

BANGKOK BIRD CLUB SURVEY OF THE BIRD AND MAMMAL TRADE IN THE BANGKOK WEEKEND MARKET

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ABSTRACT

The Bangkok Weekend Market was surveyed for wildlife in trade on 25 weekends during 19 December 1987 to 11 December 1988. A total of 68,654 native birds of 225 species was recorded, together with 3,132 exotic birds of 51 species. 3,418 native mammals of at least 24 species were also found.

Over 20% of all native birds counted and 75% of species observed were those in which trade is totally forbidden by law. Among the exotic species, both CITES Appendix I and Appendix II species were observed. Existing wildlife protection legislation in Thailand is inadequate and cannot be realistically enforced. It is suggested that the range of native birds in which trade is permitted be reduced to 7 species only. Trade in native mammals should be completely abolished.

INTRODUCTION

In comparison with many other Asian countries, Thailand possesses relatively well developed conservation legislation. A great many national parks and protected areas have been established. Protection of wildlife is covered by the Wild Animals Reservation and Protection Act (1960), under which most birds, some mammals and many reptiles are already nominally protected.

A total of 918 species of native birds have been recorded in Thailand up to the present, of which only 108 species are completely unprotected in law (Appendix II). Of the 810 protected birds, only 34 species may be captured or traded live under permit, each being subject to an annual quota: no more than 4-20 individuals of any species may be traded or hunted per permit holder per year (Appendix III). In addition, there are a further 27 protected birds for which, though trade is illegal, permits may be issued for hunting for sport or for food. In practice, very few permits for hunting activities are ever granted.

Of 227 species of mammals known for the country, 79 are completely protected. This total includes, for example, all primates, all ungulates and large carnivores, all the cats (Felidae) and some species of civets (Viverridae); the larger flying squirrels (*Petaurista*, *Aeromys* and *Hylopetes*) as well as the larger squirrels *Ratufa* spp. and *Callosciurus prevosti*. The remainder are unprotected and may be traded without restriction. Although Thailand ratified the Convention on International Trade in Endangered Species (CITES) in 1983, there is no domestic legislation which enables it to enforce the convention with regard to non-native species. As a result, CITES-listed species enter the country freely

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and may be sold here. The only adherence to the provisions of the convention is that listed species may not be re-exported unless they are covered by adequate documentation. Thailand is believed to be a major *entrepot* for wildlife from neighbouring Indo-chinese countries and Indonesia and, in addition, the country's own pet trade is a major consumer of native and exotic species.

The Bangkok Weekend Market, also known as the "Sunday Market" is one of the largest and most conspicuous outlets for the wildlife trade in Thailand. Originally established in the 1950s, when permission was given to hold a weekly bazaar at Sanam Luang, a 4-ha oval parade ground outside the Royal Palace, the market provides a venue for the sale of a wide range of produce from the provinces. In addition to foodstuffs, fabrics and so on, this also includes a great deal of wildlife. The market moved to its present location in Chatuchak Park in late 1981 and is open on each Saturday and Sunday throughout the entire year.

Owing to its conspicuous location, and because it is visited by a great many tourists, the market attracts considerable adverse comment, both because protected species such as gibbons are frequently offered for sale and because of the generally unpleasant and inhumane conditions under which wild mammals and birds are kept. The area is extremely noisy, hot and humid and the holding cages are often crowded.

Occasional arrests and confiscations of wildlife enable officials of the Wildlife Conservation Division to claim that enforcement has succeeded in reducing the illegal trade. Since there is no systematic monitoring of the Weekend Market or, indeed, of any other wildlife trade outlet, there is no evidence either to support or disprove such a claim. The only systematic attempt to record wildlife in trade at the market was made during 1967-69 when MCCLURE & CHAIYAPHUN (1971) recorded over 600,000 birds of 370 species offered for sale. Since that time, however, the status of many species in the wild may have changed: a great many have almost certainly become scarcer with much increased deforestation (e.g. ROUND, 1988).

This project was aimed at collecting some data on the wildlife trade through the Bangkok Weekend Market in order to generate information and publicity concerning the extent of the contemporary trade, both legal and illegal; to compare the results with the previous survey almost 20 years earlier; to assess the possible threats to wildlife from the trade and to make recommendations as to future action, should this be deemed necessary. The project was initiated and carried out by members of the Bangkok Bird Club.

M E T H O D S

The Weekend Market at Chatuchak Park was visited at least once per weekend on 25 weekends during the period 19 December 1987 to 11 December 1988 in order to record the bird and mammal species being offered for sale. Complete counts of all native birds and mammals were made on 11 weekends and partial counts, covering all but the most common unprotected species, were made on a further 14 weekends. The principal emphasis was placed upon native species, though exotic species were listed when recognised. In practice, this means that distinctive species such as the Salmon-crested Cockatoo *Cacatua moluccensis* were counted regularly though many other parrots and other birds could only be identified as to genus.

A map showing locations of the wildlife shops at the market was first made, in order to facilitate recording and a standardised recording sheet was prepared. One or two observers, occasionally three or more, worked together. Single observers were usually accompanied by an official provided by the Bangkok Metropolitan Administration which oversees the operation of the market.

No effort was made to conceal the recording activity. Where possible, observers would usually greet the stall-holder or, at least, establish friendly eye-contact before commencing to count birds. The only birds and mammals which were counted were those which were displayed more or less openly. No effort was made to search for those species concealed in cardboard boxes or "under the counter". Only one count was scored per weekend: where two independent counts were made on the same weekend, the larger total per species was incorporated into the records.

RESULTS

Number of Sellers

A total of 59 separate shops or sales outlets at the market were identified, together with another 3 permanent shops outside the market on Yan Phaholyothin Road. Of these, 40 shops were observed to offer fully protected species for sale. 10 shops dealt wholly or partly in mammals, mainly squirrels, while the remainder chiefly sold birds. In very few shops was the name of the shop displayed. Even one permanent and long-established shop on Yan Phaholyothin Road failed to display its name. When asked, the shopkeeper remained silent.

The great majority of the shops occupied the same position from week to week. A small number of sales outlets counted as single shops appeared to be occupied by a number of independent sellers, chiefly older women. In addition, one to three "transient" sellers were observed during most visits. Such salespeople wandered around the fringes of the market, apparently on the look out for customers. They chiefly dealt in gibbons, leaf-monkeys, slow lorises and occasionally otters (i.e., the species which wildlife officials are particularly likely to confiscate and which shops may not be easily able to sell without interference). No more than one to two animals were observed per seller.

Species Observed

The complete list of species observed is shown in Appendix I. These were broken down into the following classes: native birds, exotic birds, mammals and reptiles. Common names used chiefly follow FORSHAW & COOPER (1981), KING et al. (1975) or LEKAGUL & MCNEELY (1977).

Native birds

A total of 68,654 native Thai birds of 225 species was recorded during this time of which 14,007 individual birds (20.4% of all birds offered) were of species nominally protected by Thai wildlife laws. No fewer than 175 protected species (77.8% of the total number of species observed) were offered openly for sale.

Among the non-protected species and those which may be sold under permit, the Zebra Dove *Geopelia striata* (9,394 birds) was by far the most commonly displayed species, alone accounting for 13.7% of all birds recorded. The other most commonly sold species included Red-whiskered Bulbul *Pycnonotus jocosus* (6,889 birds; 10.0%); Scaly-breasted Munia *Lonchura punctulata* (5,299 birds; 7.7%); Red-breasted Parakeet *Psittacula alexandri* (4,496 birds; 6.5%); White-vented Myna *Acridotheres javanicus* (3,516 birds; 5.1%); Spotted Dove *Streptopelia chinensis* (3,393 birds; 4.9%); Hill Myna *Gracula religiosa* (3,295 birds; 4.8%); Pin-tailed Parrotfinch *Erythrura prasina* (2,613 birds; 3.8%); Red Avadavat *Amandava amandava* (2,222 birds; 3.2%) and White-rumped Shama *Copsychus malabaricus* (1,992 birds; 2.9%).

No fewer than 8 species of laughingthrushes *Garrulax* spp. were recorded for sale and together these constituted a total of 4,145 birds. The most numerous species observed was Black-throated Laughingthrush *Garrulax chinensis*—ironically the only one of the genus in which trade is forbidden. No fewer than 1,529 birds, or 36.9% of all laughingthrushes observed, were of this species.

Among the many protected species most commonly observed in trade were Black-collared Starling *Sturnus nigricollis*, (1,502 birds); Black-crested Bulbul *P. melanicterus* (1,046 birds); Magpie Robin *Copsychus saularis* (557 birds); Golden-crested Myna *Ampeleiceps coronatus* (462 birds); Lineated Barbet *Megalaima lineata* (356 birds); Scarlet-backed Flowerpecker *Dicaeum cruentatum* (353 birds) and Silver-eared Mesia *Leiothrix argenteauris* (208 birds).

Scarce or threatened species being openly (and illegally) offered for sale included 61 Black-shouldered Kites *Elanus caeruleus*; many other raptors, including Black Kites *Milvus migrans*, Crested Serpent-Eagles *Spilornis cheela*, Rufous-winged Buzzards *Buteo liventer* and Collared Falconets *Microhierax caerulescens*; 6 species of green pigeons, *Treron* spp.; 4 species of owls, 2 species of kingfishers, 5 species of hornbills; 4 species of woodpecker; 4 species of pittas including both Giant Pitta *Pitta caerulea* and Eared Pitta *P. phayrei*; many leafbirds, drongos, babblers, thrushes, flycatchers and sunbirds.

The scarcer, more threatened species were almost certainly under-recorded since, as mentioned, no effort was made to search for birds hidden in cardboard boxes.

No clear seasonal pattern in the number of birds displayed was evident and the total number of birds offered for sale remained high throughout the entire year. During March to July, however, many more nestlings were observed and this coincides with the breeding season for most insectivorous and frugivorous birds. A few species, such as Blue-winged Pitta *Pitta moluccensis*, only appeared in the market during the breeding season.

Exotic birds

A total of 3,132 exotic birds of at least 51 species was recorded. This excludes lovebirds *Agapornis* spp. and *Padda oryzivora*, many of which were captive bred and therefore not counted. The number of endangered or vulnerable non-native birds being offered for sale is matter of major concern, particularly as these included a considerable number of species listed under CITES. CITES Appendix I species were Palm Cockatoo

Probosciger aterrimus (8 records); Military Macaw *Ara militaris*, Scarlet Macaw *A. macao* and (probably) Yellow-shouldered Amazon *Amazona barbadensis* (2 records). At least 22 positively identified species listed on Appendix II were recorded, while there were a number of others identified only as to genus, many of which were parrots endemic to the islands of eastern Indonesia. These included a number of species which are thought to be at risk and which are listed in COLLAR & ANDREW (1988), such as Black-winged Lory *Eos cyanogenia* (2 records), Blue-streaked Lory *E. reticulata* (18 records), Lesser Sulphur-crested Cockatoo *Cacatua sulphurea*, and Goffin's Cockatoo *C. goffini* (15 records). The large total of Salmon-crested Cockatoos *C. moluccensis* (118 records) is particularly alarming since this species, once common in lowland forests of Seram and its satellite islands (WHITE & BRUCE, 1986) is now rarely seen in the wild (COLLAR & ANDREW, 1988).

A good deal of wildlife is being imported from China or, indirectly, perhaps through Hong Kong, since both Hwamei *Garrulax canorus* and Pekin Robin *Leiothrix lutea* are seldom if ever bred in captivity and yet were recorded very commonly during this survey. It was surprising, however, that apart from one other non-native *Garrulax* (species uncertain), no other wildlife which unequivocally originated from China was recorded.

Native mammals

A total of 3,418 individuals of at least 24 species were recorded, of which the overwhelming majority (96.1%) were squirrels *Callosciurus* spp., *Tamiops maccllellandi* and Common Treeshrews *Tupaia glis*. The commonest species identified was the Variable Squirrel *Callosciurus finlaysoni*. The relatively small numbers of protected mammals, such as primates, civets (Viverridae) and cats (Felidae) observed, and the use of transient sellers would suggest that the existing low level of law enforcement has had some impact. On a number of occasions, shops were seen to hurriedly remove young palm civets or White-bellied Flying Squirrels *Petinomys setosus* from view upon the approach of the census worker, apparently under the (mistaken) impression that these species were protected.

The Clouded Leopard *Neofelis nebulosa* listed was a skin.

Market Value

Data on the estimated sale prices of wildlife were obtained from Mr Somtob Norapuckprutikorn (pers. comm.) and from DOBIAS et al. (1988). These are shown for selected species in Tables 1 and 2. Applying average sale prices to the wildlife recorded would yield a total market value of Bht. 12,840,283 (US \$ 513,611; Table 3). Of this, over half (51.4%) was contributed by those native species in which trade was permitted, with the single largest contribution (18%) of the total market value being contributed by a single species *Gracula religiosa* (Bht. 2,306,500). The most numerous legally traded species, *Geopelia striata*, by comparison, accounted for no more than Baht 939,400.

A disproportionate amount (35.2% of the total value) was contributed by non-native species, which accounted for Bht. 4,523,375 (US \$ 180,935). The true amount may be even higher, however, since exotics were not consistently counted.

Given the total estimated value of wildlife of US \$ 513,611, observed on 25 weekends, the average gross value of wildlife held at the market each weekend was at least \$ 20,544.

Turnover

No data were collected on the turnover of species in the market, so that the figures collected by this survey do not represent the actual volume of wildlife sold. However, since the market was only visited on 25 weekends during one calendar year, an average turnover of roughly 50% would correspond to a volume of sales equal to the numbers of bird and mammal species displayed.

Repeated observations of what were apparently the same individual birds, both exotic and native species, might suggest that the turnover is considerably less. A turnover of 30%, would give a figure of 42,840 native birds, 1,954 exotic birds, 2,132 mammals and 336 reptiles passing through the market during one calendar year.

If we apply this turnover rate to the market value of wildlife recorded, the sales values would be: native birds \$ 202,795; exotic birds \$ 112,903; mammals \$ 4,123 and reptiles \$ 672 per year.

These values are probably underestimates since it is assumed that all wildlife which passed through the market on the census days was recorded and fails to take account of turnover which might have taken place during the actual census. Undoubtedly, some wildlife was sold and additional consignments were received during the course of the survey without being recorded.

Customers

No attempt was made to collect data on the nationality, age or socio-economic status of those buying wildlife. Nevertheless, there were strong indications that the range of species offered appealed to a wide range of customers. Lower priced birds such as *Pycnonotus jocosus* and squirrels are more likely to be bought by children; more expensive species such as *Gracula religiosa* and gibbons *Hylobates* spp. are probably bought by adults having a moderate to high income. "Comfortably-off" people probably constituted the bulk of customers since the actual maintenance of an aviary or of a captive primate is expensive and requires access to considerable living space. The overwhelming majority of customers seen either purchasing wildlife or leaving the market with pets were Thai, though some Westerners were also seen. The principal customers for the high-priced species (particularly non-native parrots) were probably Japanese and nationals of Middle Eastern countries. Although there are many high-priced cockatoos and macaws held by Thai nationals living in Thailand, most are probably bought from the dealers at their main shops rather than at the Weekend Market itself.

Table 1. Estimated average prices for selected species of birds offered for sale in the weekend market. (Sources: Mr. Sontob Norapuckprutikorn, pers. comm. and DOBIAS et al., 1988). US\$ 1.00 = approximately Baht 25.

Species	Cost (Baht)
Native birds	
<i>Elanus caeruleus</i>	150
<i>Microhierax caerulescens</i>	150
<i>Francolinus pintadeanus</i>	100
<i>Porphyrio porphyrio</i>	125
<i>Treron curvirostra</i>	50
<i>Streptopelia chinensis</i>	100
<i>Geopelia striata</i>	100
<i>Psittacula alexandri</i>	200
<i>Eudynamys scolopacea</i>	150
<i>Buceros bicornis</i>	1000
<i>Megalaima virens</i>	200
<i>Pitta moluccensis</i>	150
<i>Chloropsis cochinchinensis</i>	100
<i>Pycnonotus zeylanicus</i>	350
<i>Pycnonotus jocosus</i>	50
<i>Irena puella</i>	100
<i>Cissa chinensis</i>	200
<i>Garrulax leucolophus</i>	100
<i>Garrulax strepitans</i>	150
<i>Garrulax chinensis</i>	400
<i>Copsychus malabaricus</i>	125
<i>Acridothera javanicus</i>	35
<i>Gracula religiosa</i>	700
<i>Erythrura prasina</i>	30
<i>Lonchura punctulata</i>	20
Exotic birds	
<i>Goura</i> spp.	30,000
<i>Eos</i> spp.	1,250
<i>Trichoglossus haematodus</i>	2,000
<i>Lorius lory</i>	2,500
<i>Lorius garrulus</i>	2,000
<i>Probosciger aterrimus</i>	10,000

Table 1 (continued).

Species	Cost (Baht)
<i>Cacatua sulphurealgerita</i>	3,500
<i>Ara ararauna</i>	25,000
<i>Ara macao</i>	40,000
<i>Garrulax canorus</i>	500
<i>Leiothrix lutea</i>	125
<i>Padda oryzivora</i>	50

Table 2. Estimated average prices for selected species of mammals and reptiles offered for sale in the weekend market. (Sources: Mr Somtob Norapuckprutikorn, pers. comm. and DOBIAS 1988). US\$ 1.00 = approximately Baht 25.

Species	Cost (Baht)
Mammals	
<i>Tupaia glis</i>	50
<i>Nycticebus coucang</i>	300
<i>Macaca nemestrina</i>	300
<i>Presbytis obscura</i>	800
<i>Hylobates lar</i>	1,250
<i>Arctonyx collaris</i>	100
<i>Lutra sp. / Aonyx sp.</i>	200
<i>Paradoxurus hermaphroditus</i>	200
<i>Felis bengalensis</i>	500
<i>Neofelis nebulosa</i>	9,000
<i>Ratufa bicolor</i>	1,500
<i>Callosciurus finlaysoni</i>	30
<i>Petinomys setosus</i>	50
Reptiles	
Hard-shelled turtles	75
<i>Python sp.</i>	100
<i>Dryophis spp.</i>	30

Table 3. Market value of wildlife observed at the Bangkok Weekend Market on 25 weekends 19 December 1987 to 11 December 1988.

Category	Baht	US \$	
native birds: trade permitted/unprotected	6,461,000	258,440	(50.3%)
native birds: protected	1,663,793	66,552	(12.9%)
exotic birds:	4,523,375	180,935	(35.2%)
native mammals: trade permitted/unprotected	107,640	4,305	(0.8%)
native mammals: protected	57,550	2,302	(0.4%)
reptiles:	26,925	1,077	(0.2%)
Total Value	Baht 12,840,283	\$513,611	

DISCUSSION

Comparison with Previous Survey

The survey by MCCLURE & CHAIYAPHUN (1971) (hereafter M&C) provides a useful baseline for comparison with the present study. M&C recorded a total of 619,090 birds of a total of 370 species at the Bangkok Weekend Market. Of these, over 80% (515,568 birds of 296 species) were native species and the remainder (106,750 birds) were accounted for by 72 exotic species.

M&C's data were collected during the period November 1966 to December 1968, on 82 weekends. This yields an average of 6,287 native birds recorded per weekend, compared with 2,746 birds per weekend recorded during the present survey. The decline in the volume of the trade, though marked, is less than at first appears since abundant domesticated species including budgerigars, canaries and as well as quail *Coturnix coturnix* or *C. japonica* (counted as a native species by M&C) were not counted in the present study. In addition, a few of the most abundant wild-caught species, in which trade is permissible, including *Streptopelia chinensis* and *Geopelia striata*, were not counted consistently by all the observers who took part.

As might be expected from its longer duration, M&C's survey recorded a slightly higher number of native species (296 species) than did the current survey (225 species). Nonetheless, the two surveys differed greatly in the composition of species recorded.

M&C recorded many more diurnal birds of prey (Families Accipitridae and Falconidae), totalling 1,491 individuals of 21 species compared with 117 individuals of a minimum of 9 species during this survey). This may be partly attributed to better law enforcement: such trade in the more threatened species, which are more liable to attract the unwelcome attention of officials, or which have become more expensive due to

scarcity, is now conducted in a much more covert fashion. A number of Collared Falcons *Microhierax caerulescens*, for example, were seen hidden in covered boxes, suggesting that other species and many more individuals remained undetected. The same may be true of hornbills (M&C recorded 359 birds of 8 species; this survey 12 individuals of 5 species). M&C also recorded 352 Nicobar Pigeons *Caloenas nicobarica* at the market; whereas none were seen during this survey (though a few were reported on a non-survey weekend). Trade in this species still occurs, but is apt to be conducted "behind closed doors".

Table 4. A comparison of the most common native Thai birds (those contributing > 1% of observations) recorded during the present survey with those found by M&C (1971). Percentages are expressed as percentage of total native birds recorded.

* Contributed > 1% of native birds observed during present survey.

** Contributed > 1% of birds observed during previous survey.

Species		Number and percent	
		Present survey 1987 - 88	M&C 1966 - 68
<i>Streptopelia chinensis</i>	*, **	3,393 (4.9%)	15,167 (2.9%)
<i>Geopelia striata</i>	*, **	9,394 (13.7%)	25,790 (5.0%)
<i>Psittacula alexandri</i>	*, **	4,496 (6.5%)	8,828 (1.7%)
<i>Psittacula roseata</i>	**	692 (1.0%)	7,919 (1.5%)
<i>Psittacula finschii</i>	*	1,087 (1.6%)	2,115 (0.4%)
<i>Pycnonotus melanicterus</i>	*	1,046 (1.5%)	1,703 (0.3%)
<i>Pycnonotus jocosus</i>	*, **	6,889 (10.0%)	9,949 (1.9%)
<i>Garrulax leucolophus</i>	*	1,339 (2.0%)	3,374 (0.7%)
<i>Garrulax chinensis</i>	*	1,529 (2.2%)	253 (0.05%)
<i>Copsychus malabaricus</i>	*	1,992 (2.9%)	2,540 (0.5%)
<i>Motacilla flava</i>	**	-	16,721 (3.2%)
<i>Sturnus nigricollis</i>	*	1,502 (2.2%)	969 (0.2%)
<i>Acridotheres tristis</i>	*	1,242 (1.8%)	390 (0.07%)
<i>Acridotheres javanicus</i>	*	3,516 (5.1%)	4,563 (0.9%)
<i>Gracula religiosa</i>	*, **	3,295 (4.8%)	5,137 (1.0%)
<i>Ploceus philippinus</i>	**	222 (0.3%)	65,665 (12.7%)
<i>Ploceus manyar</i>	**	3	9,712 (1.9%)
<i>Amandava amandava</i>	*, **	2,272 (3.2%)	21,315 (4.1%)
<i>Erythrura prasina</i>	*, **	2,613 (3.8%)	29,285 (5.7%)
<i>Lonchura striata</i>	**	552 (0.8%)	6,168 (1.2%)
<i>Lonchura punctulata</i>	*, **	5,299 (7.7%)	88,796 (17.2%)
<i>Lonchura malacca</i>	*, **	854 (1.2%)	20,956 (4.1%)
<i>Lonchura maja</i>	**	193 (0.3%)	11,334 (2.2%)
<i>Emberiza aureola</i>	**		87,209 (16.9%)

Undoubtedly, however, the reduction in numbers of certain species is due to their becoming much rarer because of habitat destruction. This may especially be true of species inhabiting lowland forests, especially those in southern Thailand, where moist forests of the plains have been almost completely destroyed. Seven of the 15 native galliformes recorded by M&C were not seen during this survey, of which 5 are mainly or wholly southern in distribution and at least 3 are considered rare or endangered (ROUND, 1988). One of these, the Malaysian Peacock Pheasant *Polyplectron malacense* may already be extinct in the wild in Thailand. There were many other lowland forest bird species, including 2 species of trogon (Trogonidae), at least one barbet (Megalaimidae), 3 species of broadbill (Eurylaimidae), 2 species of pitta (Pittidae) and a number of babblers (Timaliidae), most of which are restricted to lowland forests in southern Thailand which, though recorded by M&C, were not seen during this survey.

There are at least two further striking examples of species which have probably become much rarer due to habitat destruction: in this case, clearance of plains deciduous forests in continental Thailand. M&C recorded approximately equal numbers of the White-rumped Falcon *Polihierax insignis* (164 birds), mainly or entirely restricted to the level lowlands and foothills, and the Collared Falconet *Microhierax caerulescens* (197 birds) which has a much broader altitudinal distribution. In the present survey, only 2 of the former were found compared with 31 of the latter.

The now rare (and, in Thailand, threatened) Alexandrine Parakeet *Psittacula eupatria* contributed 20.7% of observations of native *Psittacula* parakeets during M&C's survey (4,920 birds) compared with only 2.6% (169 birds) during this survey.

A number of other species sold commonly during the previous survey have greatly declined in numbers or have completely vanished from the market. Of these, the most striking are Yellow Wagtail *Motacilla flava* (16,271 birds reduced to zero birds); Baya Weaver *Ploceus philippinus* (65,665 birds reduced to 222 birds); Streaked Weaver *P. manyar* (9,712 birds reduced to 3 birds) and Yellow-breasted Bunting *Emberiza aureola* (87,209 birds reduced to zero birds). Noticeable but less marked declines were also evident in a small number of other species. The scale of these reductions is alarming if this reflects a genuine decrease in the wild, as seems probable. Many of these species have hitherto been regarded as common or abundant open country birds and have not attracted the attention of conservationists. All 4 species mentioned above roost, or formerly roosted, communally in concentrations of tens of thousands in reedbeds and huge numbers are known to have been caught by professional bird trappers up until the late 1960s, at least. There are five possibilities;

- i) Illegal trapping has been suppressed, to the extent that such species are no longer caught in significant numbers.
- ii) Disturbance has resulted in the fragmentation of major roosts, so that such species are no longer caught in large numbers.
- iii) The habit of some Buddhists of purchasing small birds in order to release them, supposedly to "make merit," recorded at the Weekend Market according to M&C, is no

longer practised on the same scale. Reduction in the demand for small, abundant but essentially dull-coloured birds which formed the "staple species" for this activity has resulted in a decrease in the supplies reaching the market.

iv) The species are still caught but are sent to a different destination. At least until 1982, market traders were dispatching large numbers of frozen *Emberiza aureola*, and almost certainly other small birds, to Japan, where they were sold as a luxury food item.

v) Populations have been greatly reduced due to over-exploitation or by a combination of over-exploitation and habitat destruction.

Alternatives (i) and (iii) can probably be rejected immediately. There is abundant evidence that illegal catching of small birds, using mist-nets and other methods, is still frequent, while many munias and other birds are still caught and sold to be released for merit-making at temples and elsewhere. In all likelihood, the last of these alternatives is the chief reason for the disappearance of yellow wagtails, weavers, and buntings: there has been a massive and real decline in numbers of communally roosting insectivorous and granivorous birds. At one major wetland, Bung Boraphet in Nakhon Sawan Province, there is evidence that numbers of such species have declined from an estimated "hundreds of thousands" to perhaps no more than 8,000 birds by 1981 (ASSOCIATION FOR THE CONSERVATION OF WILDLIFE, 1981; SOPHASAN & DOBIAS, 1984). Although some roosting birds may have dispersed to other sites, there are almost no significant areas of undisturbed reeds remaining as roosting habitat. Market trappers in 1982, catching *E. aureola* for eventual export to Japan, were netting principally in sugar cane fields. Although traders and trappers claimed that buntings were damaging rice crops, there is no evidence to suggest that the numbers of birds at any site were large enough to cause more than small scale local damage. Many birdwatchers have observed that *Ploceus philippinus* and *P. manyar*, both of which are listed by LEKAGUL & CRONIN (1974) as "common residents," are now scarce or uncommon.

In M&C's survey, the predominant native birds traded were *Lonchura punctulata* (17.2%); *Emberiza aureola* (16.9%) and *Ploceus philippinus* (12.7%) with only 7 other native species contributing more than a 2% share of the market. During the current survey, the predominant native species were *Geopelia striata* (13.7%) and *Pycnonotus jocosus* (10.0%) (only 5.0% and 1.9% of native birds respectively in M&C's survey) while 11 other species contributed more than 2% of the market (Table 4). A broad comparison of the two surveys suggests, therefore, that M&C recorded a wider range of species, with less predominance of any one species, whereas the current survey, a nucleus of a few key species contributed the overwhelming volume of the trade. Other than *Geopelia* and *P. jocosus*, mentioned above, some of the species which have markedly increased their overall share of the market are *Streptopelia chinensis* (up from 2.9% to 4.9%); *Psittacula alexandri* (1.7% to 6.5%); *Garrulux leucolophus* (0.7% to 2.0%); *G. chinensis* (0.05% to 2.9%); *Copsychus malabaricus* (0.5% to 2.9%); *Sturnus nigricollis* (0.2% to 2.2%); *A. javanicus* (0.9% to 5.1%) and *Gracula religiosa* (1.0% to 4.8%).

There were altogether 54 species of native birds recorded during this survey which were unrecorded by M&C. This appears to reflect an increasing predominance of continental Thai species in the trade, at the same time as there appears to have been a reduction in the southern, peninsular Malaysian or Sundaic element. No fewer than 27 of the new species recorded are predominantly montane in distribution, reflecting an increase in the number of species from northern and perhaps western Thailand.

Threats to Wildlife

M&C recorded only 3,986 laughingthrushes of 4 species during their survey, compared with 4,145 birds of 8 species during this survey — a larger total in spite of the much shorter duration of the present study. This is alarming from the conservation standpoint. In spite of the fact that most species are associated with forest or densely wooded secondary habitats which have greatly decreased in area, are mainly insectivorous and, like other forest birds, probably have a relatively low recruitment rate, trade is permitted in all but *Garrulax chinensis*. Of particular concern is the much increased number of *G. strepitans*, which has a relatively small world range, occurs only in moist submontane and montane forests and which contributed 770 birds (18.6% of all laughingthrushes recorded). Trade in *G. strepitans* is evidently a new phenomenon, since the species was unrecorded by M&C.

In spite of the fact that *G. chinensis* is totally protected, it is the actually the most frequent laughingthrush in trade, accounting for 1,529 birds (2.2% of all native birds at the market and over one-third of all laughingthrushes). This is a clear illustration of the failure to enforce wildlife laws at the Weekend Market.

While habitat destruction may be the primary cause for the scarcity of much wildlife in Thailand, capture for the pet trade has undoubtedly contributed to the declines of many species. This can most easily be demonstrated among those relatively ecologically tolerant, open country species. The Red-breasted Parakeet *Psittacula alexandri* listed as "common resident" by LEKAGUL & CRONIN (1974) is in fact now extremely scarce and local, even though it appears to be able to survive in agricultural land, provided that a few stands of tall trees suitable for nesting and roosting remain. Disturbance through capture for trade is undoubtedly a major factor which is limiting its numbers. Even with such a common and widespread species as the Red-wattled Lapwing *Vanellus indicus*, it is extremely unusual for birdwatchers to see broods of chicks, since these too are taken for the pet trade.

The contribution of *Gracula religiosa* to the trade, both in terms of numbers of birds and monetary value, is highly significant and of particular concern. This species has undoubtedly decreased enormously in the wild, both due to habitat destruction (it is chiefly restricted to forests of the level lowlands and plateaux) and due to the continuing trade. Even in Thailand's national parks and wildlife sanctuaries, nest trees of *Gracula religiosa* usually have bamboo pegs placed in their trunks in order to enable poachers to gain access to the nestlings. There is much evidence that not only villagers, but also those employed as forest guards, are engaged in the illegal capture of young Hill Mynas for the trade. A single brood of 3 young Hill Mynas, sold to a wildlife dealer for Bht.

500 per bird, is equivalent to one month's salary for a temporary forest guard, and is a powerful financial incentive to engage in illegal activity.

As already indicated, over 20% of the trade, in terms of individual animals sold, is already illegal. In fact, the true volume of illicit trade is undoubtedly much greater. Mr. Boonlerd Angsiri-jinda (pers. comm.) reported that there were no more than 25 permit-holders at the weekend market who had received permission to trade in birds. If we take just one species, *Geopelia striata*, the annual quota per trader is only 10 individuals per trader per year. In other words, the maximum number which can legally be sold through the market in one year (250 birds) is less than 3% of the actual number observed (9,394). This demonstrates the complete futility of trying to impose a quota system to regulate sales without any realistic mechanism for monitoring numbers.

CONCLUSIONS AND RECOMMENDATIONS

Basic Problems

The large number of native bird and mammal species still being sold illegally and openly at Bangkok's Weekend Market is a matter for great concern. This market probably constitutes only a minute fraction of the total domestic trade in native Thai fauna: the very fact that so many protected birds are sold at a venue which is regularly visited by government wildlife officials, indicates the almost total failure of existing wildlife legislation.

A number of problems were identified:

1. **Enforcement.** Of a minimum of 59 different outlets selling wildlife identified during the survey, at least 40 either openly displayed or actually engaged in the sale of protected wildlife at some time. This indicates the scale of the problem: in order to suppress the illegal trade, wildlife officials would virtually be forced to disrupt the entire pet market, which could provoke a violent confrontation. Conscientious wildlife officials have been frequently threatened with violence even for relatively limited interference with the activities of the traders so that a major intervention would be out of the question without a high degree of sustained commitment. Wildlife Division officials themselves complain that corrupt Forestry Department police may "tip off" the traders before any raids on the market are planned. Enforcement usually only results in the confiscation of wildlife and seldom in prosecution of the traders.
2. **Expertise.** The level of expertise among wildlife officials is relatively low and some may be unable to separate protected species from those in which sale is permitted.
3. **Legal loopholes.** Existing wildlife legislation allows any person to possess up to 2 individuals of most protected species, even though capture or sale of those species may be illegal. This places an unacceptable burden of obtaining proof of illegal capture or sale upon wildlife officials which makes the law difficult to enforce.

The quota system, which allows dealers to legally sell a small number of commoner species such as Zebra Doves and Hill Mynas, is in practice unenforceable since

there is no way of verifying how many individuals are sold. The volume of wildlife recorded during this survey indicated that annual quotas per trader are probably exceeded by a factor of 30 times or more.

The lack of domestic legislation aimed at non-native species means that the Convention on International Trade in Endangered Species of Flora and Fauna (CITES) cannot at present be enforced in Thailand. As a result, many CITES-listed species may be sold openly without any constraint.

4. *Species in trade.* A number of species in which populations have declined or probably declined significantly, and for which trade is believed to constitute a significant threat, are still being legally traded. These include Thick-billed Pigeon, laughingthrushes, and Hill Myna. There are a few other, relatively common open country species, such as Black-collared Starling *Sturnus nigricollis*, in which trade is, inexplicably, forbidden. A similar anomaly is found in the Magpie Robin *Copsychus saularis* and White-rumped Shama *C. malabaricus*. While the former is extremely common in open country, farmland and gardens, the latter is restricted chiefly to natural and semi-natural wooded habitats and may therefore be construed as being more at risk. Yet trade is forbidden in Magpie Robin, the commoner of the two, and allowed in the rarer species.

There are 108 other species of birds, which are not protected in law, apparently through oversight, most of which deserve protection (Appendix II). These include many small insectivorous birds and some large and endangered waterfowl.

The existence of a massive illegal trade at the Bangkok Weekend Market which lies, moreover, only 3 km from the headquarters of the Wildlife Conservation Division, Royal Forest Department, and which is regularly patrolled by their personnel, is clear evidence that the illegal wildlife trade in Thailand is completely out of control. Much better enforcement of existing wildlife legislation is needed, not only in Bangkok but throughout the entire country. This can only be attained if the authorities are prepared to devote more physical resources to achieve this. In addition, some new initiatives should be explored. The following recommendations are made.

Changes in Legislation

The legislation should be amended in order to drastically reduce the range of native species of birds and mammals in which trade is permitted and particularly to eliminate any trade in those species which are restricted to forests and tall secondary growth, the areas of which have been much reduced. These changes fall into two principal categories:

(a) those in for which protection may be improved through reducing or abolishing trade quotas. Suggested changes in the quotas need only be referred to the Ministry of Agriculture.

(b) changes which require either the passage of new laws or which require major amendments to the existing legislation.

(i) At present, trade is permitted in 34 species of birds (Appendix III). It is suggested that this be reduced to 7 species (*Streptopelia chinensis*, *Geopelia striata*, *Pycnonotus jocosus*, *Acridotheres tristis*, *A. javanicus* and the two most common *Lonchura* species, *L. striata* and *L. punctulata*.) The quotas for all these species could safely be abolished, since these are common or relatively common open country species for which no restriction need be placed on the numbers traded.

(ii) In the remaining 27 species, quotas should be reduced to zero.

Because these changes require no more than change in the trade quotas, it should be possible to make them relatively swiftly.

(iii) Of the 108 unprotected species of birds in Appendix II, all but 2 species, Rock Pigeon *Columba livia* and Eurasian Tree Sparrow *Passer montanus*, should be fully protected in law.

(iv) Trade in native mammals should be completely abolished. Reducing the range of bird and mammal species which may be traded would greatly facilitate enforcement of the law, since less wide-ranging identification ability on the part of wildlife officials would be needed.

(v) After more than 6 years of shameful non-adherence or partial adherence to the terms of CITES, an international convention which Thailand has already ratified, the Thai Government should give all priority to passing the necessary legislation to enable CITES to be effectively enforced.

(vi) The penalties for those caught dealing in protected wildlife should be greatly increased, since they are currently too trivial to act as a deterrent.

(vii) The law should be modified in order to completely prohibit private ownership of all native birds and mammals other than those species in which trade is permitted. An exception may be made to enable recognised pheasant breeders to keep, but not sell, those galliform birds which breed readily in captivity.

Law Enforcement and Monitoring

(a) More attention should be given to prosecuting not only the sellers of protected wildlife but also the purchasers.

(b) The Bangkok Metropolitan Administration, which oversees the Chatuchak Market, is within its rights to withdraw permission for vendors to display and sell goods if they ignore the regulations governing the market. Closer cooperation between officials of the Wildlife Conservation Division and BMA should be sought in order to close down those shops which persistently display or sell protected species.

(c) The Wildlife Conservation Division should spend more time monitoring the trade in order to collect data on the species offered for sale. Occasional and sudden "crack-

downs" have little effect. A regular official presence would also interfere to a much greater extent with illicit dealers' turnover.

(d) The Wildlife Conservation Division should provide proper training for officials in order to enable them to identify the principal native and non-native species of wildlife in trade.

(e) The majority of customers, and indeed policemen and other government officials, are unaware that most species of birds and other wildlife are already protected by law. Posters should be produced in order to explain this fact and traders should only be granted permits to operate at the market if they agree to display them.

(f) Some changes in the law have already been proposed by the Wildlife Conservation Division with a view to permitting the captive breeding and sale of some native bird and mammal species. If not properly monitored, however, these changes could cause an increase in the volume of illegal trade through allowing traders to claim that wild-caught animals were captive-bred. This is an especially likely scenario if the radical reductions in the range of wild-caught species in which trade is permitted, as recommended in this report, are carried out.

An efficient mechanism for monitoring the operations of all institutions claiming to breed wildlife in captivity, and indeed of the many private zoos and commercial institutions which hold wildlife, should be set up.

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APPENDIX IA. List of native Thai bird species recorded at Bangkok Weekend Market, Chatuchak Park, on 25 weekends during 19 December 1987 to 11 December 1988.

- * = species fully protected in law for which sale or purchase forbidden
 + = species in which capture or sale permitted under a quota system
 ++ = species for which most or all believed bred in captivity

Species	Number observed	No. of weekends	No. of sellers
Little Cormorant * <i>Phalacrocorax niger</i>	9	2	2
Javan Pond-Heron * <i>Ardeola speciosa</i>	1	1	1
Little Egret * <i>Egretta garzetta</i>	12	5	5
Black-crowned Night-Heron * <i>Nycticorax nycticorax</i>	1	1	1
Malayan Hight-Heron * <i>Gorsachius melanolophus</i>	1	1	1
(Bittern) * <i>Ixobrychus sp.</i>	2	1	1
Lesser Treeduck * <i>Dendrocygna javanica</i>	49	10	4
Common Teal * <i>Anas crecca</i>	5	3	1
Falcated Teal <i>Anas falcata</i>	11	4	1
Eurasian Wigeon * <i>Anas penelope</i>	1	1	1
Garganey * <i>Anas querquedula</i>	5	2	2
Cotton Pygmy Goose * <i>Nettapus coromandelianus</i>	15	3	3
Black-shouldered Kite * <i>Elanus caeruleus</i>	61	14	14

Species	Number observed	No. of weekends	No. of sellers
Black Kite * <i>Milvus migrans</i>	6	5	2
Brahminy Kite * <i>Haliastur indus</i>	3	3	1
Crested Serpent-Eagle * <i>Spilornis cheela</i>	4	4	2
Eastern Marsh Harrier * <i>Circus spilonotus</i>	1	1	1
Shikra * <i>Accipiter badius</i>	1	1	1
Accipter sp. *	2	2	2
Rufous-winged Buzzard * <i>Butastur liventer</i>	6	3	1
White-rumped Falconet * <i>Polihierax insignis</i>	2	1	1
Collared Falconet * <i>Microhierax caerulescens</i>	31	4	1
Chinese Francolin + <i>Francolinus pintadeanus</i>	235	16	9
Japanese Quail ++ <i>Coturnix japonica</i>	n.c.	n.c.	n.c.
Rain Quail <i>Ardeola speciosa</i>	3	2	1
Blue-breasted Quail <i>Coturnix chinensis</i>	273	8	14
Bar-backed Partridge * <i>Arborophila brunneopectus</i>	29	4	5
Scaly-breasted Partridge * <i>Arborophila chloropus</i>	27	7	4
Kalij Pheasant * <i>Lophura leucomelana</i>	1	1	1
Silver Pheasant * <i>Lophura nycthemera</i>	15	7	4

Species	Number observed	No. of weekends	No. of sellers
Red Junglefowl * <i>Gallus gallus</i>	8	2	2
Green Peafowl * <i>Pavo muticus</i>	22	6	n.c.
Little Buttonquail <i>Turnix sylvatica</i>	505	4	9
Yellow-legged Buttonquail <i>Turnix tanki</i>	21	4	4
Barred Buttonquail <i>Turnix suscitator</i>	192	8	6
Slaty-breasted Rail * <i>Rallus striatus</i>	1	1	1
Red-legged Crake * <i>Rallina fasciata</i>	1	1	1
(Crake) * <i>Rallus/Rallina/Porzana</i> sp.	2	1	1
White-breasted Waterhen + <i>Amaurornis phoenicurus</i>	408	24	22
Watercock + <i>Gallicrex cinerea</i>	43	3	1
Common Moorhen + <i>Gallinula chloropus</i>	63	8	7
Purple Swamphen + <i>Porphyrio porphyrio</i>	273	15	12
Common Coot * <i>Fulica atra</i>	5	2	1
Bronze-winged Jacana * <i>Metopidius indicus</i>	1	1	1
Red-wattled Lapwing * <i>Vanellus indicus</i>	91	8	11
Pin-tailed Pigeon * <i>Treron apicauda</i>	5	3	2

Species	Number observed	No. of weekends	No. of sellers
Wedge-tailed Pigeon * <i>Treron sphenura</i>	2	1	1
Thick-billed Pigeon + <i>Treron curvirostra</i>	1,414	19	24
Pompadour Pigeon * <i>Treron pompadora</i>	17	7	6
Pink-necked Pigeon * <i>Treron vernans</i>	54	10	8
Orange-breasted Pigeon * <i>Treron bicincta</i>	16	6	3
Green Imperial Pigeon * <i>Ducula aenea</i>	7	3	1
Pied Imperial Pigeon * <i>Ducula bicolor</i>	9	3	1
Mountain Imperial Pigeon * <i>Ducula badia</i>	2	1	1
Barred Cuckoo-Dove * <i>Macropygia unchall</i>	71	16	11
Oriental Turtle-Dove * <i>Streptopelia orientalis</i>	2	1	1
Red Turtle-Dove * <i>Streptopelia tranquebarica</i>	595	10	23
Spotted Dove + <i>Streptopelia chinensis</i>	3,393	25	49
Zebra Dove + <i>Geopelia striata</i>	9,394	25	56
Emerald Dove * <i>Chalcophaps indica</i>	153	16	15
Alexandrine Parakeet * <i>Psittacula eupatria</i>	169	19	19
Red-breasted Parakeet + <i>Psittacula alexandri</i>	4,496	25	43

Species	Number observed	No. of weekends	No. of sellers
Blossom-headed Parakeet + <i>Psittacula roseata</i>	692	18	25
Grey-headed Parakeet + <i>Psittacula finschii</i>	1,087	23	27
Blue-rumped Parrot * <i>Psittinus cyanurus</i>	9	3	3
Vernal Hanging Parrot + <i>Loriculus vernalis</i>	405	15	25
Blue-crowned Hanging Parrot + <i>Loriculus galgulus</i>	468	17	17
Chestnut-winged Cuckoo * <i>Clamator coromandus</i>	3	2	2
Large Hawk-Cuckoo * <i>Cuculus sparverioides</i>	1	1	1
(Cuckoo) * <i>Cuculus</i> sp.	1	1	1
Common Koel + <i>Eudynamys scolopacea</i>	654	23	37
Black-bellied Malkoha * <i>Phaenicophaeus diardi</i>	1	1	1
Green-billied Malkoha * <i>Phaenicophaeus tristis</i>	1	1	1
Greater Coucal * <i>Centropus sinensis</i>	19	6	9
Lesser Coucal * <i>Centropus bengalensis</i>	2	2	2
Barn Owl * <i>Tyto alba</i>	3	2	1
Collared Owlet * <i>Glaucidium brodiei</i>	1	1	1
Asian Barred Owlet * <i>Glaucidium cuculoides</i>	1	1	1

Species	Number observed	No. of weekends	No. of sellers
Spotted Owlet * <i>Athene brama</i>	3	2	1
Unidentified Owl *	1	1	1
Stork-billed Kingfisher * <i>Pelargopsis capensis</i>	1	1	1
White-throated Kingfisher * <i>Halcyon smyrnensis</i>	10	3	3
Chestnut-headed Bee-eater * <i>Merops leschenaulti</i>	4	1	1
Green Bee-eater * <i>Merops orientalis</i>	1	1	1
Blue-bearded Bee-eater * <i>Nyctyornis athertoni</i>	4	2	1
Indian Roller * <i>Coracias benghalensis</i>	37	6	13
Dollarbird * <i>Eurystomus orientalis</i>	1	1	1
Hoopoe * <i>Upupa epops</i>	89	12	19
Brown Hornbill * <i>Ptilolaemus tickelli</i>	1	1	1
Wreathed Hornbill * <i>Rhyticeros undulatus</i>	1	1	1
Plain-pouched Hornbill * <i>Rhyticeros subruficollis</i>	1	1	1
Indian Pied Hornbill * <i>Anthracoceros albirostris</i>	7	2	2
Great Hornbill * <i>Buceros bicornis</i>	1	1	1
Unidentified Hornbill *	1	1	1
Great Barbet * <i>Megalaima virens</i>	62	16	16

Species	Number observed	No. of weekends	No. of sellers
Lineated Barbet * <i>Megalaima lineata</i>	356	23	29
Green-eared Barbet * <i>Megalaima faiostricta</i>	17	8	7
Gold-whiskered Barbet * <i>Megalaima chrysopogon</i>	4	2	1
Red-throated Barbet * <i>Megalaima mystacophanos</i>	24	9	5
Golden-throated Barbet * <i>Megalaima franklinii</i>	2	2	1
Blue-throated Barbet * <i>Megalaima asiatica</i>	29	8	6
Moustached Barbet * <i>Megalaima incognita</i>	7	5	6
Yellow-crowned Barbet * <i>Megalaima henricii</i>	3	2	1
Blue-eared Barbet * <i>Megalaima australis</i>	5	5	4
Coppersmith Barbet * <i>Megalaima haemacephala</i>	22	8	9
Brown Barbet * <i>Calorhamphus fuliginosus</i>	3	3	1
(Barbet) * <i>Megalaima sp.</i>	3	2	1
Laced Woodpecker * <i>Picus vittatus</i>	1	1	1
Grey-headed Woodpecker * <i>Picus canus</i>	6	1	2
Black-headed Woodpecker * <i>Picus erythropygius</i>	21	4	1
Silver-breasted Broadbill * <i>Serilophus lunatus</i>	1	1	1

Species	Number observed	No. of weekends	No. of sellers
Giant Pitta * <i>Pitta caerulea</i>	1	1	1
Blue-winged Pitta * <i>Pitta moluccensis</i>	48	5	9
Hooded Pitta * <i>Pitta sordida</i>	1	1	1
Eared Pitta * <i>Pitta phayrei</i>	4	2	1
Scarlet Minivet * <i>Pericrocotus flammeus</i>	53	4	3
Lesser Green Leafbird * <i>Chloropsis cyanopogon</i>	8	5	4
Greater Green Leafbird * <i>Chloropsis sonnerati</i>	26	11	9
Golden-fronted Leafbird * <i>Chloropsis aurifrons</i>	43	15	11
Blue-winged Leafbird * <i>Chloropsis cochinchinensis</i>	60	17	10
Crested Finchbill * <i>Spizixos canifrons</i>	33	7	2
Straw-headed Bulbul * <i>Pycnonotus zeylanicus</i>	87	17	14
Black-and-White Bulbul * <i>Pycnonotus melanoleucos</i>	1	1	1
Black-headed Bulbul <i>Pycnonotus atriceps</i>	281	15	15
Black-crested Bulbul * <i>Pycnonotus melanicterus</i>	1,046	20	23
Scaly-breasted Bulbul * <i>Pycnonotus squamatus</i>	13	3	2
Red-whiskered Bulbul + <i>Pycnonotus jocosus</i>	6,889	25	47

Species	Number observed	No. of weekends	No. of sellers
Sooty-headed Bulbul * <i>Pycnonotus aurigaster</i>	231	23	15
Stripe-throated Bulbul * <i>Pycnonotus finlaysoni</i>	60	17	13
Flavescent Bulbul * <i>Pycnonotus flavescens</i>	4	2	1
Yellow-vented Bulbul * <i>Pycnonotus goiavier</i>	77	17	11
Olive-winged Bulbul * <i>Pycnonotus plumosus</i>	29	6	5
Streak-eared Bulbul * <i>Pycnonotus blanfordi</i>	85	10	4
Red-eyed Bulbul * <i>Pycnonotus brunneus</i>	3	1	1
Spectacled Bulbul * <i>Pycnonotus erythrophthalmos</i>	4	1	1
Puff-throated Bulbul * <i>Criniger pallidus</i>	11	3	4
Ochraceous Bulbul * <i>Criniger ochraceus</i>	5	4	4
Grey-eyed Bulbul * <i>Hypsipetes propinquus</i>	23	8	5
Mountain Bulbul * <i>Hypsipetes mcclllandii</i>	3	2	1
Ashy Bulbul * <i>Hypsipetes flavala</i>	30	9	7
Black Bulbul * <i>Hypsipetes madagascariensis</i>	171	12	11
White-headed Bulbul * <i>Hypsipetes thompsoni</i>	89	6	2
Black Drongo * <i>Dicrurus macrocercus</i>	31	8	9

Species	Number observed	No. of weekends	No. of sellers
Ashy Drongo * <i>Dicrurus leucophaeus</i>	2	2	1
Lesser Racket-tailed Drongo * <i>Dicrurus remifer</i>	1	1	1
Spangled Drongo * <i>Dicrurus hottentottus</i>	11	4	2
Greater Racket-tailed Drongo * <i>Dicrurus paradiseus</i>	47	9	9
Bronzed Drongo * <i>Dicrurus aeneus</i>	1	1	1
(Drongo) * <i>Dicrurus</i> sp.	4	1	2
Black-naped Oriole * <i>Oriolus chinensis</i>	46	11	12
Black-hooded Oriole * <i>Oriolus xanthornus</i>	1	1	1
Asian Fairy-Bluebird * <i>Irena puella</i>	161	14	16
Eurasian Jay * <i>Garrulus glandarius</i>	65	15	14
Short-tailed Magpie * <i>Cissa thalassina</i>	1	1	1
Green Magpie * <i>Cissa chinensis</i>	47	14	15
Blue Magpie * <i>Urocissa erythrorhyncha</i>	49	11	11
Rufous Treepie * <i>Dendrocitta vagabunda</i>	54	15	11
Grey Treepie * <i>Dendrocitta formosae</i>	5	3	3
Racket-tailed Treepie * <i>Crypsirina temia</i>	20	7	8

Species	Number observed	No. of weekends	No. of sellers
Large-billed Crow * <i>Corvus macrorhynchos</i>	22	11	7
Abbott's Babbler * <i>Trichastoma abbotti</i>	1	1	1
Large Scimitar-Babbler * <i>Pomatorhinus hypoleucos</i>	9	3	3
White-browed Scimitar-Babbler * <i>Pomatorhinus schisticeps</i>	3	3	1
White-crested Laughingthrush + <i>Garrulax leucolophus</i>	1,339	25	37
Lesser Necklaced Laughingthrush + <i>Garrulax monileger</i>	278	23	20
Greater Necklaced Laughingthrush + <i>Garrulax pectoralis</i>	57	11	8
White-necked Laughingthrush + <i>Garrulax strepitans</i>	770	25	23
Black-throated Laughingthrush * <i>Garrulax chinensis</i>	1,529	25	42
White-browed Laughingthrush + <i>Garrulax sannio</i>	1	1	1
Chestnut-crowned Laughingthrush + <i>Garrulax erythrocephalus</i>	164	20	14
Red-tailed Laughingthrush + <i>Garrulax milnei</i>	7	3	2
Red-faced Liocichla <i>Liocichla phoenicea</i>	33	7	1
Silver-eared Mesia <i>Leiothrix argenteauris</i>	208	19	19
White-hooded Babbler * <i>Gampsorhynchus rufulus</i>	1	1	1
Black-headed Sibia <i>Heterophasia melanoleuca</i>	1	1	1

Species	Number observed	No. of weekends	No. of sellers
Grey-headed Parrotbill * <i>Paradoxornis gularis</i>	3	2	1
Siberian Blue Robin <i>Erithacus cyane</i>	3	1	1
Magpie Robin * <i>Copsychus saularis</i>	557	22	25
White-rumped Shama + <i>Copsychus malabaricus</i>	1,992	25	37
Blue-fronted Redstart * <i>Phoenicurus frontalis</i>	1	1	1
Chestnut-naped Forktail * <i>Enicurus ruficapillus</i>	1	1	1
Blue Whistling-Thrush * <i>Myophonus caeruleus</i>	36	9	8
Orange-headed Thrush * <i>Zoothera citrina</i>	5	5	3
Siberian Thrush * <i>Zoothera sibirica</i>	2	2	1
Eye-browed Thrush * <i>Turdus obscurus</i>	89	11	11
Hill Blue Flycatcher * <i>Cyornis banyumas</i>	3	11	11
Tickell's Blue Flycatcher * <i>Cyornis tickelliae</i>	33	11	7
(Flycatcher) * <i>Cyornis</i> sp.	1	1	1
Black-naped Monarch * <i>Hypothymis azurea</i>	2	1	1
White Wagtail * <i>Motacilla alba</i>	128	5	2
Forest Wagtail * <i>Dendronanthus indicus</i>	2	1	1

Species	Number observed	No. of weekends	No. of sellers
Ashy Wood-swallow <i>Artamus fuscus</i>	3	1	2
Brown Shrike * <i>Lanius cristatus</i>	1	1	1
Long-tailed Shrike * <i>Lanius schach</i>	5	2	1
Philippine Glossy Starling <i>Aplonis panayensis</i>	85	6	6
Chestnut-tailed Starling <i>Sturnus malabaricus</i>	458	11	13
White-shouldered Starling <i>Sturnus sinensis</i>	452	10	10
Purple-backed Starling <i>Sturnus sturninus</i>	3	1	1
Asian Pied Starling * <i>Sturnus contra</i>	595	21	25
Black-collared Starling * <i>Sturnus nigricollis</i>	1,502	23	48
Vinous-breasted Starling * <i>Sturnus burmannicus</i>	218	16	23
Common Myna + <i>Acridotheres tristis</i>	1,242	22	39
White-vented Myna + <i>Acridotheres javanicus</i>	3,516	23	42
Golden-crested Myna * <i>Ampeliceps coronatus</i>	462	14	21
Hill Myna + <i>Gracula religiosa</i>	3,295	25	43
Unidentified Starlings, Mynas <i>Sturnus</i> or <i>Acridotheres</i> spp.	10	1	1
Brown-throated Sunbird * <i>Anthreptes malacensis</i>	6	3	1

Species	Number observed	No. of weekends	No. of sellers
Red-throated Sunbird * <i>Anthreptes rhodolaema</i>	10	2	2
Olive-backed Sunbird * <i>Nectarinia jugularis</i>	75	5	2
Crimson Sunbird * <i>Aethopyga siparaja</i>	1	1	1
Unidentified sunbirds *	10	1	1
Little Spiderhunter * <i>Arachnothera longirostra</i>	2	1	1
Yellow-breasted Flowerpecker * <i>Prionochilus maculatus</i>	1	1	1
Crimson-breasted Flowerpecker * <i>Prionochilus percussus</i>	2	1	1
Thick-billed Flowerpecker * <i>Dicaeum agile</i>	40	4	4
Yellow-vented Flowerpecker * <i>Dicaeum chrysorrheum</i>	14	4	2
Orange-bellied Flowerpecker * <i>Dicaeum trigonostigma</i>	5	2	1
Scarlet-backed Flowerpecker * <i>Dicaeum cruentatum</i>	353	14	11
Buff-bellied Flowerpecker * <i>Dicaeum ignipectus</i>	1	1	1
(Flowerpecker) * <i>Dicaeum</i> sp.	1	1	1
Japanese White-eye * <i>Zosterops japonicus</i>	9	1	1
Oriental White-eye * <i>Zosterops palpebrosus</i>	411	11	2
Eurasian Tree-Sparrow <i>Passer montanus</i>	5	2	1
Plain-backed Sparrow <i>Passer flaveolus</i>	4	1	1

Species	Number observed	No. of weekends	No. of sellers
Baya Weaver * <i>Ploceus manyar</i>	222	10	12
Streaked Weaver * <i>Ploceus manyar</i>	3	2	1
Asian Golden Weaver * <i>Ploceus hypoxanthus</i>	28	3	2
Red Avadavat * <i>Amandava amandava</i>	2,222	14	19
Pin-tailed Parrotfinch + <i>Erythrura prasina</i>	2,613	16	20
White-rumped Munia + <i>Lonchura striata</i>	552	5	1
White-rumped Munia + <i>Lonchura leucogastra</i>	20	1	1
Scaly-breasted Munia + <i>Lonchura punctulata</i>	5,299	22	19
Chestnut Munia + <i>Lonchura malacca</i>	854	17	16
White-headed Munia + <i>Lochura maja</i>	193	8	7
Black-headed Greenfinch <i>Carduelis ambigua</i>	160	5	1
Common Rosefinch <i>Carpodacus erythrinus</i>	121	3	1

APPENDIX IB. List of exotic bird species recorded at Bangkok Weekend Market, Chatuchak Park, 19 December 1987 to 11 December 1988.

I = CITES Appendix I species

II = CITES Appendix II species

++ = captive-bred or presumed captive-bred

Species	Number observed	No. of weekends	No. of sellers
Mute Swan ++ <i>Cygnus olor</i>	2	1	1
Black Swan ++ <i>Cygnus atratus</i>	2	1	1
Wood Duck ++ <i>Aix sponsa</i>	21	4	4
Mandarin Duck <i>Aix galericulata</i>	21	4	2
Baikal Teal <i>Anas Formosa</i>	6	3	2
Indian Peafowl ++ <i>Pavo cristatus</i>	6	1	2
Barbary Dove ++ <i>Streptopelia risoria</i>	n.c.	-	-
Diamond Dove ++ <i>Geopelia cuneata</i>	143	3	7
Crowned Pigeon (II) <i>Goura</i> sp.	9	5	2
Fruit-Dove <i>Ptilinopus</i> sp.	3	3	2
Black-winged Lory (II) <i>Eos cyanogenia</i>	2	1	1
Violet-necked Lory (II) <i>Eos squamata</i>	7	1	2
Blue-streaked Lory (II) <i>Eos reticulata</i>	18	3	2
Red Lory (II) <i>Eos bornea</i>	51	2	2

Species	Number observed	No. of weekends	No. of sellers
Unidentified small lories (II) <i>Eos</i> spp.	241	9	7
Dusky Lory (II) <i>Pseudeos fuscata</i>	35	4	4
Rainbow Lory (II) <i>Trichoglossus haematodus</i>	168	8	5
Black-capped Lory (II) <i>Lorius lory</i>	22	4	4
Chattering Lory (II) <i>Lorius garrulus</i>	190	9	9
Unidentified lories (II) <i>Lorius</i> spp.	5	1	9
Unidentified lorikeets (II) <i>Charmosyna</i> sp.	8	2	2
Palm Cockatoo (I) <i>Probosciger aterrimus</i>	8	3	2
Lesser Sulphur-crested Cockatoo (II) <i>Cacatua sulphurea</i>	13	3	9
Sulphur-crested Cockatoo (II) <i>Cacatua galerita</i> (ssp. <i>triton/leonora</i>)	22	7	9
Lesser Sulphur-crested/ Sulphur-crested Cockatoo (II) <i>Cacatua sulphurea/galerita</i>	103	7	9
Salmon-crested Cockatoo (II) <i>Cacatua moluccensis</i>	118	10	13
Goffin's Cockatoo (II) <i>Cacatua goffini</i>	15	4	3
Cockatiel ++ <i>Nymphicus hollandicus</i>	n.c.	-	-
Great-billed Parrot (II) <i>Tanygnathus megalorhynchos</i>	3	2	1
Eclectus Parrot (II) <i>Eclectus roratus</i>	25	6	4

Species	Number observed	No. of weekends	No. of sellers
Rosellas (II) <i>Platycercus</i> spp.	12	1	1
African Grey Parrot (II) <i>Psittacus erithacus</i>	68	10	4
Lovebirds (II) <i>Agapornis</i> spp.	n.c.	-	-
Long-tailed Parakeet (II) <i>Psittacula longicauda</i>	1	1	1
Blue-and-Yellow Macaw (II) <i>Ara ararauna</i>	15	4	2
Military Macaw (I) <i>Ara militaris</i>	2	2	1
Scarlet Macaw (I) <i>Ara macao</i>	7	4	2
Green-winged Macaw <i>Ara chloroptera</i>	1	1	1
Conures (II) <i>Aratinga</i> spp.	120	3	4
Blue-cheeked Amazon (II) <i>Amazona dufresniana</i>	10	5	2
Yellow-shouldered Amazon (I) <i>Amazona barbadensis</i>	2	1	1
Unidentified Amazons (I/II) <i>Amazona</i> spp.	30	4	6
Unidentified Psittaciformes (II)	9	2	2
Turacos <i>Tauraco</i> spp.	32	4	1
Toucanets (unidentified)	5	2	1
Toucans <i>Ramphastos</i> sp.	5	5	1
"Tufted" Jay <i>Cyanocorax</i> sp.	1	1	1

Species	Number observed	No. of weekends	No. of sellers
Hwamei <i>Garrulax canorus</i>	107	25	6
Laughingthrush <i>Garrulax</i>	1	1	1
Pekin Robin <i>Leiothrix lutea</i>	803	25	10
Black-winged Starling <i>Sturnus melanopterus</i>	5	3	2
Bali Starling ++ <i>Leucopsar rothschildi</i>	2	1	1
Golden-breasted Myna <i>Mino anais</i>	16	4	4
Yellow-faced Myna <i>Mino dumontii</i>	7	2	2
Red Cardinal <i>Cardinalis cardinalis</i>	1	1	1
Java Sparrow ++ <i>Padda oryzivora</i>	587	25	8
Black Buffalo Weaver <i>Bubalornis albirostris</i>	16	3	2

APPENDIX IC. List of Mammals and Reptiles recorded at Bangkok Weekend Market, Chatuchak Park, 19 December 1987 to 11 December 1988.

* = species fully protected in law for which sale or purchase forbidden

Species	Number observed	No. of weekends	No. of sellers
Common Treeshrew <i>Tupaia glis</i>	157	25	12
Flying Fox <i>Pteropus</i> sp.	4	2	1
Slow Loris * <i>Nycticebus coucang</i>	28	12	7
Pig-tailed Macaque * <i>Macaca nemestrina</i>	4	3	2
Stump-tailed Macaque * <i>Macaca arctoides</i>	1	1	1
Long-tailed Macaque * <i>Macaca fascicularis</i>	3	2	1
Macaca spp. *	2	2	1
Dusky Leaf Monkey * <i>Presbytis obscura</i>	8	6	5
White-handed Gibbon ** <i>Hylobates lar</i>	17	12	4
Hog Badger * <i>Arctonyx collaris</i>	3	2	2
Burmese Ferret Badger * <i>Melogale personata</i>	1	1	1
Otter * <i>Lutra</i> sp. or <i>Aonyx cinerea</i>	3	2	2
Civet <i>Viverricula</i> sp.	5	4	3
Palm Civet <i>Paradoxurus hermaphroditus</i>	18	4	6
Javan Mongoose <i>Herpestes javanicus</i>	1	1	1

Species	Number observed	No. of weekends	No. of sellers
Leopard Cat *	11	6	7
<i>Felis bengalensis</i>			
Clouded Leopard *	1	1	1
<i>Neofelis nebulosa</i>			
Lesser Mouse Deer **	3	3	1
<i>Tragulus javanicus</i>			
Black Giant Squirrel *	1	1	1
<i>Ratufa bicolor</i>			
Plantain Squirrel	7	1	1
<i>Callosciurus notatus</i>			
Variable Squirrel	547	25	16
<i>Callosciurus finlaysoni</i>			
Burmese Striped Tree-Squirrel	165	8	13
<i>Tamiops macclellandi</i>			
Indochinese Ground-Squirrel	24	4	3
<i>Menetes berdmorei</i>			
White-bellied Flying Squirrel *	18	7	9
<i>Petinomys setosus</i>			
Squirrel sp.	2,225	25	17
Tiny young squirrels or treeshrews	160	25	16
Bamboo Rat	1	1	1
<i>Rhizomys</i> or <i>Cannomys</i> sp.			
Reptiles			
Hard-shelled turtles	221	3	1
Soft-shelled turtle	1	1	1
Unidentified lizards	4	1	1
<i>Varanus</i> sp.	1	1	1
<i>Python</i> sp.	10	5	2
<i>Ahaetulla</i> sp.	141	5	2
Small snakes	160	5	2

Appendix II. List of Thai bird species which are not protected under the Wild Animals Reservation and Protection Act (1960).

Common Name	Scientific Name
Great Crested Grebe	<i>Podiceps cristatus</i>
Streaked Shearwater	<i>Calonectris leucomelas</i>
Short-tailed Shearwater	<i>Puffinus tenuirostris</i>
Swinhoe's Storm-Petrel	<i>Oceanodroma monorhis</i>
White-tailed Tropicbird	<i>Phaethon lepturus</i>
Masked Booby	<i>Sula dactylatra</i>
Brown Booby	<i>Sula leucogaster</i>
White Stork	<i>Ciconia ciconia</i>
Storm's Stork	<i>Ciconia stormi</i>
Japanese Quail	<i>Coturnix japonica</i>
Rain Quail	<i>Coturnix coromandelica</i>
Blue-breasted Quail	<i>Coturnix chinensis</i>
Small Buttonquail	<i>Turnix sylvatica</i>
Yellow-legged Buttonquail	<i>Turnix tanki</i>
Barred Buttonquail	<i>Turnix suscitator</i>
Sarus Crane	<i>Grus antigone</i>
Water Rail	<i>Rallus aquaticus</i>
Masked Finfoot	<i>Heliopais personata</i>
Northern Lapwing	<i>Vanellus vanellus</i>
Terek Sandpiper	<i>Xenus cinereus</i>
Jack Snipe	<i>Lymnocyptes minimus</i>
Eurasian Woodcock	<i>Scolopax rusticola</i>
Spoon-billed Sandpiper	<i>Eurynorhynchus pygmaeus</i>
Black-winged Stilt	<i>Himantopus himantopus</i>
Pied Avocet	<i>Recurvirostra avosetta</i>
Red-necked Phalarope	<i>Phalaropus lobatus</i>
Crab Plover	<i>Dromas ardeola</i>
Stone Curlew	<i>Burhinus oedicnemus</i>
Oriental Pratincole	<i>Glareola maldivarum</i>
Small Pratincole	<i>Glareola lactea</i>
Pomarine Skua	<i>Stercorarius pomarinus</i>
Arctic Skua	<i>Stercorarius parasiticus</i>
Long-tailed Skua	<i>Stercorarius longicaudus</i>
Indian Skimmer	<i>Rynchops albicollis</i>
Rock Pigeon	<i>Columba livia</i>
Speckled Wood-Pigeon	<i>Columba hodgsonii</i>
Ashy Wood-Pigeon	<i>Columba pulchricollis</i>
Malaysian Honeyguide	<i>Indicator archipelagicus</i>

Common Name	Scientific Name
Eurasian Jay	<i>Garrulus glandarius</i>
Black-throated Tit	<i>Aegithalos concinnus</i>
Fire-capped Tit	<i>Cephalopyrus flammiceps</i>
Striped Wren-Babbler	<i>Kenopia striata</i>
Large Wren-Babbler	<i>Napothera macrodactyla</i>
Limestone Wren-Babbler	<i>Napothera crispifrons</i>
Streaked Wren-Babbler	<i>Napothera brevicaudata</i>
Eye-browed Wren-Babbler	<i>Napothera epilepidota</i>
Pygmy Wren-Babbler	<i>Pnoepyga pusilla</i>
Chestnut-capped Babbler	<i>Timalia pileata</i>
Red-faced Liocichla	<i>Liocichla phoenicea</i>
Silver-eared Mesia	<i>Leiothrix argentauris</i>
Rufous-winged Fulvetta	<i>Alcippe castaneiceps</i>
Rufous-throated Fulvetta	<i>Alcippe rufogularis</i>
Brown Fulvetta	<i>Alcippe brunneicauda</i>
Brown-cheeked Fulvetta	<i>Alcippe poioicephala</i>
Mountain Fulvetta	<i>Alcippe peracensis</i>
Grey-cheeked Fulvetta	<i>Alcippe morrisonia</i>
Rufous-backed Sibia	<i>Heterophasia annectens</i>
Black-headed Sibia	<i>Heterophasia melanoleuca</i>
Long-tailed Sibia	<i>Heterophasia picaoides</i>
Striated Yuhina	<i>Yuhina castaniceps</i>
Whiskered Yuhina	<i>Yuhina flavicollis</i>
Burmese Yuhina	<i>Yuhina humilis</i>
White-bellied Yuhina	<i>Yuhina zantholeuca</i>
Lesser Shortwing	<i>Brachypteryx leucophrys</i>
White-browed Shortwing	<i>Brachypteryx montana</i>
Japanese Robin	<i>Erithacus akahige</i>
Rufous-tailed Robin	<i>Erithacus sibilans</i>
Siberian Rubythroat	<i>Erithacus calliope</i>
White-tailed Rubythroat	<i>Erithacus pectoralis</i>
Bluethroat	<i>Erithacus svecicus</i>
Black-throated Robin	<i>Erithacus obscurus</i>
Siberian Blue Robin	<i>Erithacus cyane</i>
Orange-flanked Bush-Robin	<i>Tarsiger cyanurus</i>
Golden Bush-Robin	<i>Tarsiger chrysaeus</i>
Rufous-tailed Shama	<i>Copsychus pyrrropygus</i>
Stonechat	<i>Saxicola torquata</i>
Pied Bushchat	<i>Saxicola caprata</i>
Jerdon's Bushchat	<i>Saxicola jerdoni</i>
Grey Bushchat	<i>Saxicola ferrea</i>

Common Name	Scientific Name
Brown Shrike	<i>Lanius cristatus</i>
Tiger Shrike	<i>Lanius tigrinus</i>
Burmese Shrike	<i>Lanius colluriooides</i>
Philippine Glossy Starling	<i>Aplonis panayensis</i>
Spot-winged Starling	<i>Saroglossa spiloptera</i>
Chestnut-tailed Starling	<i>Sturnus malabaricus</i>
Brahminy Starling	<i>Sturnus pagodarum</i>
White-shouldered Starling	<i>Sturnus sinensis</i>
Purple-backed Starling	<i>Sturnus sturninus</i>
Rosy Starling	<i>Sturnus roseus</i>
Common Starling	<i>Sturnus vulgaris</i>
Jungle Myna	<i>Acridotheres fuscus</i>
Eurasian Tree-Sparrow	<i>Passer montanus</i>
Plain-backed Sparrow	<i>Passer flaveolus</i>
Russet Sparrow	<i>Passer rutilans</i>
House Sparrow	<i>Passer domesticus</i>
Brambling	<i>Fringilla montifringilla</i>
Black-headed Greenfinch	<i>Carduelis ambigua</i>
Common Rosefinch	<i>Carpodacus erythrinus</i>
Pink-rumped Rosefinch	<i>Carpodacus eos</i>
Scarlet Finch	<i>Haematospiza sipahi</i>
Yellow-billed Grosbeak	<i>Eophona migratoria</i>
Collared Grosbeak	<i>Mycerobas affinis</i>
Spot-winged Grosbeak	<i>Mycerobas melanozanthos</i>
Tristram's Bunting	<i>Emberiza tristrami</i>
Chestnut-eared Bunting	<i>Emberiza fucata</i>
Little Bunting	<i>Emberiza pusilla</i>
Yellow-breasted Bunting	<i>Emberiza aureola</i>
Black-headed Bunting	<i>Emberiza melanocephala</i>
Chestnut Bunting	<i>Emberiza rutila</i>
Black-faced Bunting	<i>Emberiza spodocephala</i>
Crested Bunting	<i>Melophus lathami</i>

Appendix III. Trade quotas for protected bird species in 1988 (Source: Wildlife Conservation Division, Royal Forest Department).

Species	Annual Quota (number of birds/trader)
<i>Amaurornis phoenicurus</i>	5
<i>Gallicrex cinerea</i>	20
<i>Gallinula chloropus</i>	10
<i>Porphyrio porphyrio</i>	10
<i>Gallinago</i> spp.	10
<i>Treron curvirostra</i>	10
<i>Streptopelia chinensis</i>	10
<i>Geopelia striata</i>	10
<i>Psittacula</i> spp. (other than <i>P. eupatria</i>)	15
<i>Loriculus</i> spp.	6
<i>Eudynamys scolopacea</i>	4
<i>Pycnonotus jocosus</i>	10
<i>Garrulax</i> spp. (other than <i>G. chinensis</i>)	5
<i>Acridotheres tristis</i>	15
<i>Gracula religiosa</i>	5
<i>Lonchura</i> spp.	10
<i>Erythrura prasina</i>	10

