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Illustration of a Red-billed Hornbill

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TRAFFIC (Japan)

On 1 June 1982 TRAFFIC (Japan) finally became operational as a WWF/IUCN project, thus forming another link in the network of TRAFFIC offices that now includes UK, USA, Germany and Japan.*

Tom Milliken, a Japanese-speaking American conservationist who has played a major role in setting up the project, is the Assistant Director in charge of operations. Mr Hyosuke Kujiraoka, former Director of the Japanese Government's Environmental Protection Agency, is the Honorary Director of TRAFFIC (Japan) and the office is backed by a strong scientific advisory committee headed by Dr Hideo Obara, one of Japan's leading zoologists and a member of the Board of WWF Japan.

The formal opening of this TRAFFIC office in Tokyo follows the recent ratification by Japan of CITES. The new Secretary General of CITES, Mr Eugène Lapointe, has described the opening as "another major step towards the development of awareness required for international co-operation on controlled trade in endangered species. From a CITES point of view, the TRAFFIC office in Japan could become a most valuable operational tool for both the Secretariat and the Japan CITES Management Authority". Mr Lapointe has written to the Japanese CITES Management Authority urging that they co-operate with the TRAFFIC office so that TRAFFIC (Japan) can follow the pattern set by other TRAFFIC offices in maintaining close communication with the Government agencies involved with CITES implementation. Japan is a key country in many aspects of the wildlife trade and the new TRAFFIC office hopes to work closely with the authorities to see that the provisions of CITES are strictly enforced.

Japan, historically one of the leading traffickers in endangered species, appears to be undergoing a change in public attitude, according to Mr Milliken.

"The acceptance of CITES by Japan in 1980 represented a conservation milestone. As one of the world's leading consumers of wildlife, strict enforcement of CITES presents a formidable challenge but also provides a clear opportunity for Japan to move into the conservation mainstream. I look forward to co-operation with the CITES Management authorities."

Japan, after the US, is the world's largest consumer of wildlife and, on a per capita basis, may be number one. Approximately one-third of the world trade in birds involves Japan. Almost all of the musk and most of the tortoise shell in world trade is consumed by Japan.

Next to the Federal Republic of Germany, Japan is the largest trader in furskins of wild species, and is a leading importer of shells, coral, reptile skins, primates, butterflies and tropical fish. In short Japan is deeply involved in almost every area of wildlife trade.

According to Mr Milliken, "CITES has not yet halted Japan's fur consumption. Last year saw a continuation of the boom. Stockpiling, which occured before the acceptance of CITES, guarantees that endangered species will continue to be traded for some time to come."

Upon acceptance of CITES, Japan listed 9 reservations (exceptions to importing endangered species included on CITES Appendix I, a list of plants and animals for which commercial trade is proscribed) and has since added two more, including 3 species of whales, 3 of sea turtles, 3 of monitor lizards, the saltwater crocodile and the Himalayan musk deer.

Although Nepal has banned trade in the highly endangered musk deer since 1973, Japan continues to consume 90% of the international trade. Conservationists report that imports from Nepal decreased from 156 kilos in 1980 to 25 kilos in 1981, but recent estimates show that imports from China, where at least some musk deer are farmed, have doubled over the past year.

The Japanese are also the world's largest consumers of ivory. Eighty percent of the African raw ivory exports are to Japan and Hong Kong. Until recently, Japan was a major trafficker in rhino horn as well, importing an average of 800 kilos annually.

Public awareness regarding endangered species issues is very low in Japan. TRAFFIC will play a major educational role in publicising CITES and the world trade in threatened wildlife.

"Japanese conservationists, through many kinds of activities, are now co-operating with a number of groups and countries in Asia," reported Mr Noritaka Ichida, Director of the Wild Bird Society of Japan.

"I think TRAFFIC Japan will play a vital communication role in introducing these efforts to the international conservation movement and, likewise, bring important information to our society. I am hopeful that a truly 'international' situation will become firmly established."

Dr Obara's Scientific Advisory Committee will largely be responsible for assisting in the identification of wildlife and derivative products, accumulating and interpreting data, reviewing and evaluating TRAFFIC reports and projects, and distributing TRAFFIC reports and newsletters.

Prior to the official opening of the TRAFFIC (Japan) office, Tom Milliken undertook a one month training trip to Switzerland, Germany, UK and the USA where he discussed the operational aspects of trade monitoring work and became thoroughly acquainted with the staff of the other TRAFFIC offices, including WTMU, and with their methods of working.

The address of TRAFFIC (Japan) is:-

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Source:- WWF News Release - 13.5.82

Illegal Falcon Exports from Italy

The Times (5.5.82) reports the uncovering of an illicit export trade in Italy involving young peregrine falcons and other protected species, most of which are shipped to Germany. This trafficking has apparently been going on for over a year. It was first discovered at Genoa by a customs officer investigating a box allegedly containing 12 parrot chicks. The Italian League for the Protection of Birds identified them as falcons and further investigation has led to the recent arrest of a Sicilian man involved with people in Sardinia, Sicily and Liguria, who collected the birds from nests. According to the League, eggs as well as chicks are taken from nests and, being easy to raise, are placed in caravans equipped with incubators.

Peregrine falcons (Appendix I species) provide a very lucrative business. Dealers in Italy pay about 850,000 lire (£370) and sell the birds at very much higher figures; in some cases, as much as 10m lire. Rare specimens, including rare owls, are very much sought after in Germany, but much of the traffic is directed to falconry enthusiasts, a sport still practised in some areas of Germany, and also to Arab clients.

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* Following the recent sad death of Ted Norris, TRAFFIC (East Africa) which he ran single-handedly has ceased to function.

The Exportation of Cage Birds from Senegal

by R L Bruggers

SUMMARY

Over 29 million birds have been exported from Senegal since 1955, an average of 1.2 million per annum. The mortality rate from capture to export seemed to be in the range of 45-62 per cent, so that at least 2 million birds must have been trapped annually to satisfy the export demands. From 60-75 per cent of these birds were trapped in Senegal with the rest arriving from surrounding countries through an extensive network of trappers. Six exporters supplied birds to the international market between 1974 and 1978, and their trapping methods and handling, maintenance, and shipping procedures are discussed.

From 1972 to 1978 a total of 41 countries imported birds from Senegal, the number varying between 18 and 25 annually. France, West Germany, Holland, Italy, Belgium and Spain accounted for 84 per cent of the annual commerce. Most importing countries seemed to have individual preferences for particular species, based on shipping distance, transportation costs, and marketability. Cut throats, Black-rumped Waxbills and Yellow-fronted Canaries were the most frequently exported species. The major bird pests to cereal crops in Africa - quelea, weavers, bishops, and sparrows - represented 15 per cent of the trade.

The peak exportation periods each year were between March and June and during August and September, when 45 per cent and 20 per cent respectively of the birds were exported. Some species were shipped each month, others only seasonally, depending on their plumage characteristics and ease of capture. The exportation rate for at least 60 per cent of the species declined during 1975-1976, presumably in association with the drought. Certain species are reported to be more scarce and difficult to trap recently and in need of close observation.

INTRODUCTION

International trade in wild birds is thriving, although reliable figures generally are unobtainable since most traders are aware of the sensitivity of their occupation and either do not keep records or will not divulge them. Many species are exported with false papers of identification or country of origin. Not unexpectedly, the estimates of the number of birds in trade annually vary considerably, ranging from 5.5 million (Ricciuti 1977) to over 100 million individuals (Nilsson 1981).

Considerable concern has been expressed over the often deplorable conditions, and accompanying high mortality under which many of the birds (some of which are of endangered or threatened species) are captured, held in captivity, auctioned in local markets, and sold internationally (Inskipp 1975; Inskipp and Thomas 1976; Ricciuti 1977; Nilsson 1981). In the United States, the federal government and some individual states are particularly sensitive to the possible adverse effects to the poultry industry, agriculture, and resident bird populations of diseased, escaped, or released exotic species and have developed detection and exclusion procedures for prohibiting the entry of potentially undesirable species (Keffer 1974); the U.K. also has placed strict import restrictions on various birds from time to time, most recently in 1981 (TRAFFIC Bulletin 3(5): 55).

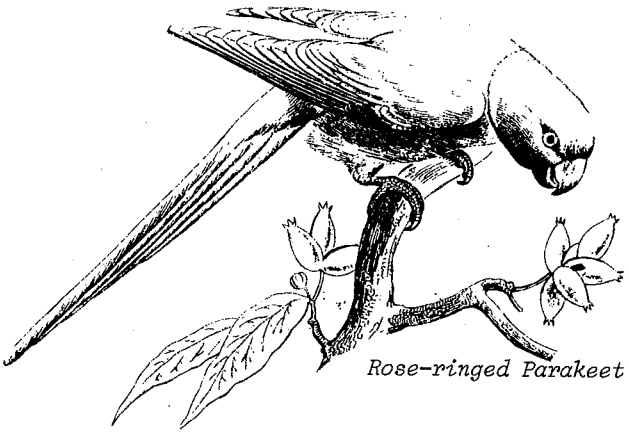
Senegal is one of the industry's most important conduits, having exported over one million birds annually in most recent years. It was also the originating country for nearly 21 per cent of all birds imported into the United States between 1970 and 1972 (Banks 1976).

METHODS

This report has been prepared from information obtained from published annual reports and the original files on which these were based (housed in the Direction des Eaux, Forêts et Chasses of the Ministère du Developpement Rural et de l'Hydraulique, Dakar, Senegal); discussions with an importer, local market vendors, and owners or administrators of five of the six export businesses; and regular monthly visits from June 1977 to May 1978 to the compounds of the two principal exporters. These visits were made during the first third of each month, usually unannounced, when the species present were identified and their numbers estimated. Single visits were also made to the compounds of a third exporter in Senegal and to two exporters in Bamako, Mali. Birds were observed being trapped in the field on two occasions.

The Government files were available from mid-1973 and contained the figures given by the exporters, in the course of obtaining export permits. The figures generally corresponded closely to those given to me by the exporters, their shipment orders, and the species observed in their compounds. Some numerical discrepancies were found, and are indicated when likely to have been of importance. Otherwise, the data should be viewed as representing orders of magnitude from which trends are easily discernible.

The scientific names of bird species mentioned are given in Appendix 1. Costs are given in US dollars but based on the CFA Franc - 225 = US$1.



Rose-ringed Parakeet

RESULTS AND DISCUSSION

Species distribution and trapping localities in Senegal

Although nearly all the principal species exported from Senegal exist and can be trapped in the country, 25-40 per cent of the birds have recently been collected in and imported from the surrounding countries of Mali, Mauritania, The Gambia and Guinea Bissau or, in the case of Grey Parrots, from Gabon and Ivory Coast. Collection is organized through a network of local trappers in each of the countries, who in turn sell to regional representatives of the exporters. As far as is known, only Mali (and perhaps Ivory Coast) directly export significant quantities of birds.

Senegal, a country of 201,000 km^2 is characterized by an annual rainfall of 200-250 mm in the northern Senegal River Valley (lat. 16°) grading into 1500 mm in the Southern Casamance (lat. 13°). Birds were trapped in various parts of the country:- Red-billed Queleas, Golden Sparrows, Golden Bishops, and Cut throats in the Senegal River Valley; Senegal Parrots and starlings from the central Sine Saloume region; Village Weavers, Red Bishops, and Red-crowned Bishops from the Casamance region; and doves, Cut throats, waxbills, whydahs and canaries from eastern Senegal (Fig. 1). Others such as Rose-ringed Parakeets, firefinches, doves, Silverbills, Bronze Mannikins, Indigobirds, and weavers were trapped throughout the semi-arid regions.

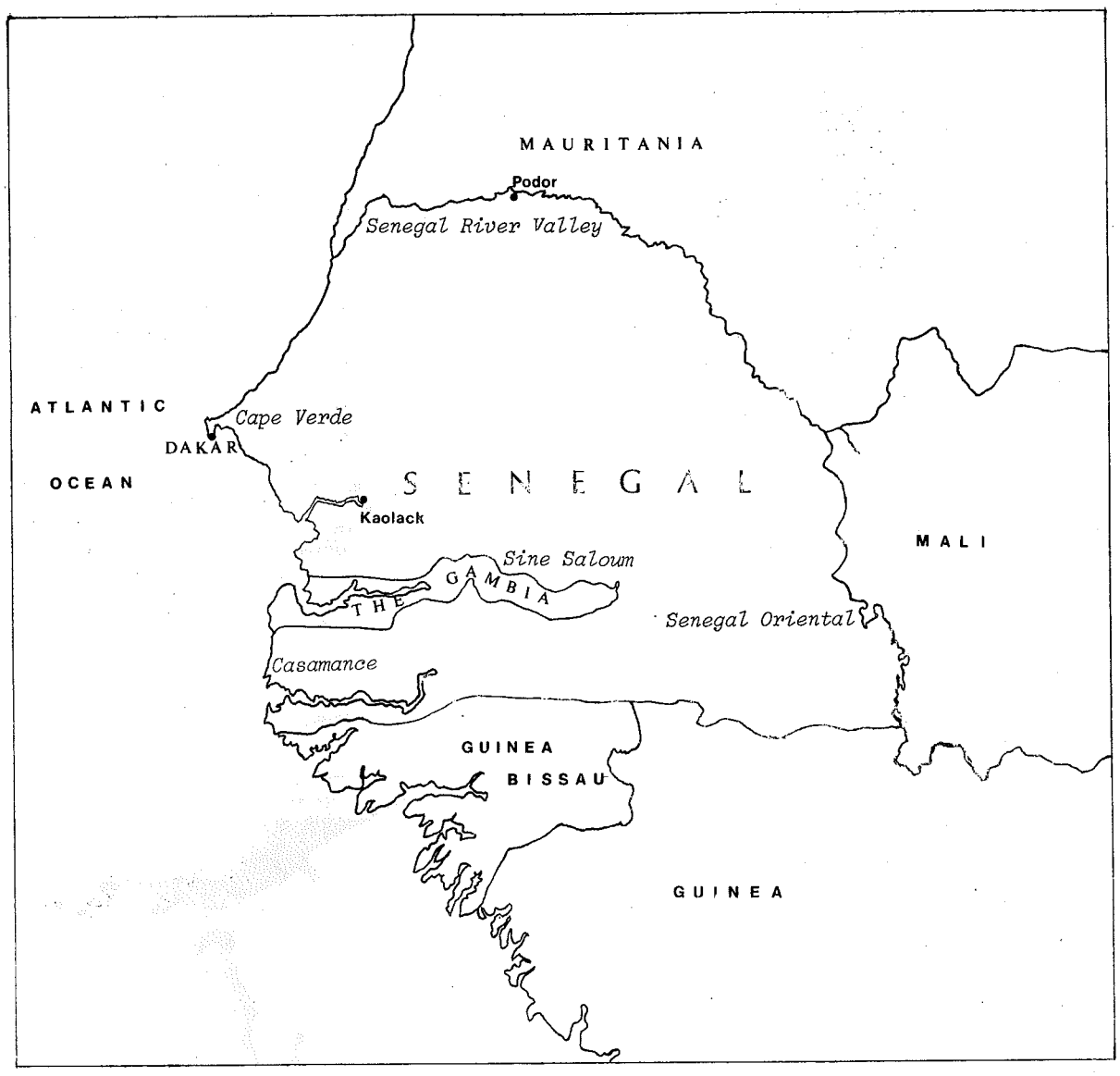


FIG 1:- Map of Senegal showing the main bird collecting regions and surrounding countries

Trappers and capture methods

Exporters employed from 10-300 trappers, each of whom required a government trapping permit. Permits were issued by the Direction des Eaux, Forêts et Chasses at $8.90. These were usually bought by the exporter who was reimbursed by the trappers. Some birds were trapped illegally, but the extent of this practice was not known.

Some trappers hired boys to carry cages, set and tend nets, and care for the collected birds, for which they were given food and occasionally clothing. After a two or three year apprenticeship the boys were able to trap on their own. This system seemed to be breaking down, and in recent years the number of trappers had decreased, and their quality and reliability had declined. One exporter employed 103 trappers in 1976 but only 72 in 1977. Recently most trappers have been Guineans.

The majority of birds were captured with locally made clap nets of the 'Thiaroye' model which was introduced by one of the exporters. Water or grain may be used as bait, or some stuffed or sun-dried birds as decoys. One or two hundred birds could be trapped daily in this manner. The birds were taken to collection centres from which they could either be sent to Dakar by train or taxi, or picked up by the exporter.

Exporters and their operations

Six exporters and at least three other market vendors were active in Senegal during the period of this study (Table 1). A new exporter, Mr C. Fall, began exporting in August 1978. These traders were registered with the Direction des Eaux, Forêts et Chasses, and all except two based in the Dakar-Cape Verde region, from which shipments could be expedited.

L. Masfrand (who began exporting with his father in 1929 from his present location in Kaolack), and A. Diallo were the most experienced. B. Wade began in 1973 but formerly sold birds locally in the markets or to other exporters. Several exporters ceased operating during the 10 years prior to this study.

Each exporter maintained, and in some cases lived within, a compound containing several cement-block buildings in which birds were kept in cages or left free-flying. He owned at least one vehicle for transporting birds, and employed from 3-15 people as accountants, drivers, carpenters, and handlers. The rooms in these buildings contained perches and were usually ventilated with screened windows or slotted walls. One exporter had a large 5m x 20m x 3m outdoor flight pen into which newly acquired birds were released. The available space seemed adequate, when properly used, unlike the situation in Mali where several hundred birds were crowded into small pens.

Comparable handling and maintenance practices were used (or were professed to be used) by most of the exporters. Generally, the aviaries of Ravanat and Masfrand were clean and any dead birds removed each morning. In contrast, dead and dying birds were often seen on the aviary floors of one of the other exporters during my monthly visits; and he, as well as most of the

others, were cited for unsanitary conditions and poor maintenance of facilities by an Eaux et Forêts team during an impromptu inspection in 1976 (Diallo 1976).

Normally, newly acquired birds were removed from their crowded transport cages soon after arrival from the field and placed in holding cages or flight pens where they remained for 2 to 12 weeks before being sold in pairs. Any unsold birds that moulted out of their colourful breeding plumage during this time were supposedly released. All exporters claimed to administer antibiotics, when available, to their birds. The professed procedure was to give birds just arriving from the bush terramycin in their drinking water for 3 to 8 successive days and then periodically until sold. However, none of the exporters had any antibiotics at the time of the 1976 government inspection (Diallo 1976).

The two largest exporters, A. Diallo and J. Ravanat, maintained a combined total of 6,000 - 80,000 birds awaiting export each month. A considerable quantity of grain was required to feed such large numbers - depending on the size of the individual export operation, between 3 and 50 tons per year of locally grown millet (Pennisetum typhoides; 16¢ - 20¢/kg) and imported Fonio or Moha seed (Phalaris canariensis; 22¢ - 24¢/kg). Uneaten grain often was reused, sometimes after mechanically separating contaminant debris and excrement. Peanuts, maize, and sunflower seeds, necessary for parrots, increased food costs. According to the profits admitted or "suggested" as acceptable (i.e. between $13,000 and $22-27,000) by three of the exporters and based on a cursory analysis of the running expenses of one exporter, it appears that the trade as a whole in Senegal resulted in a total annual profit of at least $100,000 - 150,000 for the six exporters.

Health certificates were required (and easily obtained) for all exportations, which were then registered prior to departure by number and species with the Eaux et Forêts. Exporters also paid a government tax of 2¢ per pair of birds. Birds were exported in wooden boxes, which, for passerines, measured 12cm x 24cm x 6cm. They were constructed by the exporters at a cost of about $6.67 each, had a screened front, several perches, ventilation holes, and food and water containers. The number of birds per box varied relative to the species and its size, their destination, and the season, but usually was between 75 and 125 pairs. Lufthansa, Sabena, Air Afrique, Alitalia, Iberia, Swiss Air, and Pan Am all transported birds. Pan Am gave one exporter a meritorious award for commerce. Insurance against mortality could be, but seldom was, purchased for 9-10 per cent of the shipment's value.

Kermel market vendors

Three vendors sold birds daily in the local Kermel market in Dakar during the period of this investigation. These merchants did not export but instead sold birds as house pets to local residents, tourists, and individuals who bought and released a few pairs as a charity gesture. Exporters also placed birds with some of these vendors. Each vendor had 3-5 cages containing a total of 25 to 50 pairs of birds representing perhaps 12 species, depending on the season.

Market sellers employed one or two trappers, who provided birds only when needed, perhaps once a fortnight. Birds were sold at about three times their purchase price. For example, the following prices were the minimum acceptable for pairs of several common and representative species: 67¢ - Black-rumped Waxbill; 89¢ - Red-billed Quelea; $1.78 - Yellow-fronted Canaries, Red-tailed Lavender Waxbill, and Orange-cheeked Waxbill; $2.22 - Red-billed Firefinch and Zebra Waxbill; $4.44 - Rose-ringed Parakeet and Senegal Parrot; $5.33 - whydahs; and $133.00 - Grey Parrots. The prices were not fixed but subject to bargaining, and any sales for higher prices were additional profits.

Operating expenses in this market enterprise were minimal compared to those of exporters, yet the vendors

Table 1

Number of birds exported from Senegal by various exporters between 1973 and 1978

Exporter	Establishment	1973	1974	1975	1976	1977	1978	Annual Average
A. Diallo	Oisellerie Diallo, Thiaroye	800000	872660	838906	564140	344514	230806	608504
A. Diba	Grand Oisellerie Touba, M'Backe	90000	89286	123220	100726	128854	185980	119678
L. Masfrand	Afrique Ocean, Kaolack	215000	163924	197790	*	138920	*	155939
P. Mbaye	Oisellerie du Senegal, Thiaroye	10000	1812	13650	48944	77282	62010	35616
J. Ravanat	Viv-anim, Dakar	430000	435474	428622	421424	453798	510190	446585
B. Wade	Faune Senegalaise, Thiaroye	60000	100170	73658	60210	98094	164316	92741
C. Fall	Exportateur, Rufisque	0	0	0	0	0	5000	5000
TOTALS		1605000	1663326	1675846	1305444	1241462	1158302	1441563

* Data not available but estimated in the range of 100000-120000 birds; totals and averages include these estimates

Data calculated from registration books and Annual Reports

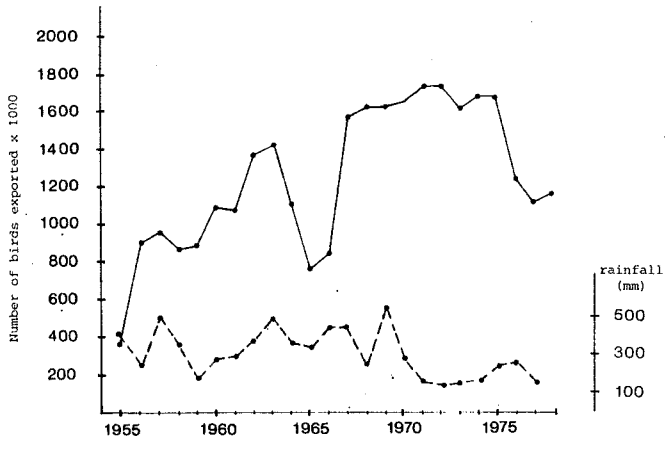
said that they had begun to show interesting profits only in the last few years. Generally, they sold between 300 and 500 pairs per year and earned an average of perhaps $90 to $111 per month. Sales fluctuated monthly relative to the presence of tourists and the species available (i.e. parrots, whydahs, parakeets, and bishops). From these sales, they rented market space at 40¢ per 109 m^2 of curb space, paid maintenance costs and the 2¢ government tax on each pair sold. Market sellers paid slightly more for grain than exporters, since they purchased it in smaller quantities. However, it seemed that much of their monthly profits were derived from the sale of this grain. Millet and Fonio bought at 24¢ to 29¢/kg and $1.11 to $1.25/kg respectively, were sold to regular customers for 67¢ and $1.55.

Annual exportation rates

From 1955 (the date of the earliest available records) to 1978, over 29 million birds were exported from Senegal, an average of 1.2 million birds a year. The annual rate varied between 360,000 in 1955 and 1,700,000 in 1972. From 1967 to 1975 over 1,500,000 were exported annually (Fig.2). This dramatic rise in numbers was a result of the development of the 'Thiaroye' trapping net, which made capture easier, and from an expanded European market opened up by air transport. Previous exportations were by ship. The trade also developed because remote areas of Senegal became accessible and Mali became an important source of birds.

The downward trend beginning in 1976 is more difficult to explain but is partly due to import restrictions in some of the consumer countries; direct exportation from the new, enlarged airport in Bamako, Mali, and perhaps the prolonged drought which has affected the entire region since 1972. The precipitous decline in 1965 and 1966 seems inexplicable unless it was also associated with drought conditions, a view held by some exporters and perhaps partially supported by the rainfall data presented in Fig. 2. These data are from Podor, in the Senegal River Valley, and one of the important bird collecting regions. A three to four year period of below average rainfall preceded both declines. The drop in 1965 might coincide with the decline in the Red-billed Quelea population in that region due to environmental changes and the control operations of OCLALAV (Organisation Commune de la Lutte Antiacridienne et de la Lutte Antiaviare). Millions of Queleas, a major pest of cereal crops in Sahelian Africa, have been killed by this organization. The Quelea population in the Senegal River Valley is now considerably lower than in the 1950s and early 1960s (Ward 1973) when it was likely to have been an important species to the export industry.

FIG 2:- Number of birds exported annually from Senegal between 1955 and 1978 and mean annual rainfall at Podor between 1955 and 1977.



Broad-tailed Paradise Whydah

Mortality rates

Most exporters kept at least cursory records of mortality, which they were unwilling to provide. When questioned on the subject they usually said that mortality was 2 to 3 per cent during transport from the field; 2 to 6 per cent while awaiting sale and shipment; and 1 to 3 per cent during export. This last figure has been corroborated by the figures of an American importer. This represents a total of between 5 and 12 per cent per 60,000 to 144,000 birds for the industry as a whole each year. In addition, the extensive field mortality during capture and while awaiting transport from the field to the exporters' compounds (Morel pers.comm.) has been estimated at 40 to 50 per cent* (Fall pers.comm.), or another 480,000-600,000 individuals, bringing the overall total to between 45 and 62 per cent of the total number exported. In other words, it is likely that at least 2 million birds were trapped annually to meet the export demands.

Seasonality in Exportation

From 12,000 to 160,000 birds were seen awaiting exportation during my monthly visits to the two largest exporters (Table 2). Ploceidae (17 species - 142,586 indiv.), Estrildidae (13 species - 253,440 indiv.), and Fringillidae (3 species - 77,597 indiv.) were the most prevalent. Twenty species were seen in every month. These included Yellow-fronted Canary, Pin-tailed Whydah, Indigobird, Village Weaver, Red-billed Quelea, Golden Sparrow, Cut throat, Cordon-bleu, African Silverbill, and several species of waxbills. Other species were collected only during the nesting season: Golden and Red Bishops when they had assumed their brilliant breeding plumage, and parakeets, parrots, starlings and hornbills, since they were easily captured at their nests. A few species such as wagtails, bulbuls, larks, Trumpeter Finches, Cabanis' Buntings, and Magpie Mannikins were occasionally seen. These either were released or exported under the "collection" or "miscellaneous" categories.

The peak export periods during any year were from March to June and from August to September when about

* see page 23

Number of each bird species observed during monthly observations at the compounds of two exporters in Senegal in 1977 and 1978

	Jun 77	Jul 77	Aug 77	Sep 77	Oct 77	Nov 77	Dec 77	Jan 78	Feb 78	Mar 78	Apr 78	May 78	TOTAL	percent * Diallo	percent * Vivanim
ALAUDIDAE (total)[1]	(5)	(3)	(2)	(0)	(0)	(70)	(46)	(101)	(46)	(86)	(35)	(25)	(419)	37	63
Eremopterix leucotis	5	1	1	0	0	70	46	100	45	85	30	25	408	36	64
COLUMBIDAE (total)[2]	(601)	(597)	(123)	(76)	(173)	(851)	(828)	(817)	(685)	(2178)	(1535)	(1026)	(9390)	58	42
Oena capensis	550	550	117	70	151	765	692	803	633	1936	1340	750	8357	55	45
Streptopelia senegalensis	20	10	2	4	10	41	28	9	12	205	150	251	742	85	15
Columba guinea	0	25	0	2	2	25	2	0	20	10	30	0	116	0	100
Streptopelia decipiens	0	3	1	0	4	0	1	0	10	12	0	25	56	91	9
PSITTACIDAE (total)	(215)	(26)	(10)	(39)	(425)	(960)	(2130)	(1825)	(390)	(252)	(182)	(500)	(6954)	40	60
Psittacula krameri	208	19	7	37	350	560	400	875	250	100	125	400	3331	28	72
Poicephalus senegalus	6	5	1	2	75	225	1150	900	135	150	5	100	2754	40	60
Poicephalus robustus	0	2	2	0	0	25	30	20	5	2	50	0	136	15	85
Psittacus erithacus	1	0	0	0	0	150	550	30	0	0	2	0	733	97	3
STURNIDAE (total)	(29)	(25)	(7)	(10)	(60)	(445)	(231)	(219)	(290)	(226)	(227)	(5)	(1774)	24	76
Lamprotornis chalybaeus	24	24	7	10	53	405	185	109	230	190	175	5	1417	28	72
Lamprotornis caudatus	0	0	0	0	0	25	45	100	45	35	0	0	250	12	88
Spreo pulcher[3]	5	1	0	0	7	15	1	10	15	1	52	0	107	2	98
EMBERIZIDAE (total)	(150)	(0)	(100)	(430)	(25)	(62)	(22)	(37)	(40)	(30)	(101)	(121)	(1118)	83	17
Emberiza tahapisi[4]	150	0	100	430	25	62	22	37	40	30	100	121	1117	83	17
FRINGILLIDAE (total)	(5500)	(7625)	(18300)	(6400)	(5100)	(5450)	(1911)	(3441)	(1747)	(1340)	(17235)	(3550)	(77599)	66	34
Serinus mozambicus	5250	7075	17350	5700	4425	5000	1600	3246	1527	1205	17100	3200	72678	68	32
Serinus leucopygius	250	550	950	700	675	450	310	195	220	135	135	350	4920	43	57
PLOCEIDAE (total)[5]	(5382)	(11296)	(23066)	(18098)	(28965)	(26179)	(7157)	(4002)	(4664)	(4203)	(6847)	(2725)	(142584)	30	70
Quelea erythrops	0	0	5	110	65	6	35	8	5	0	1	10	245	14	84
Quelea quelea	850	2200	2560	1500	1225	225	235	60	60	80	280	50	9325	10	92
Euplectes franciscanus	0		1720	2150	18975	20550	3485	1280	1675	970	2050	250	53115	18	82
Euplectes afer	0		900	1610	460	45	40	203	0	0	0	50	3308	85	12
Euplectes hordeaceus	0	0	0	350	1850	65	30	6	0	0	0	0	2301	68	32
Euplectes macrourus	50	0	70	150	75	85	50	55	32	85	235	225	1112	76	24
Vidua orientalis	225	250	1700	1800	670	130	155	460	555	355	52	0	6352	34	66
Vidua macroura	500	700	1180	2000	300	350	150	70	75	91	250	370	6036	66	34
Hypochera chalybeata	385	3250	4950	2350	410	115	170	170	150	97	250	1020	13317	53	47
Ploceus cucullatus	60	700	1150	1400	750	1100	255	110	20	260	250	125	6180	34	66
Ploceus spp.	50	185	6620	2540	1145	653	355	70	70	135	475	75	11973	35	65
Passer luteus	3250	4000	2500	1900	2800	2820	2150	1500	2020	2125	3000	550	28615	33	67
Sporopipes frontalis	5	0	110	230	225	35	35	2	2	2	4	0	650	59	41
ESTRILDIDAE (total)[6]	(16911)	(49681)	(30029)	(8116)	(6760)	(10051)	(9564)	(11659)	(34330)	(24380)	(28786)	(23173)	(253440)	53	44
Amadina fasciata	1050	7500	9200	950	4125	7285	4575	3655	8750	6950	1800	450	56290	37	63
Amandava subflava	400	1750	2325	56	75	45	40	30	0	5	410	1250	6386	9	91
Estrilda caerulescens	1600	2600	1225	300	55	145	225	155	6425	1950	8500	920	24100	83	17
Estrilda troglodytes	3100	12550	3300	1550	225	175	405	945	7300	4450	6700	12100	52800	87	13
Uraeginthus bengalus	910	955	872	400	355	275	1450	3739	7605	8450	2550	350	27911	22	78
Estrilda melpoda	7600	17250	2400	750	125	175	70	175	520	350	3100	5550	38065	66	34
Lagonostica senegala & spp.	1200	1450	2650	1150	235	445	282	2235	2400	1000	1650	1800	16497	43	57
Pytilia phoenicoptera	0	0	0	8	0	1	2	5	5	30	350	2	403	64	36
Lonchura cucullata	800	4600	4900	1400	190	195	385	240	425	440	2500	350	16425	38	62
Lonchura cantans	250	950	3150	1550	1375	1310	2130	480	900	755	1200	400	14450	65	35

* Percent may not total 100% since the individuals of several species of minor importance are included only in family totals.

1. ALAUDIDAE - Galerida cristata (11). 2. COLUMBIDAE - Turtur afer (22) Treron waalia (27) Streptopelia vinacea (70) S. turtur (1).
3. EMBERIZIDAE - Emberiza cabanisi (1). 4. FRINGILLIDAE - Rhodopechys githaginea (1). 5. PLOCEIDAE - Passer griseus (28) P. simplex (1) Petronia dentata (22) Ploceus superciliosus (4). 6. ESTRILDIDAE - Ortygospiza atricollis (76) Lonchura fringilloides (10) Lagonosticta larvata (27).

Also recorded:-
BUCEROTIDAE - Tockus erythrorhynchus (42); MOTACILLIDAE - Motacilla flava (4); PYCNONOTIDAE - Pycnonotus barbatus (1); SYLVIIDAE - Camaroptera brachyura (1)

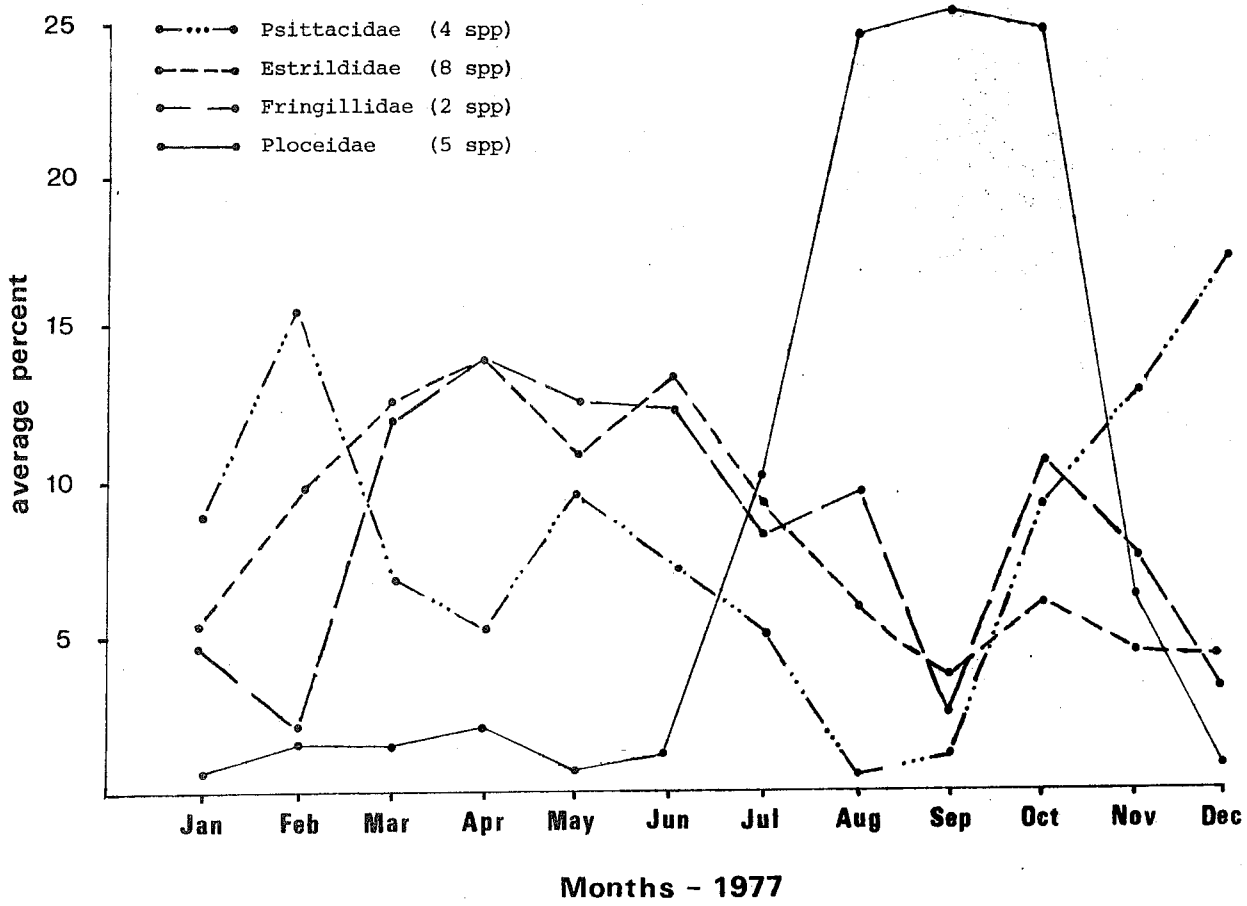


FIG 3:- Monthly exportation rate from Senegal during 1977 of selected bird species in the four most important families

45 per cent and 20 per cent respectively of the birds were shipped. Waxbills and canaries were mainly exported during the first period and the weavers and bishops, because of their highly coloured breeding plumage, during the latter period. Most parrots were exported between November and February (Fig. 3).

Species quantities and preferences of importing countries

From 1972 to 1978 Senegal exported birds to 41 different countries or states; the number of countries ranged from 18 to 25 annually (Table 3).* Ten European countries, together with the United States and Japan, were involved every year. During the same period, France, Belgium, West Germany, Holland, Italy, and Spain together averaged over 1.2 million birds a year, or almost 84 per cent of the total trade. Despite these impressive figures, the total number of birds exported to all of these countries except West Germany has decreased considerably in recent years.

The importance of Europe to Senegal's industry is based on the strong economic ties of France with Senegal; the excellent air service between Dakar and various European countries; the lack of prohibitive import restrictions in many European countries; and the efficient re-exportation network in Europe. Many birds in trade pass through Europe's clearing houses (Ricciuti 1977). For example, in November 1978, Orange-cheeked Waxbills, which had been purchased from Holland (but presumably originally imported from Senegal) were being sold in Nairobi, Kenya.

Birds were exported to five African countries: Gabon, Ivory Coast, Mauritania, Morocco and South Africa, most (85 per cent) of the total (18,350) going to the last-named country. During the same period 18,000 birds were exported to Hong Kong.

Countries of secondary importance to Senegal's commerce included Japan, U.K. (to which very few birds have been exported since 1975), Denmark, and the United States. Of these countries the most consistent export has been to Japan, averaging 52,000 (range of 30,790 - 77,974) per year. The United States' role in the pet trade has been characterized by extreme annual variations.

According to Banks (1976), Senegal, with 528,839 birds, ranked second in importance to India in supplying birds to the U.S.A. during the period 1970 to 1972. Unfortunately, comparative exportation data from Senegal encompassing that entire period were not available.* However, between 1972 and 1978 Senegal did export more than 600,000 birds to the U.S.A. including 3620 in 1973 (a year in which an embargo on the import of all exotic birds was in effect). This is six times the number of birds declared as imports into the U.S.A. from all countries during that year despite the fact that no birds were apparently imported from Senegal (Greenhall 1977). This sort of discrepancy exemplifies the problems involved in determining the extent of the export industry.

Many of the birds exported to the U.S. between 1974 and 1978 were waxbills or canaries, but almost 40,000 Golden Sparrows, weavers, and bishops were also involved (Table 4). These are major pests to cereal crops in Africa and have been the subject of intensive national and regional control programmes and research efforts (Anon 1978b; Dyer and Ward 1978), some of these species presumably could be equally destructive in some areas of the U.S. if they escaped or were released.

Ninety-five per cent of the birds supplied to the U.S. during 1977 were exported by Viv-anim (64 per cent) and Diba (31 per cent). In 1978 Viv-anim increased its rate to 74 per cent. Based on the exporter's price list for the various species during 1977 and 1978 the total value of the birds exported to the U.S. represents an annual business of $50,000 and $100,000 respectively. In 1978, Diallo re-entered the American market after an absence of several years. He previously exported as many as 20,000 birds a week on exclusive contracts during some of the peak periods. Most exporters, however, still prefer to

* see page 23

Table 3

Number of birds exported annually to different countries from Senegal between 1972 and 1978

	1972	1973	1974	1975	1976	1977	1978
Abu Dhabi			870		650	500	
Argentina						1200	6380
Australia			800				
Austria	2900	3410	2180	6250	800	7860	10550
Belgium	267364	237294	173258	180658	101196	82482	123836
Canada		2000					
Canary Islands						800	2826
Denmark	14930	22510	22750	22480	16240	10570	9380
Finland				800			
France	394912	431382	470248	355468	279014	231398	203730
Gabon							168
Germany, Fed.Rep.of	277894	243180	284386	304146	323864	282548	222790
Greece			1300	150	860	520	1620
Guadeloupe			24				
Hong Kong					3670	1400	13010
Iran	822	740	300	920	1300		
Israel		200					
Italy	182998	189162	182414	168586	125150	111916	96988
Ivory Coast	1380						
Japan	30790	50090	47860	51080	63060	47320	77974
Kuwait							2200
Lebanon			680				
Malaysia		1400		2640			
Mallorca	2000				1550		
Malta			1052				
Mauritania		20	212				
Morocco	360	320	340				
Netherlands	220930	189330	207680	260482	160546	150760	126210
Portugal						600	5270
Réunion			1376			400	500
Saudi Arabia	1350						
South Africa	4100	7050	4400				
Spain	60198	62790	87000	118794	115748	87836	75666
Sweden	1400	3200	2960	1600	1250	90	17160
Switzerland		7080	8250	2570	5590	1160	3710
Syria						2	
United Kingdom	132490	140780	137722	152084	23490	32116	29380
Uruguay		7850	17840	2000		400	
USA	129820	3620	5726	29390	12246	51454	111162
Venezuela					3670	1070	
Vietnam	1000						
TOTALS	1727638	1603408	1660252	1660098	1239894	1104402	1140510

Totals do not include the distribution of Mr Masfrand's birds annually.

Data calculated from registration books and Annual Reports.

Table 4

Number of each bird species exported to the United States from Senegal between 1974 and 1978

Species	1974	1975	1976	1977	1978	Total
PSITTACIDAE (total)		(6300)	(3146)	(2572)	(5702)	(17720)
Poicephalus senegalus		6100	3100	100	3436	12736
Psittacula krameri		200		2418	2186	4804
Psittacus erithacus and Poicephalus robustus *			46	54	80	180
STURNIDAE (total)		(90)		(322)	(0)	(412)
Lamprotornis spp.		90		322		412
FRINGILLIDAE (total)	(100)			(7100)	(16660)	(23860)
Serinus mozambicus				7000	16640	23640
S. leucopygius	100			100	20	220
PLOCEIDAE (total)	(1400)			(12860)	(25690)	(39950)
Passer luteus	300			3670	600	4570
Ploceus spp.				300	600	900
Euplectes franciscanus	1000			8160	20000	29160
Euplectes afer				400	1500	1900
Hypochera chalybeata	100			170	2340	2610
Vidua spp.				160	650	810
ESTRILDIDAE (total)	(4226)	(23000)	(9100)	(28600)	(51850)	(116776)
Amadina fasciata	1000	15000	7000	11300	10600	44900
Amandava subflava				1600	240	1840
Estrilda melpoda	276			1200	5900	7376
E. troglodytes		2100		600	10120	12820
E. caerulescens		2200		6100	1480	9780
Uraeginthus bengalus	50	1400	100	3600	14090	19240
Lagonosticta senegala	500	2100		2900	2820	8320
Lonchura cucullata	1800	200		700	3040	5740
L. cantans	600		2000	600	3560	6760
"COLLECTION" **					11260	11260
TOTALS	5726	29390	12246	51454	111162	209978

% handled by each exporter
1977 Viv-anim (64%) Faune Senegalaise (4.5%) Diba (31.5%) Diallo (0%)
1978 Viv-anim (75%) Faune Senegalaise (3.7%) Diba (11.3%) Diallo (10.5%)

* at least 95% Psittacus erithacus

** "Collection" species: weavers, sparrows, mannikins, firefinches, cut-throats, and cordon-bleus.

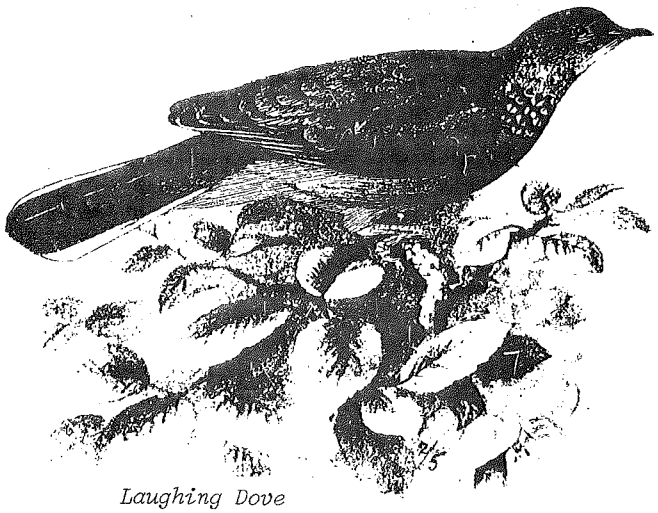
Data calculated from Eau et Forêt Cahier, Certificate d'Origine, Dakar, Senegal .

concentrate on the more lucrative and consistent European market rather than to deal with the rigid U.S. importation restrictions and formalities.

The preferences of the importing countries for the different species are based on shipping distances and transportation costs and marketability within the country. The Cut throat, Black-rumped Waxbill and Yellow-fronted Canary were the most frequently exported species. Many estrildids and the two canaries are considered quite cage-hardy and able to survive long journeys. The exports to Japan during 1978 comprised mainly waxbills (65 per cent) of which Black-rumped and Orange-cheeked Waxbills totalled 43 per cent.

Individual preferences are more difficult to assess for the major European countries, since many birds are re-routed on arrival. Between 51 and 63 per cent of the birds sent to Europe were waxbills, the remainder consisting mainly of weavers and canaries. The exports to Italy comprised more weavers (22.6 per cent) than the other European countries and more doves (1.6 per cent) and starlings (5.2 per cent) than any other country to which exports exceeded 10,000 birds annually. Austria (11.7 per cent), Sweden (8.5 per cent) and Spain (5.2 per cent) apparently preferred parrots.

The principal African agricultural pest species, Red-billed Quelea, weavers of the genus Ploceus, bishops, and sparrows, amounted to 150,000 birds in 1978 or 13 per cent of the total for all birds exported that year. In decreasing importance, Japan (23.3 per cent), U.S. (20.3 per cent), Italy (20.2 per cent), and the U.K. (18.5 per cent) had the greatest preference for these species. However, in terms of actual quantities, West Germany, France, and the U.S., with more than 32,000, 24,000 and 22,000 birds respectively, were the principal recipients.



Laughing Dove

Annual changes in species importance

Between 1976 and 1978, the number of birds exported in the three most important families - Fringillidae, Ploceidae and Estrildidae, remained relatively stable (Table 5). However, the numbers of certain species exported within some of these families changed considerably, particularly between 1975 and 1976. During these two years the exportation rate of 22 of the 30 species listed in Table 5 declined, presumably due to the lingering effect of the recent drought in Western Africa, which continued in Senegal through 1976 (Winstanley 1978). The most dramatic decrease was observed in the number of Ploceus spp. exported, which dropped from 30,700 to 7190. Village and Black-headed Weavers comprise the majority of the birds of this genus which are exported and are species which are often associated with or nest over water (Mackworth-Praed and Grant 1973). Interestingly, their numbers rebounded to near their 1975 level during 1977 and 1978.

Other species whose exportation numbers declined or which exporters considered to be less abundant and, therefore, probably merit close attention are the White-rumped Canary, various whydahs of the genus Vidua, Black-rumped Waxbills, and Bronze Mannikins. But the actual situation for the last two species is difficult to analyze because of the large number of estrildids which were lumped under the category of "collection" during 1978. It is extremely unfortunate that so many birds were exported under this category, since these lists provide one of the most useful means of monitoring the impact of the trade on the individual species. Information of this type is particularly important to any attempt at managing Senegal's bird trade, since so little is known about the biology and life histories of most of the species which inhabit this dry Acacia steppe.

It is unclear if the additional losses incurred during trapping and exportation might be sufficient to tip the balance against some species. Many of the Sahelian birds seemingly have high natural mortality rates. Two well studied species, the Red-billed Firefinch and the Red-billed Quelea, have rates of 70 to 75 per cent (Morel 1964), and about 56 per cent (Jones 1976) respectively. However they also possess some compensatory reproductive capabilities. Morel (1964) found firefinches breeding four times successively, and there is considerable speculation that the migratory quelea, under favourable conditions, breeds more than once in many parts of it range (Ward 1971). Despite the control efforts directed against this species, its population in most parts of its range seems to be as large as ever and it effect on cereal crops just as devastating. The Golden Sparrow, another seemingly opportunistic species, of which more than 20,000 were exported annually, has been recorded nesting during the dry season in northern Senegal (Bruggers and Bortoli 1976). If similar reproductive potential characterizes many of the other small seed-eating, widely dispersed species which are exported from Senegal, it seems unlikely that they will become endangered or even threatened.

This is not generally to condone bird exportation. On the contrary, the ban imposed on wildlife capture and exportation in Kenya in early 1978 seems particularly justified. Over 75 per cent of the more than 1250 birds exported from Kenya to zoo or aviculture collections during 1977 and 1978 were species other than ploceids or estrildids. Most of the birds were the large, familiar, often migratory and colourful members of the families of Anatidae, Phoenicopteridae. Gruidae, Charadriidae, Sturnidae, Musophagidae, Alcedinidae, Bucerotidae, Upupidae, Capitonidae, and Nectariniidae (Cunningham-Van Someron pers.comm.). The populations of some of these species would be particularly susceptible to removal of the adult breeding stock or disruption of the nesting colonies.

RECOMMENDATIONS

With the decreasing number of trappers and the increasing difficulties and expenses involved in capturing and maintaining birds, some exporters realized that future profits rest in reducing losses in cages. By implementing several changes mortality could be minimized and the number of birds being trapped to meet consumer demands reduced. These changes include standardizing holding pens and cages and emphasizing large flight pens; removing birds from their transport cages to these flight pens immediately upon arrival from the bush; frequent cleaning and disinfecting compound facilities and painting them twice annually; properly disposing of dead birds and keeping accurate mortality records; and reusing spilled grain only if fresh and when the debris has been carefully removed.

To promote improved conditions, the government should consider leglislating a code of conduct for the exporters and penalizing any illegalities. Unannounced inspections should be made to insure sanitary conditions.

Table 5

Number of each bird species exported from Senegal between 1974 and 1978

	1974	1975	1976	1977	1978
COLUMBIDAE	(5940- 0.4%)	(7910- 0.5%)	(5050- 0.4%)	(5054- 0.5%)	(5002- 0.4%)
Columba guinea	180	54	50	0	?
Others *	5760	7856	5000	5054	5002
PSITTACIDAE	(13528- 0.9%)	(21066- 1.4%)	(15982- 1.3%)	(17078- 1.6%)	(21974- 1.9%)
Poicephalus senegalus	11412	18180	13918	10440	14550
Psittacula krameri	2044	2686	1354	5308	4166
Psittacus erithacus and Poicephalus robustus	72	200	710	1330	3258
CICONIIDAE					
Leptoptilos crumeniferus	1- 0.0%	0- 0.0%	0- 0.0%	0- 0.0%	0- 0.0%
STURNIDAE	(10226- 0.7%)	(8406- 0.6%)	(7104- 0.6%)	(832- 0.0%)	(9560- 0.8%)
Spreo pulcher					
Lamprotornis spp					
BUCEROTIDAE	(124- 0.0%)	(400- 0.0%)	(138- 0.0%)	(266- 0.0%)	(162- 0.0%)
Tockus erythrorhynchus and T. nasutus					
FRINGILLIDAE	(178742-12.4%)	(199310-13.3%)	(177590-14.5%)	(177174-16.2%)	(162960-14.1%)
Serinus mozambicus	173892	180660	166200	171474	158110
Serinus leucopygius	4850	18650	11390	5700	4850
EMBERIZIDAE & ALAUDIDAE**	(210- 0.0%)	(20- 0.0%)	(30- 0.0%)	(210- 0.0%)	(100- 0.0%)
PLOCEIDAE	(270654-18.8%)	(255268-17.1%)	(220790-18.0%)	(222556-20.4%)	(221902-19.1%)
Quelea quelea and Q. erythrops***	26760	22028	27650	24530	26080
Ploceus spp.	38430	30700	7190	28736	24800
Passer luteus	33800	24300	15300	23130	17180
Euplectes afer	9900	3750	12120	11706	15870
E.franciscanus and E.hordeaceus	112490	120500	105680	106194	108170
Hypochera chalybeata	17970	22910	16000	14710	13582
Vidua orientalis & V. macroura	31304	31080	36850	13550	16220
ESTRILDIDAE	(959038-66.7%)	(1004048-67.1%)	(797836-65.2%)	(668564-61.2%)	(737396-63.6%)
Amadina fasciata	246202	256400	230556	224788	152586
Estrilda caerulescens	31910	26850	18150	11866	14960
Estrilda melpoda	138490	126464	126680	94864	142660
Uraeginthus bengalus	98286	150000	102020	77870	90710
Amandava subflava	3010	18710	7760	12250	25920
Lagonosticta senegala	19650	17610	10950	16800	16320
Estrilda troglodytes	337990	329294	244090	181586	150100
Pytilia phoenicoptera	3500	2000	400	600	1450
Lonchura cantans	28650	34300	17950	20940	25570
Lonchura cucullata	51350	42020	39280	26400	30650
"COLLECTION"****	0	400	0	600	86470
PTEROCLIDIDAE					
Pterocles spp.	0	0	0	10- 0.0%	0
TOTAL	(1438463-99.9%)	(1496428-100.0%)	(1224520-100.0%)	(1091744-99.9%)	(1159056-99.9%)

* Treron; Oena; Streptopelia spp.; Turtur spp.
** Emberiza tahapisi, Galerida cristata, Eremopterix leucotis
*** 99% Q. quelea
**** Mixed Estrildidae

Data compiled from the original exportation records and annual reports of the Direction des Eaux et Forêts, Dakar.

Totals do not include Masfrand's figures.

Birds should be exported with valid health certificates and the contents of selected shipments should be verified. Birds should not be exported under the "miscellaneous or collection" categories. All exporters should be required to register their shipments with the Eaux et Forêts in Dakar, so that the information is current and centralized. Exporters should be required to declare the number of each species upon arrival from the bush. Comparing this number with those actually exported could give a more accurate idea of mortality in the cages. Trapping restrictions could then be imposed on those species whose export numbers appear to be decreasing. Field trapping procedures should be observed to ensure they are proper. Much of this work could be at least initiated by one man working full time.

CONCLUSIONS

The volume of birds which Senegal contributes to the world trade is large. None of the birds is presently on an endangered or threatened species list, nor do they seem subject to the deplorable conditions described by Riciutti (1977) for birds in the Asian export centres of Singapore, Hong Kong and Bangkok. The exportation industry in Senegal is regulated by the government's Eaux et Forêts et Chasses to the extent of its available personnel. The cage bird trade in general presents some problems which from an ornithological and ecological standpoint are sometimes difficult to accept. The implication of the trade to disease transmission and animal cruelty, and the adverse effects of escaped exotic species on agriculture or resident bird populations have been stated (Nilsson 1981) and are relevant to the Senegal trade.

These considerations, however, hold little importance to exporters. When questioned, they usually were evasive and quick to "justify" their operations on the basis that they were exporting only "small numbers of birds" (in comparison to the world market), were employing otherwise unproductive villagers, and that "most" of the birds were pests to cereal crops. These views are not entirely unfounded considering that some of the countries from which these birds are collected are among the poorest in the world, are not self-sufficient in food production and experience serious employment problems for most of the individuals that come to the city when disenchanted with village life. Additionally, several of the bird species are responsible for considerable losses to cereal crops, and the individual farmers particularly appreciate having them trapped in their fields. Many individuals in developing countries, therefore, are not particularly receptive to the conservation-management philosophy, since they have other more important and immediate priorities. Nonetheless, it is ironical that this bird business, which must buy locally or import at least 140 tons of grain annually for feeding captive birds awaiting export, has thrived in Sahelian countries which suffered greatly from the recent drought and which have received considerable food aid, much of it grain.

There are no easy solutions to the problems presented by the trade in cage birds. It is unlikely that it can be stopped or that in all situations this would be completely desirable. The problem could, however, be at least partially alleviated by breeding some of the species in captivity. For the time being, it rests with the individual exporters and importers and the participating countries to try and manage themselves and the industry in a rational manner.

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APPENDIX I

Scientific and English common names of the birds mentioned specifically in the text or tables

Scientific	English
ALAUDIDAE	
Eremopterix leucotis	Chestnut-backed Finchlark
Galerida cristata	Crested Lark
BUCEROTIDAE	
Tockus erythrorhynchus	Red-billed Hornbill
Tockus nasutus	African Grey Hornbill
CICONIIDAE	
Leptoptilos crumeniferus	Marabou Stork
COLUMBIDAE	
Columba guinea	Speckled Pigeon
Oena capensis	Namaqua Dove
Streptopelia decipiens	Mourning Collared Dove
Streptopelia senegalensis	Laughing Dove
Streptopelia turtur	European Turtle Dove
Streptopelia vinacea	Vinaceous Dove
Treron waalia	Bruce's Green Pigeon
Turtur afer	Blue-spotted Wood Dove
EMBERIZIDAE	
Emberiza cabanisi	Cabanis' Bunting
Emberiza tahapisi	Cinnamon-breasted Bunting
ESTRILDIDAE	
Amadina fasciata	Cut throat
Amandava subflava	Zebra Waxbill
Estrilda caerulescens	Red-tailed Lavender Waxbill
Estrilda melpoda	Orange-cheeked Waxbill
Estrilda troglodytes	Black-rumped Waxbill
Lagonosticta larvata	Black-faced Firefinch
Lagonosticta senegala	Red-billed Firefinch
Lonchura cantans	African Silverbill
Lonchura cucullata	Bronze Mannikin
Lonchura fringilloides	Magpie Mannikin
Ortygospiza atricollis	Quail Finch
Pytilia phoenicoptera	Red-winged Pytilia
Uraeginthus bengalus	Red-cheeked Cordon-bleu
FRINGILLIDAE	
Bucanetes githaginea	Trumpeter Finch
Serinus leucopygius	White-rumped Canary
Serinus mozambicus	Yellow-fronted Canary
MOTACILLIDAE	
Motacilla flava	Yellow Wagtail
PLOCEIDAE	
Euplectes afer	Golden Bishop
Euplectes franciscanus	Red Bishop
Euplectes hordeaceus	Red-crowned Bishop
Euplectes macrourus	Yellow-shouldered Whydah
Hypochera chalybeata	Village Indigobird
Passer griseus	Grey-headed Sparrow
Passer luteus	Golden Sparrow
Passer simplex	Desert Sparrow
Petronia dentata	Bush Sparrow
Ploceus cucullatus	Village Weaver
Ploceus melanocephalus	Black-headed Weaver
Ploceus superciliosus	Compact Weaver
Quelea erythrops	Red-headed Quelea
Quelea quelea	Red-billed Quelea
Sporopipes frontalis	Speckle-fronted Weaver
Vidua macroura	Pin-tailed Whydah
Vidua orientalis	Broad-tailed Paradise Whydah
PSITTACIDAE	
Poicephalus robustus	Brown-necked Parrot
Poicephalus senegalus	Senegal Parrot
Psittacula krameri	Rose-ringed Parakeet
Psittacus erithacus	Grey Parrot
PYCNONOTIDAE	
Pycnonotus barbatus	African Bulbul
STURNIDAE	
Lamprotornis caudatus	Long-tailed Glossy Starling
Lamprotornis chalybaeus	Blue-eared Glossy Starling
Spreo pulcher	Chestnut-bellied Starling
SYLVIIDAE	
Camaroptera brachyura	Green-backed Camaroptera

The scientific names follow Hall and Moreau (1970) and Snow (1978)

Editorial Comments

In the WTMU files we have some data which is additional to, and to some extent, a clarification of that contained in the foregoing report.

Details of the number of birds exported are published by the Senegal government and are included in the following table. These figures differ somewhat from those in Table 3 of the report, however, the fact that 11 of the figures correlate indicates that a similar source must have been used for the compilation.

The general conclusions about the most important countries involved are the same and some of the discrepancies may be explained by different recording systems, e.g. the 200 birds recorded in this table as exported to Israel in 1972 may be the same as those recorded in 1973 in Table 3. The difference between the two tables for the Benelux countries is partly explained if the figures for the three countries are totalled, but the absence of birds going to Belgium in 1977 and 1978 in the table below is a mystery.

The two tables include 54 different countries or states, but 9 of these only have exports recorded to them in Table 3 (registered as blank in the present table).

When the present table is compared with Table 3 the difference between the totals for each year varies: 11% extra in 1972; more or less equal in 1973 to 1975; 23% less in 1977; and 31% less in 1978. The differences between the figures within countries is sometimes enormous, e.g. USA in 1978: 111,162 (Table 3), 42,250 (this table). It is not known whether either figure is correct but the fact that the USA imported at least 160,000 birds from Senegal in 1980 (extracted from Nilsson, 1981, Appendix) indicates that the former may be nearer the truth. The figures for several years prior to 1972 are available in the published data and they show a total of 612,866 birds exported to the USA in the three years 1970 to 1972 (cf. 528,839 on p.17 of Bruggers' report). No birds were recorded as exports to the USA in 1973 in the present table, thus agreeing with Greenhall (1977) (cf. 3,620 in Table 3).

The mortality during capture and while awaiting transport to the exporters has been estimated at 40 to 50 per cent (see p.17). This figure seems extremely high when compared with the only figure available from a comparable study in another country - 5% total pre-export mortality - The Indian Bird Trade in Nilsson (1981). It would seem unlikely that the trade could continue to be economic to the trappers who receive very little for each live bird sent to the exporter. It would be useful if the mortality in Senegal and other countries at this stage of the trade could be studied directly to produce actual figures rather than estimates.

Number of birds exported from Senegal to different countries from 1970-1978

	1972	1973	1974	1975	1976	1977	1978
Abu Dhabi			-			-	
Albania						900	
Argentina						?	2558
Australia			800*	1600		420	2012
Austria	3300	4660	2000	6650		-	-
Belgium	269520	226975	191400	224182		-	-
Canada	6000	-					
Canary Islands	800	1670	2622			-	336
China			3420				1500
Colombia			1800			?	
Congo							260
Denmark	18530	21510	21560	21880		13935	15655
Equatorial Guinea						100	
Finland				-			
France	502752	461097	460640	352280		182992	134920
Gabon	600						168*
German Dem. Rep.	2350					?	
Germany, Fed. Rep. of	292235	264469	267860	304952		173478	132204
Greece			1300*	-		1216	1620*
Guadeloupe			-				
Honduras						3750	
Hong Kong	2220	420				-	4892
Indonesia							?
Iran	520	740*	820	920*			
Irish Republic				2000			
Israel	200	-					
Italy	161228	164548	170598	172110		91144	63018
Ivory Coast	300			2740			630
Japan	39460	45470	56280	44090		36690	37798
Kuwait				330			-
Lebanon			-				
Luxembourg						96190	68592
Malaysia		1400*		2640*			
Mallorca	-						
Malta			1492			2456	745
Mauritania		-	-				
Morocco	760	320*	240				2200
Netherlands	230483	199389	213396	219965		97617	56052
Niger							4
Portugal						5250	940
Reunion			1200			-	-
Saudi Arabia	1300						
South Africa	-	-	-				
Spain	58630	60410	74392	106035		91444	184818
Swaziland		6150	3000			8	
Sweden	1400*	5400	2800	2400		45	6260
Switzerland	500	8280	8200	2170		21909	17430
Syria						-	
UK	133296	135554	113492	151180		12700	4600
USA	183706	-	7320	10500		18041	42250
USSR							650
Uruguay		7300	15200	2000*		-	
Venezuela						?	
Vietnam	-						
TOTAL	1910090	1615762	1621832	1630624	N/A	853895	782112

Data from Exportations, Commerce Special, Ministère des Finances et des Affaires Economiques, Direction de la Statistique, BP 116 Dakar

* Figure corresponds to the respective figure in Bruggers' Table 3

The Beach Chimp Trade in Spain

About 100-150 chimpanzees Pan troglodytes are being used by beach photographers in Spain and the Canary Islands. Most of the chimps come from Sierra Leone and Belgium (both non-Parties of CITES) and especially Guinea, a Party to CITES and, therefore, obliged to prohibit export of chimpanzees for commercial purposes. In some cases they come via France (also a CITES Party) in cars or caravans.

A survey is being carried out on the number and distribution of chimps being used for this practice by Mr B Templer of the International Primate Protection League for WWF International.

The photographers operate either alone or with assistants and it is also possible for them to hire a chimp for a day or a number of hours. It appears that treatment of the chimps is variable, but once the animals reach 5-6 years old, they have outgrown their commercial use and are usually destroyed. A baby chimp (1-2 years old) will cost the trader about $5,000 and in one season a successful operator can earn in the region of $40,000 (tax free); the fine, therefore, of $500 for failing to comply with the health regulations is totally inadequate in discouraging the trade. The Ministry of Commerce in Spain has confirmed that the importation of chimps for commercial purposes is prohibited. Neverthless, the loophole allowing import of "domestic pets" accompanied by their owners still exists, except in Barcelona where the authorities have agreed to refuse entry for any chimp, domestic pet or otherwise; in Alicante, Customs authorities have promised to take action to stop entries in the future.

One possible method of controlling this practice is the confiscation of chimps seen working. However, authorities are often reluctant to seize the animals due to lack of space in zoos and other holding facilities whilst legal procedures are carried out. There is no doubt though that the few successful cases where confiscated chimps have been sent to The Gambia have proved an effective deterrent to traders. Unfortunately, although confiscated beach chimps are accepted in The Gambia for rehabilitation, the cost of transporting them is extremely high.

The capture of one baby chimp often involves the killing of 3-5 adult chimps, and many of the baby chimps die during transportation. Those that survive will be dressed in clothes, their feet may be crushed by shoes, and psychologically the animals may be so disoriented that many of them become very mentally disturbed. There is also a health hazard since many of them contract diseases whilst held in captivity or during transportation and thus create a health risk during contact with humans.

As Spain is not a Party to CITES, it has proved a difficult task to implement better control in the importation of chimps and although authorities were alerted to the trade, no concertive restrictive action has been taken. In 1981, a campaign was launched on mainland Costa Brava, where the mayor of Lloret de Mar discovered two little known and certainly ignored sanitary regulations. Their effect is to prohibit photographers, accompanied by chimps, from entering bars, restaurants, hotels, night-clubs, beaches or swimming-pools. By the end of the season the photographers had virtually disappeared. If effectively enforced, these regulations should put the photographers out of business for good.

Perhaps the success at Costa Brava will prove an effective means of influencing authorities in other affected areas to take action in cracking down on the beach chimp trade.

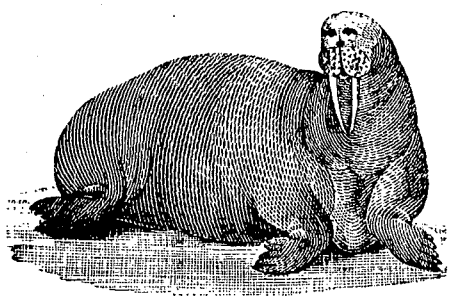
Source: B. Templer - International Primate Protection League
De Telegraaf - Holland, 22.12.79

WTMU Needs Marine Mammal Data

In 1981, the Food and Agriculture Organisation of the United Nations and the United Nations Environment Programme issued their Draft Global Plan of Action for the Conservation, Management and Utilization of Marine Mammals.

It recommended that IUCN, in co-operation with the CITES Secretariat, should prepare a proposal for improving the collection and publication of statistics on the killing of and international trade in marine mammals.

As a result, WTMU is now reviewing the available data (published and unpublished) on killing of and trade in marine mammals for the years 1979, 1980 and 1981 and will be grateful for any statistics you can supply. Please send any information to Jonathan Barzdo at WTMU.



The Walrus

Next CITES Meeting

At a recent meeting of the CITES Standing Committee held in Gland, it was confirmed that the next meeting of the Conference of the Parties will be held in Gaborone, Botswana, in the second half of April next year.

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