cities have at least one bird/wildlife market.

While Indonesia's export trade is small in relation to its internal trade, it is still large enough to rank it among the world's largest wildlife exporting nations, and most exported species are listed in Appendix II of

CITES. CITES controls provide the means to regulate through international cooperation at least a portion of Indonesia's incredibly diverse trade in wild species, including the most significant species in conservation terms. For these reasons it is extremely important that Indonesian authorities correctly apply the Convention and in particular the provisions of Article IV.

Inability to apply adequate trade controls led to the decision in 1987 at the 7th Conference of the Parties to place the Salmon-crested Cockatoo *Cacatua moluccensis* in Appendix I, and similarly in 1992 at the 8th Conference of the Parties the decision was made to place Goffin's Cockatoo *Cacatua goffini* in Appendix I. At this meeting Indonesia forestalled a move to list the Blue-streaked Lory *Eos reticulata* being placed in Appendix I by imposing an immediate zero capture quota for this species (despite this action, TRAFFIC Southeast Asia has observed several hundred *Eos reticulata* for sale on certain days in Jakarta's Pramuka bird market in 1992 and 1993). Until such decisions for these three species were taken, trade was observed frequently to surpass the quotas (see Table 3).

Table 3. Quotas and reported exports for three Indonesian psittacines
(source: Edwards & Nash, 1992; 1991 Quota; 1991 CITES Annual Report)

	1984	1985	1986	1987	1988	1989	1990	1991
Cacatua moluccensis (Quota)	*****	*not available*	*****	*5,000*	*5,000*	*3,000*	*0*	*0*
C. moluccensis (Exports)	9,542	8,632	9,173	9,287	6,817	4,940	4,614	26
Cacatua goffini (Quota)	*13,500*	*10,000*	*7,981*	*7,000*	*7,000*	*8,400*	*6,000*	*5,000*
Cacatua goffini (Exports)	10,796	7,678	10,039	8,356	8,840	7,241	5,941	7,287
Eos reticulata (Quota)	*10,000*	*7,000*	*1,600*	-	*1,000*	*1,500*	*2,000*	-
Eos reticulata (Exports)	4,630	1,397	1,450	1,374	1,736	1,664	1,543	1,890

Article IV of CITES requires that species included in Appendix II be permitted in trade only when the Scientific Authority has advised that such trade is not detrimental to the survival of that species. Concerns that trade was occurring without the benefit of such "non-detriment" findings led CITES Parties in 1984 to call for a review of trade in Appendix II species in order to identify those that were likely to be adversely affected by current levels of international trade. This led to the CITES Technical Committee launching a review of trade in all Appendix II animal species. The results of the original Significant Trade Review, based on reported trade during 1980-1982, was published in 1988. In 1990 the CITES Animals Committee decided to continue the Significant Trade project and examine trade subsequent to 1982, and completed their report in 1991. The results of the 1991 review was circulated to all Parties at the 8th Conference of the Parties in 1992 (Doc.8.30). The results of this review for Indonesian psittacines, is combined with the 1991 recommendation of the Scientific Authority, the quota established for that year, and reported exports in Table 4.

Table 4. ***1991 Indonesian Psittacine Significant trade categorisations, together with the LIPI-proposed quota, actual quota, and reported exports for 1991.***

(source: CITES Doc.8.30; 1991 LIPI proposal; 1991 quota Decree; 1991 CITES annual Report)

Species	Category	LIPI Proposal	1991 Quota	1991 Exports
Alisterus amboinensis	C	-	1,500	1,952
Aprosmictus erythropterus	C	250	1,000	500
Aprosmictus jonquillaceus	C	-	500	260
Cacatua alba	B	-	4,500	6,851
Cacatua galerita	D-ID	(protected)	(protected)	2
Cacatua goffini	B	-	5,000	7,287
Cacatua sanguinea	D-ID	-	500	229
Cacatua sulphurea	B	-	5,000	5,748
Chalcopsitta atra	C	-	1,000	405
Charmosyna josefinae	C	-	750	225
Eos bornea	C	3,000	5,000	9,971
Eos cyanogenia	C	-	1,000	290
Eos reticulata	C	-	-	1,890
Eos squamata	C	500	2,000	3,929
Loriculus flosculus	C	-	500	55
Loriculus galgulus	D-MY	-	750	2,615
Lorius garrulus	B	-	5,900	6,294
Psittacula longicauda	D-MY	-	1,000	358
Psittaculirostris desmarestii	C	-	1,500	1,028
Psittaculirostris edwardsii	C	-	1,000	826
Psittaculirostris salvadorii	C	-	600	365
Psittinus cyanurus	D-MY	-	-	-
Tanygnathus heterurus	C	-	-	20
T. megalorhynchos	C	-	2,000	737
Trichoglossus iris	C	-	300	250

Significant Trade Categories:

B = Current international trade levels are probably a threat to the survival of the taxon on a global basis.

C = Current trade levels and/or conservation status insufficiently known.

D = Species probably not threatened globally, but populations depleted in certain countries; also species for which there is evidence to suggest that a "non-detriment" finding required under Article IV of the Convention is not being made (ID=Indonesia; MY=Malaysia).

For those species considered "significantly traded", it can be seen from the above table that the recommendations of the Scientific Authority (LIPI) do not correspond to the actual quota adopted, and for several species, the reported exports exceed the quotas. All of the above-listed species have either small geographical ranges and/or restricted habitat needs, or have one or more subspecies which do.

The conservation impact that the current application of the management system has on species is real. One subspecies for which trade continues out of effective control is the "citron-crested" race of the Lesser Sulphur-crested Cockatoo *Cacatua sulphurea citrinocristata*. Despite the fact that a zero capture/export quota was imposed in 1992 and 1993 for this easily-distinguishible subspecies, permits for the export of 235 birds were issued between October and December 1992 (information for January-September is unavailable for this report), and at least some permits have been issued for exports of *C. s. citrinocristata* in 1993. TRAFFIC Southeast Asia notes that this species was commonly observed in trade both within and outside Indonesia between December 1991 and May 1993. The most recent population estimate for this subspecies (endemic to the island of Sumba) suggests that only between 1,150 and 1,850 birds remain in the wild (Van Balen *et. al.*, 1993). The higher population estimate is almost equal to the number of birds exported in 1991 (1,752).

The impact of trade on a species or subspecies with an even more limited geographical range can be demonstrated by the current case of the Red-and-blue Lory *Eos histrio*. This is a little-known parrot species occurring only in the tiny island groups of Sangihe, Talaud and Nenusa, northeast of Sulawesi. Until recently the primary threat to this species (as with most other Indonesian species) has been habitat loss, as natural habitats in all of these island groups have been largely been converted to plantation agriculture. As a result two subspecies of Red-and-blue Lory (*talautensis* and *challengeri*) are considered to be endangered to critically endangered, and the third (*histrio*) is considered critically endangered, and quite possibly extinct. International trade in this species has been until the present almost nonexistent (estimated at fewer than 10 birds/year). Between April 1992 and March 1993 TRAFFIC Southeast Asia has noted that more than 700 *Eos histrio talautensis* have been removed from the Talaud Islands, from a population believed to number fewer than 2,000 birds. This collection is likely to have occurred from the protected forest on Karakelong Island, which at 20,200 hectares is the largest surviving area of *Eos histrio* habitat in the Talaud group. This sudden appearance of significant numbers of Red-and-Blue Lories in trade poses a serious and immediate threat to the survival of this species in the wild. While this species was not listed in the 1992 capture/export quota, PHPA nevertheless issued export permits for at least 290 *Eos histrio histrio* (which were in fact *E. histrio talautensis*), without the knowledge or approval of the Scientific Authority (the additional birds included ones believed to have been exported as Red Lories *Eos bornea*, and some 200 birds which died through poor handling).

What this demonstrates is that under the current application of Indonesia's trade management system, where the Management Authority dominates the establishment of the capture quotas and allows trade for species not listed in the quotas without/against any advice from the Scientific Authority, trade can and does occur which threatens the survival in the wild for little-known low-population and limited-range species. Continuation of the current system will result in at best more additions to Appendix I, or at worst in extinctions of subspecies or even species.

CONCLUSIONS AND RECOMMENDATIONS

This review documents that implementation of essential parts of Article IV of CITES in Indonesia is either poor, non-existent, or consistently ignored by the Management Authority.

In short,

- the Scientific Authority provides advice regarding which species may be traded (and in which quantities) without detriment, but this advice is usually not accepted by the Management Authority when establishing the annual harvest quota;
- the Management Authority rarely if ever consults with the Scientific Authority before allowing trade in non-quota species;
- the Management Authority routinely surpasses the annual quotas;
- the Management Authority infrequently applies its own requirements for capture and transport permits, and issues export permits irrespective of whether prior capture/transport permits have been issued;
- only a portion of trade in Appendix II species is recorded by the Management Authority;
- the current system does not involve the Scientific Authority in monitoring exports;
- the Scientific Authority has inadequate resources to make proper Article IV findings at present.

Overall, the distinction between what is legal and technically illegal wildlife trade in Indonesia needs to be clarified. From this review it is evident for example that perhaps less than half of Indonesian psittacines in trade are likely to be considered legal on the basis of domestic permit requirements alone. At times the majority of Appendix II species in trade in Indonesia are not listed in the quotas and as a result are traded and exported directly against the recommendation of the Scientific Authority (though it should be noted that recommendations of the Scientific Authority in its present form can be equally based on guesswork or poor field studies).

In a report describing the situation in 1978, WWF (1980) summarized its findings on wildlife trade in Indonesia by including the following statements:

> "export quotas set by PPA [PHPA's former designation] are not based on sufficient information of the animal's biology and status in the wild."
>
> "some of PPA's quotas are grossly exceeded by harvests"
>
> "the reported volume of trade is believed to be only a small fraction of the number of animals taken from the wild"
>
> "legal trade not recorded at PPA headquarters remains substantial"

While administratively much progress has been made, much of the situation described in 1978 exists today, 15 years later. None of the problems are new, and the same problems have carried over several

administrations. Even if officials responsible for managing the wildlife trade were replaced, the author believes that substantive changes would not necessarily occur. What is needed is a change in *how* the system is applied, which is something far more useful than changing *who* applies it. The truth is that the Scientific Authority is accorded virtually no authority and little influence over wildlife trade decisions, nor does the current system allow it to participate in monitoring trade. This leaves the Management Authority, effectively unchecked, to selectively apply its system of trade controls in a manner dictated by trader demands and not conservation necessities.

The First Consultative Meeting on Sustainable Use of Wildlife as an Integral Part of Nature Conservation in Indonesia, which was organised by PHPA, the World Conservation Union (IUCN), the Indonesian Flora and Fauna Trade Association (IFFTA), and LIPI, was held in Jakarta on July 12-14 1993. This meeting formulated an Action Plan (PHPA *et. al.* 1993), which included a number of recommendations for changes to the policies and practices of wildlife trade in Indonesia.

The information outlined in this report on Indonesia and Article IV acts as an appropriate backdrop for the Action Plan and several of its recommendations. The recommendations of the Action Plan which are relevant to this report are the following:

- An administrative arrangement between PHPA and LIPI should be adopted to clarify their roles in relation to wildlife management and trade, particularly in reference to their responsibilities as the Management and Scientific Authorities for Indonesia under CITES. (Action Plan Recommendation 1.2)

- Regulations should be developed under Act No. 5 of 1990 governing the taking of certain unprotected species, particularly when such species are listed in the CITES Appendices. (Action Plan Recommendation 1.3)

- Export quotas should not be establishd for species that have been recommended by the CITES Animals Committee for a zero quota (CITES Resolution Conf. 8.9) unless the conditions to re-establish an export quota have been met by CITES Authorities in Indonesia. (Action Plan Recommendation 1.6)

- Recommendations for harvest quotas should be initiated by LIPI, and provided to PHPA. PHPA should distribute the recommendations to Regional Offices of PHPA and to other institutions and universities for comment. The final quota decree should be endorsed by LIPI and signed by PHPA. To the extent practicable, the process should start in September so that a decision may be made no later than the end of November of each year. (Action Plan Recommendation 2.1) *[Author's Note: The only change with the present system is that LIPI does not formally approve the quota in its final form.]*

- LIPI should be consulted to determine whether trade in CITES-listed species that are not under quota is detrimental to the survival of the species in the wild. (point 2.2) *[Author's Note: By extension, absence of approval from LIPI should be interpreted as a 'zero quota'.]*

- National export quotas for wildlife should be established by the Indonesian CITES Authorities. Export quota may include stock from previous years' capture quotas. This should not be confused with the capture quota, which is used for internal purposes. (Action Plan Recommendation 3.1)

- Each export permit for a quota species should record the number of specimens for that permit and the total exort quota for the species for that year. (Action Plan Recommendation 3.2)

- The number of specimens authorized for capture under permit should be strictly enforced so that where capture quotas are established within a province, the number of specimens authorized for capture by collectors in a particular province should not exceed the quota. (Action Plan Recommendation 3.3) *[Author's Note: In theory this should already occur.]*

- Regulations pertaining to licensing and registration of all suppliers and collectors should be strictly enforced, and revocation of licenses should occur when non-compliance is discovered. (Action Plan Recommendation 3.6) *[Author's Note: TRAFFIC Southeast Asia considers that the same threat of revocation of licence priveleges should apply to exporters, should any be involved in incorrect/illegal trading practices.]*

In addition, the need to increase the resources of the Scientific Authority, to provide training for staff of both Authorities, and to conduct field surveys was clearly identified at the meeting (Action Plan Recommendations 4.1-7; 5.5-6).

TRAFFIC Southeast Asia considers the following as minimum requirements from which rational management of wild harvests may occur:

- o strict combined oversight of all wildlife trade implementation by PHPA, LIPI, and possibly the Ministry of Trade;

- o acceptance by the Management Authority of the Scientific Authority's annual quota proposal.

- o strict implementation of existing wildlife trade procedures by PHPA, including limiting trade only to species and quantities established in annual capture and export quotas, and for which domestic capture and transport permits have been properly issued;

- o higher involvement in national CITES affairs by the Scientific Authority (including monitoring of exports).

TRAFFIC Southeast Asia encourages all relevant authorities within and outside Indonesia to address the problems with CITES Article IV implementation outlined in this report.

Kuala Lumpur,
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PHPA trade data tabulations for 1988-1991; 1992 (partial only).

TRAFFIC Southeast Asia Bird Trade Database; Irian Jaya Bird Trade Database.

Table 5.
Scientific Authority Recommendations and Final Quotas for Psittacines, 1991-1993

SPECIES	SA	1991	SA	1992	SA	1993
Alisterus amboinensis	-	1,500	-	-	-	-
Alisterus amboinensis dorsalis	-	-	1,000	1,000	250	750
Alisterus amboinensis hypophonius	-	-	-	-	-	300
Alisterus chloropterus callopterus	-	-	500	500	500	-
Alisterus chloropterus chloropterus	-	700	-	-	-	-
Alisterus chloropterus moszkowskii	500	750	-	-	-	500
Aprosmictus erythropterus papou	250	1,000	1,000	1,000	-	500
Aprosmictus jonquillaceus	-	500	-	-	-	200
Cacatua alba	-	4,500	-	0	-	1,500
Cacatua galerita	-	0	-	-	-	-
Cacatua galerita triton	-	-	2,250	-	-	-
Cacatua goffini	-	5,000	-	0	-	0
Cacatua moluccensis	-	0	-	-	-	0
Cacatua sanguinea	-	500	-	-	-	100
Cacatua sulphurea citrinocristata	-	0	-	0	-	0
Cacatua sulphurea	-	5,000	-	0	-	1,000
Chalcopsitta atra	-	1,000	-	-	-	-
Chalcopsitta atra insignis	-	-	-	-	-	100
Chalcopsitta atra atra	-	-	-	-	-	400
Chalcopsitta duivenbodei	-	750	-	-	-	500
Chalcopsitta sintillata	-	1,000	-	-	-	300
Charmosyna josefinae	-	750	-	-	-	100
Charmosyna multistriata	-	-	-	-	-	50
Charmosyna papou goliathina	-	1,500	-	-	-	500
Charmosyna papou papou	-	-	-	-	-	250
Charmosyna placentis	-	1,000	-	-	-	250
Charmosyna placentis ornata	250	-	250	250	-	-
Charmosyna pulchella	250	500	250	250	250	250
Cyclopsitta d. diophthalma	50	-	50	50	50	300
Cyclopsitta gulielmiterti	-	-	-	-	-	-
Eos bornea	-	5,000	-	-	3,000	3,000
Eos bornea rothschildi	3,000	-	3,000	4,250	-	-
Eos cyanogenia	-	1,000	-	-	-	200
Eos histrio	-	1,000	-	-	-	0
Eos squamata obiensis	500	-	500	750	-	-
Eos squamata riciniata	-	2,000	-	-	500	1,000
Eos squamata squamata	-	(both)	-	-	-	(both)
Eos reticulata	-	0	-	0	-	0
Geoffroyius geoffoyi	50	200	200	200	200	0
Loriculus aurantiifrons	-	-	1,000	1,000	-	300

Table 5., Cont'd

SPECIES	SA	1991	SA	1992	SA	1993
Loriculus flosculus	-	500	-	-	-	100
Loriculus galgulus	500	750	500	500	500	500
Loriculus pusillus	-	-	-	-	-	100
Loriculus stigmatus	-	750	-	-	-	200
Lorius garrulus	-	5,900	-	-	-	2,500
Neopsittacus musschenbroekii	-	1,000	-	-	-	200
Oreopsittacus arfaki	-	-	-	-	-	500
Prioniturís platurus	-	360	-	-	-	100
Probosciger aterrimus goliath	-	-	550	-	-	-
Pseudeos fuscata	-	1,750	-	-	-	750
Psittacula alexandri	-	5,000	-	-	-	2,000
Psittacula longicauda	100	1,000	100	100	100	200
Psittaculirostris desmarestii	-	-	-	-	-	400
Psittaculirostris desmarestii cervicalis	-	500	-	-	-	-
Psittaculirostris d. desmarestii	-	1,500	-	-	-	-
Psittaculirostris edwardsii	-	1,000	-	-	-	650
Psittaculirostris salvadorii	-	600	-	-	-	250
Tanygnathus megalorhynchos	-	2,000	-	-	-	700
Trichoglossus euteles	-	1,500	-	-	-	150
Trichoglossus flavoviridis meyeri	-	600	-	-	-	200
Trichoglossus goldei	-	1,000	-	-	-	200
Trichoglossus h. haematodus	2,000	6,000	2,000	4,500	2,000	4,000
Trichoglossus haematodus mitchelli	-	2,000	-	-	-	100
Trichoglossus haematodus forsteni	-	1,000	-	-	-	-
Trichoglossus iris iris	-	300	-	-	-	100

TABLE 6.

Scientific Authority Recommendations and Final Quotas for Reptiles, 1992-1993.

SPECIES	SA	1992	SA	1993
Candoia carinata	-	-	50	500
Candoia aspera	-	-	50	500
Indotestudo forsteni	-	-	-	400
Liasis olivaceus papuanus	-	-	-	200
Liasis boeleni	-	-	-	75
Liasis macklotti	-	-	-	350
Liasis fuscus	-	-	-	100
Liasis albertisi	-	-	100	750
Liasis amethystinus	-	-	100	750
Manouria emys	-	-	-	300
Morelia argus variegata	-	-	-	100
Naja naja sputatrix	1,000	150,000	150,000	150,000
Ophiophagus hannah	500	500	500	200
Ptyas mucosus	20,000	200,000	200,000	200,000
Python reticulatus	10,000	150,000	140,000	150,000
Python curtus	-	33,000	30,000	50,000
Varanus dumerilii	500	1,300	1,300	1,300
Varanus beccarii	-	-	-	200
Varanus similis	-	-	-	300
Varanus karkschmidti	-	-	-	200
Varanus cordensis	-	750	200	200
Varanus kalabeck	-	-	25	500
Varanus salvadorii	-	300	25	100
Varanus rudicollis	200	350	500	1,000
Varanus panoptes	-	-	-	300
Varanus salvator	70,000	650,000	500,000	600,000

Note: *Varanus kalabeck, V. cordensis, V. beccarii* and *V. similis* are not valid species.

TABLE 7.

Occurrence in Psittacine Quotas, Official Records, and Market Observations.

(1992 official data incomplete, 1993 official data unavailable)

	1991			1992			1993	
SPECIES	Quota	Off.	Obs.	Quota	Off.	Obs.	Quota	Obs.
Alisterus amboinensis	O	O	O	O	O	O		O
Alisterus a. buruensis		O			O			
Alisterus a. dorsalis		O					O	
Alisterus a. hypophonius		O			O		O	
Alisterus chloropterus		O				O		O
Alisterus c. callopterus					O			
Alisterus c. chloropterus	O	O			O			
Alisterus c. moszkowskii	O	O			O		O	
Aprosmictus erythropterus	O	O				O		O
Aprosmictus e. papou		O		O	O		O	
Aprosmictus jonquillaceus	O	O			O	O	O	
Cacatua alba	O	O		O	O	O	O	O
Cacatua galerita			O			O		O
Cacatua g. eleonora						O		O
Cacatua g. triton			O			O		O
Cacatua goffini	O	O		O	O	O		O
Cacatua moluccensis			O			O		O
Cacatua sanguinea	O	O			O	O	O	O
Cacatua sulphurea	O		O	O	O	O	O	
Cacatua s. citrinocristata			O			O	O	O
Cacatua s. parvula						O		O
Cacatua s. sulphurea	O	O	O	O	O	O		O
Chalcopsitta atra	O	O				O		O
Chalcopsitta a. atra					O	O	O	O
Chalcopsitta a. insignis		O			O	O	O	
Chalcopsitta duivenbodei	O	O			O	O	O	O
Chalcopsitta sintillata	O	O	O		O	O	O	O
Chalcopsitta s. chloroptera					O			
Charmosyna josefinae	O	O				O	O	
Charmosyna multistriata	O	O			O		O	
Charmosyna papou	O	O				O	O	O
Charmosyna p. goliathina		O			O	O	O	O
Charmosyna placentis	O	O		O	O	O	O	O
Charmosyna wilheminae		O						
Charmosyna pulchella	O	O		O	O		O	

TABLE 7. Cont'd

SPECIES	1991			1992			1993	
	Quota	Off.	Obs.	Quota	Off.	Obs.	Quota	Obs.
Eclectus roratus			O			O		O
Eclectus r. cornelia						O		
Eclectus roratus roratus						O		
Eclectus r. vosmaeri						O		
Eos bornea	O	O	O	O	O	O	O	O
Eos b. bornea		O			O	O		O
Eos b. rothschildi		O				O		O
Eos cyanogenia	O	O				O	O	
Eos histrio	O	O				O		O
Eos h. challengeri								O
Eos h. histrio					O			
Eos h. talautensis						O		O
Eos squamata		O	O			O		O
Eos s. atrocaerulea								O
Eos s. obiensis						O		
Eos s. riciniata	O	O		O	O	O	O	O
Eos s. squamata	O	O					O	O
Eos reticulata		O				O		O
Eos semilarvata		O				O		O
Geoffroyius simplex		O						
Geoffroyius geoffroyi	O	O		O	O			
Loriculus aurantiifrons		O		O			O	O
Loriculus flosculus		O					O	
Loriculus galgulus	O	O	O	O	O	O	O	O
Loriculus pusillus		O			O	O	O	O
Loriculus stigmatus	O	O			O		O	
Loriculus vernalis			O			O		O
Lorius domicellus						O		O
Lorius garrulus	O	O	O		O	O	O	O
Lorius g. flavopalliatus						O		O
Lorius g. garrulus						O		O
Lorius g. morotaiensis						O		O
Lorius lory		O	O			O		O
Lorius l. erythrothorax						O		O
Lorius l. lory						O		O
Lorius l. somu						O		
Neopsittacus musschenbroekii	O	O					O	O
Neopsittacus pullicauda		O			O	O		O
Oreopsittacus arfaki		O			O	O	O	O
Prioniturls platurus	O	O			O		O	O
Probosclger aterrimus						O		O
Pseudeos fuscata	O	O	O		O	O	O	O

TABLE 7. Cont'd

SPECIES	1991 Quota	1991 Off.	1991 Obs.	1992 Quota	1992 Off.	1992 Obs.	1993 Quota	1993 Obs.
Psittacella brehmii		O						
Psittacula alexandri	O	O	O		O	O	O	O
Psittacula longicauda	O	O		O	O	O	O	O
Psittaculirostris desmarestii	O	O	O		O	O	O	O
Psittaculirostris edwardsii		O	O		O	O	O	O
Psittaculirostris salvadorii	O	O	O		O	O	O	O
Psittinus cyanurus						O		O
Psittrichas fulgidus			O			O		
Tanygnathus heterurus		O						
Tanygnathus megalorhynchos	O	O			O	O	O	O
Tanygnathus sumatranus		O				O		O
Trichoglossus euteles	O	O				O	O	O
Trichoglossus flavoviridis	O	O			O			O
Trichoglossus f. mayeri		O					O	
Trichoglossus goldei	O	O	O		O	O	O	O
Trichoglossus haematodus	O	O	O	O	O	O	O	O
Trichoglossus h. capistratus						O		O
Trichoglossus h. flavotectus		O						
Trichoglossus h. fortis						O		O
Trichoglossus h. forsteni		O						
Trichoglossus h. haematodus						O		O
Trichoglossus h. mitchelli		O			O	O	O	O
Trichoglossus h. rosenbergii		O				O		
Trichoglossus h. rubritorquis		O						
Trichoglossus h. stresemanni						O		O
Trichoglossus h. weberi					O	O		O
Trichoglossus iris	O	O			O	O		
Trichoglossus i. iris		O					O	
Trichoglossus ornatus						O		O

Notes on Table 7:

- Official records are comprised of CITES permits, official PHPA compilations, the 1991 CITES report, and capture and transport permit information.
- *Trichoglossus h. rubritorquis* is a subspecies endemic to Australia.
- Observational data was obtained by TRAFFIC Southeast Asia from monitoring approximately 900 bird retail shops and a few exporters' premises in Indonesia and elsewhere in Southeast Asia, from December 1991-May 1993 (7507 records of Southeast Asian birds in trade, including 3037 records from 26 market survey days in Indonesia). Since psittacines are usually kept for export and that few exporters would alllow TRAFFIC to examine their stock, it is not surprising that a number of species reported in official trade records were not documented during the surveys.

TABLE 8.

1990 Irian Jaya Parrot Trade Data
(source: PHPA records)

Species	1990 Quota	Numbers on Capture Permits	Numbers on Transport Permits	Reported Export Figures
Alisterus amboinensis	1,100	240	33	1,229
Alisterus chloropterus	1,480	886	576	608
Aprosmictus erythropterus	1,230	921	572	885
Cacatua sanguinea	600	490	237	406
Chalcopsitta sintillata	1,000	36	62	882
Chalcopsitta atra	900	335	241	719
Chalcopsitta duivenbodei	550	234	167	519
Charmosyna papou	1,500	1,000	785	1,033
Charmosyna josefinae	825	555	103	366
Charmosyna pulchella	1,000	794	401	412
Charmosyna placentis	1,500	748	108	864
Cyclopsitta diophthalma	-	275	179	0
Eos cyanogenia	1,100	515	80	1,370
Eos squamata	4,400	225	-	2,146
Geoffroyus geoffroyi	500	66	16	192
Neopsittacus musschenbroeki	975	375	59	406
Oreopsittacus arfaki	-	-	40	0
Pseudeos fuscata	1,500	997	718	1,595
Psittaculirostris salvadorii	600	230	100	412
Psittaculirostris desmarestii	1,700	812	541	1,057
Psittaculirostris edwardsii	1,000	382	107	396
Tanygnathus megalorhynchos	1,575	149	40	1,258
Trichoglossus goldei	1,000	314	525	506
Trichoglossus h. haematodus	7,500	1,398	1,249	6,033

(Note: *Alisterus amboinensis, Eos squamata, Tanygnathus megalorhynchos* and *Trichogossus haematodus* are also found outside Irian Jaya province, which may explain the difference between Irian Jaya capture/transport data and exports. All other species listed only occur in Irian Jaya Province.)

TABLE 9.

1991 Irian Jaya Parrot Trade Data
(source: PHPA records)

Species	1991 Capture Quota	Number on Capture Permits	Number on Transport Permits	Exports Reported in the Annual Report
Alisterus amboinensis	1,500	484	195	1,952
Alisterus chloropterus	700	746	347	1,001
Aprosmictus erythropterus	1,000	260	286	500
Cacatua sanguinea	500	450	52	229
Chalcopsitta sintillata	1,000	92	37	403
Chalcopsitta atra	1,000	339	264	405
Chalcopsitta duivenbodei	750	750	494	1,041
Charmosyna papou	1,500	1,050	808	1,228
Charmosyna josefinae	750	300	195	225
Charmosyna rubronotata	-	-	-	151
Charmosyna pulchella	500	500	375	434
Charmosyna placentis	1,000	43	43	671
Charmosyna multistriata	-	-	-	395
Cyclopsitta gulielmitertl	-	-	-	88
Cyclopsitta diophthalma	-	240	75	353
Eos cyanogenia	1,000	-	-	209
Geoffroyus geoffroyi	200	36	40	120
Loriculus aurantiifrons	-	232	164	-
Neopsittacus musschenbroeki	1,000	655	388	451
Neopsittacus pullicauda	-	-	-	200
Oreopsittacus arfaki	-	200	136	640
Pseudeos fuscata	1,750	1,206	663	1,240
Psittacella brehmii	-	175	0	-
Psittaculirostris salvadorii	500	210	173	365
Psittaculirostris desmarestii	2,000	375	269	1,028
Psittaculirostris edwardsii	-	573	528	826
Trichoglossus goldei	1,000	498	248	376
Trichoglossus haematodus	9,000	2186	1417	9,903

(Note: *Alisterus amboinensis, Charmosyna placentis* and *Trichogossus haematodus* are also found outside Irian Jaya province, which would contribute to a difference between Irian Jaya capture/transport data and exports.)

(Note: "Annual Report" refers to the 1991 CITES Annual Report.)

TABLE 10.

1992 Irian Jaya Parrot Trade Data
(source: PHPA records)

Species	1992 Capture Quota	Number on Capture Permits	Number on Transport Permits	Number on Permits Issued (incomplete*)
Alisterus amboinensis	1,000	375	121	1,045
Alisterus chloropterus	500	1,050	443	702
Aprosmictus erythropterus	1,000	400	267	166
Cacatua sanguinea	-	200	96	85
Chalcopsitta sintillata	-	350	109	83
Chalcopsitta atra	-	350	149	872
Chalcopsitta duivenbodei	-	775	178	1,167
Charmosyna papou	-	725	238	965
Charmosyna josefinae	-	450	50	-
Charmosyna pulchella	250	250	55	310
Charmosyna placentis	250	200	135	220
Charmosyna multistriata	-	75	-	-
Charmosyna wilheminae	-	175	-	-
Cyclopsitta gulielmiterti	-	-	35	-
Cyclopsitta diophthalma	50	50	25	-
Geoffroyus geoffroyi	200	250	151	75
Geoffroyus simplex	-	50	43	-
Loriculus aurantiifrons	1,000	-	-	-
Lorius lory	Protected	-	-	2
Neopsittacus musschenbroeki	-	950	427	-
Neopsittacus pullicauda	-	300	135	650
Oreopsittacus arfaki	-	650	150	1,150
Pseudeos fuscata	-	850	318	715
Psittacella brehmii	-	425	95	-
Psittacella picta	-	75	-	-
Psittaculirostris salvadorii	-	-	-	350
Psittaculirostris desmarestii	-	725	237	690
Psittaculirostris edwardsii	-	675	308	1,281
Trichoglossus goldei	-	625	347	323
Trichoglossus haematodus	2,500	763	301	1,735

* Permit information is from permits issued between August and December 1992; permits issued between January and July were not available for this report.

(Note: Quotas given in this table are for Irian Jaya specimens, and the 'permits issued' figure is for Irian Jaya subspecies/specimens.)