

White-rumped Shama Kittacincla malabarica.

he practice of bird keeping and the popularity of bird singing competitions in Indonesia, particularly on the island of Java, is having a huge impact on wild bird populations (Burivalova *et al.*, 2017; Chng *et al.*, 2015; Chng and Eaton, 2016; Harris *et al.*, 2017, Marshall *et al.*, 2020). Birds are kept as pets to sing in people's homes and to be entered into competitions. This hobby, locally called "Kicaumania" (chirping-mania), has developed into an economically important industry in Indonesia (Burivalova *et al.*, 2017; Jepson and Ladle, 2011; Marshall *et al.*, 2020; Nijman *et al.*, 2017); it is widespread and all levels of society partake in bird singing competitions.

Bird singing competitions are commonplace across Indonesia and particularly prevalent on Java. Often these are held monthly, weekly or even daily in public spaces. The size of the events range from local competitions with up to 500 competing birds to regional events with up to 1,000 birds, and national competitions with up to 2,000 birds (Omkicau, 2019). Bird singing competitions are well organised, usually with entry fees, categories for different species, judging criteria, and prizes. Birds with a wider singing repertoire may fetch higher prizes and, for some species, it is perceived that wild caught birds have a better song quality (Jepson and Ladle, 2005; Burivalova et al., 2017; Marshall et al., 2020). This in turn drives the illegal trapping and trade in wild caught birds. It is estimated that one-third of Java's 36 million households keep 66-84 million cage birds (Marshall et al., 2020) and it is likely that number is still rising, putting extreme pressure on wild populations, particularly some protected species (Jepson and Ladle, 2011; Marshall et al., 2020).

Some of the bird species in the trade are captive bred, although demand appears to be low. The majority are wild caught, which circumvents the difficulties and expense of captive breeding (Burivalova *et al.*, 2017).

In 2020 the COVID-19 pandemic reached Indonesia, and in March the government began implementing social restrictions known as PSBB (Pembatasan Sosial Berskala Besar-Large Scale Social Restrictions). These were implemented to various extents in different parts of the country; generally non-essential public gatherings were not allowed. This meant that bird singing competitions could not take place in person, and indeed there were incidences of bird singing competitions being closed by the police. The bird singing competition communities adapted by launching online competitions, first recorded by TRAFFIC in April 2020; these quickly became popular in Indonesia. This short report documents the new trend of online bird singing competitions and discusses the impact it may have on trade in wild bird populations in Indonesia.

### **Methods**

Posts advertising both online and offline (i.e. physical, in person competitions) bird singing competitions (hereafter referred to as "posts") taking place were searched for online between April and June 2020. Omkicau.com and Wartahobi.com, two major websites that offer comprehensive lists of compiled competition posts from across Indonesia, were the main focus of searches. Facebook and Google were also searched with keywords in Bahasa Indonesia including Kicaumania and Lomba burung (bird competition). Some data were also collected

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by *ad libitum* searching on Facebook, including in Indonesian bird hobbyist groups. The mobile application (app) for online competitions, TicketCS OCO, was frequently shared in Facebook groups, therefore it was downloaded and competitions held on this platform were also recorded. Competition posts were back-searched to January 2020. Data collected included competition dates, platforms used, number of competitors, species competed, entry fees and prizes.

Bird singing competitions include several distinct contests for different species and singing levels, with different entry fees and prizes for each contest. All of the contest details within each competition were recorded.

### LEGISLATION

Article 21.2 of Indonesian Law No. 5 1990 Concerning the Conservation of Living Resources and their Ecosystems states that it is illegal to catch, injure, kill, keep, possess, care for, transport, and trade in live and dead protected animals, move protected animals within or outside of Indonesia, and to trade, keep or possess skin, bodies or other parts of a protected animal or goods made of parts of the animal. The maximum penalty for transgression is five years imprisonment and a fine of up to IDR100,000,000 (USD7,000).

### **Protected species regulation**

In July 2018, an updated and revised protected species list was passed after almost 20 years since the previous list (Government Regulation No. 7 of 1999 Concerning the Preservation of Flora and Fauna). Overall this saw more species offered protection, however the list was revised in September 2018 under Government Regulation No. 92 of 2018 (P.92/2018) and five species were removed as a result of strong lobbying from bird hobbyists and traders: White-rumped Shama Kittacincla malabarica, Javan Pied Starling Gracupica jalla, Strawheaded Bulbul Pycnonotus zeylanicus, Sangihe Whistler Coracornis sangihe and Little Shrikethrush Colluricincla megarhyncha. It is illegal to capture and trade these five species without a government permit as there is no quota for their wild harvest. However, capturing and trading of these wild caught birds is not punishable under Conservation Act (No. 5) of 1990, because they are no longer listed as protected species (Chng et al., 2018). The latest version of the protected species list is the P.106/2018 Second Amendment to the Regulation of the Ministry of Environment and Forestry 2018 Concerning Protected Types of Plants and Animals.

# Harvesting quotas

Annual quotas are also set for the capture of wild animals and harvesting of plants—in 2020, through Kuota Pengambilan Tumbuhan Dan Penangkapan Satwa Liar Periode Tahun 2020 of Government Regulation No. 8 of 1999 Concerning the Utilization of Wildlife (KLHK, 2020). The quotas apply to many populations of non-protected species and are renewed each year stating the species, the number of individuals that can be harvested

and from which part of Indonesia, the numbers designated for domestic use or export and what they can be used for. Many birds used in singing competitions have annual harvest quotas (KLHK, 2020).

### Regulations relating to bird singing competitions

Currently there is a lack of clarity over the regulations for holding bird singing competitions. However, the KSDAE (Directorate General of Nature Resources and Ecosystem Conservation), the federal agency responsible for wildlife trade regulation, released draft legislation in 2019 that explains in full new regulations for holding bird singing competitions. These are still under review at the time of writing, however they would appear to provide clear and comprehensive guidelines for those organising and taking part in bird singing competitions. They are split into three main sections; implementation, licensing and supervision (KSDAE, 2019).

Under current Indonesian laws, those organising any public event—including bird singing competitions—should prepare:

- A permit from the police for holding a gathering of people (PP No. 60/2017 Procedures For Licensing and Supervision of General Gatherings, Other Community Activities, and Notification of Political Activities).
- A letter of reference from the Department of revenue and tax if tickets are being sold for the event (UU No. 28/2009 Law Concerning Regional Taxes and Retributions).

Event Organisers may also be required to obtain the following:

- A government permit (depending on the scale of the event; local, district or provincial).
- A letter of reference from the relevant government agency (e.g. BKSDA). (Siswosoediro, 2008).

### RESULTS

## Posts recorded per month

In total 153 posts for bird singing competitions were recorded, including 111 offline and 42 online competitions. The majority (86%, n=96) of offline bird singing competitions recorded were on Java, and of these almost 70% occurred in western Java including the provinces of West Java (39%), DKI Jakarta (18%) and Banten (11%). From January through March 2020 there was an average of 34 offline competitions per month. However, between April to June 2020, when social restrictions were in place in Indonesia, there was an average of less than three live meetings per month. Online competitions started and became regular from April and continued through June with an average of 14 per month (Figure 1).

Social restrictions were in place in various locations throughout Indonesia from 31st March 2020 (Government Regulation No. 21/2020 on the Limitation of Large-Scale Social Interactions to Expedite Countermeasures Against COVID-19).

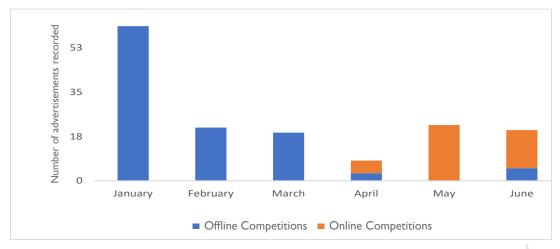


Fig. I. Number of recorded posts for online and offline bird singing competitions per month in Indonesia.

### **Bird species**

Competitions are usually advertised with lists of contests for different species or taxa and singing levels (Figures 2 and 3). Contests for 22 bird species and taxa (genus or family level) were advertised; all 22 taxa were advertised for offline competitions and 16 of these were advertised for online competitions. Five species made up a large proportion (62%, n=538) of those advertised (Table 1). Species which are protected and potentially protected (where only the taxa was given although some species within the taxa are protected) made up 173 (22%) of offline competitions and 23 (23%) of online competitions (Table 1). Prizes for categories involving protected species were generally higher than commonly wild caught and commonly captive bred species (Figure 4).

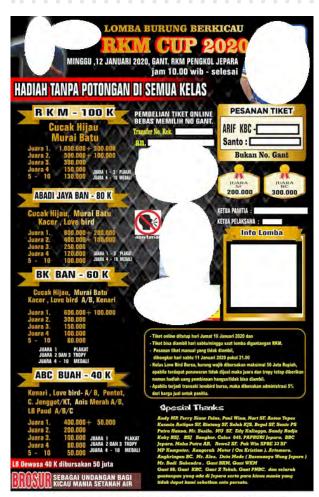
# Platforms used for online competitions

Four different platforms were recorded hosting online bird singing competitions (Figure 5). The mobile app TicketCS OCO held the most: 35 competitions held between 17th May and 30th June 2020. There was no information available about the number of participants in



Fig. 2.A post for an online bird singing competition to be held on 13th May 2020 (Wartahobi, 2020). This lists two contests, namely DEC and COVID, with a list of the species to enter each and the "Juara" or prize for each winning place.

each competition, so their size could not be gauged. To date, the TicketCS OCO platform has solely been used for bird singing competitions, although there was a recent post for a "coming soon" Betta fish online contest. This platform may be over represented in the results as it is easy to gather information from this app due to its layout compared with searching on Google, for example.



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Fig. 3.A post for an offline bird singing competition to be held on 12th January 2020 (Omkicau, 2020).

Table I. Bird species listed in advertisements for online and offline competitions.

Some are listed as a genus or family; those taxa that include species on Indonesia's 2018 protected species list are highlighted in orange, species considered to be domesticated are highlighted in green. Note: Jalak Suren can refer to either *Gracupica contra* or *Gracupica jalla*, the posts do not specify which.

Local name	Common name	Scientific name	Offline	Offline %	Online	Online %	Total	Total %
Lovebird (Lb)	Lovebird	Agapornis sp.	98	13%	24	25%	122	14%
Murai batu	White-rumped Shama	Kittacincla malabarica	102	13%	12	12%	114	13%
Kacer	Oriental Magpie- robin	Copsychus saularis	96	12%	8	8%	104	12%
Cucak hijau	Leafbird	Chloropsis sp.	90	12%	9	9%	99	11%
Kenari	Canary	Serinus canaria domestica	89	11%	10	10%	99	11%
Pentet	Long-tailed Shrike	Lanius schach	53	7%	4	4%	57	7%
Anis merah	Orange-headed Thrush	Geokichla citrina	47	6%	6	6%	53	6%
Kolibri	Sunbird	Nectariniidae sp.	42	5%	4	4%	46	5%
Pleci	White-eye	Zosterops sp.	21	3%	8	8%	29	3%
Branjangan	Horsfield's Bushlark	Mirafra javanica	22	3%	4	4%	26	3%
Cucak jenggot	Grey-cheeked Bulbul	Alophoixus tephrogenys	19	2%	2	2%	21	2%
Tledekan	Flycatcher	Cyornis sp	18	2%	2	2%	20	2%
Anis kembang	Chestnut-capped Thrush	Geokichla interpres	15	2%	I	1%	16	2%
Trucukan	Yellow-vented Bulbul	Pycnonotus goiavier	14	2%	1	1%	15	2%
Hwamei	Chinese Hwamei	Garrulax canorus	14	2%	0	0%	14	2%
Ciblek	Bar-winged Prinia	Prinia familiaris	13	2%	0	0%	13	1%
Jalak suren	Pied Myna	Gracupica contraljalla	8	1%	I	1%	9	1%
Kapas tembak	Olive-winged Bulbul	Pycnonotus plumosus	9	1%	0	0%	9	1%
Cucak rawa	Straw-headed Bulbul	Pycnonotus zeylanicus	2	0%	I	1%	3	0%
Jalak	Starling	Sturnidae sp.	I	0%	0	0%	1	0%
Poksay	Laughingthrush	Leiothrichidae sp.	1	0%	0	0%	1	0%
Serindit	Hanging parrot	Loriculus sp.	1	0%	0	0%	1	0%
			776	100%	97	100%	873	100%

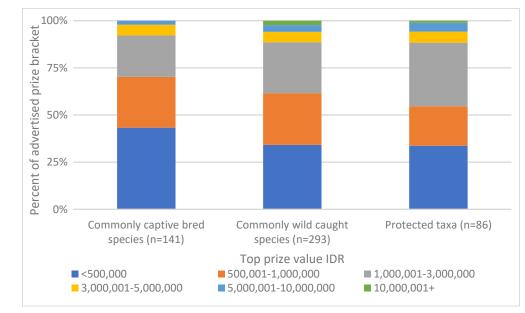


Fig. 4. Groups of bird species (refer to Table 1) and their respective percentage of advertised prize brackets.

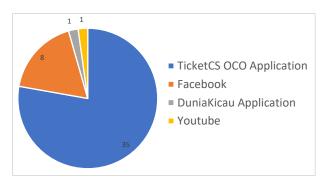


Fig. 5. Platforms used and the number of online bird singing competitions held, April–June 2020.

# Entry fees and prizes for online and offline competitions

Entry fees for online competitions are paid by transferring money or buying tickets from a particular app, for example TicketCS. Unfortunately, no data on total revenue or number of attendees for either online or offline competitions were available.

Prizes vary and include, from most to least frequently recorded: certificates (digital or paper), exclusive trophies, cash (see Table 2), cash percent revenue (a percentage of the profits from the competition, ranges from 40–80%), goats, motorcycles, birds, bird cages, fans, TVs, cars, gold, a Rolex watch, a T-shirt, a stove cooker, and often a combination of these.

### July and August 2020 update

By 2nd August 2020, regional PSBB restrictions were largely lifted, with only eight regencies in Jakarta and Greater Jakarta officially still implementing PSBB. As the restrictions are being lifted, the bird singing competitions are returning to pre COVID-19 times. From the beginning of July until 23rd August, 441 offline, in person competitions were recorded from our online searches. In July seven online competitions were recorded on the TicketCS OCO app, and none have been recorded for August on any platform. The online competitions app TicketCS OCO has not been updated since 26th July. Therefore, it appears that online competitions are unlikely to continue after the COVID-19 pandemic. Nevertheless, these data and this report demonstrate the resilience of bird singing competitors in Indonesia.

## **DISCUSSION**

# Online vs offline competitions

A variety of websites, social media and purpose built apps are being used for bird keepers to compete using recorded videos and live streaming of their birds singing. Many require competitors to purchase an e-ticket to enter and participants compete for prizes including cash, goats, gold, cars, and other prizes.

Since 2012 there have been three known previous endeavours to start online bird singing competitions, however none of them caught on in the same way. These included the SapuRegel Bird Contest System by Omkicau in 2013 (Omkicau, 2013), one Android app Gantangan Burung Online in 2017 (Burungnya, 2020), and the website Duniakicau.com which started in early 2020. The Gantangan Burung Online competitions had prizes where winners would get virtual coins which could be redeemed in local minimarket shops. Duniakicau. com uses live streaming, however only a maximum of four competitors can join at one time. The purpose built applications and more comprehensive video set-ups for the new online bird competitions described here are more sophisticated, making them more attractive for competitors.

Social media and online platforms are very popular in Indonesia (Weiss, 2014), with Indonesians having one of the largest digital audiences in the world (Greenhouse, 2020). On average, Indonesian people spend three hours 26 minutes on social media every day—one hour four minutes above the global average (Greenhouse, 2020); this may make online bird singing competitions particularly attractive to Indonesians. Social media and e-commerce platforms are already established and widely used in the buying and selling of birds and other wildlife in Indonesia (Iqbal, 2015). Despite these factors and several benefits of online competitions such as no travel costs or travel time, participants able to compete with others nationwide, lower entry fees, and lower running costs for organisers, the most recent data from July and August 2020 indicate that this trend is unlikely to continue after social distancing restrictions are lifted. Indeed, the social role that bird singing competitions play in many people's lives may, in this case, be more important than the competition itself. However, online competitions may re-emerge in the future, in the event of circumstances which again restrict social gatherings.

Table 2. Entry fees for online and offline bird singing competitions. Exchange rate from www.xe.com on 18th July 2020 (USD0.000068 = IDR1).

	Number of competitions recorded	Average entry fee (range) IDR	Average entry fee (range) USD	Top prize (range) IDR	Top prize (range) USD
Online	46 (April–June 2020)	25,200 (0–50,000)	1.7 (0–3.5)	289,200 (25,000– 3,000,000)	20.3 (1.7–211.3)
Offline	III (January–June 2020)	176,400 (0– 10,000,000)	12.4 (0–704.5)	1,639,900 (40,000– 30,000,000)	115.4 (2.8–2,112.7)

### Implications for the conservation of protected birds

A total of 22 different taxa were recorded in competition, six of which contain species protected under Indonesian law (P.106/2018). Five species/taxa made up the majority of those in posts-two domesticated (lovebirds and anaries), and three commonly wild caught (Whiterumped Shama, Oriental Magpie-robin Copsychus saularis, leafbirds Chloropsis sp.) (Table 1). While some level of captive breeding occurs for the White-rumped Shama, continued seizures of trafficked birds suggest that some are still sourced from the wild (Leupen et al., 2018), and leafbirds are likely to be wild-sourced illegally; all species within the genus are currently protected, The Orange-headed Thrush Geokichla citrina, among the top seven species in this study, is routinely wild sourced and extremely over-harvested in Bali (Kristianto and Jepson, 2011).

Several taxa used in bird singing competitions are also very commonly seized by Indonesian authorities being traded illegally (Indraswari *et al.*, 2020). This is a cyclical problem: as species which are valued for their song are worth more, they are traded more and thus become rarer making them worth even more (Courchamp *et al.*, 2006). Bird singing competitions place a value on a species that directly impacts on this cycle, thereby playing a crucial role in driving the demand that leads to the trapping and trade of wild caught birds. Therefore strict regulation of bird singing competitions would have a direct impact on the conservation of some wild bird populations.

Protected species were advertised in both online and offline bird singing competitions. This is illegal (except for birds already owned prior to and registered after the updated 2018 protected species list was announced) and a direct threat to the conservation of these species. Contests for protected taxa tended to have higher top prize values. It is essential that Indonesian law enforcement agencies assess and take action against competitions involving illegally kept birds, as bird keeping for competitions is one of the main drivers of extinction of wild songbirds (Burivalova *et al.*, 2017; Jepson and Ladle, 2005; Kristianto and Jepson, 2011; Marshall *et al.*, 2020).

The authors are unaware of any seizures of protected birds by law enforcement agencies at bird singing competitions in Indonesia (TRAFFIC, unpublished data). However, competitors joining online competitions may be more motivated to buy endangered and protected species as there is even less risk of being caught with protected birds than in offline competitions. Furthermore, protected species tend to fetch higher prizes. These factors may increase the demand for protected birds. Therefore it is vital that Indonesian law enforcement agencies monitor and take action against online and offline competitions promoting the use of protected bird species. The draft Bird Singing Competitions Regulations released by KSDAE (2019) show that the Indonesian government is serious about ensuring these competitions do not negatively impact on bird conservation. If these new regulations are implemented, it would be a major step

forward in regulating this industry. The draft outlines the phase-out of wild caught birds so that eventually only captive bred birds may be used for competitions, and even touches on protecting species listed in the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) (article 9,5). Non-native CITES listed species do not usually receive protection in Indonesia so this would be a huge breakthrough and potentially benefit the conservation of many species. However, the draft regulations make no mention of online bird competitions; if allowed to continue this will be a necessary addition, including ways to ensure captive bred species are from legitimate captive sources and with demonstrable proof of purchase. The continuation of online bird singing contests poses a threat to the conservation of Indonesia's birds. Furthermore, when illegal activity takes place on an internet platform, the platform management also bears some responsibility to address the problem. Therefore the platforms identified during this research should be ready to take action if needed in a collaborative approach with in-country law enforcement agencies.

### **CONCLUSION**

The social restrictions as a result of the COVID-19 pandemic have generally not slowed or reduced bird singing competitions in Indonesia. Online bird singing competitions were, during the initial phases of the pandemic, comparable in frequency, species advertised, entry fees and prizes to offline bird competitions. Even though lockdown restrictions eased and online competitions lost their traction for now, several of the highlighted issues remain pertinent to the use of online platforms for wildlife-related activities, and to offline competitions.

Categories for protected species persist in these competitions, which is a cause for concern as this means there is a continued demand for these species. The extremely low risk of law enforcement action and often higher prizes from competing with protected bird species may increase demand for these species. The implementation of the draft 2019 KSDAE regulations on bird singing competitions would greatly improve regulation of this industry and would have many benefits for the conservation of several species, although it should be updated to include regulation of online competitions before it is implemented. Where the use of captive bred birds is supported, proper enforcement needs to regulate legitimate captive breeding facilities.

Online bird singing competitions will be difficult to police, however each platform management should work with law enforcement agencies and be responsible for shutting down competition activities involving protected species. Indonesian police and other law enforcement agencies should also be aware of, monitor and act against protected species being used in bird singing competitions, both online and offline. The proper regulation of bird singing competitions is vital for the continued survival of Indonesia's wild bird populations.

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