CITES APPLICATION FOR REGISTRATION AND ACCREDITATION OF OPERATION BREEDING APPENDIX I SPECIES FOR COMMERCIAL PURPOSES
Res. Conf. 12.10 (Rev CoP13)

Scarlet Macaw *(Ara macao)*

Birds International, Inc.
No. 1 Sto Nino St. Alemars Subd.
Commonwealth Heights, Fairview, Quezon City, Philippines

INTRODUCTION

This proposal is being submitted to the CITES Secretariat-Switzerland through the CITES Management Authority of the Philippines, the Protected Areas and Wildlife Bureau (PAWB), for the purpose of gaining accreditation for the possible trade of Birds International, Inc.'s captive-bred, second and succeeding generations of Scarlet macaw *(Ara macao)* .

Birds International, Inc. (BII) is engaged in the conservation and propagation of the world's rare and exotic species of psittacines, 95% of which are non-Philippine birds. It operates its activities on a six-hectare farm in Quezon City, Philippines. BII is a CITES registered breeding facility (A-PH-501) breeding Appendix I species of Golden Conure *(Aratinga guarouba)* and Red-Vented Cockatoo *(Cacatua haematuropygia)* for commercial purposes.

While most breeding and conservation efforts done are government-initiated and sponsored, BII was founded privately by Antonio M. de Dios. What started as a pure hobby became a well-organized, systematic and highly technical operation to breed and conserve, which ultimately culminated in the establishment of BII.

Upon its establishment in the early 1970s, BII's principal aim was to undertake biological and conservation studies for future breeding efforts. Also, a continuous exchange of information was established with other international aviculturists.

An influx of investments followed to be able to achieve the desired breeding conditions and provide the expertise required for the successful propagation of the birds. Necessary facilities such as a veterinary hospital with twenty rooms to accommodate various cases; a laboratory with high-powered microscopes, a serum analyzer unit, a mechanical convection unit; breeding and non-breeding cages and aviaries of various designs and sizes; a 45 air-conditioned room nursery; a fully insulated hatchery with more than 40 units of Grumbach egg incubators and hatchers; dietary centers; water filtration systems, sprinkler systems for birds' artificial shower and staff quarters were constructed. In addition, hundreds of animal incubators and other needed equipment, feeds and medicines were imported.

BII is jointly managed by Mr. Antonio de Dios and his daughter, Regina. They have a staff of one hundred thirty (130) people consisting of college graduates with degrees in veterinary medicine, medical technology, animal husbandry, agriculture and zoology; and a support group of maintenance people consisting of gardeners, janitors, carpenters, masons, electricians and welders. Functional groups carry out specialized activities such as hospital management, nursery management, management of facilities and equipment and the likes.

In its more than thirty years of bird conservation and propagation, BII has made substantial contributions to the accumulation of technical knowledge on bird farming. It has achieved breeding success in its Appendix I and II species, most notably the Spix's Macaw *Cyanopsitta spixii)*

The Philippines became an active member of the Convention on International Trade of Endangered Species Flora and Fauna (CITES) in 1981. With its strong adherence to the CITES regulation of restricting the trade of wildlife species only to those that are born and bred in captivity, BII was registered as a preferred pioneer industry with the Board of Investments of the Philippines (BOI) Certificate of Registration No. 83-598 on November 16, 1983. On August 14, 1985, BII was granted Wildlife Permit No. 3 by the then Bureau of Forest Development, which allowed Birds International, Inc to export its captive-bred birds.

Net revenue generated by BII is flowed back to its operation. We continually maintain and upgrade our facilities, we hold training and seminars for our staff conducted by international professionals and we also sponsor and undertake training programs for both local and foreign veterinarians from various zoos like the Sao Paolo Zoo in Brazil, Criadouro Chaparral also in Brazil and the Philippine Eagle Conservation Program. We have allowed members of some Asian parks like the Jurong Bird Park in Singapore to observe our system of operation. We engage in exchanging ideas and information exchange with zoos and aviculturists from around the world to give the best care possible to these beautiful avian species. In the end, if such a need should arise, we are willing to be a part of their reintroduction to the wild.

1. **NAME AND ADDRESS OF THE OWNER AND THE MANAGER OF THE CAPTIVE-BREEDING OPERATION.**

Birds International Incorporated (BII)
No. 1 Sto Nino St. Alemars Subd.
Commonwealth Heights, Fairview, Quezon City Philippines
Website Address: www.birdsinternational.net
e-mail: info@birdsinternational.net

Mr. Antonio M. de Dios – Founder-President
Ms. Ma. Regina de Dios-Jardinel - Manager

2. **DATE OF ESTABLISHMENT**: February 1975

3. **SPECIES BRED**: Scarlet Macaw *(Ara macao)*[1]

4. **DETAILS OF THE NUMBER AND AGE (IF KNOWN OR APPROPRIATE) OF MALES AND FEMALES THAT COMPRISE THE PARENTAL BREEDING STOCKS. (Evidence of legal acquisition of each male and female including receipts, CITES documents, capture permits, etc)**

Between the years 1975 to 1976 the company initially acquired a total of thirty-seven heads (37) Scarlet macaw with unknown age from the domestic pet shop. From this total thirteen (13.13) pairs became the parental breeding pairs while three (3.3) pairs died after pairing and the remaining five (5) heads died during quarantine.

Furthermore, in 1994 BII acquired a total of twenty (20) heads of Scarlet macaw from Suriname with unknown sex and age. From this acquisition, nine (9.9) pairs became the parental breeding pairs while two (0.2) heads died prior to pairing. Refer to Annex A for the details.

5. **OPERATIONS LOCATED WITHIN RANGE STATES MUST PRODUCE EVIDENCE THAT THE PARENTAL STOCK WAS OBTAINED IN ACCORDANCE WITH THE RELEVANT NATIONAL LAWS (e.g capture permits, receipts, etc) or, if imported, in accordance with the provisions of the Convention (e.g. receipts, CITES documents, etc)**

Not Applicable Birds International Inc. (BII) is located in a non-range state.

6. **OPERATIONS LOCATED IN NON-RANGE STATES MUST PRODUCE EVIDENCE THAT THE ANIMALS COMPRISING THE PARENTAL STOCK**

a. are pre-Convention specimens (e.g. relevant dated receipts or other acceptable proof of lawful acquisition)
b. have been derived from pre-Convention specimens (e.g. relevant dated receipts or other acceptable proof of lawful acquisition) ; or
c. were acquired from the range State(s) in accordance with the provisions of the Convention (e.g. receipts, CITES documents, etc)

The thirty-seven (37) heads parental stocks obtained from the domestic market between the years 1975 and 1976 were pre-convention specimen, while the twenty (20) heads obtained in 1994 from Suriname are covered with CITES permits. From this total of fifty-seven heads, twenty-two pairs (22.22) became the parental breeding stock. Refer to Annex B for the details and Annex $B_{1,2,3,4}$ for CITES Import Permit.

[1] Listed under CITES Appendix III on October 28, 1976. Elevated to Appendix I on August 01, 1985

7. Where actual documentation is difficult to obtain, the Management Authority may accept signed affidavits supported by other documents (e.g. dated receipts) in lie of documents required under paragraph 6 a) through c) above until the 14th meeting of the Conference of Parties. The Management Authority may also consult with range States of the species concerned in order to validate affidavits and supporting documents.

Thirty-seven (37) heads pre-convention Scarlet macaws were acquired from the local pet shops. Ten (10) heads were acquired on April 1975, twelve (12) heads on May 1975 and the last fifteen (15) heads on June 1976. See Exhibit 1- Joint Affidavit.

8. CURRENT STOCKS (numbers, by sex and age, of progeny held in addition to the parental breeding stock above)

The company's current stocks of two hundred five (205) specimens are composed of nine (9.9) pairs from Suriname, forty-five (45.45) F1 breeding pairs, twelve (12) F1 progenies and eighty-five (85) F2 progenies. Please refer to table below.

Total Current Stock of Scarlet Macaw

Age in Years (as of 2004)	***Sex***			***Total***
	Male	***Female***	***Unsexed***	
0-1	**11**	**15**	**0**	**35**
2-3	**15**	**11**	**0**	**26**
4-5	**11**	**8**	**0**	**19**
6-7	**5**	**4**	**0**	**9**
8-9	**4**	**4**	**0**	**8**
10-11	**0**	**3**	**0**	**3**
12-13	**8**	**18**	**0**	**26**
14-15	**19**	**18**	**0**	**37**
16-17	**13**	**6**	**0**	**19**
18-19	**5**	**0**	**0**	**5**
20	**0**	**0**	**0**	**0**
Unknown[2]	**9**	**9**	**0**	**18**
Total	**100**	**96**	**9**	**205**

9. **INFORMATION ON THE PERCENTAGE OF MORTALITIES IN THE DIFFERENT AGE GROUPS AND WHERE POSSIBLE, BETWEEN MALES AND FEMALES.**

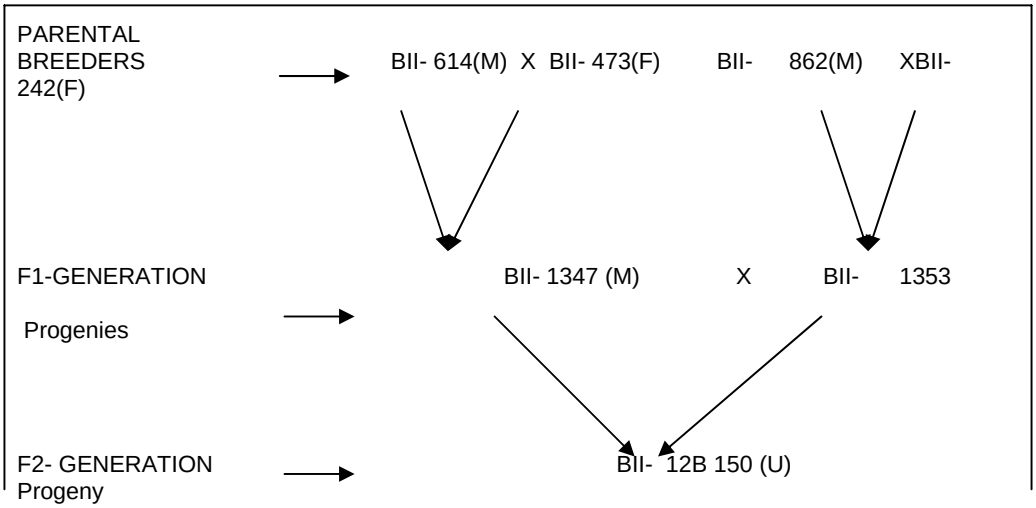
From the total production of two hundred thirty-five (235) F1-generation progenies, forty-six percent (46%) or one hundred eight (108) heads died, while fifty-four percent (54%) or one hundred twenty-seven (127) heads are the remaining live progenies. Refer to Annex C additional details

From the total of four hundred forty-five (445) F2-generation progenies, forty-one percent (41%) or one hundred eighty-two (182) heads died, while fifty-nine percent (59%) or two hundred sixty-three (263) heads are the remaining live progenies. Refer to Annex C additional details.

[2] These are the pairs from Suriname

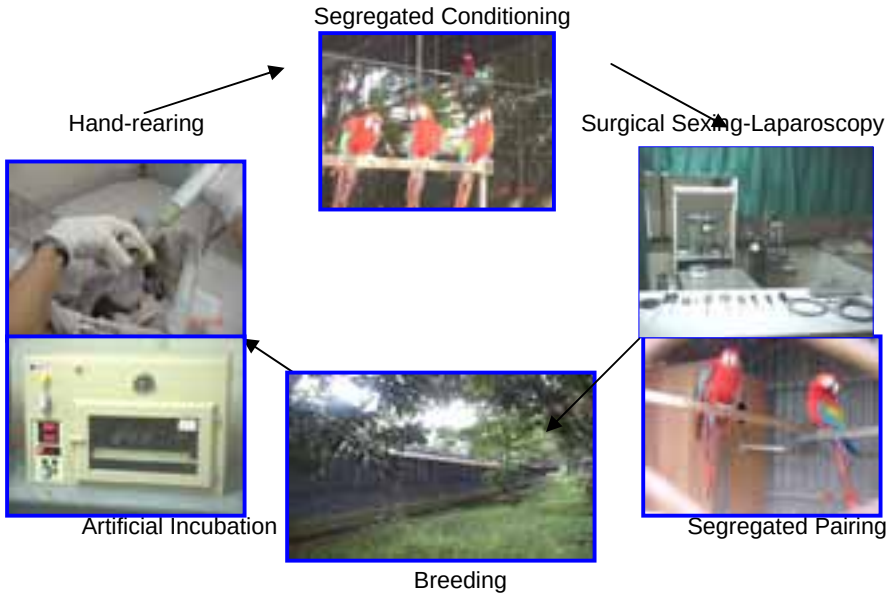
10. DOCUMENTATION SHOWING THAT THE SPECIES HAS BEEN BRED TO SECOND GENERATION BREEDING OFFSPRING (F2) AT THE FACILITY AND THE DESCRIPTION OF METHOD USED.

When Birds International started breeding Scarlet Macaw, the company decided to practice the CLOSED CYCLE BREEDING AND PRODUCTION SYSTEM. This production system requires an initial take from the wild but after the initial establishment no wild specimen will be added or taken from the wild to augment the existing parental breeding pairs. Likewise, the company follows a SEGREGATION STRATEGY of progenies coming from various generations. Segregation will ensure grouping of progenies coming from the same generation and will eliminate chances of mixing individuals from the different generations therefore making pairing of similar generation easier and the realization of F2 and F3 generation attainable. Diagram below will show how BII was able to achieve F1 and F2 generation from two (2) pairs of Parental Breeding Pair.



(F)

Presented below is the CLOSED CYCLE BREEDING AND PRODUCTION SYSYTEM for the development of Scarlet macaw leading to F1 and F2 generation progenies.



STAGES OF BREEDING	DESCRIPTION
BII is implementing the CLOSE BREEDING AND PRODUCTION SYSTEM as well as SEGREGATION STRATEGY in various stages of breeding when applicable.	
Segregated Conditioning	Birds with varying bloodlines are placed in a flight aviary where they can socialize and or bond with other birds (same species). This stage is the maturation period. Usually it will take three (3) -five (5) years to attain reproductive maturity.
Sexing	All unrelated, mature and with good quality birds are subjected to laparoscopy, to check maturity of reproductive organs such as the ovary/testes. This procedure is required to ensure proper pairing of sexually mature individuals.
Segregated Pairing	Sexually compatible male and female will be set-up in either a Large Portable Cage or inside a Breeding Aviary. Newly paired breeder will be monitored and any aggression between the pair will be taken into consideration for possible break-up to avoid injury of either the male or the female.
Segregated Breeding	Nest boxes with nesting materials are installed for egg-laying and special diet rich in Calcium will be provided. During breeding season a daily check-up of nest-boxes is required. However, noise and any other form of disturbance is avoided if not minimized.
Artificial Incubation	Eggs are carefully pulled-out from nest boxes for cleaning and disinfection after which the eggs are placed inside a Grumbach Egg Incubator for artificial incubation. Monitoring is done daily. Incubation is between 25-28 days
Hand-Rearing	Hatchlings are carefully cleaned and placed inside AICU-Animal Intensive Care Unit at the Nursery. A culture test of the eggshell is required if the hatclings exhibited any abnormal condition during incubation or immediately after hatching. Specially formulated diet will be given from day one until the bird is fully weaned. Weaning is between four (4) –eight (8) months

11. IF THE OPERATION HAS ONLY BRED THE SPECIES TO THE FIRST GENERATION, DOCUMENTATION SHOWING THAT THE HUSBANDRY METHODS ARE THE SAME AS, OR SIMILAR TO THOSE THAT HAVE RESULTED IN SECOND-GENERATION OFFSPRING ELSEWHERE.

Not Applicable – The facility was able to produce up to second (F2) going to F3 generation.

12. PAST, CURRENT, AND EXPECTED ANNUAL PRODUCTION OF OFFSPRING, TOGETHER WITH THE INFORMATION ON THE PERCENTAGE OF: a) Female producing offspring each year b) Unusual fluctuations in the annual production of offspring (including an explanation of the probable cause).

Year	Total Percentage of Productive Female (in %)			Production According to Generation			Total Production
	Parental Breeding Pairs (22.22)[3]	F1 Breeding Pairs (45.45)	F2 Breeding Pairs (18.18)	F1	F2	F3	
1985	4	0	0	3	0	0	3
1986	26	0	0	10	0	0	10
1987	47	0	0	22	0	0	22
1988	56	0	0	35	0	0	35
1989	69	0	0	45	0	0	45
1990	69	0	0	40	0	0	40
1991	65	0	0	35	0	0	35
1992	43	4	0	15	4	0	19
1993	34	7	0	10	10	0	20
1994	21	9	0	5	13	0	18
1995	9	20	0	3	32	0	35
1996	0	20	0	0	29	0	29
1997	0	20	0	0	28	0	28
1998	0	22	0	0	24	0	24
1999	0	24	0	0	22	0	22
2000	0	36	0	0	56	0	56
2001	0	53	0	0	88	0	88
2002	22	44	0	3	63	0	66
2003	22	48	0	3	50	0	53
2004	33	44	0	6	26	0	32
2005*	44*	47*	11*	8*	38*	2*	48*
2006*	55*	41*	11*	8*	50*	4*	62*
2007*	55*	66*	16*	10*	65*	6*	81*
2008*	66*	62*	16*	12*	70*	10*	92*

Legend = * indicates projected value

The company is convinced that based on the historical annual production of this species since 1985, the year on year increase and decrease is within the normal range.

[3] Nine pairs (9.9) from Suriname

13. AN ASSESSMENT OF THE ANTICIPATED NEED FOR, AND SOURCE OF, ADDITIONAL SPECIMENS TO AUGMENT THE BREEDING STOCK TO INCREASE THE GENETIC POOL OF THE CAPTIVE POPULATION IN ORDER TO AVOID ANY DELETERIOUS INBREEDING.

Our current population of F1P-BR and the additional F2P-BR breeding stocks are sufficient sources of bloodlines to sustain our present captive breeding operation. Proper management of the progenies bloodlines through the use of a specimen control number using computerized relational database guides BII personnel to avoid pairing of related birds.

BII selects unrelated, mature and superior quality captive bred produced at the center. Contacts with other breeding operations worldwide allow the trade and exchange of this species thus eliminating the need to collect this species from the wild population.

14. TYPE OF PRODUCT EXPORTED

The products exported are of live captive-bred birds. Each bird is individually marked, either by closed leg-band or by microchip implant and inspected by the technical staff of the Philippine Protected Areas and Wildlife Bureau (PAWB) which keeps a record of each bird bred from the time the egg hatched.

15. DETAILED DECRIPTION OF THE MARKING METHODS USED FOR THE BREEDING STOCK AND OFFSPRING AND FOR THE TYPES OF SPECIMENS THAT WILL BE EXPORTED.

15.1 CLOSED LEG-BAND and OPEN LEG-BAND

A closed stainless steel leg-band with unique number series is used for all captive-bred progenies and breeding stocks at the center. Closed leg-band is usually attached ten to fifteen days (10-15) after hatching. The closed leg-band identification is being used by the Philippines CITES-CMA to identify the birds intended for export. Also this is the basis for the issuance of CITES export permit.

Close Leg-bands & Open Leg-band (½")

An open stainless steel leg-band is attached additionally to a female captive bred-progeny after surgical sexing. This will clearly identify the surgically sexed female because it is fitted with two leg-bands, a closed band on the right foot and an open band on the left.

15.2 MICROCHIP IMPLANT

An ISO microchip implant is also used for the identification of captive-bred progenies intended for export.

Microchip Reader ***Microchip Installation*** ***Microchip Implant***

16. DESCRIPTION OF THE INSPECTION AND MONITORING PROCEDURES TO BE USED BY THE CITES MANAGEMENT AUTHORITY TO CONFIRM AND IDENTIFY THE BREEDING STOCK AND THE OFFSPRING AND TO DETECT THE PRESENCE OF UNAUTHORIZED SPECIMENS HELD AT OR INCORPORATED WITH THE OPERATION OR PROVIDED FOR EXPORT.

The following procedures are being adopted by the Protected Areas and Wildlife Bureau (PAWB), the CITES Management Authority in monitoring the captive breeding operations of BII;

1. The collection of wildlife species from the natural habitat for breeding purposes is allowed only under a Wildlife Collector's Permit (WCP) issued by the PAWB. Exotic species maybe acquired from breeders duly accredited and registered with PAWB or through importation under an import permit issued by the said agency;

2. A Wildlife Farm Permit (WFP) is also required for the establishment of breeding farms in the country. A WFP holder is required to maintain and provide breeding facilities suitable for the avian species to be maintained and spacious enough to ensure the welfare of the birds. Likewise, leg bands for the identification of the breeders and progenies are being checked/verified by the CMA.

3. The breeding farm is required to maintain a record for each species maintained in the farm, which shall include the data specified below. The record is periodically inspected and the stocks verified by the CMA. Only the recorded/validated animal stocks in the farm as registered in the book are allowed for trade/disposition.

    a. founding/breeder stocks- species, origin, age (date laid and date hatched) generation, sex, quantity, source, marking (leg-band, microchip etc) parental leg-band number if any.
    b. progenies – species, origin, generation, age (date laid and date hatched) sex, quantity, parental leg-band number.

c. additional acquisition – local purchase, importation, exchange or donation, species, source, generation, origin, age, quantity, parental leg-band, receipt, permit if imported
d. mortality /accidental escape – species, source, generation, origin, age, generation, quantity, parental leg-band number
e. hospital, nursery, incubator apparatus, and nesting area shall provide the same information as above.

4. The movement of the birds from the breeding farm to any point within the territorial jurisdiction of the Philippines or from the collection area to the farm should be accompanied by a local transport permit issued by the concerned field office of the CMA;

5. Only captive-bred wildlife species/sub-species produced in the breeding farms authorized under WFP are allowed for trade. Birds intended for export are inspected/validated by PAWB and verified against the production report regularly submitted by the establishment to the CMA. Export permits are issued only when the results of the inspection and verification conform with the requirements of the CMA;

6. The establishment is also required to observe cleanliness and sanitation in the maintenance of the breeding farm and facilities. This is to prevent possible contamination and /or spread of pests and/or diseases, which will affect the survival of either the captive-bred specimens or other wildlife species which maybe found in the surrounding area.

7. Cleanliness and Sanitation- the breeding operation shall observe cleanliness and sanitation in the maintenance of the breeding farm and facility. This is to prevent possible contamination and /or spread of pests and/or diseases, which may affect the survival of both captive-bred, and the wild population of animals and other wildlife species in the area.

17. DESCRIPTION OF THE FACILITIES TO HOUSE THE CURRENT AND EXPECTED CAPTIVE STOCK, INCLUDING SECURITY MEASURES TO PREVENT ESCAPES AND/OR THEFTS. DETAILED INFORMATION SHOULD BE PROVIDED ON THE NUMBER AND SIZE OF THE BREEDING AND REARING ENCLOSURES, EGG INCUBATION CAPACITY, FOOD PRODUCTION OR SUPPLY, AVIALABILITY OF VETERINARY SERVICES AND RECORD KEEPING.

The list of equipment and facilities presented below play a very vital role in the husbandry management and breeding of all Scarlet macaw at Birds International.

Facilities at Birds International

Description	Number of Units	Description	
Hatchery-I & II	2	Incubation	86m^2
Nursery 1-V	5	Hand-Rearing	1700m^2
Hanging Cages			
Small	30	Weaning/Rearing	.92m^3 / cage
Medium	120	Weaning/Rearing	2.63m^3 /cage
Large	60	Weaning/Rearing	4.46m^3 /cage
Mini-Flight	30	Conditioning Newly Weaned Birds	400m^2
Conditioning Flight	30	Conditioning Newly Weaned Birds	1750m^2
Breeding Aviary	27	Breeding	1500m^2
Portable Breeding Cages			
Small	270	Breeding	3m^3/ cage
Medium	250	Breeding	6m^3/ cage

Description	Number of Units	Description	
Large	100	Breeding	$8m^3$/cage
Food Preparation	2	Food Production for Breeders/Conditioning	$180m^2$
Hospital	3	Patient Treatment/Recovery	$577m^2$
Laboratory	1	Specimen culture	$13.5m^2$
Warehouse	2	Storage	$480m^2$
Cold Storage-Warehouse	2	Storage	$70m^2$
Administration Building	1	Record Keeping/Documentation	$252m^2$
Caretaker's Quarter	4	Accommodation	$1,462m^2$
Dining Hall	1	Caretaker's Dining Area	$25m^2$
Quarantine Building	2	Treatment /Isolation Area	$730m^2$
Laundry Building	1	Laundry	$60m^2$

Equipment at Birds International

Description	Quantity	Purpose
Egg Incubators	30	Artificial Incubation
Egg Candlers	5	Egg Development Indication
AICU (Animal Intensive Care Units)	271	Hand-rearing
Walk-In Freezer	1	Food Storage
Endoscope	2	Endoscopy/Surgical Sexing
Photo-microscope	4	Bacteria Indentification
Mechanical Convection Incubator	1	Bacteria Culture
Surgitron	1	Surgery
Airconditioning Units	50	Temperature Control
Humidifier	2	Humidity Control
Microchip Reader	3	Microchip Number Identification
Computers (CPU+Monitor)	7	Record Keeping
Power Generators (90 KVA)	3	Stand-by Power Supply
Water Filtration (UV-Light)	1	Water Disinfection
Fork-Lift	1	Garbage Collection/Transport
Power Sprayer	5	Cleaning Cages
Mini-Van	1	Bird Export
Dump Truck	1	Materials/Equipment Transport
Reflotron	1	Blood Value Analyzer
Centrifuge	2	Blood Sample Preparation
Gas-Anesthesia Unit	2	Inhaled-Anesthesia
Digital Camera (mpeg/jpeg)	2	Picture/Documentation
Refrigerators	15	Food Storage

HATCHERY EQUIPMENT AND FACILITIES


Hatchery I


Hatchery II

NURSERY EQUIPMENT AND FACILITIES

Nursery I & II **Nursery III** **Nursery IV** **Nursery V**

CONDITIONING, BREEDING & PORTABLE BREEDING FACILITIES

FOOD PREPARATION EQUIPMENT AND COLD STORAGE FACILITIES

Kitchen I **Kitchen II**

Chiller Warehouse

HOSPITAL AND LABORATORY EQUIPMENT AND FACILITIES

Hospital I & II **Laboratory**

HOSPITAL AND LABORATORY EQUIPMENT AND FACILITIES

Mechanical Convection Incubator

Photo-microscope

Reflotron machine

Centrifuge

Examination table

Endoscope

Surgitron machine

WATER TREATMENT AND FILTRATION/ LAUNDRY FACILITIES

Laundry room

Washing/Drying machine

Water Filtration/ UV Light Treatment & Storage

STAND-BY POWER GENERATOR SET AND TRANSPORT VEHICLE

CARETAKER'S QUARTERS AND DINING HALL

ADMINISTRATION FACILITIES

Prevention of the possible escape of birds is one of the many considerations in a cage design at BII. Almost all the cages used at the center can be serviced without the need to go inside to deliver the food to the birds. Food and water dishes are provided with through an especially designed hatches that can be pulled out or slide out during feeding. This design makes the escape of the birds inside the cage almost impossible.

Food Tray

Power-Pressure Spraying

Cleaning of the cage can usually be achieved by pressure hosing from the outside of the cage.

Nest-boxes are designed and situated in such a position that they also can be examined without the need to enter the cage.

Nest Box-Outside View(Alley)

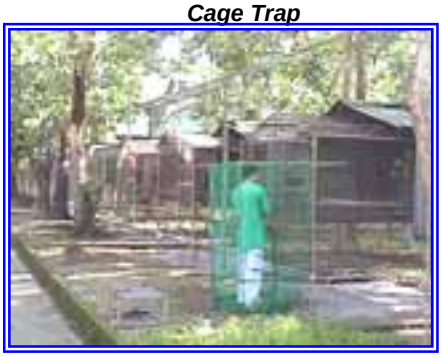
Portable Breeding Nest Box

On few occasions, when it is necessary to enter the cage to catch and examine more closely the bird, a special safety cage or cage trap is used to enter the main cage and prevent any possibility of escape.

Birds inside the breeding aviaries are housed in a completely enclosed building from which they cannot escape, even if they should come out of their cages. Breeding aviaries are secured through a screened double door.

Great care is taken whenever birds are being transferred to different facilities. These birds are always carried inside a transfer box with lock before going out of the aviary and the box is never opened unless it is fully secured inside the destination aviary.

Cage Trap



Aluminum Transport Box

The advent of technological breakthrough in the field of PC (Personal Computers) in the early 1980's enhanced and changed the old master list. Presently, the company has a relational database system that aids its staff in all aspects of avian management. This database was further enhanced with the use of C++, SQL and Visual Basic programming language. The database system at present can alert user not to pair related progenies as it does not accept records and data of related progenies intended to be paired.

18. DESCRIPTION OF THE STRATEGIES USED BY THE BREEDING OPERATION OR OTHER ACTIVITIES THAT CONTRIBUTE TO IMPROVING THE CONSERVATION STATUS OF WILD POPULATION(S) OF THE SPECIES.

The company is committed to support any effort of the Philippine government or any foreign government and non-government organizations to improve conservation status of the Scarlet Macaw macaw. The company's vast experience on the conservation of the species like Spix's macaw and the Philippine Eagle to name a few will likewise offer a great advantage to any conservation effort that will be initiated on this particular species.

19. ASSURANCE THAT THE OPERATION SHALL BE CARRIED OUT AT ALL STAGES IN A HUMANE (NON-CRUEL) MANNER.

The current success of BII in captive breeding not to mention other Appendix 1 species is a clear manifestation that indeed breeding operation at BII is carried out with utmost and humane manner. The company's commitment to follow the existing Animal Welfare Act of the Philippines and the Wild Life Resources Conservation and Protection Act is also an assurance that the company will protect, care and treat all species in a humane and non-cruel manner.

Annex A Scarlet Macaw

Species Count	Legband Number	Sex	Age	Source Country (ISO-Code)	Evidence of Legal Acquisition		Comments
					Import Permit	Date Issued	
1	032	F	UNK	PH	Affidavit	April 1975	A
2	040	M	UNK	PH	Affidavit	June 1976	A
3	078	F	UNK	PH	Affidavit	April 1975	A
4	119	F	UNK	SR	137A-94	Sept 09 94	A
5	120	F	UNK	SR	136A-94	Sept 09 94	DP
6	121	F	UNK	SR	136A-94	Sept 09 94	DP
7	125	M	UNK	PH	Affidavit	June 1976	A
8	219	F	UNK	SR	137A-94	Sept 09 94	A
9	218	F	UNK	SR	137A-94	Sept 09 94	A
10	234	F	UNK	SR	137A-94	Sept 09 94	A
11	236	M	UNK	PH	Affidavit	May 1975	A
12	237	F	UNK	SR	137A-94	Sept 09 94	A
13	242	F	UNK	SR	137A-94	Sept 09 94	A
14	288	M	UNK	PH	Affidavit	May 1975	A
15	289	M	UNK	PH	Affidavit	May 1975	A
16	323	M	UNK	SR	136A-94	Sept 09 94	A
17	324	M	UNK	SR	137A-94	Sept 09 94	A
18	336	M	UNK	SR	137A-94	Sept 09 94	A
19	352	M	UNK	SR	137A-94	Sept 09 94	A
20	379	M	UNK	PH	Affidavit	June 1976	A
21	392	F	UNK	SR	137A-94	Sept 09 94	A
22	396	M	UNK	PH	Affidavit	April 1975	A
23	398	M	UNK	PH	Affidavit	April 1975	A
24	401	M	UNK	PH	Affidavit	April 1975	A
25	465	F	UNK	PH	Affidavit	June 1976	A
26	472	F	UNK	PH	Affidavit	June 1976	A
27	473	F	UNK	SR	137A-94	Sept 09 94	A
28	491	M	UNK	PH	Affidavit	April 1975	A
29	529	F	UNK	PH	Affidavit	June 1976	A
30	531	M	UNK	SR	137A-94	Sept 09 94	A
31	537	M	UNK	SR	137A-94	Sept 09 94	A
32	552	F	UNK	PH	Affidavit	June 1976	A
33	553	F	UNK	PH	Affidavit	June 1976	A
34	556	F	UNK	PH	Affidavit	June 1976	A
35	561	M	UNK	PH	Affidavit	June 1976	DaP
36	565	M	UNK	PH	Affidavit	June 1976	DaP
37	570	M	UNK	PH	Affidavit	June 1976	DaP
38	613	M	UNK	SR	137A-94	Sept 09 94	A
39	614	M	UNK	PH	Affidavit	June 1976	A
40	615	M	UNK	SR	137A-94	Sept 09 94	A
41	622	F	UNK	PH	Affidavit	April 1975	A

Annex A Scarlet Macaw

Species Count	Legband Number	Sex	Age	Source Country (ISO-Code)	Evidence of Legal Acquisition		Comments
					Import Permit	Date Issued	
42	862	M	UNK	SR	137A-94	Sept 09 94	A
43	1012	F	UNK	PH	Affidavit	April 1975	A
44	1013	F	UNK	PH	Affidavit	May 1975	A
45	1029	M	UNK	PH	Affidavit	June 1976	A
46	1033	M	UNK	PH	Affidavit	June 1976	A
47	1032	F	UNK	PH	Affidavit	May 1975	DaP
48	1034	F	UNK	PH	Affidavit	May 1975	A
49	1036	F	UNK	PH	Affidavit	May 1975	A
50	1037	F	UNK	PH	Affidavit	May 1975	DaP
51	1045	F	UNK	PH	Affidavit	May 1975	DaP
52	1484	F	UNK	SR	137A-94	Sept 09 94	A
53	NLB	U	UNK	PH	Affidavit	May 1975	DQ
54	NLB	U	UNK	PH	Affidavit	May 1975	DQ
55	NLB	U	UNK	PH	Affidavit	May 1975	DQ
56	NLB	U	UNK	PH	Affidavit	April 1975	DQ
57	NLB	U	UNK	PH	Affidavit	April 1975	DQ

Legend

A =	*Alive*
SR=	*Suriname*
UNK =	*Unknown*
DP =	*Died prior to Pairing*
DQ =	*Died during Quarantine*

Annex 8 Scarlet Macaw

Species Count	Legband Number	Sex	Age	Source Country (ISO-Code)	Evidence of Legal Acquisition		Comments
					Import Permit	Date Issued	
1	032	F	UNK	PH	Affidavit	April 1975	A
2	040	M	UNK	PH	Affidavit	June 1976	A
3	078	F	UNK	PH	Affidavit	April 1975	A
4	119	F	UNK	SR	137A-94	Sept 09 94	A
5	125	M	UNK	PH	Affidavit	June 1976	A
6	219	F	UNK	SR	137A-94	Sept 09 94	A
7	218	F	UNK	SR	137A-94	Sept 09 94	A
8	234	F	UNK	SR	137A-94	Sept 09 94	A
9	236	M	UNK	PH	Affidavit	May 1975	A
10	237	F	UNK	SR	137A-94	Sept 09 94	A
11	242	F	UNK	SR	137A-94	Sept 09 94	A
12	288	M	UNK	PH	Affidavit	May 1975	A
13	289	M	UNK	PH	Affidavit	May 1975	A
14	323	M	UNK	SR	136A-94	Sept 09 94	A
15	324	M	UNK	SR	137A-94	Sept 09 94	A
16	336	M	UNK	SR	137A-94	Sept 09 94	A
17	352	M	UNK	SR	137A-94	Sept 09 94	A
18	379	M	UNK	PH	Affidavit	June 1976	A
19	392	F	UNK	SR	137A-94	Sept 09 94	A
20	396	M	UNK	PH	Affidavit	April 1975	A
21	398	M	UNK	PH	Affidavit	April 1975	A
22	401	M	UNK	PH	Affidavit	April 1975	A
23	465	F	UNK	PH	Affidavit	June 1976	A
24	472	F	UNK	PH	Affidavit	June 1976	A
25	473	F	UNK	SR	137A-94	Sept 09 94	A
26	491	M	UNK	PH	Affidavit	April 1975	A
27	529	F	UNK	PH	Affidavit	June 1976	A
28	531	M	UNK	SR	137A-94	Sept 09 94	A
29	537	M	UNK	SR	137A-94	Sept 09 94	A
30	552	F	UNK	PH	Affidavit	June 1976	A
31	553	F	UNK	PH	Affidavit	June 1976	A
32	556	F	UNK	PH	Affidavit	June 1976	A
33	613	M	UNK	SR	137A-94	Sept 09 94	A
34	614	M	UNK	PH	Affidavit	June 1976	A
35	615	M	UNK	SR	137A-94	Sept 09 94	A
36	622	F	UNK	PH	Affidavit	April 1975	A
37	862	M	UNK	SR	137A-94	Sept 09 94	A
38	1012	F	UNK	PH	Affidavit	April 1975	A
39	1013	F	UNK	PH	Affidavit	May 1975	A
40	1029	M	UNK	PH	Affidavit	June 1976	A
41	1033	M	UNK	PH	Affidavit	June 1976	A

Annex B Scarlet Macaw

Species Count	Legband Number	Sex	Age	Source Country (ISO-Code)	Evidence of Legal Acquisition		Comments
					Import Permit	Date Issued	
42	1034	F	UNK	PH	Affidavit	May 1975	A
43	1036	F	UNK	PH	Affidavit	May 1975	A
44	1484	F	UNK	SR	137A-94	Sept 09 94	A

Legend

A =	*Alive*
SR=	*Suriname*
PH =	*Philippines*
UNK =	*Unknown*
A =	*Alive*

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

IMPORT
EXPORT
RE-EXPORT

PERMIT № 0341

1. EXPORTER/RE-EXPORTER	2. ORIGINAL PERMIT NO.	3. VALID UNTIL
ANIMAL INTERNATIONAL Jodenbreestraat 40A Paramaribo Suriname	136 A-94	JAN 0 7 1995

4. IMPORTER (CONSIGNEE)	5. ISSUING AUTHORITY
Birds International, Inc. 99 Timog Avenue, Diliman Q.C. Philippines	Republic of the Philippines Department of Environment and Natural Resources PROTECTED AREAS AND WILDLIFE BUREAU Telephone: (632) 924-60-31 to 35 Fax: 924-01-09

6. SPECIAL CONDITIONS	
For live animals, this permit is only valid if the transport conditions conform to the Guidelines for Transport of Live Animals, or in the case of Air transport, to the IATA Regulations	7. Country of (re-) exportation 7a. Permit number of original Permit (re-export) Suriname 3228 8. Country of destination Philippines 9. Security Stamp Number: PH9120357

10. SCIENTIFIC NAME (GENUS AND SPECIES) OR COMMON NAME OF PLANT OR ANIMAL	11. DESCRIPTION OF PART OR DERIVATIVE, INCLUDING IDENTIFYING MARKS OR NUMBERS (AGE & SEX)	12. APPENDIX NUMBER AND SOURCE	13. QUANTITY OF SPECIMEN AND/OR WEIGHT (Kg.)
Scarlet Macaw (Ara macao)	Live	II(W)	4 hd.

-x-x-x-x-x-x-x-x-x-x-x-x-x-x- Nothing Follows -x-x-x-x-x-x-x-x-x-x-

CERTIFIED XEROX COPY
MYRIAM N. LIWANAG
RECORDS OFFICER II

Amount Paid: P20.00
PAWB O.R. No.: 1413176
Date Issued: 9-29-94

14. The undersigned hereby certifies that all information given in this permit are true and correct.

MARY JEAN A. CALEDA
OIC, Wildlife Division

SEP 0 9 1994
Date Issued:

APPROVED BY:
ORIGINAL SIGNED
CORAZON CATIBOG-SINHA
Director

PERMIT CONDITIONS:

- [x] The goods described above are permitted subject to all conditions described herein in accordance with IMPORT AND EXPORT permit act and any regulation made there under.
- [x] This permit is valid only for use of the applicant as indicated.
- [x] Customs documents must agree with this permit.
- This permit is valid only if it bears the CITES stamp, dry seal of Protected Areas and Wildlife Bureau and no erasures or alterations.
- [ ] No partial shipment is allowed under this permit.
- [ ] Original copy of this permit must be surrendered to the Mgt. Authority of the importing country.

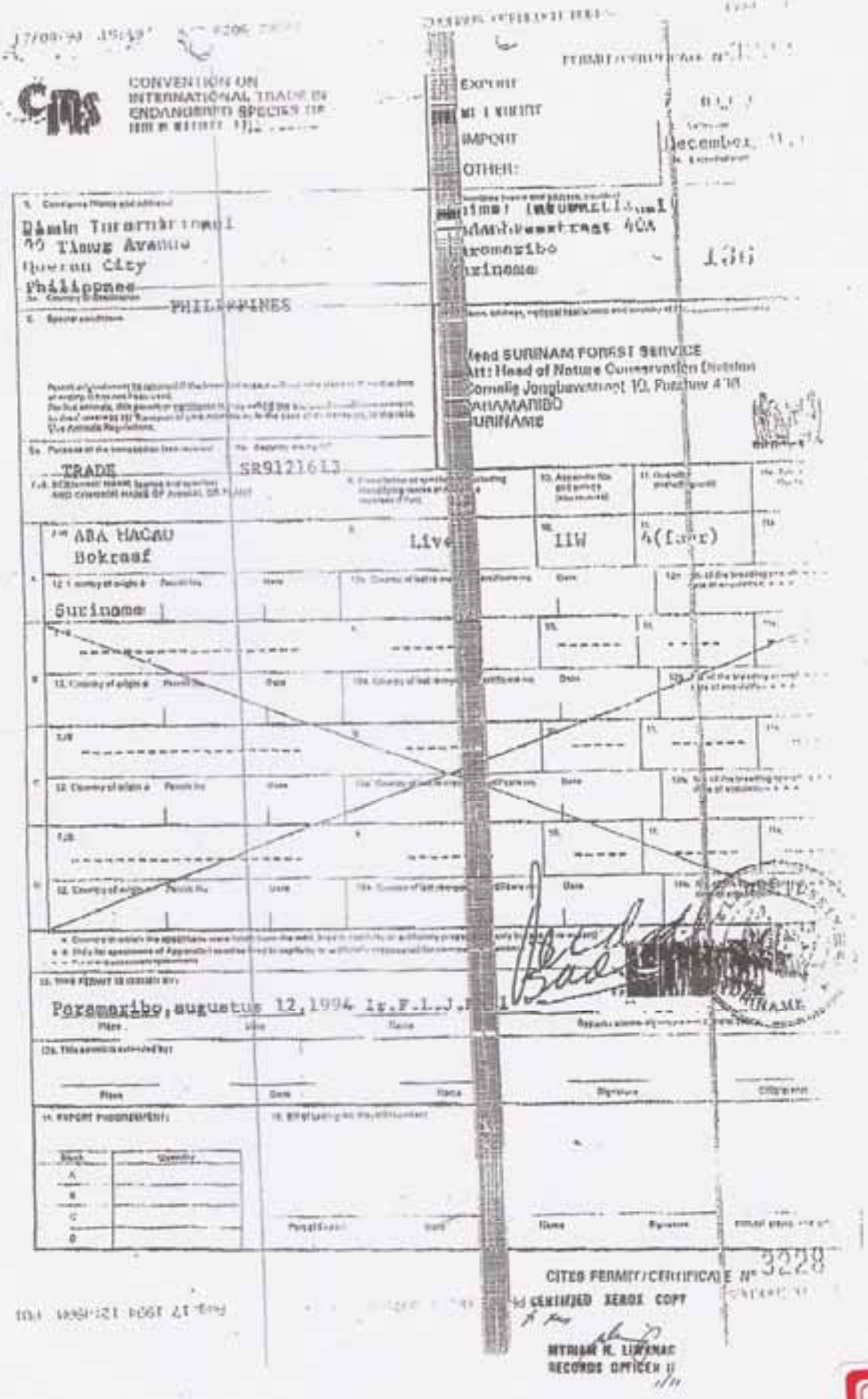
15. CHECKED BY CUSTOMS OFFICER (PORT OF EXIT/ENTRY)

DATE AND SIGNATURE

VALIDATED BY DENR MONITORING TEAM:

DATE AND SIGNATURE

Annex 6g



CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES

EXPORT

IMPORT

OTHER:

December

PHILIPPINES

TRADE

SR9121613

ABA HACAU
Bokraaf
Suriname

Live

IIW

Paramaribo, augustus 12, 1994

SURINAME

CITES PERMIT/CERTIFICATE N° 3228

CERTIFIED XEROX COPY

ANNEX 82

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

☒ IMPORT ☐ EXPORT ☐ RE-EXPORT

№ 0508 PERMIT

1. EXPORTER/RE-EXPORTER
AQUA PISH-K. KRUISLAND
Lelydorperweg 49
District Wanica
Suriname

2. ORIGINAL PERMIT NO. 137 A-94

3. VALID UNTIL JAN 07 1995

5. ISSUING AUTHORITY
Republic of the Philippines
Department of Environment and Natural Resources
PROTECTED AREAS AND WILDLIFE BUREAU
Telephone: (632) 924-60-31 to 35 Fax: 924-01-09

4. IMPORTER (CONSIGNEE)
Birds International Inc.
99 Timog Ave., Diliman, Quezon City
Philippines

6. SPECIAL CONDITIONS
* FOR BREEDING PURPOSES *

For live animals, this permit is only valid if the transport conditions conform to the Guidelines for Transport of Live Animals, or in the case of Air transport, to the IATA Regulations

7. Country of (re-) exportation: Suriname

7a. Permit number of original permit (in case of Re-export): 319

8. Country of destination: Philippines

9. Security Stamp Number: PH9120367

10. SCIENTIFIC NAME (GENUS AND SPECIES OR COMMON NAME OF PLANT OR ANIMAL)	11. DESCRIPTION OF PART OR DERIVATIVE, INCLUDING IDENTIFYING MARKS OR NUMBERS (AGE & SEX)	12. APPENDIX NUMBER AND SOURCE	13. QUANTITY OF SPECIMEN AND/OR WEIGHT (Kg.)
Scarlet Macaw (Ara macao)	Live	II(W)	16 hds.
Blue-cheeked Amazon (Amazona dufresniana)	Live	II(W)	3 hds.
-x-x-x-x-x-x-x-x-x-x-x-x-x- Nothing Follows x-x-x-x-x-x-x-x-x-x-x-x-x			

CERTIFIED TRUE COPY
MYRNA N. LUNARIO
RECORDS OFFICER II

Amount Paid
PAWB O.R. No.
Date Issued

14. The undersigned hereby certifies that all information given in this permit are true and correct.

MARY JEAN A. CALMA
OIC, Wildlife Division

APPROVED BY:
ORIGINAL SIGNED
CORAZON CASIBOG-SINHA
Director

Date Issued: SEP 09 1994

PERMIT CONDITIONS:

☒ The goods described above are permitted subject to all conditions described herein in accordance withe IMPORT AND EXPORT permit and any regulations made there under.
☐ This permit is valid only for use of the applicant as indicated.
☐ Customs documents must agree w/ this permit.
☒ This permit is valid only if it bears the CITES stamp, dry-seal of Protected Areas and Wildlife Bureau and no erasures or alterations.
☐ No partial shipment is allowed under this permit.
☒ Original copy of this permit must be surrendered to the Management Authority of the importing country.

15. CHECKED BY CUSTOMS OFFICER (PORT OF ENTRY/EXIT)

DATE AND SIGNATURE

VALIDATED BY DENR MONITORING TEAM:

DATE AND SIGNATURE

Annex 23

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

PERMIT/CERTIFICATE Nº 3199

x EXPORT
RE-EXPORT
IMPORT
OTHER:

Original

Valid until: DECEMBER 31, 1994

BIRDS INTERNATIONAL
99 PRIMO... AVENUE
QUEZON CITY ...
PHILIPPINES

AQUA FISH-H.KRUISLAND
LELYDORPERWEG 45
DISTRIKT WANICA
SURINAME

Head SURINAM FOREST SERVICE
Att: Head of Nature Conservation Division
Cornelis Jongbawstraat 10, Postbox 436
PARAMARIBO
SURINAME

TRADE 8891215...

Scientific name / common name	Description of specimens	Appendix No. and source	Quantity
Ara macao ...	live	II W	XX16XX
...	live	II W	XX3XX

Country of origin: Suriname

Country of origin: Suriname

PARAMARIBO, AUGUST 04, 1994 Mr. K. MOHADIN

CERTIFIED XEROX COPY

CITES PERMIT/CERTIFICATE Nº 3199

RECORDS OFFICER II

REPUBLIC OF THE PHILIPPINES)
QUEZON CITY) S.S.

JOINT AFFIDAVIT

WE, ANTONIO M. DE DIOS and **ALBERT TOM** both of legal age, Filipino with address at No. 99 Timog Ave., Quezon City and No 36 Com-Mart Compound, Severina, Paranaque City respectively after having been duly sworn in accordance with law, depose and state as follows:

1. ALBERT TOM is engaged in the business of buying and selling birds and other pet animals and as such has been a licensed pet shop operator since 1960 and is licensed to import pets such as birds.

2. On or about the year 1970, ANTONIO DE DIOS was introduced to ALBERT TOM by mutual acquaintances. Therafter, the two had frequent interactions related to their mutual interest in birds and became friends.

3. Since at that time DE DIOS was a pet lover and bird hobbyist, he became interested in some of the birds being sold by TOM, particularly the Macaw.

4. On or about the period of April 1975, DE DIOS purchased from TOM, TEN (10) heads of Scarlet Macaw, on May 1975, TWELVE (12) heads Scarlet Macaw and on June 1976, FIFTEEN (15) heads of Scarlet Macaw. Since this was a transaction among friends, no official receipt was issued covering the said transactions.

5. Moreover, during the time of the transactions mentioned, the Philippines was not a party of the Convention on the International Trade of Endangered Species (CITES).

6. Eventually, DE DIOS was able to successfully breed the birds he had purchased from TOM.

7. We execute this affidavit to attest to the truth of the foregoing and for whatever legal purpose it may serve.

FURTHER AFFIANT SAYETH NAUGHT.

February _____, 2005

ALBERT TOM
Affiant

ANTONIO M. DE DIOS
Affiant

SUBSCRIBED AND SWORN to before this 9th day of February 2005, affiants exhibiting to me their Community Certificate No. _____ issued at _____ on _____ and Community Certificate No. _____ issued at _____ on _____.

Doc. No. 859;
Page No. 64;
Book No. 479;
Series of 2005

JOSE L. MA. SANTOS
Notary Public
Comm. until Dec. 31, 2005
PTR No. 6010914-QC-1/3/0
TIN: 133-063-043
IBP No. 817531-QC-1/3/
ROLL No. 14779-3/11/
[illegible]

Exhibit 1

Annex C - Scarlet Macaw (Information on the Percentage of Mortalities in the Different Age Groups) Male / Female

I. F1= 235 heads, Total Production 1985-Present

Mortalities	= 108 hds	46	%
Live	= 127 hds	54	%
Total	= 235 hds	100	%

Classification of Mortalities (Age Groups)	Sex Classification						Total	
	M		F		U			
	Hds	%	Hds	%	Hds	%	Hds	%
1day-12 months	14	9	13	8	4	3	31	13
12 months - 48 months	15	10	34	0	0	0	49	21
48 months and Above	19	12	9	6	0	0	28	12
							108	46

II. F2= 445 heads, Total Production 1992 -Present

Mortalities	= 182 hds	41	%
Live	= 263 hds	59	%
Total	= 445 hds	100	%

Classification of Mortalities (Age Groups)	Sex Classification						Total	
	M		F		U			
	Hds	%	Hds	%	Hds	%	Hds	%
1day-12 months	0	0	3	1	95	33	98	22
12 months - 48 months	13	5	15	5	30	11	58	13
48 months and Above	16	6	4	1	6	2	26	6
							182	41