



Borneo Rhino Sanctuary (BRS) programme (restricted distribution)

Quarterly report : covering the period October - December 2012

### **Programme objective**

To prevent the extinction of the Sumatran rhinoceros in Sabah by protecting wild rhinos and by bringing rhinos together in managed breeding facilities at Tabin Wildlife Reserve (TWR)

### **Main participating agencies**

Sabah Wildlife Department (SWD), Borneo Rhino Alliance (BORA), WWF-Malaysia, Sabah Forestry Department (SFD), Leibniz Institute for Zoo and Wildlife Research (IZW), Zoo Leipzig, ITBC/Universiti Malaysia Sabah, WWF-Germany, Sime Darby Foundation (YSD), Sabah Foundation (YS).

### **Main financing agencies during this quarter**

YSD, WWF-Germany, BORA

### **Programme description** (following May 2009 Sabah State Cabinet decision)

- protection and monitoring of wild rhinos in TWR (BORA-SWD) and Danum Valley Conservation Area (WWF-Malaysia).
- establishing Borneo Rhinoceros Sanctuary (BRS) breeding facilities (a managed, fenced area) inside TWR.
- bringing isolated remnant rhinos from non-viable situations, into BRS.
- establishing a sustainable financing scheme to allow long-term operations of BRS.
- appointing a professional company to manage BRS and its rhinos

### **Targets for this quarter**

(1) Puntung pregnant. (2) Complete an additional interim rhino holding facility. (3) One new rhino captured. (4) Detailed feasibility study report on potential for mini-hydro power supply at TWR. (5) Upgrade BORA staff quarters.

### **Achievements**

(1) No pregnancy was achieved. (2) One additional interim rhino holding facility completed in TWR at the Rhino Quarantine Facility. (3) No rhinos were captured. (4) Partial report on hydro-power submitted to BORA. (5) Upgrade of BORA staff quarters done.

### Activities originally planned for this quarter

(1) Continue with Puntung and Tam natural mating : (a) improvement of conditions for mating (including human safety aspects), (b) reproductive assessment of Puntung, (c) mating attempt. (2) Address the need for additional temporary rhino holding facilities. (3) Decide if there is a need for capture of rhino(s) from sites other than Kulamba. (4) Locate at least one specific site for an additional rhino trap at Kulamba area. (5) Determine if any wild rhinos remain in Tabin Wildlife Reserve. (6) Consider ideas for bringing the plight of the Sumatran rhino to global attention, and for seeking post-2015 financing for BRS programme. (7) Strengthen Indonesia-BRS links. (8) Commence development of rhino food garden at TWR.

### Activities achieved during this quarter

(1) Puntung and Tam mating (a) facilities and management keeper training was done; facilities were improved (notably, swing doors were replaced with sliding door); Tam's chisel-like lower incisor teeth were filed for better safety of Puntung and keepers during mating attempts; keeper emergency escape routes were improved in case of aggressive rhino behaviour; the breeding yard structures were strengthened; (b) reproductive status a reproductive assessment of Puntung was performed on 21 November by IZW vets, at which it was found that significant endometrial cyst growth has recurred; this growth would need to be significantly reduced if prospects for either natural mating or artificial insemination are to be improved. (c) mating attempts due to erratic cycling by Puntung after August, no mating attempts were made in October-November; the second (post-August 2012) mating attempt was done 4-6 December; despite presumed optimum follicle size (almost 20 mm width) in early December, plus vaginal secretion, and flehmen in Tam, Puntung rejected Tam's advances, and appeared very fearful of him. No intromission occurred. Overall, prospects for natural mating appear less promising. (2) Rhino holding facilities Pending construction of the permanent BRS facilities at TWR, no further suitable sites exist for building of temporary holding facilities at TWR (this is due primarily to topographical constraints, along with unsuitable road alignments and conditions, and unreliable water supply); in addition, over the period 2009-12, RM699,913 has been spent (mainly provided by YSD) on building and improving the temporary facilities at TWR; it is not considered appropriate or viable to continue using donor funds beyond year 2012 for more temporary facilities at TWR; a proposal was made to Sabah Foundation (YS) and SFD to capture rhinos from Danum Valley and to retain them in new simple facilities that could be built at Danum; by this means the dual issues of obtaining government policy support to capture rhinos from Danum Valley, and providing facilities for any additional rhinos captured, could be combined; agreement was reached on this proposal via Danum Valley Management Committee (November) and Director of Wildlife (December); a specific 2 hectare site for the Danum facility was identified during December jointly by BORA, SFD and YS; it was agreed that the RM1 million raised by SFD for road access to BRS facilities is better used for building the Danum Valley rhino facility. (3) Capture of rhinos from sites other than Kulamba Agreement was reached during this quarter that rhinos need to be caught as soon as possible from Danum Valley, due to the chronic poaching risk (it was noted that Indonesian rhino poachers were active in DV during 1992, and that WWF-Malaysia has during this quarter found active "gaharu collectors", who are likely also to be snare setters and/or rhino hunters, within the range of rhinos in DV). In addition, it now appears that the Sumatran rhino is right on the verge of extinction in Sabah, as no prospects for capture of rhinos from Kulamba, Kalabakan, Kuamut and even from TWR emerged during year 2012. A team visited Kuamut 8-14 October and again 13-17 November to seek rhino signs; no signs were found, and instead notices offering a reward for information were posted locally. (4) Kulamba rhinos Surveys were done at Kulamba 6-12 and 13-25 October, 1-16 and 15-23 November, and 7-13 December to seek rhino footprints, but no definite signs were found (some possible old footprints were found on two islands); thus, no location has been found during this quarter for a second Kulamba rhino trap. It

is extremely difficult to find fresh rhino signs in extensive remote swamp forests, but such signs are essential before location of a second trap at Kulamba can be chosen. (5) Wild rhinos in TWR Ground surveys to seek rhino footprints were done in TWR 3-6 and 9-21 October, 6-12 and 21-29 November, and 5-12 and 17-20 December. 83 camera traps had been set out in north and central TWR by mid-December, by IZW researcher Mr Torsten Bohn in collaboration with BORA. By end of year 2012, no signs of wild rhinos had been found in TWR. Despite the strong survey effort made during 2012, this is the first year since 1980 for which no wild rhino signs were found in TWR. The 2012 results would indicate that the species has almost, if not entirely, vanished from TWR, leaving Danum Valley as probably the last hope to acquire additional fertile rhinos for BRS and for the survival of the species in Malaysia. (6) Sumatran Rhino Crisis Summit (SRCS) The idea for a global meeting on Sumatran rhino was discussed at a BORA board meeting in August 2012. Based on further discussion involving BORA, LEAP and WWF, key ideas for such a meeting were to include heightened global awareness, a global level plan, and increased impetus for support and financing and partnerships; venue to be Singapore, neutral for both Malaysia and Indonesia and easily accessible for international participants. During further discussion, it was agreed by majority view that the event will be convened by IUCN (rather than by species range State NGOs, as originally conceived). The SRCS name and concept was agreed, to be held 31 March - 4 April 2013 at Jurong Bird Park in Singapore, hosted by Wildlife Reserves of Singapore. A SRCS flyer was produced. An informal core planning team was formed involving BORA, Fauna & Flora International (FFI) Indonesia, Indonesia Zoo & Aquarium Association (PKBSI), International Rhino Foundation (IRF), IUCN, LEAP, Leuser International Foundation (LIF), Wildlife Conservation Society (WCS) Indonesia, WWF & Yayasan Badak Indonesia (YABI). (7) Indonesia-BRS links BORA staff made a visit to Sumatran Rhino Sanctuary (SRS) 16-20 October; YSD Chairman Tun Musa Hitam visited SRS and Minister of Forestry Indonesia, 3-5 November. (8) Rhino food garden the chosen site received an occupation permit from SFD, and was prepared for planting seedlings.

### **Awareness**

The visit of YSD Chairman Tun Musa Hitam to Indonesia provided an opportunity to put news on the Sumatran rhino into global public domain, particularly in relation to Indonesia-Malaysia collaboration. See : <http://www.channelnewsasia.com/stories/southeastasia/view/1237648/1.html>  
[http://www.yayasansimedarby.com/1212130938%C2%BBJoint Efforts to Breed Sumatran Rhinos in the Offing.aspx](http://www.yayasansimedarby.com/1212130938%C2%BBJoint%20Efforts%20to%20Breed%20Sumatran%20Rhinos%20in%20the%20Offing.aspx)  
<http://www.borneorhinoalliance.org/featured/critically-endangered-sumatran-rhinos-to-receive-artificial-insemination/>

Significant points made public included : “Tun Musa said the Minister agreed that both parties could and should work together to breed the rhinos in managed sanctuaries, in order to increase the depleting population. We want to ride on the success of our Indonesian counterparts to breed the rhinos as we are also trying hard to do the same. We can learn from their experiences and collaborate. We need to have the endorsement of both the Indonesian and Malaysian governments for the exchange of information, biological materials and expertise. We should work on all areas of cooperation and consideration should also include exchange of rhinos”.

### **Meetings held**

SWD-BORA, 25 October, 8 November, 4 December; BRS technical committee / Sabah rhino task force meetings meeting, 7 December; SWD-Konsultant Kumpulan-BORA, 12 October; BORA-Minister of Culture, Tourism & Environment, 23 October; BORA-WWF-Malaysia 5, 10, 25 October, 12 November; YSD-BORA, 23 October, 27 November; BORA-Wildlife Reserves Singapore, 2 November.

## **Other updates**

(1) Working collaboration between BORA and WWF-Malaysia has strengthened significantly during this quarter, an important trend supporting the BRS programme. (2) Public Works Department commenced serious work on road upgrading into TWR during December. (3) Gelogob remained at TWR during this reporting period, pending renovation of her old enclosure in Lok Kawi Wildlife Park.

## **Problems to be addressed**

(1) Puntung's reproductive potential is compromised by recurrence of endometrial cyst growth. (2) IZW researcher Mr Torsten Bohm ends his period in Sabah in February 2013, with non-issuance of research permits for foreigners remaining as an unresolved problem for all forms of biological field research in Sabah. (3) Insufficient information available to allow determination of additional potential rhino trap sites at Kulamba. (4) Absence of permanent BRS facilities at TWR, three-and-a-half years after programme commencement continues to be an issue of very significant concern. (5) Unreliable piped water supply at TWR.

## **Solutions**

(1) IZW to be requested to remove cyst growth and to consider how best to proceed during 2013 with artificial insemination (AI). (2) BORA has committed to monitor camera traps set out in TWR after the IZW researcher has left Sabah in February 2013, combining this with regular surveys for footprints. BORA can assist other institutions to provide advocacy directed at Government of Sabah to solve the "log jam" of unanswered research applications from foreign researchers. (3) Continue surveys to seek rhino footprints in Kulamba region. (4) (a) accelerate building of permanent BRS breeding facilities at TWR, (b) build additional interim facilities at Danum Valley. (5) Investigate the possibility of using Tabin Wildlife Resort water supply system.

## **Plans for next quarter**

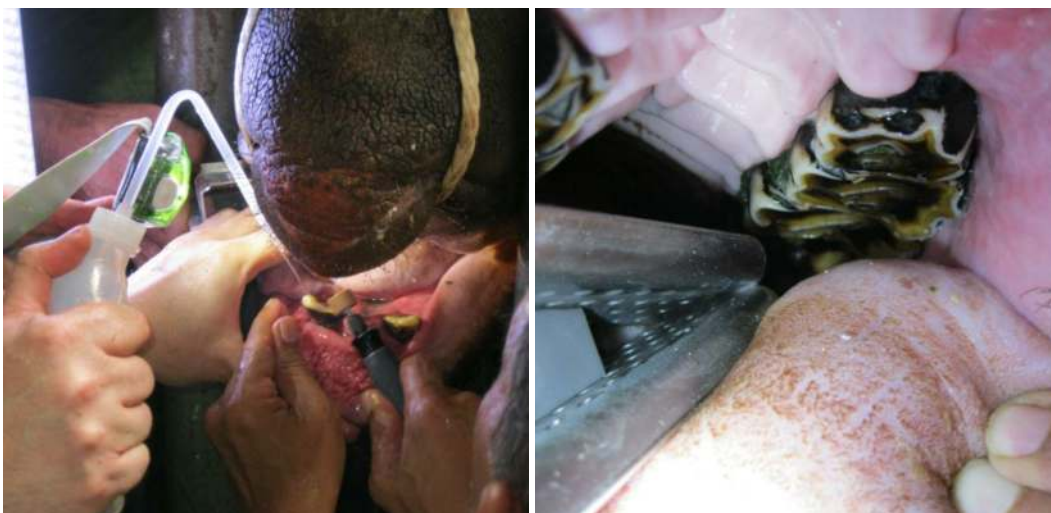
(1) Obtain formal State Government (Cabinet) endorsement of plans to capture rhinos from Danum Valley and to hold rhinos at a facility at Danum Valley. (2) Pending (1), preparations to be completed for design and construction of a rhino facility at Danum Valley. (3) Continue with Puntung and Tam natural mating attempts. (4) Puntung's endometrial cyst growth to be removed (again). (5) A plan for artificial insemination of Puntung to be developed. (6) WWF monitoring of rhinos in Danum Valley to continue, and plans to be made for further rhino conservation work at Danum actions during 2013. (7) Locate at least one site for an additional rhino trap at Kulamba area. (8) Continue to seek presence of wild rhinos in TWR. (9) Plant rhino food garden at TWR. (10) Hydro power feasibility study to be finalized and a decision made on follow-up. (11) Prepare for Sumatran Rhino Crisis Summit (SRCS).



(left) rhino breeding yard, with added emergency keeper escape ladders in case of aggressive behaviour by Tam, (right) measuring for replacement of a swing door with a sliding door



(left) construction of extra staff quarters space at Rhino Interim Facility (October), (right) completed additional rhino paddock at Rhino Quarantine Facility (RQF; November)



(left) filing of Tam's chisel-like lower incisor teeth (21 November; this was done for safety of both Puntung and keepers during future mating attempts), (right) while Tam was immobilised, the opportunity was taken to obtain the first clear views of his premolar and molar teeth.



(left) scar caused by Tam's incisor tooth wound on Puntung's left side visible 2 months later, (right) BORA veterinarian (Dr Zainal) guided by IZW veterinarian (Dr Thomas Hildebrandt) examines Puntung's ovarian follicles by ultrasound.



(left) example of a rhino food plant (*Leucosyke* species) in trials at RQF, a fast-growing woody shrub favoured by the three rhinos at Tabin, (right) view of rhino food garden site (October 2012)



Several potential sites for a rhino holding facility at Danum Valley were assessed on 22-24 November and 12-14 December, including (left) an old logging road below Bukit Atur, and (right) the ridge east of the Danum Valley Field Centre (DVFC)



(left) Tun Musa Hitam and Bapak Erwin Arifin, Bupati, Lampung Timur District, exchange gifts at Way Kambas National Park (4 November), (right) (left to right) Drs. Widodo Ramono, executive director, Indonesian Rhino Foundation; H. Zulkifli Hasan, Minister of Forestry Indonesia; Tun Musa Hitam; Hj. Yatela Zainal Abidin, chief executive officer, Sime Darby Foundation (5 November)



(left) Andatu, born 23 June 2012 in Sumatran Rhino Sanctuary, Way Kambas, with his mother Ratu, who was captured from the wild near WKNP in 2005 (17 October), (right) BORA group visit to Taman Safari (a supporter of Sumatran Rhino Sanctuary) near Bogor.



The approximately 2 hectare site selected for the Danum Valley rhino holding facility lies between the lower Kalisun river (left) and about 1.5 km along the existing road before reaching DVFC (right).