

The IUCN SSC Asian Songbird Trade Specialist Group

A BRIEF REPORT ON ITS FIRST FOUR YEARS: 2017-2020

Shukhova, S., Chng, S.C.L., Lee, J.G.H. and Jeggo, D.



Singapore 2021



The IUCN SSC Asian Songbird Trade Specialist Group

A BRIEF REPORT ON ITS FIRST FOUR YEARS: 2017-2020

Report authors: Shukhova, S., Chng, S.C.L., Lee, J.G.H. and Jeggo, D.

Contributors: Jain, A., Marsden, S.J., Owen, A., Rheindt, F.E. and Shepherd, C.R.

Published by the IUCN SSC Asian Songbird Trade Specialist Group (ASTSG),
hosted by Mandai Nature

© 2021 The IUCN SSC Asian Songbird Trade Specialist Group

Suggested citation: Shukhova, S., Chng, S.C.L., Lee, J.G.H. and Jeggo, D. (2021). *The IUCN SSC Asian Songbird Trade Specialist Group. A brief report on its first four years: 2017-2020*. The IUCN SSC Asian Songbird Trade Specialist Group (ASTSG), Singapore.

Front and back cover photos: S.Shukhova / FLIGHT



CONTENTS

- 2 Asian songbird crisis
- 4 About the IUCN SSC Asian Songbird Trade Specialist Group
- 6 Achievements: 2017-2020
- 14 Moving forward: 2021-2024
- 16 Threatened species
- 16 Contacts
- 18 Endnotes and references



photo by Jonathan Beilby

ASIAN SONGBIRD CRISIS

The illegal and unsustainable wildlife trade continues to be a leading driver of biodiversity loss worldwide. In particular, it has a detrimental impact on the species' survival in Southeast Asia.^{1,2} With the attention of law enforcement agencies, researchers and media being often attracted to the large volume seizures of animal parts and derivatives, or to the trade in charismatic species such as elephants and rhinos, the live animal trade, such as caged birds, is often overlooked and gets less public attention.

Although the songbird trade is rooted in a long tradition of bird keeping in Southeast Asian countries,³ it remained understudied and poorly researched until very recently. The recent work by researchers, conservation organisations, and law enforcement agencies has raised the conservation profile of the Asian songbirds and highlighted the devastating impact of their trade on the wild populations,⁴ a phenomenon dubbed the Asian Songbird Crisis.

More and more data and insights on the Asian songbird taxonomy, conservation status, distribution, trade and drivers for demand are becoming available, illustrating the complexity of the issue and the need for urgent action through cooperation among stakeholders.

The IUCN SSC Asian Songbird Trade Specialist Group (ASTSG) brings together conservation professionals from around the globe to coordinate current efforts to tackle the Asian songbird crisis and inform future conservation strategies. With expertise varying from genetic and field research to market and trade surveys, to captive breeding, outreach, community engagement and behaviour change - the specialist group's members aspire to find solutions that will protect Asian songbirds from extinction, preserve intact habitats and biodiversity, and benefit local communities.



photo by Sofiya Shukhova

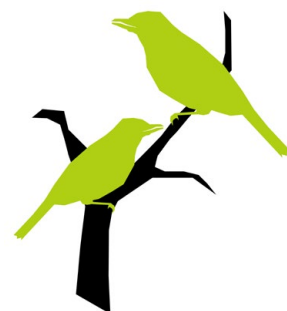
ABOUT THE IUCN SSC ASIAN SONGBIRD TRADE SPECIALIST GROUP

The ASTSG was established in 2017 following the publication of the “Conservation Strategy for the Southeast Asian Songbirds in Trade”⁵ based on the first Asian Songbird Trade Crisis Summit held at the Jurong Bird Park, and hosted by the Wildlife Reserves Singapore in 2015.⁶ Operating as a specialist group under the IUCN Species Survival Commission, it currently includes 71 members from around the world representing in-situ and ex-situ

conservation projects including academia, international and local NGOs and zoos, all dedicated to tackling the illegal and unsustainable trade in songbirds. The ASTSG studies, addresses and provides recommendations on the Asian songbird crisis’ tackling through five thematic sub-groups:

Field research

Field research conducted by the ASTSG’s members enables the mapping of the songbird taxa distribution, identification of population sizes and trends, as well as an understanding of the trade’s impact on populations in the wild. This research is essential for identifying the most vulnerable species and driving conservation efforts through identifying priority landscapes and bird populations, revising protected species’ lists, identifying future release locations and safeguarding important sites.



Genetic research



Genetic research is essential for songbird taxa identification and documentation of the genetically distinct lineages deserving protection as separate conservation units. The assessment of the trade’s impact on the genomically distinct populations and establishment of pure lineages for conservation breeding programmes would not be possible without genetic research.

Conservation breeding and reintroduction



Due to the continued unsustainable songbird trade and its devastating impact on the wild populations, assurance populations of priority taxa are key tools for the conservation of threatened Asian songbirds. The ASTSG's members lead and coordinate ex-situ conservation breeding programmes and set standards for the songbird population management under human care.

Trade and legislation

Despite the obvious negative impact of the trade on the Asian songbird populations, their legal protection is still inadequate, and effective law enforcement is often lacking. The ASTSG's members research and monitor the trade in physical and online markets, its patterns and drivers, and provide published evidence to lobby for legal protection through national and international legislations and conventions, and to support law enforcement actions.



Education and community engagement



ASTSG seeks to build a strong understanding of the social, cultural and economic aspects of the songbird trade and to establish working relationships with relevant stakeholders involved in the trade. Strategic and science-based efforts to educate, provide alternative livelihood and change the behaviour of communities and other actors involved in the trade are essential in fostering more sustainable practices and addressing the Asian songbird crisis.

Coordination and communication among the thematic groups within the ASTSG is key to ensuring the effectiveness of the ASTSG. The ASTSG's members are constantly sharing their findings and collaborating on cross-cutting issues.



ACHIEVEMENTS: 2017-2020

Since its formation in 2017, the ASTSG has achieved several milestones in understanding the Asian songbird trade, guiding related conservation efforts, informing national and international regulations, raising awareness and reducing demand.

1st ASTSG meeting

The first meeting of the ASTSG since its formal conception was held from 30 March to 1 April 2019. Over 50 experts from around the world, from various institutions and disciplines, gathered at the Jurong Bird Park in Singapore to evaluate and update progress over the last two years and to chart future actions. While discussions were largely organised around ASTSG's five sub-themes, the group also discussed projects and action points that cut across multiple topics.

One cross-cutting issue was the plight of the songbird taxa endemic to the Barusan Islands, which lie off the coast of Sumatra, Indonesia, and also the extreme biological importance of these forest islands. These islands possess a number of endemic sub-species that are likely to be genetically distinct taxa of White-rumped Shama (*Kittacincla malabarica*) and by some authorities are considered full species. They are on the brink due to excessive trapping. The meeting considered emergency measures that could be implemented to avert their imminent extinction. A taskforce was formed to take these priority actions forward.

There was also an increasing focus on demand reduction and changing behaviours of bird keepers, with presentations on initial research to profile consumers in Indonesia, Viet Nam and Singapore and to understand the drivers and motivations behind bird buying and bird keeping behaviour. These will form the foundation of future work to influence consumers to shift away from unsustainable bird keeping behaviours. Additionally, there was also discussion about including in-situ protection of wild birds under the ASTSG.

While songbird trade is largely prevalent in Indonesia, this meeting saw the need to also increase attention on other markets in the region, as well as those selling Asian songbirds beyond Asia. The growing and constantly shifting demand of the songbird trade has also put more species at risk. The priority list of birds considered during the meeting has increased to 44 species, from the 28 species identified four years ago.

Summarised here are some of the achievements carried out by ASTSG's members and their organisations under the ASTSG's sub-themes from 2017 to 2020:

Field research

Field-based surveys conducted between 2017 and 2020 helped to inform the ASTSG's priority conservation actions and identify further research areas. For instance, the research found that Straw-headed Bulbul (*Pycnonotus zeylanicus*) is now highly likely to be entirely extinct in Sumatra and has significantly decreased across Borneo and Peninsular Malaysia.⁷ Its last stronghold in Singapore is estimated to comprise 22.9-57.3% of the global wild population, making it a priority for conservation.⁸

Species distribution range and habitat assessment created a baseline for conservation planning. The review of the state of the West Javan mountain highlighted approximately 40% of forest cover loss⁹ and identified a series of around 20 areas, all needing biological and socio-economic surveys.¹⁰ Following this research, Cikananga Wildlife Center, in partnership with Chester Zoo and Manchester Metropolitan University, launched the Javan Green Magpie Project. The project aims to better understand the ecological and biological requirements of the Javan Green Magpie (*Cissa thalassina*) through fieldwork, identify sites in West-Central Java suitable for species conservation and/or reintroduction and engage the local community.

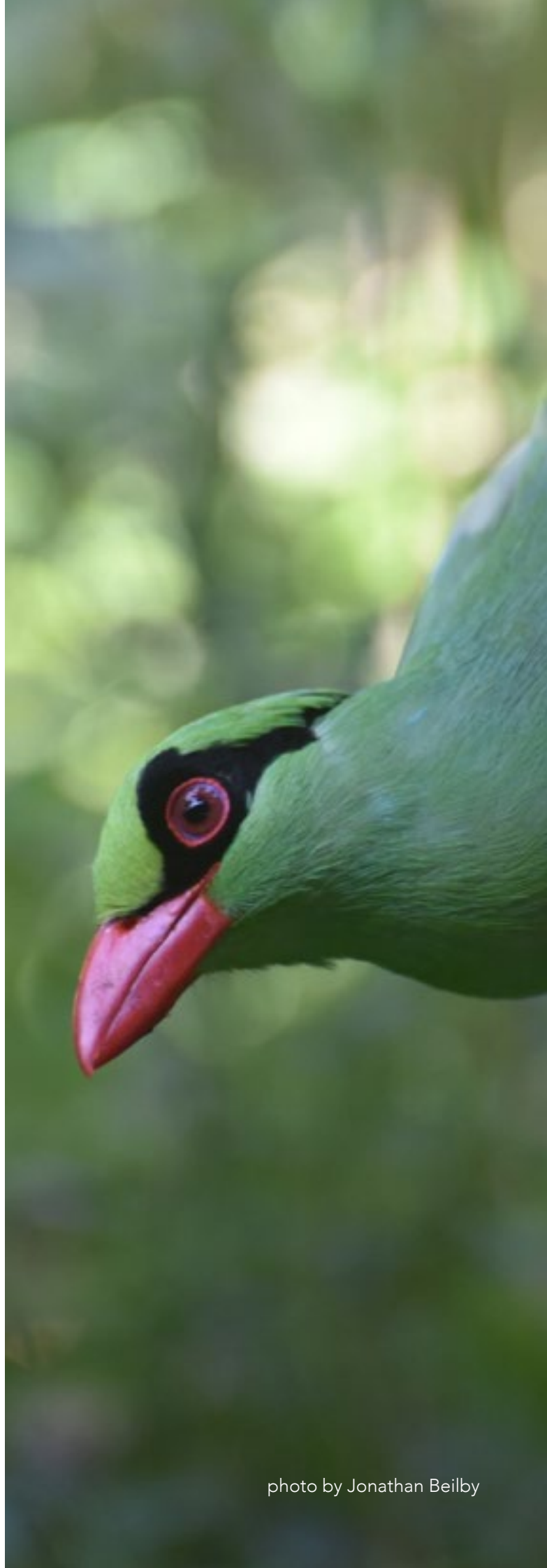


photo by Jonathan Beilby



A citizen science birdwatching event in Java and Bali resulted in over 100 000 bird records submitted by more than 300 Indonesian birders. These data will feed into baseline monitoring of common birds across the islands.¹¹

Field research discoveries along with genetic and trade-related findings made by the ASTSG's members contributed to the changes in the Asian songbird species conservation statuses and their uplisting in the IUCN Red List of Threatened Species, among them Straw-headed Bulbul (*Pycnonotus zeylanicus*), Sumatran Laughingthrush (*Garrulax bicolor*), Rufous-fronted Laughingthrush (*Garrulax rufifrons*) and Javan Pied Starling (*Gracupica jalla*). The changes in conservation statuses consequently led to changes in legislation.^{12, 13} Research on Black-winged Myna (*Acridotheres melanopterus*) in Baluran National Park and on Bali Myna (*Leucospaer rothschildi*) in Bali Barat National Park is also informing park authorities on management of these critically endangered birds.

Genetic research

Findings based on the genetic research allowed to identify new genomically distinctive populations of songbirds threatened by unsustainable trade. These species and subspecies were included in the ASTSG priority list. They require a re-evaluation of their conservation and protection status as distinct taxonomic units, and in some instances, an establishment of the conservation breeding programmes. Examples of such species are Javan Jungle Flycatcher (*Cyornis banyumas*), one of the five species previously known as Hill Blue-Flycatcher (*Cyornis banyumas*) and widely extirpated throughout its known range,¹⁴ Simeulue Hill Myna (*Gracula*

religiosa miotera), a distinct genomically and morphologically unique species lacking recognition in most classifications and possibly extinct in the wild,¹⁵ Sangkar White-eye (*Zosterops melanurus*), a heavily traded species endemic to Java and Bali, and previously misdiagnosed as a mere group of subspecies of the widespread Oriental White-eye (*Zosterops palpebrosus*).^{16, 17, 18}

DNA analysis of the Asian Pied Starling (*Gracupica contra*) detected three deeply diverged lineages at the species level, one of them being Javan Pied Starling (*Gracupica jalla*), which has disappeared from its native range in Java and Bali, Indonesia.^{19, 20} ASTSG agreed that a captive population of Javan Pied Starling (*Gracupica jalla*) needs to be assembled for conservation breeding and safe release into the wild.

Genetic research also suggested establishing three separate breeding programmes for Black-winged Myna (*Acridotheres melanopterus*) to maintain sub-specific traits that may confer local adaptation.²¹ An occasional cross-breeding between assurance populations may be needed to boost genetic diversity and increase the overall viability prospects of each breeding programme.



photo by Jonathan Beilby

Conservation breeding and reintroduction

Ex-situ support through breeding for conservation has been identified as a key need for a number of highly threatened songbird species. With immense efforts and resources, a number of internationally renowned zoos and local breeding centres have embarked on establishing ex-situ populations for some of the Asian songbird species affected by the trade. Several facilities in the region are successfully running conservation breeding programmes for a number of the ASTSG's priority species.

For example, Jurong Bird Park in Singapore started off with humble populations of five Greater Green Leafbirds (*Chloropsis sonnerati*), and 17 Straw-headed Bulbuls (*Pycnonotus zeylanicus*) and have since seen two and five offspring of each species bred, respectively.

Ecosystem Impact Foundation recently, over the pandemic year, established a conservation breeding programme for Barusan Shama (*Kittacincla (malabarica) melanurus*), and their first nesting success resulted in two offspring. These young represent the first successful breeding of this Shama as part of an internationally endorsed ex-situ conservation programme. Ecosystem Impact Foundation now have six male and six female adult birds, two fledglings and two recently hatched chicks.

In 2020 alone, Prigen Conservation Breeding Ark (PCBA), in Indonesia, successfully raised nine Tenggara Hill Mynas (*Gracula venerata*), eleven Maratua Shama (*Kittacincla (malabarica) barbouri*), eleven Javan Pied Starling (*Gracupica jalla*), ten Javan White-eye (*Zosterops flavus*), five Wangi-Wangi White-eye (*Zosterops sp. nov.*), four Javan Green Magpie (*Cissa thalassina*), four Sumatran Laughing-

thrush (*Garrulax bicolor*), six Ruby-throated Bulbul (*Pycnonotus dispar*), two Orange-spotted Bulbul (*Pycnonotus bimaculatus*), one Rufous-fronted Laughingthrush (*Garrulax rufifrons*), one Sunda Laughingthrush (*Garrulax palliatus*) and one Javan Leafbird (*Chloropsis cochinchinensis*).

Especially remarkable is the repeated breeding success of Maratua Shama (*Kittacincla (malabarica) barbouri*) and Wangi-Wangi White-eye (*Zosterops sp. nov.*). Both species are not kept in any other institution and first reproduced at PCBA in 2019. While the Wangi-Wangi White-eye (*Zosterops sp. nov.*) is not yet described and already at imminent risk of extinction, the Maratua Shama (*Kittacincla (malabarica) barbouri*) is likely to be extinct in the wild with the entire known population being kept at PCBA.



photo by Jonathan Beilby

Trade and legislation

A number of research activities were carried out by the ASTSG's members, resulting in publications in peer-reviewed journals. This included market surveys^{22, 23, 24, 25, 26} and analysis of the seizure data.²⁷ Species-specific accounts also highlighted species that had been flying under the radar including Orange-spotted Bulbul (*Pycnonotus bimarulatus*),²⁸ Spotted Crocias (*Laniellus albonotatus*),²⁹ Chinese Hwamei (*Garrulax canorus*)³⁰ and Oriental Magpie-robin (*Copsychus saularis*).³¹ This body of trade research also contributed to Indonesia's revision of its protected species list in 2018, and continues to be used to advocate for better legal protection for threatened species. These publications have also formed the basis of a number of recommendations for the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) listings that have been put forward to CITES Parties for consideration prior to the next CITES Conference of the Parties (CoP).

Online trade in songbirds was already rampant. With the onset of Covid-19 related lockdowns, the internet became even more important as a medium. Online songbird competitions cropped up as an alternative to temporarily banned in-person competitions. The ASTSG's members were able to monitor and document this trend.³²

This trade monitoring as well as targeted investigations were able to support law enforcement actions against those dealing in protected species or smuggling birds without permits. Law enforcement agencies and NGOs dedicated significant resources to tackling illegal songbird trade online and in the field, with many successes in seizures and arrests.

In 2019 alone, local enforcement agencies confiscated over 41 000 birds from the illegal trade in Sumatra, Indonesia, thanks to support from ASTSG members.³³ Traffickers are also increasingly being convicted for their crimes,^{34, 35} a sign that illegal songbird trade is now taken seriously by authorities.

Although much of the work focused on the trade in Indonesia, trade in other countries' markets and international trade were also studied and addressed, including China, Malaysia, Thailand, Viet Nam and others.^{36, 37, 38, 39, 40} In response to the document on "Songbird Trade and Conservation Management" submitted by the USA and Sri Lanka for the 18th CITES CoP,⁴¹ ASTSG was represented by its members in the songbird side event, which was organised to raise awareness around the issue and highlight the document.⁴² The ASTSG's members continue to be involved in CITES processes to gather more information on the international commercial trade in songbirds and guide CITES processes to secure appropriate international protection for species threatened by international trade.⁴³ A songbird trade database has been developed, and when released will be a valuable tool to consolidate trade data for Asian songbirds, and to inform policymakers, and more importantly, to be used to identify trends in trade and demand and to aid in prioritising species of concern. The database was also used to generate a report for the CITES Secretariat for consideration by the CITES Animals Committee in 2021.⁴⁴

Education and community engagement

The ASTSG's members conducted and published research on demand reduction and consumer behaviour change in Indonesia, Singapore and Viet Nam.^{45, 46, 47, 48} These covered various aspects of stakeholder engagement along the supply chain namely understanding the characteristics of bird keepers, songbird competitions and other actors, drivers of the trade and motivations for the songbird keeping as well as engaging with songbird breeders to move them towards captive-breeding of birds. The ASTSG's members were also involved in developing a songbird demand reduction campaign in Java.⁴⁹ Regionally, the ASTSG's members shared best practices through webinars. The hope is that such sharing can be collated to form the basis of future behaviour change interventions.

Education and community engagement initiatives were launched at different scales by organisations ranging from European zoos to local NGOs. One of the most prominent awareness raising campaigns, 'Silent Forest', was organised by EAZA and ran from 2017 until 2019. More than 200 zoos signed up in support of this initiative, and more than €550.000 were raised to support in-situ conservation projects.⁵⁰ The Indonesian Big Month 2020⁵¹ was a citizen science initiative that helped to fill knowledge gaps in Java and Bali's bird distribution data, while increasing local engagement with birdwatching. The ASTSG's members such as the Begawan Foundation and many others also worked with schools and local communities to promote an appreciation for birds in the wild.

Local NGOs demonstrated effectiveness and benefit of community engagement in conservation as an alternative livelihood for songbird hunting and trading. Planet Indonesia alone saw a 150% decrease in wildlife trapping, poaching and ownership in villages engaged through conservation cooperatives, SMART patrols and other programmes.⁵²



photo by Sin Yong Chee Keita

MOVING FORWARD: 2021-2024

Moving forward, ASTSG plans to continue research and conservation actions under five main directions: genetic research, field research, conservation breeding and reintroduction, trade and legislation, education and community engagement. Inclusion of habitat-based protection for wild songbird populations is also being developed. More cross-cutting work across these themes is also being encouraged, to effectively mobilise the range of expertise within ASTSG membership to develop multi-faceted solutions. Concurrently, discussions are underway to develop country-specific solutions and strategies.

Some key focal areas for the ASTSG in the next quadrennium could be summarised below:

1

Strengthen existing partnerships, and build up the ASTSG membership and their individual or organisational capacities, with greater representation from the Southeast Asian region;

2

Enhance collaborations and catalyse actions with governments, IUCN members and other stakeholders accomplish species conservation results;

3

Improve and publish biodiversity and conservation knowledge, as well as expand the coverage of biodiversity assessments such as the IUCN Red List of Threatened Species, with the aim of bolstering species conservation in national, regional and global policies;

4

Strengthen and expand species conservation planning efforts at local, national, regional and global levels, and enhance conservation action through the implementation of effective, collaborative and effective approaches;

5

Increase visibility of conservation efforts through innovative communications.

Knowledge gathered through scientific research and observations in the field will continue to be a foundation for species conservation status assessments, development and implementation of conservation strategies, and lobby for better protection on national, regional, and international levels. Hence, the ASTSG's members are anticipated to continue publishing their research on the Asian songbird crisis, and to recommend and apply solutions based on research findings. In particular, members are encouraged to carry out research and implement conservation measures on the species involved in the trade, their taxonomy, population size, distribution and impact from the trade, drivers of demand for the songbirds, supply chain and trade patterns, impact of current international and national regulatory and law enforcement efforts, analysis of past demand reduction and behaviour change campaigns. It is hoped that the Songbirds in Trade Database, which will be hosted on the Monitor website, will be useful to the ASTSG in planning and prioritising future conservation actions.

The next CITES CoP, to be held in 2022, presents an opportunity for the ASTSG to put songbird trade and trafficking in the spotlight, and is the venue to put measures in place to reduce illegal and unsustainable international trade in songbirds. The ASTSG's members are developing recommendations for CITES Parties to include songbird species in the Appendices of CITES, and lobbying and providing evidence will be essential activities in the lead up to the Conference.

Future success and achievements of the ASTSG will depend on the individual capacity of the ASTSG's members and the collaborations within membership, with new partners, stakeholders, and the public. Therefore, further membership

engagement, internal and external communications continue to be key priorities of the ASTSG. One of the main goals for 2021-2022 is to establish ASTSG's online public presence and bring even more attention to the Asian songbird crisis using social media, press releases, newsletter publications and collaborations with other conservation organisations. Specialist groups often overlook outward communications due to their limited capacity and voluntary nature of membership. Hence, in January 2021, a communications coordinator was appointed for the ASTSG. Once a basic communications strategy is established and running in English, ASTSG will increase communication capacity in regional languages.

Effective communication of the ASTSG's members' work and achievement is likely to raise the members' organisations' profile and offer more funding opportunities. In particular, ASTSG's hope to drive more much-needed funding for rescue, rehabilitation and release operations for confiscated songbirds in the region, as well as to establish and manage the assurance populations of selected priority taxa.

Closer partnership with local organisations and stakeholders has the potential to bring new members to ASTSG to ensure more diversity, country-specific expertise and knowledge necessary for the conservation planning. Building conservation capacity and competency among local conservation organisations, including but not limited to the ASTSG's members, law enforcement agencies and communities, will be essential for the successful conservation interventions. The importance of this and an integrated and holistic cross-sector approach to conservation was particularly accentuated in the 2020 COVID-19 global pandemic, and serves both as a reminder and motivator.

THREATENED SPECIES

During the Songbird Trade Crisis Summit in 2015, a list of 28 taxa most threatened by trade was identified. In 2019, at the first ASTSG meeting, this list grew to 44 species. It is continually updated as new information is available, and the latest version can be found on the ASTSG's website:

<https://www.asiansongbirdtradesg.com/species-list>

The list does not include all threatened Asian songbird species, but instead focuses on the species whose survival is directly affected by the illegal and unsustainable trade. It should be noted that this is not a comprehensive list, but is a list of priority species the ASTSG have identified for priority conservation actions and/or further research and assessment.

CONTACTS

More information can be found on our website: <https://www.asiansongbirdtradesg.com/>
For further inquiries, please email us at asiansongbirdtradesg@gmail.com

Follow us

Facebook: [IUCN SSC Asian Songbird Trade Specialist Group - @IUCN.Songbirds](#)

Instagram: [@iucn_songbirds](#)

Twitter: [@IUCN_songbirds](#)



ENDNOTES & REFERENCES

- ¹ Duckworth, J. W., Batters, G., Belant, J. L., Bennett, E. L., Brunner, J., Burton, J., Challender, D. W. S., Cowling, V., Duplaix, N., Harris, J. D., Hedges, S., Long, B., Mahood, S. P., McGowan, P. J. K., McShea, W. J., Oliver, W. L. R., Perkin, S., Rawson, B. M., Shepherd, C. R., Stuart, S. N., Talukdar, B. K., van Dijk, P. P., Vié, J.-C., Walston, J. L., Whitten, T. and Wirth, R. (2012). Why South-East Asia should be the world's priority for averting imminent species extinctions, and a call to join a developing cross-institutional programme to tackle this urgent issue. *Sapiens*, (5.2). <https://journals.openedition.org/sapiens/1327>
- ² Wilcove, D. S., Giam, X., Edwards, D. P., Fisher, B., & Koh, L. P. (2013). Navjot's nightmare revisited: Logging, agriculture, and biodiversity in Southeast Asia. *Trends in Ecology & Evolution*, 28(9), 531–540. <https://doi.org/10.1016/j.tree.2013.04.005>
- ³ Jepson, P., & Ladle, R. J. (2005). Bird-keeping in Indonesia: Conservation impacts and the potential for substitution-based conservation responses. *Oryx*, 39(04), 442. <https://doi.org/10.1017/S0030605305001110>
- ⁴ Sykes, B. R. (2017) The elephant in the room: addressing the Asian songbird crisis. *BirdingASIA*, 27, 35-41. <https://www.silentforest.eu/wp-content/uploads/2017/05/Elephant-in-Room.pdf>
- ⁵ Lee, J. G. H., Chng, S. C. L. & Eaton, J. A. (2016). 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. <https://www.traffic.org/site/assets/files/2275/conservation-strategy-for-southeast-asian-songbirds-in-trade.pdf>
- ⁶ Shepherd, C. R. and Cassey, P. (2017). Songbird trade crisis in Southeast Asia leads to the formation of IUCN SSC Asian Songbird Trade Specialist Group. *Journal of Indonesian Natural History*, 5(1 & 2), pp.3-5. https://www.researchgate.net/publication/325719010_Songbird_trade_crisis_in_Southeast_Asia_leads_to_the_formation_of_IUCN_SSC_Asian_Songbird_Trade_Specialist_Group_Guest_Editorial
- ⁷ Chiok, W. X., Miller, A. E., Pang, S. E. H., Eaton, J. A., Rao, M. & Rheindt, F. E. (2019). Regional and local extirpation of a formerly common Sundaic passerine, the Straw-headed Bulbul *Pycnonotus zeylanicus*. *Forktail*, 35, 3-11. <https://static1.squarespace.com/static/55032857e4b0a9cec125fe9c/t/5eb90448655c7270e6383af1/1589183566570/interim+Straw-headed+Bulbul+Forktail.pdf>
- ⁸ Chiok, W. X., Ng, E. Y., Tang, Q., Lee, J. G., & Rheindt, F. E. (2020). A distance sampling survey of the Critically Endangered Straw-headed Bulbul *Pycnonotus zeylanicus* in Singapore. *Bird Conservation International*, 1-13. <https://avianevonusdotcom.files.wordpress.com/2020/11/chiok-et-al-2020-bird-cons-int-straw-headed-bulbul-in-singapore.pdf>
- ⁹ Higginbottom, T. P., Collar, N. J., Symeonakis, E., & Marsden, S. J. (2019). Deforestation dynamics in an endemic-rich mountain system: Conservation successes and challenges in West Java 1990–2015. *Biological Conservation*, 229, 152-159. <https://doi.org/10.1016/j.biocon.2018.11.017>
- ¹⁰ *Field research* (2021). The IUCN SSC Asian Songbird Trade Specialist Group. Retrieved June 20, 2021 <https://www.asiansongbirdtradesg.com/field-research>
- ¹¹ Squires, T. M., Yuda, P., Akbar, P. G., Collar, N. J., Devenish, C., Taufiqurrahman, I., Wibowo, W. K., Winarni, N. L., Yanuar, A. & Marsden, S.J. (2021). Citizen science rapidly delivers extensive distribution data for birds in a key tropical biodiversity area. *Global Ecology & Conservation* 28: e01680. <https://doi.org/10.1016/j.gecco.2021.e01680>
- ¹² Gokkon, B. (2018) Indonesia adds hundreds of birds to protected species list. *Mongabay*. <https://news.mongabay.com/2018/08/indonesia-adds-hundreds-of-birds-to-protected-species-list/>
- ¹³ Gokkon, B. (2018) 5 bird species lose protections, more at risk in new Indonesia decree. *Mongabay*. <https://news.mongabay.com/2018/10/5-bird-species-lose-protections-more-at-risk-in-new-indonesia-decree/>
- ¹⁴ Gwee, C.Y., Eaton, J.A., Garg, K.M., Alström, P., Van Balen, S., Hutchinson, R.O., Prawiradilaga, D.M., Le, M.H. and Rheindt, F.E. (2019). Cryptic diversity in *Cyornis* (Aves: Muscicapidae) jungle-flycatchers flagged by simple bioacoustic approaches. *Zoological Journal of the Linnean Society*, 186(3), 725-741. <https://doi.org/10.1093/zoolinnean/zlz003>

- ¹⁵ Ng, D. Y., Švejcárová, T., Sadanandan, K. R., Ferasyi, T. R., Lee, J. G., Prawiradilaga, D. M., Ouhel, T., Ng, E. Y. X. & Rheindt, F. E. (2021). Genomic and morphological data help uncover extinction-in-progress of an unsustainably traded hill myna radiation. *Ibis*, 163(1), 38-51. <https://avianevonusdotcom.files.wordpress.com/2021/04/ng-et-al.-2021-hill-mynas-ibis.pdf>
- ¹⁶ Gwee, C. Y., Garg, K. M., Chattopadhyay, B., Sadanandan, K. R., Prawiradilaga, D. M., Irestedt, M., Lei, F., Bloch, L. M., Lee, J. G. H., Irham, M., Haryoko, T., Soh, M. C. K., Peh, K. S-H., Rowe, K. M. C., Ferasyi, T. R., Wu, S., Wogan, G. O. U., Bowie, R. C. K & Rheindt, F. E. (2020). Phylogenomics of white-eyes, a 'great speciator', reveals Indonesian archipelago as the center of lineage diversity. *Elife*, 9, e62765. <https://elifesciences.org/articles/62765>
- ¹⁷ Genetic research (2021). The IUCN SSC Asian Songbird Trade Specialist Group. Retrieved June 20, 2021 <https://www.asiansongbirdtradesg.com/genetic-research>
- ¹⁸ Lim, B. T. M., Sadanandan, K. R., Dingle, C., Leung, Y. Y., Prawiradilaga, D. M., Irham, M., Ashari, H., Lee, J. G. H. & Rheindt, F. E. (2019). Molecular evidence suggests radical revision of species limits in the great speciator white-eye genus *Zosterops*. *Journal of Ornithology*, 160(1), 1–16. <https://doi.org/10.1007/s10336-018-1583-7>
- ¹⁹ Baveja, P., Garg, K. M., Chattopadhyay, B., Sadanandan, K. R., Prawiradilaga, D. M., Yuda, P., Lee, J. G. H. & Rheindt, F. E. (2021). Using historical genome-wide DNA to unravel the confused taxonomy in a songbird lineage that is extinct in the wild. *Evolutionary applications*, 14(3), 698-709. <https://onlinelibrary.wiley.com/doi/epdf/10.1111/eva.13149>
- ²⁰ The extraordinary vanishing act of the Javan Pied Starling (2021). The IUCN SSC Asian Songbird Trade Specialist Group. Retrieved June 20, 2021 <https://66d8233c-a33b-4658-89ad-3a0eaecf773e.filesusr.com/ugd/08f72d5fe7a9c5856f4e269d8f7e2ee1ecf3b9.pdf>
- ²¹ Sadanandan, K. R., Low, G. W., Sridharan, S., Gwee, C. Y., Ng, E. Y., Yuda, P., Prawiradilaga, D. M., Lee, J. G. H., Tritto, A. & Rheindt, F. E. (2020). The conservation value of admixed phenotypes in a critically endangered species complex. *Scientific reports*, 10(1), 1-16. <https://www.nature.com/articles/s41598-020-72428-2.pdf>
- ²² Chng, S. C., Shepherd, C. R., & Eaton, J. A. (2018). In the market for extinction: birds for sale at selected outlets in Sumatra. *TRAFFIC Bulletin*, 30(1). https://www.traffic.org/site/assets/files/10567/bulletin-30_1-birds-sumatra.pdf
- ²³ Eaton, J. A., Nguyen, M. D. T., Willemsen, M., Lee, J., & Chng, S. C. L. (2017). Caged in the city: An inventory of birds for sale in Ha Noi and Ho Chi Minh City, Viet Nam. *TRAFFIC*, Southeast Asia Regional Office, Petaling Jaya, Malaysia. <https://www.traffic.org/site/assets/files/1580/caged-in-the-city.pdf>
- ²⁴ Rentschlar, K. A., Miller, A. E., Lauck, K. S., Rodiansyah, M., Bobby, Muflihati, & Kartikawati. (2018). A silent morning: The songbird trade in kalimantan, indonesia. *Tropical Conservation Science*, 11, 194008291775390. <https://doi.org/10.1177/1940082917753909>
- ²⁵ Leupen, B. T. C., Gomez, L., Shepherd, C. R., Nekaris, K. A.-I., Imron, M. A., & Nijman, V. (2020). Thirty years of trade data suggests population declines in a once common songbird in Indonesia. *European Journal of Wildlife Research*, 66(6), 98. <https://doi.org/10.1007/s10344-020-01436-4>
- ²⁶ Shepherd, C. R., Leupen, B. T. C., Siriwat, P., & Nijman, V. (2020). International wildlife trade, avian influenza, organised crime and the effectiveness of CITES: The Chinese hwamei as a case study. *Global Ecology and Conservation*, 23, e01185. <https://doi.org/10.1016/j.gecco.2020.e01185>
- ²⁷ Indraswari, K., Friedman, R. S., Noske, R., Shepherd, C. R., Biggs, D., Susilawati, C., & Wilson, C. (2020). It's in the news: Characterising Indonesia's wild bird trade network from media-reported seizure incidents. *Biological Conservation*, 243, 108431. <https://doi.org/10.1016/j.biocon.2020.108431>
- ^{28, 29, 30} Tackling the illegal and unsustainable trade in Asian songbirds. *Our Projects* (2021). Monitor Conservation Research Society. Retrieved June 20, 2021. <https://mcrsociety.org/programmes/songbirds/>
- ³¹ Chng, S.C.L., Saaban, S., Wechit, A. & Krishnasamy, K. (2021). Smuggled For Its Song The Trade in Malaysia's Oriental Magpie-robins. *TRAFFIC*, Southeast Asia Regional Office, Petaling Jaya, Malaysia. <https://www.traffic.org/publications/reports/smuggled-for-its-song-the-trade-in-malaysias-oriental-magpie-robins/>
- ³² Armstrong, O.H., & Chng, S.C.L. (2020). Distancing the flock: bird singing competitions fly online to avoid Covid-19, *TRAFFIC Bulletin*, 32(2). <https://www.traffic.org/site/assets/files/13362/distancing-the-flock.pdf>

- ³³ During 2019, there were 58 smuggling attempts from Sumatra to Java involving more than 41,000 wild birds which were successfully intercepted by officers (2021). Flight Protecting Birds. Retrieved June 20, 2021. <https://flightprotectingbirds.org/during-2019-there-were-58-smuggling-attempts-from-sumatra-to-java-involving-more-than-41000-wild-birds-which-were-successfully-intercepted-by-officers/>
- ³⁴ Indonesian man convicted for smuggling protected songbirds (2021). TRAFFIC. Retrieved June 20, 2021. <https://www.traffic.org/news/indonesian-man-convicted-for-smuggling-protected-songbirds/>
- ³⁵ Indonesian man jailed for attempting to smuggle protected bird species (2021). Borneo Bulletin. Retrieved June 20, 2021. <https://borneobulletin.com.bn/indonesian-man-jailed-attempting-smuggle-protected-bird-species/>
- ³⁶ Eaton, J. A., Nguyen, M. D. T., Willemsen, M., Lee, J., & Chng, S. C. L. (2017). Caged in the city: An inventory of birds for sale in Ha Noi and Ho Chi Minh City, Viet Nam. TRAFFIC, Southeast Asia Regional Office, Petaling Jaya, Malaysia. <https://www.traffic.org/site/assets/files/1580/caged-in-the-city.pdf>
- ³⁷ Eaton, J. A., Leupen, B. T. C., & Krishnasamy, K. (2017). Songsters of Singapore: An overview of the bird species in Singapore pet shops. TRAFFIC, Southeast Asia Regional Office, Petaling Jaya, Malaysia. <https://www.traffic.org/site/assets/files/2278/songsters-of-singapore.pdf>
- ³⁸ Chng, S.C.L., Saaban, S., Wechit, A. & Krishnasamy, K. (2021). Smuggled For Its Song The Trade in Malaysia's Oriental Magpie-robins. TRAFFIC, Southeast Asia Regional Office, Petaling Jaya, Malaysia. <https://www.traffic.org/publications/reports/smuggled-for-its-song-the-trade-in-malaysias-oriental-magpie-robins/>
- ³⁹ Persistent illegal bird trade highlighted at notorious Bangkok Market (2016). TRAFFIC. Retrieved June 20, 2021. <https://www.traffic.org/news/persistent-illegal-bird-trade-highlighted-at-notorious-bangkok-market/>
- ⁴⁰ Tackling the illegal and unsustainable trade in Asian songbirds. Our Projects (2021). Monitor Conservation Research Society. Retrieved June 20, 2021. <https://mcrsociety.org/programmes/songbirds/>
- ⁴¹ CITES (2019). Songbird trade and conservation management (Passeriformes). CoP18 Doc. 79. Eighteenth meeting of the Conference of the Parties Colombo (Sri Lanka), 23 May – 3 June 2019. Gland, Switzerland. <https://cites.org/sites/default/files/eng/cop/18/doc/E-CoP18-079.pdf>
- ⁴² Songbird Trade. The Song of Extinction (2021). Govdelivery. Retrieved June 20, 2021. <https://content.govdelivery.com/accounts/USDOIFWS/bulletins/258d138>
- ⁴³ Leupen, B. T., Krishnasamy, K., Shepherd, C. R., Chng, S. C., Bergin, D., Eaton, J. A., Yukin, D.A., Koh, S.P.H., Miller, A., Nekaris, K.A-I, Nijman, V., Saaban, S. & Imron, M. A. (2018). Trade in White-rumped Shamas *Kittacincla malabarica* demands strong national and international responses. *Forktail*, 34, 1-8. <https://www.traffic.org/site/assets/files/12318/white-rumped-shama-forktail-report.pdf>
- ⁴⁴ Juergens, J., Bruslund, S., Staerk, J., Nielsen, R.O., Shepherd, C.R., Leupen, B., Krishnasamy, K., Chng, S.C.L., John Jackson, J., da Silva, R., Bagott, A., Alves, R.R.N. & Dalia A. Conde, D.A. (2021). A standardized dataset for conservation prioritization of songbirds to support CITES. CITES. Thirty-first meeting of the Animals Committee, 31 May, 1, 4, 21 and 22 June 2021, Online. <https://cites.org/sites/default/files/eng/com/ac/31/Inf/E-AC31-Inf-11.pdf>
- ⁴⁵ Marshall, H., Collar, N. J., Lees, A. C., Moss, A., Yuda, P., & Marsden, S. J. (2020). Spatio-temporal dynamics of consumer demand driving the Asian Songbird Crisis. *Biological Conservation*, 241, 108237. <https://doi.org/10.1016/j.biocon.2019.108237>
- ⁴⁶ Indraswari, K. (2021). A multi-faceted analysis of Indonesia's songbird trade economy an evidence-based market solution. *Ph.D. Dissertation (Under Review)*. Queensland University of Technology, Brisbane, Australia
- ⁴⁷ Chiok, W. X., Lee, R., Lee, J. G. H. & Jain, A. (2021). The dynamics of songbird ownership and community interconnectedness in Singapore. *In press*.
- ⁴⁸ TRAFFIC (2021). Calling for Compassion: Countering Vietnam's songbird demand with Buddhist philosophy. TRAFFIC <https://www.traffic.org/publications/reports/calling-for-compassion-countering-vietnams-songbird-demand-with-buddhist-philosophy/>
- ⁴⁹ Bijak Berkicau online campaign (2021). Bijak Berkicau. Retrieved June 20, 2021. <https://www.facebook.com/BijakBerkicau/>

⁵⁰ *Campaign goals* (2021). Silent Forest. Retrieved June 20, 2021. <https://www.silentforest.eu/about/campaign-goals/>

⁵¹ Squires, T.M., Quires, Yuda, P., Akbar, P.G., Collar, N.J., Devenish, C., Nasution, A., Taufiqurrahman, I., Wibowo, W.K., Winarini, N.L., Winnasis, S., Yanuar, A. & J. Marsden, S.J. (2020) BigMonth2020: citizen science event helps fill gaps in Java and Bali's bird distribution data *BirdingASIA*, 34, 17-22 <https://static1.square-space.com/static/5c1a9e03f407b482a158da87/t/603f815ea188af615cf35c25/1614774624319/BA34-Big-Month.pdf>

⁵² *Impact* (2021). Planet Indonesia. Retrieved June 20, 2021. <https://www.planetindonesia.org/impact>



The IUCN SSC Asian Songbird Trade Specialist Group (ASTSG)
<https://www.asiansongbirdtradesg.com/>

