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

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PROPOSALS FROM COSTA RICA AND MEXICO (COP12 PROP. 16 AND PROP. 17)

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REPORT ON THE CONSERVATION STATUS, LEGAL AND ILLEGAL TRADE OF THE YELLOW-NAPED PARROT (*Amazona auropalliata*) AND THE YELLOW HEADED PARROT (*Amazona oratrix*):

Considerations for the transfer from Appendix II to Appendix I of Prop. 12.16 *Amazona auropalliata* (Costa Rica) and Prop. 12.17 *Amazona oratrix* (Mexico)

Presented by:
CITES Scientific Authority of Mexico
Comisión Nacional para el Conocimiento y Uso de la Biodiversidad (CONABIO: National Commission for the Knowledge and Use of Biodiversity)

Prepared by:
Subcommittee for the Conservation, Management and Sustainable Use of Psittacids in Mexico in collaboration with the CITES Authorities of Mexico

INTRODUCTION

This information document is presented by Mexico to the 12 COP in order to augment the information available for the amendment proposals: Prop.12.16 *Amazona auropalliata* (Costa Rica) and Prop.12.17 *Amazona oratrix* (Mexico), and amplify the justification for transfer of these species from Appendix II to Appendix I of CITES.

Over the last 40 years, the Yellow-naped Parrot (*A. auropalliata*) (Prop. 12.16) and the Yellow-headed Parrot (*A. oratrix*)(Prop. 12.17) have been among the most popular species in the national and international market, with high demand from both legal and illegal sources. Both species are internationally recognized as threatened due primarily to commercial exploitation, followed by habitat destruction (Banks 1970; Banks & Clapp 1972; Clapp & Banks 1973a, b; Quiñónez & Castro 1975; Nilsson 1981; Ridgely 1981; Ramos 1982; Pérez & Eguiarte 1989; Iñigo-Elias & Ramos 199; Collar *et al*. 1992; Wiedenfeld 1995; Cantú & Sánchez 1996; Gobby *et al.* 1996; Howell & Webb 1995; Birdlife International 2000; Macias-Caballero *et al*. 2000; Snyder *et al.* 2000). Both species present a natural history with "K" type reproductive strategies (few young, reproduction below potential, high parental care, delayed sexual maturity of up to 3 years or more). In addition, both species are density dependent, where reproduction and survival is affected by the density of individuals in the population, thus being more susceptible to predation, competition, and disease. Such factors make these species highly vulnerable to extinction as a consequence of commercial exploitation, as is currently occurring.

Contrary to the suggestion by the CITES Authority of Switzerland and the Secretariat in their comments on the proposals Prop.12.16 *Amazona auropalliata* (Costa Rica) and Prop.12.17 *Amazona oratrix*(Mexico), the CITES authorities of Mexico do not consider that there is any justification for not accepting both these species, as well as *Amazona ochrocephala*, as distinct species, much less that there is any taxonomic justification for not listing *A. auropalliata* and *A. oratrix* within Appendix I of the Convention. Firstly, since 1992, CITES has accepted and recognized the division of *A. auropalliata* and *A. oratrix* as allospecies of the complex *A. ochrocephala*. This was notified to the parties (Notification 688, Lausanne, 24 August 1992), recommending the urgent need to distinguish between the three species in the different markets, and to exercise care in commercial transactions with specimens originating from the wild. Secondly, for over 10 years authorities in bird taxonomy have recognized these as three distinct species (Clements 1991, 2000; AOU 1993, 1998; Monroe & Sibley 1993). During which time no taxonomic discrepancy has existed. Thirdly, captive populations of these species have also been internationally recognized as distinct, and are managed as such by the International Species Information System (ISIS) recognized by IUCN and CITES. The species *A. oratrix* is universally recognized and managed in captivity by 39 institutions in 22 countries; the species *A. auropalliata* by 11 institutions in 6 countries, and *A. ochrocephala* by 51 institutions in 14 countries (ISIS 2002). Finally, studies by Eberhard and Bermingham (in prep.) on the phylogeny and biogeography of the complex *A. ochrocephala* support the division of *A. oratrix* in Mexico and Mesoamerica as a distinct species from *A. ochrocephala*.

The recognition of three distinct species implies that the area of distribution for each of the species is less than the total area of distribution for the complex *A. ochrocephala*, making it essential to establish adequate conservation plans for each of these species in their actual distribution range.

During the recent "Preparatory Meeting of the CITES Technical Committee of the CCAD for the 12th COP" in San Jose, Costa Rica, on the 25-26 September 2002, Mexico explored the opinion of participating countries regarding the proposals: Prop. 12.16 *A. auropalliata* (Costa Rica) and Prop. 12.17 *A. oratrix* (Mexico). All participants agreed with the protection of these species under Appendix I of CITES.

At an international level, 31 species of parrot are recognized within the genus *Amazona*, and are listed in one of the appendices of the Convention. As of October 2002, 13 species are classified in Appendix I; eight of which were listed in 1975, three in 1981, one in 1990, and one more in 1997. In addition, 18 species are listed in Appendix II, 19 of these were listed in 1981, and one with reservations in 1987, two species were transferred to Appendix I in 1990 and 1997. The Secretariat requires periodic evaluations of the actual status of these species, including the impact of international and local trade on wild populations.

CITES would fulfil the purpose of its mission by listing these species in Appendix I, as indicated in the Convention text Article II.1 on "Fundamental Principals", which states: "Appendix I shall include all species threatened with extinction which are or may be affected by trade. Trade in specimens of these species must be subject to particularly strict regulation in order not to endanger further their survival and must only be authorized in exceptional circumstances". For this reason, and as expressed in document "Conf. 9.24 Criteria for Amendment of Appendices I and II, Annex I: Biological Criteria for Appendix I", it is requested of the Parties and the Secretariat that the species *A. auropalliata* (Prop. 12.16) and *A. oratrix* (Prop. 12.17) be transferred to Appendix I of CITES, this being the most adequate category to ensure the conservation of these species.

PART I. CONSERVATION STATUS

1. 1. *Amazona oratrix*

In 1999, Mexico established among its environmental priorities, the conservation and management of Psittacids (parrots, macaws, and parakeets) (Macias Caballero *et al.* 2000). As part of this program, in 2002 a national study was initiated: "Evaluation of the Conservation Status of Populations of the Yellow-headed Parrot (*Amazona oratrix*) in Mexico" (Macias Caballero & Iñigo Elias 2002), with the support of the CITES Scientific Authority of Mexico (CONABIO). The purpose of this study was to determine the actual distribution and relative abundance of the species in Mexico, and the impact which national and international trade has had on wild populations. In the study, the known distribution of the species, based on the distribution range proposed by Howell & Webb (1995), was divided into quadrants of 50 x 50 km, which were then surveyed in the field to determine the presence or absence of the species and its abundance. A total of 134 survey quadrants were established for *A. oratrix*, 37 on the Pacific Coast and 97 on the Gulf Coast of Mexico.

In each quadrant, surveys were conducted by means of transects with point counts (Casagrande & Beissinger 1997, Marsden 1999, Bibby *et al*. 2000, Marsden *et al*. 2001), as well as counts from lookout points in the late afternoon when birds are flying to roost (Snyder *et al*. 1987, Gnam & Burchsted 1991). In addition, interviews were conducted with local residents in order to evaluate the presence or absence of the species, its population tendencies, and human pressures on the wild population. Existing data was also analyzed on specimens confiscated at the northern and southern borders of Mexico with the United States of America and Guatemala.

The results of this evaluation support the proposal to transfer *A. oratrix* (Prop. 12.17) to Appendix I of CITES. The study demonstrates that the status of the species is critical in Mexico, owing primarily to the legal and illegal capture which it has been subjected to over the last 40 years, and secondly to destruction of habitat, including nest sites. As a consequence, the species has been extirpated from the majority of its original distribution; currently existing only in small and fragmented populations. Areas also exist with potential habitat for the species, which occur in good condition and have been protected for more than a decade, however the species is no longer present in these localities.

1.1.1. Population decline

In 1994, the global population of *A. oratrix* was estimated at no greater than 7,000 individuals in the wild. This demonstrates a decline of more than 90% of the wild population since the 1970's (Collar *et al*. 1994). In the last 10 years, there has been a decline of more than 68% of the wild population (Birdlife International 2000). As a result of this, the species is actually classified by IUCN and Birdlife International as endangered or in danger of extinction.

Preliminary results of the study: "Evaluation of the Conservation Status of Populations of the Yellow-headed Parrot (*Amazona oratrix*) in Mexico" (Macias Caballero & Iñigo Elias 2002), indicate that the abundance of wild populations of this species is actually much lower than that suggested by IUCN and Birdlife International (Birdlife International 2000). The results to date demonstrate that in the Mexican Gulf states (Tamaulipas, Nuevo León, Veracruz, San Luis Potosí, Puebla, Tabasco, and part of Oaxaca and Chiapas), the average density of the species is 0.064 ind./km^2 with an estimated population of 6,560 individuals; while on the Pacific coast of Mexico (Nayarit, Jalisco, Colima, Michoacán, Guerrero, and part of Oaxaca) average density is 0.021ind./km^2 with an estimated population of 1,802 individuals. In the pacific coast region of Mexico, the species is currently found in protected areas, such as the Chamela-Cuixmala Biosphere Reserve, where *A. oratrix* presents a density of less than 0.05 ind./km^2 (Renton 2002).

Added to which, in all quadrants sampled on the Pacific slope of Mexico, local inhabitants reported that the population of *A. oratrix* had declined (70% of interviews) or had been extirpated in their region (27% of interviews). Equally, in all quadrants sampled on the Gulf slope of Mexico, interviewees reported that the species had declined (56%) or had been extirpated from their region (32%) (Macias Caballero & Iñigo Elias 2002).

In accordance with "Biological Criteria D of Annex 1", in Resolution 9.24 of CITES, the continued decline of the population would lead within 5 years to the species being considered under Criteria A of a small wild population, with a decline in individuals and habitat (criteria *Ai*), as well as a high vulnerability due to the specie's biology (criteria *Av*). Hence, the species meets the requirements to be listed within Appendix I of CITES.

1.1.2. Decrease in area of distribution

Since the 1970s, the species has suffered a dramatic reduction by 70% of its original area of distribution (Birdlife International 2000). The most recent evaluation (Macias Caballero & Iñigo Elias 2002) estimates that on the Pacific slope of Mexico, the actual area of distribution of the species is no gr eater than 32,500 km^2, representing a reduction of more than 40% of its original area of distribution. On the Gulf slope of Mexico, the actual area of distribution of the species is no greater than 45,000 km^2, representing a loss of 44% of its original distribution. All the historical locations of the species were provided by the project: "Atlas of the Birds of Mexico" (Navarro *et al.* 2002).

In parallel, a study by Ríos Muños (2002) using predictive models for the distribution of species (GARP), as well as cartographic models based on satellite images and presence of the species in a Geographic Information System (GIS), estimated that 31% of habitat required by the species has been lost in continental and insular Mexico (Fig. 1).

1.1.3. Habitat reduction

Between 1950 and 1994, there has been a loss of 64.2% of the total extent of sub-humid forests in Mexico, on both the Pacific and Gulf slope, with only 31,026 km^2 of conserved sub-humid forests remaining within the distribution range of *A. oratrix* (Table 1). It is estimated that currently only 73,984 km^2 of habitat remains available for the species in its entire area of distribution, and of this a mere 20,138 km^2 represents optimum habitat for the species (SARH 1994, FORIS 2000). During the last two decades high deforestation rates have been maintained in Belize and Guatemala, which form part of the natural distribution of this species (Table 2).

1.1.4. Biological vulnerability

As with the majority of parrot species, *A. oratrix* presents a low proportion of reproductive pairs in the wild population, with less than 40% of pairs reproducing each year (Enkerlin-Hoeflich 1995, 2000). Of the pairs that nest, the reproductive success is low with a nest success of 50%, and a production of only 0.8 fledglings per breeding pair (Enkerlin-Hoeflich 1995). This low reproductive rate implies that wild populations do not have the capacity to recuperate rapidly from addition pressures such as those actually being experienced. The low population densities, together with a low reproductive rate and a preference for sub-humid forests, make the species vulnerable to human pressures of trade and deforestation.

1.2. *Amazona auropalliata*

1.2.1. Population decline

Until the 1960s, the wild population of *A. auropalliata* was regarded as common throughout its distribution range. The species has currently declined to such a degree that it is now classified as in danger of extinction. Populations of the species are now extremely reduced and fragmented in Costa Rica, El Salvador, Honduras, Mexico, and almost extinct in Guatemala (Ridgway 1916; Ridgely 1981, 1982; Ramos 1985; Thurber *et al.* 1987; Forshaw 1989; Stiles & Skutch 1989; Howell and Webb 1995; Juniper & Parr 1997; Clay 1999; Macias *et al.* 2000, Snyder *et al.* 2000). In Nicaragua, a decline of 48% of the wild population was registered during 1995–1999 (Wiedenfeld 1995, Wiedenfeld *et al*. 1999). In accordance with "Biological Criteria C" (Annex 1, Resolution 9.24 of CITES), *A. auropalliata* meets the requirements for listing in Appendix I of CITES as it presents a decline in individuals in the wild, which has been observed as ongoing (criterion *Ci*), and may be inferred on the basis of habitat reduction and levels of exploitation (criterion *Cii*).

1.2.2. Decrease in area of distribution

Using predictive models for the distribution of species (GARP), as well as cartographic models based on satellite images and presence of the species in a Geographic Information System (GIS), Ríos Muños (2002) estimated that the species presents a reduction by over 30% of its original distribution in Mexico (Fig. 2).

1.2.3. Habitat reduction

Mexico has lost a large extent of its semi-deciduous and deciduous forest, and it is estimated that there remains only 10,710 km^2 of habitat available for the species in the states of Oaxaca and Chiapas (SARH 1994). Similarly, in Costa Rica only 6,871 km^2 of habitat remains available for the species. In particular, both El Salvador and Nicaragua have presented high deforestation rates during the last decade (Table 2).

PART II. LEGAL TRADE

Between 1983 and 1999, there was worldwide trade of more than 9,000 specimens of *Amazona auropalliata*, of these 7,364 individuals were reported by importing countries, and 9,605 by exporting countries (Fig. 3). For *Amazona oratrix* between 1986 and 1999 there was worldwide trade of more than 500 specimens, of which 510 individuals were reported by importing countries, and 550 by exporters (Fig. 4). Between 1981 and 1999, a total of 96,131 specimens of the complex *Amazona ochrocephala-oratrix-auropalliata* were imported internationally (Fig. 5). Of these, 92% were of the form *A. ochrocephala*, as CITES has recognized this as a single species since 1992 (Notification 688 Lausanne, 24 August 1992).

In the Animals Committee 17 Doc. 7.2, review of the implementation of recommendations on species subject to significant trade; *A. auropalliata* was last reviewed in September 1993, and *A. oratrix* in March 1992.

During 1991–2001, there was international trade of 1,345 specimens of *A. oratrix* (WCMC database, Tables 3 & 4), more than 80% of specimens being exported in the last 5 years of the decade. In the period 1996-2000, the principal exporting countries for *A. oratrix* were Mexico (39.7% of exports), and the United States of America (28.7%). During this same period the principal importing countries were the United States of America (24.8% of imports), Panama (18.4%), and Japan (11.9%). In the case of imports by the United States of America and Panama, the majority of specimens originated from Mexico (82.7% and 97% of imports respectively), while in the case of Japan, 57% of imports originated from the United States of America, and 37.4% from the Netherlands.

Between 1991 and 2001, the main purpose of international trade in *A. oratrix* was commercial (49.6% of specimens). Of specimens in international trade, 23.7% were from wild source, with 53.2% captive bred, though only 20.5% were second generation captive born. This increased during the period 1996-2000, with 28.3% of specimens from wild source, 46.3% captive bred, and 22.1% second generation captive born.

In the case of *A. auropalliata*, there was international trade of 10,263 specimens during 1991-2001, the majority of which were exported by Nicaragua (77% of exports). The main importing countries during this period were Japan, United States of America, and the Netherlands (Table 5). The order of importance of importing countries altered during 1996-2000, with the Netherlands being the principal importer (24.9% of imports), followed by the United States of America (20%), and Japan (16.7%). In 83% of cases, the main purpose of international trade was commercial.

Each specimen of *A. oratrix* has an average value of between US$844 (Wright *et al*. 2001) and US$1,350 (Michels 1996) on the market in the United States of America, while each specimen of *A. auropalliata* has an average value of US$825 (Wright *et al*. 2001). During the period 1991-2001, the value of international trade in *A. oratrix* was approximately US$1,475,465, and US$8,466,975 for *A. auropalliata*.

PART III. ILLEGAL TRADE

Stronger legislation is required to control trade that negatively affects wild species. The inclusion of species in Appendix I of CITES supports the legislative, conservation, and management efforts of range countries, permitting the application of greater sanctions in illegal international trade with these species.

The high demand and economic value of *A. oratrix* and *A. auropalliata* in the international live bird trade currently promotes and incites illegal international trade of threatened species in the countries of origin (Fig. 6). As such, *A. auropalliata* was the most frequently confiscated parrot species along the USA-Mexico border, with 648 specimens confiscated during 1990-1993 (Gobbi *et al*. 1996). The second most confiscated species was *A. oratrix* with a total of 542 specimens confiscated (Gobbi *et al.* 1996). Confiscated specimens of *A. oratrix* probably originate in Mexico, while specimens of *A. auropalliata* may originate from Honduras and Guatemala (Snyder *et al*. 2000).

The great inequity in economic value of specimens of *A. oratrix* and *A. auropalliata* between countries of origin and importing countries, stimulates international commerce and illegal trade in these species (Mulliken *et al*. 1992, Swanson 1992). The proximity of Mexico to the United States of America, with the largest pet market in the world, has generated since the 1960s and up to the early 1990s, an enormous legal and illegal market for these and other species of the genus *Amazona* (Iñigo Elias & Ramos 1991). The United States of America prohibited the import of wild birds with the enforcement of the Wild Bird Conservation Act in October 1992 (Federal Register 1995, Gobbi *et al*. 1996, Enkerlin-Hoeflich *et al*. 1997).

However, the continued extensive illegal trade in birds from Mexico to the United States of America, means that listing of these two species in Appendix I would permit the application of more severe sanctions against traffickers. The penal code currently in force in the United States of America (USSC Nov. 2001: §2Q2.1. Offenses Involving Fish, Wildlife, and Plants), states that penalties may be up to four times greater if the offence involves a species listed in Appendix I of CITES. Inclusion in Appendix I would help both nations provide more effective actions against illegal trade in these species. In Mexico, *A. oratrix* is one of the most frequently confiscated parrot species, despite its protection as an endangered species under Mexican law since 1994 (D.O.F. 1994, 2000, 2002). Mexico has on other occasions informed the parties of suspicious organizations within the country which are intent on trafficking with these and other species (see Notification to the Parties No. 871, 31 August 1995), as in for example the case of the commercial organization "Especies en Peligro, A.C." In the last three years, the Mexican State Delegations of the Federal Attorney for Environmental Protection (PROFEPA) in Chiapas and Oaxaca, have also confiscated various cargoes of *A. oratrix* and *A. auropalliata*, as well as *Amazona farinosa*.

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PART VI. ANNEXES

Figure 1. Distribution of the Yellow-headed Parrot (*Amazona oratrix*) in Mexico (Ríos Muños 2002).
A) Historical Distribution B) Actual Distribution

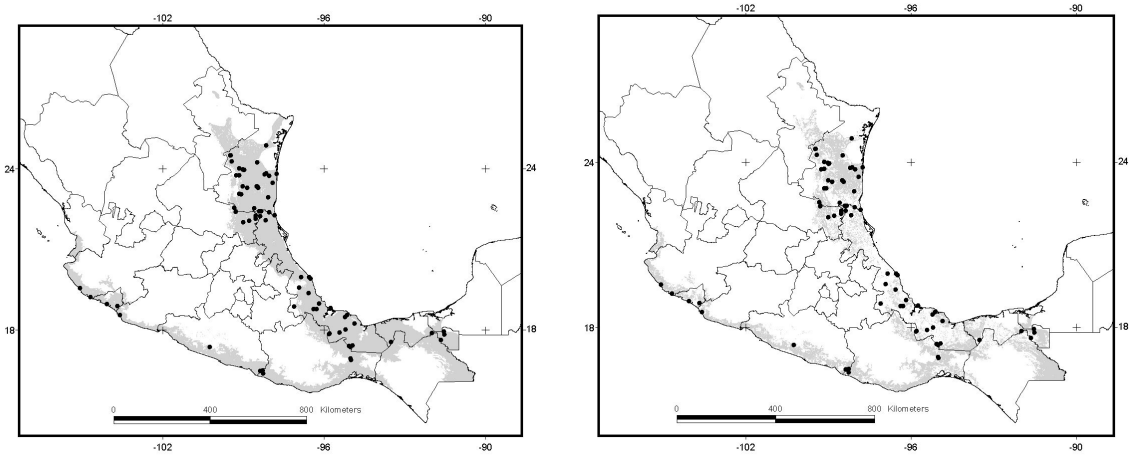


Figure 2. Distribution of the Yellow-naped Parrot (*Amazona auropalliata*) in Mexico (Ríos Muños 2002).

A) Historical Distribution B) Actual Distribution

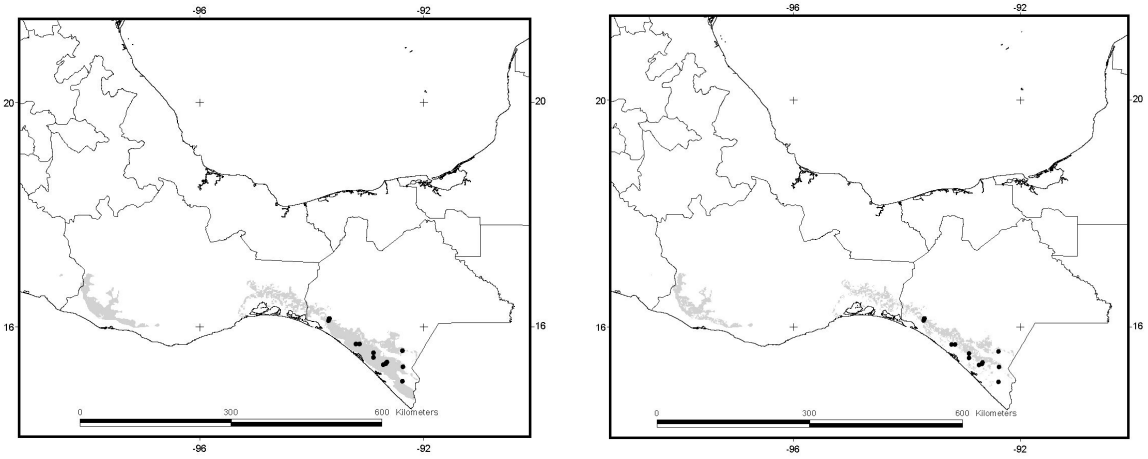


Table 1: Forest availability within the distribution range of *Amazona oratrix* in Mexico (SARH 1994).

State	Semi-deciduous forest (ha)	Deciduous forest (ha)	Total forest (ha)
Jalisco	98,518	334,181	432,699
Colima	34,570	51,198	85,768
Michoacán	114,709	155,448	270,157
Guerrero	71,815	600,235	672,050
Oaxaca	36,881	170,595	207,476
Tabasco	48,022	23,054	71,076
Tamaulipas	13,917	970,106	984,023
Veracruz	277,706	101,606	379,312
TOTAL (ha)	696,138	2,406,423	3,102,561
Km^2	6,961	24,064	31,026

Table 2: Deforestation rates in range countries of *Amazona oratrix* and *Amaxona auropalliata* (SARH 1994, FORIS 2000).

Country	% Forest change 1981-1990	% Forest change 1990-2000
Belize[1]	0.2	2.3
Costa Rica	2.6	0.8
El Salvador	2.0	4.7
Guatemala	1.6	1.7
Honduras	2.0	1.0
México	1.2	1.1
Nicaragua	1.7	3.0

[1] Only with distribution of *A. oratrix*

Figure 3. World trade of *Amazona oratrix* reported between 1986-1999. World Trade Data supplied by WCMC 2001.

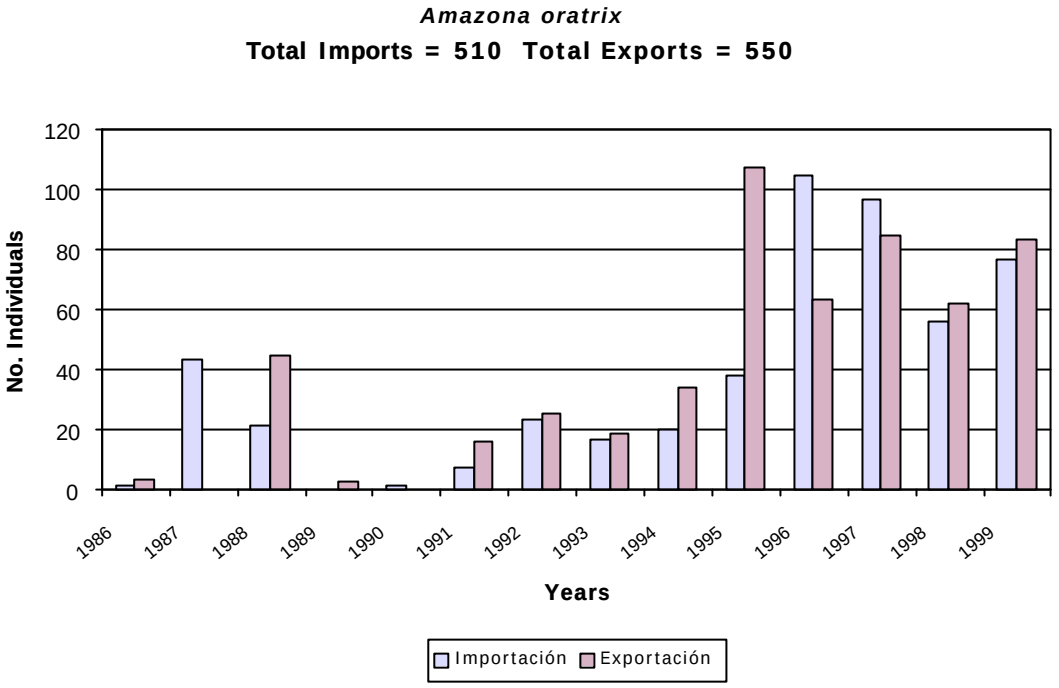


Figure 4. World trade in *Amazona auropalliata* reported between 1983-1999. World Trade Data supplied by WCMC 2001.

Figure 5. World trade in the complex *Amazona ochrocephala–oratrix–auropalliata* during 1981-1999, as percent of a total 96,131 individuals. World Trade Data supplied by WCMC 2001.

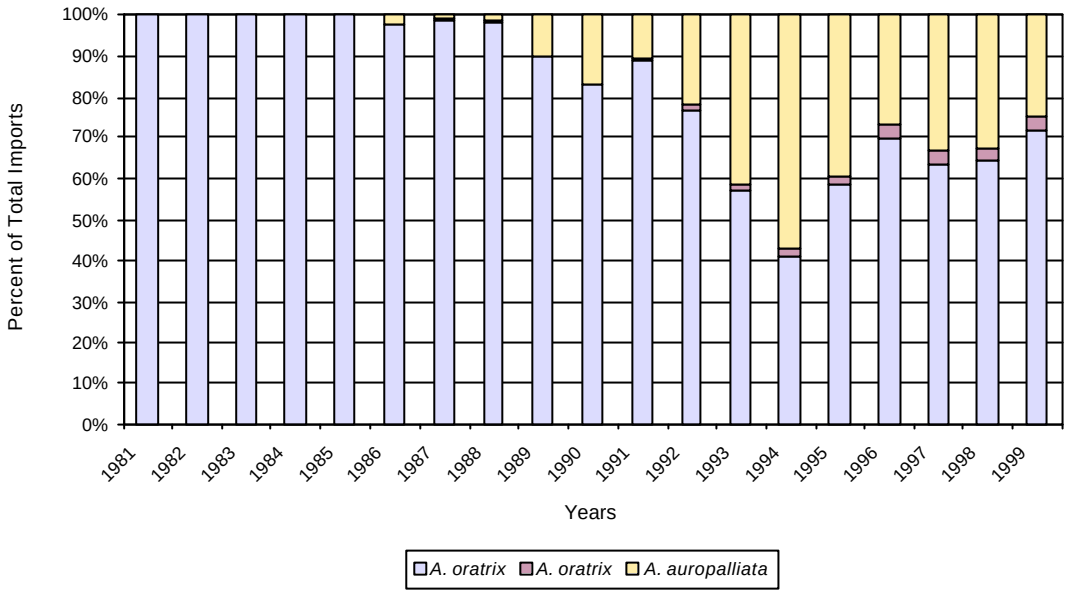


Table 3: Principal exporting countries for *Amazona oratrix* during 1991-2001 (Source: WCMC).

Country	No. of specimens exported	% of total exports
Mexico	434	32.3
United States of America	356	26.5
Netherlands	168	12.5
United Kingdom	107	7.9
South Africa	81	6

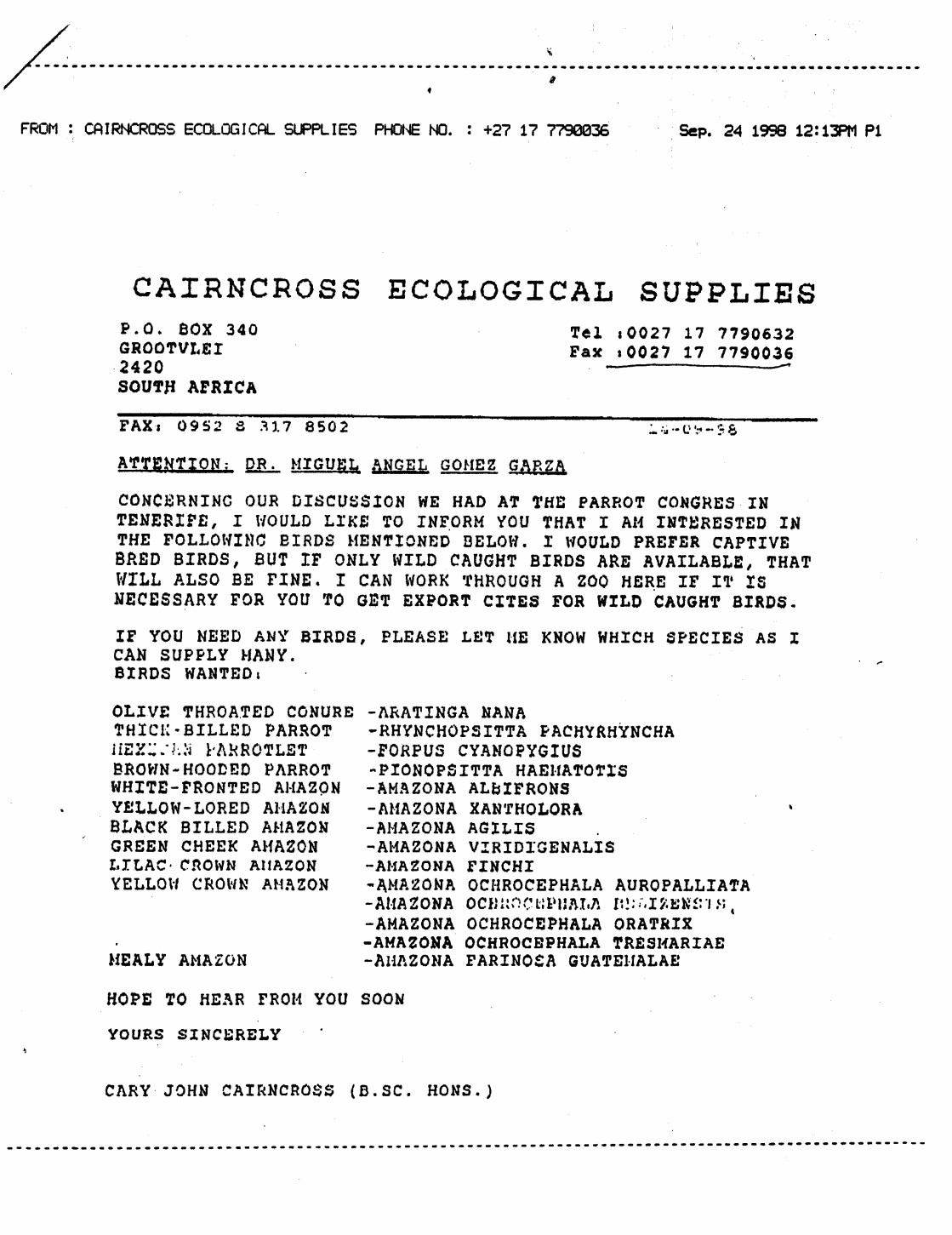
Table 4: Principal importing countries for *Amazona oratrix* during 1991-2001 (Source: WCMC).

Country	No. of specimens imported	% of total imports
United States of America	277	20.6
Panama	202	15
Japan	150	11
United Arab Emirates	111	8.3
Singapore	96	7
South Africa	81	6

Table 5: Principal importing countries for *Amazona auropalliata* during 1991-2001 (Source: WCMC).

Country	No. of specimens imported	% of total imports
Japan	2,358	23
United States of America	1,635	16
Netherlands	1,474	14.4
Germany	776	7.6
Italy	631	6

Figure 6. Example of the existing demand for international trade in wild populations of Mexican parrots, particularly *Amazona oratrix* and *Amazona auropalliata*.



FROM : CAIRNCROSS ECOLOGICAL SUPPLIES PHONE NO. : +27 17 7790036 Sep. 24 1998 12:13PM P1

CAIRNCROSS ECOLOGICAL SUPPLIES

P.O. BOX 340
GROOTVLEI
2420
SOUTH AFRICA

Tel :0027 17 7790632
Fax :0027 17 7790036

FAX: 0952 8 317 8502 14-09-98

ATTENTION: DR. MIGUEL ANGEL GOMEZ GARZA

CONCERNING OUR DISCUSSION WE HAD AT THE PARROT CONGRES IN TENERIFE, I WOULD LIKE TO INFORM YOU THAT I AM INTERESTED IN THE FOLLOWING BIRDS MENTIONED BELOW. I WOULD PREFER CAPTIVE BRED BIRDS, BUT IF ONLY WILD CAUGHT BIRDS ARE AVAILABLE, THAT WILL ALSO BE FINE. I CAN WORK THROUGH A ZOO HERE IF IT IS NECESSARY FOR YOU TO GET EXPORT CITES FOR WILD CAUGHT BIRDS.

IF YOU NEED ANY BIRDS, PLEASE LET ME KNOW WHICH SPECIES AS I CAN SUPPLY MANY.
BIRDS WANTED:

OLIVE THROATED CONURE	-ARATINGA NANA
THICK-BILLED PARROT	-RHYNCHOPSITTA PACHYRHYNCHA
MEXICAN PARROTLET	-FORPUS CYANOPYGIUS
BROWN-HOODED PARROT	-PIONOPSITTA HAEMATOTIS
WHITE-FRONTED AMAZON	-AMAZONA ALBIFRONS
YELLOW-LORED AMAZON	-AMAZONA XANTHOLORA
BLACK BILLED AMAZON	-AMAZONA AGILIS
GREEN CHEEK AMAZON	-AMAZONA VIRIDIGENALIS
LILAC CROWN AMAZON	-AMAZONA FINCHI
YELLOW CROWN AMAZON	-AMAZONA OCHROCEPHALA AUROPALLIATA
	-AMAZONA OCHROCEPHALA [illegible]
	-AMAZONA OCHROCEPHALA ORATRIX
	-AMAZONA OCHROCEPHALA TRESMARIAE
MEALY AMAZON	-AMAZONA FARINOSA GUATEMALAE

HOPE TO HEAR FROM YOU SOON

YOURS SINCERELY

CARY JOHN CAIRNCROSS (B.SC. HONS.)