



ACTION INDONESIA

GLOBAL SPECIES MANAGEMENT PLAN

FOR ANOA, BANTENG AND BABIRUSA



ANNUAL REPORT 2018



World Association of
Zoos and Aquariums
WAZA | United for
Conservation

ASSOCIATION
OF ZOOS &
AQUARIUMS



AWCSG
Asian
Wild
Cattle
Specialist
Group



IUCN/SSC: Wild Pig Specialist Group

In a nutshell: Achievements of Action Indonesia GSMPs in 2018

Anoa, banteng and babirusa all occur within Indonesia and are under threat of extinction due to hunting and habitat loss.

The Action Indonesia Partnership was created in 2016 with the aim to promote international collaboration to ensure the long-term survival of these species by a combination of *ex situ* and *in situ* activities. This used the Global Species Management Plans (GSMPs) frameworks for banteng, anoa and babirusa.

2018 has been another successful year for the Action Indonesia GSMPs, thanks to your support, partnership and collaboration. Below is a summary of our achievements:

- Held the second GSMP Planning Workshop to agree actions for 2018-2020. This meeting included the Sumatran tiger GSMP for the first time.
- Second set of breeding and transfer recommendations developed and distributed to Indonesian zoos.
- First successful transfers of banteng and anoa between Indonesian zoos, as well as the banteng breeding facility in Baluran National Park. This is an important step towards cooperative breeding in Indonesia!
- Two major workshops, 'Zoo Educator Training' and 'Collection Planning and Enclosure Design', conducted to further build capacity in Indonesian zoos.
- Yonathan, PKBSI-GSMP Programme Officer, joined the IUCN SSC Conservation Planning Specialist Group's mentee scheme.
- Continued successful fundraising to support GSMP activities
- GSMP representatives promoted our work at eight international conferences and numerous partner meetings.


Your support has been key to these successes!

In 2019 we will submit the second GSMP Masterplan, this time covering anoa, babirusa and banteng in a single document. We will also organise further education, husbandry and facilitation training workshops. 2019 will also us lay the groundwork for GSMP-led *in situ* projects in East Java and Sulawesi.

Thank you for your support and contributions! We look forward to continuing our collaboration.



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Chair
IUCN SSC Asian Wild
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Terry Hornsey
Convenor
Anoa GSMP



Joe Forys
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Ivan Chandra
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Introduction

What are GSMPs?

Global Species Management Plans (GSMPs) provide a framework for regional zoo associations to work together on a global plan for the *ex situ* activities for a particular species. The GSMPs are administered by the World Association for Zoos and Aquaria (WAZA) and run by committees of representatives of the regional zoo associations participating in the collaboration.

Action Indonesia GSMPs

The partners of the Action Indonesia GSMPs collaborate for the conservation of three threatened Indonesian taxa; **anoa** (*Bubalus depressicornis* and *B. quarlesi*), **banteng** (*Bos javanicus*) and **babirusa** (*Babrousa* sp.; three species).

These GSMPs were founded by the Indonesian Zoo and Aquarium Association (PKBSI), the European Association of Zoos and Aquaria (EAZA), the Association of Zoos & Aquariums (AZA), the IUCN Species Survival Commission (SSC), the IUCN SSC Asian Wild Cattle Specialist Group (AWCSG) and the IUCN SSC Wild Pig Specialist Group (WPSG) in 2015. In March 2016, they were endorsed by the Indonesian Ministry of Environment and Forestry (KKH) and WAZA. These GSMPs use the One Plan Approach to combine the skills, resources and expertise of both the zoo community and *in situ* practitioners.

The Action Indonesia GSMPs have four main goals. These are:

1. To reach a demographically and genetically healthy global *ex situ* population
2. To raise awareness among zoo visitors
3. To use zoo expertise to help *in situ* conservation
4. To prioritise and support *in situ* projects



The Action Indonesia ungulate GSMP species: anoa, banteng and babirusa. Photos: Chester Zoo

1. Your contributions in 2018

The achievements and activities in 2018 were only possible due to your generous contributions. Support came in various forms; financial contributions as well as staff time, travelling to workshops and meetings, other technical input and the sharing of expertise.

This year, many institutions sent staff to the second GSMP Planning Workshop, held in Cisarua, West Java, in February, and to the training workshops held in Jakarta in November. Travel to Indonesia is not essential to support the GSMPs, however. Other institutions freed work time to allow staff to contribute to various GSMP activities, such as planning the training workshops, preparing education materials, analysing studbooks and preparing breeding and transfer recommendations. This in-kind support provided by your institutions or organisations is shown in Table 1.

Table 1 also shows the GSMP activities that contributions by your institutions and organisations have funded or will fund. Over £20,000 more was raised in 2018 compared to 2017; this is testament to the rising profile of the Action Indonesia GSMPs, as well as the hard work of all those involved in fundraising and the amazing generosity of our supporters.

The first section of Table 1 shows contributions to GSMP unrestricted funding. Unrestricted funding is important to assist with the overall functioning of the GSMPs, as well as to ensure funds are available in the case of urgent, last-minute activities; these funds are allocated by the Fundraising Working Group (see Table 2).

Table 1 also shows restricted funding – the contributions to specific activities. Some of this funding was secured in late-2018, so the associated projects won't start until 2019.



Participants of the November 2018 Zoo Educator Training workshop at Faunaland Ancol. Photo: Faunaland Ancol

Table 1 Action Indonesia Partner and supporter contributions; all funding, technical and in-kind support for the GSMP's in 2018.

Institute/Organisation/Individual	Contribution
Unrestricted funds	
Alexandria Zoological Park, USA	
Jacksonville Zoo and Gardens, USA	Action Indonesia GSMP Workshop held in February in Cisuara, West Java; travel to the Zoo Educator Workshop in November.
Micanopy Zoological Preserve, USA	
Kölner Zoo, Germany	
Private individual (Matt Jackson)	
Saint Louis Zoological Park, USA	Remaining funds to be used to for projects identified as priorities by Working Group leaders.
Toronto Zoo, Canada	
West Midland Safari Park, UK	
Restricted funds	
Antwerp Zoo, Belgium	Training courses for Forestry Office and Protected Area staff on handling rescued/confiscated anoa and babirusa
Centre for the Conservation of Tropical Ungulates, USA	Coordination of the Action Indonesia GSMPs; core funding; staff time; salary and travel of AWCSG PO
Chester Zoo, UK	Coordination of the Action Indonesia GSMPs; salary and travel of AWCSG PO; staff travel and time for workshops and education materials
Global Wildlife Conservation, USA	Coordination of the Action Indonesia GSMPs; core funding; salary and travel of AWCSG PO
Jawa Timur Park Group, Indonesia	Action Indonesia GSMP Workshop, February 2018
Opel Zoo, Germany	Training courses for Forestry Office and Protected Area staff on handling rescued/confiscated anoa and babirusa; microchips and readers for captive anoa and babirusa
Saint Louis Zoological Park, USA	Training courses for Forestry Office and Protected Area staff on handling rescued/confiscated anoa and babirusa
San Antonio Zoo, USA	Action Indonesia GSMP Workshop, February 2018
San Diego Zoo Global, USA	Run training courses and provide mentoring and resources for protected areas and offices in Sulawesi and East Java; materials for banteng enclosures in Baluran National Park; coordination of the Action Indonesia GSMPs
Wilhelma Zoo, Germany	Training courses for Forestry Office and Protected Area staff on handling rescued/confiscated anoa and babirusa
Zoo Leipzig, Germany	Action Indonesia GSMP Workshop, February 2018
In-kind support	
Africa Alive!, UK	Staff time and travel
Audubon Zoo, USA	Staff time and travel
[B]BKSDA (Provincial and local conservation authorities), Indonesia	Staff time and travel
Bogor Agricultural University (IPB), Indonesia	Staff time and travel
Copenhagen Zoo, Denmark	Staff time and travel
Faunaland Ancol, Indonesia	Hosting Zoo Educator and Collection Planning and Enclosure Design Workshops; staff time
Indonesian Institute of Sciences (LIPI), Indonesia	Staff time and travel
Indonesian Zoos and Aquarium Association (PKBSI)	Staff time and travel and financial support of workshops
Konservasi Keanekaragaman Hayati (KKH) of the Ministry of Environment and Forestry, Indonesia	Staff time and travel
Lincoln Park Zoo, USA	Staff time and travel
Ocean Dream Samudra – Ancol, Indonesia	Hosting Zoo Educator Workshop; staff time
Ragunan Zoo, Indonesia	Hosting GSMP visits; staff time and travel
Surabaya Zoo, Indonesia	Hosting GSMP visits; staff time and travel
Taman Burung – Taman Mini Indonesia Indah, Indonesia	Staff time and travel
Taman Impian Jaya Ancol, Indonesia	Hosting Collection Planning and Enclosure Design Workshop; staff time
Taman Safari Indonesia Bogor, Indonesia	Hosting the Action Indonesia GSMP Workshop; staff time and travel
Taman Safari Prigen, Indonesia	Staff time and travel
Wildlife Reserves Singapore, Singapore	Staff time and travel; training materials
Zoo Miami, USA	Staff time and travel
Zoological Society of London, UK	Staff time and travel; training materials
Thanks to all Indonesian zoos and institutions that sent participants to: GSMP Planning Workshop (31 participants), Zoo Educator Training (17 participants) and Collection Plan & Enclosure Design Workshop (26 participants)	

Details of Achievements

2018 has seen another successful year for the Action Indonesia GSMPs. The year began with the second GSMP Planning Workshop, hosted by Taman Safari Indonesia in Cisuara, West Java. Representatives of the Sumatran tiger GSMP joined this meeting, working alongside the three ungulate species for the first time; this helped to align the discussions for all four taxa, which is preferable for the Indonesian Ministry of Environment and Forestry and PKBSI. By working together in areas such as husbandry training and education, the four GSMPs can deliver a greater impact.

The second GSMP Planning Workshop was attended by 91 participants from 50 institutions, including Indonesian, Japanese, European and US zoos, as well as various NGOs, universities and the Indonesian Ministry of Environment and Forestry. During the workshop, new thematic Working Groups were set up (see Table 2). These will allow more effective coordination across the GSMPs and encourage smaller groups to progress more efficiently with their area of work. A Masterplan has been drafted that describes the vision and priorities for the various Working Groups, and the GSMPs as a whole, over the next two years – this is will be submitted to WAZA in early 2019.

Table 2 Action Indonesia GSMP Working Groups and leaders

Name	Contact details	Affiliation(s)
Anoa Population Management		
John Andrews	jandrews@lpzoo.org	AZA Population Management Centre, Lincoln Park Zoo, USA
Yohana Tri Hastuti	yohanavet@tamansafari.net	Taman Safari Indonesia, Indonesia
Babirusa Population Management		
Joe Forys	jforys@auduboninstitute.org	Audubon Nature Institute, USA
Sri Pentawati	pipentakbs_94@yahoo.co.id	Surabaya Zoo, Indonesia
Banteng Population Management		
Ivan Chandra	ivan@tamansafari.net	Taman Safari Indonesia, Indonesia
Steve Metzler	smetzler@sandiegozoo.org	San Diego Zoo, USA
Education		
Charlotte Smith	c.smith@chesterzoo.org	Chester Zoo, UK
Ligaya Tumbelaka	tigressgaya@gmail.com	Bogor Agricultural University (IPB) & PKBSI, Indonesia
Fundraising and Communications		
Jeff Holland	jeffhollandcctu@gmail.com	Center for the Conservation of Tropical Ungulates, USA
Terry Hornsey	terry.hornsey@africa-alive.co.uk	Africa Alive!, UK
Genetics		
Gono Semiadi	semiadi@gmail.com	Indonesian Institute of Sciences (LIPI), Indonesia
Christina Hvilsom	ch@zoo.dk	Copenhagen Zoo, Denmark
Laurent Frantz	laurent.frantz@qmul.ac.uk	Queen Mary University of London, UK
Husbandry Training		
Joe Forys	jforys@auduboninstitute.org	Audubon Nature Institute, USA
Ligaya Tumbelaka	tigressgaya@gmail.com	Bogor Agricultural University (IPB) & PKBSI, Indonesia
Steve Metzler	smetzler@sandiegozoo.org	San Diego Zoo, USA
Tim Rowlands	t.rowlands@chesterzoo.org	Chester Zoo, UK
Anoa and Babirusa <i>in situ</i>		
Abdul Haris Mustari	haris.anoa@yahoo.com	Bogor Agricultural University (IPB), Indonesia
James Burton	jamesburton@yahoo.co.uk	IUCN SSC Asian Wild Cattle Specialist Group, UK
Banteng <i>in situ</i>		
Carl Traeholt	cat@zoo.dk	Copenhagen Zoo, Denmark

The Action Indonesia GSMPs were also well represented at other international meetings and conferences throughout 2018, helping to further generate interest in and support for this partnership:

- EAZA Joint Taxon Advisory Group Meeting (Budapest, Hungary), May – James Burton (AWCSG) & Tony Sumampau (Taman Safari Indonesia)
- EAZA Annual Conference (Athens, Greece), September – GSMP meeting chaired by James Burton (AWCSG) with updates from several Working Groups. Other talks by Kristin Leus (Copenhagen Zoo) & Tony Sumampau (Taman Safari Indonesia)
- AZA Annual Conference (Seattle, Washington), September – Jamie Jackson (Audubon Zoo)
- CPSG Annual Meeting (Bangkok, Thailand), October – Kathy Traylor Holzer (IUCN SSC Conservation Planning Specialist Group; Sumatran tiger GSMP)
- WAZA Annual Conference (Bangkok, Thailand), October – Thomas Kauffels (Opel-Zoo)
- International Zoo Educators Conference (Al Ain Zoo, UAE), October – Charlotte Smith (Chester Zoo)
- BIAZA Educators' & Presenters' Conference (Bristol Zoo Gardens, UK), November – Charlie Daly (Chester Zoo)
- PKBSI Annual Meeting (Ancol Dreamland, Indonesia), November – Charlie Daly (Chester Zoo) & Malcolm Fitzpatrick (ZSL; Sumatran tiger GSMP)

In their talks, Charlotte Smith and Charlie Daly were able to generate interest in 'Action Indonesia Day' – a coordinated day of international awareness raising planned for August 18th, 2019. More details about this will be coming soon!

Updates and news about the Action Indonesia GSMPs have also been regularly shared via the AWCSG [Facebook](#), [Instagram](#) and [Twitter](#) accounts with a high-level of engagement – GSMP-related posts reached over 140,000 people in 2018. These AWCSG accounts, and the accounts of some partners, have used the hashtag #ActionIndonesia to make posts searchable. This hashtag will be utilised for the 'Action Indonesia Day'. Please follow the work of the GSMPs and share your updates and news with us!

The activities of the Action Indonesia GSMPs continue to be supported and coordinated by Yonathan (PKBSI-GSMP Programme Officer), Stu Young (AWCSG Programme Officer) and James Burton (AWCSG Chair).



Participants of the second GSMP Planning Workshop, February 2018. Photo: PKBSI

The next section describes the progress achieved for each of the four agreed roles of the GSMPs in 2018:

ROLE 1

“Facilitate the maintenance of a demographically and genetically healthy global *ex situ* population, including the provision of breeding and transfer plans, and facilitation of transfers”

Following the second GSMP Planning Workshop in February, new breeding and transfer recommendations were developed by the population biologists and international and regional studbook keepers. These were approved by PKBSI and distributed to Indonesian zoos.

July 2018 saw the first successful animal transfers as part of the first set of recommendations. Three banteng bulls were moved between three institutions of Taman Safari Indonesia (TSI Bogor, TSI Prigen and Bali Safari & Marine Park), as well as Baluran National Park. Then, in August 2018, an anoa was successfully transferred between TSI Bogor and Bali Safari & Marine Park, as recommended by the second set of breeding and transfer recommendations. These transfers are a major milestone for the GSMPs and Indonesian zoos, as this is the first time animal moves have been undertaken for the purpose of co-operative breeding.



Banteng bull ‘Selamat’ being moved from TSI Prigen to Bali Safari & Marine Park, July 28th, 2018. Photo: Ivan Chandra/TSI



Preparing the crate to move banteng bull ‘Doni’ from Baluran National Park to TSI Bogor, July 19th, 2018. Photo: Ivan Chandra/TSI

These moves were facilitated in part by skills learned during GSMP husbandry workshops, which included training banteng bulls to enter transportation crates. It is hoped that these successful transfers will lead to further moves, and the first transfers of babirusa.

ROLE 2

“Support the needs and goals of the regional *ex situ* programmes by supporting collaboration, including initiation of required research, sharing of information and expertise, and capacity building”

In October 2018, Ligaya Tumbelaka (PKBSI & Bogor Agricultural University) and Yuliyati Nurmaya (Ragunan Zoo) attended the Educators Training Week at Chester Zoo. The aim of this week was to build capacity and enhance the skills of Ligaya and Maya to co-deliver future education training in Indonesia. During this Training Week, Ligaya was also able to have meetings with GSMP partners based at Chester Zoo.

Ahead of the PKBSI Annual Meeting in November 2018, the Education Working Group delivered a two-day training workshop for zoo educators. The content of the ‘Zoo Educators Workshop’ was informed by a survey of the PKBSI zoo educators’ network, and focussed on planning, creating and delivering conservation education activities. The workshop was attended by 32 educators representing 17 Indonesian zoos. Following their participation in the Educators Training Week, the workshop was delivered by Ligaya and Maya, as well as by Charlie Daly (Chester Zoo) and Jamie Jackson (Audubon Zoo).

Also in November 2018 (running alongside the PKBSI Annual Meeting) was the ‘Collection Planning and Enclosure Design Workshop’. The content was identified by PKBSI as a priority and developed by the Husbandry Training Working Group, with a focus on the basics of enclosure design aimed at a curator/keeper level. The workshop was delivered by a team from PKBSI, AWCSG, ZSL and Wildlife Reserves Singapore, with the support of facilitators from Faunaland Ancol, Taman Burung – TMII, Chester Zoo and the IUCN SSC Asian Songbird Trade Specialist Group. 32 participants from 26 Indonesian zoos attended the workshop, with 96% of attendees reporting that they found the training ‘useful’ or ‘very useful’. Developing the knowledge and skills of collection planning and enclosure design within the Indonesian zoo community is an important step towards achieving successful cooperative breeding.

Following the second GSMP Planning Workshop in February 2018, members of the Husbandry Training Working Group visited Surabaya Zoo to follow up on the October 2017 anoa and babirusa Husbandry and Transportation Training Workshop. Here, they received feedback and saw a number of positive outcomes as a result of changes made following the previous training workshop. The Husbandry Training team were also able to offer additional advice on the management and husbandry of the GSMP species (including Sumatran tiger). For example, this included ways in which space could be better utilised to contain holding pens for babirusa, which will help facilitate the breeding of these species at Surabaya.

To further build capacity for conservation planning in Indonesia, Yonathan (PKBSI) has been enrolled on the IUCN Conservation Planning Specialist Group (CPSG) mentor scheme. For this, Yonathan has been paired with a CPSG mentor who will support the development of his skills in facilitation and conservation planning. Yonathan will then be able to help plan and deliver workshops in Indonesia to develop a network of effective facilitators and conservation planners, helping the Action Indonesia GSMPs to achieve their goals and benefiting Indonesian conservation in general.



Participants and trainers of the November 2018 Collection Plan and Enclosure Design Workshop. Photo: Ragunan Zoo

ROLE 3

“Promote an effective interface between *ex situ* and *in situ* management that supports the conservation of the three taxa”

This role aims at facilitating the effective use of *ex situ* resources, expertise and skills to support *in situ* activities. In 2018, this consisted of visits to field sites in Java and Sulawesi to identify issues and needs that the GSMPs could assist with.

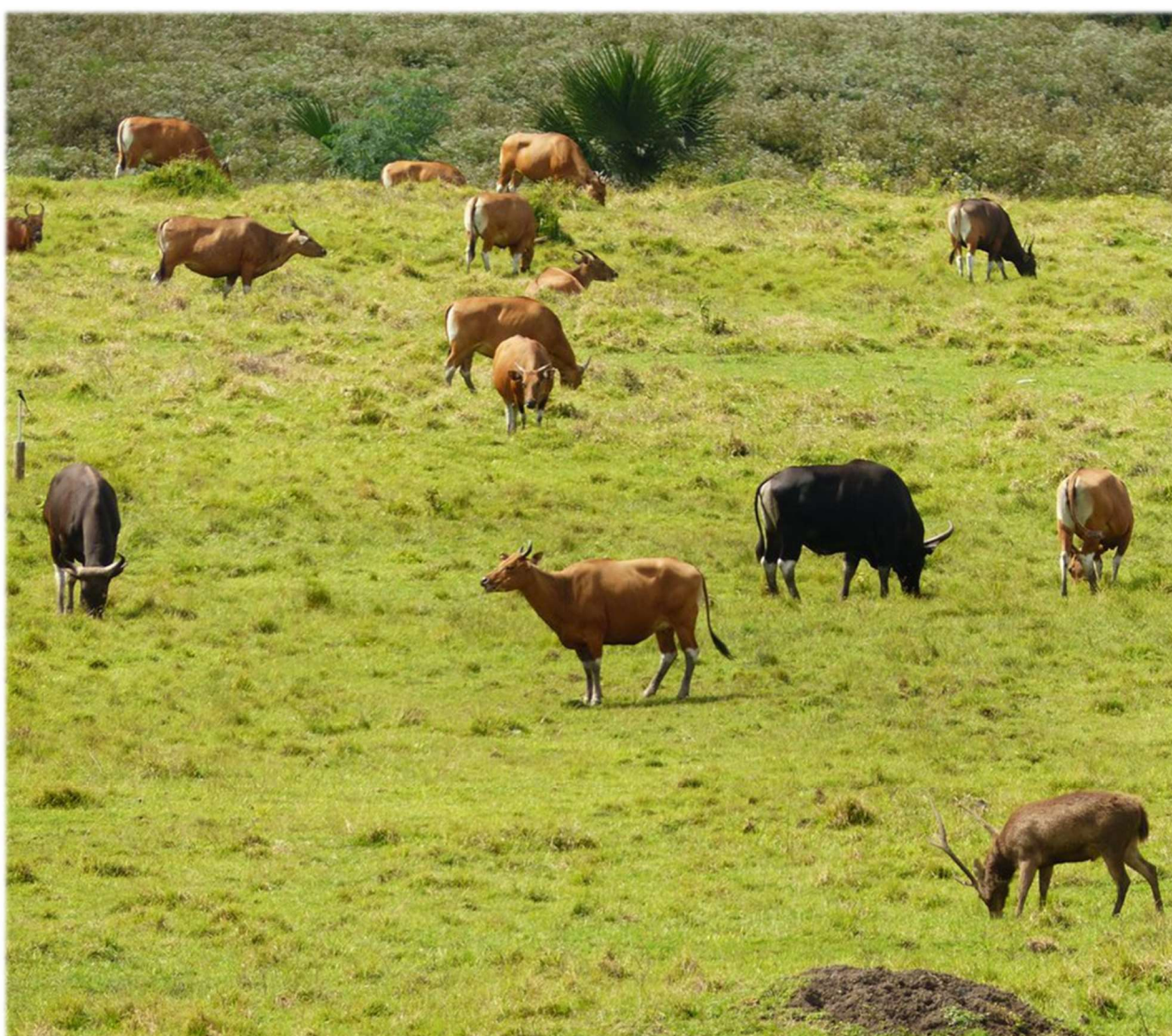
Ahead of the second GSMP Planning Workshop, Steve Metzler (San Diego Zoo Global) and Matt James (Zoo Miami/Dallas Zoo) visited Baluran National Park in East Java. Through discussions with park staff, they were able to identify the need for materials to build additional holding pens at the park’s Banteng Breeding Centre – for which some funding has now been secured (see Table 1). They were also able to highlight the importance of the Breeding Centre both as a source for the *ex situ* population and as a potential site for the reintroduction of banteng (see ROLE 1). To facilitate further transfers and breeding of banteng at Baluran, some funding has been secured to run husbandry training courses for park staff (see Table 1).

Following the second GSMP Planning Workshop, James Burton (AWCSG), Jeff Holland (CCTU) and Joe Forsy (Audubon Zoo) visited provincial offices of the Ministry of Environment and Forestry on Sulawesi. Here, they assessed the needs of the forestry offices dealing with rescued and confiscated anoa and babirusa as well as explaining the *in situ* support the GSMPs could provide. Forestry offices in Palu and Gorontalo need improved facilities and capacity to better house and manage the increasing numbers of rescued and confiscated animals – some funding has been secured to run husbandry training courses in Sulawesi to help address this (see Table 1).

ROLE 4

“Encourage support of *in situ* conservation”

In 2018, funding was secured for a full-time ‘Field Coordinator’ position. While the finer details of this position are still to be confirmed, it is expected that the Field Coordinator will oversee the GSMPs *in situ* activities in East Java and Sulawesi. As well as managing field conservation projects on the vulnerable wild populations of banteng, anoa and babirusa, the Field Coordinator will also build and maintain relationships with key contacts within the Indonesian government and National Park authorities. For example, the Field Coordinator may lead on some banteng monitoring projects in the East Javan National Parks, as well as liaising between the National Park offices. This would ultimately lead to improved communications between these protected areas, as well as with central government, PKBSI and the wider GSMP.



Wild banteng (and Javan deer) in Alas Purwo National Park, East Java. Photo: Steve Metzler

2. Outlook for 2019

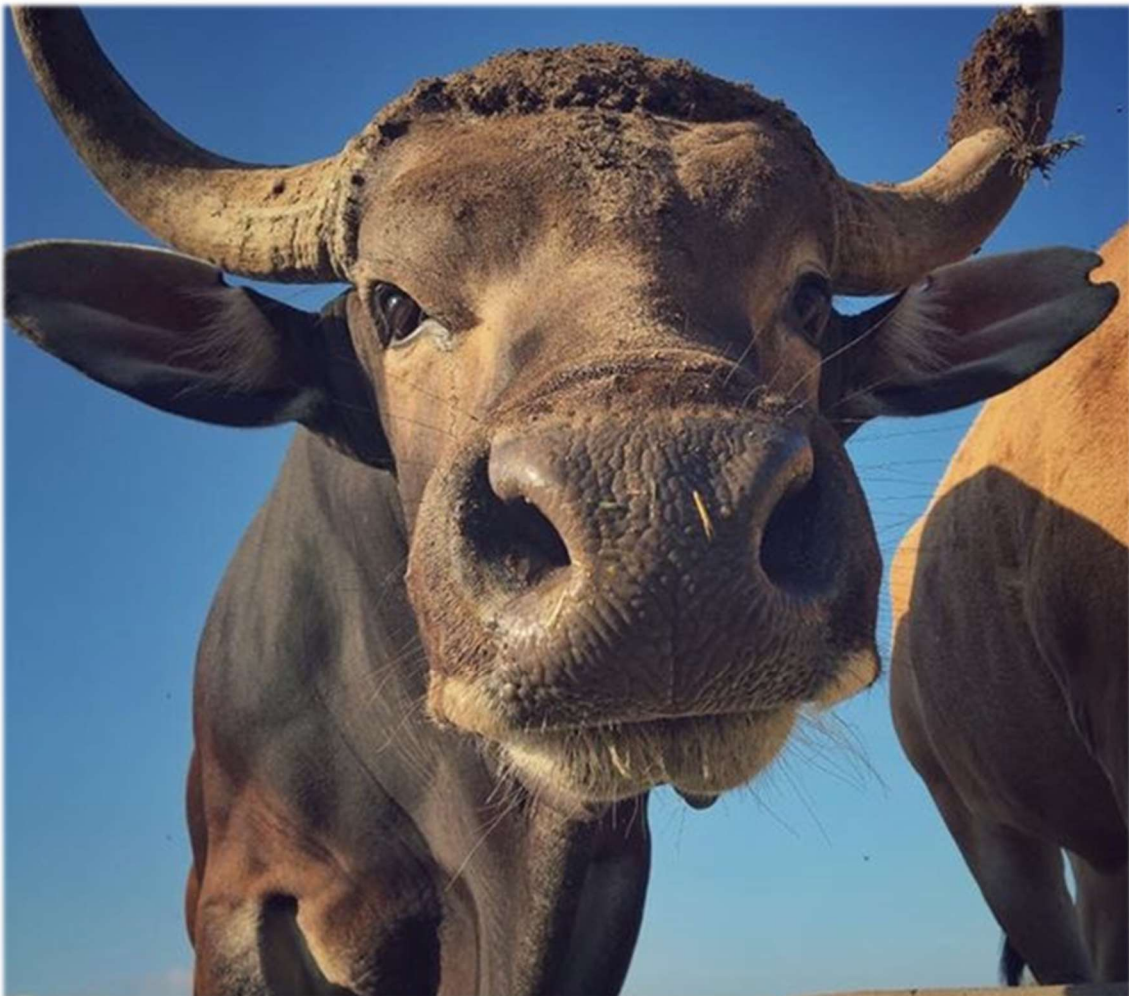
Thanks to your support and contributions, 2018 has been a very successful year for the Action Indonesia GSMPs.

In 2019, it is essential that we greatly expand our activities. We will continue building capacity in Indonesia and expanding this dynamic partnership. August 2019 will see the first 'Action Indonesia Day'. This will further raise the profile of these GSMPs and will hopefully generate a lot of interest in – and support for – our work!

We rely on your support, expertise and funding to carry out our activities. If you are interested in getting involved and want to find out more, please contact either James Burton (jamesaburton@yahoo.co.uk) or Stu Young (s.young@chesterzoo.org) of the AWCSG, a Working Group leader (see Table 2) or one of the GSMP convenors:

- Anoa: Terry Hornsey (terry.hornsey@africa-alive.co.uk)
- Banteng: Steve Metzler (smetzler@sandiegozoo.org)
- Babirusa: Joe Forsys (jforsys@auduboninstitute.org)

We need your help for the 2019 activities – please get in touch!



Studebaker – banteng bull at San Diego Safari Park. Photo: Steve Metzler

Citation:

Young, S., Rode-Margono, E.J. & Burton, J. 2019. Action Indonesia – Global Species Management Plans for banteng, anoa and babirusa. Annual Report 2018.

Available from:

IUCN SSC Asian Wild Cattle Specialist Group (www.asianwildcattle.org)



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Thanks to all the Action Indonesia GSMP partners and supporters

