

# **Annual Report**

**January 2021 – December 2021**

**Cikananga Conservation Breeding Centre**



**CCBC**



# Contents

1.	Introduction.....	1
2.	CCBC Species Information .....	3
a.	Javan Green Magpie <i>Cissa thalassina</i> .....	4
b.	Black-winged Myna <i>Acridotheres melanopterus</i> .....	5
c.	Rufous-fronted Laughingthrush <i>Garrulax rufifrons rufifrons</i> .....	6
d.	Rufous-fronted Laughingthrush <i>Garrulax rufifrons slamatensis</i> .....	7
e.	Sumatran Laughingthrush <i>Garrulax bicolor</i> .....	8
f.	Spectacled Laughingthrush <i>Garrulax mitratus</i> .....	9
g.	Javan Warty Pig <i>Sus verrucosus</i> .....	10
3.	Species Picture Highlights.....	11
4.	Achieved Projects .....	12
a.	Block C.....	12
b.	Pig Facilities .....	13
5.	<i>In-situ</i> Fieldwork .....	14
a.	Javan Green Magpie Program .....	14
b.	Foundation Programmes .....	15
I.	<i>Ciletuh-Pelabuhan Ratu UNESCO Global Geopark (CPUGGp), West Java</i> .....	15
II.	<i>Malind-Bian Conservation Program, Papua</i> .....	16
6.	Goals for 2022 .....	17
a.	Ex-situ .....	17
I.	<i>Conservation Breeding</i> .....	17
II.	<i>Dismantling of Old Aviary Blocks</i> .....	17
III.	<i>Expand Conservation Breeding Programs</i> .....	17
IV.	<i>Insect Breeding</i> .....	18
V.	<i>Pig Facility Renovations</i> .....	18
VI.	<i>Clinic Facilities</i> .....	18
VII.	<i>Exporting Animals</i> .....	18
b.	In-situ .....	19
I.	<i>Continuation of Javan Green Magpie Program</i> .....	19
II.	<i>Community Conservation Breeding, CPUGGp</i> .....	19
III.	<i>Ciletuh-Pelabuhan Ratu UNESCO Global Geopark</i> .....	19
IV.	<i>Malind-Bian Conservation Program, Papua</i> .....	19
7.	Team Dynamic.....	20
8.	Sponsoring and Partnership .....	21
9.	Financial Review .....	22
10.	Appendix .....	22

# 1. Introduction

The following report reviews the year 2021 (January 2021 – December 2021) at Cikananga Conservation Breeding Centre (CCBC). For much of 2021, society in Indonesia was subject to varying levels of restrictions in an attempt to curtail the spread of the corona virus whilst the large undertaking of vaccinating the population was undertaken. The CCBC team thankfully stayed healthy during this period but we have been impacted by the lingering effects of the global CoVID pandemic which affected building projects, funding and also our *in-situ* impact. It has therefore been a difficult year to advance many plans but, nonetheless, we still have progress to celebrate and are immensely grateful to all our sponsors. Within this Annual Report is a brief summary of each species housed at CCBC, a project review from 2021 and goals for 2022 are described before closing with the financial review. Firstly, objectives that were made in December 2020 are presented, and their status assessed.

Table 1. Objectives set in the 2021 Annual Report and their status

Objectives	Status
<b>Ex situ</b>	
<b>Breeding of <i>Garrulax rufifrons</i>, nominate species and ssp. <i>slamatensis</i></b>	The conservation breeding of this species continues to present a considerable challenge with requirements for consistent breeding success not yet understood. Despite this, CCBC at the start of the 2021 breeding season (October) had one pair of nominate species successfully rear chicks to independence and will continue to encourage breeding until the end of the 2021/2022 breeding season. More on this species and subspecies in their respective sections, 2c and 2d.
<b>Continue growing population of <i>Acridotheres melanopterus</i></b>	The conservation breeding of this species was not undertaken in 2021 due to the enclosure capacity of the center having been significantly impacted by condition of old aviaries and the building of new aviaries.
<b>Focused breeding of Javan Green Magpie <i>Cissa thalassina</i></b>	After a few seasons of consistent conservation breeding success with this species, 2021 saw CCBC only have one bird which was reared to independence. We have a few theories but are ultimately unsure for the cause of this reduced conservation breeding success and are left somewhat confused. More on this species in its respective section, 2a.
<b>Completion of Building Aviary Block</b>	This aviary block project was undertaken and completed in 2021, further details on this in section 4.
<b>Pig Facility Renovations</b>	Despite reduced funding in 2021, which in particular impacted the finances of our Javan Warty Pig programme, we were still able to undertake some necessary renovations and improvements. More details on these in section 4.

### Exportation of Birds

Plans to export birds to create conservation satellite populations unfortunately did not progress in 2021 past discussion. This goal will however remain for 2022 as potential national and international plans start to gain momentum.

### Begin further live breeding of other food sources

The funds for the new insect building were supplied in their entirety by Prague Zoo in association with the City of Prague and the building of this insect facility is due to begin in February 2022.

## *In Situ*

### Community Engagement

We continued into 2021 being involved in the planning of the conservation programs of the Ciletuh-Pelabuhan Ratu UNESCO Global Geopark. We also conducted social and biological surveying in 2021 as we look to progress community based programs and ecotourism potential of the site in 2022.

### Hire Field Biologist

Unfortunately our search for a suitable candidate to fill the permanent role of field biologist of YCKT was not successful in 2021. We however adapted our approach and have found a solution alongside our newly initiated *in-situ* Javan Green Magpie project, more in section 5.

### Hire Education Officer

With the CoVID situation in Indonesia in 2021, this goal was not deemed a priority as schools remained closed and we had minimal engagement with communities due to health concerns and widespread social restrictions.

## 2. CCBC Species Information

Table 2. Inventory of the species at CCBC at the start and at the end of 2021 (Male.Female.Unknown)

Species	As of 31/12/2020	As of 31/12/2021
<b>Javan Green Magpie</b> <i>Cissa thalassina</i>	17.23.1 (41)	16.24.0 (40)
<b>Black-winged Myna</b> <i>Acridotheres melanopterus</i>	30.30.0 (60)	28.29.0 (57)
<b>Rufous-fronted Laughingthrush</b> <i>Garrulax rufifrons rufifrons</i>	8.5.0 (13)	9.7.0 (16)
<b>Rufous-fronted Laughingthrush</b> <i>Garrulax rufifrons slamatensis</i>	3.3.0 (6)	3.2.0 (6)
<b>Sumatran Laughingthrush</b> <i>Garrulax bicolor</i>	17.7.0 (24)	17.6.0 (23)
<b>Spectacled Laughingthrush</b> <i>Garrulax mitratus</i>	4.0.0 (4)	4.0.0 (4)
<b>Javan Warty Pig</b> <i>Sus verrucosus</i>	19.17.4 (40)	22.23.0 (45)
<b>TOTAL CCBC</b>	<b>98.85.5 (188)</b>	<b>98.90.2 (190)</b>

### a. Javan Green Magpie *Cissa thalassina*

The population of Javan Green Magpie at CCBC reduced by one over this period of review, with the current population now at 40 individuals. The two birds to hatch were from the same clutch and were from a F0 and F1 pairing, the first time either parent had successfully bred. Unfortunately one of the offspring died from a respiratory infection at a few months old. A further two individuals died over this period, an F1 female and an F2 male. The F1 female is suspected to have died from a night fright as damage and internal breeding were found on the skull on necropsy, the F2 male died from a systemic infection of unknown cause.

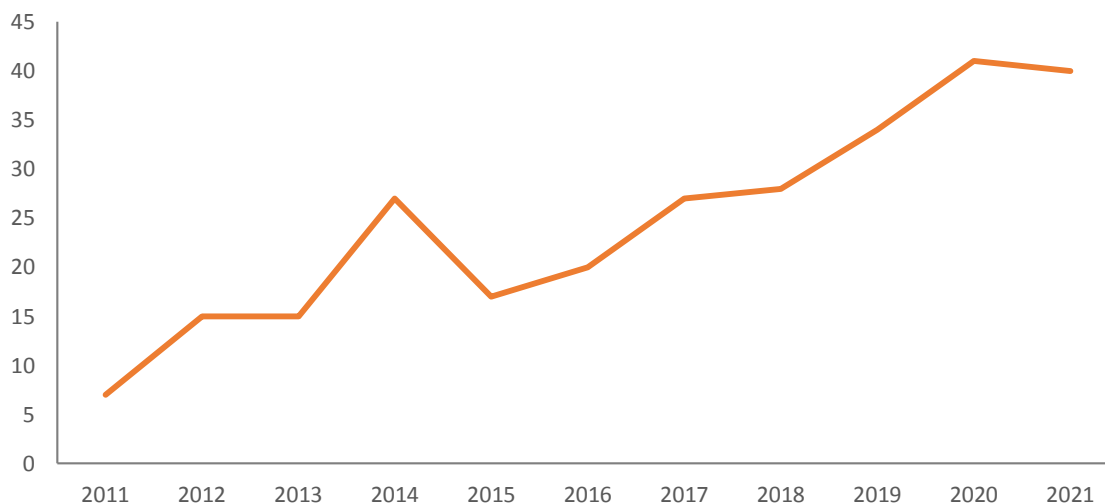


Figure 1. Population size of the Javan Green Magpie at the end of the year at CCBC since 2011

The breeding of this species for the past year has, for unknown reasons, been very disappointing with multiple pairs constructing good nests but not having breeding attempts and the birds having breeding attempts either producing infertile clutches or failing during the rearing process. Previous successful breeding seasons leave us with a positive outlook however. The sex ratio of our population is well balanced with a skew in favour of females and the shape of the age pyramid healthy in terms of future breeding efforts. This age pyramid is a fair representation of our population as currently 29 birds in the population are either F1 or F2, some of the older birds therefore are likely older than is presented in the age pyramid.

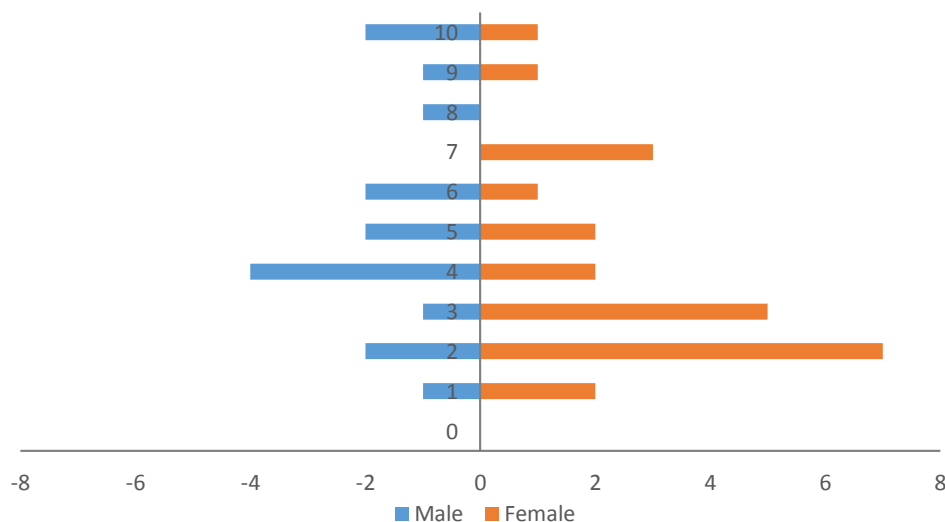


Figure 2. Age pyramid of the current Javan Green Magpie population at CCBC

## b. *Black-winged Myna* *Acridotheres melanopterus*

Over 2021 our population declined by three individuals, despite plans to recommence the breeding programme of this species in 2021, aviary capacity was a limiting factor and this will now occur over the drier months of 2022. The three birds that died were all 10 years of age or older, two of which were euthanised for health reasons that were affecting their quality of life and the other succumbed to a tumour. We have worked hard with the management of this species which is very sensitive to endoparasites, to have no deaths in 2021 associated to parasite burden is a huge achievement for the center.

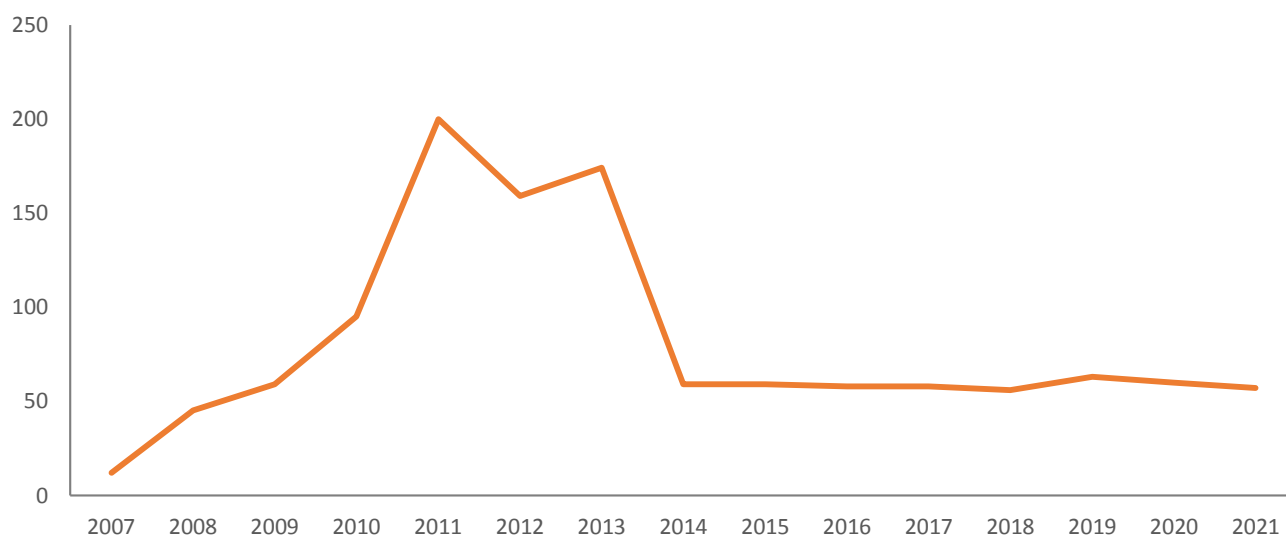


Figure 3. Population size of the Black-winged Myna at the end of the year at CCBC since 2011

This breeding programme still suffers from the theft in 2014 and the numbers of our population have never been able to recover to pre-2014 numbers. In 2022 we will focus breeding on underrepresented genetics in older individuals in line with recommendations from the International studbook. Of our population 24 are founding individuals with estimated ages inputted within the age pyramid, 15 of these birds are situated on the age 8 point and all arrived in the same confiscation from the same location in 2018. For these birds we would like to conduct interrelatedness testing before encouraging breeding within our population.

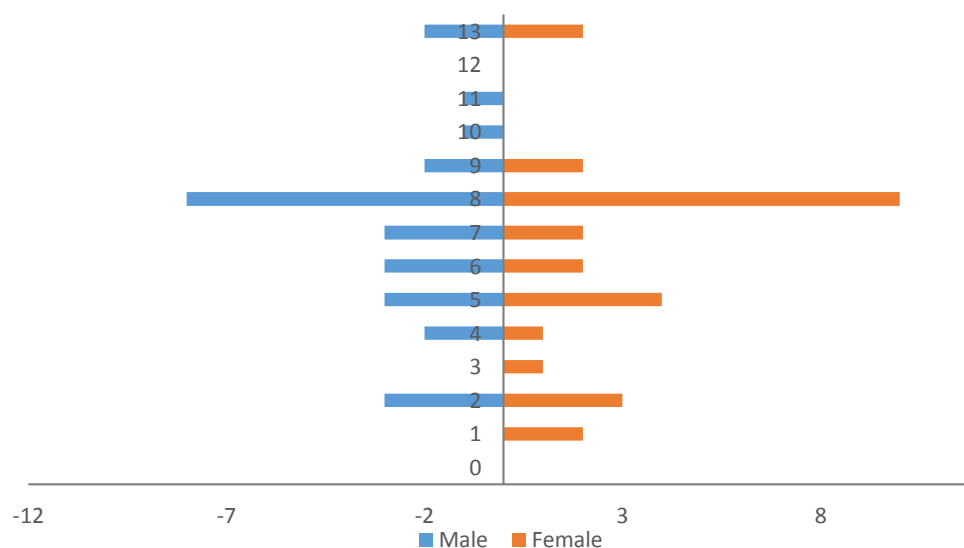


Figure 4. Age pyramid of the current Black-winged Myna population at CCBC

### c. Rufous-fronted Laughingthrush *Garrulax rufifrons rufifrons*

In 2021 the population of sp. *rufifrons* increased by three individuals with four birds hatching from two separate clutches of the same pair, one of these individuals died before fledging. Besides the chick that died pre-fledge, no other deaths were recorded from this species in 2021 and this is the first time since the inception no adult deaths have occurred over the course of a year. Whilst we still try to fully understand the breeding requirements of this species, we can take a lot of positives from our husbandry technique and overall health of our population.

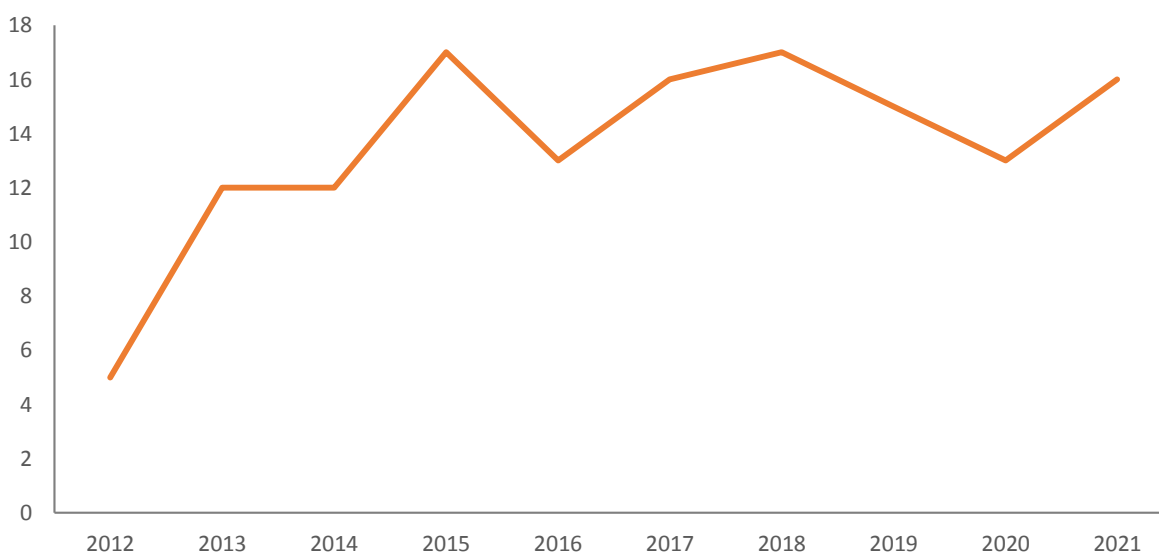


Figure 5. Population size of the Rufous-fronted Laughingthrush sp. *G.r. rufifrons* at the end of the year at CCBC since 2012

Because of the difficulties with the conservation breeding of this species the age pyramid is potentially not that representative of the population as it is made up of nine founders with estimated ages. This breeding programme is still small and lacks in genetic diversity, this is a programme that would greatly benefit from new individuals. This is especially true as we still have founding individuals which are yet to produce offspring and are likely close to passing reproductive age, if not already.

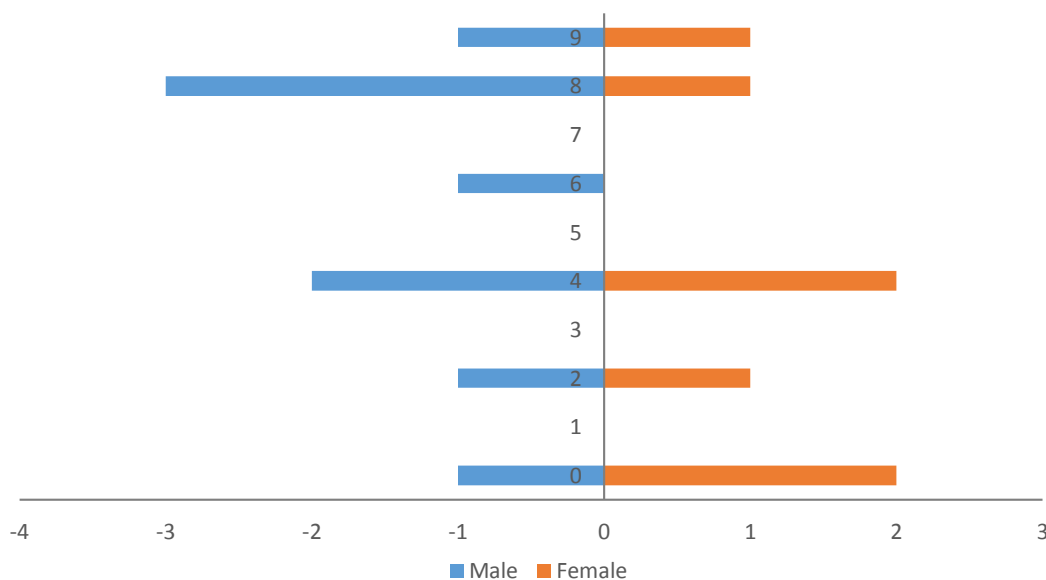


Figure 6. Age pyramid of the current Rufous-fronted Laughingthrush sp. *G.r. rufifrons* population at CCBC



#### d. *Rufous-fronted Laughingthrush Garrulax rufifrons slamatensis*

Our population of ssp. *slamatensis* decreased by one individual over this period with the death of a founding female. This death was frustratingly caused when the bird became egg bound and our medical assistance could not help it through this stressful event. We had been observing this pair closely and it would have been the first time that, to our knowledge, CCBC would have produced eggs from this subspecies.

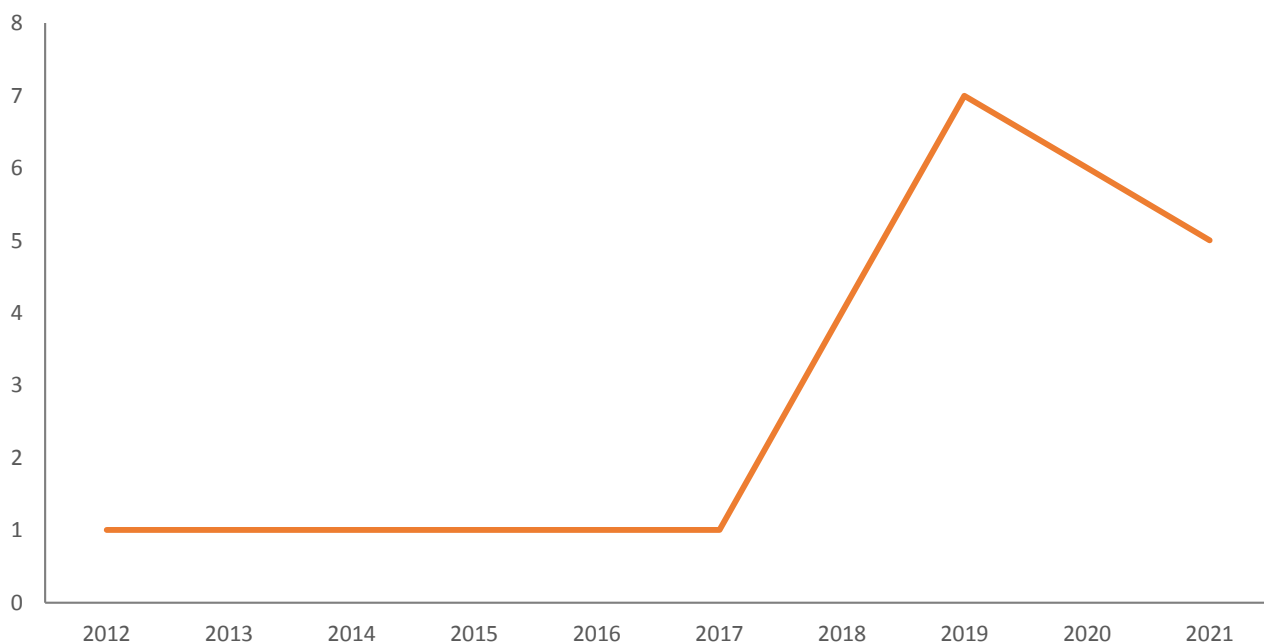


Figure 7. Population size of the Rufous-fronted Laughingthrush ssp. *G.r. slamatensis* at the end of the year at CCBC since 2012

As in previous years, the size of this breeding programme is very small and breeding success very limited. Whilst this programme would benefit from more individuals, our efforts are equally focused on furthering our understanding of this sub-species requirements in captivity. Currently our population is split in a ratio of 3 males and two females, as all individuals are founders it is important to note all ages are estimated. The remaining pairs have shown good breeding behaviour e.g. nest building and positive pair bonding behaviour over this period as we have adapted our approach and tried different techniques for encouraging breeding efforts.

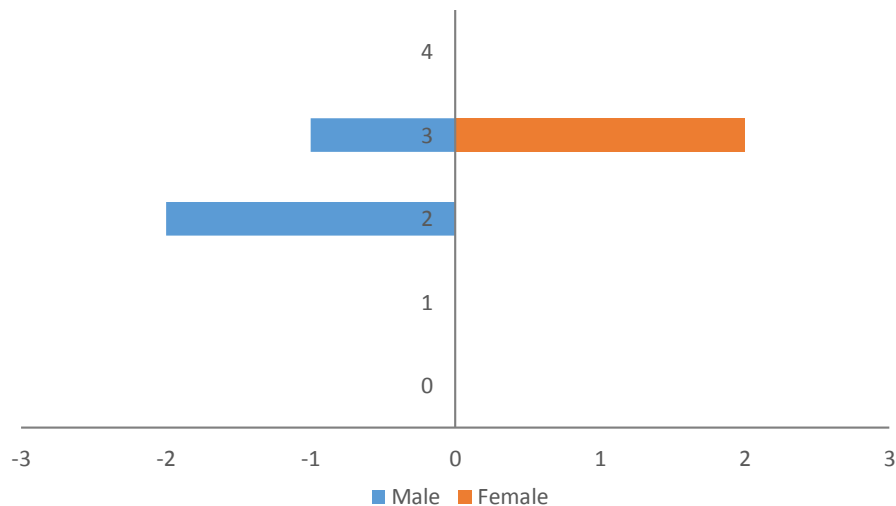


Figure 8. Age pyramid of the current Rufous-fronted Laughingthrush ssp. *slamatensis* population at CCBC

### e. *Sumatran Laughingthrush Garrulax bicolor*

Our population of Sumatran Laughingthrush decreased by one in 2021 when we lost a female at the start of the year from cagemate aggression. The trigger to this was unknown as this was a pair that had been together for a while and the dynamics in the block had not changed. The population of this species at CCBC is unlikely to grow as we do not encourage breeding while we plan the next steps for this breeding programme. With all genetics already represented in the European studbook we look to export the remaining individuals to other facilities, either nationally or internationally, to initiate new regional satellite populations.

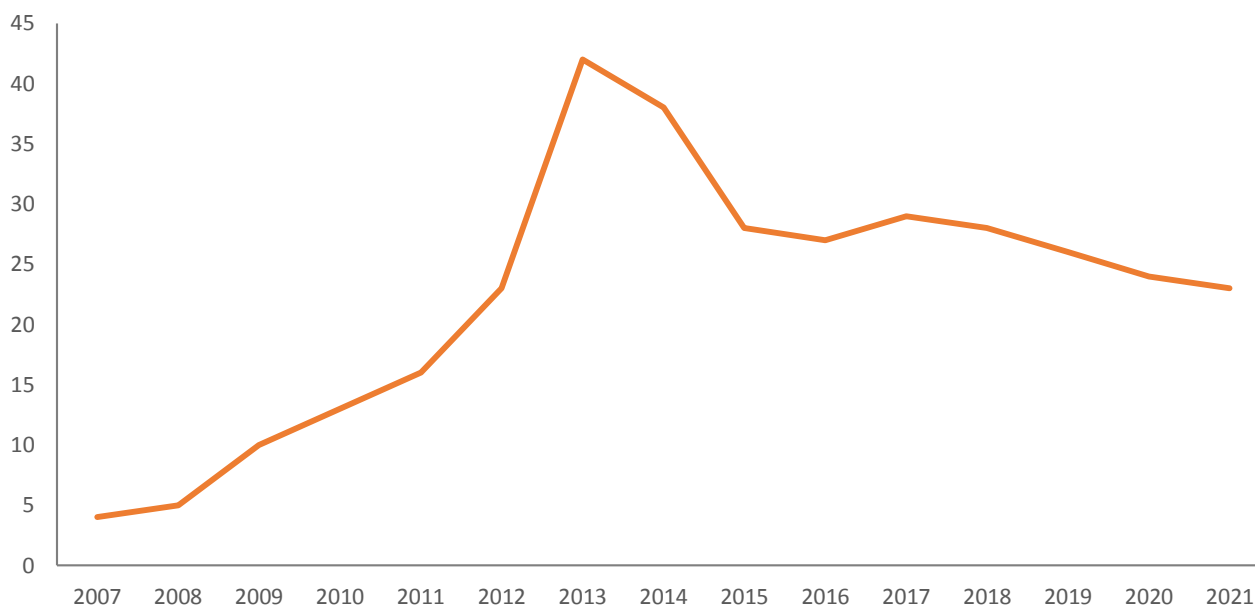


Figure 9. Population size of the Sumatran Laughingthrush at the end of the year at CCBC since 2007

The population of Sumatran Laughingthrush at CCBC is heavily skewed towards males and the balancing of this is high priority as alongside being inefficient for the breeding programme it also impacts upon capacity of CCBC. Due to the success over the years of this breeding programme, all birds bar four are F1 or F2 and the age pyramid therefore a very accurate representation of the population.

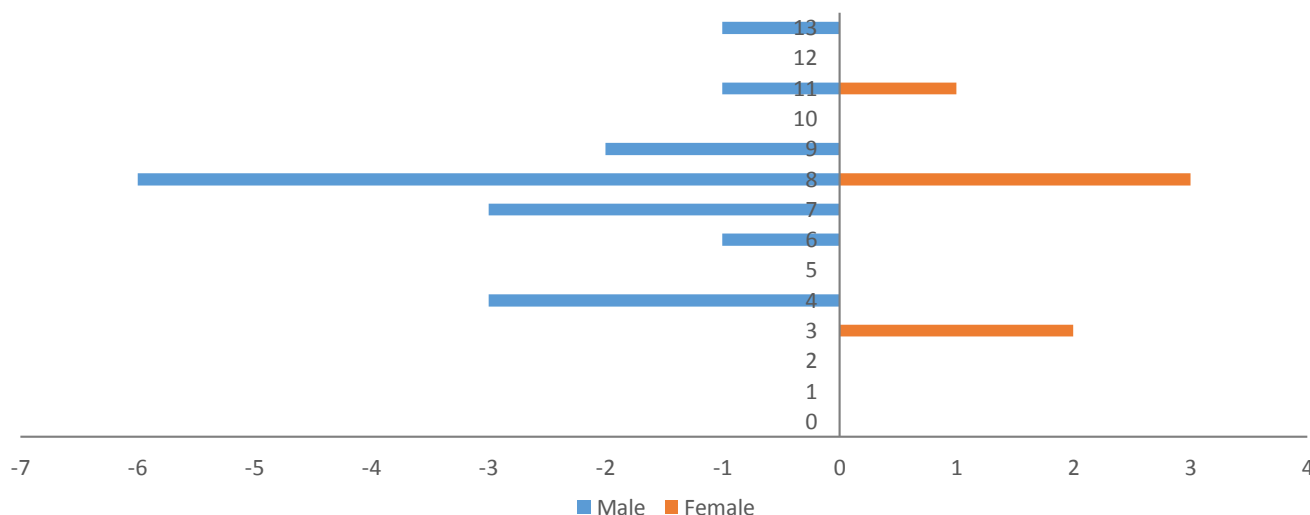


Figure 10. Age pyramid of the current Sumatran Laughingthrush population at CCBC

### f. *Spectacled Laughingthrush Garrulax mitratus*

The population of Spectacled Laughingthrush remained stable over this period as we continue to house a remnant population of four males from a now retired breeding programme. This species is no longer bred at CCBC due to the conservation status and trade activity not a cause for conservation breeding efforts currently, this however may change in the future. Initially this species was housed at CCBC as a model species for Laughingthrush husbandry.

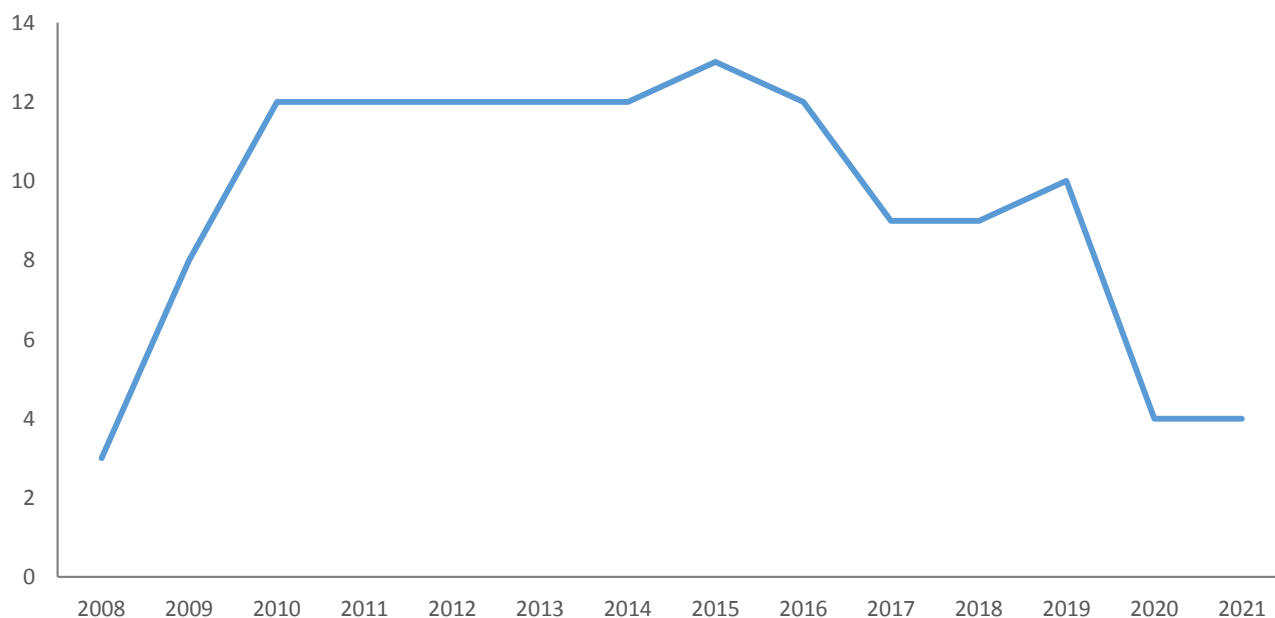


Figure 11. Population size of the Spectacled Laughingthrush at the end of the year at CCBC since 2008

The two older birds of this population are founding individuals whose age is likely older than is represented on the age pyramid. The two remaining birds are F1 individuals that were bred at CCBC. We will aim to export some, if not all, these individuals this year to facilities that offer them a larger area to exhibit natural behaviour and hopefully the opportunity to breed.

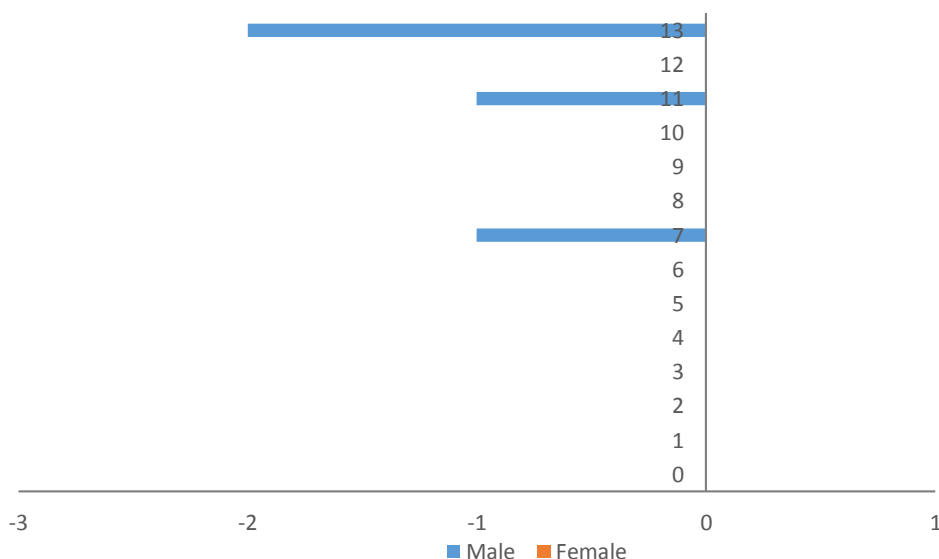


Figure 12. Age pyramid of the current Spectacled Laughingthrush population at CCBC

### g. Javan Warty Pig *Sus verrucosus*

Over this period of review the Javan Warty Pig population at CCBC grew by five individuals, this included the births of 10 pigs from three different pairs. Unfortunately, from one litter of five which were given birth to by a first time mother, four pigs died within a month. These piglets were highly likely eaten by the mother who was very stressed during the rearing period due to large scale celebrations that persisted for a week in the surrounding area. One other pig died over this period, an F1 male who had a poor body condition that after months of treatment we could not improve suggesting there was an internal issue. Sp. also had an issue with his penis whereby a defect had occurred and it no longer retracted or functioned typically. For these reasons, the decision was made to euthanize this individual as his poor condition had begun to impact his quality of life.

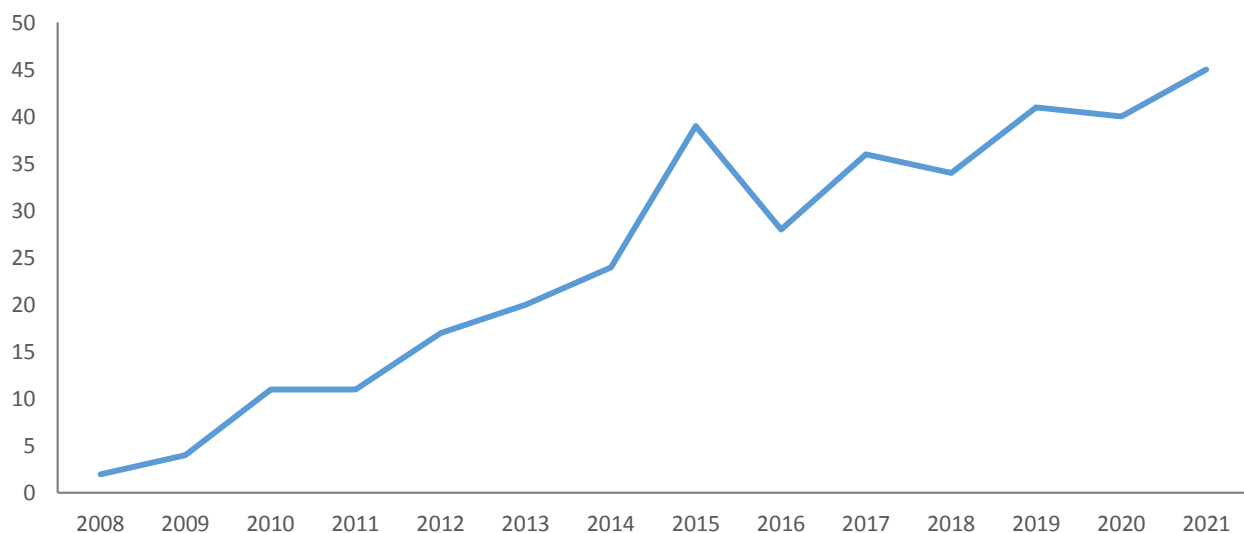


Figure 13. Population size of the Javan Warty Pig at the end of the year at CCBC since 2008

As our population continues to grow and funds to renovate and expand facilities cannot be found quickly enough, we begin to have issues with separating breeding groups due to the management challenge this species presents when making groups. This year we have plans to export pigs both nationally and internationally which we hope can come to fruition, providing us with some space to continue increasing our genetic diversity and benefitting the conservation status of this species by creating pure Javan Warty Pig satellite populations.

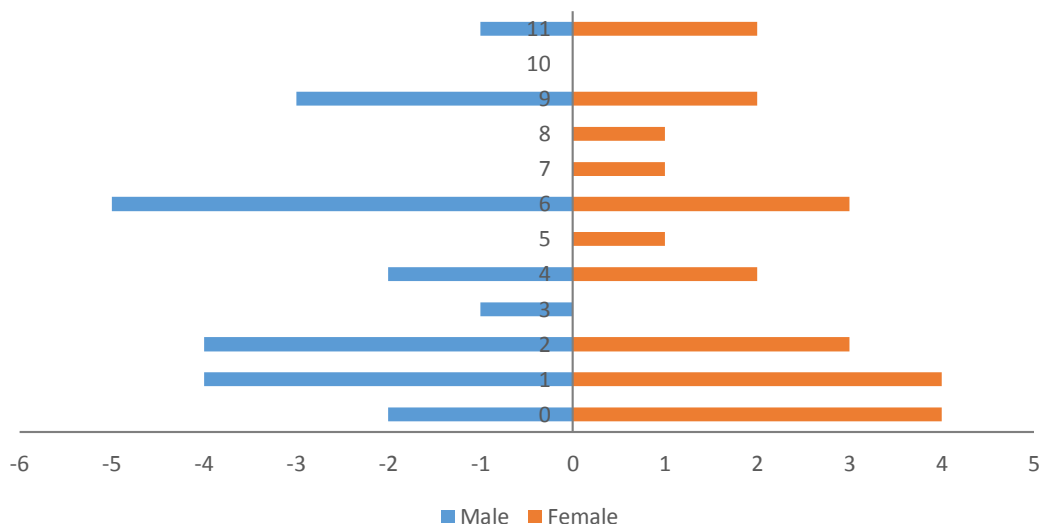


Figure 14. Age pyramid of the current Javan Warty Pig population at CCBC



### 3. Species Picture Highlights



*Javan Green Magpie in Breeding Condition*



*Black-winged Myna*



*Javan Warty Piglets Group Nap Time*



*Javan Green Magpies Incubating*



*Newly Fledged Rufous-fronted Laughingthrush*



## 4. Achieved Projects

### a. Block C

From March until the end of October the building of a new aviary block, Block C, was undertaken. Block C has expanded the footprint of CCBC significantly and, at its maximum capacity, provides CCBC with an additional 56 aviaries of varying size and specifications. The completion of Block C was very timely as the onset of heavy rains in November pushed many of the older aviaries of CCBC to become unusable. Unfortunately, due to the delayed completion of Block C, the vegetation in many of the larger aviaries we intend for the breeding of our more sensitive species was not established enough for conservation breeding efforts in 2021. This project was not without its stresses as we saw price increases of materials throughout the build and we are immensely grateful to Chester Zoo, EAZA Silent Forest Campaign, Montpellier Zoo, Rothschild Foundation and Waddesdon Manor Aviary for helping us achieve this important step in the progress of CCBC.



*Land Preparation*



*Foundation and structure*



*Bird Recovery Building*



*Large aviary before and after planting*





## *b. Pig Facilities*

In 2021 we were able to perform some essential repairs and renovations to our Javan Warty Pig facilities. Repairs were made to boundary walls and foundations which posed a risk of pigs escaping due to the movement of earth and digging of pigs! Renovations of an existing enclosure consisted of building a long corridor dividing it in two, creating a new enclosure. The addition of the corridor makes it easier to move pigs between enclosures avoiding the need to catch them whilst also providing a route for the keepers to more easily visually health check pigs.



*Rebuilt boundary wall*



*Foundations reinforced*



*Dividing corridor between enclosures*



*Completed dividing corridor*



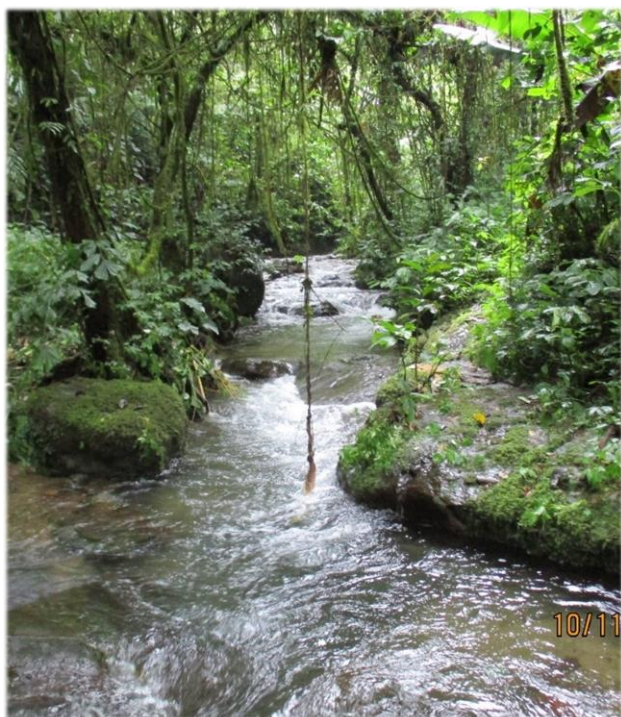
## 5. *In-situ* Fieldwork

### a. *Javan Green Magpie Program*

In the summer of 2021, CCBC was delighted to be able to initiate our *in-situ* program for the Javan Green Magpie in partnership with Chester Zoo and Manchester Metropolitan University with funding from the EAZA Silent Forest Campaign. The aim of this program is to gain a comprehensive understanding of the status of this species currently in Java by researching trade networks and activity, *in-situ* field surveys and social surveys with communities who live close to potential Javan Green Magpie habitat. These vital first steps will enable us to understand threats at multiple locations and assess the wild status. These results will then dictate how we approach the program going forward e.g. protection of a remaining population through community based programs, restocking of birds in the wild or increase the focus on conservation breeding whilst mitigating *in-situ* threats.

After initially planning to hire a field biologist and a community officer, a difficult search for suitable candidates meant we had to adapt our approach and we hired one program officer to lead the project instead. This has been a good decision, and our program officer, Meidiyanto, is proving to be a very hard worker with high quality output (more on Meidiyanto in section 7). We will then, when necessary, hire experts from within our network for short periods of time for more specialist activities such as intensive habitat surveys.

Since the beginning of this project, Meidiyanto has conducted regular trade surveys online and in markets, spent periods of time with communities close to historic and potential Javan Green Magpie habitat and also joined with experienced local community members to survey habitat. Initial results from this program, combined with other recent surveys, are suggesting the status of the Javan Green Magpie in the wild is dire and is being pushed close to extinct in the wild.



*Typical Javan Green Magpie habitat*



*Local bird store*



*Meidiyanto with local community members*



## b. Foundation Programmes

The parent foundation of CCBC, Yayasan Cikananga Konservasi Terpadu (*Cikananga Integrated Conservation Foundation – YCKT*) has multiple long term programmes that currently, or in the future, will span both CCBC and Cikananga Wildlife Rescue Center. The following section describes the progress that was made with these in 2021.

### I. Ciletuh-Pelabuhan Ratu UNESCO Global Geopark (CPUGGp), West Java

The overall conservation direction of the CPUGGp site continues to be managed by YCKT. This is a broad role and is a programme that in 2021 included social and habitat surveying. Social surveys were conducted with a particular focus on historical and present occurrence of hornbill species but also covered multiple environmental topics such as poaching, forest usage and biodiversity. These initial surveys with the local community are key as we look ahead for future projects. Multiple habitat surveys were also undertaken. Firstly we conducted focused surveying of the Wreathed Hornbill in the Cikepuh Wildlife Reserve, a large protected area within the CPUGGp site. With these surveys we assessed population dynamics and monitored behaviour ecology, an important first step for bigger plans in 2022 (more details in section 6f). Wider surveys were then conducted within CPUGGp that identified conservation hotspots that were outside of protected areas, such as wildlife corridors which are crucial for future conservation plans that involve maintaining and improving genetic diversity of local animal populations.



*Cikananga team conducting social surveys*



*Field survey team*



*Wreathed hornbills in flight*

## II. Malind-Bian Conservation Program, Papua

During the period 2019 - 2021, Cikananga Wildlife Center (YCKT) has assisted in preparing a social-environmental program to support sustainable development of indigenous communities and nature conservation in the Lake Bian Wildlife Reserve (*Suaka Margasatwa Danau Bian* - LBWR), in Merauke District, Papua. The program will be entirely funded by the plantation company PT Bio Inti Agrindo to fulfil requirements for RSPO Certification. For implementation of this program, the company agreed to create a consortium, consisting of three experienced local NGOs, namely: the national NGO PILI-Green Network (*Pusat Informasi Lingkungan Indonesia*) that will be leading the overall field project management and stakeholder engagement, the local NGO Yayasan Santo Antonius (YASANTO) that will be leading community development programs, and the national NGO YCKT that will be leading wildlife and habitat management.

The LBWR was officially gazetted as a wildlife reserve (*Suaka Margasatwa*) in 1990 to protect the habitats of 3 key species; the New Guinea Freshwater Crocodile (*Crocodylus novaeguineae*), the Brolga Crane (*Grus rubicunda*) and the Black-necked Stork (*Ephippiorhynchus asiaticus*) and, in addition, all freshwater fish species. The reserve is situated in a matrix of Lowland Rainforest and seasonal swamps, lakes and swamp forests. The area also serves as an important water catchment area for the Merauke Regency.



Entry to a traditional village inside the LBWR



Slaters Crowned Pigeon in a forest within the LBWR

The ultimate goal of the Compensation Plan is to reduce current, latent and emerging threats to LBWR to maintain and enhance terrestrial and aquatic ecosystems and their biodiversity and ecosystem services over the long-term. It will also include a high level of community involvement and long-term benefits to the local communities. This will be accomplished through five inter-related strategic / programmatic approaches:

1. Improving management of LBWR through a collaborative management approach for conservation activities and monitoring
2. Improving the welfare of the local communities through strengthening livelihoods based on sustainable natural resources management
3. Sustaining natural resources management through a conservation incentive program
4. Implementing Integrated Fire Management in the landscape
5. Advocating for implementation of best management practices by all stakeholders in the landscape

## 6. Goals for 2022

### a. *Ex-situ*

#### I. Conservation Breeding

##### *Black-winged Myna*

With increased aviary capacity, in 2022 we will recommence the conservation breeding of this species aiming to build our population. The genetic diversity of our population has unfortunately been limited since a large percentage of the population was stolen, so as well as breeding to maximise genetic diversity it will also be beneficial for us to test a number of birds that were received during confiscations for interrelatedness and possibly also acquire new individuals.

##### *Javan Green Magpie*

Following a successful few years for this conservation breeding programme, for reasons unbeknownst to us, breeding in 2021 was very disappointing. We will continue to encourage breeding in multiple pairs through the breeding season (October – March) as we aim to maximise genetic diversity. This is especially important in light of our *in-situ* program highlighting the importance of *ex-situ* conservation efforts for this species.

##### *Rufous-fronted Laughingthrush*

With successful breeding of *G.r.rufifrons* in 2021 we will continue into 2022 trying to build on these successes, importantly aiming to produce offspring from under represented genetics. This species presents a significant challenge for consistent breeding due to their very sensitive nature. This seems to be especially true with *G.r.slamatensis* which we still have had no success with, despite coming close in 2021.

#### II. Dismantling of Old Aviary Blocks

In the meantime, as we source funding for the building of new aviary blocks, we will prepare the land of where we plan to build. This will involve removing old unusable aviaries, salvaging material and then modifying the land to prepare for future designs e.g. moving of earth.

#### III. Expand Conservation Breeding Programs

As the facilities of CCBC progress, as does our desire to increase our conservation breeding programmes. Whilst we will still focus on building most of our current conservation breeding programmes, we also want to increase our conservation impact by applying our knowledge and experience to other species. Going forward we believe ourselves to have most impact by focusing on species/subspecies that are endemic to Java/West Java. This is due to the easier facilitation of in-situ efforts e.g. habitat surveying, community engagement programs, future releases.



#### IV. Insect Breeding

A goal that has been carried over from 2021 is the building of a bespoke insect building to progress CCBC in its goal of being self-sustainable where possible whilst also diversifying the food types we offer our birds. Funding was sourced for this project in 2021 from Prague Zoo in association with the City of Prague and was delayed due to availability of reliable builders, this project will now be undertaken in February 2022.

#### V. Pig Facility Renovations

The renovation of the Javan Warty Pig facilities is an ongoing goal due to the size of these facilities and instability of land. This year we will aim to build enclosures that are suitable for holding single full grown males, reinforce foundations and, if possible, divide a large enclosure in two using a corridor system as was done in 2021.

#### VI. Clinic Facilities

As it stands, when CCBC has a sick or injured bird that needs regular treatment we are limited in facilities that are appropriate. With the building of Block C in 2021, we also built a bird handling and recovery room, in 2022 we plan to install holding cages in this building that are user friendly in design and which provide a calm environment to assist the recovery of birds.

#### VII. Exporting Animals

##### *Satellite Populations*

An important function of the conservation approach of CCBC is identifying other trusted facilities in the development of a satellite population network to provide security to the genetics of the *ex-situ* population. With facilities already identified, nationally and internationally, we will aim to realise these plans in 2022 for a number of our species, namely Javan Green Magpie and Javan Warty Pig.

##### *Reintroduction*

In 2022 we hope to be able to achieve the export of Javan Warty Pig to Baluran National Park again. Previous translocations to Baluran National Park were with the intention of pigs joining the breed and release program, subsequently the National Park has built a large habituation cage where soft release of pigs can be undertaken. This translocation will have to be done in the wet season, either at the start of the year, or the end, to maximise potential of successful reintroduction due to food availability.

## *b. In-situ*

### I. Continuation of Javan Green Magpie Program

We will aim to build on the positive start of the Javan Green Magpie program in 2022. The initial results give us solid foundations into the current status of this species in Java and also highlight the importance of our *ex-situ* and *in-situ* conservation efforts. In 2022, having highlighted several sites of interest and potential, we will conduct further surveys of habitat and socio-economic factors whilst also initiating awareness programs. Furthermore, we will try to gain more information from within the trade network of the Javan Green Magpie, this objective however will be challenging due to the covert nature of the information source.

### II. Community Conservation Breeding, CPUGGp

A program we would like to begin in 2022 is one that involves community members in the breeding and eventual release of birds. This program will need to be well planned and managed, so in 2022 we will aim to lay the foundations of the project by bringing birds into CCBC to initiate our local population and also identify suitable community members at the CPUGGp site who can assist us in this unusual but potentially very effective *in-situ* conservation technique. The species we have identified as being suitable for initiating this program is the Javan Pied Starling, a species that is highly likely extinct in the wild but estimated to number between 600,000 – 1,000,000 individuals in cages across Java and Bali.

### III. Ciletuh-Pelabuhan Ratu UNESCO Global Geopark

As well as the aforementioned community conservation breeding programme, the CCBC parent foundation, YCKT, is committed to continuing conservation efforts in the CPUGGp in 2022. This is a site that we intend to have long-term involvement with and in 2022 have plans in place for the community led habituation and release of Wreathed Hornbills *Rhyticeros undulatus* and the development of ecotourism opportunities for national and international tourism.

### IV. Malind-Bian Conservation Program, Papua

In 2022, the Cikananga Wildlife Center/CCBC will start supporting on the ground activities in Papua, including:

1. Conducting thorough baseline Biodiversity Assessments including Flora, Fish, Birds, Mammals, Reptiles and Amphibian species
2. Preparing facilities that will support law enforcement related to illegal wildlife trade of Papuan wildlife species, including Rescue, Rehabilitation and Release facilities
3. Assessing the need for community breeding programs of Papuan wildlife species that are either in need of a conservation breeding program, or that are commercially attractive for long-term community-based sustainable use programs
4. Setting up breeding programs for a selection of the above-mentioned species

## 7. Team Dynamic

The CCBC team grew by two staff members in 2021, expanding both the captive care and the *in-situ* aspects of the team. Firstly, Dodi joined the team to primarily assist with the husbandry of our large Javan Warty Pig population and to also act as general keeper cover. With Pak Aos, our head pig keeper, having worked at Cikananga for over 20 years with a wide variety of animals, Dodi provides some very welcome assistance for the physical demands of the job while also giving Pak Aos the opportunity to impart his knowledge to the next generation. Dodi is from one of the surrounding villages to Cikananga and, with a calm demeanour and a good eye for detail, has settled in to the role very well. Secondly, as mentioned in the *in-situ* fieldwork section, Meidiyanto has joined CCBC as the programme officer for the Javan Green Magpie programme. Meidiyanto brings to the role experience from working on projects pertaining to illegal wildlife trade and enabling positive change within communities in Indonesia. Meidiyanto has settled in well and has shown a strong work ethic, researching thoroughly and producing high quality output.



Dodi (right) with head pig keeper Pak Aos (left)



Meidiyanto conducting field surveys

The CCBC now consists of five keepers – Ajat Sudrajat, Pak Aos, Asep Mulyana, Wawan and Dodi - who are the primary caregivers of our local populations. We then have two full-time veterinarians – Wahyu Hananto and Bilan Viawan – who work very hard to ensure our local populations remain in good health. Meidiyanto then leads on the *in-situ* Javan Green Magpie activities, a role we aim to expand the scope of as our *in-situ* activities also expand. Finally, to ensure the smooth running of CCBC, the primary management roles are held by Cahyono Subekti (Deputy Director of Operations) and Bertie Ferns (Conservation Breeding Manager). Special mention also goes to Resit Sozer, Director of Cikananga Wildlife Center, who is vital in the process of discussing and progressing plans.

## 8. Sponsoring and Partnership

- AfdPZ
- Asian Species Action Partnersip (ASAP!)
- Chester Zoo – *Core Partner*
- EAZA Silent Forest Campaign
- Fondation Segré
- Los Angeles Zoo
- Mandai Nature – *Core Partner*
- Montpellier Zoo
- Oriental Bird Club
- Prague Zoo in association with the City of Prague
- PT. Antam Pongkor
- Riverbanks Zoo and Garden
- Rothschild Foundation
- Tulsa Zoo
- Waddesdon Manor Aviary
- Wroclaw Zoo
- ZGAP – *Previous funder who were pivotal in progressing CCBC initially*
- ZSL

The CCBC team would like to thank all the above sponsors for their previous and continued support.

Thanks to your support during this period we have been able to keep a full complement of staff and have not been required to reduce staff working hours or wages. Alongside this, we have kept local populations of Critically Endangered and Endangered species to a high standard and seen progress on multiple fronts with *ex-situ* and *in-situ* projects. Without your support this important conservation work would not be possible.

## 9. Financial Review

*Removed*

## 10. Appendix

### Decision making protocol for acquisition of birds

Where possible the legal acquisition of birds is always preferable and the route of acquisition we pursue, working with the forestry department, rescue centres and sometimes convincing private owners without the need for financial exchange. The decision to acquire birds is not a decision that is taken lightly by CCBC as the risk this could pose to fuelling the trade is recognised. This being said, there are certain circumstances that, when used in conjunction, may merit this action, these are outlined below.

- 1) Is the species often handed over to CCBC following confiscations?
- 2) Is the demographic of the population in CCBC healthy? E.g. over representation of current genetics within population, age pyramid, sex skew, low population numbers.
- 3) Is the species/subspecies often seen within the trade?
- 4) Is the species/subspecies wild population numbers of extreme conservation concern?