

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



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Cages of birds for sale at Pramuka Market, Jakarta.

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INTRODUCTION

The Greater Sunda region, which comprises Brunei Darussalam, western Indonesia (Bali, Java, Kalimantan and Sumatra), Malaysia, southernmost Myanmar, Singapore and south Thailand, is an ecologically diverse region in Southeast Asia, home to more than 850 bird species, and globally recognized as a biodiversity hotspot with high levels of endemism. For example, Indonesia has the second highest number of globally-threatened bird species in the world (146 species as of September 2015, behind Brazil). Illegal and/or unsustainable trade is a leading threat to many of these species, though little is being done to prevent it. Among the groups of birds most threatened are the passerines – more specifically, those traded as songbirds.

Songbird-keeping as a pastime is firmly entrenched in local culture and tradition in many regions of Southeast Asia. Demand for songbirds in Southeast Asia is high, involving hundreds of species and millions of individual birds annually. The capture for the bird trade is recognized as the primary threat for many species in Southeast Asia, particularly in the Greater Sunda region. At present, conservation efforts are hampered by a lack of effective regulation, monitoring and enforcement. These challenges are further compounded by a lack of public awareness and concern for bird conservation, and for laws and regulations.

Conservation efforts to reduce the threats, and reverse the declines of threatened songbird taxa are lacking, and as a result, numerous species and subspecies are being pushed alarmingly close to extinction. Furthermore, there is a dearth of updated information on the status of these taxa in the wild and in trade. In response to this crisis, Wildlife Reserves Singapore (WRS), TRAFFIC, and Cikananga Wildlife Center, along with other local and international stakeholders, joined forces to convene the first Asian Songbird Trade Crisis Summit, hosted by WRS in September 2015 at the Jurong Bird Park, Singapore.



Credit: James Eaton

A Black-winged Myna for sale in Indonesia.

GOALS AND OBJECTIVES OF THE SUMMIT

The overarching goal was to come together effectively to reduce the threat from trade to, and ensure the survival of, songbird taxa in the Greater Sunda region.

The objectives of this Summit were:

Southeast Asian Songbird Working Group

- To establish a Southeast Asian Songbird Working Group;
- To develop and formalize an internal Strategy and Action Plan for the Songbird Working Group, as well as an agenda of follow-up activities; defining the responsibility(s) of each party and their role in the conservation and/or protection of these species;

Conservation strategy and actions

- To prioritize a list of the most threatened songbird species for a regional conservation strategy;
- To develop species-focused action plans to enhance conservation efforts for each;
- To develop recommendations for relevant government agencies to close down illegal trade in key bird markets in the region;
- To provide updated information and recommendations to BirdLife International to aid in future IUCN Red List status assessments;
- To encourage publication of information on key taxa and related trade and policy issues aimed at guiding conservation and research efforts, informing national and international laws and policies, raising awareness and reducing demand;
- To establish an official IUCN SSC Asian Songbird Trade Specialist Group, which would officially represent the Southeast Asian Songbird Working Group;
- To establish well-managed ex-situ populations on a global/international scope and develop rigorous Reintroduction Programmes whenever possible.



Credit: James Eaton



Credit: D. Bergin/TRAFFIC

SUMMIT OUTCOMES

Over 30 experts and attendees from academia, conservation NGOs, ecotourism bird tour companies, government agencies and zoological institutions gathered at WRS's Jurong Bird Park in September 2015.

After much discussion and deliberation, a list of 28 taxa most threatened by trade were identified to be of high conservation concern. These were further ranked, based on expert opinion and what is currently known of wild populations, population trends and levels, and types of threat (Table 1). As a result, 12 taxa were identified as being of highest priority (Tier 1) and in need of immediate action, with the remaining 16 also being of high conservation concern but requiring further research before proceeding with taxon-specific action planning (Tier 2).

Four key themes of work required to meet the Working Group's goals were identified, along with the main functions of the groups assigned to each theme:

1 Genetic and Field Research:

To conduct research on the taxonomy, trends and status of wild populations

2 Captive Breeding and Husbandry:

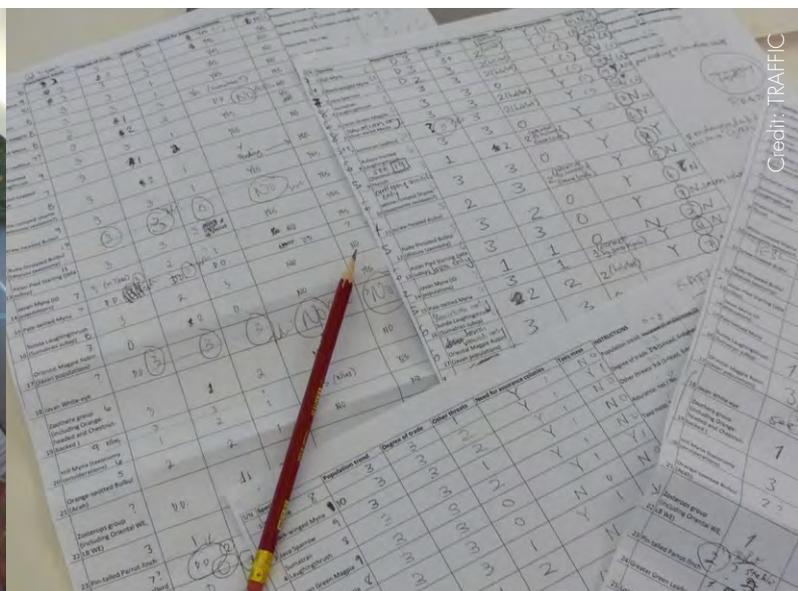
To establish and expand, where necessary, ex-situ assurance breeding populations, and to develop and manage stud-books, health and husbandry protocols for each taxon identified as needing ex-situ management

3 Community engagement, Communication and Education:

To strengthen community outreach for a bottom-up approach involving actors involved in the trade, raise awareness of the issues and key conservation efforts ultimately to reduce demand for songbirds, through a strategic communications and behavioural change strategy

4 Trade, Legislation and Enforcement:

To reduce the threat of illegal and unregulated trade through monitoring of markets and other trade hubs/forums, especially in key bird markets, lobby for and support increased effective enforcement actions at national and international levels



Roundtable discussions by the participants to determine the priority species and their conservation issues

Table 1:

Top 28 priority species and their IUCN Red List status in September 2015
(Tier 1 = blue; Tier 2 = grey)

Species	Scientific Name	IUCN	CITES	Range States in Greater Sunda
Black-winged Myna	<i>Acridotheres melanopterus</i>	CR (2015)	NA	ID: Java and Bali
Common Hill Myna	<i>Gracula religiosa</i>	LC (2012)	II	BN, ID, MY, MM, SG, TH
Asian Pied Starling	<i>Gracupica contra</i>	LC (2012)	NA	ssp. <i>jalla</i> : ID only but probably extinct in wild, only in breeding facilities
White-rumped Shama	<i>Copsychus malabaricus</i>	LC (2013)	NA	BN, ID, MY, MM, SG, TH
Javan White-eye	<i>Zosterops flavus</i>	NT (2012)	NA	ID: Java, Kalimantan
Java Sparrow	<i>Lonchura oryzivora</i>	VU (2012)	II	ID: Java, Bali
Silver-eared Mesia	<i>Leiothrix argentauris</i>	LC (2012)	II	ID: Sumatra, MY
Straw-headed Bulbul	<i>Pycnonotus zeylanicus</i>	VU (2012)	II	BN, ID, MM, MY, SG, TH
Rufous-fronted Laughingthrush	<i>Garrulax rufifrons</i>	EN (2013)	NA	ID: Java
Bali Myna	<i>Leucopsar rothschildi</i>	CR (2015)	I	ID: Bali
Sumatran Laughingthrush	<i>Garrulax bicolor</i>	VU (2013)	NA	ID: Sumatra
Javan Green Magpie	<i>Cissa thalassina</i>	CR (2015)	NA	ID: Java
Oriental Magpie Robin	<i>Copsychus saularis</i>	LC (2012)	NA	BN, ID, MY, MM, SG, TH
Sumatran Leafbird	<i>Chloropsis media</i>	LC (2012)	NA	ID: Sumatra
Sunda Laughingthrush	<i>Garrulax palliatus</i>	LC (2012)	NA	BN, ID, MY
Ruby-throated Bulbul	<i>Pycnonotus dispar</i>	LC (2012, as <i>P. melanicterus</i>)	NA	ID: Java, Sumatra
Greater Green Leafbird	<i>Chloropsis sonnerati</i>	LC (2012)	NA	BN, ID, MM, MY, SG, TH
Orange-spotted Bulbul	<i>Pycnonotus bimaculatus</i>	LC (2012)	NA	ID: Java, Sumatra
Chestnut-capped Thrush	<i>Geokichla interpres</i>	NT (2012)	NA	BN, ID, MY, TH
Orange-headed Thrush	<i>Geokichla citrina</i>	LC (2012)	NA	ID, MY, MM, SG, TH
Chestnut-backed Thrush	<i>Geokichla dohertyi</i>	NT (2012)	NA	ID
Javan Myna	<i>Acridotheres javanicus</i>	LC (2012; as <i>A. grandis</i>)	NA	ID: Java, Bali
Pin-tailed Parrotfinch	<i>Erythrura prasina</i>	LC (2012)	NA	BN, ID, MY, MM, TH
Grey-cheeked Bulbul	<i>Alophoixus bres</i>	LC (2012)	NA	BN, ID, MY, MM, TH
Zosterops group (including Oriental White-eye)	<i>Zosterops spp.</i>	LC (2012, for <i>Z. palpebrosus</i>)	NA	BN, ID, MY, MM, SG, TH
Hill Blue Flycatcher	<i>Cyornis banyumas</i>	LC (2013)	NA	BN, ID, MY, MM, TH
Asian Fairy Bluebird	<i>Irena puella</i>	LC (2012)	NA	BN, ID, MY, MM, SG, TH
Long-tailed Shrike	<i>Lanius schach</i>	LC (2012)	NA	BN, ID, MY, MM, SG, TH

BN: Brunei, ID: Indonesia, MM: Myanmar, MY: Malaysia, SG: Singapore, TH: Thailand. CITES = Convention on International Trade in Endangered Species of Wild Fauna and Flora. NA: Not Applicable, I: Appendix I listed, II: Appendix II listed. LC: Least Concern, NT: Near Threatened, VU: Vulnerable, EN: Endangered, CR: Critically Endangered

ACTION PLAN

Overarching

Genetic and field research

Field research is required to identify further and map taxon distributions, population sizes and trends in order to identify taxa that require attention reliably and to guide actions. Understanding population trends in the wild is also key to revising protected species lists internationally and nationally, as well as IUCN Red List status; establishing baseline data is crucial for this. Field monitoring is needed to show if trade has significant effects on wild populations. It is essential that where possible systematic monitoring methodologies are set in place to evaluate threats and trends over time, and to identify emerging issues of concern. Through field work, important sites for priority species can be identified and given adequate protection (linked to Community Engagement).

To identify taxa that require attention reliably, and to evaluate progress and/or effectiveness of conservation actions, accurate status assessments are required. Genetic research is needed for a variety of conservation targets that may be applicable in different combinations to each species:

Guidance for breeding programmes to avoid inbreeding between closely related individuals:

In conservation breeding programmes, the pairing of kin must be avoided in all circumstances to preclude inbreeding depression. Population-genomic analysis can help in preventing kin pairings under captive circumstances and help maximize population-genetic diversity of these populations.

Identification of pure (non-introgressed) individuals for breeding programmes:

While individuals generally avoid interbreeding with individuals from other species in nature, hybridization has an increased incidence in rare and endangered species. Some hybrid pairings lead to fertile offspring that may back-cross with pure members of either parent species, which leads to "genetic introgression", i.e. the infiltration of the gene pool with another species' DNA. Hybrids are also often generated in captivity and then sold as members of the rarer, more desirable species. In breeding programmes, it is vital that the endangered species be bred on the basis of pure individuals to avoid genetic introgression.

Identification of genetically distinct lineages deserving of protection as separate conservation units:

Previous research suggests that many songbirds endangered by trade are characterized by cryptic diversity, and that some may deserve treatment as separate conservation units. Ignorance of the full taxonomic diversity of these forms may lead to some distinct units being overlooked by conservation efforts, or to a mixing of different units in captive breeding programmes that creates unwanted hybrid lineages. Phylogenomic approaches will be invaluable in clarifying the taxonomy of many of these songbirds to make sure that conservation efforts can be targeted appropriately.

Trade, legislation and enforcement

Only a small number of songbird species are legally protected in range countries and fewer still are protected at international levels. Where legal protection exists, enforcement of laws is often lacking. Efforts to ensure adequate legal protection, and to encourage enforcement actions, are hampered by a lack of published information and by the absence of timely provision of information to regulatory and policy-making bodies. As such, the following activities are urgently needed:

Collect, analyse and make use of existing knowledge for trade in priority taxa:

Information from past, present and future market studies is essential to ensure information is at hand to guide conservation and enforcement actions.

Co-ordinate future market monitoring efforts:

Systematic monitoring is required to produce not only information on the trade in the priority taxa, but also to identify emerging threats to other taxa in time to allow for conservation actions to be put into place. The Working Group would benefit from the establishment and use of standardized market survey methodologies, and convenient information sharing practices.

Timely access to new taxonomic work on species, development and sharing of species identification tools and sharing of relevant information, such as on national laws, harvest and trade quotas, commercial captive breeding issues, and other important trade-related information is essential. The establishment of the Working Group is a step towards putting in place an effective communications platform to facilitate such sharing and collaboration. The Working Group should collaborate on the establishment of baseline data on trade of key taxa and in key locations, including areas not yet surveyed, and should work towards better use of price data, consumer attitudes and perceptions and other such information. Furthermore, it is essential that the Working Group establish mechanisms and methodologies to deal with the ever increasing rate of trade carried out online.

Ensure that all priority species are adequately protected by national legislations in their range countries and under CITES:

Since Indonesian legislation pertaining to the protection of priority species is currently undergoing revision, this provides an opportunity for previously overlooked species to gain better protection, supported by scientific evidence. As part of the advocacy approach, publications will be produced to raise the profile of the issue on national and international platforms. This will be complemented by policy briefs lobbying for better legal protection and enforcement. Legal protection for songbirds in other Greater Sunda countries will also be examined and the Working Group will lobby for better protection and enhanced enforcement where required. At the international level, CITES Appendix listings for species threatened by international trade will be proposed.

Increase effective regulation and enforcement:

The Working Group will collect and analyse information on enforcement effort, seizures and prosecutions, in order to understand the impacts of law enforcement actions better, as well as to provide informed support to law enforcement agencies. In conjunction with the bottom-up approach, the Working Group will collaborate with stakeholders to ensure that regulations to regulate effectively commercial captive breeders and trade in legitimately captive-bred birds are in place and enforced. Hotspots of bird capture will be identified for better law enforcement and anti-poaching actions (linked to Community Engagement).



Birds for sale at Sukahaji Market, Bandung, Indonesia.

Captive breeding and management of assurance colonies

The goals for ex-situ management are to determine the need for, endorse and initiate possible ex-situ breeding programmes, as well as to develop short-term strategies for selected priority taxa, based on ongoing ex-situ action and defined targets. This precautionary approach is recommended based on the very real risk that pressure from unsustainable trapping is extremely strong and alternative conservation measures will not take effect in a sufficiently timely manner to prevent these taxa from disappearing completely from the wild. Trends in traded species shift, other species may come under pressure and their decline may require for managed captive populations to be established.

These programmes will require a significant resource investment at various levels. A number of breeding centres will need to be established within the Greater Sunda region. Globally, zoos will need to devote additional space to these species. To be successful, these facilities will need to be staffed by skilled personnel, which can be achieved by capacity building, workshops and training. This should be co-ordinated internationally within existing programmes (e.g. Global Species Management Plans (WAZA), Species Survival Plans (AZA), or European Endangered Species Programmes (EZA)).

The prevalence of relevant infectious diseases (e.g. avian influenza) should also be considered when developing and managing the current or new conservation breeding centres. Health management regulations in different areas in Asia may pose a hindrance to animal transfer between breeding institutions. Currently, influenza-free countries within the region such as Singapore can make useful platforms for the transfer of important founding stock. Proper quarantine facilities and husbandry protocols with veterinary support are essential. The protected status of certain species will require official arrangements to be organized between facilities and countries.

The aim of reintroduction programmes is to increase the overall security and sustainability of the species through re-establishment of populations or by boosting viability of wild populations with released individuals from captive breeding programmes. Management strategies should therefore aim for reintroduction at an early stage before too much genetic diversity is lost. Reintroduction programmes require careful assessment and comprehensive post-release monitoring to evaluate the success of the programme, and should follow the IUCN Guidelines for Reintroduction.



Left: Breeding facilities at Cikananga Conservation Breeding Programme; Right: Black-winged Myna reintroduction by the Cikananga Conservation Breeding Programme.

Community engagement, communication and education

A strong understanding of the social and economic aspects of the songbird trade is essential for targeted actions to educate and change the behaviour of communities and actors involved in the trade. There is an urgent need for a multi-level approach, where top-down regulations (i.e. enforcement of laws preventing the trapping and trade in key bird species) should be conducted in tandem with bottom-up approaches, which both address reducing supply while sustaining local livelihoods and decreasing demand through education and outreach. Three major aspects of the supply chain were identified, comprising diverse actors with various motivations, including trappers, middlemen and consumers.

An assessment of the supply chain concluded that bottom-up programmes would be most suited to working with consumers to decrease demand and working with trappers to decrease supply of birds through targeted development initiatives. The majority of middlemen are involved in organized crime and large enterprises. As such, top-down regulation would be a more suitable and cost-effective strategy. Alternatively, this may be achieved through a self-regulation approach, where significantly influential stakeholders (e.g. songbird clubs) have a vested interest and support the conservation of threatened songbirds in the wild. One possible area of work with stakeholders who are involved in the mid-sector of the supply chain is working with commercial breeders to increase their standards, decrease mortality rates, and regulate their take of wild birds to form breeding stock. Many mitigation techniques are likely to be specific to locations and situations. The main objectives identified for this theme were:

- Improve regulation and monitoring of commercial breeders to prevent laundering of wild-caught priority bird species by working with governments and stakeholders to develop a regulatory framework for registered breeders. Reducing mortality of captive-bred birds through capacity building of breeders to reduce demand for sourcing breeding stock from the wild.
- Increase regulation and monitoring of songbird competitions by working with governments and stakeholders to develop and implement a regulatory framework.
- Increase information sharing and collaboration among stakeholders involved in mitigating the trade.
- Support relevant government authorities and stakeholders to decrease trapping in key protected areas. This can be achieved through a two-pronged approach of building forest patrol units and working with both local communities and management staff to regulate better and control trapping, and identifying and disseminating information on targeted sustainable development models that focus on reducing poverty rates.

- Raise awareness about the songbird crisis among the general public and bird owners, through developing a clear strategy for targeted campaigns based on social and market research to influence behaviour change (e.g. discouraging indiscriminate release of birds in religious practices). Within Indonesia, suitable local groups need to be enlisted to help implement such campaigns targeting consumers.
- Conduct research to inform mitigation strategies better, in particular analysing the supply chain to understand social, ecological, and cultural dimensions of the trade better, identifying trade hot spots and key protected areas, and identifying variability in quality and legal issues faced by breeders.



Credit: Cikananga Conservation Breeding Center

Children's activities under the education programme at Cikananga.



Credit: Cikananga Conservation Breeding Center

Birdwatching club as part of Cikananga's education programme.

Species-specific action plans

In addition to the overarching actions listed above, some actions specific to individual taxa are detailed below. Detailed actions are in Appendix II.

First Tier – highest priority

Black-winged Myna *Acridotheres melanopterus*

Formerly widespread in the open savannahs and woodlands of Java and Bali, this species has been severely reduced by intense trapping for the bird trade. The species is divided into three morphologically distinct subspecies. Field surveys are needed to determine the status of remaining wild populations of the three subspecies. Illegal hunting and trade continues despite its protected status in Indonesia; improved in-situ anti-poaching protection and enforcement against trade is required. Market surveys should also distinguish between the three subspecies. The private bird breeding community in Indonesia breed Black-winged Mynas but pay little regard to separating subspecies. The extent of this captive breeding in Indonesia and how this is being regulated needs better understanding. Existing conservation breeding programmes need to be expanded, ensuring genetic purity of the three subspecies. To monitor international trade in the species, a CITES Appendix III listing may be considered.



Black-winged Myna

Credit: Tan Siah Hin David

Common Hill Myna *Gracula religiosa*

A widespread species throughout much of Asia, the species has seriously declined through Southeast Asia and in particular Indonesia. Although populations of the nominate subspecies *G.r. religiosa* remain widespread, five of the subspecies endemic to Indonesia have become seriously threatened as a result of illegal trapping (*G.r. robusta*, *G.r. batuensis*, *G.r. miotera*, *G.r. engganensis* and *G.r. venerata*). Surveys to determine their status in the wild and captivity are required. The complex taxonomic situation requires further clarification to delineate the status of populations and/or taxa that need immediate conservation action.



Common Hill Myna

Credit: Tan Siah Hin David

Asian Pied Starling *Gracupica contra*

A widespread species of open landscapes from South to Southeast Asia, three subspecies are still widespread and common. However, the subspecies *G.c. jalla*, which is endemic to Sumatra, Java and Bali, may now be extinct in the wild. Opportunistic field surveys enlisting the assistance of local birdwatching communities could determine the presence of any *G.c. jalla* wild populations. Recent unpublished analyses suggest that *G.c. jalla* may be sufficiently distinct to warrant being treated as a species in its own right (Javan Pied Starling *Gracupica jalla*); if updated research shows sufficient differentiation, the Javan Pied Starling would instantly become a candidate species for listing in a higher IUCN Red List category and would warrant considerable conservation action. Market surveys should also distinguish between Javan Pied Starlings and other subspecies. Currently, private breeders pay little regard to keeping Javan Pied Starlings separate from other subspecies and selective breeding to encourage colour mutation may be prevalent. Potential conservation breeding programmes should prioritise identifying pure *jalla* individuals.



Credit: Tan Siah Hin David

Asian Pied Starling

White-rumped Shama *Copsychus malabaricus*

Widespread throughout South and Southeast Asia, the species has at least 14 subspecies. Some are distinct peripheral forms characterized by a narrow geographic distribution which are seriously threatened with extinction (*C.m. stricklandii*, *C.m. barbouri*, *C.m. melanurus*, *C.m. hypolizus*, *C.m. opisthochrus*, *C.m. mirabilis*, *C.m. nigricauda*, *C.m. omissus*, *C.m. suavis*). Urgent field survey work is needed to establish the existing wild population status of these subspecies across Sumatra, Java and surrounding islands, accompanied by genetic studies building on existing work to include all Indonesian forms that are under immediate trapping pressure. The establishment of captive breeding programmes for some of these forms may be necessary, especially within Indonesia. Market surveys should also attempt to distinguish between the different forms. As a competition class species, improved understanding of demand and pricing details (tail length, song, subspecies, etc) in markets and bird clubs could inform conservation actions.



Credit: Tan Siah Hin David

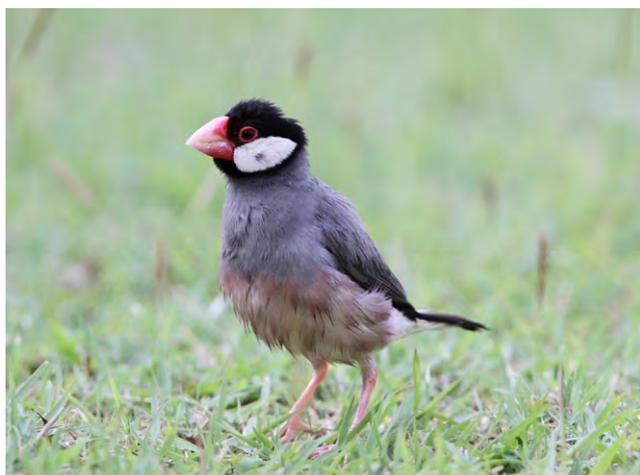
White-rumped Shama

Javan White-eye *Zosterops flavus*

This range-restricted endemic faces double threats of habitat loss and trapping for trade. Targeted field surveys for the species across its range in Borneo and Java are required to determine its population status, as well as studies to determine any genomic differences between the Bornean and Javan populations. As *Zosterops* species are very similar in appearance, identification material will aid market surveys to understand the trade dynamics of this species better.

Java Sparrow *Lonchura oryzivora*

Endemic to Java and Bali, this species was previously abundant and widespread in open countryside, but has since disappeared from most of its native range and is close to extinction in the wild. A nest-box conservation breeding project has been locally successful and requires continued support. Better understanding is also required of commercial nest-box harvesting (ranching) schemes in Indonesia and its impacts on any remaining wild populations. On the other hand, it is well established in the global avicultural industry and large feral populations exist around the world. Nonetheless, feral populations are not protected and caged populations are moving rapidly towards a domesticated form with colour mutations. Conservation breeding may be required to preserve pure forms.



Java Sparrow

Credit: James Eaton

Silver-eared Mesia *Leiothrix argentauris*

A widespread species of the mountains of Asia, the two Sumatran subspecies *L.a. rookmakeri* and *laurinae* are seriously threatened because of trapping pressure for trade. Field surveys are recommended in Sumatra to determine the population status, and legal protection for the species in Indonesia should be considered. These two subspecies are also the most morphologically distinct subspecies, and may be separable as an independent species; genetic studies are needed to clarify this. Captive breeding programmes should also be initiated for these subspecies. If split, the Sumatran Mesia would qualify for a higher IUCN Red List category listing, requiring urgent conservation action.



Silver-eared Mesia

Credit: Tan Siah Hin David

Straw-headed Bulbul *Pycnonotus zeylanicus*

Confined to the Greater Sunda region, the species has undergone massive declines across its range in response to trapping for trade. It is thought to be extinct in Thailand and locally extirpated in Indonesia (Java and Sumatra). Field surveys are needed in Malaysia, Kalimantan, Myanmar and Brunei to establish the status of wild populations. Due to high demand, continued monitoring of trade in this species is needed across its range, and as some are claimed to be of captive-bred origin it is necessary to determine the extent of commercial captive breeding across its range, and how this is being regulated. Improved protection is required through in-situ site protection and CITES, and reassessment of its IUCN status. Captive breeding programmes should be initiated as the species continues to decline. Anecdotal evidence from breeders suggests that populations in Borneo may be distinct from those in the rest of its range and genetic studies are required to clarify this.



Straw-headed Bulbul

Credit: Tan Siah Hin David

Rufous-fronted Laughingthrush *Garrulax rufifrons*

This Javan montane endemic is divided into two subspecies: *G.r. rufifrons* from West Java and *G.r. slamatensis* from a single mountain, Mount Slamet in central Java. Since 1990, *G.r. rufifrons* has only been recorded at one site throughout its historical range, despite abundant suitable habitat, which suggests the decline is due to trapping for trade. The subspecies *G.r. slamatensis* has not been observed in the wild since it was collected in 1925. Field surveys are required to ascertain the presence of wild populations. Additional birds are required to supplement existing captive breeding programmes, and could be acquired through confiscated birds from trade. Its IUCN status also requires reassessment.



Rufous-fronted Laughingthrush

Credit: Cikananga Conservation Breeding Center

Bali Myna *Leucopsar rothschildi*

Historically endemic to Bali, populations have been decimated largely due to the incessant capture for trade. Existing birds in the wild are a result of the reintroduction of captive-bred individuals from locally-sourced stock in and around Bali Barat National Park. A Bali Myna conservation strategy is being developed, as well as the creation of an international advisory board that will assist in improving in-situ and ex-situ management programmes, including post-release monitoring protocols. Anti-poaching units at reintroduction sites are also required.



Bali Myna

Credit: Tan Siah Hin David

Sumatran Laughingthrush *Garrulax bicolor*

Endemic to Sumatra, this species is an easy target for trappers due to its noisy, flocking nature and increased accessibility to their montane forest habitat due to deforestation. As a result, it has disappeared from much of its range. Field surveys are required to ascertain the presence of wild populations. Legal protection of this species is urgently required in Indonesia. Existing captive breeding programmes require expansion. Its IUCN status also requires reassessment.



Sumatran Laughingthrush

Credit: Cikananga Conservation Breeding Center

Javan Green Magpie *Cissa thalassina*

This Javan endemic was recently recognized as a separate species from the Bornean Green Magpie *C. jefferyi*. It therefore is not currently protected under Indonesian law. It is thought to be close to extinction in the wild due to habitat loss and excessive trapping, with no confirmed records in the wild since 2007. Small numbers of birds were found for sale and in trade. Field surveys are required to ascertain the presence of wild populations. Additional birds are required to supplement existing captive breeding programmes, and could be acquired through confiscated birds from trade.



Javan Green Magpie

Credit: Cikananga Conservation Breeding Center

Second Tier – high conservation concern but requiring further research

Oriental Magpie Robin *Copsychus saularis*

At least 11 subspecies are recognized of this widespread Asian species. The species' decline is due to trapping for trade, with all Indonesian endemic subspecies (*C.s. zacnecus*, *C.s. nesiarchus*, *C.s. masculus*, *C.s. pagiensis*, *C.s. amoenus* and *C.s. pluto*) severely threatened and even locally extinct. Some of these subspecies may deserve species-level treatment. A genomic, range-wide enquiry and morphological analysis is needed to clarify the differentiation of these subspecies, and help guide conservation efforts.



Credit: Tan Siah Hin David

Oriental Magpie Robin

Sumatran Leafbird *Chloropsis media*

This species was long considered a subspecies of the more widespread, mainland Asia Golden-fronted Leafbird *C. media* but is now considered a separate species. Restricted to Sumatran sub-montane forest where it was previously common, its current status is poorly known and field surveys are required. Recently, it has been noted in the bird trade in Europe, Singapore and its native Indonesia, but the impacts of the trade remain to be evaluated.

Sunda Laughingthrush *Garrulax palliatus*

This comprises two subspecies: *G.p. palliatus* and *G.p. schistochlamys*. While *G.p. schistochlamys* still occurs in numbers in the wild in East Malaysia, its status in Kalimantan is not well-known, and *G.p. palliatus* is undergoing rapid declines in Sumatra and has disappeared from most easily-accessible areas of forest it should inhabit. A genomic, range-wide enquiry is recommended for subspecies differentiation, and to determine if they should be treated as separate conservation units. Given trade levels, legal protection for this species in Indonesia is recommended.

Ruby-throated Bulbul *Pycnonotus dispar*

Previously considered conspecific with the widespread mainland Asia Black-crested Bulbul *P. melanicterus*, this Indonesian endemic is found in large numbers in trade and has become absent throughout much of its former range in Sumatra, Java and Bali. Field surveys are required to clarify their conservation status and management needs. Reassessment of its IUCN status is also recommended.



Credit: Gabriel Low

Ruby-throated Bulbul

Greater Green Leafbird *Chloropsis sonnerati*

A lowland forest species widespread across the Sundaic region, huge numbers have recently been detected in markets and seizures in Kalimantan, Sumatra and Java. The subspecies *C.s. sonnerati* endemic to Java is now likely to be rare as all individuals recorded to subspecific level in the Javan markets have been of the subspecies *C.s. zosterops*, from the Greater Sunda region outside of Java. The nature of this cross-border trade and the threat it poses to wild populations requires further investigation. As this species is increasingly used in songbird competitions, the new surge in demand will be a considerable threat to wild populations; improved understanding of demand and use of the species in songbird competitions is needed. Its IUCN status also requires reassessment.



Credit: Tan Siah Hin David

Greater Green Leafbird

Orange-spotted Bulbul *Pycnonotus bimaclatus*

Endemic to montane forests of Sumatra and Java, three subspecies are recognized. Two are still locally common and widespread despite huge numbers encountered in trade, whereas the subspecies *P.b. snouckaerti*, confined to Aceh province in northernmost Sumatra, is of particular conservation concern due to its restricted range and few records. It is expected to be elevated to species status and instantly be treated as globally threatened. Field surveys are required to clarify their conservation status and management needs, particularly the subspecies *P.b. snouckaerti*. Species identification material for the three taxa will enable finer-scale information to be collected during market surveys to determine the origin of birds.



Credit: James Eaton

Orange-spotted Bulbul

Chestnut-capped Thrush *Geokichla interpres*

Resident through the Greater Sunda region, Sulu islands and east to Flores, there have been no recent records from the wild in Java, where it was formerly considered common. Targeted trapping of this species is still widespread, although recent evidence suggests it is declining. It is found in large numbers in trade, with sizeable numbers of fledglings observed. The extent of commercial ranching of this species in Indonesia and how this is being regulated needs to be investigated.



Credit: James Eaton

Chestnut-capped Thrush

Orange-headed Thrush *Geokichla citrina*

A widespread species across Asia, comprising 11 subspecies, the subspecies *G.c. rubecula*, confined to Java and Bali, is now thought to be very rare due to habitat loss and trapping for trade. Little is known about how distinct *G.c. rubecula* may be; field and genomic studies should be carried out to determine appropriate conservation actions. One study alleges that 116,000 chicks are harvested from the wild in a small area of Bali but the species is very rarely encountered by birdwatchers on the island. The extent of commercial captive breeding or ranching of this species in Indonesia and how this is being regulated needs to be investigated.



Credit: Tan Siah Hin David

Orange-headed Thrush

Chestnut-backed Thrush *Geokichla dohertyi*

Endemic to the Lesser Sunda islands from Lombok through to Timor and Wetar, this monotypic species is still locally numerous. It has been recorded in small numbers in Javan markets, and while trapping appears to have subsided throughout its range further study is required to determine its current status in trade.



Credit: James Eaton

Chestnut-backed Thrush

Javan Myna *Acridotheres javanicus*

This formerly abundant and highly adaptable species is now a rare bird throughout its native range of Java and Bali due to extremely high levels of trapping for trade. However, it has become established as an abundant and widespread invasive in Malaysia and Singapore, with several other feral populations also found throughout Borneo, Lesser Sunda region and Sumatra. One possibility would be to reintroduce feral populations to Java and Bali.



Credit: Tan Siah Hin David

Javan Myna

Pin-tailed Parrotfinch *Erythrura prasina*

Found throughout Southeast Asia, this species has long been considered a pest species by rice farmers, swarming in flocks of thousands. Flocks of this magnitude are now seldom seen, due to trapping with large numbers found in trade. The current population status in the wild and trade requires investigation.



Credit: James Eaton

Pin-tailed Parrotfinch

Grey-cheeked Bulbul *Alophoixus bres*

Found throughout much of the lowland rainforest that remains in the Sundaic region, the Grey-cheeked Bulbul is currently experiencing high trapping pressure especially in parts of its Kalimantan and Javan range. It may consist of four different cryptic species; genomic enquiries are necessary in order to clarify conservation needs for each distinct taxon. The race *A.b. bres* (Java and Bali) is becoming increasingly rare in the wild, and the subspecies endemic to Borneo *A.b. gutturalis* is increasingly used as a cheaper alternative to Straw-headed Bulbul in songbird competitions. The Sumatran and mainland Southeast Asian race *A.b. tephrogenys* is found regularly in Javan bird markets. Improved understanding of demand and use of the species in songbird competitions is needed.

Oriental White-eye *Zosterops palpebrosus* and other *Zosterops* species in the complex

White-eyes are under heavy trapping pressure in Indonesia. The Oriental White-eye, comprising 11 subspecies, is a widespread species across Asia. Cryptic diversity within this complex is presumably high, and there is a good possibility that Indonesian subspecies represent taxonomically distinct species. With populations on some islands declining rapidly, and huge numbers found encountered in trade in Southeast Asia, there is a need to disentangle the taxonomic uncertainty surrounding this species complex in order to establish which entities require conservation action. Other *Zosterops* species found in the region are also found in huge numbers in trade and require further study.



Oriental White-eye

Credit: Tan Siah Hin David

Hill Blue Flycatcher *Cyornis banyumas*

Occurring across Asia, this species currently comprises eight subspecies. The two subspecies on Java (*C.b. ligus* and *C.b. banyumas*), are distinct morphologically and vocally, but genomic differentiation is unclear. The Javan forms are now rare, thought to be primarily because of trade, as well as habitat loss. The taxonomy of the species requires a comprehensive review; especially the Javan subspecies. The long distance migrant *C.b. magnirostris* and the Bornean subspecies *C.b. coeruleatus* may be sufficiently distinct to warrant specific status. Species identification material for the subspecies will enable finer-scale information to be collected during market surveys to determine the origin of birds.



Hill Blue Flycatcher

Credit: Tan Siah Hin David

Asian Fairy Bluebird *Irena puella*

Widespread across Asia, this species comprises six subspecies. Although common throughout much of its range, records of the Javan race *I.p. turcosa* have been sparse in recent years. Whether this is to do primarily with habitat loss or trapping is worthy of further investigation, and could be combined with field surveys of other Javan forest species.



Asian Fairy Bluebird

Credit: Tan Siah Hin David



Long-tailed Shrike

Long-tailed Shrike *Lanius schach*

Widespread across Asia, this species comprises nine subspecies. Large numbers are observed in trade; improved understanding of demand and use of the species in songbird competitions is needed. Although it is well-known in the avicultural industry that *Lanius* species are difficult to breed, many of the records are of chicks and fledglings, suggesting that they are ranched rather than captive-bred. The extent of commercial captive breeding or ranching of this species in Indonesia and how this is being regulated needs to be investigated.

ACKNOWLEDGEMENTS

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APPENDICES

Appendix I: List of Summit Attendees



Name	Organisation
Bernd Marcordes	AG Zoologischer Garten Köln
Bradley T. Gardner	Begawan Foundation
Carol Kenwick	Begawan Foundation
Adeline Seah	Biodiversity Connections Singapore
Nancy Gibson	Bird Conservation Society of Thailand
Thattaya Bidayabha	Bird Conservation Society of Thailand
James Eaton	Birdtour Asia
Hum Gurung	BirdLife International Asia
Nigel Collar	BirdLife International
Paul Insua-Cao	The Royal Society for the Protection of Birds (BirdLife UK)
Ria Saryanthi	Burung Indonesia
Anais Tritto	Cikananga Conservation Breeding Center
Resit Sözer	Cikananga Conservation Breeding Center
David Jeggo	Durrell Wildlife Conservation Trust
Darmawan Liswanto	Fauna & Flora International
Karthi Martelli	Full Circle Foundation
Simon Bruslund	Heidelberg Zoo

Name	Organisation
Phill Cassey	Invasion Ecology Group, University of Adelaide
Rudianto Sembiring	Indonesian Species Conservation Programme
Dewi M. Prawiradilaga	Indonesian Institute of Science (LIPI)
Angelin Lim	Jurong Bird Park
Ivan Choo	Jurong Bird Park
Nicole Tay	Mandai Safari
Geoffrey Davison	National Parks Board, Singapore
Frank Rheindt	National University of Singapore
Vinayagan Dharmarajah	Nature Society of Singapore
Samsul Hadi	Pelestari Burung Indonesia
Tony Sumampau	Taman Safari
Chris R. Shepherd	TRAFFIC
Serene Chng	TRAFFIC
Nisha Sabanayagam	TRAFFIC
Jill Capotosto	TRAFFIC
Madhu Rao	Wildlife Conservation Society/Asian Species Action Programme
Dwi Adhiasto	Wildlife Conservation Society
Sonja Luz	WRS
Luis Neves	WRS
Jessica Lee	WRS
Adam Miller	Planet Indonesia International

Appendix II: Detailed species-specific actions

Species	Scientific Name	Actions Needed
First Tier		
1 Black-winged Myna	<i>Acridotheres melanopterus</i>	<ul style="list-style-type: none"> • Surveys across the former and known range of the three subspecies should be carried out to determine the presence and status of remaining wild populations. These may be combined with surveys with Java Sparrow, Asian Pied Starling and Javan White-eye in the same locations to make the most of limited resources • To continue surveys for suitable release sites and to monitor success of release populations • Population-genomic research to establish the levels of genomic differentiation between the three subspecies • Ensure that only pure individuals are used for breeding purposes, and eliminating hybrids from programmes • Prevent inbreeding depression through genetic analysis of breeding individuals in captivity and use of studbooks. International Studbook already established since March 2016 • Develop species identification materials for subspecies so that market surveys can record subspecies and hybrids. This finer-scale information will enable the Working Group to determine the origin of birds • Currently not listed in CITES. Recommend CITES Appendix III listing – require proposal by Indonesian Government • Determine the extent of commercial captive breeding of this species in Indonesia, and how this is being regulated • Find out if there are any Black-winged Mynas held with traders in Singapore for potential absorption into assurance colonies. Evidence of international trade would support a CITES listing. • Improved in-situ anti-poaching protection for the species • For the West Java race of Black-winged Myna <i>Acridotheres melanopterus melanopterus</i>, follow the recommendation of the international studbook, and continue with breeding and transfer to selected institutions • For the Balinese race of Black-winged Myna <i>Acridotheres melanopterus tertius</i>, acquire additional founder stock and develop regional studbook
2 Common Hill Myna	<i>Gracula religiosa</i>	<ul style="list-style-type: none"> • Field surveys on several islands off the coast of west Sumatra to assess the status of wild populations of island subspecies • A range-wide genomic study is urgently needed to elucidate the taxonomic status of a number of forms, including subspecies <i>G.r. robusta</i>, <i>G.r. enganensis</i>, <i>G.r. batuensis</i>, <i>G.r. miotera</i> and <i>G.r. venerata</i> • Clarify listing of the species and other specific subspecies in Indonesian legislation • Determine if there is international trade in these subspecies • Determine where individuals of the certain subspecies might be held captive

3	Asian Pied Starling	<i>Gracupica contra</i>	<ul style="list-style-type: none"> • Targeted searches to determine presence of wild populations of the jalla subspecies (*Combine with surveys for the Black-winged Myna, Java Sparrow and Javan White-eye on Java, enlisting the assistance of local birdwatching communities) • Urgent genomic research is required to provide scientific evidence of the distinctness of the Javan Pied Starling. If deemed sufficiently differentiated, the Javan Pied Starling would instantly become a candidate species for listing by IUCN as “Extinct in the Wild” and would warrant considerable conservation action • Identify pure <i>G.c. jalla</i> individuals for a breeding programme • Determine the extent of commercial captive breeding of the jalla subspecies in Indonesia, and how this is being regulated • Develop species identification materials for subspecies so that market surveys can record subspecies and hybrids. This finer-scale information will enable the Working Group to determine the origin of birds • Carry out a feasibility study for legal protection of this species. If there are plans for reintroduction in Indonesia, they will require national protection • Identify several breeding facilities in Java or Singapore
4	White-rumped Shama	<i>Copsychus malabaricus</i>	<ul style="list-style-type: none"> • Urgent survey work is needed to establish the existing wild population status of identified lesser-known subspecies across Sumatra, Java and surrounding. (This can be undertaken in conjunction with surveys for Hill Myna) • A range-wide taxonomic inquiry using genome-wide DNA markers to elucidate the taxonomic status of a number of forms, building on existing work to include all Indonesian forms that are under immediate trapping pressure • Develop species identification materials for subspecies so that market surveys can record subspecies and hybrids. This finer-scale information will enable the Working Group to determine the origin of birds • Look into having this species listed in CITES Appendix III and/or II, pending better understanding of international trade • Carry out feasibility study for legal protection of this species in Indonesia • Improved understanding of demand and pricing details (tail length, song, subspecies, etc) in markets and bird clubs • Utilise genetic information about the various subspecies for the establishment of captive breeding programmes • Identifying holding facilities in Indonesia

5	Javan White-eye	<i>Zosterops flavus</i>	<ul style="list-style-type: none"> • Targeted field surveys for the species across its range in Borneo and Java. (*Combined with surveys with Java Sparrow, Asian Pied Starling and Javan White-eye) • Genetic studies to determine genomic differences between the Bornean and Javan populations • Develop species identification materials for <i>Zosterops</i> species, which are morphologically difficult to differentiate • Carry out feasibility study for legal protection of this species in Indonesia • Determine if international trade is a threat • Clarify if the songbird competition class for the species in Singapore is for the <i>Zosterops</i> complex or only Oriental White-eye
6	Silver-eared Mesia	<i>Leiothrix argenteauris</i>	<ul style="list-style-type: none"> • Perform field surveys for the species in Aceh and assess suitability for reintroduction programmes (*This work may be combined with surveys for the Sumatran Laughingthrush, Sunda Laughingthrush, Ruby-throated Bulbul and Sumatran Leafbird) • A range-wide genetic inquiry to clarify the taxonomic status of the Sumatran populations • Develop species identification materials for subspecies so that market surveys can record subspecies. This finer-scale information will enable the Group to determine the origin of birds • Investigate international trade using CITES trade data • Carry out feasibility study for legal protection in Indonesia • Initiate captive breeding programmes for the Sumatran subspecies
7	Java Sparrow	<i>Lonchura oryzivora</i>	<ul style="list-style-type: none"> • Carry out field surveys to identify new populations, and to understand better habitat requirements • Support existing nest-box conservation breeding projects • Determine the extent and sustainability of commercial nest-box harvesting schemes ("ranching") in Indonesia, and how this is being regulated • Determine characteristics and measurements of original wild type before any onset of domestication using museum specimens
8	Straw-headed Bulbul	<i>Pycnonotus zeylanicus</i>	<ul style="list-style-type: none"> • Perform field surveys in Brunei, Malaysia, Myanmar and Singapore to establish wild population status • A population-genomic study is needed to ascertain the distinctness of the Bornean population from individuals that occur in the rest of its range • Continue monitoring trade of species across entire range – include Thai-Malaysian border and Brunei and utilizing CITES trade data • Determine the extent of commercial captive breeding across its range, and how this is being regulated • Lobby for improved site-based protection in protected areas across range • Support up-listing to Critically Endangered on IUCN Red List and CITES Appendix I • Initiate captive breeding programmes in Singapore and Indonesia

9	Rufous-fronted Laughingthrush	<i>Garrulax rufifrons</i>	<ul style="list-style-type: none"> • Perform field surveys across west and central Java to ascertain the presence of wild populations • Targeted studies on habitat requirements to inform in-situ conservation management if sufficiently large populations can be found, as well as reintroduction programmes • Carry out population-genetic study to establish the level of differentiation of the subspecies <i>slamatensis</i> • Targeted searches in markets and with dealers and private collectors, and facilitating the confiscation of birds found in trade to supplement captive breeding programmes • Recommend IUCN up-listing to Critically Endangered
10	Bali Myna	<i>Leucopsar rothschildi</i>	<ul style="list-style-type: none"> • Provide recommendations to guide the development of a Bali Myna conservation strategy • Creation of an international advisory board that will assist in improving in-situ and ex-situ management programmes, including post-release monitoring protocols • Implementation of anti-poaching units at reintroduction sites • Carry out genetics research to determine the degree of inbreeding and number of existing founding individuals
11	Sumatran Laughingthrush	<i>Garrulax bicolor</i>	<ul style="list-style-type: none"> • Perform field surveys to identify wild populations in northern Sumatra, and to determine ecological requirements of the species, to inform in-situ conservation management and reintroduction schemes • Urgently recommend legal protection in Indonesia • Determine if international trade is a threat • Recommend IUCN up-listing to Endangered • Continue and expand ex-situ conservation breeding programmes, coupled with genetic studies to minimise inbreeding
12	Javan Green Magpie	<i>Cissa thalassina</i>	<ul style="list-style-type: none"> • Perform field surveys to determine the population status and habitat requirements in the wild to inform reintroduction schemes. The surveys may be combined with searches for other species, such as the Rufous-fronted Laughingthrush • Targeted searches in markets and with dealers and private collectors, and facilitating the confiscation of birds found in trade to supplement captive breeding programmes • Urgently recommend legal protection in Indonesia • Continue and expand ex-situ conservation breeding programmes, coupled with genetic studies and exchanges between breeding institutions to minimise inbreeding

Species	Scientific Name	Actions Needed
Second Tier		
13 Oriental Magpie Robin	<i>Copsychus saularis</i>	<ul style="list-style-type: none"> • While many of these subspecies are poorly differentiated, at least three of them (<i>C.s. amoenus</i>, <i>C.s. adamsi</i> and <i>C.s. pluto</i>) look strikingly different from the other subspecies and may deserve species-level treatment. A genomic, range-wide enquiry and morphological analysis covering as many subspecies as possible is necessary to help guide conservation efforts
14 Sumatran Leafbird	<i>Chloropsis media</i>	<ul style="list-style-type: none"> • Perform field surveys for the species in Sumatra. This work may be combined with surveys for other Sumatran species
15 Sunda Laughingthrush	<i>Garrulax palliatus</i>	<ul style="list-style-type: none"> • A genomic, range-wide enquiry is necessary for subspecies differentiation, and to determine if they should be treated as separate conservation units • Recommend legal protection of this species in Indonesia
16 Greater Green Leafbird	<i>Chloropsis sonnerati</i>	<ul style="list-style-type: none"> • Determine if international trade is a threat • Improved understanding of demand and use of the species in songbird competitions
17 Orange-spotted Bulbul	<i>Pycnonotus bimaculatus</i>	<ul style="list-style-type: none"> • Field surveys into their distribution, numbers and habitat requirements to help clarify their conservation status and management needs, particularly subspecies <i>P.b. snouckaerti</i> • Develop species identification materials for subspecies so that market surveys can record subspecies. This finer-scale information will enable the Group to determine the origin of birds
18 Orange-headed Thrush	<i>Geokichla citrina</i>	<ul style="list-style-type: none"> • Little is known about how distinct <i>G.c. rubecula</i> may be; field and genomic studies should be carried out to determine appropriate conservation actions • Determine the extent of commercial captive breeding or ranching of this species in Indonesia, and how this is being regulated
19 Oriental White-eye and Zosterops species complex	<i>Zosterops spp</i>	<ul style="list-style-type: none"> • A range-wide genomic enquiry examining most subspecies across the range will be necessary to determine species differences and resulting conservation efforts
20 Hill Blue Flycatcher	<i>Cyornis banyumas</i>	<ul style="list-style-type: none"> • Range-wide genomic study and field surveys into their distribution, numbers and habitat requirements to help clarify their conservation status and management needs, particularly subspecies <i>C.b. magnirostris</i> and <i>C.b. coeruleatus</i> • Develop species identification materials for subspecies so that market surveys can record subspecies. This finer-scale information will enable the Working Group to determine the origin of birds
21 Ruby-throated Bulbul	<i>Pycnonotus dispar</i>	<ul style="list-style-type: none"> • Range-wide genomic study and field surveys into their distribution, numbers and habitat requirements to help clarify their conservation status and management needs • Recommend review of the IUCN Red List status

22	Grey-cheeked Bulbul	<i>Alophoixus bres</i>	<ul style="list-style-type: none"> • Range-wide genomic study and field surveys into their distribution, numbers and habitat requirements to help clarify their taxonomic, conservation status and management needs • Improved understanding of demand and use of the species in songbird competitions
23	Asian Fairy Bluebird	<i>Irena puella</i>	<ul style="list-style-type: none"> • Determine if species decline is primarily due to habitat loss or trapping for trade
24	Long-tailed Shrike	<i>Lanius schach</i>	<ul style="list-style-type: none"> • Improved understanding of demand and use of the species in songbird competitions • Determine the extent of commercial captive breeding or ranching of this species in Indonesia, and how this is being regulated
25	Chestnut-backed Thrush	<i>Geokichla dohertyi</i>	<ul style="list-style-type: none"> • Determine current species status in trade
26	Javan Myna	<i>Acridotheres javanicus</i>	<ul style="list-style-type: none"> • Consider reintroducing feral population back to native range
27	Pin-tailed Parrotfinch	<i>Erythrura prasina</i>	<ul style="list-style-type: none"> • Determine current species population status in the wild and trade
28	Chestnut-capped Thrush	<i>Geokichla interpres</i>	<ul style="list-style-type: none"> • Improved understanding of demand and use of the species in songbird competitions • Determine the extent of commercial captive breeding or ranching of this species in Indonesia, and how this is being regulated



Summit participants deep in discussion

ORGANIZATION PROFILES

Wildlife Reserves Singapore

www.wrs.com.sg | www.wrscf.org.sg

Wildlife Reserves Singapore (WRS) is dedicated to the management of world-leading zoological institutions—Jurong Bird Park, Night Safari, River Safari and Singapore Zoo—that aim to inspire people to value and conserve biodiversity by providing meaningful and memorable wildlife experiences. A self-funded organization, WRS focuses on protecting biodiversity in Singapore and Southeast Asia through collaborations with like-minded partners, organizations and institutions. Each year, the four attractions welcome 4.6 million visitors.

Wildlife Reserves Singapore Group



TRAFFIC

www.traffic.org | facebook.com/trafficsea

TRAFFIC, the wildlife trade monitoring network, works to ensure that trade in wild plants and animals is not a threat to the conservation of nature. TRAFFIC has an enviable reputation as a reliable and impartial organization, a leader in the field with a unique role as a global specialist leading and supporting efforts to identify and address conservation challenges and solutions linked to trade in wild animals and plants of conservation as it relates to wildlife trade. TRAFFIC's global network is research-driven and action-oriented, committed to delivering innovative and practical conservation solutions based on the latest information. TRAFFIC's Southeast Asia presence was established in 1992, with a Regional Headquarters in Petaling Jaya, Malaysia. The modest but dedicated team works in a region that is considered one of the world's biggest centres of wildlife trade. This office has, over the years, called much needed attention to the problem of wildlife trafficking and unsustainable use of wild plants and animals through its numerous initiatives and publications.



Cikananga Wildlife Center

www.cikanangawildlifecenter.com

The Cikananga Wildlife Center (Yayasan Cikananga Konservasi Terpadu), with the Cikananga Conservation Breeding Center (CCBC) as one of its programmes, was established in August 2001 as a non-profit NGO, to assist the Indonesian Government with law enforcement regarding wildlife species in trade, and their subsequent rescue, rehabilitation and release. In 2008 the organization started to set up breeding programmes for several species of Endangered and Critically Endangered species to prevent their extinction. Currently species such as the Javan Warty Pig (EN), Sumatran Laughingthrush (VU), Rufous-fronted Laughingthrush (EN), Black-winged Myna (CR) and Javan Green Magpie (CR), are being successfully bred. The Center is located 30 km south of the town of Sukabumi, in West Java, Indonesia.





**Recommendations from the first
Asian Songbird Trade Crisis Summit 2015
held in Jurong Bird Park, Singapore,
27-29 September 2015.**

