SECOND SOUTH-EAST ASIAN SONGBIRD CRISIS SUMMIT

South-east Asia is a hotspot for illegal and unsustainable trade in songbirds, leading to serious declines in many species. The vast majority of the songbirds in trade are taken from the wild, sought after for their attractive song, colourful plumage and their increasing rarity. Unfortunately, songbird conservation has not received the attention it deserves, and as a result, many species have slipped perilously close to extinction, all but unnoticed.

In September 2015, a group of concerned experts came together for the first Asian Songbird Trade Crisis Summit, held in Singapore, to begin the process of co-ordinating a response to the alarming numbers of songbirds trapped from the wild in South-east Asia for domestic and international trade (see *TRAFFIC Bulletin* 27(2):47). This unprecedented meeting in the region led to the development of the much-needed Conservation Strategy for Southeast Asian Songbirds in Trade.

In this strategy, four main themes of work were identified to reduce illegal and unsustainable bird trade in South-east Asia. These were: genetic and field research to fill in knowledge gaps on taxonomy, trends and status of wild populations; captive breeding and husbandry to establish and expand ex-situ assurance breeding colonies; community engagement, communication and education for a bottom-up approach involving trade actors and to raise awareness of the issues and key conservation efforts ultimately to reduce demand for songbirds; and trade legislation and increased monitoring of trade hubs and forums, and the lobbying for and support of increased enforcement actions at national and international levels.

Since the first meeting, TRAFFIC has greatly intensified efforts under the fourth theme in particular, to understand current levels of trade in markets throughout South-east Asia, looking at the species involved, numbers of each, and the levels of trade. This information has been published in a number of peer-reviewed papers and reports in an effort to make the information useful and accessible, and to influence others to join in the effort

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Sharing the discussion outcomes following a break-out group activity on behaviour change.

to end this crisis. The focus has also been on particular species in dire need of immediate conservation attention, including the Rufous-fronted Laughingthrush *Garrulax rufifrons*, which is now known from fewer than a dozen individuals, and others, such as the Sumatran Laughingthrush *G. bicolor* and the Greater Green Leafbird *Chloropsis sonnerati* (see pages 4–8 of this issue), all birds highly threatened by trade in Indonesia, the epicentre of the songbird trade crisis. These also contributed to the latest IUCN Red List update of 17 species threatened by the Indonesian cage bird trade—including the three aforementioned species—to reflect their current conservation status more accurately. While not all the species threatened by trade in Indonesia are protected by law, there is a zero quota for the harvest of any songbirds, which technically makes the trade in any of these species against Indonesian law and policy.

Other participating organizations and individuals have also made impressive progress on some actions over the past two years. For instance, a workshop convening trappers, traders and government officials to discuss issues and solutions to reduce unsustainable and illegal bird trade was organized in Kalimantan. Genetic research has yielded preliminary results elucidating the distinctiveness of sub-populations of priority species, ▶

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Participants at the second South-east Asian Songbird Crisis Summit, Jurong Bird Park, Singapore.

► which is crucial to informing future conservation efforts. Assurance colonies have also grown for a number of priority species, with more breeding stock acquired and breeding facilities expanded.

From 19 to 21 February 2017, the second Asian Songbird Trade Crisis Summit, organized by Wildlife Reserves Singapore and TRAFFIC, took place at Jurong Bird Park, Singapore. Approximately 60 experts came together to discuss this progress and to look ahead to the implementation of the strategy. Participants discussed a variety of future actions ranging from advocating the closure of illegal markets, motivating enforcement actions, breeding highly threatened species in captivity for eventual release in the wild, and the need for further research and monitoring of trade and wild populations. Opportunities to raise global awareness of this crisis through campaigns by zoos were also discussed at length.

Other priority action areas included improving knowledge on wild populations, community-based interventions to reduce poaching and reduce demand for wild birds, supporting law enforcement successes along the trade chain and developing a plan for the rehabilitation and release of confiscated birds.

The Government of Indonesia is strongly encouraged to take immediate action to close down the markets facilitating the illegal and unsustainable trade in songbirds. It is also vital that the governments of other South-east Asian nations take stronger measures to protect songbirds from unsustainable over-exploitation and shut down pet shops and markets facilitating illegal trade.

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Straw-headed Bulbul *Pycnonotus zeylanicus*, one of the Tier 1 species identified in the first Summit, was recently uplisted from Vulnerable to Endangered.

Report by Serene C.L. Chng, James A. Eaton, and Adam E. Miller

GREATER GREEN
the trade in South-east Asia

Introduction

It is widely known that the greatest threats to Indonesia's avian species are illegal and unsustainable wildlife trade and habitat loss largely due to conversion of forest to agricultural production (Sodhi and Brook, 2006). Yet, our understanding of the nature and severity of these impacts on most species is limited, with basic information on the current population status of avian species in Indonesia lacking (Lee *et al.,* 2017). Over 169 avian species in Indonesia are now listed as globally threatened by the International Union for Conservation of Nature (IUCN) and BirdLife International (2016a), with harvest and trade to meet national demand amongst the leading threats. A number of these species are in demand in Indonesia for the popular hobby of bird keeping, which is also seen as a sign of wealth, sophistication, and status (Jepson and Ladle, 2005; Jepson *et al.,* 2011), and it is this practice which is driving demand for the capture of wild birds.

Monitoring bird markets is an important tool to gain insights into the dynamics of the wild bird trade and to identify species of concern (Courchamp *et al.,* 2006; Wilcove *et al.,* 2013; Harris *et al.*, 2015). Of the over 300 species traded in Indonesia, the volume of trade in one species in particular has shown a rapid increase. The Greater Green Leafbird *Chloropsis sonnerati*, the largest of the leafbirds, is native to Sundaland, including Brunei Darussalam, Indonesia (Sumatra, Borneo, Java and the outlying islands of Natuna, Riau archipelago, Nias, Bangka and Belitung), Malaysia, south Myanmar, Singapore and south Thailand (Wells, 2016). The race *zosterops* was previously considered to be common where habitat remains, in lowland forest and occasionally heavily wooded parkland and tree-shaded plantations, up to 1100 m (Wells, 2016), but both this and the race *sonnerati* are now thought to be uncommon, becoming scarce (Eaton *et al.,* 2016).

The capture of and trade in the Greater Green Leafbird is banned in parts of its native range (Malaysia, Singapore, Thailand) but not others (Brunei, Indonesia, Myanmar). Although the Greater Green Leafbird is currently not listed as a protected species in Indonesia, only species with a harvest quota are permitted to be harvested from the wild; as there is no harvest quota for the Greater Green Leafbird, in theory trapping is not permitted.

This species has been observed in trade for decades. Nash (1993) noted that the Greater Green Leafbird was the 19th most numerous bird on sale in Singapore in

MALE GREATER GREEN LEAFBIRD *CHLOROPSIS SONNERATI* (AMAR-SINGH HSS)

LEAFBIRDS:
with a focus on Indonesia

the early 1990s, with 400 specimens recorded in seven shops. In Indonesia, the species was recorded for sale in 1987 in Pramuka market, Jakarta, in very low volumes (Basuni and Setiyani, 1989). It was also found in 30 of 39 markets surveyed in Indonesia between 1991 and 1993, and between 1990 and 1992 some 406 were imported into Hong Kong (Nash, 1993). It was not recorded in trade in Malaysia, Philippines or Viet Nam in 1993, nor in Medan, North Sumatra, Indonesia, in 1997 and 1998, although 110 were observed there over the following three years (Shepherd, 2006). Numbers appeared to increase, with an annual number traded through the markets in Medan estimated at 842 birds during 2012 and 2013 (Harris *et al.,* 2015). More recent surveys carried out in key markets in other parts of South-east Asia, as well as reports of seizures made by authorities, have shown that demand for the species has suddenly surged, particularly in Indonesia. High volumes observed in recent surveys of bird markets in Indonesia and suspected increasing rarity in some locations noted by professional bird-watching tour companies and researchers, indicate the Greater Green Leafbird may be in peril as a result of unsustainable and illegal capture for trade (Chng *et al.,* 2015; Chng and Eaton, 2016a; Eaton pers obs). In light of these "early warning" indicators, the species was identified at the inaugural Asian Songbird Trade Crisis Summit (September 2015) as one of 28 species requiring action as a matter of priority (Lee *et al.,* 2017). Its conservation status was also recently revised on the IUCN Red List of Threatened Species from Least Concern to Vulnerable, with a decreasing population trend, due to evidence that trade is a far greater threat to the species than previously thought (BirdLife International, 2016a). This paper consolidates existing knowledge from recent research on the rise of poaching and trade of this species in South-east Asia, and proposes steps to prevent further declines.

Methods

Information on wild populations was obtained through informal discussion with experts in the field, including professional bird-watching tour leaders, field researchers and wildlife trade experts. Questions covered whether there was any anecdotal evidence of poaching, the frequency in sightings and any population trends at individual localities or range of the species.

A two-month field study in June and July 2015 across 119 point counts in Gunung Palung National Park, West Kalimantan, was also carried out by a team of two (A.E. Miller, and a field assistant) to investigate the impacts of trade on wild bird populations. The data presented here form part of a larger study including additional counts and areas in 2017.

Full inventories of markets in Indonesia were carried out in July 2014 in Barito, Pramuka, Jatinegara (Jakarta) (Chng *et al.,* 2015); surveys in June 2015 were undertaken in Yogyakarta (Central Java), Bratang, Kupang, Turi (Surabaya, East Java) and Malang (East Java) (Chng and Eaton, 2016a); and in Bandung (West Java) in September 2016 (Chng *et al.,* 2017). In West Kalimantan, three large surveys were conducted from July to December 2015, February to March 2016, and June to August 2016, from which data on Greater Green Leafbirds were extracted and analysed. Each consisted of four sub-surveys to cover all major cities and provincial roads within the province: one survey involved four separate teams working in: (a) Pontianak (capital of province), (b) north-west coast (Pontianak to Sambas), (c) the interior of West Kalimantan (Pontianak to Kapuas Hulu), and (d) the south-west coast (Pontianak to Ketapang). Provincial roads were used to map out markets, where species were identified and data collected on prices, volumes, and place of origin. Additionally, in August 2016, one survey was conducted in Palangkaraya, the capital city of Central Kalimantan.

Additionally, as part of the Kalimantan research, informal interviews were conducted with shopkeepers to gain insight into the socio-economic dynamics of the trade, and to identify any rise in demand for and price of species over the past five years. Price has been shown to be an accurate indicator of species status in the wild as increasing prices and corresponding decreasing trade volumes may indicate species rarity (Harris *et al.,* 2015).

Information was also obtained from other published and unpublished literature on the bird trade in this region, from open media and from enforcement agencies.

The exchange rates used were: USD1=IDR11 650 (July 2014); USD1=IDR12 500 (July 2015 to August 2016); and USD1=IDR13 100 (September 2016). The inflation calculator at fxtop.com was used to account for inflation for historical prices.

Results

Field observations

The field survey in Gunung Palung National Park found Greater Green Leafbirds present at only nine of 119 point count sites in two months of sampling. As this species should be common in the lowland forests of Gunung Palung, its lack of appearance across point counts raises cause for concern. In the past five years of birding in the lowland forests in Peninsular Malaysia by one of the authors, the species is now rarely encountered (in the States of Johor, Pahang, Kedah and Perak), and is vastly outnumbered by Lesser Green Leafbird; both used to be observed regularly. Where once it was recorded almost as regularly as Lesser Green Leafbird, on most birding days the species is no longer seen (J.A. Eaton, pers. obs.). Recent visits to Sumatra reveal the same, and it is the species most trappers are reportedly now searching for (Eaton *et al.,* 2015). Another field expert noted that bird trappers in Sumatra, Kalimantan and Java were now targeting Greater Green Leafbirds where previously they focused on Straw-headed Bulbuls *Pycnonotus zeylanicus* and White-rumped Shamas *Copsychus malabaricus* (Eaton *et al.,* 2015).

Market observations

In Indonesia, Greater Green Leafbirds were observed in bird markets in each province surveyed during this study, with a total of 3008 individuals recorded from 515 shops (Table 1). This species was seen in unexpectedly high numbers in a 2014 survey in Jakarta (Chng *et al.,* 2015), the fourth most numerous species, comprising 6.6% of all birds recorded. A further 658 individuals were recorded at five markets in Surabaya, Malang and Yogyakarta in June 2015, making it the ninth most numerous species recorded (Chng and Eaton, 2016a). Relatively lower volumes (17 individuals at 13 stalls) were recorded for sale in Bandung in September 2016 (less than 0.5%), where one individual said to be from Sumatra was priced at USD99 (IDR1.3 million). From the three surveys covering West Kalimantan, the authors found 13 498 individuals from 123 species in over 90 shops. The Greater Green Leafbird was the fifth most commonly traded species in this area, with 720 individuals for sale.

Prices for this species appear to have increased over time. In 1987, a specimen cost IDR27 500 (equivalent to IDR345 816 in 2014) (Basuni and Setiyani, 1989). Then, it was of similar value to other popular songbirds such as Straw-headed Bulbul and Chinese Hwamei *Garrulax canorus*. Contemporary prices have risen slightly to IDR512 600 (USD44) in 2014 (Chng *et al.,* 2015) and ranged between IDR350 000 and IDR1 296 900 (USD28 and USD99) in 2016. However, there appear to be multiple factors determining the value of birds, based mostly on the quality of their song and singing abilities. Interestingly, female Greater Green Leafbirds were also offered for sale, despite their lack of singing prowess; one vendor claimed that an adult female bird was a young male, suggesting that sellers may try to pass the females off as more valuable males.

Additionally, when 20 shop owners in West Kalimantan were asked which five species had increased the most in price over the past five years, the Greater Green Leafbird and White-rumped Shama were the species most commonly cited, with 75% of shop owners indicating a price increase. When asked which three species were the hardest to find in West Kalimantan, 58% of respondents indicated the White-rumped Shama, 33% the Oriental Magpie-robin *Copsychus saularis* and 25% noted the Greater Green Leafbird and Straw-headed Bulbul. Demand for this species is clearly high and increasing. Greater Green Leafbirds from Kalimantan were also deemed to be more prized than those from Sumatra or Java; the winner of the "president cup bird competition", the most prestigious bird-singing competition award in Indonesia, was a Greater Green Leafbird from Kapuas Hulu in West Kalimantan.

Greater Green Leafbirds have also been recorded for sale in Thailand and Singapore albeit in much smaller volumes (TRAFFIC data). The source of these birds is unclear. Outside Indonesia, just 12 individuals were observed in Bangkok, Thailand, in four surveys between March 2015 and February 2016 (23 surveys between 1999 and 2016; Chng and Eaton, 2016b; Chng and Shepherd, in prep.) and seven in Singapore (survey of pet shops in November to December 2015; Eaton *et al.,* 2017). None was observed in a 2016 survey of bird shops in Ho Chi Minh City and Hanoi, Viet Nam (Eaton *et al.,* in prep.). It is clear that the epicentre of this trade is in Indonesia.

AMAR-SINGH HSS

GREATER GREEN LEAFBIRD, KLEDANG-SAYONG FOREST RESERVE, IPOH, PERHAK, MALAYSIA.

Seizures

Worrying volumes of Greater Green Leafbirds have been confiscated, especially in Indonesia. Between October 2014 and September 2016, 13 seizures of at least 2244 Greater Green Leafbirds were seized in Indonesia, apart from a single individual in Malaysia. Based on seizures information, most shipments originate from Kalimantan and Sumatra, and are destined for major cities in Java; 2019 of the birds were seized by port

Province	Market	Date	No. of individuals	No. of stalls/ shops	% of total birds	Price USD	Price IDR
West Java	Jakarta	21–22 July 2014	1248	72	6.60	44.00	512 600
Central Java	Yogjakarta	24 June 2015	89	17	2.20	NA	NA
East Java	Malang	23 June 2015	193	23	4.00	NA	NA
East Java	Surabaya	22 June 2015	378	58	2.70	NA	NA
West Kalimantan	Pontianak, NW Coast, Interior, SW Coast	July–December 2015	325	86	7.10	68.00	850 000
West Kalimantan	Pontianak, NW Coast, Interior, SW Coast	February–March 2016	226	118	4.10	65.80	822 500
West Kalimantan	Pontianak, NW Coast, Interior, SW Coast	June–August 2016	462	112	7.50	44.00	550 000
Central Kalimantan	Palangkaraya	August 2016	70	16	8.50	28.00	350 000
West Java	Bandung	3 September 2016	17	13	0.53	99.00	1 296 900

Table 1. No. of Greater Green Leafbirds observed at various market locations in Indonesia.
Prices cited are the first prices given by the vendors.

authorities in Tanjung Perak Port, Surabaya, in three consignments originating from Kalimantan. One of these shipments (1411 individuals) was destined for Pasar Pramuka in Jakarta, while another (408 individuals) was destined for Semarang. The third, comprising 140 birds and seized at Minangkabau Airport in Padang, was destined for Jakarta. Of particular concern is the mortality rate of the seized birds. In the largest shipment on 2 December 2015, 678 of the 1411 Greater Green Leafbirds discovered had perished three days later due to malnourishment, dehydration and stress. There have also been confiscations involving poachers found with this species, including two incidents in Gunung Leuser National Park in Sumatra.

Discussion

Much of the demand in Greater Green Leafbirds centres around the cage bird trade in Indonesia, particularly the phenomenon known as *kicau mania*, as the bird-singing competition is known. In recent years, the species has been included as a category for songbird competitions, which is likely to have increased demand for the species. This bird is an excellent songster, and able to mimic the song of other species such as White-rumped Shama and Asian Fairy Bluebird. The singing ability of other species of leafbirds is deemed to be inferior, but it is possible that demand may be displaced to these species when the Greater Green Leafbird becomes difficult to obtain. Interviews with trappers noted that possession of this species is now "fashionable". The higher asking prices for good quality birds reflects this, and is likely to continue rising in response to increasing rarity (Harris *et al.,* 2015).

Origin of Greater Green Leafbirds

In Jakarta, traders suggested the Greater Green Leafbirds originated from Sumatra (traders referring to them as "Lampung", a generic term used to describe birds from Sumatra, which is the nearest port to Java). In Surabaya and Yogyakarta, traders indicated that the birds originated both from Sumatra and Kalimantan, along with other species such as White-rumped Shama and Oriental Magpie-robin.

In West Kalimantan, traders interviewed suggested that Greater Green Leafbirds are sourced locally; they are then either sold to local shops or transported to major port cities for onward transport to Java. Traders in Bengkayang district in Indonesia were found to be actively smuggling birds across the border with Malaysia, one trader dealing in as many as 6000 Greater Green Leafbirds a month from Malaysian Borneo to Kalimantan. Anecdotal evidence from locals indicated that many individuals along the Indonesian-Malaysian border in Borneo have traded large volumes of Greater Green Leafbirds, indicating that the species has declined greatly in or even been extirpated from West Kalimantan and that trappers are seeking new forests to target this species. Eaton *et al.* (2016) states that 5000 individuals a month are currently being imported into Kalimantan from Sarawak.

Conclusions and Recommendations

The illegal harvest from domestic and cross-border sources and trade to supply the growing demand in this species is of increasing concern. It is clear that over the past decade or so the extent of occurrence of the Greater Green Leafbird has been greatly reduced, with declines noted in parts of its range, and extirpations a possibility in many other areas. Increasing levels of exploitation are demonstrated from market data, which, judging by other species similarly in demand for and heavily hit by the caged bird trade such as Straw-headed Bulbul (BirdLife International, 2016b), will eventually plateau as a result of rising prices and a difficulty in obtaining wild-caught Greater Green Leafbirds owing to its rarity. The authors believe that high demand and the medium-to-high (but potentially decreasing) supply, has placed this species at a tipping point.

The following steps need to be taken immediately if the Greater Green Leafbird is not to be terminally affected by current trade levels: while the reclassification of this

species to Vulnerable is to be welcomed, the authors believe that an Endangered listing would more accurately reflect the rates of decline. A lack of quantitative evidence of rates of population decline hindered the meeting of criteria for listing the species as Endangered (projected decline of >50% over 10 years). Researchers and birdwatchers are therefore urged to share their recent observations of the species in the wild with the authors. More research is also needed into the supply of birds moved from Malaysia to Indonesia for the trade. It is recommended that the Indonesian Government considers adding Greater Green Leafbird to the list of protected species, which will allow for improved regulation of the trapping and trade of the species. The Natural Resources Conservation Agency (BKSDA) under the Directorate General of Forest Protection and Nature Conservation (KKH)—responsible for the regulation of harvest and trade in wildlife in Indonesia—should take action to reduce and eventually eliminate illegal trade of this species in the country's bird markets. Where confiscations take place, it would be constructive if the authorities can work with local conservation groups and birders to rehabilitate the birds and release them in forests that are well patrolled by rangers and the birds therefore less likely to be hunted.

Education awareness and demand reduction campaigns should be designed and implemented to discourage buyers from purchasing Greater Green Leafbirds. It is recommended that songbird competition groups phase out the use of Greater Green Leafbirds and other wild-caught birds, focusing instead on common avicultural species such as canaries, which are legitimately bred in captivity.

Although other leafbird species are not as sought after as the Greater Green Leafbird, they may be increasingly targeted as numbers of this species decline. It is important that bird markets are policed regularly and the trade in all leafbirds monitored closely for early warning signs so that action can be taken to safeguard these increasingly vulnerable species.

Acknowledgements

The authors thank Bas van Balen and Chris R. Shepherd for reviewing the paper and providing helpful comments, and would like to thank an anonymous donor for generously supporting this research by TRAFFIC and Yayasan Planet Indonesia. Grateful thanks also to Amar-Singh HSS for permission to reproduce his images.

References

Basuni, S. and Setiyani, G. (1989). Bird trading at the Pasar Pramuka, Jakarta and the bird catching techniques. *Media Konservasi* 2(2):9–18.

BirdLife International (2016a). *Chloropsis sonnerati*. The *IUCN Red List of Threatened Species* 2016: e.T22704950A93992403. http://dx.doi.org/10.2305/IUCN.UK.2016-3.RLTS.T22704950A93992403.en. Viewed 16 December 2016.

BirdLife International (2016b). *Pycnonotus zeylanicus*. The *IUCN Red List of Threatened Species 2016*: e.T22712603A94338033. http://dx.doi.org/10.2305/IUCN.UK.2016-3.RLTS.T22712603A94338033.en. Viewed 14 February 2017.

Chng, S.C.L., Eaton, J.A., Krishnasamy, K., Shepherd, C.R. and Nijman, V. (2015). *In the market for extinction: an inventory of Jakarta's bird markets.* TRAFFIC, Petaling Jaya.

Chng, S.C.L. and Eaton, J.A. (2016a). *In the Market for Extinction: Eastern and Central Java.* TRAFFIC. Petaling Jaya, Selangor, Malaysia.

Chng, S.C.L. and Eaton, J.A. (2016b). Snapshot of an on-going trade: an inventory of birds for sale in Chatuchak weekend market, Bangkok, Thailand. *BirdingASIA* 25:24–29.

Chng, S.C.L., Guciano, M. and Eaton, J.A. (2017). In the market for extinction: Sukahaji, Bandung, Java, Indonesia. *BirdingASIA* 26:22–28.

Courchamp, F., Angulo, E., Rivalan, P., Hall, R. J., Signoret, L., Bull, L., and Meinard, Y. (2006). Rarity value and species extinction: the anthropogenic Allee effect. *PLoS Biol* 4(12), e415.

Eaton, J.A., Shepherd, C.R., Rheindt, F.E., Harris, J.B.C., van Balen, S.B., Wilcove, D.S. and Collar, N.J. (2015). Trade-driven extinctions and near-extinctions of avian taxa in Sundaic Indonesia. *Forktail* 31:1–12.

Eaton, J.A., van Balen, B., Brickle, N.W. and Rheindt, F.E. (2016). *Birds of the Indonesian Archipelago. Greater Sundas and Wallacea*. Lynx Edicions. Barcelona.

Eaton, J.A., Leupen, B.T.C. and Krishnasamy, K. (2017). *Songsters of Singapore: An overview of the bird species in Singapore pet shops*. TRAFFIC. Petaling Jaya, Selangor, Malaysia.

Jepson, P. and Ladle, R.J. (2005). Bird-keeping in Indonesia: conservation impacts and the potential for substitution-based conservation responses. *Oryx* 39(04):442–448.

Jepson, P., Ladle, R.J. and Sujatnika (2011). Assessing market-based conservation governance approaches: a socio-economic profile of Indonesian markets for wild birds. *Oryx* 45(04):482–491.

Harris, J.B.C., Green, J.M.H., Prawiradilaga, D.M., Giam, X., Giyanto, Hikmatullah, D., Putra, C.A. and Wilcove, D.S. (2015). Using market data and expert opinion to identify overexploited species in the wild bird trade. *Biol. Conserv.* 187:51–60.

Lee, J.G.H., Chng, S.C.L. and Eaton, J.A. (eds). (2017). *Conservation strategy for Southeast Asian songbirds in trade.* Recommendations from the first Asian Songbird Trade Crisis Summit 2015 held in Jurong Bird Park, Singapore, 27–29 September 2015. Wildlife Reserves Singapore/TRAFFIC.

Nash, S.V. (1993). *Sold for a Song: the Trade in Southeast Asian non-CITES birds.* TRAFFIC International.

Shepherd, C. (2006). The bird trade in Medan, north Sumatra: an overview. *BirdingASIA*:16–24.

Sodhi, N.S., and Brook, B.W. (2006). *Southeast Asian biodiversity in crisis*. Cambridge University Press.

Wells, D. (2016). Greater Green Leafbird (*Chloropsis sonnerati*). In: del Hoyo, J., Elliott, A., Sargatal, J., Christie, D.A. and de Juana, E. (eds). *Handbook of the Birds of the World Alive.* Lynx Edicions, Barcelona. http://www.hbw.com/node/58063. Viewed 16 December 2016.

Wilcove, D.S., Giam, X., Edwards, D.P., Fisher, B., and Koh, L.P. (2013). Navjot's nightmare revisited: logging, agriculture, and biodiversity in Southeast Asia. Trends in ecology & evolution, 28(9):531–540.

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