

Red-and-blue Lory (*Eos histrio talautensis*)



PRIGEN CONSERVATION BREEDING ARK
Winter Update / Annual Report
December 2021

By Jochen Menner

Preface

With 2021 coming to an end, we reflect on yet another very challenging time.

For most of the year, Indonesia has been in the tight grip of the Covid pandemic. This led to businesses crumbling and many households struggling to make ends meet. Taman Safari Indonesia as a private business suffered heavy economic losses due to the shortfall of visitor numbers. Nevertheless, thanks to a very robust company structure and wise management, Taman Safari Indonesia is not only economically safe but recovering well.

For PCBA, 2021 was a very turbulent year, beginning with Stephan Bulk leaving PCBA to take on a position at Bandung zoo, and the resulting uncertainties in finding adequate replacement. At the same time we were able to double our fenced area, giving us space to further expand our conservation breeding efforts.

During 2021, we were able to complete another five breeding complexes for different animal groups and another complex has entered its final construction stage.

With Parrots, Galliformes and Blackwater Fish complexes completed, a number of new species groups have found their place at PCBA.

In addition to all the work right here in Prigen, we have also been able to start engaging in in-situ conservation projects, adding another important conservation tool to PCBA's work.



PCBA team by the end of 2021

Fourth Quartal 2021

In Lars Mundhenk, PCBA has found a new assistant curator and head keeper. After a lengthy wait for borders to open, the visa application process and a ten days quarantine period, he has finally been able to join the team in early December. His employment will help to further increase our animal husbandry standards and will put PCBA on an even more stable basis.

Lars' employment has been possible, once again, thanks to the outstanding partnership between Taman Safari Indonesia, KASI foundation, ZGAP and Vogelpark Marlow.



Newly employed Lars Mundhenk

Augsburg complex

By the beginning of December the new breeding facility, sponsored by Zoo Augsburg and ZGAP had been completed.

With a total of 12 aviaries of varying sizes, this complex is a highly vital addition to PCBA. Located away from the other songbird complexes, this new facility offers us the opportunity to house pairs of species with complex territorial behavior at greater distance from other pairs of the same species. At the same time, larger aviaries enable us to form colonies of Javan Pied Starling (*Gracupica jalla*), which will hopefully lead to even better breeding results with this critically endangered species.

All aviaries are interconnected via slide doors and flight tunnels, allowing for a very flexible management of the birds, which is especially important when forming new pairs or for the husbandry of bigger groups of birds.



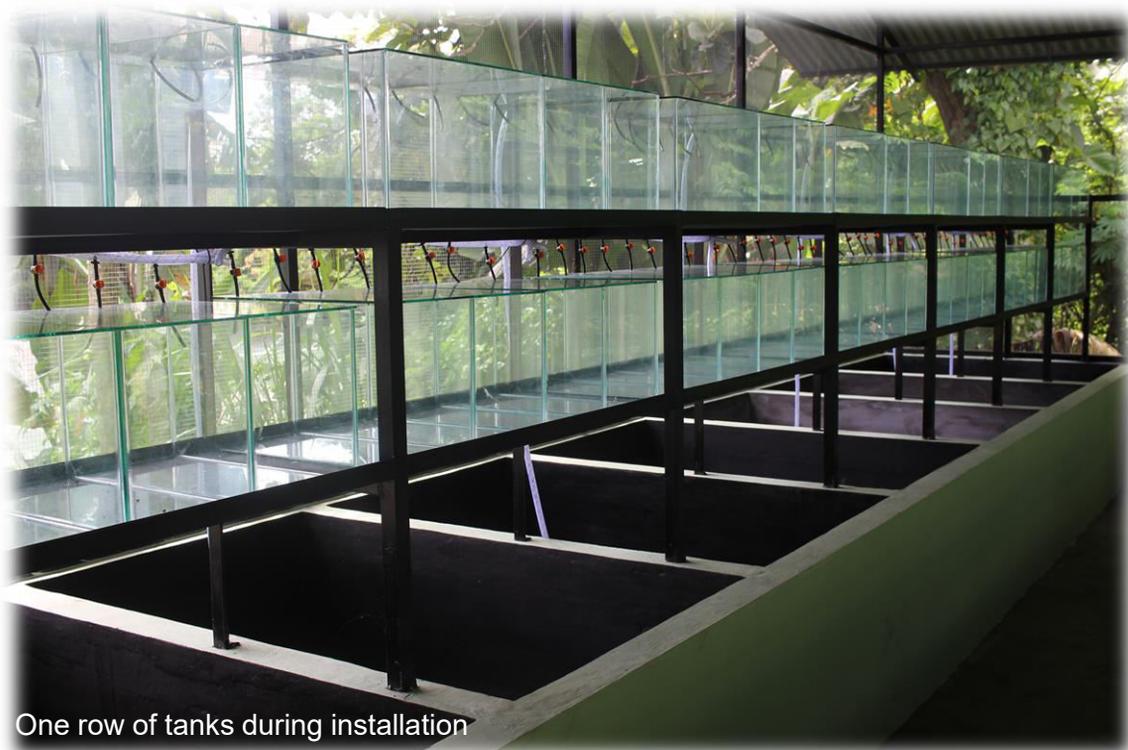
Newly completed Augsburg complex

Blackwater Fish facility

The new breeding facility for threatened Indonesian Blackwater fish is very close to completion with only minor details to be finished. This new, much larger complex will replace our existing breeding room for Blackwater fish, which, with minor modifications, will then be used for endangered fish endemic to Sulawesi's ancient lakes.

In the beginning of 2022 we will be able to move the animals into this revolutionary, and in terms of focus and scale globally unique facility with its 160 tanks. 140 aquaria and 20 concrete ponds with a combined capacity of 24.000 liters of water will allow for the creation of sizeable ex-situ populations of a number of species that are on the very verge of extinction. The focus of our breeding efforts will be on the genera *Betta* and *Parosphromenus*.

This project has been made possible by the generous support by European Association of Aquarium Curators (EUAC), Uwe Abraham and ZGAP, we are very thankful for the trust put in PCBA. It enables us to initiate ex-situ conservation efforts for species that have long been overlooked.



One row of tanks during installation

Feeder insect breeding

Thanks to the generous donation by Zoo Dresden, we have been able to set up 3 breeding rooms for various feeder insect species.

Equipped with both heaters and windows, these rooms enable us to create stable environmental conditions favorable for efficient insect breeding.

Currently we are breeding the following species as food for our valuable animal collection:

- *Tenebrio molitor*
- *Zophobas morio*
- *Alphitobius diaperinus*
- *Gryllus bimaculatus*
- *Gryllus testaceus*
- *Shelfordella lateralis*
- *Balptica dubia*

In the near future we might include more species at least on a trial basis.



Small Mammal breeding facility

Enabled by generous donations by Zoo Wroclaw, Zoo Leipzig, ZGAP and Roland Wirth we have been able to commence construction of an aviary complex, specifically dedicated to the conservation breeding of threatened smaller mammal species.

Our focus will be on non-carnivorous species like Slow Loris (*Nycticebus sp.*), Sunda Pangolin (*Manis javanica*) and Spotted Cuscus (*Spiloglossus sp.*)

A total of 19 enclosures will be available early next year. Each aviary will be equipped with several slide doors, allowing for flexible management of the highly sensitive animals.

Measuring 4m long, 2m wide and up to 4m high, the enclosures will offer ample space to house a variety of different species.



In-situ conservation

With the appointment of PCBA's very own biologist, Febry Riyad Hendiyanto, we have been able to start engaging in in-situ conservation projects.

The highest priority for the moment is the conservation of the last remaining populations of the Wangi-Wangi White-eye in Wakatobi National Park.

After preliminary discussions it became clear that Wakatobi National Park is very interested in cooperation with PCBA and Taman Safari to conserve its unique avifauna.

Febry, accompanied by Taman Safari's Keni Sultan has visited Wangi-Wangi island in December to deepen the understanding and partnership and has been welcomed with great enthusiasm. We are looking forward to a very fruitful collaboration and ultimately strengthened protection not only for the Wangi-Wangi White-Eye but also for the Yellow-crested Cockatoo (*Cacatua sulphurea paulandrewi*).



Project proposal being handed over by Keni Sultan (r) to the director of Wakatobi NP ©FRH



Wakatobi- (*Z.flavissimus*) and Wangi-Wangi White-eye ©FRH

Remarkable changes in our animal populations

Mammals:

With three male and two female Javan small-toothed Palm-Civets born at PCBA over the last 18 months our breeding program for this highly threatened species is becoming more and more stable.

Since all Civets are doing great we are nearing our holding capacity limits. An additional enclosure complex dedicated to small carnivores is therefore of urgent priority. Hopefully we will be able to realize this project in 2022, to be able to continue our breeding efforts for Javan Small-toothed Palm-Civet.



Young female civets

Parrots

Following the first breeding success of Sula hanging Parrot (*Loriculus sclateri*) in the third quartal, another pair reproduced within the past three months and is currently raising one chick.

For the first time we recorded a clutch of Red-and-blue Lory (*Eos histrio*) with two fertile eggs being laid and incubated well.

Unfortunately, the chicks did not hatch. Nevertheless, we are optimistic that our very young Lories will successfully reproduce in the near future.

Songbirds

Successfully raised during the last three months:



Nias Hill Myna being hand raised

- Three Tenggara Hill Myna (*Gracula venerata*) were raised by two pairs, one pair reproduced for the first time.
- One Nias Hill Myna (*Gracula robusta*) has been raised, which may represent the world's first successful captive breeding of that species. This chick was hand raised after its sibling died in the nest.
- Ten Javan Pied Starlings (*Gracupica jalla*) have been raised by four different pairs.
- Four Maratua Shama (*Kittacincla (m.) barbouri*) have been raised by two pairs, involving two so far unrepresented founders into the small ex-situ population.
- One Larwo Shama (*Kittacincla (m.) omissa*) was successfully raised
- Two Orange-spotted Bulbul (*Pycnonotus bimaculatus*) were raised by their parents.
- One Ruby-throated Bulbul (*Rubigula dispar*) was raised.
- Two Wangi-Wangi White-eyes (*Zosterops sp. nov*) have been raised by two pairs.
- Two Javan White-eyes (*Zosterops flavus*) have been raised by two pair.
- Two Sunda Laughingthrushes (*Garrulax palliatus*) were raised by two pairs.
- One Rufous-fronted Laughingthrush (*Garrulax r. rufifrons*) was successfully raised.

Acquisitions:

- One female Javan Leafbird (*Chloropsis cochinchinensis*) was donated to us by a local keeper.



Losses:

- Both young Sumatran Laughingthrushes (*Garrulax bicolor*) that hatched last quartal, succumbed to an unknown illness.
- One Mangrove Blue-Flycatcher (*Cyornis rufigastra*) died, possibly of old age.
- One young adult male Javan Green Magpie (*Cissa thalassina*) died of a bacterial pneumonia.
- One subadult Orange-spotted Bulbul (*Pycnonotus bimaculatus*) was killed by its cage mate.
- One adult female Maratua Shama died in the aftermath of an cloaca prolaps

Galliformes

With the completion of our new Galliformes breeding facility, we were able to move all Galliformes to their dedicated aviaries.



Grey-breasted Partridge

Blackwater fish

In preparation of moving all our Blackwater fish to the new facility, breeding has not been our highest priority. Nevertheless a few *Betta miniopinna* and *Parosphromenus bintan* have been raised. Apart from that we have been able to acquire a group of *Parosphromenus sp.* Bangka, a yet to be described species from Bangka island.

By the end of 2021 PCBA is home to the following fish species:

- *Betta hendra*
- *Betta rutilans*
- *Betta miniopinna*
- *Betta burdigala*
- *Betta cf. uberis* Belitung
- *Betta dimidiata*
- *Betta mandor*
- *Betta spilotogena*
- *Parosphromenus bintan*
- *Parosphromenus deissneri*
- *Parosphromenus ornaticauda*
- *Parosphromenus anjunganensis*
- *Parosphromenus pahuensis*
- *Parosphromenus sp.* Tangkit
- *Parosphromenus sp.* Bangka
- *Gymnochanda verae*

Animal Populations kept at PCBA

English	Scientific	27.12.2020				Total	31.12.2021				Total
		M	F	?	M		F	?			
Passeriformes											
Javan Leafbird	<i>Chloropsis cochinchinensis</i>	6	5	2	13		7	6		13	
Greater Green Leafbird	<i>Chloropsis sonnerati</i>	9	7	1	17		9	7		16	
Fairy Bluebird	<i>Irena puella cf. turcosa</i>	3	2		5		3	2		5	
Mangrove Blue Flycatcher	<i>Cyornis rufigaster</i>	2			2		1			1	
Maratua Shama	<i>Kittacincla malabarica barbouri</i>	5	11	7	23		9	11	4	24	
White-crowned Shama	<i>Kittacincla m. stricklandii</i>	7	11		18		5	9	1	15	
East Javan Shama	<i>Kittacincla m. omissa</i>	1	1		2		3	3	2	8	
Kangean Shama	<i>Kittacincla m. nigricauda</i>						4	1		5	
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>	2	4		6		2	5	1	8	
Javan Pied Starling	<i>Gracupica jalla</i>	14	11	5	30		15	13	14	42	
Tenggara Hill Myna	<i>Gracula venerata</i>	5	11	4	20		9	12	3	24	
Nias Hill Myna	<i>Gracula robusta</i>	2	3	3	8		3	4	1	8	
Enggano Hill Myna	<i>Gracula (religiosa) enganensis</i>	1	2		3		5	3		8	
Sumatran Laughingthrush	<i>Garrulax bicolor</i>	4	4	2	10		3	4		7	
Rufous-fronted Laughingthrush	<i>Garrulax rufifrons rufifrons</i>	2	4	1	7		2	3	1	6	
Mount Slamet Laughingthrush	<i>Garrulax rufifrons slamatensis</i>	4	4		8		3	1		4	
Sunda Laughingthrush	<i>Garrulax palliatus</i>	5	4	1	10		6	4	3	13	
Sumatran Mesia	<i>Leiothrix laurinae</i>		1	3	4			3		3	
Wangi-Wangi White-Eye	<i>Zosterops sp. nov.</i>	5	13	3	21		7	16	3	26	
Javan White-Eye	<i>Zosterops flavus</i>	5	6	18	29		7	6	25	38	
Straw-headed Bulbul	<i>Pycnonotus zeylanicus</i>	3	3		6		4	4		8	
Orange-spotted Bulbul	<i>Pycnonotus bimaculatus</i>	3	3		6		5	4	3	12	
Ruby-throated Bulbul	<i>Rubigula dispar</i>	6	5	3	14		10	8	2	20	
Javan Green Magpie	<i>Cissa thalassina</i>	6	12	3	21		6	12	5	23	
Javan Crested Shrikejay	<i>Platylophus g. galericulatus</i>	1	1		2		1	1		2	
Bare-throated Whistler	<i>Pachycephala nudigula</i>			2	2			1		1	

English	Scientific	27.12.2020			Total	31.12.2021			Total	
		M	F	?		M	F	?		
Parrots										
Red and Blue Lory	Eos histrio	4	4		8		6	4		10
Scarlet-breasted Lorikeet	Trichoglossus f. mitchellii								1	1
Sula Hanging Parrot	Loriculus sclateri			9	9		2	2	8	12
Yellow-crested Cockatoo	Cacatua sulphurea		2		2			3		3
White Cockatoo	Cacatua alba						1	1		2
Galliformes										
Javan Green Peafowl	Pavo m. muticus						1	1		2
Grey-breasted Partridge	Arborophila orientalis						1	1	4	6
Bornean Peacock Pheasant	Polyplectron schleiermacheri						1			1
Mammals										
Javan Warty Pig	Sus verrucosus	3	8		11		3	7		10
Javan Small-toothed Palm-Civet	Arctogalidia t.trilineata	4	3		7		6	6		12
Sunda Pangolin	Manis javanica							1		1



Male *Betta rutilans*