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Descriptive Analysis Report of Wild Bird Imports to the United States (2004–2009)



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Abstract: Regulatory authority over the importation of wild birds is currently divided among several Federal agencies including the U.S. Department of Agriculture’s Animal and Plant Health Inspection Service Veterinary Services (USDA:APHIS:VS), the U.S. Fish and Wildlife Service (FWS), and the Centers for Disease Control and Prevention (CDC). In a 2010 report to the U.S. Senate Committee on Homeland Security and Governmental Affairs, the U.S. Government Accountability Office found that because each of the agencies is focused on different aspects of live animal imports, no single entity has comprehensive responsibility for the zoonotic and animal disease risks posed by live animal imports ([GAO 2010](#)).

This report presents a summary of wild bird import data collected by the U.S. Fish and Wildlife Service from 2004 to 2009. Wild birds were specifically chosen because of the frequency and severity of zoonoses introduced by wild species and the interaction between pet birds of wild origin, domestic fowl, and humans (OIE 2011; CDC 2011). The importation of wild birds and other animals has raised concerns about the risk these animals present to both animal and human health in the United States and globally. Two exotic diseases of paramount economic concern to animal and human health in the United States that can be transmitted by wild birds are HPAI and Exotic Newcastle Disease (END). The United States has experienced outbreaks of END and HPAI in the past, and future outbreaks remain a concern.

Keywords: Zoonotic, wild birds, imports, infectious diseases, emerging trends

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Descriptive Analysis Report of Wild Bird Imports to the United States (2004–2009)

Introduction	1
Data	1
Results	2
Overall Trends	2
Trends by Order	3
Trends by Family	5
Trends by Genus	6
Trends by Country of Origin.....	7
Trends by Port of Entry.....	10
Discussion.....	11
Conclusion	12
References.....	12

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Descriptive Analysis Report of Wild Bird Imports to the United States (2004–2009)

INTRODUCTION

Zoonotic diseases represent an increasing and significant threat to global health. In the past 70 years, zoonotic pathogens caused the majority of emerging infectious diseases, and the majority of these zoonotic pathogens originated in a wildlife species, including West Nile in the United States and Highly Pathogenic Avian Influenza (HPAI) globally (Pavlin et al. 2009; OIE 2011; CDC 2011). The number of infectious disease outbreaks caused by pathogens originating in wildlife has increased significantly over this same time (Jones 2008). These trends emphasize that a comprehensive plan to protect the United States from diseases, particularly zoonotic disease, should include research into identifying the risks of wildlife-human interaction and targeting surveillance efforts on activities that result in wildlife-human contact.

The United States is the world's largest wildlife importer (Pavlin et al. 2009). Multiple Federal agencies have regulatory authority over wildlife imports to the United States ([CFR Title 50 Part 14](#)). The combined regulations of these Agencies mitigate some of the risk to animal and public health, but do not completely eliminate all risk. Despite the existence of wild animal import rules, including those for exotic animals frequently imported for the pet business, lack of regulatory coordination leaves the United States vulnerable to disease incursions ([GAO 2010](#)).

This report presents an analysis of wild bird import data collected by the U.S. Fish and Wildlife Service (FWS) from 2004 to 2009. Birds were specifically chosen because of the frequency and severity of zoonoses introduced by wild species (OIE 2011; CDC 2011) and the interaction between pet birds of wild origin, domestic fowl, and humans.

DATA

The data used for this analysis are declared wildlife imports to the United States from 2004 through 2009 as recorded in the Office of Law Enforcement (OLE) Law Enforcement Management Information System (LEMIS) database. Specifically, data concerning imports of wild birds were analyzed. LEMIS data originate from [USFWS Form 3-177](#), U.S. Fish and Wildlife Service Declaration for Importation or Exportation of Fish or Wildlife (USFWS 2010). All wildlife species entering the United States must be declared at the port of entry, using this form. Wildlife is broadly defined in this report as live animals that are either captured from the wild, raised or bred in captivity for legal export to the United States, and may include native and non-native (exotic) species and laboratory animals. The Centers for Epidemiology and Animal Health (CEAH) has reviewed the data and worked with FWS to correct any data entry error. Occasional changes in taxonomic classifications can also be a source of error in these data. Where such changes were identified, the data have been modified, accordingly. Any minor inaccuracies that remain do not significantly affect the general trends, findings, and conclusions of this report.

RESULTS

Overall Trends

The number of birds imported into the United States from 2004 to 2009 has declined from 334,147 birds in 2004 to 162,308 birds in 2009 (Figure 1)¹. This figure represents a 51 percent reduction in number of birds imported from 2004 to 2009. Similarly, the number of shipments has declined from 681 in 2004 to 514 in 2009, a reduction in number of shipments by 25 percent. In the six-year period from 2004 to 2009, 73 percent of all shipments entering the United States contained only one wild bird species. The remaining 27 percent of shipments contained between 2 and 25 species.

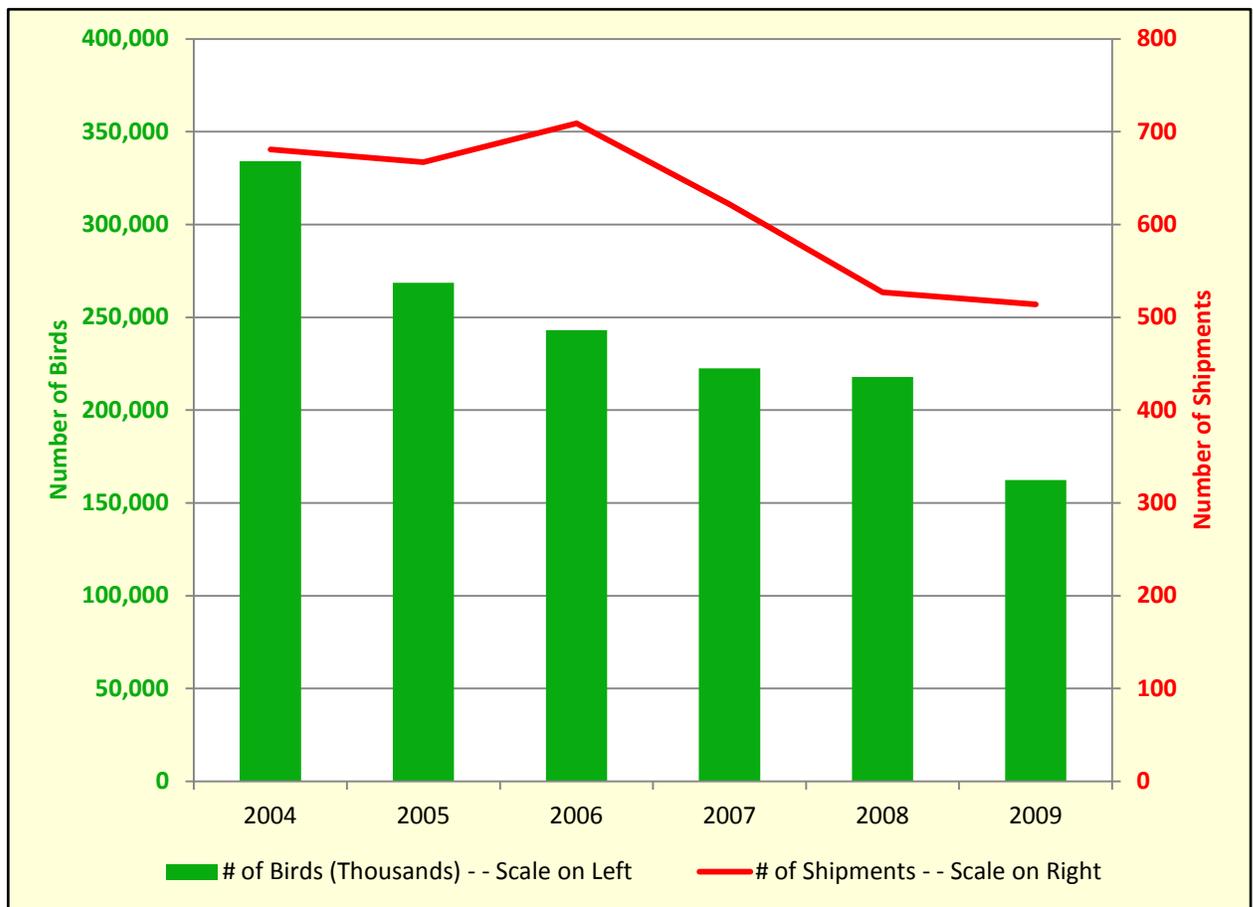


Figure 1. Wild bird imports to the United States 2004–2009

¹ Shipments containing more than one bird species were counted once for each species; consequently, the total number of shipments by order, family and genus appears greater than the actual number of individual shipments shown in Figure 1.

Trends by Order

Figure 2 shows the number of birds that entered the United States each year from 2004 to 2009 by order. The top three orders were Passeriformes (perching birds), Galliformes (fowl-like birds), and Psittaciformes (parrots and allies). These orders made up 99 percent of total bird imports during that period. The percentage of Passeriformes imported each year increased from 57 percent of the total in 2004 to 83 percent in 2009. The percentage of Galliformes, on the other hand, decreased overall from 36 percent of the total in 2004 to fewer than 3 percent in 2009. The decrease resulted primarily from a decrease in imports of Galliformes from Canada. The number of Psittaciformes imported each year remained relatively steady over the period, but the percentage imported relative to the total more than doubled (5 percent to 12 percent).

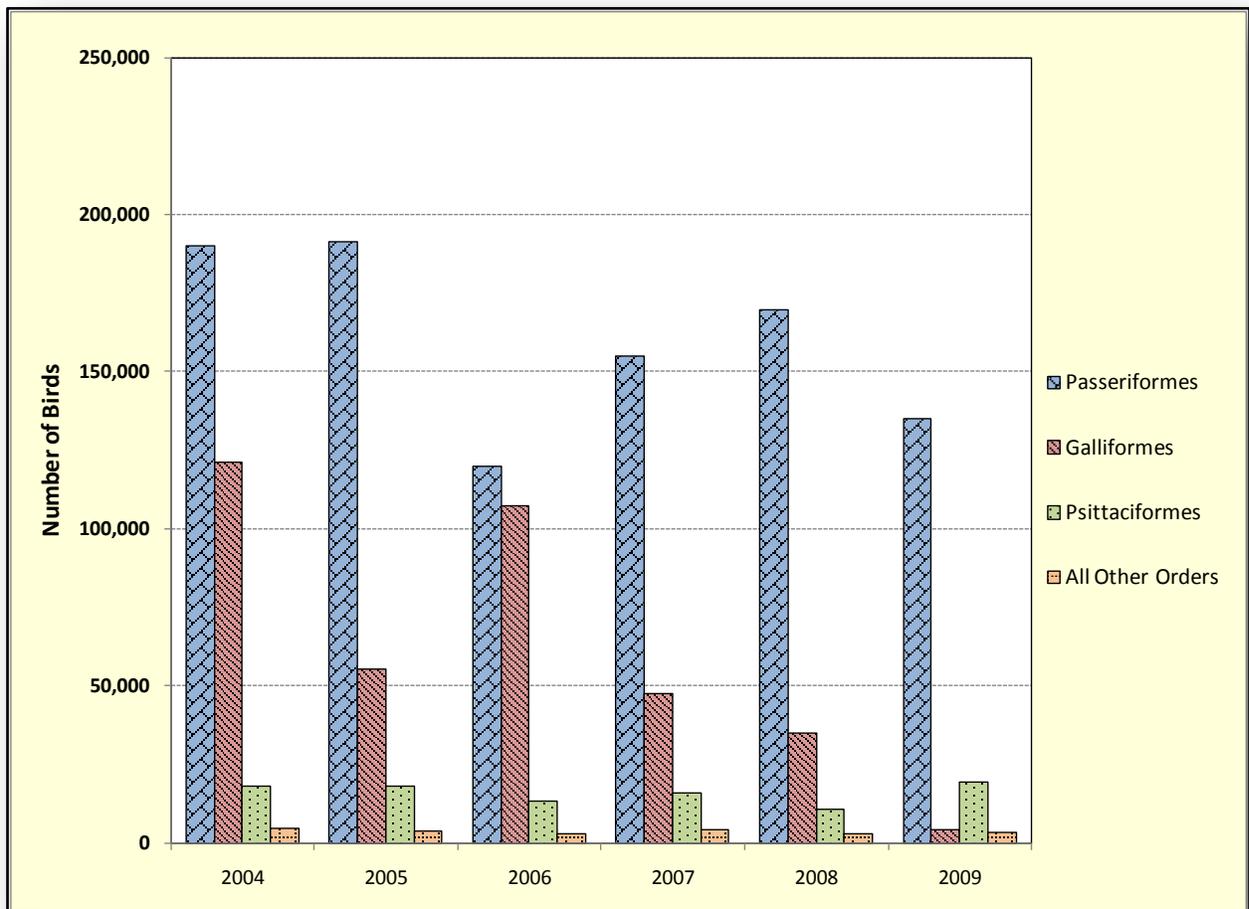


Figure 2. Top avian orders imported to the United States 2004–2009 (number of birds)

Similarly, Figure 3 shows the frequency of shipments containing birds of each order from 2004 to 2009. Shipments containing Passeriformes and Psittaciformes entered the United States most frequently during the period. On average, these orders accounted for 81 percent of shipments. The percentage of individual shipments containing Passeriformes was fairly consistent, ranging from 40 percent in 2004 to 46 percent in 2009. Shipments of Psittaciformes increased slightly over the period from 31 to 36 percent.

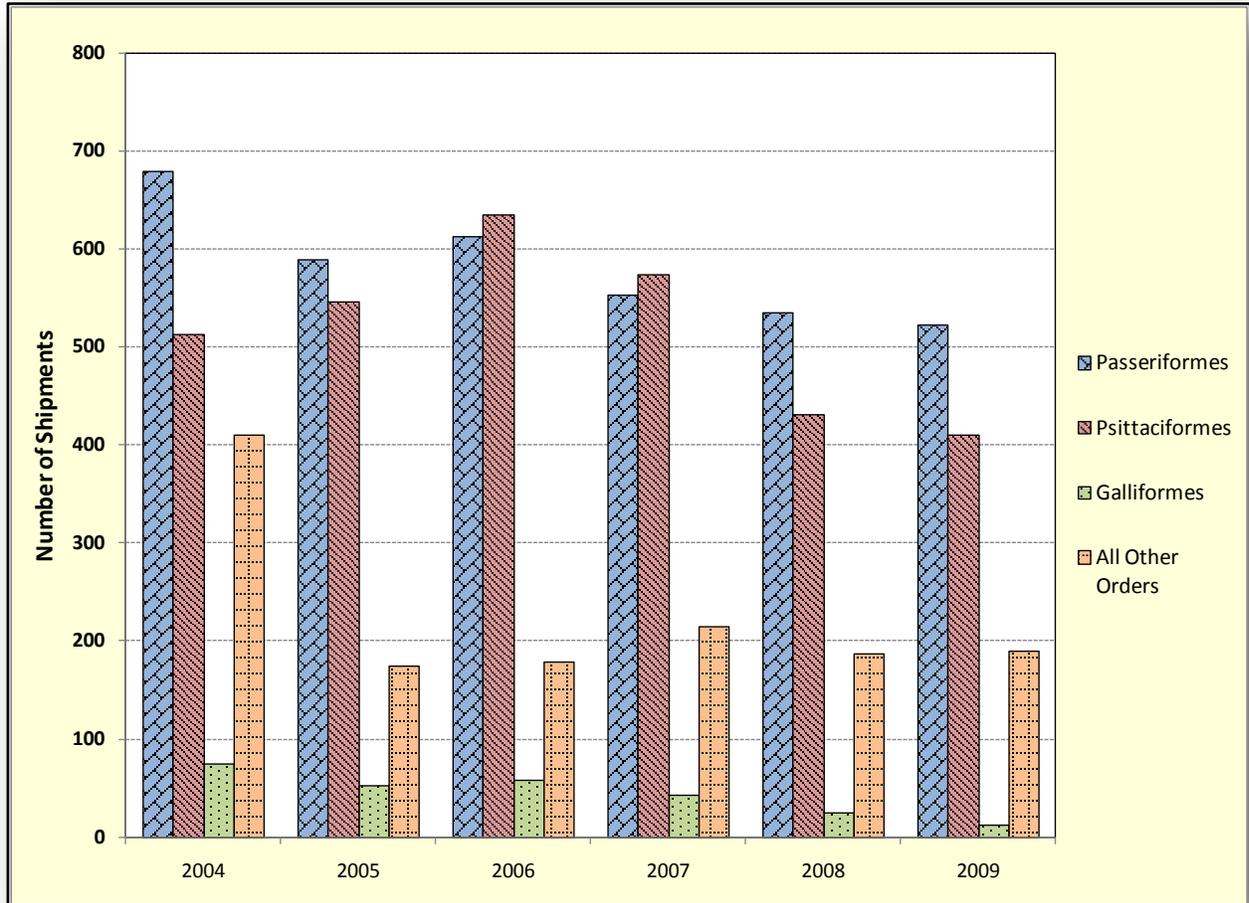


Figure 3. Top avian orders imported to the United States 2004–2009 (number of shipments)

Trends by Family

The top three families of birds that entered the United States from 2004 through 2009 were Fringillidae (true finches), Estrildidae (weaver finches and true sparrows), and Phasianidae (pheasants and partridges). During the six-year period, 85 percent of all birds entering the United States were members of these three families. Psittacidae (true parrots), Thraupidae (tanagers), and Cacatuidae (cockatoos) were also top families imported during this period (Table 1), although in much smaller numbers than the families discussed previously. Together, the top six families combined represented 94 percent of all wild bird imports from 2004 to 2009.

Table 1. Top avian families imported into the United States, 2004–2009 (numbers)

Family(example)	2004		2005		2006		2007		2008		2009		Total	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Fringillidae(true finch)	97,821	29	83,678	31	89,393	37	77,302	35	67,595	31	70,015	43	485,804	34
Estrildidae(weaver finch)	75,265	23	88,186	33	19,121	8	61,610	28	70,235	32	57,419	35	371,836	26
Phasianidae(pheasant)	121,270	36	55,269	21	107,116	44	47,454	21	34,760	16	4,222	3	370,091	26
Psittacidae(true parrot)	10,131	3	8,303	3	11,661	5	11,437	5	8,252	4	19,513	12	69,297	5
Thraupidae(tanager)	4,782	1	6,625	2	7,212	3	5,553	2	4,355	2	3,383	2	31,910	2
Cacatuidae(cockatoo)	8,077	2	9,873	4	1,817	1	4,380	2	2,564	1	45	0	26,756	2
Hirundinidae(swallow)	0	0	0	0	0	0	0	0	17,875	8	0	0	17,875	1
Other Families	16,801	5	16,639	6	6,684	3	14,772	7	12,236	6	7,711	5	74,843	5
Total	334,147	100	268,573	100	243,004	100	222,508	100	217,872	100	162,308	100	1,448,412	100

Similarly, when measuring the frequency of shipments, these top six families remained the same (Table 2). However, shipments containing Psittacidae occurred most frequently followed by shipments containing Estrildidae, Fringillidae, Thraupidae, and Cacatuidae. The percentage of shipments containing psittacine birds ranged from 26 percent to 37 percent over the six-year period with no clear trend. Estrildidae shipments remained relatively stable with slight growth in 2008 and 2009, ranging from 17 to 22 percent, and there was an overall increase in the percentage of Fringillidae shipments, from nine percent in 2004 to 14 percent in 2009.

Table 2. Top avian families imported into the United States, 2004–2009 (shipments)

Family(example)	2004		2005		2006		2007		2008		2009		Total	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Psittacidae(true parrot)	442	26	477	35	549	37	516	37	387	33	378	33	2,749	33
Estrildidae(weaver finch)	310	18	251	18	251	17	254	18	258	22	257	23	1,581	19
Fringillidae(true finch)	157	9	140	10	141	10	136	10	135	11	161	14	870	11
Thraupidae(tanager)	100	6	99	7	140	9	63	5	73	6	48	4	523	6
Cacatuidae(cockatoo)	71	4	69	5	86	6	57	4	43	4	32	3	358	4
Phasianidae(pheasant)	75	4	50	4	57	4	38	3	23	2	4	0	247	3
Anatidae(duck,geese)	53	3	35	3	65	4	39	3	19	2	23	2	234	3
Other Genera	469	28	240	18	195	13	280	20	239	20	231	20	1,654	20
Total	1,677	100	1,361	100	1,484	100	1,383	100	1,177	100	1,134	100	8,216	100

Trends by Genus



The top three genera imported into the United States from 2004 to 2009 were *Serinus* (canaries, siskins, and seedeaters), *Phasianus* (typical pheasant), and *Uraeginthus* (grenadiers and cordon-bleus). Together they made up 55 percent of all birds imported during the period. *Alectoris* (partridge), *Carduelis* (greenfinches, redpolls, and goldfinches), and *Poephila* (Australian estrildid finches) completed the top six genera, although only very few birds of genus *Alectoris* were recorded in LEMIS since 2005 (Table 3). Overall, the percentage of birds in the top six genera decreased from 78 percent of all birds in 2004 to 64 percent in 2009.

Table 3. Top 15 avian genera imported into the United States, 2004–2009 (numbers)

Genus(example)	2004		2005		2006		2007		2008		2009		Total	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%
<i>Serinus</i> (canary)	73,404	22	67,443	25	69,392	29	63,381	28	54,565	25	55,510	34	383,695	26
<i>Phasianus</i> (pheasant)	47,525	14	32,302	12	106,891	44	47,304	21	34,510	16	4,112	3	272,644	19
<i>Uraeginthus</i> (grenadier)	29,494	9	43,731	16	50	0	11,889	5	25,697	12	27,581	17	138,442	10
<i>Alectoris</i> (partridge)	73,600	22	22,750	8	0	0	2	0	200	0	0	0	96,552	7
<i>Carduelis</i> (greenfinch)	23,236	7	14,875	6	19,194	8	13,239	6	12,430	6	13,150	8	96,124	7
<i>Poephila</i> (masked finch)	11,874	4	11,625	4	9,262	4	6,325	3	3,863	2	2,815	2	45,764	3
<i>Estrilda</i> (waxbill)	2,703	1	4,700	2	20	0	6,345	3	13,732	6	8,857	5	36,357	3
<i>Amandava</i> (estrildid finch)	7,210	2	7,210	3	28	0	12,245	6	2,666	1	2,344	1	31,703	2
<i>Nymphicus</i> (cockatiel)	8,025	2	9,845	4	1,781	1	4,333	2	2,540	1	29	0	26,553	2
<i>Lonchura</i> (silverbill)	8,646	3	7,227	3	261	0	1,305	1	6,042	3	218	0	23,699	2
<i>Melopsittacus</i> (parakeet)	2,668	1	520	0	4,095	2	2,307	1	2,135	1	11,819	7	23,544	2
<i>Chloebia</i> (rainbow finch)	3,607	1	3,311	1	4,294	2	4,663	2	3,298	2	2,031	1	21,204	1
<i>Hirundo</i> (barn swallow)	0	0	0	0	0	0	0	0	17,875	8	0	0	17,875	1
<i>Psittacula</i> (parakeet)	1,040	0	1,302	0	860	0	2,111	1	2,601	1	5,835	4	13,749	1
<i>Neochmia</i> (star finch)	650	0	2,593	1	3,434	1	4,284	2	1,498	1	1,149	1	13,608	1
Other Genera	40,465	12	39,139	15	23,442	10	42,775	19	34,220	16	26,858	17	206,899	14
Total	334,147	100	268,573	100	243,004	100	222,508	100	217,872	100	162,308	100	1,448,412	100

When examining imported shipments by genera, there are no genera that dominate these imports. Overall, *Serinus*, *Psittacus*, and *Amazona* comprised the top three genera in terms of imported shipments of wild birds (Table 4). However, these top three genera accounted for less than 18 percent of the total shipments between 2004 and 2009. In fact, the top 15 genera accounted for approximately 46 percent of shipments over the six-year period.

Table 4. Top 15 avian genera imported into the United States, 2004–2009 (shipments)

Genus(example)	2004		2005		2006		2007		2008		2009		Total	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Serinus(canary)	94	6	97	7	87	6	102	7	104	9	113	10	597	7
Psittacus(parrot)	65	4	58	4	75	5	84	6	72	6	77	7	431	5
Amazona(parrot)	88	5	75	6	78	5	62	4	48	4	60	5	411	5
Poephila(masked finch)	76	5	56	4	71	5	42	3	40	3	35	3	320	4
Ara(macaw)	42	3	62	5	46	3	34	2	27	2	32	3	243	3
Erythrura(parrotfinch)	58	3	25	2	56	4	30	2	21	2	28	2	218	3
Platycercus(rosella)	18	1	29	2	51	3	40	3	33	3	22	2	193	2
Carduelis(redpoll)	43	3	27	2	32	2	26	2	25	2	33	3	186	2
Nymphicus(cockatiel)	30	2	42	3	50	3	28	2	20	2	15	1	185	2
Falco(falcon)	55	3	17	1	18	1	44	3	20	2	24	2	178	2
Cacatua(cockatoo)	41	2	26	2	36	2	28	2	22	2	17	1	170	2
Aratinga(parakeet)	35	2	28	2	21	1	28	2	28	2	29	3	169	2
Pionites(parrot)	29	2	47	3	56	4	21	2	6	1	2	0	161	2
Estrilda(waxbill)	34	2	30	2	6	0	28	2	30	3	29	3	157	2
Agapornis(lovebird)	42	3	31	2	28	2	23	2	14	1	16	1	154	2
Other Genera	927	55	711	52	773	52	763	55	667	57	602	53	4,443	54
Total	1,677	100	1,361	100	1,484	100	1,383	100	1,177	100	1,134	100	8,216	100

Trends by Country of Origin

Table 5 and Table 6 show the top 19 countries of origin, including the United States, for wild birds imported to the United States over the period 2004 to 2009. These countries supplied over 96 percent of U.S. wild bird imports during this period; however, birds originating from 116 countries entered the United States during the six-year period.

Table 5. Top countries of origin for avians imported into the United States, 2004–2009 (numbers)

Country of Origin	2004		2005		2006		2007		2008		2009		Total	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Canada	54,898	16	31,179	12	98,226	40	35,668	16	21,020	10	13,814	9	254,805	18
Taiwan	50,089	15	36,263	14	46,890	19	43,408	20	33,291	15	22,130	14	232,071	16
United States	73,816	22	26,326	10	17,427	7	15,396	7	17,384	8	4,865	3	155,214	11
Tanzania	43,354	13	65,917	25	299	0	11,210	5	15,080	7	16,023	10	151,883	10
Senegal	2	0	0	0	1	0	49,389	22	37,227	17	48,496	30	135,115	9
Belgium	24,171	7	28,796	11	29,125	12	17,138	8	7,186	3	6,529	4	112,945	8
Australia	11,517	3	12,442	5	26,230	11	22,035	10	15,769	7	20,336	13	108,329	7
Peru	8,014	2	6,326	2	6,754	3	5,824	3	5,137	2	4,362	3	36,417	3
South Africa	11,309	3	15,624	6	1,021	0	926	0	3,230	1	799	0	32,909	2
Mozambique	0	0	0	0	0	0	3,240	1	15,853	7	9,208	6	28,301	2
Brazil	5,149	2	12,352	5	4,347	2	2,143	1	3,524	2	35	0	27,550	2
Russia	20,167	6	6,105	2	0	0	0	0	1	0	1	0	26,274	2
Malaysia	16,718	5	457	0	1,014	0	3	0	1,202	1	30	0	19,424	1
France	4	0	3	0	0	0	0	0	17,877	8	3	0	17,887	1
Qatar	1	0	17,448	6	0	0	0	0	0	0	0	0	17,449	1
Guinea	17	0	1	0	12	0	1,016	0	9,017	4	4,748	3	14,811	1
Spain	874	0	2,406	1	3,610	1	3,035	1	2,451	1	1,158	1	13,534	1
Uzbekistan	0	0	0	0	0	0	0	0	3,840	2	7,150	4	10,990	1
Suriname	614	0	461	0	4,084	2	1,228	1	1,015	0	246	0	7,648	1
Other Countries	13,433	4	6,467	2	3,964	2	10,849	5	7,768	4	2,375	1	44,856	3
Total	334,147	100	268,573	100	243,004	100	222,508	100	217,872	100	162,308	100	1,448,412	100

Table 6. Top countries of origin for avians imported into the United States, 2004–2009 (shipments)

Country of Origin	2004		2005		2006		2007		2008		2009		Total	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Canada	185	26	190	28	261	36	192	30	168	32	165	32	1,161	31
United States	171	24	150	22	160	22	163	26	132	25	130	25	906	24
Mexico	35	5	22	3	37	5	23	4	22	4	30	6	169	4
Belgium	18	3	26	4	30	4	21	3	14	3	8	2	117	3
Tanzania	25	3	28	4	10	1	16	3	16	3	19	4	114	3
United Kingdom	21	3	18	3	25	3	15	2	12	2	17	3	108	3
South Africa	24	3	18	3	8	1	19	3	17	3	12	2	98	3
Taiwan	14	2	10	1	13	2	20	3	22	4	17	3	96	3
Various, Unspecified	23	3	24	4	9	1	8	1	8	2	3	1	75	2
Netherlands	15	2	15	2	11	2	15	2	11	2	6	1	73	2
Peru	20	3	13	2	8	1	12	2	7	1	11	2	71	2
Australia	9	1	15	2	14	2	10	2	12	2	10	2	70	2
Indonesia	10	1	13	2	14	2	19	3	3	1	4	1	63	2
Germany, Federal Republic	11	2	10	1	9	1	13	2	7	1	2	0	52	1
Guyana	13	2	18	3	7	1	4	1	1	0	3	1	46	1
Senegal	1	0	0	0	1	0	13	2	10	2	17	3	42	1
Brazil	6	1	12	2	7	1	5	1	4	1	6	1	40	1
Suriname	5	1	3	0	10	1	3	0	9	2	4	1	34	1
Spain	5	1	5	1	7	1	6	1	2	0	5	1	30	1
Panama	4	1	4	1	2	0	5	1	8	2	4	1	27	1
All Others	100	14	83	12	78	11	49	8	48	9	49	9	407	11
Total	715	100	677	100	721	100	631	100	533	100	522	100	3,799	100

Birds and shipments with the United States listed as country of origin represent birds returning to the United States after a period abroad. Birds originating in the United States totaled 11 percent of all birds and 24 percent of all shipments entering the United States during the six-year period. The majority of these birds were Galliformes returning from Canada. Other notable orders originating in the United States were Falconiformes returning from the United Arab Emirates, and personally owned psittacines returning from a variety of countries.

Other than the United States, the top countries of origin for wild bird imports were Canada, Taiwan, and Tanzania. These countries represented 44 percent of all birds entering the United States from 2004 to 2009. The top country of origin for wild bird shipments was Canada, followed by the United States, Mexico, and Belgium. These countries (not including the United States) represented 38 percent of all shipments entering the United States from 2004 through 2009.

Birds originating in Tanzania have decreased from 2005 (65,917) to 2009 (16,023). Similarly, birds originating from Belgium have decreased from 2006 (29,125) to 2009

(6,529). There was a notable increase in birds originating from Mozambique and Senegal from 2007 through 2009 from the previous three-year period (Table 5). Similarly, very few or no birds were imported from France and Guinea from 2004 through 2007; however, in 2008 the United States received 17,877 and 9,017 birds from these countries, respectively. By 2009, imports of birds from France returned to pre-2008 levels, and imports from Guinea dropped by 47 percent.

The greatest number of bird shipments entered the United States from Canada, Mexico and Belgium. Shipments originating in these three countries made up 38 percent of all shipments entering the United States from 2004 to 2009. In addition, 24 percent of shipments entering during this period represented birds originating in the United States and returning after a period abroad (Table 6).

Trends by Port of Entry



The United States has 17 designated wildlife ports (Anchorage, Atlanta, Baltimore, Boston, Chicago, Dallas, Honolulu, Houston, Los Angeles, Louisville, Memphis, Miami, New Orleans, New York, Portland, San Francisco, and Seattle) ([50 CFR 14.12](#)). Additional FWS authorized border ports may receive shipments of wildlife if the animals do not require a permit under 50 CFR 14.12 and they originated from and are destined for the United States, Canada, or Mexico. Shipments of species that are considered injurious, endangered, or threatened—or that require a permit under the Convention on International Trade in Endangered Species (CITES) or the Wild Bird Conservation Act (WBCA)—also require a FWS permit under 50 CFR 14.12 and may enter only through the designated ports. The same regulation applies to bald or golden eagles, migratory birds, and marine mammals. Special ports in Alaska, Puerto Rico, and Guam may receive wildlife if these ports are the final destination of the shipments. Under other special conditions, permits may be granted for wildlife to enter the United States through ports that are not designated as wildlife ports, authorized ports, or special ports according to FWS regulations.

Four U.S. ports (Los Angeles, Niagara Falls, Pembina, and New York) received 84 percent of all avian imports from 2004 to 2009 (Table 8). The top U.S. port to receive imports of wild birds from 2004 to 2009 was Los Angeles, ranging from a low of 49 percent in 2006 to a high of 76 percent in 2009, with an average of 63 percent of total imports for those years. Los Angeles, New York, Miami, and Sumas received 53 percent of the shipments of wild birds from 2004 to 2009 (Table 7). The percentage of shipments for each of these ports remained relatively stable over the six-year period. Los Angeles received the greatest number of shipments of birds from 2004 to 2009, handling 18 percent of wild bird shipments over the entire period.

Table 8. Top ports of entry for avians imported into the United States, 2004–2009 (numbers)

Port of Entry	2004		2005		2006		2007		2008		2009		Total	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Los Angeles, CA	189,731	57	192,737	72	118,203	49	143,277	64	144,732	66	122,936	76	911,616	63
Buffalo/Niagara Falls, NY	77,004	23	24,058	9	10,845	4	1,079	0	730	0	1,246	1	114,962	8
Pembina, ND	27,363	8	9,407	4	21,203	9	15,757	7	19,215	9	14,818	9	107,763	7
New York, NY	6,873	2	2,105	1	2,131	1	20,256	9	23,830	11	19,852	12	75,047	5
Other Ports	33,176	10	40,266	15	90,622	37	42,139	19	29,365	13	3,456	2	239,024	17
Total	334,147	100	268,573	100	243,004	100	222,508	100	217,872	100	162,308	100	1,448,412	100

Table 7. Top ports of entry for avians imported into the United States, 2004–2009 (shipments)

Port of Entry	2004		2005		2006		2007		2008		2009		Total	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Los Angeles, CA	132	19	143	21	106	15	105	17	90	17	100	19	676	18
New York, NY	79	12	83	12	84	12	74	12	65	12	64	12	449	12
Miami, FL	84	12	99	15	81	11	59	9	59	11	47	9	429	12
Sumas, WA	45	7	70	10	88	12	85	14	68	13	55	11	411	11
All Other Ports	341	50	272	41	350	49	299	48	245	46	248	48	1,755	47
Total	681	100	667	100	709	100	622	100	527	100	514	100	3,720	100

DISCUSSION



The U.S. wild bird trade decreased substantially during the six-year period from 2004 to 2009, with 162,308 wild birds imported as a part of 1,134 shipments. The 162,308 wild birds and 1,134 shipments that were imported in 2009 represent slightly more than a 50 percent reduction in the number of birds imported in 2004 (334,147) and a 32 percent reduction in the number of shipments in 2004 (1,677). The importation of wild birds and other animals has raised serious concerns about the risk these animals present to both animal and human health in the United States and globally. Two exotic diseases of paramount economic concern to animal and human health in the United States that can be transmitted by wild birds are HPAI and Exotic Newcastle Disease (END). An epidemic of END occurred in the Western United States from September 2002 to September 2003. While the origin (i.e., foreign versus domestic) of the END epidemic was not clearly established, 4.5 million birds were destroyed and more than 50 countries imposed some form of trade restriction against U.S. poultry exports. The epidemic led to \$395 million in direct and indirect trade losses, and \$138 million Federal dollars were allocated to the eradication effort (GAO 2010).

The decrease in wild bird imports from 2004 to 2009 could theoretically decrease the risk of importing disease such as HPAI and END. According to FWS data summarized by GAO, the decrease in imports during recent years corresponds to the economic recession in the United States as well as an increase in user fees imposed by the FWS (GAO 2010).

Wild birds were in greater demand in commercial pet trade during the years leading up to the recession. While this demand appears to have been tempered by the recession, the demand may grow as the U.S. economy continues to recover. Thus, while it may be tempting to suggest that risk of disease transmission by legal imports of wild birds may be decreasing due to the decrease in recent imports, the decrease in risk may be transient.

CONCLUSION



This report provides a descriptive summary of live bird imports to the United States for the years 2004 to 2009. This summary identifies trends and highlights areas of potential risk where future analysis may be necessary. Risk factors considered may include infectious diseases and parasites potentially carried by wild birds, country of origin, regulatory safeguards, and intended use of the wild bird after importation. Once the wild bird is released into the United States, the level of contact with other birds, domestic fowl, and people should also be considered.

As reported in a recent GAO report, current institutional controls and U.S. import regulations mitigate some of the risks of disease transmission from wildlife entering the United States. However, these controls and regulations do not eliminate the risk of disease transmission from imported animals (GAO 2010).

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