

Wangi-Wangi White-Eye (*Zosterops sp. nov.*)



PRIGEN CONSERVATION BREEDING ARK
Winter Update / Annual Report
December 2020

By Jochen Menner



KASI
Konservasi Alam Satwa Indonesia



Preface

2020, which was overshadowed by the global spread of the Corona pandemic, certainly has been tremendously challenging for everyone. Zoos in almost every country of the planet have seen temporary closures, depriving them of crucial income. Taman Safari Indonesia, the Prigenark's parent institution was no exception, the TSI zoos were either closed or only allowed to operate with reduced visitor numbers for most of the year.

Nevertheless for PCBA it has been the most productive year so far.

At the beginning of the year we were operating with 99 Songbird aviaries and five enclosures for Javan warty pigs.

By the end of 2020 we have increased our capacities to 199 Songbird breeding aviaries, five paddocks for Warty pigs and eight enclosures for arboreal small carnivores, while a complex with 21 aviaries for threatened parrots and a room with 75 aquaria for threatened blackwater fish are almost finished.

Also in terms of breeding 2020 has been our most successful year so far. 13 Songbird species and both mammal species successfully raised offspring.

Those numbers are testimony of how fantastic our support is!

Without the generous support of our sponsors, Taman Safari and ZGAP not a single enclosure could have been built. We are endlessly grateful for all of your contributions to our success!

Thank you very much!

In the end of 2020, **Stephan Bulk** was leaving PCBA. He has been one of the founding fathers of our center.

After more than 11 years in Indonesia and remarkable achievements in the field of ex-situ conservation, he is starting his well-deserved retirement.

Stephan's contribution to the conservation of Songbirds and Warty Pigs in Indonesia can not be underestimated. At PCBA in particular, he was the one to build the foundation upon which all recent and future expansions and additions are based.

The entire team wishes Stephan all the very best!

4th Quartal 2020

Again, we have seen three very challenging months. With another lockdown being imposed on Taman Safari and a crumbling Indonesian Economy, our host TSI is still facing serious economical challenges.

Nevertheless, the support for PCBA is unshattered and we are able to operate on full capacity.



Once again we have been able to employ another animal keeper, Agus, to keep up with the ever growing number of breeding facilities, species and individuals.

Agus is the third new keeper in 2020, whose employment was made possible by the long term support of Vogelpark Marlow. It cannot be highlighted enough how valuable this support is for us, especially in a year like 2020!

Hill Myna Complex

The German “Zootier des Jahres” campaign and Vogelpark Marlow enabled us to build a aviary complex specifically designed to cater the needs of Indonesia's threatened Hill Myna species.

With 16 aviaries, each 4.5m long, 2m wide and 4m high, we now have enough capacities which strengthens our ongoing breeding efforts for Nias Hill Myna, Tenggara Hill Myna and Enggano Hill Myna.

By December, the first birds moved into the new complex and are obviously doing great. We were able to establish new pairs right away.

Thanks to large slide doors and good observability, pairing and grouping of the Mynas are made far easier and less stressful for the birds and the keepers.



New aviary complex for Hill Mynas

Parrots



Large aviaries for Cockatoos

With the construction of the Hill Myna complex being completed, we are now working with full force on our first breeding complex for threatened Indonesian Parrot species.

12 aviaries will house smaller species like Lories, Parakeets and Hanging Parrots while nine aviaries are designed to accommodate larger species, mainly Cockatoos.

Basel Zoo and Mr. Johannes Martin Wijaya, Indonesia, have made this breeding complex possible by donating specifically for it.



Parrot complex

Blackwater Fish



One of our three aquarium racks

Enabled by a generous donation by Uwe Abraham, Berlin, and the continuous support by the Parosphromenus Project, we are in the process of setting up a breeding room dedicated to Indonesia's most threatened blackwater fish species.

Over the course of the last weeks we have installed custom made racks and 75 tanks.

45 Tanks holding 35 Liter

15 Tanks holding 52 Liter

10 Tanks holding 61 Liter

5 Tanks holding 78 Liter.

Currently, we are working on the filtration system and especially on setting up of the right water parameters.

We expect to be ready to receive the first fish by early next year.

Experimental Insect breeding

With the growing experience in the breeding of more sensitive Songbird species, it is becoming increasingly clear that we have to become more innovative if we want to be successful.

With a number of species (e.g. Leafbirds and Wangi-Wangi White-Eyes) we are facing great difficulties to raise the chicks, many offspring die within the first days.

The most likely explanation is that our food supply is insufficient. Far harder is to solve this problem.



Adult Eri Silkmoth



Eggs and caterpillars of *Samia ricini*

Many canopy dwelling species certainly rely on caterpillars and other leaf eating insects and their larvae as food for the chicks. Currently, such insects are not available on a commercial scale as feeder animals.

In order to provide our birds with the best possible care, we have started breeding Eri Silk Moths (*Samia ricini*), in the hope that the provision of leaf eating Insect larvae might increase the survival rate of some of our most delicate species.

Remarkable changes in our populations

Songbirds

Successfully raised:

- Tenggara Hill Myna (*Gracula venerata*)

In the thirds quartal of 2020 we managed to raise another four Tenggara Hill Myna chicks, making up the total number of chicks raised in 2020 to 9!

One of the more recent chicks was abandoned by its parents on the fifth day, thanks to careful observation by our keepers, we were able to rescue the chick and hand raise it.



The same bird, on day 5 and day 34.

- Sumatran Laughingthrush (*Garrulax bicolor*),
Our successful breeding pair raised another two chicks in November.



Young Ruby-Throated Bulbul

- Rufous-fronted Laughingthrush (*Garrulax r. rufifrons*)
One chick was successfully raised by a pair of first-time-parents.
- Sunda Laughingthrush (*Garrulax palliatus*),
One chick has been raised by its parents.
- Javan Pied Starling (*Gracupica jalla*),
Once again we were able to raise four Javan Pied Starlings. Two pairs reproduced, both for the first time. Another great step forward in creating a stable ex-situ population was made when the first F2 bird raised a chick.

- Ruby-throated Bulbul (*Pycnonotus dispar*),
Two pairs raised one chick each. One of the pairs reproduced for the first time.
- Orange-spotted Bulbul (*Pycnonotus bimaculatus*)
For the first time two chicks were raised. Unfortunately both offspring were killed by other aviary inhabitants, most likely a Leafbird. Nevertheless, we have learned a lesson and understand the species a little better now, hence we feel confident to be able to breed Orange-spotted Bulbuls successfully in the near future.
- Javan Leafbird (*Chloropsis cochinchinensis*),
For the first time a Javan Leafbird not only fledged but reached independence at PCBA. This is a major step forward in the ex-situ conservation of the Endangered species.

- Javan White-Eye (*Zosterops flavus*),
Again, two pairs reproduced, raising a total of four chicks, one additional chick was lost just after fledging.

- Wangi-Wangi White-Eye (*Zosterops sp. nov.*)
Over the three months six chicks hatched. Two died in the nest the other four fledged.

One of the four fledglings was subsequently killed by a rat. This is the first time this has happened at PCBA. In general all our aviaries are rat-proof but in this specific case the rodent found its way into the aviary via a drainage pipe. The drainage pipe (and other similar ones) has now been modified, so that rats can no longer get access through them to the enclosures

- Maratua Shama (*Kittacincla (malabarica) barbouri*),
Seven Maratua Shama chicks have been raised by three pairs during the last three months.



Maratua Shama with two chicks

- Javan Green Magpie (*Cissa thalassina*),
Over the course of the last three months, three chicks were raised to independence. One chick had to be hand raised from just after fledging after it got wet from rain and the parents neglected it afterwards. For the first time, a Magpie hatched at PCBA reproduced successfully. Currently, more pairs are incubating eggs or raising chicks; therefore we might see a few more chicks fledging in the near future.

Acquisitions:

- We received three Nias Hill Mynas (*Gracula robusta*) and one Enggano Hill Myna (*Gracula (religiosa) enganensis*), donated by a wealthy Indonesian privateer.
- Three East-Javan Shamas (*Kittacincla malabarica omissa*) have been acquired from the trade. This subspecies is highly distinct from any other Indonesian Shamas and might even be a separate species. It is certainly is on the very brink of extinction. We are planning to set up several pairs to start an effective conservation breeding program.
- Three pairs of Straw-headed Bulbul (*Pycnonotus zeylanicus*) have been acquired from a local breeder. All birds are captive bred and unrelated and will form the foundation of our conservation efforts for this critically endangered species. The acquisition of all three pairs have been sponsored by Leipzig Zoo!
- Three Sumatran Mesias have been acquired from in private keeper

Losses

Over the course of the last three months we lost mostly nestlings as follows:

- A female and offspring Wangi-Wangi White-Eye to a rat attack
- A fledgling Javan White-Eye
- Two juvenile Sumatran Laughingthrushes
- One male Tenggara Hill Myna
- Five Javan Green Magpies, one was euthanized just after fledging, due to blindness. All others were nestlings that died of unknown cause
- One male East-Javan Shama died a few weeks after arrival
- Two Greater Leafbird nestlings died on the third day
- Six Maratua Shama chicks have been lost, necropsy results showed a Pneumonia in most cases, most likely related to the very wet and chill weather conditions.

Transfers

- 1.1 Sumatran Laughingthrushes
- 2.2 Ruby-throated Bulbuls
- 1.0 Javan Green Magpie and
- 1.0 White-crowned Shama

Have been transferred to Taman Safari Bogor for breeding purpose.

Javan Warty Pig

Four male piglets, born in August have been transferred to a display enclosure in Taman Safari Prigen, here they will function as ambassadors for our breeding efforts.

In return one adult female moved from the TSI enclosure to PCBA to breed with a founder male.

In November, our second female gave birth for the first time. Unfortunately, none of the four piglets survived the first two days. Since the female was a first-time-mother that is considered not too uncommon and we are confident that future litters will survive.

Accompanied by Stephan Bulk, two male pigs born at the Prigenark have been transported to Baluran National Park as part of a re-introduction project.



New female Warty Pig

Javan Small-toothed Palm Civet

At six months of age the first Civet born at PCBA has been separated from its mother. This will allow us to pair the breeding female with her previous male again, in the hope that they will resume reproducing.

Two more pairs have been showing nice pair behavior and we are hoping to see more offspring soon.

PCBA's Population, by the end of 2019 and 2020

English	Scientific	31.12.2019			Total		27.12.2020			Total
		M	F	?			M	F	?	
Javan Leafbird	<i>Chloropsis cochinchinensis</i>	6	5		11		6	5	2	13
Greater Green Leafbird	<i>Chloropsis sonnerati</i>	10	7		17		9	7	1	17
Fairy Bluebird	<i>Irena puella cf. turcosa</i>	3	2		5		3	2		5
Mangrove Blue Flycatcher	<i>Cyornis rufigaster</i>	3	2		5		2			2
Maratua Shama	<i>Kittacincla malabarica barbouri</i>	1	6	4	11		5	11	7	23
White-crowned Shama	<i>Kittacincla m. stricklandii</i>	8	8	5	21		7	11		18
East Javan Shama	<i>Kittacincla m. omissa</i>						1	1		2
Barusan Shama	<i>Kittacincla m. cf. melanurus</i>	1	1		2		1	1		2
Bornean Shama	<i>Kittacincla m. suavis</i>		1		1			1		1
Orange-headed Thrush	<i>Geokichla citrina rubecula</i>	1	3		4		2	4		6
Javan Pied Starling	<i>Gracupica jalla</i>	8	5	3	16		14	11	5	30
Tenggara Hill Myna	<i>Gracula venerata</i>	5	8		13		5	11	4	20
Nias Hill Myna	<i>Gracula robusta</i>	2	1		4		2	3	3	8
Enggano Hill Myna	<i>Gracula (religiosa) enganensis</i>						1	2		3
Sumatran Laughingthrush	<i>Garrulax bicolor</i>	4	4	2	10		4	4	2	10
Rufous-fronted Laughingthrush	<i>Garrulax rufifrons rufifrons</i>	2	6		8		2	4	1	7
Mount Slamet Laughingthrush	<i>Garrulax rufifrons slamatensis</i>	1	3		4		4	4		8
Sunda Laughingthrush	<i>Garrulax palliatus</i>	5	4	1	10		5	4	1	10
Sumatran Mesia	<i>Leiothrix laurinae</i>	2	4		6			1	3	4
Wangi-Wangi White-Eye	<i>Zosterops sp. nov.</i>	10	9	1	20		5	13	3	21
Javan White-Eye	<i>Zosterops flavus</i>			18	18		5	6	18	29
Javan Grey-throated White-Eye	<i>Heleia javanica</i>	3	2	1	6					
Yellow-ringed White-Eye	<i>Heleia wallacea</i>			1	1					
Orange-spotted Bulbul	<i>Pycnonotus bimaculatus</i>	5	3		8		3	3		6
Ruby-throated Bulbul	<i>Pycnonotus dispar</i>	5	5	3	13		6	5	3	14
Javan Green Magpie	<i>Cissa thalassina</i>	7	9	3	19		6	12	3	21
Javan Crested Shrikejay	<i>Platylophus g. galericulatus</i>	1	1		2		1	1		2
Bare-throated Whistler	<i>Pachycephala nudigula</i>								2	2
Sula Hanging Parrot	<i>Loriculus sclateri</i>								9	9
Red and Blue Lory	<i>Eos histrio</i>						4	4		8
Yellow-crested Cockatoo	<i>Cacatua sulphurea</i>							2		2
Javan Warty Pig	<i>Sus verrucosus</i>	5	4		9		3	8		11
Javan Small-toothed Palm-Civet	<i>Arctogalidia trivirgata trilineata</i>						4	3		7
		98	103	42	244		109	141	65	318

News from other TSI-projects

Black-winged Myna (*Acridotheres melanopterus*) at Taman Safari Bogor

Late 2019 brought heavy storms and massive damage to the vegetation in Taman Safari Bogor. Not only were several nesting trees destroyed but also a number of birds went missing after the storms, leaving only about 25 Mynas in and around TSI Bogor.

With the Corona pandemic hitting Taman Safari, no regular monitoring of the released Black-winged Mynas has been possible and the worst had to be feared.

Despite the uncertainties, a greater delight flourishes as new counts from the field are coming in. In December 2020, as many as 58 Mynas have been counted, the vast majority living on the grounds of Taman Safari with a few birds in nearby villages.

Regular breeding seems to occur and the first F2 birds have been observed in the wild. These are very encouraging signs that the reintroduction of this critically endangered species is heading into the right direction.

Apart from the growing population in the wild, another 17 Black-winged Mynas are kept for breeding purposes in a designated breeding facility. New founders will be added soon to increase the genetic viability of the captive population.



- **Javan Warty Pigs in Bogor**

Currently 7.3.4 Javan Warty Pigs are kept at Taman Safari Bogor. With recent birth of four offspring and, even more importantly, with a newly added founder pair, this group forms the second pillar of Taman Safari's efforts to conserve this highly threatened species.

Alongside the two pigs from PCBA, five Warty Pigs from Bogor have been sent to Baluran National Park for a reintroduction program.

- **Bali Starling at Bali Safari and Marine Park**

In April 2019, 40 Bali Starlings have been released on the premises of BSMP. Within the first few months nearly all 40 birds stayed in close proximity to the release site and started showing nesting behavior within weeks after release. A number of nestlings successfully fledged in the wild in 2019.

With the Corona pandemic hitting BSMP very hard, monitoring activities for the released Starlings had to be put on hold. This, coupled with the growing economical pressure on the locals, most probably led to poaching on Starlings. Casualties inflicted by territorial disputes and predators also have to be taken into account. All together led to decrease in released Starlings, leaving only three birds in the vicinity of BSMP.

Much more positive news comes from the Bali Starling breeding facility at BSMP. Currently 85 Starlings are being kept there, building the foundation for a possible future release.