REVIEW OF PROPOSALS TO AMEND APPENDICES I AND II

A. Proposal

Transfer of *Amazona finschi* from Appendix II to Appendix I, in accordance with Resolution Conf. 9.24 (Rev. CoP12), Annexes 1 and 4.

B. Proponent

Mexico.

- C. Supporting statement
- 1. Taxonomy
 - 1.1 Class: Aves
 - 1.2 Order: Psittaciformes
 - 1.3 Family: Psittacidae
 - 1.4 Genus and species: Amazona finschi (Sclater 1864)
 - Subspecies: Amazona finschi woodi (Moore 1937) from southeast of Sonora to southwest of Chihuahua and northeast of Sinaloa (Friedmann *et al.* 1950). Amazona finschi finschi (Sclater 1864) in Sinaloa, Nayarit, Jalisco, Durango, Colima, Michoacán, Guerrero and Oaxaca (Friedmann *et al.* 1950).
 - 1.5 Scientific synonyms: Chrysotis glauciceps (Sclater 1864), Chrysotis finschi (Sclater 1864)
 - 1.6 Common names:English:Lilac-crowned Parrot (AOU 1998)French:Amazone à couronne lilas; Amazone de FinschSpanish:Loro corona lila (Escalante *et al.* 1996)Dutch:Finsch' Amazone
 - 1.7 Code number: A-218.003.005.014

2. Biological parameters

2.1 Distribution

The species *Amazona finschi* is endemic to the Mexican coast of the Pacific Ocean (Friedmann *et al.* 1950, Forshaw 1989, Collar 1997, Juniper y Parr 1998). Historically, its range extended along the Pacific from south of Sonora and southwest of Chihuahua as far as Oaxaca (Howell and Webb 1995). From 1995 to the present, studies have been conducted on the species' natural history and ecological requirements in the State of Jalisco, contributing valuable information. This research indicates that *Amazona finschi* has little reproductive success and specific habitat requirements, travelling long distances in seasonal migration (Renton 1998, 2001, 2002, Renton and Salinas-Melgoza 1999, 2002a, 2002b, Renton *et al.* 2001, Salinas Melgoza 1999, Salinas Melgoza and Renton 2001). A study entitled *Evaluation of the current status of lilac-crowned parrot* (Amazona finschi) *populations in Mexico* was carried out during the year 2002 (Renton and Iñigo Elías 2003), with the support of the Mexican CITES Scientific Authority, the *Comisión Nacional para el Conocimiento y Uso de la Biodiversidad* (CONABIO, *National Commission for Knowledge and Use of Biodiversity*). The objectives of this research were to determine current distribution, the relative abundance of the species in the country, and the impact domestic and international trade has had on wild populations.

In this study, the species' area of distribution was defined on the basis of the range proposed by Howell and Webb (1995), considering sites with historic records, identified in the *National Atlas of the Birds of Mexico* (Navarro *et al.* in preparation). The range was divided into 50 x 50 km quadrants, which were later reviewed in the field to verify the presence or absence of the species.

The results of the study demonstrate that *Amazona finschi* has been practically eradicated from Oaxaca, as it has not been recorded in the censuses nor reported by local people in over 60 years. Furthermore, the species has disappeared from some parts of the States of Nayarit, Jalisco, Durango, Colima and Michoacán, and has undergone important population declines in many areas of its original range (Macias Caballero *et al.* 2000, Renton and Iñigo Elías 2003). The species is currently most abundant, over a larger range, in the States of Jalisco, Michoacán and Sinaloa (Renton e Iñigo Elías 2003).

The species has been reported from sea level up to 2,000 m above sea level (Friedmann *et al.* 1950, Forshaw 1989). However, in the recent evaluation of its distribution, it was not recorded beyond 1,000 m above sea level, and the largest number of individuals was found between sea level and 500 m above sea level (Renton e Iñigo Elías 2003). It was estimated that the species' current range covers less than 142,500 km² (Figure 1), which represents a 29 per cent reduction of its original distribution over the past 20 years (Renton and Iñigo Elías 2003). In a parallel study with GARP models and cartographic land use analysis, Ríos Muñoz (2002) estimated that *Amazona finschi* had suffered a 20 per cent loss of habitat, with the consequent reduction of its original range.

2.2 Habitat availability

The species inhabits tropical deciduous and semi-deciduous forests, as well as pine and holm oak forests (Forshaw 1989, Renton y Salinas Melgoza 2002a). It must be noted that the medium growth (semi-deciduous) forest in the region is essential for the species, as it offers nesting and feeding sites during the dry season. This is reflected in the parrot's strong preference for this type of habitat (Renton 1998, 2001, Renton and Salinas Melgoza 1999, Renton and Iñigo Elías 2003). In addition, during dry periods, the species makes great altitudinal, seasonal migrations from the deciduous jungle along the coast towards the medium growth semi-deciduous forest in the foothills of the mountains (Renton *et al.* 2001).

In recent decades, the Pacific coastal tropical jungles have undergone considerable transformation and fragmentation (Masera *et al.* 1996, Trejo and Dirzo 2000). Between 1950 and 1994, 64 per cent of the total extension of Mexican sub-humid forests has been lost (FORIS 2000). Originally, dry tropical forests covered 13 per cent of the nation's territory (Rzedowski 1994), but by the year 1988, only 9 per cent of this habitat remained undisturbed (Flores Villela and Geréz 1988). This represented one of the highest deforestation rates in Mexico (Masera *et al.* 1996). The forestry inventory analysis (SARH 1994) demonstrated that along the Mexican Pacific coast, from the south of Sonora as far as Oaxaca, there were no more than 25,517 km² of jungles left that could be considered the habitat of *Amazona finschi.* However, only 5,106 km² are high and medium growth forests, the most favourable habitat for the species (Renton and Iñigo Elías 2003).



Figure 1: Current distribution of the lilac-crowned parrot (*Amazona finschi*) in Mexico. The thick black line shows historic distribution according to Howell and Webb (1995), while the grey-shaded area shows current distribution as estimated by Renton and Iñigo Elías (2003).

2.4 Population trends

Historic reports dating back to the 1940s – 1960s consider the lilac-crowned parrot a common species throughout most of its range (Van Rossem 1945, Stager 1954, Schaldach 1963), and quite scarce or not very common in the State of Oaxaca (Binford 1989, Forshaw 1989). In the year 1975, trade in this species was found to be reaching a level that could have an impact on wild populations (Ridgely 1981).

The study evaluating the present status of *Amazona finschi* on the Mexican Pacific coast indicates that wild populations have decreased dramatically since the 1980s. In 339 surveys conducted among local residents within the species' area of distribution, 91 per cent stated that the population of *Amazona finschi* had decreased in their region (Renton e Iñigo Elías 2003). Most notably, in Oaxaca 30 per cent of the people reported that the species had disappeared from their region. Likewise, for the State of Jalisco, 29 per cent of the people reported that *Amazona finschi* no longer existed in their area (Renton and Iñigo Elías 2003). The most significant report on the decline of the wild population was obtained for Nayarit, where 98 per cent of the people said the local population of *Amazona finschi* had decreased in their region (Renton e Iñigo Elías 2003).

2.5 Geographic trends

The database in CONABIO-UNAM's *Atlas of Mexican Birds* (Navarro *et al.* in preparation) was used to determine sites where the species had previously been collected or recorded. These geo-referenced sites were verified in the field, to evaluate whether the species continued to be present. According to the results of the study, it was no longer to be found in 37 per cent of the sites where it had previously been recorded (Renton e Iñigo Elías 2003). It was discovered to be absent from places where it had previously been collected in Oaxaca, which, along with the results of the censuses, indicates that *Amazona finschi* has been eradicated from Oaxaca. Furthermore, it is important to note that the species was not recorded in 50 per cent of the sites where it had previously been collected in Nayarit, although habitats were still available for

it (Renton e Iñigo Elías 2003). *Amazona finschi* has recently been recorded in some new sites in Nayarit, but it is considered a very rare species (Espinoza 2000). The parrot was also absent from 48 per cent of the sites visited where it had previously been collected in Sinaloa, and its presence was restricted to the foothills of western Sierra Madre, having completely disappeared from the lowlands, which have now been transformed into large agricultural lands (Renton e Iñigo Elías 2003). In general, the species is most abundant in the central part of its range, comprising the States of Jalisco and Michoacán (Renton and Iñigo Elías 2003).

2.6 Role of the species in its ecosystem

Amazona finschi feeds on over 33 tree species, consuming mostly seeds (82 per cent of its diet), while the fruit of species such as *Ficus* spp. constitutes 10 per cent of its diet (Renton 1998, 2001). As a predator of canopy seeds, it exerts an influence on tropical jungle dynamics, and could play an important part in maintaining the diversity of the trees in these forests (Dirzo and Miranda 1990, Renton 2001). In addition, it is an endemic species to Mexico, with significant cultural value, not only for Mexicans, but also for the world, as thousands of bird-watchers come to look for it in its natural environment. This makes it a valuable symbol for conservation of the dry forests along the Mexican Pacific coast.

2.7 Threats

Offtake for domestic and international trade is the main threat to wild populations of *Amazona finschi*. In surveys with local residents, 61 per cent of those interviewed felt that capture for trade was the main threat to wild populations in their region, while 17 per cent blamed habitat destruction (Renton e Iñigo Elías 2003).

2.7.1 Habitat destruction

The dry forests of the lowlands along the Pacific coast are being drastically transformed into croplands and pastures, at an annual deforestation rate of 1.9 per cent or 306,000 acres/year (Masera *et al.* 1996). Increased habitat fragmentation could have a serious impact on wild populations of the species, either by restricting food resources during critical periods of the year, or by increasing the flow of predators, or by limiting the parrot's chances to meet its requirements for reproduction. In 1996, the species was considered 'near threatened' on the IUCN Redlist (Redlist 1996: Lower Risk – near threatened LR/nt). Juniper and Par (1998) considered it nearly threatened. *Amazona finschi* has recently been designated one of the priority species for psittacid conservation in Mexico (Macias Caballero *et al.* 2000).

2.7.2 Trade

In the late 1970s, capture of and trade in specimens of wild *Amazona finschi* rose dramatically (Ridgely 1981). In 1981-82, 86 per cent of the psittacids caught in Mexico came from the Pacific coast, with *Amazona finschi* among the three psittacid species of highest demand in Mexico (Iñigo Elías and Ramos 1992). At present, illicit trade in these parrots is widespread and intensive. Adult specimens are captured, nests are plundered, and the birds are traded nationally as well as internationally (Renton and Iñigo Elías 2003). *Amazona finschi* is also one of the psittacid species most often confiscated at the Mexico-Texas border, in spite of being so far from its natural range (Gobbi *et al.* 1996). In early 2003, the Swiss CITES Authorities seized a shipment of *Amazona finschi* from Mexico containing double the specimens allowed as stated on the permit issued by the Mexican CITES Management Authority.

3. Utilization and trade

3.1 National utilization

In Mexico, offtake was only allowed under the 'Capture and Exploitation of Ornamental and Songbirds' for the three seasons from 1979 to 1983. Since 1983, when its capture was prohibited, there has been no legal domestic trade in this species (D.O.F. 1983). Certain

programmes for exploitation are implemented by the Secretariat for the Environment and Natural Resources (SEMARNAT), through Wildlife Conservation Management Units (UMAs). In the case of *Amazona finschi*, its biological characteristics, distribution, current abundance and population dynamics limit the sustainable exploitation rates that can be determined for the species, and permits have not been granted for the use of wild birds. Even so, *Amazona finschi* is among the most illegally traded psittacid species.

3.2 Legal international trade

In the period from 1981-2001, 4,061 *Amazona finschi* specimens were traded internationally, of which 3,215 specimens (79 per cent) were directly exported from Mexico (UNEP-WCMC database). Commercial purposes accounted for the majority of these international transactions (95 per cent), and most of the birds had been collected from the wild (64 per cent including illegal captures). During this period, the United States of America continued to be the main importer (55 per cent) of *Amazona finschi* specimens directly from Mexico, while European countries imported 28 per cent of these direct Mexican exports.

The highest international trade in the species occurred in the years 1981 and 1982, with 2,462 specimens, of which 2,306 were direct exports from Mexico. Practically all the exports during this period were for commercial purposes (99.7 per cent). The main importing countries in these two years were the United States of America with 72 per cent, and Germany with 13 per cent of the imports.

In the decade between 1991 and 2001, international trade in the species began to rise again, with 1,471 specimens traded internationally (Figure 2), of which 898 (61 per cent) were direct exports from Mexico. As before, these international transactions were chiefly for commercial purposes (89 per cent), and 60 per cent of the parrots were of wild origin. During this period, European countries received 64 per cent of the imports of this species, while imports into the United States accounted for 13 per cent.



Figure 2: Number of lilac-crowned parrot (*Amazona finschi*) individuals in global international trade over the decade 1991-2001 (UNEP-WCMC database). The solid black line (Direct export) shows direct Mexican exports from the wild, while the broken line (Re-export) shows other exports and re-exports of specimens.

3.3 Illegal trade

Apart from legal international trade, there is widespread, intensive illegal trade in this species, for both the domestic and the international market. In Mexico, *Amazona finschi* is one of the psittacid species most confiscated by the Federal Justice Bureau for Environmental Protection (PROFEPA)'s Law Enforcement Authority (Table 1), and most often illegally sold at the market in Sonora, D.F. (Table 2). This is one of the most important markets where animals of wild origin are sold in Mexico. *Amazona finschi* is also the psittacid species (from Mexico) that is most often seized in the United States of America (Table 3), and it is one of the most frequently confiscated psittacid species at the Mexico-Texas border (Table 4, Gobbi *et a*l. 1996). According to the results gathered from surveys among local residents, these seizures would only represent a small fraction of the number of parrots actually exported illegally to the United States (Renton and Iñigo Elías 2003).

Of the people surveyed locally along the Mexican Pacific coast, 75 per cent reported pillaging of chicks in their region, where between 10 and 50 chicks could be obtained per season at each site (Renton and Iñigo Elías 2003). Likewise, 53 per cent of these people reported adults being caught with nets in their region. With this practice, over 100 individuals may be extracted per season at each site (Renton e Iñigo Elías 2003). In southern Sonora and Sinaloa, local residents reported these captures to be for illicit trade to the United States.

Nest looting is a biologically important factor for the reproduction of wild populations of many psittacid species (Wright *et al.* 2001). When the US Wild Bird Conservation Act came into force in 1992, forbidding imports of psittacids of wild origin and those included in the CITES Appendices, there was a significant corresponding reduction in the plundering of nests in the countries of origin (Wright *et al.* 2001). Control over international trade obviously has positive benefits for wild psittacid populations in their countries of origin. Including *Amazona finschi* in CITES Appendix I will support legislative, conservationist and management efforts in its country of origin, allowing more severe punishment to be applied where the species is involved in illicit cross-boundary exchange, thus reducing the pressure from pillaging and removal of wild populations.

Species	1995	1996	1997	1998	1999	2000	Total
Amazona auropalliata	NA	23	2	5	21	NA	51
Amazona farinosa	NA	8	10	NA	15	2	35
Amazona finschi	3	52	40	10	31	8	144
Amazona oratrix	6	2	39	16	57	3	123
Amazona sp.	11	35	NA	NA	20	13	79
Amazona viridigenalis	5	6	14	14	18	NA	57
Amazona xantholora	NA	8	6	2	14	1	31
Aratinga holochlora	79	6	116	17	17	NA	235
Ara militaris	10	NA	NA	18	20	7	55
Forpus cyanopygius	2	2	NA	NA	NA	4	8
Pionopsitta haematotis	NA	NA	NA	8	NA	NA	8
Pionus senilis	4	2	9	5	19	NA	39
Rhynchopsitta pachyrhyncha		2	12	1	5	NA	20
	120	146	248	96	237	38	

 Table 1: Seizures of psittacids (number of specimens*) in Mexico in which trade is forbidden: 1995-2000
 (Source: General Direction for Wildlife Inspection and Monitoring, PROFEPA)

* These seizures are chiefly of live specimens for the pet trade.

NA: Information not available.

According to recent information provided by PROFEPA on seizures of specimens of the species in the past few years, at least 5 seizures (13 specimens) in 2001, 15 (84 specimens) in 2002 and 12 seizures (25 specimens) in 2003 can be added to the above data. These occurred through inspection and surveillance carried out domestically, at different sites around various municipalities in 14 Mexican States. This information corroborates that there is still an important market for the species, in which illegal trade persists, so greater attention must be paid, and control measures strengthened.

 Table 2: Number of specimens of psittacid species in which trade is forbidden, discovered to be on sale at the Sonora market, in Mexico DF (1994-1995).

Species	1994	1995	Total
Amazona finschi	139	458	597
Aratinga holochlora		581	581
Amazona viridigenalis	97	38	135
Amazona oratrix	19	83	102
Amazona auropalliata	30	50	80
Pionus senilis	49	13	62
Ara militaris	3	46	49
Amazona farinosa	11	10	21
Forpus cyanopygius		10	10
Ara macao	2	1	3
Amazona xantholora	1	1	2
TOTAL	351	1291	1642

Modified from Cantú and Sánchez (1996).

 Table 3: Psittacids declared of Mexican origin (number of specimens) seized by the United States of America (Source: LEMIS 2000 Declarations Standard Report 1995-2000, USFWS).

Species	# Wild	# Captive	# Unknown	Total
Amazona finschi	59	8	14	81
Amazona albifrons	62	0	8	70
Amazona autumnalis	45	2	22	69
Amazona oratrix	37	3	13	53
Amazona auropalliata	9	3	17	29
Amazona ochrocephala	2	3	24	29
Amazona viridigenalis	17	0	8	25
Ara militaris	3	0	1	4
Ara macao	0	0	3	3
Amazona sp.	35	0	1	36

Species	1990	1991	1992	1993	Total
Amazona auropalliata	2	137	215	294	648
Amazona oratrix	66	121	281	74	542
Amazona viridigenalis	177	70	61	29	337
Aratinga holochlora	156	59	14	24	253
Amazona finschi	85	23	29	12	149
Pionus senilis	15	9	31	0	55
Ara militaris	2	12	7	12	33
Aratinga spp.	13	5	0	10	28
Amazona spp.	17	2	2	5	26
Amazona farinosa	5	1	2	0	8
Ara macao	0	3	1	0	4
TOTAL	538	442	643	460	2083

 Table 4: Seizures of psittacids in which trade is forbidden, at the Mexico-Texas border (1990-1993, TRAFFIC-USA).

Modified from Gobbi et al. (1996).

3.4 Actual or potential trade impacts

Nesting success for wild populations of *Amazona finschi* is shown to be low, at 42 per cent, producing an average of 0.72 juveniles per reproductive couple (Renton 1998, Salinas Melgoza and Renton 2001, Renton and Salinas Melgoza 2002a, 2002b). The species has high yearly fluctuations in productivity, ranging from a maximum of 1.3 to a minimum of 0.25 juveniles per reproductive couple (Renton 1998, Salinas Melgoza 1999, Salinas Melgoza and Renton 2001, Renton and Salinas Melgoza 2002a, 2002b). This low reproductive rate implies that wild populations do not have the capacity to recover quickly from any additional pressure, such as that which they currently face owing to commercial exploitation. Furthermore, the species has specific habitat requirements, and migrates seasonally over great distances in search of food resources (Renton 1998, 2001, 2002, Renton *et al.* 2001, Renton and Salinas-Melgoza 2002a, 2002b). For all these reasons, the species is highly vulnerable to human pressure, such as commercial exploitation and habitat destruction.

Given the low productivity of wild *Amazona finschi* populations, pillaging of chicks for illicit trade drastically reduces their capacity to maintain their levels or recover from additional pressures. Likewise, capturing adults and juveniles with nets constitutes a major threat to the species, as individuals with reproductive potential are indiscriminately eliminated from the population, leading to a rapid decline in wild populations. The highest numbers of these parrots caught with nets were reported in Jalisco (55 per cent), Guerrero (47 per cent), and Sinaloa (45 per cent), implying strong pressure on the wild populations of the species in these States (Renton e Iñigo Elías 2003). Throughout most of *Amazona finschi* 's range, high offtake for trade has resulted in the decline or eradication of wild populations, although habitats are available for the species.

3.5 Captive breeding for commercial purposes (outside country of origin)

Several specimens are kept at zoos and in private collections. Internationally, a total of 53 individuals are registered with the International Species Information System (ISIS) in breeding establishments or zoos, and no births have been reported in captivity in the past six months. Nationally, at least six intensive UMAs are registered for breeding activities, but the total size of the captive population is unknown. There are no captive reproduction systems that produce second-generation parrots of the species for large-scale trade.

4. Conservation and management

4.1 Legal status

4.1.1 National

In Mexico, *Amazona finschi* is currently ranked as a *Threatened* (A) species, in accordance with the Official Mexican Norm NOM-059-ECOL-2001, which establishes the degree of protection the country's wild native species require, and the risk categories and specifications for their inclusion, exclusion or changes. This ranking means the parrot could be in danger of disappearance in the short or medium term, if factors continue to exert a negative influence over its vital needs, deteriorating or altering its habitat or causing direct reduction of its population size, which therefore require special protective measures (D.O.F. 2002). The recently applied Risk Evaluation Method (MER) recommended changing this ranking to 'in danger of extinction', owing to the reduction of its range, its low abundance, its intrinsic biological vulnerability and the impact of human activities on its wild populations (Renton and Salinas Melgoza 2002b). In addition, as part of the Project for the Recovery of Priority Species (see 4.2.3.), *Amazona finschi* is considered a priority species for psittacid conservation in Mexico (Macias Caballero *et al.* 2000).

For the aforementioned reasons, the exploitation and management of Amazona finschi in Mexico must follow the provisions of Article 87 of the General Law of Ecological Balance (LGEEPA), as well as Articles 85, 87, and other relevant sections of the General Wildlife Law (LGVS). The LGEEPA particularly stipulates that for species that are threatened or in danger of extinction, no exploitation of wild populations may be authorized, except when it is possible to guarantee their controlled reproduction and growth. Likewise, the LGVS indicates that exploitation of specimens of species at risk may only be authorized when the priority for collection and offtake is for activities aimed at restoring, re-populating and re-introducing the species. Such authorization may only be granted in the light of the results of population studies or sampling, in the case of animals living in the wild. Further requisites include: (a) criteria, measures and direct action for controlled breeding and growth of the population in its natural habitat included in a management plan; (b) specific measures and action to counteract the factors that have led to population decrease or habitat deterioration; and (c) a population study containing accurate estimates of birth and mortality rates, and sampling. When populations are in danger of extinction or threatened, both the study and the management plan must be physically or morally backed by a recognized specialist, in compliance with regulations. In addition, for species considered in danger of extinction, individuals must be the product of controlled breeding, and contribute to the growth of populations of the species (D.O.F. 2000).

4.1.2 International

In 1981 the species was included in CITES Appendix II along with the rest of the Psittaciformes. This means that international trade in the species must adhere to the provisions of the Convention, especially to Article IV on *Regulation of trade in specimens of species included in Appendix II.* However, on the basis of current information presented in this proposal, there is an obvious need to tighten measures to protect the species, subjecting it to stricter international trade regulations so as not to endanger its survival further, and authorize trade only under exceptional circumstances.

The status of *A. finschi* was last reviewed in CITES at the ninth Animals Committee meeting (AC9) in September 1993, in Phase 2 (CoP8 to CoP9) of the Review of Significant Trade, and no further action was taken (Notification No. 785 (10 March 1994). This review was carried out by the *World Conservation Monitoring Centre* (WCMC) and IUCN, with the help of TRAFFIC, as directed by the CITES Secretariat, in line with Resolution Conf. 8.9 (Rev.). In 1996, the species was considered 'near threatened' in the IUCN Red List (Red List 1996: Lower Risk - near threatened LR/nt).

4.2 Species management

4.2.1 Population monitoring

In the year 2002, the Mexican CITES Scientific Authority (CONABIO), commissioned the study 'Evaluation of the current status of lilac-crowned parrot (*Amazona finschi*) populations in Mexico' (Renton and Iñigo Elías 2003). The purpose of this study was to determine the current distribution and relative abundance of the species in the country, and to evaluate the impact of national and international trade on wild populations.

4.2.2 Habitat conservation

Few natural protected areas preserve the habitat for the species within its range. Only in the Sierra de Alamos-Arroyo Cuchujaqui Biosphere Reserve in southern Sonora, and in the Chamela-Cuixmala and Sierra de Manantlán Biosphere Reserves in Jalisco, is the species to be found. It has also been reported to exist in seven Areas of Importance for the Conservation of Birds (AICAs): Alamos-Río Mayo in Sonora; Piélagos in western Durango; Marismas Nacionales in Nayarit; Chamela-Cuitzmala and Presa Cajón de Peñas in Jalisco; and Tancítaro and Coalcomán-Pómaro in Michoacán (CONABIO 2002), but some of these areas lack official protection or conservation programmes.

4.2.3 Management measures

In 1999, the Mexican Government established the Project for the Recovery of Priority Species (D.O.F. 1999). This included the Plan for Conservation, Protection and Recovery of Psittacids in Mexico, setting strategies for trade regulation, rehabilitation and captive breeding, awareness-raising and environmental education, also creating strategies for habitat conservation and recovery of wild *Amazona finschi* populations (Macias Caballero *et al.* 2000).

4.3 Control measures

4.3.1 International trade

As most of the illegal trade in this species is directed towards the northern border with the United States, and the U.S. Wild Bird Conservation Act prohibits imports of psittacids of wild origin and those included in the CITES Appendices, an Appendix-I listing of this species would be helpful for its conservation. When this Act entered into force in 1992, it was associated with a significant reduction in nest plundering in the countries of origin (Wright *et al.* 2001). This shows that control over international trade evidently has positive benefits for the conservation of wild populations in their countries of origin. The inclusion of *Amazona finschi* in CITES Appendix II has not been sufficient to halt population decline. In accordance with the U.S. Penal Code (USSC Nov. 2001: §2Q2.1. Offences Involving Fish, Wildlife, and Plants), punishments would be four times as severe for offences involving specimens of a CITES Appendix-I species. Transferring the species to CITES Appendix I would allow stiffer penalties to be applied for illegal international trade in the species. This measure would reduce the pressure of capture on wild populations.

4.3.2 Domestic measures

In Mexico, Article 87 of the General Law of Ecological Balance and Environmental Protection forbids utilizing wild populations of species that are endemic, threatened, or in danger of extinction (D.O.F. 1988). The General Law of Wildlife establishes a series of requirements for exploitation of endangered species: authorization for exploitation of species at risk may only be granted when restoration, conservation or re-introduction activities are prioritized, and for species in danger of extinction, individuals must be the product of controlled breeding (D.O.F. 2000). *Amazona finschi* is ranked as "threatened" under NOM-059-ECOL-2001 (D.O.F. 2002), and is also considered a priority species for psittacid conservation in Mexico (Macias Caballero *et al.* 2000).

5. Information on similar species

The most similar species to *Amazona finschi* is *Amazona viridigenalis* (the green-cheeked amazon, red-crowned amazon, or red-crowned parrot), which is endemic to northeastern Mexico and is listed in CITES Appendix I.

6. Other comments

In recent years, both legal and illegal global trade in *Amazona finschi* specimens of wild origin has increased (see Annex).

7. Additional remarks

For all the above reasons, *Amazona finschi* meets the necessary biological and trade criteria to be included in Appendix I. In accordance with Resolution Conf. 9.24 (Rev. CoP12)*, the species:

- a) is characterized by a decrease in the area of distribution and in the quality of habitat (criterion B. iv), partly owing to the pressures of trade in the species;
- b) the wild population has undergone a dramatic decrease in the number of individuals, which has been observed as ongoing [criterion C. i)], and may be inferred on the basis of habitat loss [criterion C. ii)];
- c) in accordance with criterion D, if the decline continues, the species could be reduced to a small wild population in only a few years (criterion A), as a decline in individuals and habitat [criterion A. i)], is exacerbated by the specie's high intrinsic vulnerability, owing to its low reproductive capacity and specific habitat requirements [criterion A. v)].
- 8. <u>References</u>
 - A.O.U. 1998. Check-list of North American Birds. 7th Ed. American Ornithologists' Union. Lawrence, KA.
 - Binford, L. C. 1989. A Distributional Survey of the Birds of the Mexican State of Oaxaca. Ornithological Monographs No. 43. American Ornithologists' Union. Washington, D.C.
 - Cantú, J. C., & M. E. Sánchez. 1996. El Mercado de Sonora de la Ciudad de México. Naturaleza y Tráfico. April Vol. 1 (No. 1).
 - CITES. 1994. Review of the implementation of recommendations on species subject to significant trade. Animals Committee 17, Doc. 7.2. (http://www.cites.org/eng/notifs/).
 - CITES. 2001. Revised export quotas for 2001. Notification to the Parties: Notification 2001/041, Geneva, July 9, 2001. (http://www.cites.org/esp/notifs/valid01.shtml).
 - Collar, N. J. 1997. Family Psittacidae (Parrots) Pp. 280-477. In: J. del Hoyo, A. Elliot and J. Sargatal (Eds). Handbook of the Birds of the World. Vol. 4: Sandgrouse to Cuckoos. Lynx Editions, Barcelona. 679 pp.
 - CONABIO. 2002. Áreas de Importancia para la Conservación de las Aves (AICAS). (http://conabioweb.conabio.gob.mx/aicas/doctos/aicas.html)
 - D.O.F. 1983. Acuerdo que establece el calendario de captura, transporte y aprovechamiento racional de las aves canoras y de ornato, correspondiente a la temporada 1983-1984. Diario Oficial de la Federación, 1983.
 - D.O.F. 1988. Ley General del Equilibrio Ecológico y la Protección al Ambiente. Diario Oficial de la Federación, January 28, 1988.
 - D.O.F. 1999. Acuerdo por el que se crea el Comité Técnico Consultivo Nacional para la Recuperación de Especies Prioritarias. Diario Oficial de la Federación, Wednesday, June 23, 1999.
 - D.O.F. 2000. Ley General de Vida Silvestre. Diario Oficial de la Federación, July 3, 2000.

- D.O.F. 2002. NOM-059-ECOL-2001. Protección ambiental especies nativas de México de flora y fauna silvestres Categorías de riesgo y especificaciones para su inclusión, exclusión o cambio Lista de especies en riesgo. Diario Oficial de la Federación, March 6, 2002.
- Dirzo, R., & A. Miranda. 1990. Contemporary Neotropical defaunation and forest structure, function and diversity a sequel to John Terborgh. Conserv. Biol. 4: 444-447.
- Escalante Pliego, B. P., A. M. Sada, & J. Robles Gil. 1996. Listado de Nombres Comunes de las Aves de México. CONABIO/Sierra Madre, Mexico.
- Espinosa Hernández, I. J. A. 2000. Distribución de la riqueza, endemismo y rareza: criterios para la conservación de las aves de la Sierra de San Juan, Nayarit, México. B.Sc. Thesis. Facultad de Ciencias, UNAM, Mexico.
- Flores Villela, O., & P. Geréz. 1988. Conservación en México: síntesis sobre vertebrados terrestres, vegetación y suelo. INIREB. Mexico.
- FORIS. 2000. Forestry Information System: Country Profiles. (http://www.fao.org/foresty/FO/SOFO/sofo-e.stm). 31 December, 2000.
- Forshaw, J. M. 1989. Parrots of the World. 3rd Ed. Lansdowne Editions, Australia.
- Friedmann, H., L. Griscom, & R. T. Moore. 1950. Distributional check-list of the birds of Mexico: Part 1. Pacific Coast Avifauna 29, 1-202. Cooper Ornithological Club.
- Gobbi, J., L. Sheeline, D. Rose, & G. de Ferrari. 1996. Parrot smuggling across the Texas-Mexico Border. TRAFFIC-USA & World Wildlife Fund-US.
- Howell, S. N. G., & S. W. Webb. 1995. A guide to the birds of Mexico and northern Central America. Oxford University Press, New York.
- Iñigo-Elias, E. E., & M. A. Ramos. 1991. The psittacine trade in Mexico. Pp 380-392 In J. G. Robinson & K. H. Redford (eds). Neotropical Wildlife Use and Conservation. University of Chicago Press, Chicago.
- Juniper, T. & M. Parr 1998. Parrots. A guide to the parrots of the world. Yale University Press New Haven and London. 584 pp.
- Macías Caballero, C., E. E. Iñigo Elías, & E. C. Enkerlin Hoeflich. 2000. Proyecto de Recuperación de Especies Prioritarias: Proyecto Nacional para la Conservación, Manejo y Aprovechamiento Sustentable de los Psitácidos de México. Instituto Nacional de Ecología/SEMARNAP, Mexico DF.
- Masera, O. R., M. J. Ordóñez, & R. Dirzo. 1996. Carbon emissions from Mexican forests: current situation and long-term scenarios. Climate Change 10: 1-31.
- Renton, K. 1998. Reproductive ecology and conservation of the Lilac-crowned Parrot (*Amazona finschi*) in Jalisco, Mexico. Ph.D. Thesis. University of Kent, Canterbury.
- Renton, K. 2001. Lilac-crowned Parrot diet and food resource availability: resource tracking by a parrot seed predator. Condor 103: 62-69
- Renton, K. 2002. Influence of environmental variability on the growth of Lilac-crowned Parrot nestlings. Ibis 144: 331-339.
- Renton, K., & E. E. Iñigo Elias. 2003. AS001: Evaluación del estado actual de las poblaciones de loro corona lila (*Amazona finschi*) en México. Reporte Final a CONABIO, Mexico.
- Renton, K., & A. Salinas-Melgoza. 1999. Nesting behavior of the Lilac-crowned Parrot. Wilson Bulletin 111: 488-493.
- Renton, K., & A. Salinas Melgoza. 2002a. *Amazona finschi* (Sclater 1864) (Loro corona lila). Pp 343–344 In F. A. Noguera, J. H. Vega Rivera, A. N. García Aldrete, & M. Quesada Avendaño (eds.). Historia Natural de Chamela. Instituto de Biología, UNAM, Mexico
- Renton, K., & A. Salinas Melgoza. 2002b. W007: *Amazona finschi*. Fichas sobre las especies y subespecies de Aves incluidas en Proyecto de Norma Oficial Mexicana PROY-NOM-059-ECOL-2000. CONABIO, Mexico.

- Renton, K., A. Salinas Melgoza, & J. H. Vega Rivera. 2001. Migración estacional altitudinal por el loro corona lila y el trogón citrino en el bosque tropical seco: implicaciones para conservación de ecosistemas. Pp 30 In Resúmenes, V Congreso sobre el Estudio y Conservación de las Aves en México, Morelia, Michoacán, November 20-23, 2001. Universidad Michoacana de San Nicolás de Hidalgo/CIPAMEX.
- Ridgely, R. S. 1981. The current distribution and status of mainland Neotropical parrots. Pp 233-384 In R. F. Pasquier (ed). Conservation of New World Parrots: Proceedings of the ICBP Parrot Working Group Meeting, St Lucia 1980. Smithsonian Institution Press/ICBP Technical Publication No 1.
- Rios Muñoz, C. A. 2002. Caracterización geográfica de la familia Psittacidae (Aves) utilizando un modelo predictivo. B.Sc Thesis. Facultad de Ciencias UNAM. Mexico, D.F.
- Rzedowski, J. 1994. Vegetación de México. 6th Edition, Limusa Noriega Editores, Mexico.
- Salinas Melgoza, A. 1999. Elementos biológicos de la reproducción del loro corona lila (*Amazona finschi* Sclater 1864) en la costa de Jalisco, México. B.Sc. Thesis. Universidad Michoacana de San Nicolás de Hidalgo, Morelia, Mexico.
- Salinas Melgoza, A., & K. Renton. 2001. Éxito de anidación y productividad reproductiva del loro corona lila: implicaciones para su manejo. Pp 67 In Resúmenes, V Congreso sobre el Estudio y Conservación de las Aves en México, Morelia, Michoacán, November 20-23, 2001. Universidad Michoacana de San Nicolás de Hidalgo/CIPAMEX
- SARH. 1994. Inventario Nacional Forestal Periódico 1992–1994. Memoria Nacional, Subsecretaria Forestal y de Fauna Silvestre, Secretaria de Agricultura y Recursos Hidráulicos, Mexico.
- Schaldach, W. J. 1963. The avifauna of Colima and adjacent Jalisco, Mexico. Proc. West. Found. Vert. Zool. 1: 1-100.
- Stager, K. E. 1954. Birds of the Barranca de Cobre region of southwestern Chihuahua, Mexico. Condor 56: 21-32.
- Trejo, I., & R. Dirzo. 2000. Deforestation of seasonally dry tropical forest: a national and local analysis in Mexico. Biological Conservation 94: 133-142.

United States Sentencing Commission, Guidelines Manual §3E1.1. (Nov. 2001).

- Van Rossem, A. J. 1945. A distributional survey of the birds of Sonora, Mexico. Occ. Pap. Mus. Zool. La St. Univ. 21: 1-379.
- Wright, T. F., C. A. Toft, E. Enkerlin-Hoeflich, J. Gonzalez-Elizondo, M. Albornoz, A. Rodríguez-Ferraro, F. Rojas-Suárez, V. Sanz, A. Trujillo, S.R. Beissinger, A. Berovides V., X. Gálvez A., A. T. Brice, K. Joyner, J. Eberhard, J. Gilardi, S. E. Koenig, S. Stoleson, P. Martuscelli, J. M. Meyers, K. Renton, A. M. Rodríguez, A. C. Sosa-Asanza, F. J. Vilella, & J. W. Wiley. 2001. Nest poaching in neotropical parrots. Conservation Biology 15: 710-720.

