## IUCN-SSC Pangolin Specialist Group Conservation Conference, 24-27 June 2013 at Wildlife Reserves, Singapore Rajesh Kumar Mohapatra<sup>\*</sup>

Pangolins are toothless mammals with overlapping horny scales, long protrusible tongue and prehensile tail. There are eight living species of pangolins in the world from which four species of pangolins are found in Asia (Indian pangolin, Chinese pangolin, Sunda Pangolin and Philippine pangolin) and other four species of pangolins found in Africa (Giant ground pangolin, Temminck's ground pangolin, White-bellied pangolin and Black-bellied pangolin). They are nocturnal, burrowing and myrmicophagous (eat ants and termites) in habit. Their population is increasingly under threat throughout their range due to habitat destruction, illegal trade of live pangolins, their skin, scales and meat. These animals are difficult to manage and rarely breed in captivity. Little is known about their biology because of its nocturnal and secretive nature.

**IUCN-SSC Pangolin Specialist Group** (IUCN-SSC Pangolin SG) with the generous support from Wildlife Reserves, Singapore (WRS) organised the first ever pangolin conservation conference between 24-27 June 2013. With a theme "Scaling up pangolin conservation" this four days conference aimed to develop strategies for conservation of pangolins and provide input to the IUCN Red List to reassess the status and further protect these species. IUCN-SSC Pangolin SG was re-established in 2012 with about 50 researchers and pangolin experts across the globe. There is a need to study various facets of pangolins to facilitate both in-situ and ex-situ conservation. This network aims to highlight the present conservation status and future conservation strategies for world's pangolins. As a member of the IUCN-SSC Pangolin SG, I got an opportunity to participate and present the ongoing research work on Indian pangolins (Manis crassicaudata) in the conference.

The conference started on 24 June 2013 evening with registration at front entrance of River Safari, Singapore followed by an ice breaker, where all the delegates met and discussed about the opportunities and problems on different aspects of pangolin. It helped me to integrate in the network, sharing my ideas, research plans and associated challenges with others.

There were five technical sessions in this four days conference. The



Rajesh Kumar Mohapatra, Nandankanan Zoological Park, India delivering presentation



Man in focus, Dan Challender, Co-Chair, IUCN-SSC Pangolin SG during Sunda pangolin Red List assessment discussion

programme of the 2<sup>nd</sup> day, started with the welcome address by Claire Chaing, Chairman, WRS followed by welcome address by Professor Jonathan Baillie, Co-Chair, IUCN-SSC Pangolin SG and an introductory speech by Dan Challender, Co-Chair, IUCN-SSC Pangolin SG. The first session titled "Threats and thoughts towards demand reduction" focused on illegal trade of pangolins, their utilisation for Traditional Chinese Medicine (TCM) and meat as luxury/status consumption. Twelve participants presented the findings of their studies and observations on illegal trade dynamics and utilisation of pangolins. Speakers emphasized on the strengthening of legislation and its proper enforcement, physical and online market monitoring to track illegal trade, campaign for demand reduction, identification and protection of pangolin habitats, participation of local people, awareness among TCM practitioners to use herbal alternatives and awareness among public can help in reduction of demand.

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Pangolin husbandry group in discussion during "Towards conservation strategy" session



Indian pangolin Red List assessment working group- from right to left Rajesh Kumar Mohapatra, Nandankanan Zoological Park, India, Professor Jonathan Baillie, Co-Chairs of the IUCN-SSC Pangolin SG, Prativa Kaspal, Himalayan Nature

The second session on "Ecology and the informing of field methodology" focused on the tools and techniques used to study the ecology of pangolins in Asia and Africa. Nine speakers presented and discussed about GPS-GIS tracking methodology, camera trapping, use of direct and indirect sign for tracking, use of hunter's experience and challenges associated with it. Topics like home range, habitat use, burrow ecology, homing instinct, activity pattern, food and feeding habits were also discussed. The third session "Lessons and scope for conservation breeding" focused on the husbandry and conservation breeding of pangolins in captivity. As one of the five presentations in this session my presentation dealt with the ongoing research work on husbandry, behaviour and conservation breeding of Indian pangolin at Nandankanan Zoological Park, Odisha, India. The presentations of this session discussed about diet, housing, environmental enrichment, husbandry, behaviour, rescue, rehabilitation, health care, hormonal monitoring for reproductive

studies and hand rearing practices for pangolin species of Asia and Africa. The fourth session titled "Red List assessment" started with "An Introduction to IUCN's Red List assessment process" presented by Professor Jonathan Baillie. This was followed by a workshop session for Red list assessments of eight pangolin species and input of the results into Species Information Service (SIS). As per the 2005 IUCN Red List, Chinese pangolin and Sunda pangolin are included under Endangered (EN) category; Indian pangolin, Philippine pangolin, White-bellied pangolin and Giant ground pangolin are included under Near Threatened (NT); Temminck's ground pangolin and Black-bellied pangolin are included under Least Concerned (LC) category. In the Red List reassessment of pangolins during the conference, Chinese pangolin and Sunda pangolin were recommended to be included in the Critically Endangered (CR) category where as other pangolin species such as Indian pangolin, Philippine pangolin and four African pangolin species recommended to include in Endangered (EN) category of 2014 IUCN Red List. This recommendation will be subjected to rigorous review by IUCN. In the evening delegates were taken around Night Safari, including the pangolin housing facilities.

The fifth session titled "towards conservation strategy" focused on the future strategies and research goal on ecological monitoring, genetics, captive care and demand reduction. The following things were highlighted in this workshop session.

• To develop effective tools and techniques for ecological monitoring of pangolins.

• To develop standardize genetic analysis protocol for pangolins and submit the results to global data base like GenBank or BOLT.

• To harness the collective knowledge and resources of captive pangolin stockholders to promote animal welfare standards and research in relation to rescue, rehabilitation, diet, health care and conservation breeding.

 To establish and maintain awareness campaign among TCM practitioner community, consumer, judiciary dealing with wildlife crime and general public.

At the end of session, Dan Challender, Co-Chair, Pangolin SG and Sonja Luz, Director, Conservation, Research and Professional Training, WRS expressed vote of thanks to all invitees for whose participation make this conference a success. It was a great event which brought together for the first time all the leading workers of the world



WRS staff showing a Sunda pangolin during Public seminar

pangolins from across the world to a common forum to establish a network in which everyone can feel comfortable with communication and sharing of common ideas. It was an excellent opportunity to share ways to enhance global collaboration and communication in species conservation planning and contribute to IUCN Red List assessment.

The next day following the conference, i.e., on 28 June 2013 there was a public seminar. Dan Challender, Professor Jonathan Baillie, Co-Chairs of the IUCN-SSC Pangolin SG, Dr Chris Shepherd, Regional Director for TRAFFIC in South-East Asia and Razak Jaffar, Assistant Curator, Night Safari, WRS presented their observation and communicated their concern to public about pangolin trade, use of technology to conserve species and management of Sunda pangolin at Night Safari, WRS. Following the presentations there was a public interaction session where speakers answered the queries of public and Night Safari staff showed a Sunda pangolin and explained about it. The whole conference had created an environment of cooperation and knowledge sharing. The public seminar was a successful awareness event.

I, thankfully acknowledge IUCN-SSC Pangolin Specialist Group especially Dan Challender, Co-chair, IUCN-SSC Pangolin SG and Wildlife Reserve, Singapore (WRS) especially Sonja Luz, Director, Conservation, Research and Professional Training, WRS for inviting and giving me an opportunity to present my research in this conference.



Group photograph of participants of IUCN SSC Pangolin Specialist Group Conservation Conference