

paper

INTERNATIONAL TRADE IN
WILD BIRDS, AND
RELATED BIRD MOVEMENTS,
IN LATIN AMERICA
AND THE CARIBBEAN



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INTERNATIONAL TRADE IN WILD BIRDS, AND RELATED BIRD MOVEMENTS, IN LATIN AMERICA AND THE CARIBBEAN*

* Emergency Assistance for Early Detection and Prevention of Avian Influenza in the Caribbean (TCP/RLA/3103); Central America (TCP/RLA/3104); Andean Region (TCP/RLA/3105) and the South Cone (TCP/RLA/3106)

**Emergency Centre for
Transboundary Animal Disease Operations (ECTAD)**

Regional Office for Latin America and the Caribbean (FAO/RLC)

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Foreword

The panzootic of highly pathogenic avian influenza (HPAI) H5N1 first appeared in southern China in the mid-1990s, and at present affects 60 countries of Asia, Europe, the Near East and Africa, evidencing its capacity to spread. Although the American continent is as yet free of the disease, it could be introduced through birds or contaminated poultry products. With the objective of preventing this, and ensuring early detection should the disease be introduced, FAO has implemented four subregional technical assistance projects involving 33 countries in Latin America and the Caribbean. These projects include an analysis of commercial trade in wild birds, and related bird movements as potential risk factors for the region.

The import of wild birds and poultry incurs a risk of spreading the HPAI H5N1 strain, and the results of this study should contribute to the elaboration of national, subregional and regional risk analyses. The study gathers up-to-date and unpublished information on the wild bird trade in Latin America and the Caribbean for the first time, relying on the collaboration of veterinary authorities and wildlife services in 27 out of the 33 countries that responded to the survey.

It is worth noting that the majority of wild birds traded in the region are Passeriformes and Psittaciformes, rather than the more vulnerable Galliformes, Anseriformes and Charadriiformes. These birds are traded mainly as domestic ornamental pets, in zoo exchanges and for scientific study. Since the closure of European and United States markets for animal health and conservation reasons, the main importers of wild birds from the countries surveyed are Mexico, Argentina, Chile, the Dominican Republic and Venezuela.

Animal health and conservation issues are the main constraints on wild bird trade in the region, but only half of the countries declared having special procedures to prevent the spread of HPAI and Newcastle disease.

FAO hopes that this publication will contribute to the prevention and early detection of HPAI H5N1 in Latin America and Caribbean countries and would like to thank the author, Mr Tomas Waller, for his great dedication and accomplishment.

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Executive summary

This report summarizes the results of a consultancy on market trade in live wild birds and related bird movements, in line with four FAO projects on Emergency Assistance for Early Detection and Prevention of Avian Influenza in 33 countries of the Caribbean, Central America, Andean and South Cone subregions. The survey aimed to assess the magnitude and dynamics of trade in wild birds, and the conditions under which local regulations are enforced. Each country participating in the projects received a survey form and instructions in its official language; statistics on international trade in wild birds were also analysed. Of the 33 countries consulted, 27 replied. The information gathered was compiled in a trade database, allowing the role of each country and region to be evaluated. Only four countries provided statistics, but it was possible to evaluate the trade volumes and dynamics of other countries using statistics from the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) trade database.

Of the 33 countries, Mexico is the main importer of wild birds originating in Africa, Latin America and the Caribbean. Argentina, Guyana and Suriname are the main exporters, followed by Peru, Uruguay, Venezuela, Nicaragua and Cuba. In the recent past, most native bird exports from these countries were exported to Europe. However, formal operations have been drastically reduced since the European Union (EU) imposed a ban on wild bird imports, resulting in closure of this important market. At present, legal trade is directed mainly to Mexico, followed by Asia and Africa. Mexico absorbs most wild bird imports from both within the region and elsewhere, and is not an active wild bird re-exporter, implying no further movements of exotic birds within the subregions covered by the survey.

The majority of countries declared taking precautionary measures by preventing the import of birds originating from countries in which avian influenza (AI) has been reported. Although most countries have animal health regulations and procedures in place, not all of them have specific guidelines for the early detection and control of AI, and not all require animal health documentation as a condition for trade. Owing to low trade volumes, many countries do not apply quarantine of imported birds, but quarantine is required in countries where sanitary measures are strict. Most countries consider that the risk of highly pathogenic avian influenza (HPAI) entry is low or medium. In spite of this, countries expressed particular concern about the consequences of illegal trade and migratory birds on the dispersal of AI.

Acronyms

AI	avian influenza
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
ECTAD	Emergency Centre for Transboundary Animal Disease Operations
EU	European Union
HPAI	highly pathogenic avian influenza
NGO	non-governmental organization
RLC	FAO Regional Office for Latin America and the Caribbean
UNEP	United Nations Environment Programme
WB	wild bird
WCMC	World Conservation Monitoring Centre

Chapter 1

Introduction

Highly pathogenic avian influenza (HPAI), caused by the H5N1 subtype originating in Asia, has become a very serious socio-economic problem for many countries in Asia, Europe, the Near East and Africa, causing a critical sanitary situation and the threat of outbreak in other regions. The disease has serious impacts on commercial poultry production and trade, food security and biodiversity, and represents a risk for public health.

FAO has developed four subregional projects on Emergency Assistance for Early Detection and Prevention of Avian Influenza in 33 countries of the Caribbean (TCP/RLA/3103), Central America (TCP/RLA/3104), the Andean Region (TCP/RLA/3105) and the South Cone (TCP/RLA/3106), through the Emergency Centre for Transboundary Animal Disease Operations (ECTAD). The primary objective of these projects is to strengthen target countries' capacity to generate and share HPAI disease information and establish emergency preparedness plans against the introduction of HPAI into the region, specifically in relation to the migration of and trade in wild birds.

This report summarizes the results of a consultancy to analyse the volumes and dynamics of trade in live wild bird species and related bird movements, and to assess the controls and regulations under which these movements take place, as a contribution to early warning of and early reaction to HPAI introduction, as part of the four FAO projects in Latin America and the Caribbean.

Chapter 2

Background

GLOBAL TRADE IN LIVE BIRDS

International trade in wild birds (WBs), together with migrations of WBs and movements of poultry and poultry products (Kilpatrick *et al.*, 2006) are considered potential means for spreading HPAI (Mase *et al.*, 2001; Moutou, 2004; Van Borm *et al.*, 2005; Karesh and Cook, 2005; Karesh *et al.*, 2005; 2007), although their real importance in risk assessment is under debate.

In 1975, an estimated 7.5 million WBs were traded. During the 1990s, international trade was estimated at between 2 and 5 million specimens a year, mainly ornamental and singing birds (Inskipp, 1990). More recently, these figures have dropped, owing to the enforcement of international regulations related to the conservation of several bird species.

Roughly 2 600 of the more than 9 600 species in existence are registered as being subject to trade, with Passeriformes (small birds) and Psittaciformes (macaws, parrots, cockatoos, parakeets and lorikeets) dominating world markets, at 70 and 20 percent participation respectively.

All regions worldwide supply the demand for WBs, but mainly Africa, Asia, Oceania and the Neotropics. Africa is the main producer, particularly Senegal and the United Republic of Tanzania, while Europe and the United States of America were historically the main destinations for birds under international trade (Thomsen, Edwards and Mulliken, 1992). In 1992, following restrictions on WB imports into the United States of America (the United States Wild Bird Conservation Act 1992), the European Union (EU) became the largest market for WBs. Between 2000 and 2003, the EU imported 2.8 million WBs of species regulated by the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), and other species not covered by the treaty. This represented 93 percent of imports registered worldwide for the period (CITES World Trade Database, United Nations Environment Programme [UNEP] World Conservation Monitoring Centre [WCMC], Cambridge, United Kingdom).

In most countries, the internal market is vast, mainly because of cultural preferences for keeping birds in cages. Illegal trade and smuggling are difficult to assess (Thomsen, Edwards and Mulliken, 1992). In the 1990s, informal markets for singing birds among China and other Eastern countries involved approximately 1 to 3 million specimens a year (Inskipp, 1990).

In the last decade, international movements of WBs have diminished and changed their dynamics, mainly owing to more efficient domestic customs controls, more restrictions based on humanitarian or conservation principles (such as in the United States of America), and precautionary measures introduced since the outbreak of HPAI (such as the EU's recent import restrictions). Nevertheless, it is still difficult to assess the WB trade, both formal and informal.

It has been argued that more restrictions, or a total trade ban, would help reduce the risk of HPAI spread (Karesh *et al.*, 2007). This opinion has also been expressed by animal rights organizations that oppose any kind of trade in WBs for ethical or conservation reasons.

Although international trade in any WB species creates a risk of HPAI spread, the most vulnerable groups (Galliformes, Anseriformes and Charadriiformes) are not a significant part of world trade in pets, which means that the cancellation of all trade to prevent the spread of HPAI would not be justified. The 1 to 2 million WBs traded globally are insignificant when compared with the global trade in poultry, estimated at 750 million specimens a year. In the present context, however, any induced or natural international movement of wild or domestic birds, their parts and derivatives represents a risk. The most fair and efficient way of minimizing threats is by implementing early warning and early reaction systems.

Chapter 3

Methodology

This study is based on an assessment of country surveys and statistics on WB trade. “Wild birds” are taken as meaning all the species under trade that originate in the wild, including specimens originating from captive breeding operations. Some species originating in the wild but bred massively in captivity, such as pheasants, Guinea fowls, peacocks and geese, are not of primary importance for the study.

COUNTRY SURVEY FORMS

A survey was conducted through specially designed forms and instructions addressed to the sanitary and/or wildlife authorities of the 33 participating countries in Latin America and the Caribbean. The information requested included statistical information on WB movements.

The survey was open-ended, in Spanish, French or English, depending on the country's official language (Annex). The form was relatively brief and focused on:

- *the country's trade status* – its participation in WB movements and trade, for export, import, transit or breeding;
- *WB trade restrictions* – whether the country has global or partial restrictions on bird trade, and the rationale for these restrictions;
- *imports, exports and re-exports* – up-to-date information on trade volumes, composition, destinations and origins, and on transport methods and routes;
- *sanitary and epidemiological aspects* – the existence and level of sanitary controls and procedures for WB trade and movements;
- *general and animal health documentation* – the level of monitoring and tracking of WB movements;
- *other* – additional information and opinions regarding preventive measures, the perceived risk of HPAI entering the country and other comments.

The survey also requested up-to-date WB trade statistics, particularly the tendencies for 2007. It was sent to wildlife authorities, indicating which other authorities to consult for information on specific issues.

CITES INTERNATIONAL TRADE STATISTICS ON WILD BIRDS

One of the main objectives of the survey was to obtain sound statistics on national trade in WBs, but only a few countries provided adequate comparative information. This is a common and recognized problem in the region, particularly regarding information on birds (Thomsen, Edwards and Mulliken, 1992). The only systematized statistics on wildlife available are those involving species included in the CITES appendices. CITES requests each Party to the Convention to present annual reports on the movement and/or international trade of all these species, along with other relevant information. The information is entered into the CITES World Trade Database by UNEP's WCMC.

To obtain a clear picture of WB trade dynamics in Latin America and the Caribbean, international trade statistics for the 33 countries of the region were requested from WCMC. The database contains transactions from 32 countries (Haiti is not a party to CITES), ordered in columns for species, type of specimen (live, sub-product), quantity, unit (kg, individuals), purpose of transaction (commercial, scientific, etc.), origin of specimen (wild, captive breeding, etc.), and two columns indicating whether the declaration applied to an importing or an exporting country.

It should be noted that the CITES information has limitations:

- It concerns only those species included in CITES appendices (1 700 out of the 2 600 bird species traded). The Passeriformes are a massively traded group that is underrepresented in CITES databases.
- It reflects information from 32 out of 33 countries (excluding Haiti). However, this is of limited significance as any transaction with Haiti involving the movement of CITES species is likely to be reported by another country.
- WCMC statistics are delayed by two years, owing to the long deadline that CITES allows for the compilation and presentation of annual reports and the time it takes WCMC to enter the information into its database; for example, this report is based on WCMC information for 2005. This is a significant limitation when analysing trends, but it has been mitigated by results from the surveys sent to participating countries.
- It deals only with species originating from the wild, and not with wild species bred in captivity. Species subject to exchanges among zoos and bird collectors are therefore excluded from the study, although again results from the survey forms mitigate this lack.

In spite of these limitations, the CITES statistics were relevant to the study as they originated from reliable sources and WB trade databases, allowing the identification of standards and trends in WB trade and related movements. The trade information provided by some countries compensated for some shortcomings.

Chapter 4

Results

Of the 33 countries contacted, 27 returned completed consultancy forms (Table 1), but usually after the original deadline for doing so. This 82 percent response rate was acceptable. It provided results that are representative of Latin America and the Caribbean as a whole, constituting a solid base for evaluations of the region, subregions and individual countries that can guide the design of contingency plans related to the risk of an HPAI outbreak due to WB trade.

Replies varied from the in-depth to the less consistent. Some were rich in detail and additional comments, while others contained significant incongruities and omitted some items. The quality and level of responses varied among subregions, as did the level of understanding and replies regarding specific issues. These variables were analysed objectively, taking into account the incongruities, information gaps and specialized knowledge of the person completing the form. Variables were categorized according to criteria assessing reliability and representativeness. Based on the number of participating countries, number of forms returned, and quantity and quality of replies, global reliability and representativeness were calculated at 62 percent.

For example, the Caribbean returned 87 percent of the country forms, and the representativeness of the information – based on the quality of responses – was 73

TABLE 1
Countries contacted for the survey

Central America (6/8 replies)	Caribbean (13/15 replies)	Andean Region (2/4 replies)	South Cone (6/6 replies)
Belize	Antigua and Barbuda	Colombia	Argentina
Costa Rica	Bahamas	Ecuador	Bolivia
El Salvador	Barbados	Peru	Brazil
Guatemala	Cuba	Venezuela	Chile
Honduras	Dominica		Paraguay
Mexico	Dominican Republic		Uruguay
Nicaragua	Grenada		
Panama	Guyana		
	Haiti		
	Jamaica		
	San Kitts and Nevis		
	Saint Vincent and the Grenadines		
	Saint Lucia		
	Suriname		
	Trinidad and Tobago		

Countries in bold are those that returned completed survey forms.

percent, which is more than adequate for analysis. All the countries in the South Cone responded, but reliability was only 67 percent as some questionnaires were incomplete or were completed by individuals with little knowledge of certain issues or by those who did not follow the guidelines. Central America returned 75 percent of its forms, but reliability was only 57 percent, for similar reasons. Of four countries in the Andean Region, only two responded (50 percent), and representativeness dropped to 25 percent as many items on one of these forms were not answered.

In general, poor information was provided on quarantine facilities, such as physical isolation and the use of independent epidemiological units, and on the distance between control centres and ports of entry or distribution centres. This could be because quarantine often takes place at the facilities of traders, importers or exporters in all the subregions surveyed, and the forms did not take this into account.

Owing to these limitations, a strictly percentage-based analysis of the forms was not attempted. To establish consistency in the results, a more flexible approach was adopted, which aimed to resolve ambiguities by interpreting questionnaires in the light of trade statistics; general patterns were then established.

Only four countries provided systematic statistical information on imports and exports: the Bahamas, Costa Rica, Guyana and Mexico. Almost all the forms therefore reflected only basic aspects of WB trade. The magnitude, dynamics and trends of international movements of birds were analysed on the basis of CITES statistics from WCMC.

RESULTS ACCORDING TO COUNTRIES' ROLES IN BIRD MOVEMENTS

Wild bird importing countries

Of the 27 responding countries, 17 declared themselves to be WB importers (Table 2). Many of these countries are also exporters, and most operations are for commercial purposes. Only a few countries reported re-export operations, which appear to be rare. This suggests that imports are for local consumption, while exports are of endemic or native species. This is highly relevant to the survey, as it implies that the traffic of foreign birds in the region is insignificant.

Domestic pet markets are the prime reason for trade. Volumes are low, with imports nearly always involving fewer than 100 or between 100 and 1 000 specimens a year. Mexico is the only large-scale importer of ornamental WBs, with more than 10 000 specimens a year for domestic markets, originating mainly in Africa, Argentina, Guyana, Peru and Venezuela. Mexico also imports Galliformes from the United States of America, including Guinea fowls, peacocks and pheasants, which represented 20 percent of Mexico's imports for 2005. However, as these are domesticated or semi-domesticated species, they were not included in the survey.

The main taxonomic groups imported into the subregions surveyed are Psittaciformes and Passeriformes from various origins in the American continent and elsewhere. A few countries import Galliformes and Anseriformes, from the United States of America, Africa and Central America. Air transit is the most important means of transport.

All the responding countries impose restrictions on imports aimed at protecting animal health. Almost all importers have specific restrictions regarding HPAI, usually by banning the entry of birds from countries that have reported an AI outbreak.

TABLE 2
Summary of WB trade in the 27 Latin American and Caribbean countries responding to the survey

Region/country	Importing countries (n = 17)			Exporting countries (n = 14)				
	Purpose	Source ^a	Bird group	Volume	Purpose	Destination ^b	Bird group	Volume
<i>Caribbean (n=13)</i>								
Antigua and Barbuda	CO	NA-SA-CAB	GA-PS	<100	CO	NA-SA-CAB	PS	<100
Bahamas	CO-ZO	NA-CAB-UE	GA-PS-AN	<100	CI	NA-UE-AF	PS	<100
Barbados	.	.	.	.	.	.	.	.
Dominica	.	.	.	.	.	.	.	.
Dominican Republic	CO	NA-SA	PS	<100	CO	NA	PS	<100
Grenada	.	.	.	.	.	.	.	.
Guyana	.	.	.	.	CO-ZO-CI	CAB-UE-AF-MO-AS	PS-PI	>10 000
Haiti	CO	NA-CAB	AN-ST	<100	.	.	.	.
Jamaica	.	.	.	.	n/c	NA	PS	<100
Saint Kitts and Nevis	CO	NA	PS	<1 000	CO	NA	PS	<100
Saint Vincent and the Grenadines	CO	NA-CAB	PS-PA	<1 000	.	.	.	.
Suriname	CO	NA-UE	PS	<1 000	CO	NA-UE-AS	PS	<10 000
Trinidad and Tobago	.	.	.	.	.	.	.	.
<i>Central America (n=6)</i>								
Costa Rica	CO	NA	GA-PS-AN-PA-CO	<1 000	.	.	.	.
El Salvador	CO	UE	ST	<100	.	.	.	.
Guatemala	CO-ZO-CI	NA-SA-CAB	PS-PH-ST-PA	<1 000	CO-ZO-CI	NA-SA-CAB-UE	PS-PA-SG-GA-ST	<100
Honduras	CO	NA-CAB	GA-PS-AN-ST-PA	n/c	.	.	.	.
Mexico	CO	NA-SA-CAB-UE-AF-AS-PO	GA-PS-AN-FA-PH-ST-PA-CO-GR-CH	>10 000	CO	NA-UE	PS-PA-GA	>10 000 ^c
Nicaragua	.	.	.	.	CO	UE-AF	PS	<10 000
<i>Andean (n=2)</i>								
Colombia	CO-ZO-CI	NA-SA-CAB	PS-FA	<100	PE	NA-SA-CAB-UE	PS	<100
Ecuador	ZO	UE	PS-PH-SG	<100	ZO	NA	PS	<100
<i>South Cone (n=6)</i>								
Argentina	CO-ZO	NA-SA-CAB-UE-AF-PO-AS	PS-PA-CO	<1 000 ^d	CO-ZO	NA-SA-UE-MO-AF-AS	PS-PA-CO-PH	<10 000
Bolivia	.	.	.	.	.	.	.	.
Brazil	.	.	.	.	.	.	.	.
Chile	.	.	.	.	.	.	.	.
Paraguay	CO	n/c	n/c	n/c	.	.	.	.
Uruguay	CO	NA-SA	PS-ST-PA	<100	CO	NA-CAB	PS	<10 000

Purpose: CO = commercial; SC = scientific; ZO = exchange among zoos. **Source/destination:** AF = Africa; AS = Asia; CAC = Central America and the Caribbean; EU = European Union; NA = North America; PO = Pacific/Oceania; SA = South America. **Taxonomic order:** AN = Anseriformes; CH = Charadriiformes; CO = Columbiformes; FA = Falconiformes; GA = Galliformes; GR = Gruiformes; PA = Passeriformes; PH = Phoenicopteriformes; PI = Piciformes; PS = Psittaciformes; SG = Strigiformes; ST = Struthioniformes. ^a In the survey, Mexico is listed as a Central American country, but many references to exports from and imports to North America include Mexico. ^b Many countries referred to exports to EU member countries, although imports of WBs into the EU are currently forbidden for animal health reasons. ^c Exports reported by Mexico were mainly to Italy. ^d Owing to HPAI, Argentina established a temporary ban on all imports in November 2005. This is still on place.

More than 50 percent of the countries require quarantine of imported birds for no more than 30 days. The most common analyses carried out are for AI and Newcastle disease. Most countries have special sanitary measures for breeding facilities and zoos.

Although most countries mention specific legal requirements and documents, only a few require animal health documentation for imports. This is inconsistent with other survey results, and could be the result of incorrect responses. The vast majority of importing countries believe that the risk of HPAI introduction is medium to low.

Wild bird exporting countries

Of the 27 countries, 14 are WB exporters (Table 2). Most of these countries are also importers. The main purpose of exports is for commercial trade in native species; more than 50 percent of the countries also report exchanges with zoos and, at lower volumes, exports for scientific institutions. As already stated, few countries mentioned re-exports of WBs, confirming the insignificant traffic of foreign birds in the region. This was cross-checked during analysis of the statistics.

Most countries declare exports of fewer than 100 specimens a year. A minority export 1 000 to 10 000 specimens a year, and only two export more than 10 000. In order of importance, the major exporters are Argentina, Guyana, Suriname, Peru, Uruguay, Nicaragua, Paraguay and Venezuela. Mexico used to export significant numbers of native birds to Italy, but current restrictions in the EU make this no longer possible.

Exports mainly involve the country's native species. Indigenous Psittaciformes followed by Passeriformes are the most common taxonomic groups. Recent major destinations are the United States of America (in terms of number of countries declaring exports to, rather than volume imported by the United States), followed by Europe, Asia, Central America and Africa. Air is the most important means of transport.

Closure of the European markets for sanitary reasons has led to a change in the pattern of exports. At present, Mexico and Asia receive significant volumes of bird exports from Latin America and the Caribbean, mainly from Argentina, Guyana and Suriname. The majority of exporting countries claimed to maintain WB trade statistics, but very few included them with their survey responses.

Animal health and conservation are the main reasons for imposing export restrictions, which usually relate to CITES enforcement, domestic measures to protect native species, and disease control. More than 50 percent of exporting countries impose export restrictions against HPAI, but import limitations are more common.

A majority of countries have measures in place for the early detection of HPAI, but export quarantine is not common, and the length is normally subject to importing countries' requirements. HPAI and Newcastle disease controls are common. Import and export quarantines take place at special facilities in 50 percent of cases. Requirements for presenting legal documentation of specimens seem to be more common than sanitary requirements. This is inconsistent, and suggests that some survey responses are not reliable. The vast majority of countries perceive the risk of HPAI from exports to be low, although a minority indicated it as high.

Countries that breed wild birds in captivity

Of the 27 countries, 15 have breeding operations for WB species in captivity. These countries are distributed across the four subregions, and all of them import WBs, while most of them also export. Most countries have fewer than five breeding operations, although there are a few with 20 each.

The main destinations for these bred specimens are domestic pet markets, but one-third of the countries reported that international trade markets were their main destinations. Only 50 percent of countries have up-to-date lists and monitoring records for breeding operations, but most of them enforce sanitary measures in breeding facilities and zoos.

REGIONAL SUMMARY

Owing to the low representativeness of the Andean Region responses (only two out of four countries responded), this section describes the general patterns for only the Caribbean, Central American and South Cone subregions.

Caribbean (13 responses)

Most Caribbean countries reported trade in WBs, with imports being more common than exports. However, import volumes are extremely low, involving fewer than 1 000 specimens a year per country. With the exception of the continental countries of Suriname and Guyana, which export significant amounts of native birds, exports or re-exports in Caribbean countries are insignificant, involving fewer than 100 birds a year each. Island countries are low-volume importers and insignificant exporters, while Guyana and Suriname are high-volume exporters.

The main objective of imports is to supply the domestic pet market, while exports are commercial or for zoo exchanges. The main taxonomic groups imported are Psittaciformes, followed by Galliformes for 50 percent of countries in the subregion. Psittaciformes are the main group exported, especially from Suriname and Guyana. Most countries exchange small volumes of WBs with the United States of America, while some receive birds from other countries in the subregion and from Central America. Commercial exports from Guyana and Suriname are mainly for Europe, Asia and Mexico, but this pattern has changed recently owing to the EU ban on WB imports.

Most countries maintain import-export statistics, but the Bahamas was the only one to provide these statistics. All countries require documentation for the entry of live birds, but only half require animal health documentation.

Most countries' import restrictions are due to the risk of AI, although some invoke general animal health risks. Half of the countries have specific procedures for the early detection and control of AI, including importing only from countries that are certified free of AI and monitoring live birds at ports of entry. Exports seem to be less rigorously controlled than imports. Very few countries have export restrictions due to the risk of AI or other animal health issues.

Import and export quarantine is not frequent in the subregion. Only one-third of the countries apply quarantine, which rarely exceeds 30 days. In all cases of quarantine, tests to detect AI and Newcastle disease are performed. Precautionary quarantine seems to take place mainly at ports of entry into the subregion. For example, Barbados requires the quarantine of all birds from London, New York or Miami before entering the country.

Some 50 percent of countries have commercial captive breeding operations, but not all of them have up-to-date registers. Domestic trade in WBs is authorized in almost all the countries that responded to the survey, and more than half of them authorize the trade and export of native WBs.

Although most Caribbean countries believe the risk of HPAI entry is low or medium, two perceive it as high. Two-thirds of the countries believe the risk of HPAI leaving the country is low or non-existent, while the rest believe it to be medium or high. Most protection measures related to AI in the subregion focus on migratory species and illegal trade movements.

Central America (six responses)

All countries in the subregion have trade transactions involving WBs, mainly for commercial, scientific and zoo exchange purposes. Most are importers, and half also export. There are no re-exports in the subregion. Central America could be defined as a high-volume importer. Imported birds are for the domestic collector and pet markets, with a small percentage supplying scientific institutions. Trade volumes are fewer than 1 000 specimens a year per country, except for Mexico, which imports more than 10 000 specimens a year to supply domestic market demand. Mexico does not re-export, and its exports involve only native species, mainly for the Italian market.

Importing countries enforce import restrictions based mainly on animal health provisions (sanitary measures), with half basing restrictions on conservation. Export restrictions share the same motives.

The main taxonomic groups imported into these countries are Psittaciformes, Galliformes, Passeriformes, Struthioniformes and Anseriformes, from sources such as the United States of America, Central America and the Caribbean, mainly by air transport followed by surface means. Mexico imports birds from all over the world, involving the same taxa plus others such as Columbiformes, Ciconiformes, Coraciiformes and Piciformes. Although most countries maintain import statistics, only Mexico and Costa Rica provided details of these.

The main purpose of exports is for commercial trade, followed by exchanges with scientific institutions and zoos. Exports and re-exports of native birds are permitted in 50 percent of countries. Volumes vary from fewer than 100 to 10 000 birds a year. The most commonly exported taxa are Psittaciformes and Passeriformes, and the main destinations are the United States of America followed by Europe, Central America and the Caribbean, with a few exports going to Africa. Air and surface transport are used. All exporting countries maintain export statistics, but Mexico and Costa Rica were the only two to submit these.

Import quarantine is required in all countries, and does not exceed 30 days in all but one country. Only one country applies export quarantine. Among other tests, AI and Newcastle disease controls are performed in all countries, and the majority have specific procedures for the early detection and control of AI. All countries apply import restrictions due to AI, but only half restrict exports, following the same pattern as in the Caribbean subregion. In most countries, as in the Caribbean, WB trade is subject to specific legal requirements, while animal health documentation is less frequently required.

Almost all countries have captive breeding operations, and most have up-to-date registers of these. Most countries have up to ten breeding operations, and their entire produc-

tion is for internal markets and zoos. Mexico is the only country with more than 20 WB captive breeding operations, supplying domestic and international markets. Animal health procedures for zoos and captive breeding operations are in place in all countries. Domestic trade is permitted in several countries, although some sanitary restrictions apply.

Central American countries have diverse perceptions of the risk of HPAI entry, with most believing it to be low, but some perceiving it as high and others as non-existent. Most countries consider the risk of exporting HPAI from the region as non-existent. Central America is concerned about the HPAI issue and proposes strengthening its monitoring and control and providing incentives for producers to report AI events. In general, this subregion follows the same pattern as the Caribbean, trading only with countries that are certified free of AI and requiring exporting countries to provide animal health documentation.

South Cone (six responses)

Almost all the countries in this subregion carry out transactions involving WBs. Although most report a prevalence of imports, the main exporting countries report significant volumes, making the region a high-volume exporter and a medium-volume importer.

Most countries have import and export restrictions for sanitary reasons. Almost all have specific import restrictions against AI, while a few also apply restrictions on exports, to avoid spreading the disease.

Imports are primarily to supply the domestic market, and secondly for exchanges among scientific or zoological institutions. Import volumes vary from 100 to 1 000 specimens a year, and the main taxonomic groups imported are Psittaciformes, Passeriformes, Columbiformes and Struthioniformes. Import sources are the United States of America, South America and Europe, with lower volumes from Central America, the Caribbean, Africa, Oceania and Asia. Air is the main transport means, followed by sea. Some 50 percent of importing countries have up-to-date statistics. Argentina was the subregion's main importer, but in 2002 it imposed strict restrictions on WB imports in response to the HPAI threat, and now bans them completely.

Commercial trade and exchanges with zoos are the main purposes of exports, accounting for 100 percent of the exports reported in the survey. Several countries allow exports of native species, with volumes of between 1 000 and 10 000 specimens a year per country, making this subregion a high-volume exporter. Argentina is the main exporting country. Originally directed to Europe and Mexico, exports now go to Mexico and Asia, owing to the EU's ban on WB imports to avoid the risk of HPAI.

The main taxonomic groups exported are Psittaciformes and Passeriformes, although other ornamental species exported include Piciformes (toucans) and Phoenicopteriformes (flamingoes). Mexico is the main export destination, followed by the United States of America, South America, Europe, Africa, the Near East, Asia, Central America and the Caribbean. Transport is by air. Most countries have up-to-date export statistics.

Unusually, export quarantine is more common than import quarantine in this subregion. All countries report that the length of export quarantine depends on the requirements of the importing country, while import quarantine is more than 30 days. Tests carried out during import quarantine include AI, Newcastle disease and chlamydiosis. Most countries

have specific procedures for the early detection of AI, and require legal and animal health documentation from all the parties involved in WB trade – breeders, stockholders, traders, exporters, importers, etc.

Several countries have captive breeding operations, with an average of 20 operations per country producing for domestic and international markets. Most have up-to-date registers, but only a few have specific animal health regulations for breeding operations.

Most countries perceive the risk of HPAI entry as low or non-existent, while some regard it as low to medium. Most countries focus their responses to this risk on control and emergency preparedness plans, and only one focuses on combating illegal trade.

WILD BIRD TRADE STATISTICS FOR LATIN AMERICA AND THE CARIBBEAN (CITES)

The CITES Trade Database (UNEP-WCMC) holds statistical information on the WB trade, which provides an understanding of the dynamics of live WB trade among, from and to all the countries included in the survey. Although this report focuses on only a sample of the range of species traded globally, the patterns that emerge are sufficiently consistent to allow conclusions to be drawn.

Wild bird imports (CITES)

Tables 3 and 4 show declared gross annual imports from 2000 to 2005, by subregion and country, respectively. Central America had the most CITES-registered WB imports for the period, followed by the South Cone.

Of the 33 countries, 30 declared imports totalling 101 003 birds over the period. Mexico was the main importer, with 78 percent, while Argentina, Chile, the Dominican Republic and Venezuela together received 21 percent, and the remaining 25 countries 1 percent.

Argentina, Chile, the Dominican Republic and Venezuela have progressively reduced their WB transactions in recent years, making Mexico the main WB importer in the region. Because the volume reductions of these secondary importers have been compensated for by increased imports into Mexico, the total number of WBs imported annually into the region has remained relatively constant. As shown in Table 4, between 2003 and 2005, Latin America and the Caribbean received 54 071 CITES-registered WBs (18 000 per year), from 38 countries around the world, especially in Africa. Mexico imported 50 248 (96 percent) of these birds. This is also reflected at the subregional level, with imports decreasing in all subregions except Central America, where they remained stable or increased (Table 3).

TABLE 3
CITES WB imports into Latin American and Caribbean subregions, 2000 to 2005

Region	2000	2001	2002	2003	2004	2005	Total
Central America	8 320	14 518	5 908	13 687	15 780	20 890	79 103
Caribbean	224	1 108	836	487	176	56	2 887
Andean Region	441	169	150	150	969	120	1 999
South Cone	7 733	6 873	652	730	773	253	17 014
Total	16 718	22 668	7 546	15 054	17 698	21 319	101 003

Source: WCMC.

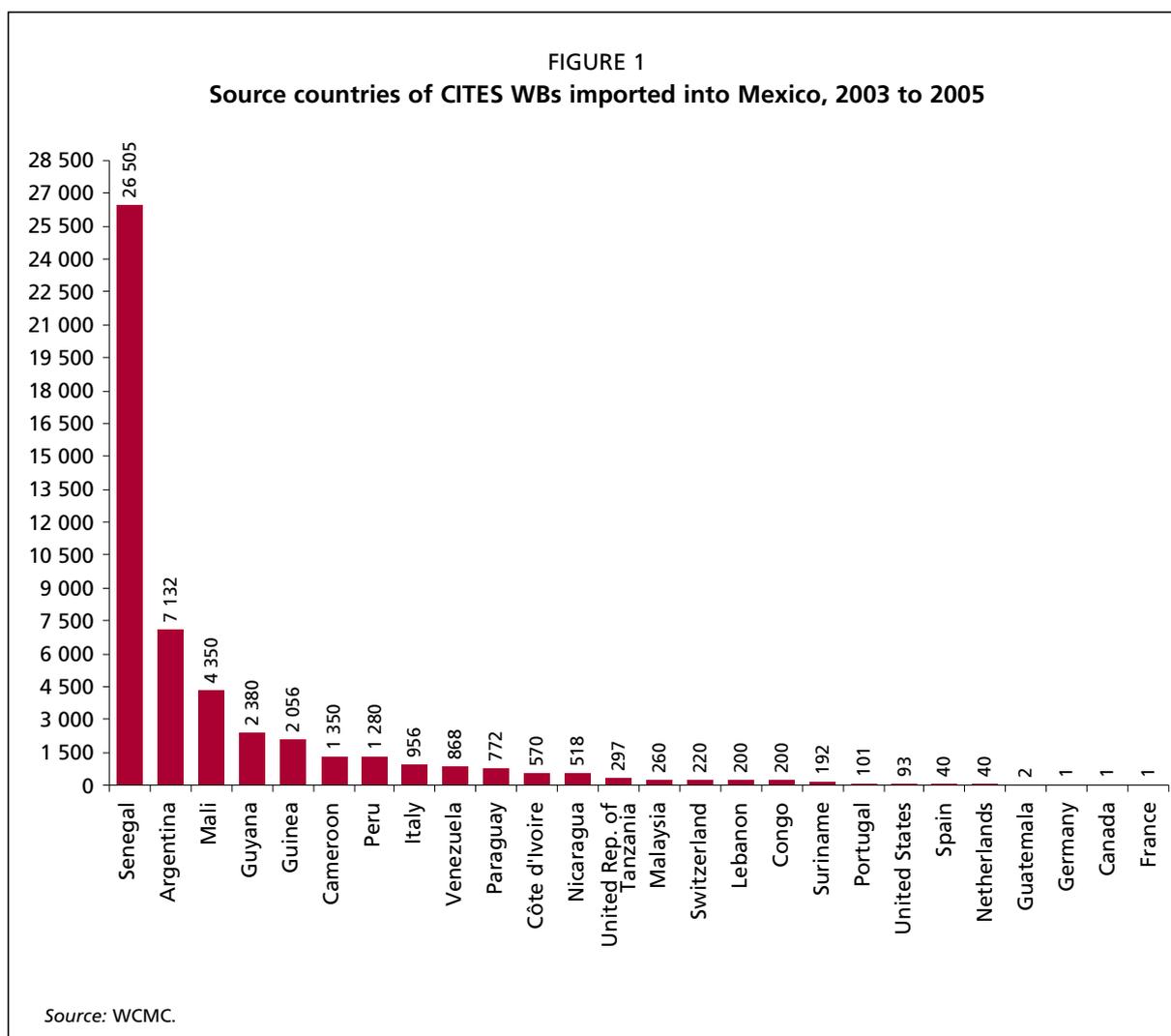
Figure 1 shows 26 source countries for WB imports into Mexico between 2003 and 2005. Some 69 percent of birds originated in African countries, especially Senegal, which accounted for 53 percent of WB imports into Mexico. Argentina was the second-most important source of WBs, providing 14 percent of Mexico's total imports.

The statistics returned by Mexico showed that this country imports large amounts of non-CITES species, mainly Galliformes and Anseriformes, which are considered domestic species. In 2005, 41 476 WBs entered Mexico in addition to the 20 827 reported in CITES

TABLE 4
CITES WB imports into Latin American and Caribbean countries, 2000 to 2005

Country	2000	2001	2002	2003	2004	2005	Total
Mexico	8 040	14 437	5 897	13 657	15 764	20 827	78 622
Argentina	5 998	6 599	551	359	400	201	14 108
Chile	1 714	262	78	347	365	48	2 814
Dominican Republic	130	1 030	806	283	96		2 345
Venezuela	435	168	132	148	964	120	1 967
Panama	91	70	8	18		58	245
Cuba	64	62			34	2	162
Honduras	156					2	158
Jamaica	8			148			156
Trinidad and Tobago		2		40		51	93
Brazil	13	6	15	14	4	2	54
Costa Rica	31	4	2		12	2	51
Antigua and Barbuda					44	2	46
Saint Vincent and the Grenadines	18	12	4				34
Grenada			4	14			18
Peru	5		10	2	1		18
Barbados	1		12	2	1	1	17
Guatemala		4	1	10	2		17
Uruguay	1	2	4	5	3	2	17
Bolivia	6	4	4	2			16
Colombia	1	1	8				10
Saint Kitts and Nevis			8				8
Paraguay	1			3	1		5
Ecuador					4		4
El Salvador	2			2			4
Bahamas	3						3
Belize		3					3
Nicaragua					2	1	3
Suriname		2			1		3
Saint Lucia			2				2
Total	16 718	22 668	7 546	15 054	17 698	21 319	101 003

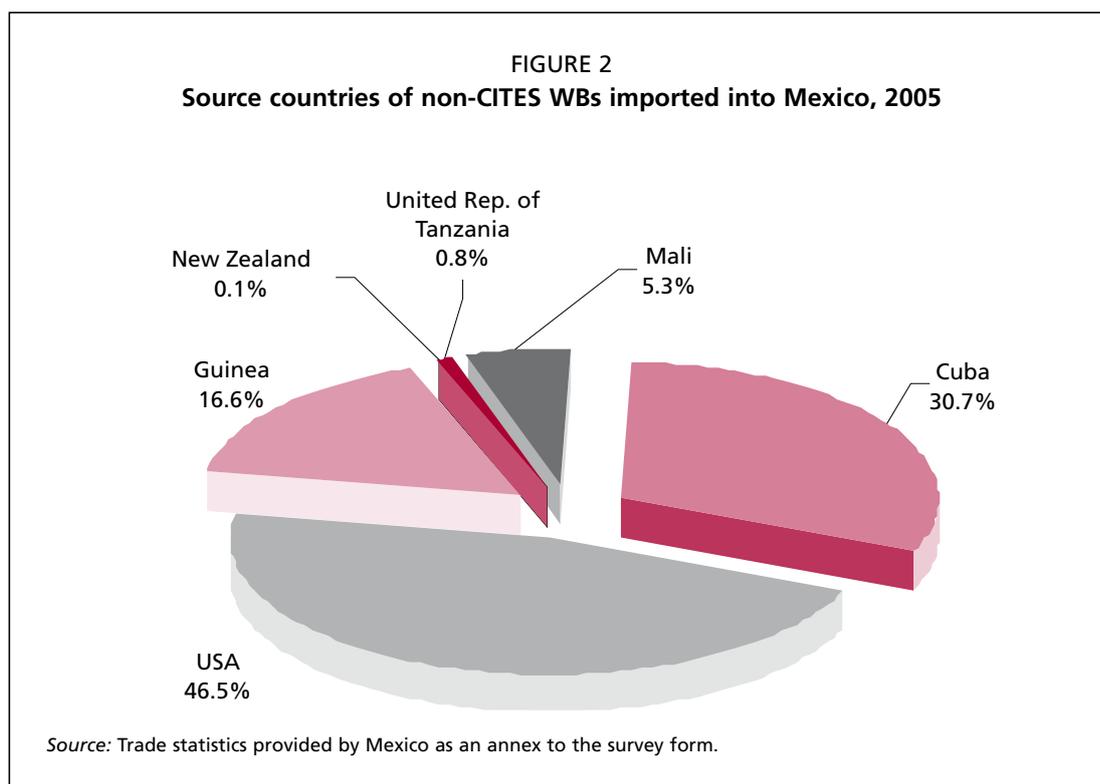
Source: WCMC.



statistics; 20 percent of these were domestic Galliformes (pheasants, Guinea fowls), and the rest were mainly caged and ornamental birds. Mexico's annual trade figures, including CITES and other wild species (but excluding domestic species) are therefore approximately 50 000 specimens a year. These figures suggest that CITES statistics reflect about 35 to 40 percent of the actual WB trade for that country.

Most of the non-CITES birds imported into Mexico during 2005 came from the United States of America and Cuba (Figure 2). The United States exported mainly turkeys, pheasants, Guinea fowls, ostriches and geese of various species (Galliformes, Anseriformes and Struthioniformes), mainly domestic, while Cuba exported captivity-bred Psittaciformes. African countries provided small birds (Passeriformes), and smaller volumes of Anseriformes, Piciformes and Coraciiformes.

This pattern of trade in domestic, non-CITES or captivity-bred birds with the United States of America could also occur with other countries in the region, particularly those in Central American, and is outside the scope of this survey. While inter-regional imports involve ornamental birds such as parrots, parakeets, cockatoos and small birds, trade between neighbouring countries (such as Mexico and the United States of America) involves domestic and other birds, including geese, pheasants and Guinea fowls.

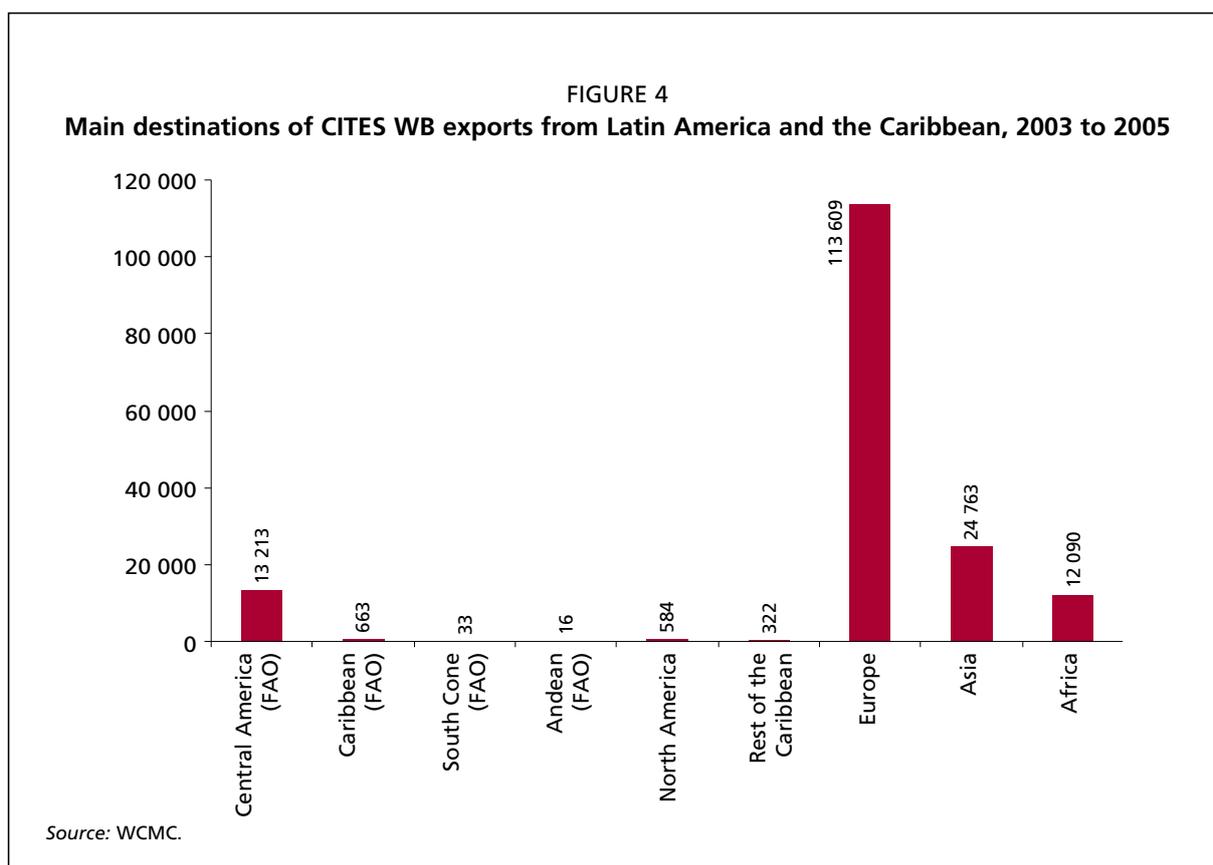
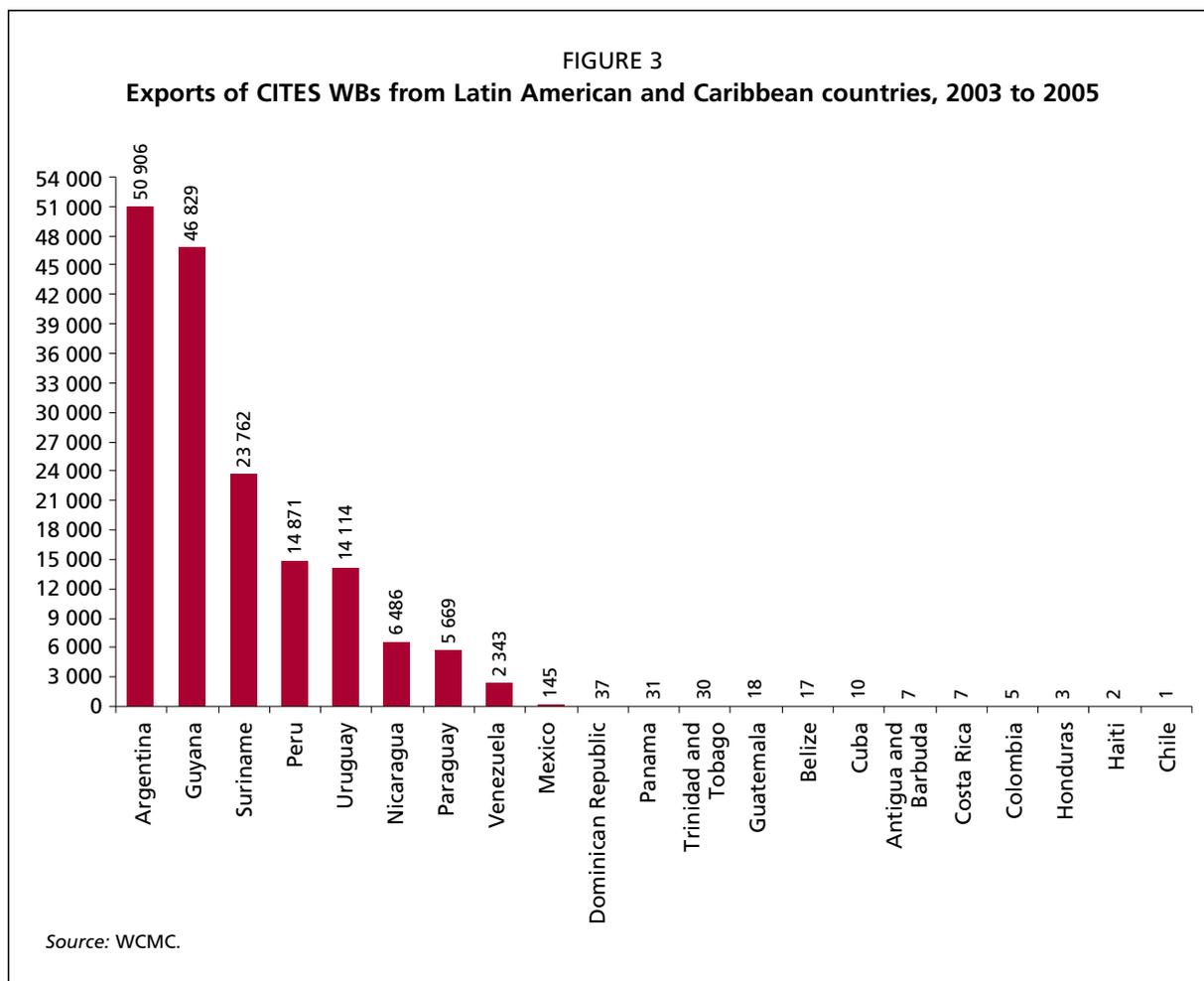


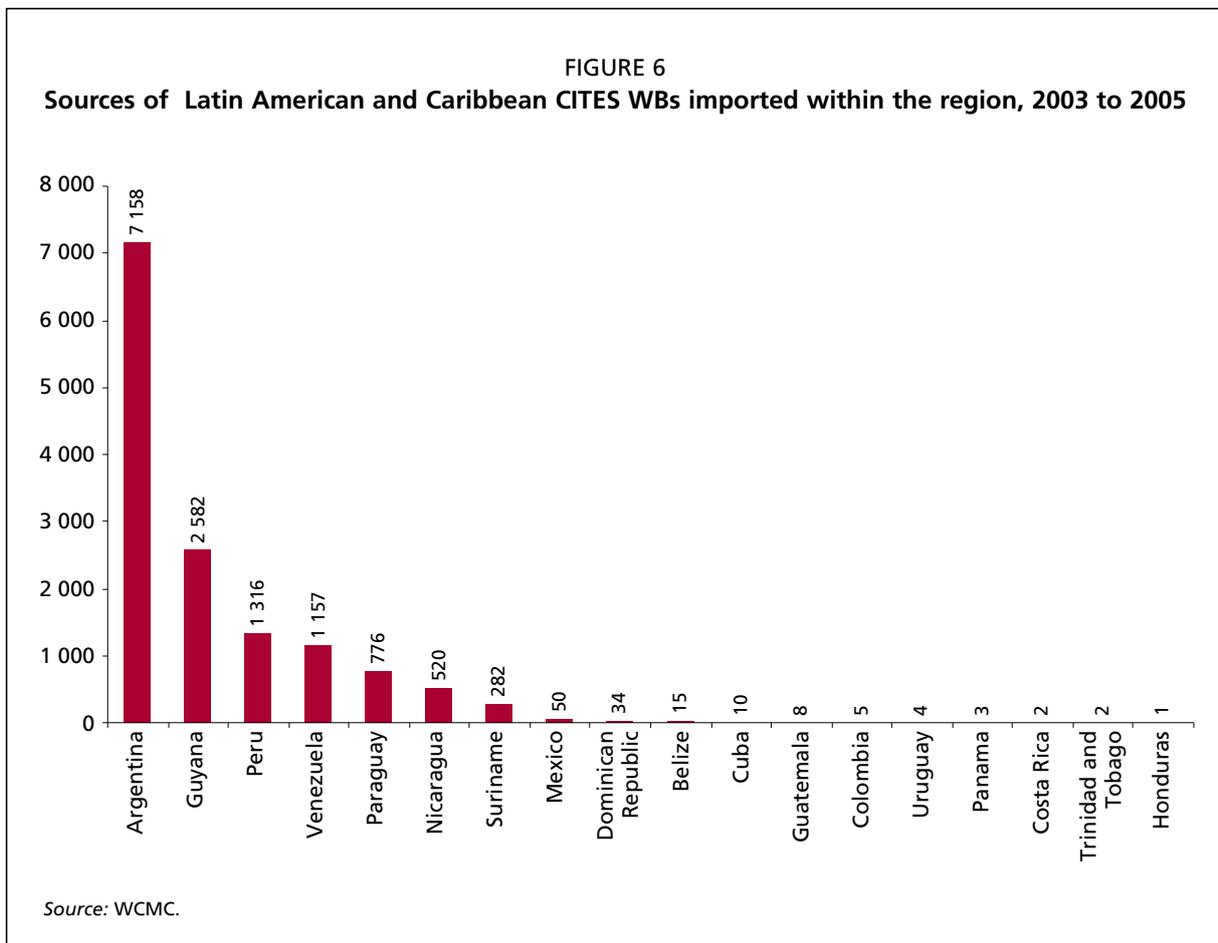
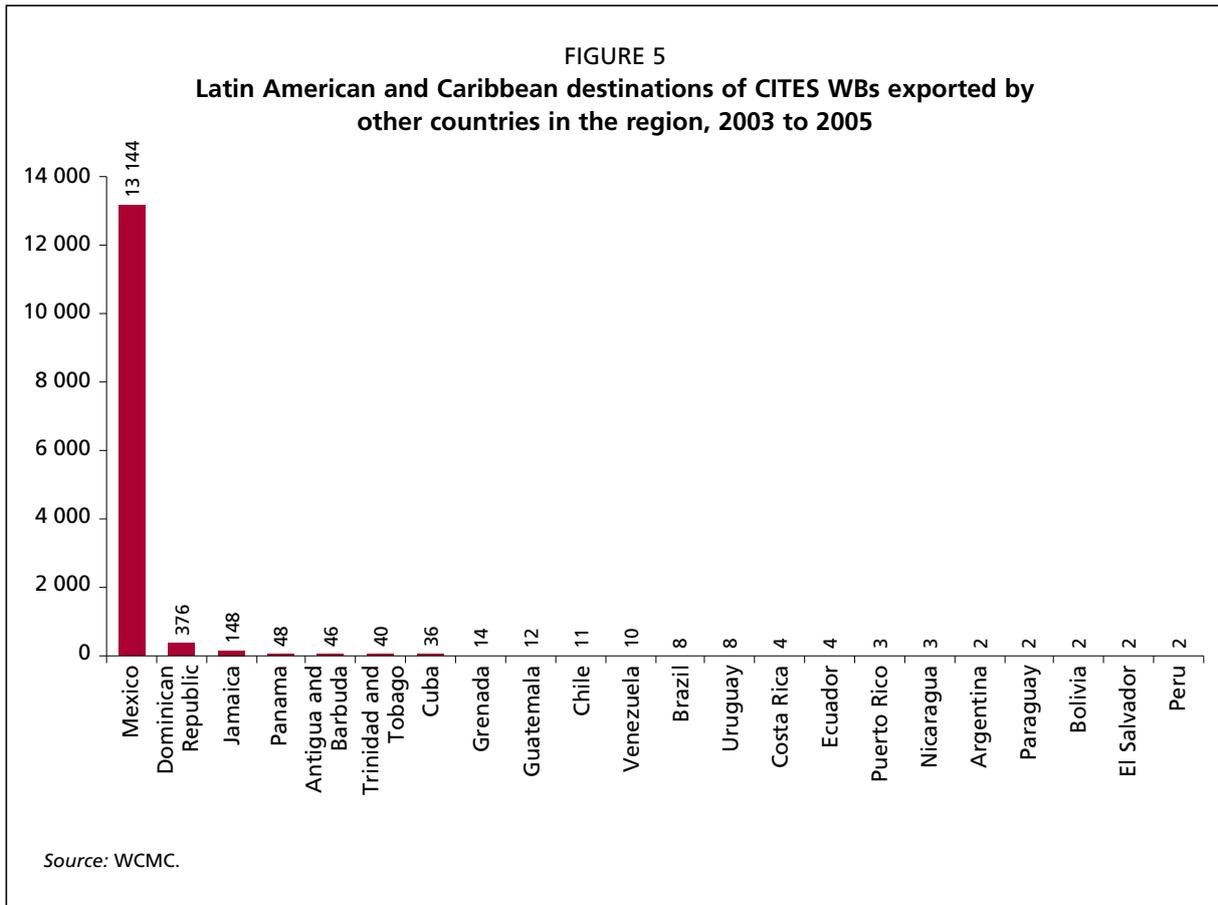
Wild bird exports (CITES)

Figure 3 shows total exports of CITES WBs from 21 countries in Latin America and the Caribbean during 2003 to 2005. Unlike imports – for which one country dominates (Mexico) – eight countries are heavily involved in exports. In order of importance these are Argentina, Guyana, Suriname, Peru, Uruguay, Nicaragua, Paraguay and Venezuela, which together exported 99.8 percent of the 165 293 birds traded by countries in the region.

Most birds were exported to Europe (69 percent), followed by Asia and Africa, although a significant proportion were traded among countries in Latin America and the Caribbean (8.4 percent; Figure 4). Mexico absorbed 94 percent of the 13 925 birds circulated within Latin America and the Caribbean (Figure 5). Argentina produced 50 percent of the birds exported in the region (Figure 6).

Although in the recent past Argentina was the leading Latin American and Caribbean exporter to Europe, this trend has changed, and the volumes decreased drastically in 2006 and 2007, owing to the EU's import ban. This ban led to changes in the destinations and volumes of birds exported from Argentina, Guyana and Suriname, which now export mainly to Asia and Mexico. Both of which are still significant WB consumers.





Chapter 5

Conclusions

According to CITES statistics and the completed survey forms, Mexico is the only significant WB importer in Latin America and the Caribbean, with some 50 000 birds per year, originating mainly in Africa and other countries in this survey, such as Argentina, Guyana, Peru, Venezuela and Cuba. Mexico is not a significant WB exporter or re-exporter, absorbing most imports into its internal market. For example, birds from Africa are not recirculated in the region after entering Mexico.

Several countries in Latin America and the Caribbean export birds to Mexico and have historically provided native species to the rest of the world, especially the United States of America, Europe, Asia and Africa. After 1992, when the United States imposed a trade ban for animal welfare and conservation reasons (United States Wild Bird Conservation Act), Europe became the most important importer of WBs from the region, with significant volumes of American Passeriformes and Psittaciformes.

The magnitude and nature of trade in WBs from Latin America and the Caribbean experienced another substantial change when the EU established a ban on WB imports in 2006. Commercial trade in WBs dropped dramatically at the global level, requiring Argentina, Guyana, Suriname, Peru, Venezuela and Nicaragua to seek new destinations for their WB exports. Currently, market demand is concentrated in Asia, Africa and Mexico, the last of which has increased its imports.

The long-term impact of the European trade ban has raised concerns, and the situation is being analysed, as some consider that total bans on legal trade can promote illegal trade. For example, animal health authorities in Argentina established a temporary ban on all bird imports in 2005. This ban produced a significant reduction in legal imports of both CITES and non-CITES species, eliminating Argentina from the list of importing countries. WBs historically imported into Argentina came from European countries (mainly Portugal and Spain) and were subject to strict sanitary measures (quarantine). As an example, birds exported from Senegal were first imported into Europe (undergoing two quarantines, one in Senegal and one in Europe) and then re-exported to Argentina, where they were subject to import quarantine. Strictly regulated legal trade allows the monitoring and control of conservation and animal health issues, and supplies market demand, which may turn to illegal trade if legal trade is banned.

As a security measure, most countries in the region, particularly in the Caribbean, do not import birds from countries that have reported AI cases. Although most countries reported some exchange of WBs, not all of them have specific procedures for the early detection and control of AI, nor do they all require sanitary documentation. In many countries, the general perception is that avoiding trade with countries infected with HPAI removes the risk of the disease being introduced. Control efforts are therefore low. In many of the countries surveyed, the risk of HPAI entry is perceived as low or medium. Nevertheless, commercial

trade has declined drastically in recent years, particularly concerning imports: apart from Mexico, countries reported importing only 100 to 1 000 specimens a year.

Throughout the region, there is a lack of consistency concerning the type of controls enforced and the documentation that is required for trading in WBs at the international level. This is regardless of the individual country's level of involvement in WB trade, and hampers the exchange of information and the prevention or mitigation of health problems. Some countries require a wide range of legal and sanitary documentation, and apply rigorous controls through quarantine, while others have no such requirements. The risk with such inconsistency is that it leaves an open door through which HPAI can enter and – even more serious (should an entry occur) – makes it impossible to determine accurately how and when an outbreak first occurred, and where it is likely to hit next. There is need for a regional prevention and early warning system and for emergency response plans.

Migratory birds and bird smuggling are a major concern. In their replies to the survey, many countries suggested that this calls for establishing or strengthening domestic and international restrictions, creating bodies to monitor bird migrations, setting up coastline surveillance systems to counter smuggling, and using groups of volunteers (such as through non-governmental organizations [NGOs]) to detect the disease. Countries also suggested that outbreaks of HPAI should be communicated immediately through a specially established international administrative body. Other constructive suggestions included creating economic incentives for producers and/or traders, encouraging them to report cases of HPAI.

Chapter 6

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Annex

Instructions and survey form



SURVEY ON INTERNATIONAL TRADE IN WILD LIVE BIRDS (AND OTHER RELEVANT MOVEMENTS) IN LATIN AMERICA AND THE CARIBBEAN

INTRODUCTION

The attached opinion poll on international trade in wild birds (and other relevant movements), is aimed to assess the specific composition, scale and sense of artificial movements (induced by man) of live wild birds to, from and among the 33 countries of the Caribbean, Central America, Andean and Southern Cone Regions, as an integral part of the Emergency Assistance for Early Detection and Prevention of Highly Pathogenic Avian Influenza (HPAI) models. The information obtained through this survey will allow each country to reinforce (or establish) an appropriate and effective level of monitoring according to the existing risks. In this sense, the valuation of real risks can be observed graphically once all information from and among countries is compiled and analyzed.

We thank you in advance for your cooperation and for any comments you may wish to convey in regards to the project and/or survey.

GENERAL INSTRUCTIONS

The survey has been designed to be easily completed by computer or as a printout. Please read carefully and follow the instructions. If it becomes necessary, please attach extent contents as an annex in same paper size. Once completed, please email a digital version (electronic form or the completed scanned printout) and any attached information to the sender before July 15th, 2007.

The average time for completing the survey is approximately 45 minutes. In order not to exceed the average time, we suggest you quickly read the form and gather support information before completing, such as

- National and international movements of wild living birds registers,
- Information on volumes of these movements,
- Information on captive breeding of wild birds, and
- Contacts and consultations with wildlife sanitary authorities.

GLOSSARY

Wild Living Birds (WLB): all avian wildlife species (native or captive bred locally or from other country) in trade as pets, or in trade among collectors, or exchanged for scientific and zoological purposes, except for those bred in ranches, commonly defined as poultry or domestic birds, mainly for human consumption.

International trade: trade (import, export, re-export) of wild living birds among countries in the region and to the rest of the world, with primarily commercial purposes.

Local trade/Internal market: refers to all trade having place within the country's boundaries.

Captive breeding: refers to reproducing and breeding wild birds regardless of the purpose for doing so.

Captive breeding operations: refers to wild bird captive breeding for commercial purposes.

Relevant movements: exchange among zoos, scientific institutions or any other movement originated by human beings in relation to wild birds among countries in the region and to the rest of the world, where purpose of trade is not primarily commercial.

Export: refers to shipping wild live birds from one country to another.

Exporter: refers to the country, individual or corporate body exporting wild live birds.

Import: refers to the admission into the country of wild live birds from abroad.

Importer: refers to the country, individual or corporate body importing wild live birds.

Scientific institutions: refers to academic or research institutions working with wild live birds.

Re-export: refers to shipping previously imported wild live birds from other country to another country.

Re-export: refers to the country, individual or corporate body re-exporting wild live birds.

Transit: refers to the circumstantial passage of wild live birds through a country which is in the route between trading countries.

Zoos: refers to free access zoological collections (zoological gardens).

CONTENTS EXPLANATION

a) COUNTRY'S POSITION REGARDING INTERNATIONAL TRADE IN *WLB*

Aims to determine if your country could eventually be a receptor or transporter of a vector through trade in *WLB*. The results of this survey will allow identifying possible external and internal threats, as well as existing assessments for preventing epidemics originating in *WLB*.

b) RESTRICTIONS TO INTERNATIONAL TRADE IN *WLB*

Aims to determine the present status of trade restrictions (in the region) and the relationship between regulations and diseases prevention originating in *WLB*.

c) IMPORT AND EXPORT

Aims to evaluate and qualify risks according to the different taxonomic groups involved, and the scale of movements, as well as knowledge on transport modalities, facilitating detection (and further prevention) of vectors acquired before and after *WLB* movements.

d) SANITARY AND EPIDEMIOLOGIC ASPECTS

Although some diseases such as AI H5N1 could require longer incubation time over the quarantine, it is essential to know how this process occurs and the importance assigned to it, since it is at this stage that it is possible to effectively work on prevention.



SURVEY ON INTERNATIONAL TRADE IN WILD LIVE BIRDS (AND OTHER RELEVANT MOVEMENTS) IN LATIN AMERICA AND THE CARIBBEAN

The Caribbean and Latin American countries, together with FAO, are implementing four emergency regional assistance projects for the early detection of the Highly Pathogenic Avian Influenza. In this context, a Regional Geographic Information System is being developed, with the aim of improving the epidemiological monitoring and the risk analysis for the participating countries. We would appreciate your valuable cooperation with this survey, which will provide an important support to such a system, offering relevant information regarding trade and other movements of wild live birds.

1. INFORMATION ON THE PERSON IN CHARGE TO RESPOND THE SURVEY

1. Complete name	2. Occupation	3. Title	4. Organism / Department	4. Country
5. Address	6. Phone/Fax	7. E-mail	8. Date	

2. COUNTRY'S POSITION REGARDING INTERNATIONAL TRADE IN WILD LIVE BIRDS (WLB)

a. Does any international trade in wild live birds occur in your country? yes no

If "yes" what is the purpose?

Commercial Exchange with zoos Scientific Others (explain):

b. Which is/are the role/s of your country in this trade?

Exporter Importer Re-exporter Transit Other (explain):

c. Are there captive breeding operations in your country? yes no

If "yes" please estimate a figure: < than 5, between 5 and 10 , between 10 and 20 , > than 20

d. What is the purpose of captive breeding operations?

Internal market International trade Exchange with zoos Scientific Others (explain):

e. Does your country have an updated register of wild bird captive breeding operations? yes no

3. RESTRICTIONS TO INTERNATIONAL TRADE IN WLB

a. Does your country allow imports of wild live birds yes no yes with reservations

In case of restrictions, please explain if this responds to ethical, conservation, animal sanity, human health, or other reasons:

b. Does your country allow exports / re-exports of wild live birds? yes no yes with reservations

In case of restrictions, please explain if this responds to ethical, conservation, animal sanity, human health, or other reasons:

c. Does your country allow internal trade in live birds? yes no yes with reservations

In case of restrictions, please explain if this responds to ethical, conservation, animal sanity, human health, or other reasons:

d. Are there any partial or total restriction of imports on wild live birds due to avian influenza? yes no

Please explain:

e. Are there any partial or total restriction of exports / re-exports on wild live birds due to avian influenza?yes no

Please explain:

f. In case there is legislation in place regulating or restricting trade in wild birds due to avian influenza, please explain what kind of restrictions/regulations and indicate legal supporting instrument(s) for those restrictions/regulations and there date of entry into force:

4. IMPORTS (complete only if there were any registered movements between 2003 - 2007)

a. Please, indicate the purpose(s) for the import of wild birds into your country:

- Internal market Commercial re-export Exchange with zoos Scientific Other - Please, clarify:

b. Indicate the scale of the imports into your country:

- < 100 birds annually
 100 to 1000 birds annually
 1000 y 10000 birds annually
 > 10000 birds annually
 no information

c. Please indicate which of the following taxonomic groups has been imported into your country over the last three years:

- | | |
|---|---|
| <input type="checkbox"/> Anseriformes (ducks, geese, swans, oaks, mergansers) | <input type="checkbox"/> Passeriformes (common small birds) |
| <input type="checkbox"/> Charadriiformes (jacanas, lapwings, plovers, stilts, terns, gulls) | <input type="checkbox"/> Pelecaniformes (pelicans, cormorants, booby, frigatebirds) |
| <input type="checkbox"/> Ciconiiformes (storks, herons, ibis, spoonbills) | <input type="checkbox"/> Phoenicopteriformes (flamingos) |
| <input type="checkbox"/> Columbiformes (pigeons, doves) | <input type="checkbox"/> Podicipediformes (freshwater diving birds, grebes) |
| <input type="checkbox"/> Falconiformes (eagles, hawks, kites, buzzards, vultures, falcons) | <input type="checkbox"/> Psittaciformes (parakeets, parrots, macaws) |
| <input type="checkbox"/> Galliformes (pheasants, turkeys, grouses, chickens, quails) | <input type="checkbox"/> Strigiformes (owls) |
| <input type="checkbox"/> Gruiformes (cranes, limpkins, crakes, coots) | <input type="checkbox"/> Struthioniformes (ostriches, emus) |
| <input type="checkbox"/> Others: | |

d. Please indicate regions of origin and/or source of the wild live birds imported into your country:

- | | | | |
|---------------------------------|--------------------------------------|--|--|
| <input type="checkbox"/> Africa | <input type="checkbox"/> Europe | <input type="checkbox"/> Central America and Caribbean | <input type="checkbox"/> North America |
| <input type="checkbox"/> Asia | <input type="checkbox"/> Middle east | <input type="checkbox"/> South America | <input type="checkbox"/> Pacific/Oceania |

e. Please indicate most important countries of origin and/or sources of the imports entering to your country and, if possible, means of transport for each case:

Country of origin	Airway	Ship	Terrestrial	Commercial line(s) most commonly used
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

f. Does your country have an updated statistics of imports of wild live birds? yes no

If "yes", please attach available information for the period 2003 - 2007, or for the last three years including statistics for 2007. Required information should include data on the different species, countries of origin, source countries, volume and purpose of transaction (commercial, research, zoos, etc.).

5. EXPORT/RE-EXPORT (complete only if registered operations have taken place during 2003 - 2007)

a. Please indicate the purpose(s) of exports/re-exports of wild live birds in your country:

- Commercial Exchange with zoos Scientific Others (explain):

b. Does your country allow export of native wild birds? yes no - Please explain:

c. Does your country allow re-export of wild birds originating from other countries? yes no - Please explain:

d. Please select the scale of the exports/re-exports of live birds in your country:

- < 100 birds annually
- 100 to 1000 birds annually
- 1000 y 10000 birds annually
- > 10000 birds annually
- no information

e. Does your country allow wild birds in "transit"? yes no - Please explain:

f. Do you consider your country as usual transit for trade in birds between other countries? yes no
Please explain:

g. Please indicate which of the following taxonomic groups has been exported/re-exported from your country over the last three years:

- | | |
|---|---|
| <input type="checkbox"/> Anseriformes (ducks, geese, swans, oaks, mergansers) | <input type="checkbox"/> Passeriformes (common small birds) |
| <input type="checkbox"/> Charadriiformes (jacanas, lapwings, plovers, stilts, terns, gulls) | <input type="checkbox"/> Pelecaniformes (pelicans, cormorants, booby, frigatebirds) |
| <input type="checkbox"/> Ciconiiformes (storks, herons, ibis, spoonbills) | <input type="checkbox"/> Phoenicopteriformes (flamingos) |
| <input type="checkbox"/> Columbiformes (pigeons, doves) | <input type="checkbox"/> Podicipediformes (freshwater diving birds, grebes) |
| <input type="checkbox"/> Falconiformes (eagles, hawks, kites, buzzards, vultures, falcons) | <input type="checkbox"/> Psittaciformes (parakeets, parrots, macaws) |
| <input type="checkbox"/> Galliformes (pheasants, turkeys, grouses, chickens, quails) | <input type="checkbox"/> Strigiformes (owls) |
| <input type="checkbox"/> Gruiformes (cranes, limpkins, crakes, coots) | <input type="checkbox"/> Struthioniformes (ostriches, emus) |
| <input type="checkbox"/> Others: | |

h. Please indicate the regions to which wild live birds are exported/re-exported from your country:

- | | | | |
|---------------------------------|--------------------------------------|--|--|
| <input type="checkbox"/> Africa | <input type="checkbox"/> Europe | <input type="checkbox"/> Central America and Caribbean | <input type="checkbox"/> North America |
| <input type="checkbox"/> Asia | <input type="checkbox"/> Middle east | <input type="checkbox"/> South America | <input type="checkbox"/> Pacific/Oceania |

i. Please indicate the most important countries of destination of exports/re-exports from your country and the most frequent means of transport for each case:

Country of origin	Airway	Ship	Terrestrial	Commercial line(s) most commonly used
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

j. Does your country have an updated statistics of exports/re-exports of wild live birds? yes no

If "yes", please attach available information for the period 2003 - 2007, or for the last three years including statistics for 2007. Required information should include data on the different species, countries of origin, source countries, volume and purpose of transaction (commercial, research, zoos, etc.). and in the case of re-exports, countries of origin.

6. SANITARY AND EPIDEMIOLOGIC ASPECTS

a. Please indicate if your country requires quarantine for imported wild live birds import : yes no
Time in days:

b. Please indicate if your country requires quarantine for exported/re-exported wild live birds import: yes no
Time in days:

c. Please indicate if your country establishes any particular sanitary measures for wild birds in transit: yes no
Please explain:

d. Please indicate if your country establishes any particular sanitary measures for zoos and captive breeding operations with wild birds: yes no - Please explain:

e. Please indicate which sanitary controls are applied to wild birds in quarantine:

	Import quarantine	Export quarantine
Avian Influenza	<input type="checkbox"/>	<input type="checkbox"/>
Clamydiosis	<input type="checkbox"/>	<input type="checkbox"/>
Newcastle	<input type="checkbox"/>	<input type="checkbox"/>
Others	<input type="checkbox"/>	<input type="checkbox"/>

f. In the case that preventive sanitary controls are applied during quarantines, please indicate if these controls are applied to all specimens or to a sample, or if these controls depend on the related taxonomical group (in this case, indicate the monitored groups and the sampling or individual control):

g. Please indicate if the import and export quarantines take place in the same building/facility: yes no
Please explain:

h. If "yes", indicate if birds are contained in isolated epidemiological units: yes no
Please explain:

i. Please indicate if during quarantines wild birds share the same facility, or epidemiological units, with domestic birds in quarantine:

j. Please indicate an estimated distance between quarantine facilities and ports of entry/departure, trading, stockpiling and distribution points in your country:

Maximum distance between boundary (or port) and quarantine facilities: km.
Maximum distance between quarantine facilities and stockpiling, trade or distribution points: km.

k. In case of existing specific regulations on quarantines, please describe:

l. Please indicate if your country has established particular procedures for early detection and control of avian influenza related to trade, zoo and scientific exchange of wild birds: yes no
If "yes", please describe briefly procedures and state the date of entry into force of those procedures:

7. GENERAL AND SANITARY DOCUMENTATION

a. Does your country request legal proof / documents to authorize exchange of wild live birds? yes no

b. If "yes", please indicate in general the legal proof / documentation requested by your country to authorize exchange of wild birds for the following categories:

Zoos / Scientific institutions	
Commercial breeding facilities	
Stockpilers and local traders	
Exporters	
Importers	

c. Please indicate necessary documentation for export/re-export of CITES species:

d. Please indicate necessary documentation for import of CITES species:

e. Please indicate necessary documentation for export/re-export for NON-CITES species:

f. Please indicate necessary documentation for import of NON-CITES species:

g. Please indicate the sanitary documents requested to authorize exchange of wild birds for the following categories:

Zoos / Scientific institutions	
Commercial breeding facilities	
Exporters	
Importers	

h. Please indicate kind of documentation certifying that import or export quarantine has taken place:

i. Please indicate name of person in charge of sanitary aspects for wild birds subject to international trade in your country, complete address and department/title:

8. OTHERS

a. Which additional preventive measures, other than the indicated above, your country implemented concerning avian influenza and trade in wild live birds?

b. What is your perception regarding risks of entry or exit of avian influenza in your region?

Risk of entry (select one): high, medium, low, none, fail to recognize

Risk of exit (select one): high, medium, low, none, fail to recognize

Please explain:

c. Please describe actions you believe should be taken to reduce risks:

d. Additional comments and information:

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The highly pathogenic avian influenza (HPAI) virus H5N1 has become a serious problem worldwide, causing a critical health situation. The annual movement of millions of live wild birds to meet the demand for international trade in pets and ornamental birds poses a serious risk of HPAI spread into new regions. This document presents the results of a study of trade in live wild birds in 33 countries of Latin America and the Caribbean, conducted within the framework of FAO's technical assistance projects for the prevention of HPAI in the region. The study assesses the magnitude and dynamics of wild bird trade and the regulatory health conditions under which it takes place.