

## SPECIAL REPORT

# The bird trade in Medan, north Sumatra: an overview

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## Introduction

Trade is a serious threat to the conservation of numerous species of birds in Indonesia. Keeping birds as pets in Indonesia is a very popular and widespread hobby (Shepherd *et al.* 2004, Jepson & Ladle 2005). While some of the birds are intended for international export, the bulk of the trade supplies local demand. This trade involves large volumes of birds, with the vast majority of them being wild-caught (Shepherd *et al.* 2004). Virtually all towns and cities in Indonesia have bird markets and very little is done to regulate or monitor the trade and to ensure it is both legal and sustainable. Most bird species are traded for pets, while a few species are traded for food, and to a far lesser extent, for medicinal and folk magic purposes.

Indonesia has committed to the conservation of its wildlife through national and international legislation and is a signatory to the Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES). However, despite being a party to CITES and having good national wildlife protection laws, illegal trade continues to flourish, openly throughout the country.

A study was carried out by the South-East Asia office of TRAFFIC, the wildlife trade monitoring network of WWF and IUCN, to survey three bird markets in the city of Medan, the provincial capital of North Sumatra, Indonesia (*Open Season: An analysis of the pet trade in Medan, Sumatra 1997–2001*). The main objectives of this study were to document the species in trade, the number of species being traded that were protected by law and to determine trade routes and other relevant market dynamics. The three markets were chosen because huge volumes of birds passed through these markets, many of them threatened and legally protected species.

## Methods

Surveys of the three bird markets in Medan (Jalan Bintang, Petisah and Sembahé), which totalled more than 50 individual stalls selling birds, were carried out on a monthly basis between 1997 and 2001. A spot-check on the markets was also carried out in December 2005.

Building a relationship with dealers in the bird markets was a key element of the surveys' success. Dealers offered valuable information through

numerous informal interviews and conversations which took place during the repeated visits made to the markets.

During these surveys, all species observed and the quantities of each species were recorded.

Estimates of the quantities of species that were very common and numerous, and legally unprotected, were made. Accurate counts of all other species were made. Species identification was made on the basis of personal knowledge and with reference to field guides. Photographs were taken whenever possible to assist in identification. A total of 16 avian species that could not be identified at least to a genus level were omitted from the analysis of the trade in these markets.

## Legislation

Indonesia has been Party to CITES since 1978, (which entered into force in March 1979). National legislation allows native species listed on Appendix II and III of CITES, as well as non-CITES species that are not fully protected by national law (CITES-listed species are not necessarily protected by national legislation in Indonesia, while some non-CITES-listed species are fully protected), to be traded, following a harvest and export quota system. Of the entire harvest quota, only 10% may be for domestic trade, whether protected by national legislation or not. The bulk of the numbers harvested are for export.

The quotas are set on an annual basis for all species at a meeting of various stakeholders including the Directorate General of Forest Protection and Nature Conservation (PHKA—the CITES Management Authority), and the Indonesian Institute of Sciences (LIPI—the CITES Scientific Authority), non-government conservation organisations and licensed wildlife traders. These quotas are reported by PHKA to the CITES Secretariat at the beginning of each year. CITES requires sustainability assessments, known as “non-detriment findings” to be carried out by the authorities themselves or in collaboration with conservation organisations for CITES-listed species in trade, however, such studies are not being carried out prior to the quotas being set. Therefore, there is no accurate information to gauge levels of sustainable off-take. Furthermore, the harvest and export limits are not adequately enforced.

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**Plate 1.** White-crested Laughingthrush *Garrulax leucolophus* of both the Sumatran and mainland South-East Asian subspecies are commonly sold in the markets. Dealers claim that this species is becoming increasingly scarce on Sumatra.



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**Plate 4.** White-headed Munias *Lonchura maja* are sent without permits to Malaysia and Singapore in large quantities, to be released for religious purposes.

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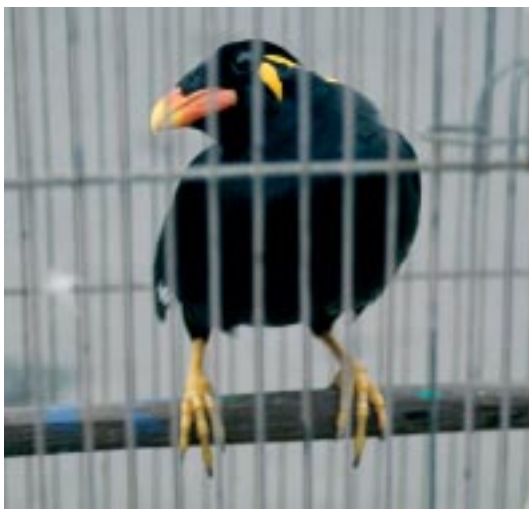
**Plate 2.** Fire-tufted Barbets *Psilopogon pyrolophus* in cages. There is no legal capture or trade of this species in Indonesia.



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**Plate 5.** Red-breasted Parakeets *Psittacula alexandri* and other species of parrots are sold in large volumes in Medan.

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**Plate 3.** Hill Mynas *Gracula religiosa* are heavily harvested in Sumatra, and are becoming increasingly scarce. Many of the Hill Mynas for sale in Medan come from Malaysia and other parts of South-East Asia.



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**Plate 6.** White Cockatoos *Cacatua alba* taken from the wild and smuggled to Medan's markets by land and air. These birds are often smuggled out of Indonesia to nearby Malaysia and Singapore.

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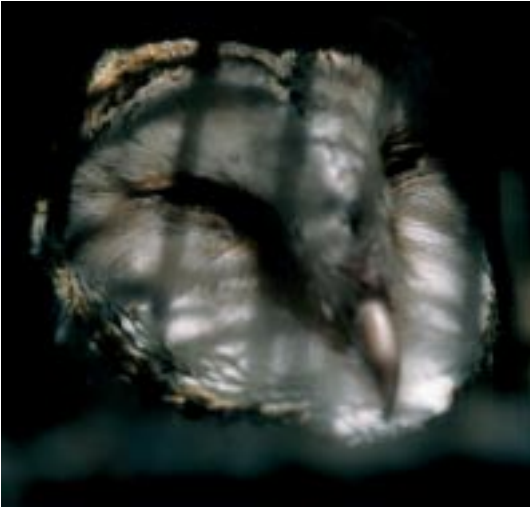


**Plate 7.** Black-winged Kites *Elanus caeruleus* were the most commonly observed raptor in trade during this study.



**Plate 9.** Fire-tufted Barbets *Psilopogon pyrolophus* and Javan Mynas *Acridotheres javanicus* are sold in large quantities in the Medan bird markets.

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**Plate 8.** A Barn Owl *Tyto alba* peers through the bars of a small cage. Owls are traded largely for novelty pets.



**Plate 10.** A young scops owl *Otus* sp. to be sold as a novelty pet.

Harvest quotas are divided by province, with a limited amount being allowed from each designated area. Wildlife cannot be harvested from a province that has no allotted quota. If an exporter does not finish the allotted quota in a year, it is forfeited—the remaining volume that was not realized cannot be added to the following year's quota.

All wildlife traders in Indonesia must be registered with PHKA. Anyone not registered is not permitted to harvest and trade.

The Decree of the Ministry of Forestry No. 447/Kpts-11/2003 (revised from Decree of the Ministry of Forestry No. 62/Kpts-II/1998) requires any harvest or capture and distribution of wild plant and animal specimens to be done under a license. Sending or transporting wildlife from one location

to another within Indonesia must be covered by legal documents, according to Article 42, Chapter X of the Regulations of the Government of the Republic of Indonesia Number 8 (1999), whether the species is protected by law or not. Collectors and suppliers (or middlemen) must be registered with regional offices for the Natural Resources Conservation Agency (BKSDA), the agency under PHKA responsible for the regulation of wildlife trade at the provincial level (Siswomartono, 1998).

Since 2002, Indonesia has not permitted export of any wild CITES-listed bird species. Low harvest quotas were set for Appendix II -listed birds since 2002 for captive breeding purposes only, and not for trade.

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**Plate 11.** White-headed Munias *Lonchura maja* and Scaly-breasted Munias *L. punctulata* are sent in large volumes to Malaysia and Singapore. These birds suffer very high mortalities, even before export—note dead birds on top of cage.

Furthermore, since 2005, no international trade of birds has been permitted due to the risk of avian influenza. During a recent spot-check on the three bird markets in Medan in 2005, it was observed that very few non-native and non-Sumatran species were available. According to dealers, this was due to import restrictions, stemming from the threat of avian influenza. However, the quantities of species and individual birds observed were much the same as in previous surveys. Dealers stated that more birds were being captured in Sumatra to meet the demand and fill the void caused by the threat of avian influenza. Six dealers were questioned regarding bird flu and all six stated that they did not believe such a virus existed and that it was merely a rumour, most likely concocted by competing bird traders in other South-East Asian countries.

**Observations**

During the surveys carried out between 1997 and 2001, an average of more than 3,500 birds was observed on each survey, representing a total of 300 species across the whole five years.

**Plate 12.** Hundreds of Purple-backed Starling *Sturnus sturninus* for sale in Medan bird markets.

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Of the 300 species of birds observed, a total of 56 were totally protected by law in Indonesia, and were offered for sale illegally. Some species of non-protected birds may be permitted in trade, provided they are legally sourced, following quota, transport and trade regulations. However, the vast majority of these species should also be considered illegal, as the regulations and quotas governing legal trade were not adhered to, based on numbers observed during these surveys, and information gleaned from conversations with the bird dealers. The large volumes of birds far exceeded the allowed quotas and were taken out of areas where quotas had already been exhausted or from areas not included in the quota. Such practices undermine efforts by the authorities in Indonesia to control and ensure any semblance of sustainable trade. Many birds were also reportedly trapped in protected areas, such as the Gunung Leuser National Park. Bird trappers and dealers were observed to be indiscriminate in the species they catch and sell, although legally protected and rare species, as well as species valued as song birds, are often preferred, as they command higher prices. Trappers and traders state that species highly valued in the trade are in decline in the wild, such as the Straw-headed Bulbul *Pycnonotus zeylanicus* and the Hill Myna *Gracula religiosa* (especially the subspecies *G. r. robusta* from the west coast island of Nias), due to over-harvesting.

Legally protected species are openly displayed in these markets, indicating a lack of effort on behalf of the enforcement authorities. Dealers are highly aware of the status of protection of the various species, and demand higher prices for protected ones. For example, 49 Yellow-crested Cockatoos *Cacatua sulphurea*, protected in Indonesia, were observed for sale during the 12 surveys conducted monthly in 2001. While there is some captive breeding of this species, none of the individuals observed during these surveys was

**Plate 13.** Purple-backed Starling *Sturnus sturninus* crammed into cages for sale in Medan.



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acquired legally, as dealers admitted that the birds had been obtained from the wild.

While the trade in legally protected species is an obvious concern, the trade in unprotected species is also in need of urgent attention. Though regulations and quotas are set to ensure the trade in these species remains sustainable, these are seldom, if ever, adhered to. For example, the trade of the Rainbow Lory *Trichoglossus haematodus* was allowed prior to 2002, regulated by the harvest and export quota system. In 2001, a total of 175 Rainbow Lorries were allowed to be taken from the wild in Indonesia, with less than 20 of these for the domestic market. Despite these controls, a total of 600 were observed during 12 monthly surveys conducted in 2001, in the markets of Medan alone.

The trade of unprotected species that do not have quotas is largely overlooked. These species are not listed as being protected by Indonesian law, but are not permitted in trade as there is no harvest or trade quota. All fauna species traded in Indonesia are subject to quota regulations. However, these species make up a large portion of the species in trade and are often traded in very large volumes. For example, the Fire-tufted Barbet *Psilopogon pyrolophus* is not protected by law, has no capture or trade quota and therefore should not be in the bird markets. However, during the 12 surveys conducted monthly in 2001, 1,409 Fire-tufted Barbets were observed. These figures should be considered a gross underestimate of the actual quantities in trade: e.g. one dealer in Medan claimed to export approximately 500 Fire-tufted Barbets to the Pramuka bird market in Jakarta, the capital city of Indonesia, each week, by public bus.

### Conclusion/Discussion

The bird trade in Indonesia is carried out largely in an illegal manner. It appears to be a serious threat to many species and demands urgent attention from government and conservation organisations. The fact that the illegal trade of birds is carried out in an open fashion points directly to a lack of enforcement by the authorities. In conversations with dealers, it was clear that they were well-versed with the relevant legislation. In fact, they used the protected status of the relevant species to demand a higher price. They were clearly not concerned with potential legal action against them.

As long as the trade is carried out in an uncontrolled and unregulated manner, it will continue to be a serious threat to the conservation of Indonesia's avifauna. Also, it is a threat to non-native species that are traded in these same markets. While very little research has been carried out to determine the impact trade has on wild populations, dealers themselves in the Medan bird

markets stated that many species are becoming increasingly difficult to obtain from the wild in Indonesia. Some species once relatively easy to obtain in Sumatra, such as the Hill Myna and the Straw-headed Bulbul are now imported from Malaysia and other countries. A few species are also being bred in captivity, such as Spotted Dove *Streptopelia chinensis* and Zebra Dove *Geopelia striata*. However, according to dealers, wild birds are still captured and in some cases, these are preferred over captive-bred birds. Wild-caught birds still make up the majority of available specimens in these markets.

### Recommendations

Enforcement efforts, including regular market monitoring and registration of dealers' stocks, by the Indonesian government must be increased if the trade is to be efficiently regulated. Without effective enforcement, illegal and unsustainable trade will continue to threaten the conservation of Indonesia's birds.

Systematic monitoring procedures should be applied to Indonesia's bird markets is required in order to detect changes in market trends, monitor trade levels and identify species in urgent need of conservation interventions.

Research should be carried out on wild populations of birds in trade, especially those known to be or suspected to be in decline, as well as species that are very heavily traded, to determine the impact of trade and to assist the authorities in Indonesia in setting realistic capture and trade quotas.

### Acknowledgements

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## Appendix I

Bird species and numbers recorded in monthly surveys of the wildlife markets of Medan. January 1997–December 2001. A number of species originate from outside the Oriental region and the sequence of families follows that used in the Howard & Moore *Complete checklist of the birds of the world*. Third Edition, 2003.

Species	1997	1998	1999	2000	2001	Total
Southern Cassowary <i>Casuarius casuarius</i>	0	4	0	0	0	4
Blue-breasted Quail <i>Coturnix chinensis</i>	28	2	2	1	0	33
Grey-breasted Partridge <i>Arborophila orientalis</i>	7	2	23	10	2	44
Ferruginous Partridge <i>Caloperdix ocella</i>	0	0	3	1	0	4
Crested Partridge/Rouloul <i>Rollulus rouloul</i>	2	0	2	2	0	6
Red Junglefowl <i>Gallus gallus</i>	6	12	30	34	36	118
Green Junglefowl <i>Gallus varius</i>	0	0	10	3	0	13
Hoogerwerf's Pheasant <i>Lophura hoogerwerfi</i>	0	0	16	3	0	19
Sumatran Peacock Pheasant <i>Polyplectron chalcurum</i>	10	10	33	20	0	73
Green Peafowl <i>Pavo muticus</i>	0	2	11	0	5	18
Wandering Whistling Duck <i>Dendrocygna arcuata</i>	4	0	7	0	2	13
Lesser Whistling Duck <i>Dendrocygna javanica</i>	20	5	55	26	73	179
Family Ardeidae (>5 Oriental species)	14	1	4	2	0	21
Black Baza <i>Aviceda leuphotes</i>	2	5	0	3	0	10
Black-winged Kite <i>Elanus caeruleus</i>	19	2	40	6	2	69
Brahminy Kite <i>Haliastur indus</i>	0	15	3	11	6	35
Changeable Hawk-eagle <i>Spizaetus cirrhatus</i>	5	8	0	3	7	23
Other Accipitridae (>11 Oriental species)	12	14	4	6	6	42
White-breasted Waterhen <i>Amaurornis phoenicurus</i>	76	28	36	68	53	261
Purple Swampphen <i>Porphyrio porphyrio</i>	2	26	14	16	11	69
Common Moorhen <i>Gallinula chloropus</i>	28	0	2	0	4	34
Other Rallidae (4 Oriental species)	2	5	0	0	0	7
Barred Buttonquail <i>Turnix suscitator</i>	30	33	20	10	3	96
Island Collared Dove <i>Streptopelia bitorquata</i>	150	223	196	252	290	1,111
Spotted Dove <i>Streptopelia chinensis</i>	400	307	642	615	340	2,304
Barred Cuckoo-dove <i>Macropygia unchall</i>	0	7	1	15	2	25
Little Cuckoo-dove <i>Macropygia ruficeps</i>	0	0	0	0	47	47
Emerald Dove <i>Chalcophaps indica</i>	31	11	5	13	4	64
Zebra Dove <i>Geopelia striata</i>	2,200	1,899	3,456	2,075	1,360	10,990
Barred Dove <i>Geopelia maugei</i>	0	0	16	25	0	41
Other <i>Geopelia</i> (2 Australian species)	26	31	47	45	9	158
Nicobar Pigeon <i>Caloenas nicobarica</i>	17	18	2	2	1	40
Pink-necked Green Pigeon <i>Treron vernans</i>	138	125	148	227	203	841
Blue-crowned Hanging Parrot <i>Loriculus galgulus</i>	199	176	198	154	423	1,150
Tanimbar Cockatoo <i>Cacatua goffiniana</i>	36	145	86	36	35	338
Yellow-crested Cockatoo <i>Cacatua sulphurea</i>	103	83	125	40	49	400
Sulphur-crested Cockatoo <i>Cacatua galerita</i>	0	3	29	35	28	95
White Cockatoo <i>Cacatua alba</i>	14	10	54	4	22	104
Salmon-crested Cockatoo <i>Cacatua moluccensis</i>	0	2	28	36	5	71
Black Lory <i>Chalcopsitta atra</i>	102	67	79	12	22	282
Brown Lory <i>Chalcopsitta duivenbodei</i>	0	0	6	46	4	56
Yellow-streaked Lory <i>Chalcopsitta scintillata</i>	0	2	17	30	27	76
Violet-necked Lory <i>Eos squamata</i>	0	22	56	150	117	345
Red Lory <i>Eos bornea/Eos rubra</i>	362	160	74	47	69	712
Blue-streaked Lory <i>Eos reticulata</i>	0	22	56	0	19	97
Dusky Lory <i>Pseudeos fuscata</i>	280	183	96	102	73	734
Rainbow Lorikeet <i>Trichoglossus haematodus</i>	593	397	466	479	600	2,535
Iris Lorikeet <i>Psitteuteles iris</i>	0	0	16	0	10	26
Goldie's Lorikeet <i>Psitteuteles goldiei</i>	0	74	34	9	5	122
Chattering Lory <i>Lorius garrulus</i>	406	156	406	153	158	1,279



**Plate 14.** A female Eclectus Parrot *Eclectus roratus* for sale in the market. This species, and many other parrots and cockatoos, are smuggled from eastern Indonesia to Medan for sale. Many are sold illegally to international buyers from this market.



**Plate 15.** A Buffy Fish-owl *Ketupa ketupu* and a Barred Eagle Owl *Bubo sumatranus* await sale in a roadside cage.

### Species

Species	1997	1998	1999	2000	2001	Total
Black-capped Lory <i>Lorius lory</i>	37	55	117	78	91	378
Papuan Lory <i>Chamosyna papou</i>	0	23	10	0	0	33
Red-flanked Lory <i>Chamosyna placentis</i>	0	0	0	0	52	52
Eastern Rosella <i>Platycercus eximius</i>	6	0	5	4	3	18
Red-rumped Parrot <i>Psephotus haematonotus</i>	0	0	0	12	4	16
Bourke's Parrot <i>Neopsephotus bourkii</i>	0	0	0	1	16	17
Blue-rumped Parrot <i>Psittinus cyanurus</i>	4	7	0	20	1	32
Eclectus Parrot <i>Eclectus roratus</i>	33	17	97	30	10	187
Moluccan King Parrot <i>Alisterus amboinensis</i>	6	0	1	0	0	7
Jonquil Parrot <i>Aprosmictus jonquillaceus</i>	11	3	13	7	36	70
Red-breasted Parakeet <i>Psittacula alexandri</i>	44	11	23	23	19	120
Long-tailed Parakeet <i>Psittacula longicauda</i>	86	8	2	46	0	142
African Grey Parrot <i>Psittacus erithacus</i>	4	0	5	14	20	43
Blue-and-yellow Macaw <i>Ara ararauna</i>	0	0	4	6	11	21
Red-and-green Macaw <i>Ara chloropterus</i>	0	0	3	15	3	21
Large Fig Parrot <i>Psittaculirostris desmarestii</i>	0	0	6	8	3	17
Family Cuculidae (5 Oriental species)	1	3	4	1	4	13
Greater Coucal <i>Centropus sinensis</i>	15	26	22	7	4	74
Lesser Coucal <i>Centropus bengalensis</i>	0	0	14	0	4	18
Barn Owl <i>Tyto alba</i>	9	17	9	4	3	42
Oriental Bay Owl <i>Phodilus badius</i>	4	5	2	1	0	12
Barred Eagle Owl <i>Bubo sumatranus</i>	5	7	0	0	0	12
Buffy Fish Owl <i>Ketupa ketupu</i>	9	4	7	0	0	20
Other Strigidae (>5 unidentified species)	9	15	1	3	0	28
Family Alcedinidae (3 Oriental species)	4	8	6	0	1	19
Family Bucerotidae (4 Oriental species)	0	6	4	0	1	11
Fire-tufted Barbet <i>Psilopogon pyrolophus</i>	1,200	1,163	368	340	1,409	4,480
Gold-whiskered Barbet <i>Megalaima chrysopogon</i>	1	0	16	4	8	29
Red-crowned Barbet <i>Megalaima rafflesii</i>	0	0	0	10	14	24
Red-throated Barbet <i>Megalaima mystacophanus</i>	0	0	11	16	4	31
Black-browed Barbet <i>Megalaima oorti</i>	10	40	33	63	186	332
Other Megalaiminae (3 Oriental species)	2	0	6	6	1	15

Species	1997	1998	1999	2000	2001	Total
Family Lybiinae (African Barbets: 2 species)	0	0	2	2	0	4
Common Goldenback <i>Dinopium javanense</i>	87	3	188	98	77	453
Other Picidae (3 Oriental species)	3	0	2	0	1	6
Black-and-red Broadbill <i>Cymbirhynchus macrorhynchus</i>	0	1	0	4	0	5
Hooded Pitta <i>Pitta sordida</i>	5	0	4	3	0	12
Blue-winged Pitta <i>Pitta moluccensis</i>	0	1	0	2	0	3
Helmeted Friarbird <i>Philemon buceroides</i>	7	0	4	0	5	16
Black-faced Friarbird <i>Philemon moluccensis</i>	0	0	0	7	1	8
Common Iora <i>Aegithina tiphia</i>	3	32	22	20	7	84
Long-tailed Shrike <i>Lanius schach</i>	1	117	73	138	125	454
Black-naped Oriole <i>Oriolus chinensis</i>	359	194	250	302	199	1,304
Family Oriolidae (2 Oriental species)	2	1	2	0	5	10
Lesser Racket-tailed Drongo <i>Dicrurus remifer</i>	1	1	0	7	57	19
Greater Racket-tailed Drongo <i>Dicrurus paradiseus</i>	4	9	2	4	0	66
Other Dicruridae (mainly unidentified)	38	39	5	18	6	106
Pied Fantail <i>Rhipidura javanica</i>	6	0	3	1	0	10
Crested Jay <i>Platylophus galericulatus</i>	5	0	4	5	11	25
Common Green Magpie <i>Cissa chinensis</i>	120	127	135	264	121	767
Sumatran Treepie <i>Dendrocitta occipitalis</i>	2	46	49	39	0	136
Racquet-tailed Treepie <i>Crypsirina temia</i>	0	0	7	2	0	9
Slender-billed Crow <i>Corvus enca</i>	62	49	11	4	0	126
King Bird-of-Paradise <i>Cicinnurus regius</i>	0	0	7	0	0	7
Lesser Bird-of-Paradise <i>Paradisaea minor</i>	0	1	0	0	0	1
Great Tit <i>Parus major</i>	4	302	111	49	6	472
Family Alaudidae (several unidentified species)	121	46	2	32	20	231
Hill Prinia <i>Prinia atrogularis</i>	0	0	0	13	6	19
Bar-winged Prinia <i>Prinia familiaris</i>	0	90	54	48	23	215
Yellow-bellied Prinia <i>Prinia flaviventris</i>	0	0	34	44	55	133
Rufous-tailed Tailorbird <i>Orthotomus sericeus</i>	0	0	30	3	4	37
Ashy Tailorbird <i>Orthotomus ruficeps</i>	97	272	156	99	139	763
Straw-headed Bulbul <i>Pycnonotus zeylanicus</i>	334	415	299	154	267	1,469
Black-headed Bulbul <i>Pycnonotus atriceps</i>	10	79	78	138	99	404
Black-crested Bulbul <i>Pycnonotus melanicterus</i>	107	337	371	305	253	1,373
Scaly-breasted Bulbul <i>Pycnonotus squamatus</i>	13	128	3	24	26	194
Grey-bellied Bulbul <i>Pycnonotus cyaniventris</i>	20	38	0	6	16	80
Red-whiskered Bulbul <i>Pycnonotus jocosus</i>	150	154	610	431	31	1,376
Sooty-headed Bulbul <i>Pycnonotus aurigaster</i>	500	476	1,058	588	905	3,527
Orange-spotted Bulbul <i>Pycnonotus bimaculatus</i>	240	303	385	170	224	1,322
Yellow-vented Bulbul <i>Pycnonotus goiavier</i>	90	101	186	240	455	1,072
Red-eyed Bulbul <i>Pycnonotus brunneus</i>	0	0	0	39	11	50
Ochraceous Bulbul <i>Alophoixus ochraceus</i>	8	60	73	32	2	175
Grey-cheeked Bulbul <i>Alophoixus bres</i>	0	0	10	17	43	70
Sunda Bulbul/Olive Bulbul <i>Iole virescens</i>	0	0	0	16	15	31
Ashy Bulbul <i>Hemixos flava</i>	0	0	0	18	4	22
Black Bulbul <i>Hypsipetes leucocephalus</i>	24	0	0	43	8	75
Other Pycnonotidae (4 Oriental species)	0	0	3	10	37	50
Sunda Laughingthrush <i>Garrulax palliatus</i>	400	425	884	364	260	2,333
White-crested Laughingthrush <i>Garrulax leucolophus</i>	850	815	645	532	550	3,392
Black Laughingthrush <i>Garrulax lugubris</i>	6	58	2	18	13	97
Black-throated Laughingthrush <i>Garrulax chinensis</i>	800	924	226	350	207	2,507
Chestnut-capped Laughingthrush <i>Garrulax mitratus</i>	550	524	310	252	147	1,783
Hwamei <i>Garrulax canorus</i>	2	0	234	255	131	622
Other <i>Garrulax</i> (3 species)	0	4	2	9	2	17
Silver-eared Mesia <i>Leiothrix argenteauris</i>	203	138	212	138	77	768
Red-billed Leiothrix <i>Leiothrix lutea</i>	850	740	1,116	978	797	4,481
Long-tailed Sibia <i>Heterophasia picaoides</i>	119	22	32	183	383	739



Species	1997	1998	1999	2000	2001	Total
Other Timaliidae (7 Oriental species)	3	2	15	5	8	33
Oriental White-eye <i>Zosterops palpebrosus</i>	254	213	796	829	232	2,324
Asian Fairy Bluebird <i>Irena puella</i>	3	57	44	27	142	273
Asian Glossy Starling <i>Alponis panayensis</i>	19	422	512	789	337	2,079
Yellow-faced Myna <i>Mino dumonii</i>	100	90	108	140	59	497
Golden Myna <i>Mino anais</i>	13	0	23	31	19	86
Sulawesi Myna <i>Basilornis celebensis</i>	7	1	1	2	0	11
Finch-billed Myna <i>Scissirostrum dubium</i>	23	1	31	0	0	55
Hill Myna <i>Gracula religiosa</i>	697	204	348	555	352	2,156
Crested Myna <i>Acridotheres cristatellus</i>	87	25	7	23	7	149
White-vented/Javan Myna <i>Acridotheres javanicus</i>	5,000	7,618	3,955	1,831	1,115	19,519
Common Myna <i>Acridotheres tristis</i>	23	216	406	353	415	1,413
Black-winged Myna <i>Acridotheres melanopterus</i>	18	22	37	41	28	146
Black-collared Starling <i>Sturnus nigricollis</i>	174	83	152	224	154	787
Asian Pied Starling <i>Sturnus contra</i>	83	57	47	33	39	259
Purple-backed Starling <i>Sturnus sturninus</i>	1,500	1,859	1,757	143	1,579	6,838
Chestnut-capped Thrush <i>Zoothera interpres</i>	1	8	20	15	12	56
Chestnut-backed Thrush <i>Zoothera dohertyi</i>	0	0	13	14	9	36
Orange-headed Thrush <i>Zoothera citrina</i>	19	46	50	111	149	375
Siberian Thrush <i>Zoothera sibirica</i>	11	5	1	6	41	64
Common Blackbird <i>Turdus merula</i>	0	38	0	8	14	60
Island Thrush <i>Turdus poliocephalus</i>	0	0	0	9	18	27
Eyebrowed Thrush <i>Turdus obscurus</i>	13	6	1	7	20	47
Magpie Robin <i>Copsychus saularis</i>	2,500	2,565	3,478	2,433	1,519	12,495
White-rumped Shama <i>Copsychus malabaricus</i>	2,500	2,586	1,979	2,055	1,200	10,320
Pied Bushchat <i>Saxicola caprata</i>	0	0	1	5	8	14
Family Muscicapinae (unidentified <i>Cyornis</i> species)	0	0	0	13	6	19
Greater Green Leafbird <i>Chloropsis sonnerati</i>	0	0	5	72	33	110
Blue-winged Leafbird <i>Chloropsis cochinchinensis</i>	200	204	220	345	395	1,364
Blue-masked Leafbird <i>Chloropsis venusta</i>	0	0	0	0	8	8
Other <i>Chloropsis</i> (mainly unidentified)	11	65	0	25	9	110
Orange-bellied Flowerpecker <i>Dicaeum trigonostigma</i>	134	49	89	144	85	501
Other Dicaeidae (2 Oriental species)	0	0	3	1	0	4
Family Nectariniidae (4 Oriental species)	4	0	14	3	1	22
Baya Weaver <i>Ploceus philippinus</i>	1,500	1,503	1,851	1,770	1,419	8,043
Family Estrildidae (6 African species)	221	46	0	0	0	267
Family Estrildidae (5 Australasian species)	136	136	2	15	1	290
Red Avadavat <i>Amandava amandava</i>	352	212	117	116	343	1,140
Pin-tailed Parrot-Finch <i>Erythrura prasina</i>	249	271	251	272	270	1,313
Scaly-breasted Munia <i>Lonchura punctulata</i>	2,500	2,555	6,925	12,600	6,270	30,850
Black-headed Munia <i>Lonchura malacca</i>	588	437	225	519	298	2,067
White-headed Munia <i>Lonchura maja</i>	2,500	2,415	4,870	11,800	6,450	28,035
Java Sparrow <i>Lonchura oryzivora</i>	390	193	297	449	184	1,513
Forest Wagtail <i>Dendronanthus indicus</i>	0	0	3	8	2	13
Grey Wagtail <i>Motacilla cinerea</i>	5	100	14	8	0	127
Family Viduidae (1 African species)	9	4	0	0	0	13
Family Fringillidae (2 African species)	168	10	15	63	33	289