



TAG Reports 2011

EUROPEAN ASSOCIATION OF ZOOS AND AQUARIA

INTRODUCTION

EAZA's Taxon Advisory Groups (TAG) range from Terrestrial Invertebrates to Tapirs and Hippos, from Penguins to Felids and many more. TAGs define the *ex situ* management level a species requires, which might be low, medium or high. Within the European Association of Zoos and Aquaria (EAZA) these levels are defined as Monitor Programmes, European Studbooks (ESB) or European Endangered Species Programmes (EEP). EAZA currently has 41 TAGs, 184 EEPs and 186 ESBs.

Each TAG develops and oversees the implementation of a Regional Collection Plan (RCP), in which the management level of species is outlined. The RCP is a living document, continually under revision due to shifts in both *ex situ* and *in situ* population management. RCPs can be used as the base for Institutional Collection Plans, so that institutions obtain animals that have the highest priority of being held within the EAZA community. The TAG also oversees and helps to develop Husbandry Guidelines that reflect the best practice management of the respective taxa.

The TAG itself is led by a TAG chair who is assisted by one or more TAG vice chairs, depending on the number of species covered by the group. Within the remit of the TAG also lie the EEPs, ESBs and Monitor Programmes, and the TAG encourages involvement of representatives from across the EAZA community. Most TAGs are assisted by internal and external advisors regarding specific topics, such as veterinary or research matters for instance. Additionally EAZA's EEP Committee guides the TAGs in decision-making processes, such as approving the nomination of new breeding programme managers and non-EAZA institutions to participate in EEPs.

Between them, EAZA's TAGs cover all groups of animals held by EAZA collections. A TAG meeting is held at least once per year, which brings breeding programme managers, other experts and interested parties together.

To ensure the quality of intensively managed populations, the TAGs evaluate their EEPs every five years. 2011 was an important year as the five-year cycle of EEP evaluations was finalised and reviewed by the EEP Committee. Aside from this the first EAZA conservation campaign in official collaboration with the IUCN/SSC (www.southeastasiacampaign.org) was also put into place in 2011 and several TAGs strengthened their collaborations with other regions' zoo associations.

A detailed overview of these activities can be found in this TAG Annual Report. In the past the TAG Annual Reports were published in the EAZA Yearbook, which used to be the world's most extensive publication on both species management in zoos and aquariums and *ex situ* conservation. This new approach shall provide an overview of the TAGs activities and outline the involvement both within and outside the EAZA community.

If you wish to receive more information on any of the topics raised, please contact the EAZA Executive Office via info@eaza.net.

Please note that reports are not included from the following TAGs: Amphibian TAG, Gibbon TAG and Equid TAG.

TERRESTRIAL INVERTEBRATES

TAG chair Warren Spencer, Artis Zoo, Amsterdam, The Netherlands; TAG vice chair Paul Pearce-Kelly, ZSL London Zoo, London, United Kingdom

The Terrestrial Invertebrate TAG (TITAG) held its annual meeting at Montpellier during the EAZA Annual Conference in September 2011, focusing on reporting progress since the previous annual conference in Verona. It also began the official process of filling the position of TITAG veterinary advisor and vice chair to strengthen knowledge and TAG development. Work continues with RCP development. To ensure this goal is achieved the TAG is now looking for a new RCP coordinator.

In terms of programme development the 2010 Partula snail EEP studbook was produced and circulated. The studbook records a 10% population increase overall compared to the previous year and there are 11 institutions currently participating in the EEP. We have also extensively updated the conservation action plan for this programme and are in the process of reviewing the husbandry guidelines to ensure that *in situ* and *ex situ* programme elements are as effective as possible. There has also been some valuable research conducted on diet improvements and clarification of some outstanding phylogenetic issues using the programme's extensive preserved specimen material.

The Fregate Island Beetle EEP programme summary was produced and the 2010 EEP studbook circulated. The population is growing and reports an increase of 29% on last year's figures with new participation and is now held in 13 institutions. At the Royal Zoological Society of Scotland (RZSS) food trials on larval development times has been completed and we await publication of the results. Genetic and nutritional studies for this species continue at Manchester University. A focus goal for this programme is the development of revised husbandry guidelines.

New projects included are the development of a new EEP programme for the Lord Howe Island stick insect and colleagues in Budapest are working on realising this effort. TITAG is also focussed on developing a conservation programme on four taxa of highly endangered European spiders. Although



in situ population data from southern European Ischnocolus species is unfortunately poorly known, arachnologists in the field report that it is highly possible that the habitat of these species has been severely compromised and, in many cases, has been degraded to the point of total destruction. Most historical populations are now considered extinct and those remaining are in grave danger of extinction if action is not taken. To that end TITAG is: working to establish a programme coordinator and eventually a studbook in the range country; establish an RCP assessment and build a masterplan; and, develop and propose conservation programmes via multi-taxa EEPs, thus developing and promoting *in situ* links and the eventual conservation of these species and its habitat in the wild.

The TITAG Nutritional Advisor, Dr Andy Beer (Sparsholt College), carried out important general nutritional studies of invertebrate live food. Project MOSI, set by the World Association of Zoos and Aquariums (WAZA), Zoological Society of London (ZSL) and Imperial College UK, is working to establish an international network of 60 permanent mosquito monitoring sites. This work will confirm baseline species composition, abundance and activity profiles and help to clarify the impact of climate change on a large number of mosquito species.

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FREGATE ISLAND BEETLES (*POLPOSIPUS HERCULEANUS*) ON WOOD, ZSL
 © PAUL PEARCE KELLY





ONE OF THE MOSQUITO MONITOR SITES (PROJECT MOSI), ZSL © PAUL PEARCE KELLY

Working with the EAZA Academy, TITAG has begun plans to hold a terrestrial invertebrate husbandry management course which is scheduled to take place on 25-28 February 2013. This course should assist with improving the care of invertebrates, increasing the knowledge of staff managing these animals and increasing involvement in the work of TITAG.

Proceedings and documents from the meetings as well the RCP can be found on the TAG's workspace on the EAZA website's member area.

FISH AND AQUATIC INVERTEBRATES

TAG chair Heather Koldewey, ZSL London Zoo, London, United Kingdom

The Fish and Aquatic Invertebrate TAG (FAITAG) had two regular meetings this year, one at the EAZA Annual Conference (Montpellier, France, September 2011) and one at the European Union of Aquarium Curators (EUAC) Annual Conference (Stralsund, Germany, October 2011). In addition, a major international symposium was held as part of the international aquarium husbandry series. The 'Syngnathid Husbandry, Conservation and Management' symposium was held from 2-4 November 2011 at the John G Shedd Aquarium, Chicago, US. This was co-organised by Project

Seahorse, ZSL, Shedd Aquarium and Monterey Bay Aquarium and attended by 92 people from 14 countries. This symposium concluded that we are breeding more syngnathid (seahorses and their relatives) species more reliably, publishing more research, inspiring more members of the public and getting more engaged in conservation. However, there is a need for better coordination and integration of information from wild and aquarium populations. It was agreed to develop regional underwater surveys using standardised methods that could be compiled in a central database to fill some of the major gaps of knowledge of wild seahorses. The proceedings of this symposium are currently being compiled.

One new studbook (ESB) was initiated this year for the horned shark (*Heterodontus francisci*), managed by Warren Spencer, Artis Zoo. Challenges have been experienced in progressing the ESBs for the two European seahorse species (*Hippocampus guttulatus* and *H. hippocampus*) as the data cannot be entered into SPARKS due to the challenges in identifying both parents and offspring in these relatively fecund species. As a result, the European Population Management Advisory Group (EPMAG) has been providing advice that will enable the trial of an alternative approach to population management. This is particularly important as these methods are required before we can implement new programmes for many colony-breeding fish species.

A major new initiative of 2011 was the development of an Aquatic Collection Sustainability Action Plan. Public aquariums and zoos exhibit over 3,500 fish and aquatic invertebrate species belonging to over 15 phyla. The ability to acquire these animals from the wild requires travelling to these areas, working with local residents, or purchasing animals through commercial dealers. Logistics associated with direct acquisition efforts are difficult and are becoming more so with new legislation requiring additional permits and procedures.

However, most species can be obtained through commercial dealers or through governmental permit processes. The existence of a long-established network of commercial breeders of ornamental species has lessened the need to collect many of the tropical freshwater fishes from the wild. While breeding some marine species is an alternative, this is

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EGGS OF SMALL SPOTTED CAT SHARK (*SCYLIORHINUS CANICULA*) © MAX JANSE

only successful for a small number of species and provides a tiny percentage of the individual fish and invertebrates that public aquariums require for their exhibits.

In order to continue our ability to acquire aquatic species into the future, it is important that public aquariums and zoos have a sustainable collection plan that reviews the issues and outlines a plan of action. The plan requires a multipronged approach that needs to include a decision tree and a cost-benefit analysis to help curators make the most appropriate decisions regarding the acquisition of aquatic specimens. A draft of the Aquatic Collection Sustainability Action Plan (prepared by Dr Dennis Thoney, Doug Warmolts and Dr Heather Koldewey for WAZA) was discussed at the EAZA and EUAC meetings this year and feedback is being incorporated into a final draft that will be submitted to EAZA for endorsement in early 2012.

REPTILES

TAG chair Ivan Rehak, Zoologická zahrada Praha, Prague, Czech Republic; TAG Vice chairs: Fabian Schmidt, Zoologischer Garten Leipzig, Leipzig, Germany; Henk Zwartepoorte, Diergaarde Blijdorp, Rotterdam, The Netherlands; Thomas Kolpin, Thüringer Zoopark, Erfurt, Germany; Gerardo Garcia, Durrell Wildlife Conservation Trust, Jersey, United Kingdom; Michael Jorgenson, Randers Regnskov, Tropical Zoo, Randers, Denmark

The Reptile TAG (RTAG) currently maintains eight

European Breeding Programmes and 20 European Studbooks and coordinates an optimal management of EAZA reptile collections to ensure long-term existence of populations of managed species of chelonians, crocodiles, lizards and snakes. This is all done while respecting conservation requests, research issues, space availability, ethics, safety and other associated aspects. Simultaneously, the RTAG is a platform where EAZA reptile specialists, as well as eventually other professional colleagues, can meet, share and disseminate information and work to improve expertise in reptile husbandry, develop relevant guidelines, protocols and recommendations. In 2011 the Reptile TAG consisted of 28 core members and five advisors.

Two meetings were held in 2011. The first meeting in April 2011 was hosted by the Eskilstuna Zoo, Sweden. Among other issues the RTAG mid-year meeting focused on developing the Venomous Snakes Protocol, dealt in detail with the complex problem of reptile thermoregulation, and discussed problems with management of EAZA zoo populations where 'hidden' hybrids are involved. In addition, the first experiences and results of the RTAG coordinated import of the lizard *Dracaena guianensis* were evaluated and steps to prepare a management for this priority species were demonstrated. Problems with monitoring of one of the priority turtle species was discussed.

The second meeting was held during the EAZA Annual Meeting in Montpellier, France, in September 2011. Again, the protocols of venomous snake species were a central topic with an example given of how this is handled in Sweden. It seems that the issue is handled very differently in different European nations and this topic will remain present in future meetings.

Other topics included space use of juvenile Komodo dragons, new enclosures for Komodo dragons and tomistoma at Zoo Leipzig, first egg-laying of tomistoma at Riga Zoo and an awareness campaign of conservation of Philippine crocodiles. An overview on the taxonomy of the Galapagos tortoise, the genetic situation of *Mauremys*



annamensis and possible consequences for reintroduction and the progress of the *Testudo kleinmanni* EEP in relation to an already existing *in situ* project in Egypt were also covered, as were the further development of a Chelonian RCP, a possible *Cyclura ricordi* import from the Dominican Republic, updates on the release of *Nactus* geckos, and discussions about the Global Reptile Assessment and how to compile experiences with mixed species exhibits. Furthermore, many updates on EEP and ESB programmes were given.

During 2011 one new EEP programme and two new ESB programmes endorsed by the RTAG have been appointed by the EEP Committee. The evaluations of the EEPs for Jamaican boas, Egyptian tortoise and both *Heloderma* species were completed, reducing the number of as yet unevaluated EEPs to two. The Reptile RCP as a 'living document' was updated in its crocodile section. The RTAG co-operated closely with the EAZA Amphibian TAG as well as with partners in other regional associations (eg AZA, ZAA). To facilitate a creation of conservation *ex situ* and *in situ* links, the RTAG continued to develop a close cooperation with the IUCN Specialist Groups, Task Forces and other IUCN umbrella organisations – in particular Crocodile SG, Iguana SG, Fresh-water Turtle SG, CSG Tomistoma TF, Turtle Conservation Alliance – plus other international reptile conservation initiatives (eg Gharial Conservation Alliance, Blue Iguana Recovery Programme).

Significant development was reached in implementing the EAZA Research Committee recommendations and focusing on important research issues for a proper species management as well as for *ex situ* (and in some cases also for *in situ*) conservation efforts. For instance, thanks to professional coordination of programme coordinators and cooperation from involved zoos as well as academic partners important research projects have been conducted. The genetic differentiation of the African dwarf crocodile (*Osteolaemus tetraspis*) was realised (coordinated by Zoo Leipzig), while similar examination to obtain genetic and phylogeographic data was finalised for the turtles *Orlitia borneensis* and *Mauremys annamensis* (co-ordinated by Prague Zoo). New haplotypes discovered through the RTAG coordinated research in Cuban iguanas kept in EAZA zoos were shown to have significant

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impact for species conservation strategies, and similar research in Cuban boas showed formerly unexpected problems in management of *ex situ* populations. Meanwhile, valuable data was accumulated to improve our knowledge of the facultative automictic parthenogenesis in reptiles, and studies of adaptation to malacophagy and development of 'biting apparatus' in selected lizard species were conducted. Some scientific papers originated of mentioned research were published or are in press or preparation.

RATITES

TAG chair Joost Lammers, Vogelpark Avifauna, Alphen aan den Rijn, The Netherlands; Paignton Zoo Environmental Park, Paignton, United Kingdom

The Ratite TAG encompasses all species of palaeognath birds. This includes ostriches, rheas, cassowaries, emus, kiwis and tinamous. The Ratite TAG was established in 2008, with the mission to facilitate management of captive ratites and tinamous in EAZA collections and participate in and support relevant conservation efforts.

NORTH AFRICAN OSTRICH
(*STRUTHIO CAMELUS*
CAMELUS) AT HANNOVER ZOO



The Ratite TAG met in April 2011 at the EAZA mid-year Bird TAGs meeting in Puy du Fou, France. During this meeting the first EAZA Ratite TAG Regional Collection Plan (RCP) was presented and the decision-making process was explained to participants.

A pledge was also held to upgrade the endangered North African ostrich (*Struthio camelus camelus*) from a monitored by person (Mon-P) programme to an EEP level, due to recent successful imports of eggs by Hannover Zoo and the possibilities to link to *in situ* conservation for the species. It was decided to prepare a proposal for the EEP Committee with Maren Frerking from Hannover Zoo as EEP Coordinator, which was approved in September 2011. The EEP Coordinator is now trying to set up a new egg collection to boost numbers in this EEP.

Currently the Ratite TAG comprises the North African ostrich EEP mentioned above, and two ESB programmes.

The Lesser rhea ESB has experienced personnel problems that need to be solved for this ESB to run properly. The major task will be to solve the subspecies issue first and to publish a studbook for the species.

The Southern cassowary ESB is facing difficulties breeding the species and it is not yet known what the carrying capacity within EAZA member institutions



SOUTHERN CASSOWARY
(*CASUARIUS CASUARIUS*)
WITH FOUR CHICKS AT
VOGELPARK AVIFAUNA
© JOOST LAMMERS

is. Therefore a space survey will be carried out for this and the other species, which should also result in setting targets for the current RCP.

The Northern Brown kiwi is a special case. Given the small population within Europe, colleagues in Europe and America agreed that zoos that hold the species in Europe will participate in the American breeding programme that coordinates all brown kiwis outside New Zealand.

Jo Gregson, the Ratite TAG vice chair, participated in the American Zoo Association (AZA) Ratite TAG meeting and workshop in March 2011 to further investigate collaboration between the two regions. One of the topics discussed was the establishment of an International Studbook (ISB) for the southern cassowary that is now on the agenda for 2012. The international husbandry guidelines for southern cassowaries will also be revised in 2012.

Unfortunately Simon Brusland, Weltvogelpark Walsrode needed to step down as vice chair by the end of 2011 due to his move to Loro Parque. His great enthusiasm and efforts will be missed in this TAG. It was decided to continue managing the TAG with Jo Gregson as vice chair and Joost Lammers as chair.

PENGUIN

TAG chair Miguel Bueno Brinkmann, Weltvogelpark Walsrode, Walsrode, Germany; TAG vice chair Pierre de Wit, Dierenpark Emmen, Emmen, The Netherlands

During the last meeting of the Penguin TAG at





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the EAZA Annual Conference in Montpellier in September 2011, reports were given by representatives of institutions promoting or conducting conservation projects. The breeding programmes are currently being reviewed for the RCP.

Humboldt penguin EEP

This species is the most widely kept and abundant in Europe, together with the African penguin. Its numbers peaked at almost 2,000 birds in recent years, with a slight reduction to 1,800. The coordinator suggests having a core population managed as an EEP, and to manage the remainder of the population as a studbook.

Black-footed penguin EEP

Black-footed penguins have become a dominant species in the European region. However this EEP is facing difficulties due to a low quality and lack of data. Unfortunately, this is preventing the coordinator from effectively managing the genetic lines and maintaining the desired diversity. Bristol Zoo is supporting and promoting 'Project Penguin', an *in situ* initiative to address the catastrophic decline of the species in the wild.

King penguin ESB

The king penguin is the most characteristic penguin species kept in Europe. There are several husbandry and population difficulties that urge the TAG and the participating institutions to find appropriate solutions. A clear male-skewed population (144.86.32), together with very low breeding success and mortality associated to husbandry challenges give this species a difficult future. Predictions indicate a population reduction of a 75% in 50 years. A working group for the species was created to address the situation.

Rockhopper penguin ESB

This species has revealed particular breeding problems in captivity so far, and only one institution breeds it regularly in Europe (Vienna Zoo). The population shows several problems: fragmented population into two subspecies; very low breeding success; and a dispersed population. An action plan for the species in captivity is urgently needed.

Gentoo penguin ESB

This species is held in Europe by 18 institutions (a total of 497 individuals, broken down into

210.251.36) an already exceeds the proposed population target (330). The population grows consistently, but is heavily dependent on the breeding results of a single institution. The issue of two potential subspecies still needs to be clarified.

Magellanic penguin MON-P

The Magellanic penguin is in demand, as a number of institutions have shown an interest in keeping it, and so there is potential for this programme to grow by 50%. Among 10 institutions a population of 134 birds (62.57.15) is currently being kept.

Macaroni penguin MON-P

This species (the most abundant in the wild), is poorly represented in captivity in Europe (25.25.4), and is only kept by four institutions. Limited genetic origin for most individuals, low productivity and competition for space from other species jeopardise the future of the species in European population.

Little blue penguin MON-T

This species has recently only been kept by only two institutions in Europe, and there is a proposal to establish it again. There are strong colonies of little penguins in captivity in Australia and breeding is consistent. Interest was shown by several institutions within the European region to start keeping the species. A first group of 30 birds was sent to a German institution, however none of the birds survived the quarantine period. Research on the postmortem results are still to be confirmed.

PELECANIFORMES
TAG chair Bjarne Klausen, Odense, Denmark

The Pelecaniformes TAG was established in 1999. The species that fall under the remit of this TAG are not only those of the order Pelecaniformes, but also Gaviiformes (loons and divers), Podicipediformes (grebes) and Procellariiformes (albatrosses and petrels). According to this taxonomy the name Pelecaniformes does not adequately cover the remit of the TAG, but the species that the TAG predominantly focuses on are included within it.

Since the publication of the Pelecaniformes RCP in 2004 important changes in the taxonomy have been proposed, including the transfer of Balaenicipitidae (shoebill) and Scopidae (hamerkop)

from the order Ciconiiformes. The Chair of the Ciconiiformes and Phoenicopteriformes TAG and the Chair of the Pelecaniformes TAG have agreed that these two families should remain under the umbrella of the former for now, because their management is similar to Ciconiiformes and because of the knowledge and management efforts already in place. This decision can be reviewed during the future RCP development.

TAG members have also developed a decision flowchart that will help members in the ongoing process of updating the RCP. A more thorough update of the RCP has been initiated and is expected to be finished in 2012.

In 2011 an evaluation of the Dalmatian pelican EEP was performed. This revealed issues such as producing a studbook and improving the dataset of the current population, which the coordinator is currently addressing.

Steve Nasir stepped down as ESB coordinator of the Pink-backed pelican ESB. Steve has done a lot of work collecting data from the different institutions and trying to improve breeding this species. It was decided that Anette Nielsen (Odense Zoo) should take over this work.

Roman Horsky (Zlin) agreed to monitor the spot-billed pelican as this species appears in European

PINK-BACKED PELICAN
 (PELECANUS RUFESCENS) AT
 ODENSE ZOO
 © ARD JONGSMA



institutions and is Near Threatened in the wild. The TAG feels it is important to monitor the birds and their breeding success.

CICONIIFORMES AND PHOENICOPTERIFORMES

TAG chair Catherine King, Weltvogelpark Walsrode, Walsrode, Germany; TAG vice chair Andrea Bračko, Zooloski vrt Zagreb, Zagreb, Croatia

The Ciconiiformes and Phoenicopteriformes TAG met twice in 2011; once during the EAZA mid-year Bird TAGs meeting in April 2011 and once during the EAZA Annual Conference in Montpellier in September 2011.

During 2011 the *Fabulous Flamingo Questionnaire II* was undertaken, looking at all EAZA institutions holding flamingos, how they are kept, how they have been bred and how they were sourced. Flemming Nielsen (Copenhagen) and Geer Scheres (Walsrode) shared their positive experiences with the sustainable importation of Caribbean flamingos from the Cuban Caribbean flamingo ranching programme during the April meeting.

CHILEAN FLAMINGOS
(*PHOENICOPTERUS CHILENSIS*)
AT BEEKSE BERGEN
© ROLF VEENHUIZEN

An aviary e-book database was proposed with information on existing aviaries to make it easier for zoos to construct aviaries appropriate to the climate and the species that they want to hold. Information on specific products, manufacturers and suppliers should be included. Discussions in September indicated that other TAGs also see a need for such a database as well. The Ciconiiformes and Phoenicopteriformes TAG offered to find a student to develop the database and to ask the EAZA Office whether it wants to host it.

A space survey for the RCP is currently being undertaken. Approximately one third of the zoos did not specify which species and how many they wish to hold in five years, which raises some concerns about institutional collection planning and the functionality of a space survey.

Presentations given during the EAZA Annual Conference in Montpellier can be found in the proceedings on the EAZA website. Many species reports were given, and an overview of threatened Ciconiiformes in Southeast Asia was presented in the context of the EAZA-IUCN/SSC Southeast Asia Campaign. A presentation was also given on the Angkor Centre for Conservation of Biodiversity (ACCB) in Cambodia, which does much valuable conservation work with

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threatened Ciconiiformes species.

The EEP Committee approved Roman Horsky (Zlin-Lesna) as the Yellow-billed stork ESB keeper, Ross Snipp (Malton) as the new Hamerkop ESB keeper, and Géraldine Blanchon-Pothet (Villars-Dombes) as the new Saddle-billed stork ESB keeper. Cathy King was re-nominated as TAG chair following a change of institutions (now at Walsrode). Arnaud Dazord (Pleugueneuc) began monitoring the boat-billed heron (*Cochlearius cochlearius*). The evaluation for the Oriental white stork EEP was initiated.

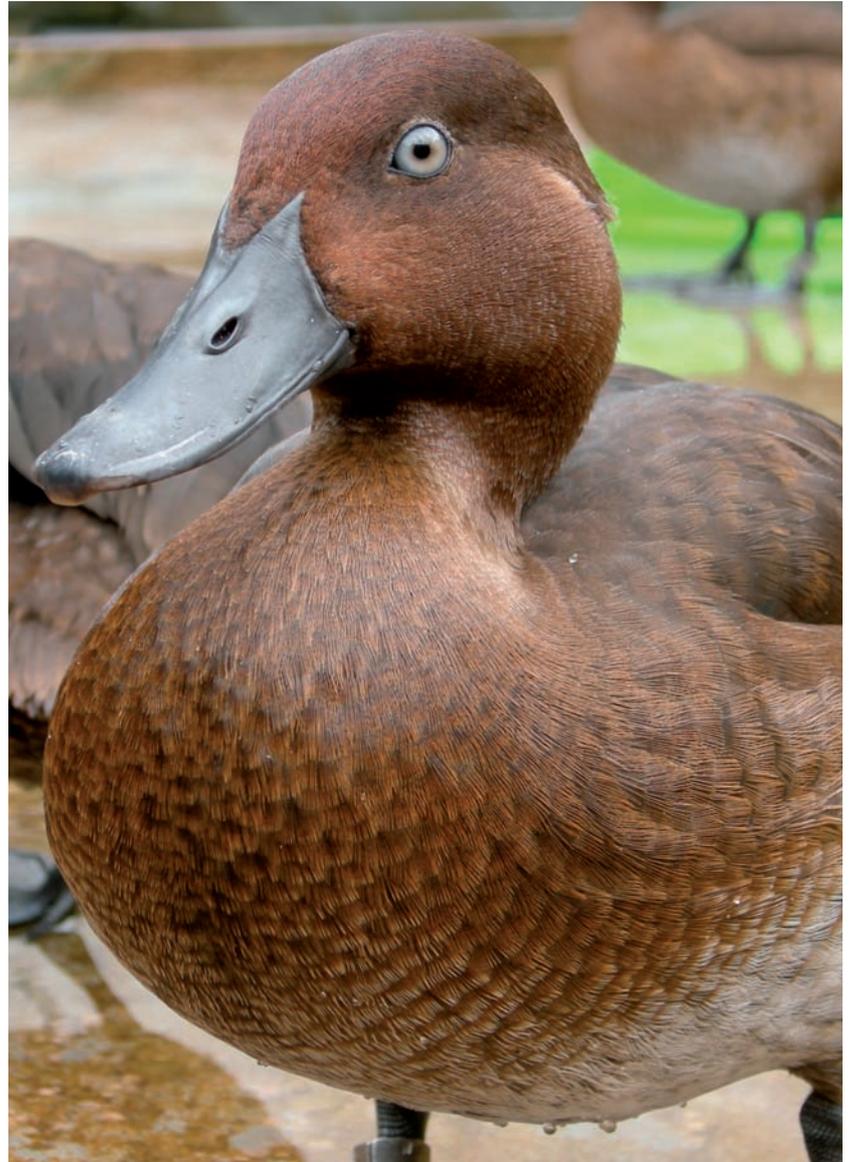
The TAG initiated a discussion about the use of birds in shows that have the risk of becoming an invasive species and could potentially hybridise with native species. The TAG is encouraging zoos not to fly such birds in shows. The TAG is also concerned with reports of zoos holding species that are known to be invasive, eg sacred ibis (*Threskiornis aethiopicus*) in free-ranging situations, or in situations they can escape easily.

WATERFOWL

TAG chair Bernd Marcordes, Zoologischer Garten Köln, Köln, Germany; TAG vice chair David Jeggo, Durrell Wildlife Conservation Trust, Jersey, United Kingdom

The EAZA Waterfowl TAG was established in 2001 and includes all Anseriformes species.

The first RCP for waterfowls was published in 2002, since when it has been constantly revised. A second RCP was developed in 2008 with the use of a revised decision flowchart, and attention has focused on IUCN listed species. The Waterfowl TAG currently oversees two managed breeding programmes; one EEP for the Meller's duck and one 'International Studbook' for the Madagascar teal. There is a plan to establish an ESB for the white-winged wood duck (*Cairina scutulata*) in 2012. Ten species are monitored by various people and 12 other IUCN Red List species are monitored by the TAG. In 2011 the Meller's Duck EEP was evaluated by the EEP Committee within the framework of EEP evaluations. The number of EAZA institutions keeping waterfowl is slowly growing, as well as the total number of Anseriformes kept in EAZA. However, the breeding of Anseriformes in EAZA institutions is still very limited. Most institutions



MADAGASCAN POCHARD,
© OWEN JOINER, WWF

acquire birds regularly from the private sector. To date the breeding success in EAZA institutions cannot guarantee sustainable populations for most Anseriformes species.

FALCONIFORMES

TAG chair Shmulik Yedvab, The Tisch Family Zoological Gardens, Jerusalem, Israel; TAG vice chairs: Mark Habben, ZSL London Zoo, London, United Kingdom; (owls) Barbara Mihelic, Zivalski vrt Ljubljana, Slovenia

In late 2010 it was decided to discontinue the EAZA Owl TAG and include the species under the umbrella of the Falconiformes TAG. Therefore Barbara Mihelic was appointed as second vice chair



to the TAG to assist with the management of owls in EAZA collections. Falconiformes species and owls can easily be managed beneath the same umbrella due to the following reasons:

- overlap in issues such as: birds in shows, reintroductions and how to deal with rehabilitated birds;
- the need to stimulate the interest in this group by using the frame work of a similar, existing TAG, and
- overlap of colleagues involved with both orders.

Further changes in the breeding programmes included: Kim van de Put, Burgers' Zoo taking on the King Vulture ESB; an ESB being established for the secretary bird, managed by Lars Versteeg, Safaripark Beekse Bergen; Rudy Wedlarski, Parc Zoologique Doue-la-Fontaine being approved as Andean condor EEP coordinator; and the establishment of the Lesser kestrel EEP coordinated by Inigo Sanchez, Zoobotanico de Jerez and the White-headed vulture ESB coordinated by Joost Lammers, Vogelpark Avifauna.

In 2011 the Mission Statement for the Falconiformes and Owls TAG was also decided upon and reads as follows:

'The TAG should be a leading influence in the husbandry, welfare and management of captive birds of prey and owls. We will convey an educational message and create awareness and interest in our living collection. EAZA member institutions should support and initiate conservation projects. Therefore, The TAG collection planning and activities should be influenced mainly by conservation needs.'

WHITE-TAILED SEA-EAGLE (*HALIAEETUS ALBICILLA*) AT JERUSALEM ZOO

HORNGUAN (*OREAPHASUS DERBIANUS*) AND RED-BILLED CURASSOW (*CRAX BLUMENBACHII*), WELTVOGELPARK WALSRODE



In 2012 the major challenge will be to compile recommendations for the use of birds of prey and owls in bird flight demonstrations, which is an issue shared by several other bird TAGs and is of growing importance.

Finally, there is now a Lesser kestrel EEP. There are currently several active conservation projects around the Mediterranean and South Africa dedicated to this species.

CRACID

TAG chair Geer Scheres, Cracid Breeding Conservation Centre

Of the 51 recognised species of Cracidae, a full third are considered Threatened, one species is Extinct in the Wild, and five more are Near Threatened on a global level. Many cracids have restricted ranges in which they come into direct conflict with humans for space, and are relentlessly hunted – being so closely related to the chicken means they are highly prized for the table.

The EAZA Cracid TAG is working with local organizations and the AZA Cracid TAG to conserve the Critically Endangered blue-billed curassow (*Crax alberti*), and breeding took place in two institutions in Europe in 2011.

The EEP Committee approved an EEP for the Endangered horned guan at the beginning of 2011. The EEP also supports the Cloud Ambassadors Fund, which focuses on bi-national conservation programmes in Guatemala and Mexico for the horned guan. Grants are given to local conservationists for projects ranging from development of census methods to habitat analysis and community education.

Geer Scheres, coordinator of the Red-billed curassow EEP, reviewed the history of the bird's reintroduction programme during the Cracid

TAG meeting in April 2011. He emphasised that a long-term commitment is essential for projects to be sustainably successful. Reintroduction of red-billed curassows began in 1991 at the Reserva Particular do Patrimônio Natural (RPPN) Fazenda Macedonia, a site in Minas Gerais. Since then there have been birds released at three other sites, and this species has been downgraded from Critically Endangered to Endangered on the IUCN Red List. Most of the captive population is held at the Crax Brazil breeding station in Belo Horizonte, but there are substantial numbers in the Cracid Breeding and Conservation Center (CBCC) in Belgium as well.

The most recent Red-billed curassow ISB was published in 2009 by Rob Belterman (Rotterdam) and Roberto Azeredo (Crax Brazil). Crax Brazil is currently upgrading its record keeping system and Rob Belterman continuously collects data for the EEP population. There are currently 31.28 red-billed curassows at eight institutions in Europe.

In 2011 a discussion was held regarding the programmes included in the RCP and it was concluded that the current 13 monitored programmes would benefit from having a species champion, and that some may be candidates for ESBs or EEPs. To achieve this, efforts will be made to increase popularity of cracids in zoos so that these species can be further distributed and more people become actively involved in their management.

Weltvogelpark Walsrode and the Cracid Breeding Conservation Centre (CBCC) continue to train people from Latin America in cracid husbandry, and to support cracid conservation, including reintroduction projects, throughout 2011.

GALLIFORMES

TAG chair Jan Dams, Weltvogelpark Walsrode, Walsrode, Germany; TAG vice chair Ludo Pinceel, The World Pheasant Association, Hampshire, United Kingdom

At the end of 2011 Jan Dams was appointed as the new Galliformes TAG chair after the previous TAG chair, Simon Brusland (Walsrode) resigned. Ludo Pinceel will remain the Galliformes TAG vice chair.

A Galliformes TAG meeting was held during the EAZA Bird TAGs meeting in April 2011. The 21 species that are currently being monitored by

“
SOME GALLIFORMES SPECIES WARRANT MORE INTENSIVE MANAGEMENT, HOWEVER FINDING VOLUNTEERS FOR THESE POSITIONS IS DIFFICULT
 ”

KAGU (*RHYNOCHETOS JUBATUS*), WELTVOGELPARK WALSRODE



the TAG were reviewed by Simon Bruslund. Of these, the populations were stable for three species, increasing in 10 cases, and declining among eight. Some of these species warrant more intensive management, however finding volunteers for these positions is difficult.

First steps were taken to find a new EEP coordinator for the extremely important Edward's pheasant EEP. Discussions have been held with the former EEP coordinator and potential candidates for this position. This species, being endangered and even possibly extinct in the wild, urgently needs more attention from zoos to ensure a healthy *ex situ* population. Additionally, communication has now begun with Roland Wirth, ZGAP (Zoologische Gesellschaft für Arten- und Populationsschutz) about possible *in situ* research, something the TAG will hopefully be able to support in the future.

The Palawan peacock pheasant EEP and Congo peafowl EEP were evaluated as sufficient by the EEP committee. Both EEPs were advised to update their studbooks and to explore possibilities for introducing new genetic material to their captive populations, and to work more actively with their Species Committee.

At the end of 2011 the Galliformes TAG also started to contemplate the idea of undertaking a space survey.

GRUIFORMES

TAG chair Geer Scheres, Cracid Breeding and Conservation Center; TAG vice chair Rob Belterman, Diergaarde Blijdorp, Rotterdam, The Netherlands

The emphasis during the TAG meeting in April 2011 was clearly put on crane species as 11 of the 15 species are considered threatened on the IUCN Red List.

The Red crowned crane EEP was analysed and it was found to be the only EAZA bird EEP that meets all five sustainability criteria, indicating that this is a very healthy and well-managed programme.

The White-naped crane EEP is currently facing problems as there are many birds in the population of unknown origin, which is a serious problem in genetic management. Birds of unknown origin should not be allowed to breed and more data on

origins of birds are being collected as a management plan needs to be developed.

The AZA population of hooded crane has had low breeding success in recent years, and consequently is now in need of additional birds. An AZA representative therefore requested some from Europe. The ESB keeper suggested that the AZA (American Zoo Association) region first try to get the AZA population back on track, for example by placing some breeding pairs in northern zoos with higher latitudes where they should breed better, before importing new birds.

The Cracid and Crane Breeding Center (CBCC) is continuing to participate in the Memorandum of Understanding (MoU) concerning conservation measures for the Critically Endangered Siberian crane, along with other international organisations such as the International Crane Foundation (ICF) and Wetlands International (WI). This MoU is administered by the Convention on Migratory Species (CMS). The EEP Coordinator has provided a number of links for information on Siberian crane conservation, including the CMS MoU, via the Gruiformes workspace on the EAZA Member Area.

The EEP committee approved the Kagu EEP in 2011 and this EEP is working together with the US and Japan, as well as in New Caledonia to ensure that this unique bird, recently on the brink of extinction, will survive. The EEP is additionally trying to improve collaboration with private European breeders that hold this species. The Kagu sex ratio is skewed towards males in the captive population, both within Europe and globally. Currently four EAZA institutions hold kagus and it is hoped that the European population will increase in the near future.

The grey-winged trumpeter is MON-P with a major focus on starting to sex the birds as there seem to be many of unknown gender in the population.

The Gruiformes TAG RCP is currently not recommending keeping kori bustards but if there would be sufficient zoos prepared to import birds and to manage them well, a programme could be initiated. Some kori bustards pairs in the AZA population are considered over-represented, and possibly offspring from these birds could be sent to Europe.

CHARADRIIFORMES

TAG chair Kirsi Pynnönen-Oudman, Helsinki Zoo, Helsinki, Finland; TAG vice chair Achim Johann, NaturZoo Rheine, Rheine, Germany

The Charadriiformes TAG met at the EAZA Annual Conference in September in Montpellier. At the meeting the TAG vice chair stepped down and Dionne Slagter from Artis Zoo volunteered to take over this position. After some internal discussion it was decided that Dionne would be nominated as TAG chair and that Kirsi, the former chair, would continue as TAG vice chair. At the end of the year this proposal was forwarded to the EEP Committee for official approval.

The current RCP dates back to 2007 and needs to be revised, especially concerning sea bird species. Sea birds are facing many breeding difficulties and populations are far from being sustainable. In order to improve the population management and husbandry of different sea birds, it was decided to start with a working group that will concentrate

INCA TERN (*LAROSTERNA INCA*) AT BRISTOL ZOO
INSET: INCA TERN COLOUR BAND, ARTIS ZOO



working on these bird taxa. Paignton Zoo Environmental Park offered to call in a meeting of specialists on these species.

Since global warming might have a major negative impact on the populations of seabirds, TAG action on seabird monitoring should be started as soon as possible. Husbandry guidelines are essential in breeding species such as puffins, auks and murrens. Copenhagen Zoo has started breeding puffins and will provide husbandry advice to other holding institutions.

The Inca tern ESB is facing the problem of unknown parentage and participants are asked to identify the parents of chicks born. However, the population in EAZA collections has increased constantly during the last years, but the genetic management is difficult due to the many unknown animals. The draft husbandry guidelines should be revised and published on the TAG workspace.

There is also an urgent need to start to work on jacanas. An ESB keeper for wattled jacana is needed as soon as possible. There is an immediate need for new founders. Husbandry guidelines should be

compiled, too.

The ruff population is growing constantly, but the number of institutions successful in breeding is not increasing. According to a survey from 2005 aviary structure has an important effect on breeding success. Examples of good aviaries should be collected on the TAG workspace. This will be discussed in more detail during the midyear meeting in 2012.

PIGEON AND DOVE

TAG chair Duncan Bolton, Paignton Zoo Environmental Park, Paignton, United Kingdom; TAG vice chair Jo Gregson, Paignton Zoo Environmental Park

The Pigeon and Dove TAG met during the EAZA Annual Conference in Montpellier in September 2011. The TAG chair was grateful to the TAG members, and especially to Jo Gregson, for running this meeting as he was not able to attend.

The RCP is now nearing its current completion and includes some significant improvements and changes compared to the previous version. With the assistance of the EAZA Executive Office, the EEP evaluations for the Socorro dove EEP and the Mauritius pink pigeon EEP were completed and feedback has been compiled and sent to the relevant co-ordinators. The TAG is currently searching for replacements of the Scheepmaker's and Blue crowned pigeon ESB. The Victoria crowned pigeon ESB will be taken over by Mylene Sannier, Reserve Zoologique de Calviac, France.

There are serious concerns over the longer term viability of the Mauritius pink pigeon EEP. This is due to both the low fecundity rate of the existing population in recent years and a lack of potential new holders for the species. It is hoped that once fecundity is improved new holders will be found. With our other EEP, the Socorro dove EEP, the fecundity is not a major problem, but there is still a need to encourage more aviary space for this Extinct in the Wild species. The long term objective of returning this species to the wild is still a major goal, which is a project lead by Stefan Stadler, Frankfurt Zoo.



PARROT

**TAG chair Roger Wilkinson,
Chester Zoo, Cheshire, United
Kingdom**

The EAZA Parrot TAG was established in 1992 and has the remit of including all parrot species – currently held to be 374.

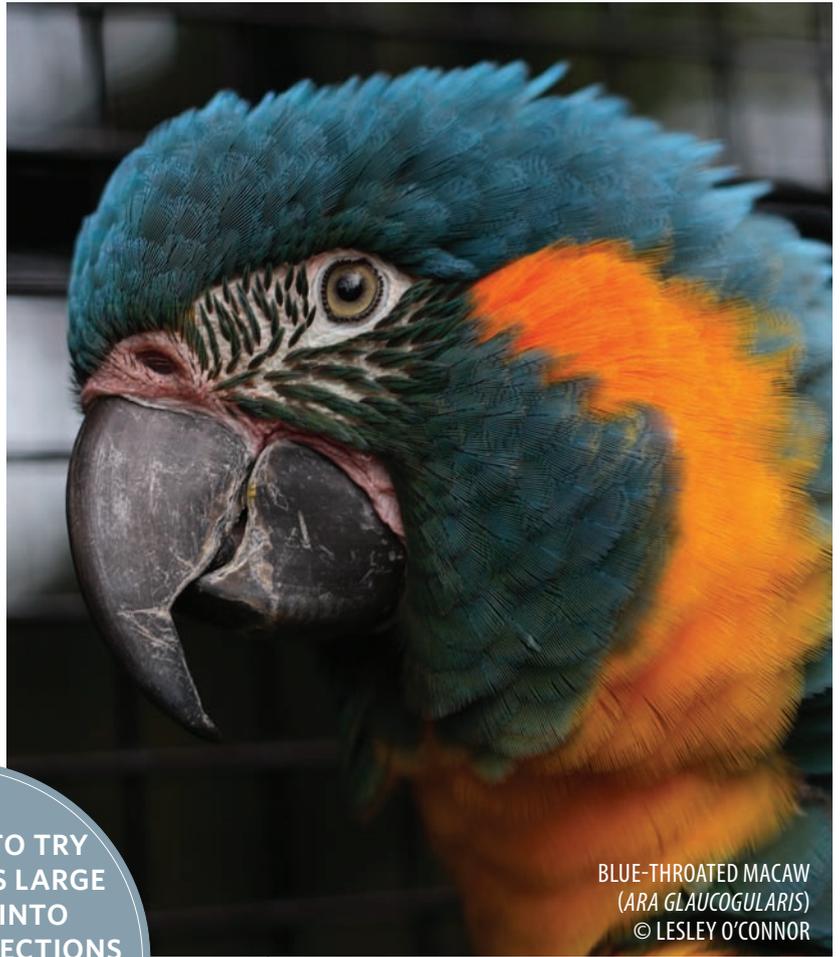
The first RCP was published in 1998/99 and a global overview of captive management programmes for parrots followed in 2000. The RCP was revised as and when required. A second RCP was developed in June 2008 with the use of a revised decision flowchart. Attention has been focused on the larger parrots and especially the more popular cockatoos, macaws and Amazon parrots. Currently the Parrot TAG oversees 24 managed breeding programmes: 12 as EEPs and 12 as ESBs.

However, the interest of keeping parrots within EAZA collections, the numbers of species and the numbers of individual pairs have all significantly decreased over the past 20 years. Censuses no longer occur and information has had to be gleaned largely from ISIS. Except for the now popular walk-through lory exhibits this appears to have been particularly the case for breeding lorries in zoos and the ESB for black-winged lory was discontinued because of very small numbers and little interest amongst zoos. The former Yellow-backed chattering lory ESB has now been re-designated as an ESB for all captive subspecies of chattering lory which we are pleased to report is currently being worked on by Anna Kazazou of Attica Zoological Park.

Except for the Red-fronted macaw EEP – which has only recently been taken on by Jo Elliott of Edinburgh zoo – all our 12 current Parrot EEP programmes have now been evaluated. The last three of these – the Palm cockatoo, the Buffon's macaw and Red-tailed amazon EEPs were evaluated in 2011. Three EEP programmes require re-evaluation – these are the Red-browed amazon EEP and Blue-throated macaw EEP which the EEP Committee requested we re-evaluate in 2012, and the Ecuador amazon EEP.

Over the last two annual meetings we agreed to try to break this large TAG down into manageable

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”



BLUE-THROATED MACAW
(*ARA GLAUCOGULARIS*)
© LESLEY O'CONNOR



CITRON-CRESTED COCKATOO
(*CACATUA SULPHUREA
CITRINOCRISTATA*) AT RIGA
ZOO © SANDRA MOLLOY

sections and to share the workload by having two subgroup leaders – one for old world parrots and one for new world parrots. Bernd Marcordes stepped up to the challenge at our 2010 annual TAG meeting in agreeing to assist with the old world parrots. The Parrot TAG is still seeking an enthusiastic colleague to assist with the new world parrots.

TOUCAN AND TURACO

TAG chair John Ellis, ZSL London Zoo, London, The United Kingdom; TAG vice chair Harald Schmidt, Diergaarde Blijdorp, Rotterdam, The Netherlands

The EAZA Toucan and Turaco TAG (TTTAG) is a considerably more diverse group of birds than the name of the group might suggest, and generally covers most 'softbill' bird species not covered by the Hornbill or Passerine TAGs.

The TTTAG held a meeting at the 2011 EAZA Conference in Montpellier where a full range of talks and reporting presentations were given. Due to the large number of bird families within the TTTAG there are now eight subgroups with a person appointed leader and four further monitors of species not included within the subgroups. In all there are 36 species being managed on ESB level or monitored by a person. 2011 saw the first year when all the subgroup leaders gave an update on all the work that has been carried out within their group as well as individual presentations on non subgroup species. As a management tool, splitting the TTTAG into subgroups has not been without its teething problems, however it has generally given a far better overview of the selected bird groups due to the hard work of the subgroup leaders. On a technical note due to various reasons the TAG chair was unable to attend the meeting as was one of the presenters. Due to the wizardry of internet conferencing software and the assistance of the EAZA Executive Office the presenter was able to give a talk and the TTTAG chair was able to listen to the entire meeting and join in during the question and answer sessions.

Work continues to formalise the RCP. This is a living document and as we see more intensive monitoring of species the better able we are to understand the requirements needed for

maintaining captive populations. Within the space of a few years it is noticeable how better monitored species tend to develop more viable populations than those not monitored and some species identified within the RCP only eight years ago have now almost disappeared from zoos. Therefore a key aim for 2012 will be to get more volunteers to monitor specific species. Work is also underway to initiate toucan husbandry guidelines and it is hoped that this will be done in conjunction with the AZA Piciformes TAG.

The EAZA TTTAG continues to forge closer links with AZA colleagues in the relevant TAGs with the sharing of information and a look at closer management of captive bird populations. It is encouraging to note that there is movement of birds between institutions within EAZA and AZA and we continue to work towards defining viable TAG population targets in both organisations.

We are sad to announce that our colleague and friend John Ellis died in June 2012. He will be greatly missed.

HORNBILL

TAG chair Koen Brouwer, Bioparc Valencia; TAG vice chair Roger Wilkinson, Chester Zoo

In February 2011 the first EAZA Hornbill Keeping and Breeding Workshop in Vogelpark Avifauna, Alphen a/d Rijn took place. This meeting was specifically directed at sharing practical husbandry and breeding knowledge among keepers working with hornbills. In addition to a series of practical presentations given by members of the Hornbill

A PAIR OF KNOBBED HORNBILLS AT WALSDRODE BIRD PARK, GERMANY
© TOBIAS





RHINOCEROS HORNBILL
(*BUCEROS RHINOCEROS*),
PRAGUE ZOO

TAG, all participants were provided with the opportunity to introduce hornbill-keeping in their own zoo and share ideas on how this could be improved. Two days of workshops and many discussions led to some interesting new ideas, such as the possibility of 'harvesting of captive produced eggs' and hand-rearing of chicks of several of the very hard-to-breed Asian hornbills.

In September 2011 the EAZA Hornbill TAG met at the EAZA Annual Conference in Montpellier. The meeting was attended by some 80 participants who, in addition to receiving summaries by EEP and ESB coordinators on the status of their hornbill populations, were also provided with an update on various hornbill conservation projects undertaken by EAZA zoos. Talks on successfully introducing male and female hornbills, the development of the Von der Decken's hornbill ESB over the past 10 years and the threat that pseudo-tuberculosis (*Yersinia*) is causing to hornbills in our collections were presented by members of the TAG.

The ESB for the Asian pied hornbill was discontinued as the numbers of birds kept in European zoos are limited, and of different subspecies. This species is not (yet) threatened in the wild and breeds rather well in certain Southeast Asian zoos. Zoos interested in working with a smaller Asian hornbill species can participate in several other programmes such as, for example, the Malayan black hornbill.

The EEP evaluations for the Great hornbill EEP and the Wrinkled hornbill EEP were completed. Both programmes are well run by their respective coordinators, but breeding success is lacking – especially in the great hornbill population – and all efforts must be focused on attempting to

encourage the decreasing population of hornbills to breed, which also means providing more practical husbandry training to the staff members of the zoos holding these magnificent birds.

The TAG Chair and several of the EEP/ESB coordinators are members of the IUCN Hornbill Specialist Group and maintain contact with the chair and other members of this group on a regular basis. Cooperation between EEP/ESB coordinators and their counterparts in other regions, but especially North America, are good.

Several of the EAZA hornbill breeding programs have strong links with *in situ* conservation – this is especially the case for the EEP of the Visayan tarictic (*Penelopides panini panini*).

The TAG chair is also worried by the increase in importation of most likely wild-caught hornbills from Asia and especially from the Philippines, in both Europe and the Middle East. This is an extremely delicate issue that could potentially negatively influence long-lasting and successful conservation programmes for hornbills in those regions, but also harm the good reputation of zoos and private breeders.

PASSERIFORMES

TAG chair David Jeggo, Durrell Wildlife Conservation Trust, Jersey, The United Kingdom; TAG vice chair Theo Pagel, Zoologischer Garten Köln, Köln, Germany

During 2011 it became evident that the Passeriformes TAG's breeding programmes need to be analysed on their sustainability and that the RCP needs to be revisited. It is necessary to see how the RCP's implementation is progressing, and, in addition, more species coordinators and monitored programmes are required. Possibilities have opened up to further collaboration with conservation projects in the wild which is good, yet it also shows the deteriorating state the world's birds are in.

The Passeriformes TAG comprises seven breeding programmes (1 EEP and 6 ESBs). The evaluation of the Bali starling EEP was finalised and this programme was deemed to be satisfactory by the EEP committee. It is a large and important programme as the continued survival of this species in the wild depends on the release of captive bred individuals. A significant event was the return to



CLOCKWISE FROM LEFT: BALI STARLING (*LEUCOPSAR ROTHSCHILDI*); CHESTNUT-BACKED THRUSH (*ZOOTHERA DOHERTYI*) © TYMEN ROES; OMEI SHAN LIOCICHLA (*LIOCICHLA OMEIENSIS*) © GREGORY GUIDA; HOODED PITTA (*PITTA SORDIDA*) © JOHN DINHAM; BLUE-CROWNED LAUGHING THRUSH (*GARRULAX COURTOISI*) © GREGORY GUIDA



Bali of 20 birds from the EEP in August 2011. These were bred at nine different EAZA institutions. They are currently held at a breeding centre on the island and their offspring will be used for future release.

In Southeast Asia, because of the regional popularity of keeping wild songbirds, and associated pressures from trapping, passerine species are especially threatened. The precarious state of the Bali starling and other species from this region led the TAG to focus attention on this particular and urgent conservation issue within Southeast Asia. To this end a group of involved TAG members met with Dr Nigel Collar, BirdLife International, at Chester Zoo in June 2011 to discuss conservation actions required and what the TAG could do to assist. This meeting led to the formation of a focus group within the TAG. The group is aiming to make a difference for conservation of the songbirds of Southeast Asia. Already, several new initiatives have been started and extra support continues to be generated.

An excellent report was produced by Simon Brusland, Weltvogelpark Walsrode, on the South America jays of the genus *Cyanocorax*; this assesses the captive status of the species kept in Europe. Like many passerines the numbers of any of the species were not high and the breeding success in general rather poor. However, recommendations were made that two species, the green jay and the plush-crested jay, should be MON-P with the aim of establishing better populations. These are very charismatic species and the inclusion in the RCP will aid boosting the image of the species.

The passerines remain a challenging group, but progress is being made particularly in terms of *in situ* conservation and the retention of species diversity within the RCP will require greater collective effort and investment from EAZA institutions.

MONOTREME & MARSUPIAL

TAG chair Udo Ganslosser, University of Greifswald, Greifswald, Germany

In 2011 the opportunity for closer collaboration with the Australian region arose, and new imports have been discussed and linked to the RCP. The Monotreme and Marsupial TAG also communicated with the Australian Zoo and Aquarium Association (ZAA) and detailed the additional marsupial species

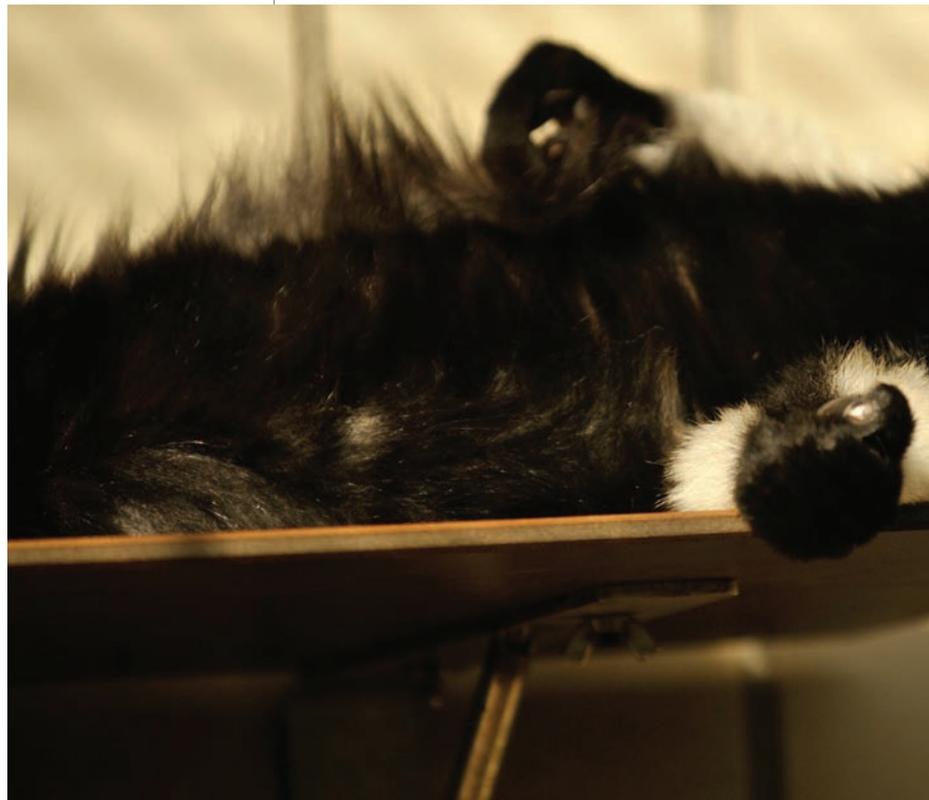
that are of interest to the European region.

In an outstanding achievement, quolls have been added to European collections by Leipzig Zoo, Germany in 2011, which were even successful in breeding. Quolls needed to be added to European collections as, until this point, no large marsupial carnivore species had been represented, apart from the four Tasmanian devils kept at Copenhagen Zoo, Denmark. Large marsupial carnivore species are important for education purposes to demonstrate convergencies with placental mustelids.

The Monotreme and Marsupial TAG also took part in the EEP evaluations and the Wombat EEP was successfully evaluated. The Brushtailed bettong EEP coordinator position became vacant in 2011 and has yet to be filled. Jutta Heuer from Halle Zoo, Germany, volunteered to monitor *Didelphis* species, which was important for the integrity of the RCP.

Unfortunately, the Kowari ESB and the Bettong EEP show problems due to very restricted founder lines and high degrees of inbreeding. It is hoped that these issues will be solved once the collaboration with the Australian region is intensified.

BELTED RUFFED LEMUR (*VARIEGATA SUBCINCTA*)
© FRANCOIS GRANDIN, MHNH



PROSIMIAN

TAG chair Achim Johann, NaturZoo Rheine, Rheine, Germany; TAG vice chair Delphine Roulet, Parc Zoologique de Paris, Paris, France

In 2011 the Prosimian TAG continued its work to guarantee the keeping of the most diverse *ex situ* collection of prosimian species. A diverse *ex situ* population enables action and reaction to ever-changing conservation priorities and helps to link EAZA collections to the countries of origin. As an essential tool to achieve this, the RCP defines the priorities in the animal collections in order to work towards self-sustaining *ex situ* populations for education and conservation purposes.

There are currently 34 prosimian taxa kept in EAZA zoos. Twenty of these are 'recommended' in the RCP and therefore managed as EEPs (13) and ESBs (7).

All EEPs have been evaluated over the years, the last ones in 2011 being for the Ruffed lemurs, the Mongoose lemur and the Slender loris EEPs. Results from the evaluation process were summarized as 'good' to 'satisfying', but also revealed issues in need of improvement.

In consequence the three EEPs for ruffed lemurs (Red, Black-and-white and White-belted ruffed

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lemur EEPs), the TAG and the EAZA Population Management Advisory Group (EPMAG) met in a workshop to define working procedures and goals for these breeding programmes. The respective coordinators are highly motivated and busy creating high-quality programmes for these charismatic and popular flagship species.

The participants' active participation in these programmes is essential to meet the set goals.

In March 2011 the TAG organised a Nocturnal Prosimians Workshop hosted by Frankfurt Zoo, Germany, to highlight these taxa, which are often neglected in European collections. It was a highly successful meeting with an interdisciplinary approach. The participants formed and strengthened a network of expertise in linking zoos with universities and *in situ* conservation activists.

During the annual TAG reporting session at the EAZA Annual Conference in September 2011 in Montpellier the results from a survey on husbandry experiences with lemurs kept in single-sex groups were shown. The range of *in situ* conservation projects that are supported by EAZA zoos was also presented. There are a number of these with direct links to the species managed in EEPs as there are projects focusing on greater bamboo lemur, crowned sifaka, Sclater's lemur and ruffed lemurs.

For 2012 it is planned to host a mid-year meeting with the focus on *in situ* conservation. Participation of representatives from Madagascan authorities and onsite NGOs are expected to attend the meeting. Also further systematic research on the behaviour of ruffed lemurs kept in single-sex groups is scheduled for 2012. Finally, the issue of changing and disputable taxonomy of prosimians needs serious discussion. IUCN Red List categories are considering taxonomic uniqueness for defining the grade of threat. So any taxonomic re-arrangement might result in up- or down-grading the conservation status and consequently breeding-programme priorities for those 'taxonomic units'.

Proceedings and documents from the workshops and meetings mentioned above as well the RCP can be found on the TAG's workspace in the EAZA website's Member Area.





WHITE-FOOTED TAMARIN
(*SAGUINUS LEUCOPUS*)

CALLITRICHID

TAG chair Eric Bairrao Ruivo, Zooparc de Beauval, France; TAG vice chair Dominic Wormell, Durrell Wildlife Conservation Trust, Jersey, United Kingdom

In 2011 the Callitrichid TAG met twice – once during the TAG’s mid-year meeting in March at the EAZA Executive Office in Amsterdam where most of the TAG issues are being addressed, and during the EAZA Annual Conference in September in Montpellier where presentations on *in situ* conservation projects were held, such as the white-footed tamarin conservation programme, the cotton-top tamarin conservation club and pied tamarin work around Manaus – all of which are supported by the Callitrichid TAG’s member institutions.

Several issues relating to EEPs and ESBs were addressed throughout the year, the most serious being problems that the emperor tamarin programme has faced. Lisbon Zoo remains the institution that holds the EEP but a new coordinator has been appointed. Improvements in the running of the programme have already been seen.

The Latin American Association of Zoological Parks and Aquariums (ALPZA) agreed, after having been approached by the Callitrichid TAG, to expand the emperor tamarin programme into South America. Steps have already been taken to put this into action and the first animals should soon be transferred to Santiago Zoo in Chile.

The new Callitrichid Husbandry Guidelines have been translated into Spanish by the Colombian

zoo association (ACOPA ZOO) and Barcelona Zoo. The TAG chair travelled to China and discussed the translation of the new guidelines into Chinese with the Chinese Association of Zoological Gardens (CAZG). Arrangements to translate the guidelines into German and Portuguese were also made during the year and are to be finalised in 2012.

The Callitrichid TAG chair has been in contact with all other regions and there have been ongoing discussions between the EAZA TAG and the equivalent Australian body about possible transfers.

The Callitrichid TAG produced a statement on surplus animals, which is reproduced here:

Callitrichids have a complex social system in which older offspring need to remain in their natal groups to experience the rearing of younger infants in order to become competent parents themselves. However, although groups can reach quite large numbers and remain stable, evictions (aggressive expulsion of animals from the family by parents or siblings) are an inevitable event that will arise in all collections at some point.

Therefore, it is essential that any institution taking on a breeding group of callitrichids plans ahead for evictions and makes sure that sufficient accommodation is available so that evicted animals can be housed in environmentally and socially appropriate conditions.

Although efforts are always made by programme coordinators and studbook keepers to place animals that have been removed from their natal families, appropriate partners cannot always be found in the short term and it is the responsibility of the holding institution to ensure adequate welfare standards in the interim. Institutions should therefore not take on a breeding group unless they can provide such reservoir accommodation when necessary. Single individuals of different species can often be housed together successfully, and if no conspecific companion is available, this is preferable to housing a callitrichid alone. For further information on housing and welfare, please refer to the surplus and breeding control section in the EAZA Callitrichid Husbandry Guidelines.

This statement was approved and now appears on the TAG workspace of the EAZA website’s Member Area.

The emergence of a potentially serious new disease in callitrichids was observed in some institutions in the region throughout the year. The nematode *Parastrongylus* (*Angiostrongylus*), a cardiac pulmonary parasite similar to the rat lung

worm, has affected three zoos in France in the last few years. Diagnosis is difficult even at post mortem. Institutions were asked to be extremely vigilant and report any occurrences to the TAG vet advisor.

The TAG chair and vice chair travelled to Colombia to conduct a husbandry workshop and help to further develop the strategic plan for the endangered white-footed tamarin, which the TAG has developed and supported for the last five years.

Finally the first steps to update the Callitrichid TAG RCP were taken and it was decided to include people working with the species *in situ* in the discussion and decisions. This will be done through the IUCN Primate Specialist Group and it is probably the first time that an RCP will be done with real and direct input from people working in the field. This process has been coordinated by Kristin Leus, EAZA Population Management Advisory Group (EPMAG) chair, who is also a member of the Callitrichid TAG as population management advisor.

CLOCKWISE FROM BOTTOM LEFT: WHITE-FACED SAKI (*PITHECIA PITHECIA*); VARIEGATED SPIDER MONKEY (*ATELES BELZEBUTH HYBRIDUS*) © KIRSTEN PULLEN, PAIGNTON ZOO; BLACK HOWLER MONKEY (*ALOUATTA CARAYA*)



CEBID

TAG chair Frank Rietkerk, Apenheul Primate Park, Apeldoorn, The Netherlands; TAG vice chair Kirsten Pullen, Paignton Zoo Environmental Park, Paignton, United Kingdom

The coordinators for the three spider monkey programmes are settling into their new positions well and a new coordinator was appointed for the Common squirrel monkey EEP in 2011.

Further links with institutions in Guyana have been established with the Red-faced black spider monkey EEP. This has provided new potential founders for the EEP. In addition, progress is being made with the first draft of the husbandry guidelines for spider monkeys. There is continuing discussion on the possibility of moving spider monkey group management from a traditional to a more fission-fusion-based set up. Behavioural research will be carried out during 2012 to complement existing research into this.

There are ongoing issues with the number of



institutions holding non-recommended capuchin species and a lack of space available for the two programme species, particularly the yellow breasted capuchin. The revision of the Cebid RCP may assist with this, but efforts will be made to encourage a change to the programme species.

A new programme has been proposed for the bearded saki (currently held in Colchester and Belfast). At the moment numbers of bearded sakis are very small and Belfast will maintain a monitoring role. They are also investigating the potential to further this species among EAZA institutions through liaising with other regions.

Issues with diets in the Cebid TAG species have been raised. The TAG is talking to the EAZA nutrition group about defining these issues and establishing some research to deal with them.

The Cebid TAG is also looking into ongoing issues with the effectiveness of contraceptives in Cebid TAG species. Collecting and collating data on the use and effectiveness of products is essential to allow informed decisions on product use. The European Group for Zoo Animal Contraception (EGZAC) will be a useful tool in helping us deal with this.

Towards the end of 2011 the EEP evaluation process was completed for all the Cebid TAG EEPs. Action points stemming from the evaluation process will be decided upon in the coming year and added to the year plan.

Strong conservation links are already in place for the titi monkeys, capuchins and woolly monkeys. Links with ALPZA are being explored to see if involvement in other projects can be furthered through the TAG. A list of projects currently supported by the TAG and potential projects will be compiled in the coming year. This will then be made available to institutions to encourage more participation in conservation of the Cebid TAG species.

The TAG action plan for the coming years is:

- to continue to support the work of the programme managers, especially those new to the process;
- to revise the RCP document;
- conduct an assessment of available space for capuchin species in particular;
- provide a list of current conservation projects and potential projects for zoos to become involved in;
- continue dialogue with the European Nutrition Group re: identification of dietary issues;
- make a wishlist of priority research for the different species that are in the RCP;

“
THE INITIAL FINDINGS OF A SURVEY ON MIXED EXHIBITS OF OLD WORLD MONKEYS HAVE NOW BEEN COLLATED INTO A DATABASE
 ”



- establish further Action Points arising from the EEP evaluation process.

OLD WORLD MONKEY

TAG chair Neil Bemment, Paignton Zoo Environmental Park, Paignton, The United Kingdom; TAG vice chair Tjerk ter Meulen, Apenheul Primate Park, Apeldoorn, The Netherlands

The EAZA Old World Monkey (OWM) TAG held a midyear meeting of its Core Group members at the EAZA Office on 23 March 2011. Tjerk ter Meulen (Apenheul Primate Park, The Netherlands) was confirmed as vice chair of the OWMTAG along with Matt Hartley (Zoo Wildlife Solutions Ltd) as an additional veterinary advisor. A number of operational issues were reviewed and



actions put in place pertaining to the OWM EEP evaluations timetable and the ongoing revision of the RCP. Specific problems for individual taxa were highlighted from the ESB and EEP reports such that the management categories within the EAZA OWM RCP have been reassessed and changes to species programme proposals agreed. All that remains is for the species managers to set realistic target population sizes in early 2012. The RCP introduction will include the OWM TAG Mission Statement, namely:

‘To encourage the good management of Old World monkeys in EAZA collections and associated institutions by means of promoting high standards of husbandry and Regional Collection Planning with a view to establishing self-sustaining populations in captivity for the purposes of education, research, *ex situ* conservation and the support of *in situ* conservation initiatives.’

As such there are several challenges that need addressing for the future management of European

BABARY MACAQUE (*MACACA SYLVANUS*) APENHEUL PRIMATE PARK

zoo Old World monkey populations, not least the declining trends for many of the endangered taxa that started with only a few founders. There is also a lack of new holders for certain taxa for which the populations need to be expanded and a need to downsize some populations that have been allowed to grow *ad hoc*. Following the publication of the revised RCP there will be a drive to promote both the actions needed to address the competition between some populations including the encouragement of mixed OWM exhibits to maximise the available zoo space.

With regards to publications in 2011, current guidance from the EAZA Veterinary Group on the management of primate zoonosis was duly circulated among the OWM TAG Core Group for comment as was a more species specific draft document by Matt Hartley on the ‘Risks and Management of SIV in the De Brazza Guenon *Cercopithecus neglectus*’. Both will hopefully reassure EAZA members working with Old World monkeys

that the 'knee-jerk' reaction to the confirmation of potential zoonosis does not necessarily have to be mandatory euthanasia and that a more pragmatic approach involving sensible precautions in their husbandry, in association with ongoing veterinary surveillance, will suffice.

The initial findings of a survey on mixed exhibits of Old World monkeys have also been collated into a database (Tjerk ter Meulen). All of these developments are to be formally publicised on the OWMTAG web page prior to the 2012 Annual Conference along with the presentations from the 2011 midyear and annual conference sessions ie EEP coordinator and ESB keeper reports and updates on various *in situ* conservation initiatives such as barbary macaque in the Rif Mountains (Sian Waters) and the West African Primate Conservation Action (WAPCA) (Teresa Abello).

It is also hoped in 2012 to form a closer working relationship with PASA (the Pan African Sanctuaries Alliance) to optimise our joint resources and to this end a draft SOI (Statement of Intent) is currently under discussion between PASA and the EAZA OWMTAG. Contact with AZA and ZAA OWMTAG on cooperative management also increased in the latter part of 2011 such that a more collaborative approach is anticipated in 2012, to be heralded by a Joint EAZA/AZA mid-year meeting that has been scheduled specifically to discuss common issues and how best to forge a way forward for our respective *ex situ* populations.

GREAT APE

TAG chair Tom de Jongh, Burgers' Zoo, Arnhem, The Netherlands; TAG vice chair Maria Teresa Abello, Parc Zoologic de Barcelona, Barcelona, Spain

2011 was an important year for the Great Ape TAG, as it was involved in the EAZA Ape Campaign, in which EAZA Zoos collected money for projects contributing to the conservation of great apes and gibbons. So far almost €500.000,00 has been transferred to the campaign's account and more is expected to be received soon. Four pre-selected conservation projects received the amounts they applied for, and a fund was created from which more projects can be supported in the coming years. As part of the campaign, a major accomplishment



SUMATRAN ORANG-UTAN (*PONGO ABELII*), ZOO LA BOISSIÈRE DU DORÉ

was the effective lobbying by EAZA in the European Parliament on food information for consumers. As a result the type of vegetable oil used as an ingredient in food should be clearly specified, including palm oil. In particular, wild orangutans are heavily endangered by the loss of their habitat, as it is being replaced by palm oil plantations. The appeal was successful and resulted in the EU adopting a law which will require the labeling of specific vegetable oils on food products showing consumers when they are using palm oil.

The TAG met twice during 2011. First, in April the Midyear meeting took place in Munich. The RCP was updated, and a schedule was set for the planned Species Committee elections and EEP evaluations until 31 December 2015. The current variety of breeding loan agreements has led to much confusion regarding the ownership of certain individuals. This was discussed and will probably be discussed further in 2012. The role of the Research Group in the TAG was explained. This group will help the TAG to identify research priorities; advise EEP coordinators regarding research related matters; collect and compile information on ongoing research in the various EEPs; evaluate research proposals and help the TAG to decide which projects to endorse; where possible identify researchers that can take on one of the identified research priorities and many more topics.

In September 2011 the annual meeting took place during the EAZA Annual Conference in Montpellier. This meeting mainly concentrated on presentations. Apart from updates on the various EEPs by the coordinators, the agenda had a nice variety of presentations:

Orang utan EEP

This year this EEP was officially split into a separate one for the Sumatran orangutan (*Pongo abelii*) and one for the Bornean orangutan (*Pongo pygmaeus*) to reflect their current taxonomical status. There will be no practical consequences to this change. The target population size for each of the two species was set at 200 individuals. The biggest problem in this EEP is the growing surplus in males. It seems that drastic changes in the type of social management of these species are strongly needed. Before the planned election of a new Species Committee, this programme will be evaluated.

Gorilla EEP

The target population size for this species was set at 500 individuals. In 2011 a new Species Committee was elected.

Bonobo EEP

There was further progress made in the execution of the masterplan, rearranging the population in groups with low mean kinship values and other groups with high mean kinship values. The target population size for this species is set at 200 individuals.

Western chimpanzee EEP

In 2011 important progress was made in the identification of subspecies. The advice of Michael Seres, who is very experienced in introducing chimpanzees, has turned out to be very valuable for this EEP. The target population size is set at 500 individuals.

SMALL MAMMAL

TAG chair Jutta Heuer, Zoologischer Garten Halle, Halle, Germany; TAG vice chair Klaus Rudloff, Tierpark Berlin-Friedrichsfelde, Berlin, Germany

In May 2011 a combined spring meeting together with the Small Carnivore TAG was held in Tierpark

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**THE TAG'S NAME
 WAS CHANGED FROM
 CANID TAG TO CANID
 AND HYAENID TAG TO
 CLARIFY THAT HYENAS
 ALSO FALL UNDER ITS
 REMIT**
 ”

Berlin, Germany. About 75 participants from all over Europe took part in this meeting, at which a number of interesting presentations were given. The new Madagascar exhibit in Newquay Zoo was presented, as well as the *in situ* conservation work on Rock Cavy (*Kerodon rupestris*). All presentations can be found on the EAZA website's Member Area.

During the EAZA Annual Conference in September in Montpellier the Small Mammal TAG met again and focused on status updates of EEPs, ESBs and monitoring studbooks.

In Montpellier the Xenathra-Session was a novelty being organised by the Small Mammal TAG. The session was developed in collaboration with the IUCN SSC Specialist group for anteaters, sloths and armadillos. Flavia Miranda also presented the work she carries out for Projeto Tamanduá, the Brazilian anteater project and her work as deputy chair for the IUCN/SSC Anteater, Sloth & Armadillo.

CANID AND HYAENID

TAG chair Raymond van der Meer, DierenPark Amersfoort, Amersfoort, the Netherlands; TAG vice chairs: Conrad Ensenat, Parc Zoologic de Barcelona, Barcelona, Spain; Heike Maisch, Thüringer Zoopark Erfurt, Erfurt, Germany

In 2011 the TAG's name was changed from Canid TAG to Canid and Hyaenid TAG to clarify that hyenas also fall under the remit of the TAG. In 2011 it was also decided to split up the coordination of the three hyena studbooks which were previously coordinated by one person. The aim is to give more attention to the Striped hyena ESB. The coordination of this ESB was, after the approval of the EEP Committee, handed over to Frederic Houssaye from Cerza Zoo, Lisieux, France. For the brown hyena it was decided during the Regional Collection Planning process to downgrade it to a not recommended (REPL) species because the TAG's focus lies on the striped and spotted hyena.

The bat-eared fox monitor programme was, after approval by the EEP Committee, upgraded to an ESB and is now managed by Mike Woolham from Banham Zoo, UK.

In February 2011, the EAZA Canid and Hyaenid TAG held its midyear meeting in Gaia Park, Kerkrade, The Netherlands. The main goal of this meeting was to finish the RCP process with a special focus on the wolf species and subspecies.

The TAG members worked on a decision tree to evaluate and assess all the species under the remit of the TAG. There are 35 canid species and four hyena species within the scope of the TAG. The taxonomy used is in agreement with the IUCN SSC Canid and the Hyenid Specialist Groups. There is a lot of debate about the different subspecies of the grey wolf (*Canis lupus*) and so they were discussed separately. The subspecies were divided into three regions to make evaluation easier. The regions are the American/Mexican, the European and the non-European/non-American region. For all three regions we went through the decision tree and came out with the appropriate categories.

The cooperation with the AZA Canid and Hyaenid TAG was further established when the chair of the TAG, Jack Grisham, joined the EAZA Annual Conference in September in Montpellier. We discussed cooperation with other regions and the IUCN Specialist Groups, and will look into the possibilities of a global canid meeting in 2013.

The TAG action plan for the coming years is:

- to finish the RCP document, and evaluate the effect of the RCP;
- evaluate the involvement in canid and hyaenid conservation projects;
- make a wishlist of priority research for the different species that are in the RCP;
- explore the possibilities of the organisation of a global canid meeting.

BEAR

TAG chair José Kok, Ouwehands Dierenpark, Rhene, The Netherlands;
TAG vice chair Lydia Kolter, Zoologischer Garten Köln, Köln, Germany

The Bear TAG was invited to hold the 2011 midyear meeting at Izmir Zoo, Turkey. During this meeting a draft of two surveys was discussed and developed further. The surveys address the topics of conservation education and the effects of the Ursid Husbandry Guidelines on current husbandry practices. A draft version of the document ‘Critical

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A POLAR BEAR
INTERNATIONAL
MEETING TOOK PLACE TO
BRING TOGETHER FIELD
RESEARCHERS AND ZOO
BIOLOGISTS TO DISCUSS
POTENTIAL RESEARCH
COLLABORATION
”

criteria for breeding and rearing polar bears in captivity’ was also created.

During the open sessions staff members of several Turkish zoos participated and took the opportunity to discuss topics such as ‘Brown bear husbandry and nutrition in zoos’ (led by José Kok) and ‘How can we stimulate normal behaviours in the existing enclosures’ (led by José Kok and Lydia Kolter). Due to the lack of attendance of Bear TAG members during the EAZA Annual Conference in September in Montpellier the meeting was cancelled. However, the Polar bear EEP coordinator Janos Szantho held a species committee meeting with the support of the TAG chair, José Kok. The polar bear master plan was presented based on the genetic analysis done by Laurie Bingaman Lackey (ISIS) and the EEP coordinator.

In late March 2011 a workshop of the Captive Bear Expert Team (CBET), which is a subgroup of the IUCN SSC Bear Specialist Group, was hosted by Cologne Zoo, Germany. All three members of the Bear TAG, who are also CBET members, attended the meeting, which dealt with the question of how captive bears can contribute to bear conservation in terms of awareness, fundraising, conservation education and conservation-relevant research.

The Bear TAG vice chair attended the International Conference on Bear Research and Management (IBA) in Ottawa, in July 2011, where she outlined part of the results of the CBET workshop regarding the topic of ‘Connecting captive bears with conservation – connecting *in situ* and *ex situ* communities’. During an IBA workshop she also talked about the concept, definition, requirements and challenges of large bear enclosures in relation to the EAZA Ursid Husbandry Guidelines. She also presented the results of the research session during the CBET meeting and how collaborative partnerships could be facilitated to improve bear research, conservation, and husbandry of captive and free-ranging bears.

During the IBA conference a Polar Bear International (PBI) meeting took place to bring together field researchers and zoo biologists to discuss potential research collaboration. A first list of topics has been identified to which zoo-based projects might contribute, generating conservation relevant information which was categorised later. The list is currently being revised by the group members focusing on methods and feasibility of the different topics.

SMALL CARNIVORE

TAG chair Stewart Muir, Newquay Zoo, Newquay, The United Kingdom; TAG vice chair Aude Haelewyn-Desmoulin, Zooparc de Beauval, St-Aignan, France

The Small Carnivore TAG held a combined mid-year meeting in Berlin with the Small Mammal TAG. Few of the programme coordinators which form the core group of the TAG were able to attend this meeting. Those that were present discussed this problem as it is difficult to discuss relevant TAG issues without more of the people involved being present. While the combined mid-year meeting is always enjoyable and interesting, it is perhaps not as constructive as a closed session to discuss purely TAG business. It has been suggested that a one-day workshop is held during 2012 in a more central location, ie the EAZA Executive Office in Amsterdam, in the hope that more people can attend to discuss issues which are now becoming urgent, such as revision of the RCP.

We have tried in the past to set aside some time for a closed meeting at the Annual Conference

but, as everyone is aware, it is also a challenge to get relevant people to attend because we all have so many other commitments.

During the Annual Conference, all of the programmes gave or sent reports. A number of presentations were given, including a comprehensive overview of the European mink EEP by Tiit Maran and a 10-year summary of the work achieved by the Vietnamese Carnivore and Pangolin Programme by Stewart Muir. Over 80 delegates attended the session. The only change in personnel was the transference of Eurasian otter EEP coordination from Jo Elliott to Lynda Burrill at Edinburgh Zoo. A new EEP was approved for the Owston's civet – coordinator, Stewart Muir, and studbook holder, Sam Harley – at Newquay Zoo, UK. Leif Blomqvist gave a presentation about the yellow-throated marten (*Martes flavigula*). As the population of this species is growing within EAZA collections, a proposal was put forward to apply for an ESB for this species.

EEP evaluations for all the relevant programmes were completed with the help of the EAZA Executive Office. Generally, the programmes run well but certain areas need addressing. Most programmes need to hold re-elections of species

OWSTON'S CIVET
(*CHROTOGALE OWSTONI*), COC
PHUONG NATIONAL PARK



committee members and there is a lack of reporting generally of conservation work being carried out for most of the species.

The TAG chair is a member of the IUCN Small Carnivore Specialist Group and attended the CBSG meeting in Prague in October. The TAG would like to encourage members to subscribe to the IUCN Small Carnivore Group newsletter as an excellent way of receiving information about conservation efforts and research for small carnivores.

The TAG action plan for the coming year is:

- to work on the revision of the RCP document;
- to ensure species committees are elected where necessary;
- to improve the dissemination of news about relevant conservation work for each of the EEP species;
- to review existing husbandry guidelines, and compile others for those EEPs that do not yet have them.

FELID

TAG chair Alexander Sliwa, Zoologischer Garten Köln, Köln, Germany; TAG vice chairs: André Stadler, Zoo Wuppertal, Wuppertal Elberfeld, Germany; Grégory Breton, Le Parc des Felins, Lumigny-Nesles-Ormeaux, France

The EAZA Felid TAG was established several decades ago. Since the publication of the first Felid TAG RCP in 1997 some important changes in the taxonomy of felids have taken place. The chairs of the Felid TAG agreed that a new version of the RCP is needed. They started working on this at the mid-year meeting in Nesles, France in 2007 with the help of all represented coordinators.

The TAG members developed a decision flowchart that helps the TAG members in the ongoing process of updating the RCP. The RCP was thoroughly updated during the mid-year meeting at Nordens Ark, Sweden in March 2011 and the RCP is expected to be finished in 2012.

In 2011 the EEP evaluations within the remit of the Felid TAG were finished with the evaluation of the Amur tiger, Fishing cat and Clouded leopard EEPs. The evaluations meant that some coordinators started to improve their programmes by producing studbooks and working on their datasets.



AMUR TIGER (*PANTHERA TIGRIS ALTAICA*)
© ALEXANDER SLIWA

Other important topics included the continuation of preparing one-page summaries of all felid species for the RCP (mainly handled by the coordinators themselves or by the TAG chairs) and the publishing of the minimum two-page summaries of husbandry guidelines for all the managed species/subspecies. We currently have 83% of summaries available.

The problems between the programmes differ. In some EEPs/ESBs we only have small populations (eg black-footed cat, oncilla, Asian golden cat), whereas others, such as the four leopard subspecies programmes, compete for space with each other, while valuable holding space is occupied by generic leopards. This problem also occurs between the tiger subspecies programmes. In general we increasingly try to address and solve problems with veterinary issues, genetic purity, research and husbandry, as well as enrichment. In addition, there is a need to look after populations of cats that become increasingly endangered in the wild, such as those of the African lion, flat-headed cat and other species.

The TAG action plan for the coming years is:

- to finish the RCP document, and evaluate the effect of the RCP;
- to evaluate the involvement in felid conservation projects, especially for the smaller wild cat species;



“
CONCERNING SEALIONS, THE CURRENT TB ISSUE WAS DISCUSSED AND A MEETING OF VETERINARY SPECIALISTS IS PLANNED FOR SEPTEMBER
 ”

- to compile a priority research list for the different species that are in the RCP;
- to address various veterinary issues.

MARINE MAMMAL

TAG chair Gerard Meijer, Ouwehands Dierenpark, Rhenen, The Netherlands; TAG vice chair Claudia Gili, Acquario di Genova, Genova, Italy

The Marine Mammal TAG currently comprises two EEPs and four ESBs. The TAG met twice in 2011, and the first meeting was held together with the European Association for Aquatic Mammals (EAAM) in Barcelona, Spain. Discussions took place on how to proceed with the future management of the Bottlenose dolphin EEP, and a change of coordinator was proposed and, later in the year, approved. One of the topics raised at the meeting concerned the Caribbean manatee EEP and its current genetic study and the differences in breeding success.

The working group for updating the Husbandry Guidelines for seals and sealions also presented

their progress. This working group is of particular interest as both members of EAAM and the Marine Mammal TAG are collaborating on this project together. In addition, concerning sealions, the current tuberculosis issue was discussed and a meeting of veterinary specialists is planned for September.

The TAG met again at the EAZA Annual Conference in Montpellier in September. Updates were given on the current situation of the TAG's EEPs and ESBs. Representatives from Zoo Halle, Germany, presented their all-male enclosure for the South African fur seal, while Zoo Nuremberg, Germany, gave an insight into their new marine mammal exhibit. Another presentation focused on surplus animals and how participating institutions should be more responsible in terms of reproduction planning. 2011 was also the year for finalising the Bottlenose dolphin EEP and the Manatee EEP evaluations.

For 2012 it is planned to update the RCP and finalise the update of the Husbandry Guidelines for seals and sealions.

ELEPHANT

TAG chair Heiner Engel, Zoo Hannover, Hannover, Germany

The Elephant TAG met on three occasions in 2011. In June, a closed TAG meeting was kindly hosted by Amersfoort Zoo, The Netherlands. A closed and an open meeting were held during the EAZA Annual Conference in September in Montpellier. The future global population management was discussed at the International Elephant Foundation Meeting in October in Rotterdam.

The studbooks for the African and Asian elephant



ASIAN ELEPHANT (*ELEPHAS MAXIMUS*), ARTIS ZOO
 © HEINER ENGEL

EEPs have been published on the EAZA website and the recommendations included span across many years ahead. The Asian elephant EEP has reached a level of demographic self sustainability, with the same number of births and deaths. The breeding results for African elephants have to be improved, though, with the main problem seeming to be the exchange of breeding bulls between facilities. Therefore a working group was established. Results are documented and published on the TAG workspace under 'Risks of transferring big bulls' During the various meetings several rules and standards were discussed, including:

- the procedures for importing animals into the EEP;
- post mortem reports which should be send to veterinary advisors;
- status and care procedures for Herpes (EEHV);
- transport procedures (review of IATA Live Animal Regulations) and testing (all animals should be tested prior to transport and found negative for tuberculosis);
- updates on the discussions on German standards for keeping elephants;
- AZA's new safety rules and implications for the EAZA region;
- the 'Elephant Fund' (setting up a fund that could assist the functioning of the elephant programmes was discussed but it was decided not to move forward with this idea for the moment).

A full overview of elephant management decisions taken by the EAZA Elephant TAG over the past ten years is available on the Member Area of the EAZA website.

The Elephant TAG reviewed and compiled several publications in 2011. The husbandry guidelines in English and French were published on the TAG workspace and a Spanish version is currently being prepared. The TAG Mission statement was reviewed and published on the TAG workspace:

'All elephants held globally under human care in zoological gardens can be regarded as iconic, flagship animals helping raise the awareness of the plight of the elephant to the zoo-going public. Due to their intellect, longevity and social awareness, elephants are ambassadors that generate immediate empathy from zoo visitors, and while there are no immediate plans to return elephants back to the wild, their role under human care in terms of profiling education,

conservation and research cannot be overstated.

'The goals of the Elephant TAG are to have a self-sustaining population under human care. Within this remit, social, physical and psychological needs must be adequately catered for, and standards of excellence in terms of general husbandry, medical welfare – including research into prevalent disease, along with conservation breeding – are pivotal as the cornerstones to maintaining this species under human care.

'The TAG is also an information platform that disseminates and shares scientific knowledge worldwide; it encourages research, *in situ* conservation and staff training, and identifies new challenges that push forward the advances of elephant management as a whole.'

In *Zooquaria* 76 the Elephant TAG reported on the demographic change in the Asian elephant population.

Aside from publications, the Elephant TAG also established a working group on the RCP development. The TAG also announced various advisors to the TAG:

Conservation advisor:	Harry Schwammer
Educational advisor:	vacant
Nutrition advisors:	Joeke Nijboer; Andre Fidgett
Scientific advisor for reproduction:	Ann-Kathrin Oerke
Special advisor for Seville:	Jesus Fernandez Moran
Veterinary advisors:	Michael Flügger; Thomas Hildebrand; Willem Schaftenaar; Endre Sos

RHINO

TAG chair Friederike von Houwald, Zoologischer Garten Basel, Basel, Switzerland; TAG vice chair Lars Versteegen, Safaripark Beekse Bergen, Hilvarenbeek, The Netherlands

The vision of the EAZA Rhino TAG is a healthy, viable population of free-ranging and intensively managed rhinos in intact ecosystems where they are valued and cherished, both locally and globally. The mission of the TAG is to ensure all

“
ALL THREE RHINO SPECIES SHOULD CONTINUE TO BREED TO ENSURE EACH EEP POPULATION IS SELF-SUSTAINING AND GENETICALLY VIABLE IN THE LONG-TERM
”

captive populations are healthy, self-sustaining and genetically viable, and capable of being an effective tool in support of rhino conservation in the wild. The EAZA Rhino TAG met once during 2011, at the EAZA Annual Conference in Montpellier, France.

The population of black and Indian rhinos is steadily increasing due to sufficient breeding. The white rhino population is still suffering from a lack of breeding. The White rhino EEP is working to improve this poor birth rate.

The TAG has been very active throughout the year. A new version of the RCP has been written and published on the EAZA rhino webpage. The RCP states that all three rhino species should continue to breed to ensure that each EEP population is self-sustaining and genetically viable in the long-term. Zoos also have the potential to support rhino conservation projects by raising awareness, by financially supporting field projects and by providing animals as requested by range states when approved by the appropriate specialists group and the TAG. All three EEPs have gone through the evaluation process in which the holders, species committee members and the EAZA Executive Office evaluated each programme on the basis of functionality.

There have been some changes amongst TAG membership and TAG advisors: a Research Advisory Team and an Education Advisory Team have now been appointed. The overall aim of the Education Advisory Team is to help the Rhino TAG and the zoos that keep rhinos to raise awareness about the current poaching crisis of rhinos.

On World Rhino Day (22 September 2011) a position paper was published in cooperation with the AZA Rhino TAG Chair. On this special day, people around the world stood up for rhinos and shared the message that rhino horn is NOT medicine.

For the first time, the TAG chair was invited by the chair of the IUCN African Rhino Specialist Group (AfRSG) to attend their annual meeting. During this meeting the TAG Chair was given the opportunity to report on the efforts by zoos not only to breed and manage rhino species in captivity but also to raise awareness for conservation needs. At the end of the meeting it was encouraging to see a wish for a closer cooperation between zoos, the AfRSG and NGOs. The Rhino TAG is promoting a list of projects which are run by experts and NGOs in Africa and Asia which can be found on the EAZA

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THERE IS A LONG
TRADITION OF A CLOSE
RELATIONSHIP BETWEEN
THE EAZA TAPIR
AND HIPPO TAG AND
THE IUCN/SSC TAPIR
SPECIALIST GROUP
”

website.

Much of the focus of this year's efforts has been on trying to strengthen ties with *in situ* partners to tackle the huge poaching problem. 2011 was the worst poaching year for South Africa in the last decade: 448 rhinos were shot and had their horns cut off. In contrast to Africa, Asia – with a focus on Nepal – can share some good news: no rhino was lost there, while India lost fewer than 30.

For the TAG meeting, the executive director of the IRF, Dr Susie Ellis, was invited to speak about their conservation work, and in each of the species presentations the importance of *in situ* conservation was also stipulated.

The Rhino TAG has also been in very close contact with the executive director of Save the Rhinos (SRI), Cathy Dean. Both directors from SRI and IRF work worldwide and already have close relationships with some zoos working towards rhino conservation, but there is still a huge need for further field support.

An everlasting aim of the Rhino TAG is to encourage every zoo that keeps rhinos to get in contact with field projects and to support them morally and financially, as help is urgently needed.

TAPIR AND HIPPO

TAG chair Bengt Holst, Copenhagen Zoo, Copenhagen, Denmark

The Tapir and Hippo TAG had its annual meeting on 23 September during the EAZA Annual Conference in Montpellier. During the meeting the ESB keeper for the common hippo, Jan Pluhacek, gave a presentation on suckling behaviour in common hippos, and Chris Ransom (ZSL) gave a presentation on the conservation strategy for the pygmy hippo. The latter initiated a fruitful discussion on how to secure a closer link between the IUCN/SSC pygmy hippo subgroup and the EAZA Tapir and Hippo TAG in the future.

There is a long tradition of a close relationship between the EAZA Tapir and Hippo TAG and the IUCN/SSC Tapir Specialist Group (TSG), and in 2011 this close cooperation was reflected in the preparation of the 'V International Tapir Symposium' that was held in Kuala Lumpur from 17-21 October. The TAG chair was part of the organising team. During the symposium a new



three-year strategic plan for the work of the TSG was developed, and the former action plans for the four species of tapirs were evaluated. The next TSG symposium will be in Brazil in 2014, and the TAG plans to be an active part in the preparation of that one, too.

The TAG includes at the moment 3 EEPs (pygmy hippo, Malayan tapir and lowland tapir) and 1 ESB (common hippo) but due to the complex composition of the European population it is now considering turning the ESB into an EEP, allowing for stricter management. This change is in accordance with the RCP that was launched in 2010. Furthermore, the three EEPs have all been evaluated, and the comments from the EEP

RADIOCOLLARING MALAYAN TAPIR (*TAPIRUS INDICUS*)
© BEH

Committee have been forwarded to the species coordinators for consideration and action.

Imports from the wild or from range countries in general have been discussed several times for the Malayan tapir for which the EEP population is rather small. But due to the fact that tuberculosis (TB) is a significant problem in the two Tapir EEPs, the TAG chair has stated that no Malayan tapir imports from the wild or from range countries will be accepted until the TB situation is under control. This also goes for any transfer of tapirs within the EEP region. All tapir holders are obliged to test their animals for TB, and no non-tested animals should be moved.

From a demographic point of view the Malayan tapir population is suffering from too few births, and the Pygmy hippo EEP from a skewed sex ratio with too many females. Both problems are addressed by the species coordinators in the management of the programmes.

PIG AND PECCARY

TAG chair Alastair Macdonald, Edinburgh Zoo, Edinburgh, United Kingdom; TAG vice chair Jochen Reiter, Duisburg Zoo, Duisburg, Germany

The Pig and Peccary TAG comprises a total of three EEPs for babirusa, Visayan warty pigs and red river hogs, plus an ESB for warthogs. The TAG collaborates with regional associations, primarily with ALPZA and AZA. The TAG chair is also a member of the IUCN/SSC Peccaries Specialist Group.

The current RCP was published in 2001 and it will be revised in the near future. AZA input through Jeff Holland from Los Angeles Zoo in the US will be provided. The Babirusa EEP evaluation is currently being finalised and the remaining EEP programmes will be evaluated soon.

During the 2011 EAZA Annual Conference in September in Montpellier all the programmes presented their reports.

There is a continued decline in population size within the Babirusa EEP. On both TAG and EEP level, hard work is being carried out to facilitate imports from Indonesia, possibly through Singapore Zoo. James Burton from the IUCN Asian Wild Cattle Specialist Group is linked to the Babirusa EEP and is assisting with negotiations in Indonesia.

Comprehensive genetic work is also under way, which includes the study of material from museum specimens.

The population of the Visayan warty pig has been growing steadily, and more holders are urgently needed. The programme will be participating in a genetic study looking at pigs and domestication and genetic variation in *Sus* species.

The red river hog population within EAZA collections is highly inbred and so the EEP collaborated with the North American studbook keeper which resulted in the importation of new founders. Breeding needs to be limited to prioritised pairs and/or groups.

In 2011 Ceri Robertson was appointed as the new Warthog ESB keeper. The programme suffers from poor cooperation of holders.

There is interest in importing Chacoan peccary from the USA. This species may replace other peccaries in European zoos in the future.

The husbandry guidelines will be revised for babirusa and warthog and the guidelines for Visayan warty pig and red river hog will be compiled. In addition, the breeding programme managers were encouraged to communicate *in situ* conservation efforts more often.

The TAG Action plan for 2012:

- Attend Joint Hoofstock mid-year meeting (could not be attended in 2011).
- Revise RCP.
- Complete evaluations for all programmes.
- Make up-to-date husbandry guidelines available for all programmes.
- Evaluate (greater) involvement in conservation and research projects for all programmes.

CATTLE AND CAMELID

TAG chair Gary Batters, Banham Zoo, Banham, United Kingdom; TAG vice chair Terry Hornsey, Africa Alive!, Suffolk, United Kingdom

The Cattle & Camelid TAG held three meetings during 2011. In June there was the joint midyear meeting held in Hannover, Germany along with the Sheep & Goat and the Antelope & Giraffe TAGs, and both an open and a closed TAG meeting during the EAZA Annual Conference in Montpellier in

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THE UNGULATE PROGRAMME IMPORT CHART AIMS TO HIGHLIGHT HOW FOUNDER NEEDS AND SOLUTIONS CAN BE ADDRESSED IN A COORDINATED WAY
 ”

September.

At the midyear meeting, in addition to the normal activities of giving programme updates and refining the RCP in individual TAG sessions, the functioning of the Anoa & Banteng EEPs were reviewed and plans to complete the evaluations of the Gaur, Banteng & Anoa EEPs were formulated. A key joint session covered the topic of the lack of founders for most of our programmes, a problem not unique to any specific TAG. It was decided to develop a joint document detailing the founder status of each programme, and the potential locations of new founders in either a specific foreign zoo or region, the logic being that if there were key potential founders for multiple programmes in one location, a joint import would be more efficient.

At the open meeting during the EAZA Annual Conference in Montpellier, Wanda Olech-Piasecka officially stood down as coordinator for the European bison EEP and Douglas Richardson from the Highland Wildlife Park, Scotland, UK was proposed as new coordinator. The TAG recognised all the time and effort Wanda had put into the programme over the years. The TAG continues its support for anoa genetic studies being carried out by Dr James Burton in both wild and captive animals, and continues to forge strong conservation links and to work closely with the IUCN/SSC Asian Wild Cattle Specialist Group on projects such as: the Banteng Genetics Project, which aims to understand the genetic population structure of banteng in the wild and assess the hybridisation in zoo and wild banteng; and the collection of banteng and gaur DNA samples from museums, with the aim of working towards trying to ascertain provenance of European captive stock and carrying out zoo banteng sampling to identify and collect a sample from each founder or their offspring.

The TAG currently has five EEPs and one ESB. The RCP continues to be reviewed and adjusted on an annual basis and recently it was decided to include the saola, as it is listed by the SSC with wild Asian cattle. Evaluation of both the Gaur and Banteng EEPs were carried out leaving only the Anoa EEP to be completed. Three programmes have now provided information for the ongoing EAZA Ungulate Programme Import Chart, which aims to highlight how founder needs and solutions can be addressed in a coordinated way. The Gaur, Banteng and Anoa EEPs have still to provide information.

The TAG initially proposed an 'Asian wild



LESSER MALAYAN MOUSE-DEER (*TRAGULUS JAVANICUS*)

cattle' focused campaign for the 2011/2012 EAZA Conservation Campaign, which eventually evolved into the broader EAZA IUCN/SSC Southeast Asia Campaign. More information can be found at www.southeastasiacampaign.org.

DEER

TAG chair Noam Werner, Tisch Family Zoological Gardens, Jerusalem, Israel; TAG vice chair Christian Kern, Tierpark Berlin-Friedrichsfelde, Berlin, Germany

The name Deer TAG is somewhat misleading as this TAG is responsible for three taxonomically distinct groups: the chevrotains (mouse-deer; Tragulidae), musk deer (Moschidae) and true deer (Cervidae). Despite having the word 'deer' in their common names, these groups are not related to each other any more than to other even-toed ungulate (Artiodactyla) groups. Recently, on top of the common name, these groups also share taxonomical revisions that they have gone through, which poses a challenge for the TAG when writing or revising the RCP. Currently, a total of 64 species fall under the remit of the Deer TAG (8 Tragulidae; 7 Moschidae; 49 Cervidae), but this number is not final and may

change in the future.

The first draft of the renewed Deer TAG RCP was presented during the 2010 EAZA meeting. During 2011 the RCP was revised and a more updated version was published on the TAG workspace. The taxonomy used follows the one accepted by the IUCN Red List at the species level. Where possible, species were evaluated to the sub-species level, in which case the taxonomy followed recent scientific publications. Later in the year, a draft RCP decision tree was sent to all TAG members for review, and it will be finalised and published soon.

Following the renewal and revision of the RCP, several species and sub-species have received more attention and have been monitored to assess the need for more intense management. Two *Hyelaphus* species, the Critically Endangered Bawean deer (*H. kuhlii*) and the Endangered hog deer (*H. porcinus*) are now being monitored by Lidia Przybylska from Zoo Poznan, Poland and preliminary studbooks for both species were created and published. The Endangered Eld's deer (*Rucervus eldii*) is being monitored by Patrick Roux from Réserve de la Haute-Touche, France and a preliminary studbook is being prepared. Jan Pluhacek, from Zoo Ostrava, Czech Republic will monitor the Siberian wapiti (*Cervus canadensis sibiricus*), the only Eurasian sub-species that is kept in European zoos. The TAG is also monitoring several species and a preliminary studbook for the Near Threatened tufted deer (*Elaphodus cephalophus*) was presented during the EAZA Annual Conference in September in Montpellier. Also, following the revision of the RCP, it was agreed to upgrade the Vulnerable white-lipped deer (*Przewalskium albirostris*) from a monitored species level to an ESB in due course.

Otherwise at the breeding programme level, one personal change took place during 2011 – André Stadler took over as the official Chilean pudu EEP Coordinator in place of Dr. Ulrich Schürer.

Cooperation with the IUCN/SSC Deer Specialist Group was established during the last EAZA meeting, when Dr. Will Duckworth, the IUCN/SSC Red List Authority Focal Point for Southeast Asian deer species, attended the meeting. Dr. Duckworth joined the Deer TAG members for a closed meeting and presented the situation of the SE Asian species, and also gave a similar presentation during the TAG's open meeting. Following the new cooperation, the TAG Chair, Dr. Noam Werner, joined the IUCN/SSC Deer Specialist Group.

The TAG plans for the coming year are:

- to continuously revise the RCP, and complete missing chapters of the document;
- to create a mechanism to free space for managed and/or threatened deer species in EAZA zoos;
- to complete preliminary studbooks for all species recommended to be TAG-M in the RCP'
- to publish, at least partially, general husbandry protocol for deer;
- to promote genetic research to sort out taxonomy of individuals of unknown origin;
- to publish a TAG newsletter.

ANTELOPE AND GIRAFFE

TAG chair Frank Rietkerk, Apenheul Primate Park; TAG vice chair Angela Glatston, Diergaarde Blijdorp, Rotterdam, The Netherlands

The Antelope and Giraffe TAG is currently searching for a new TAG chair and for the meantime Frank Rietkerk will remain in the position. There were a few changes within the breeding programmes, such as the Giraffe EEP coordinator, the Greater kudu ESB keeper and the Blue duiker EEP coordinator positions that were newly appointed in 2011. The Eastern bongo EEP was also in the process of appointing a new coordinator in 2011, which was finalised in early 2012.

In 2011 the TAG met twice, once at the combined hoofstock midyear meetings in May 2011 and once at the EAZA Annual Conference in Montpellier in September. The TAG currently focuses on deciding how the revised taxonomy of antelopes as published by Colin Groves in *Handbook of Mammals of the World, Vol 2, Hoofed mammals* which included major revisions for nyala, bongo, kudu, hartebeest and blue duiker, and will impact on TAG policy. The RCP and the proposal for Joint Species Committees are also being revised. The TAG is producing a report on how (veterinary) legislation is impacting on breeding programmes. For the antelope populations the TAG is also carrying out rapid assessments. The EEP evaluations were finalised for the Dorcas gazelle, Dama gazelle (Mhor), Blue duiker and Nile lechwe EEPs.

Under the remits of the TAG various theme



DORCAS GAZELLE (*GAZELLA DORCAS*), MARWELL WILDLIFE © KHENDON

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THERE WAS A RE-RANKING OF PROGRAMMES TO PRIORITISE NEW FOUNDER ACQUISITION BASED ON IUCN STATUS
 ”

groups have been established and for the groups a reporting structure needs to be put in place. The theme group of aridland antelopes outlined that concerns have arisen due to the unknown parentage within the populations, that there are management restrictions due to the bluetongue disease, and that difficulties in exchanging animals between Middle East and Europe leads to fragmented populations. For savannah antelopes the group asks participants of the programmes to take hair samples of animals during transports as these samples could prove useful for genetic research in the future.

In 2012 the TAG is aiming at redrafting the TAG mission statement and it will propose a

new EEP, the Red duiker EEP. In addition a list of potential imports is currently being compiled in collaboration with the Cattle and Camelid TAG and the Sheep and Goat TAG. These imports are crucial to help improve the sustainability of the Antelope and Giraffe TAG breeding programmes.

SHEEP AND GOAT

TAG chair Jean-Luc Berthier, Menagerie du Jardin des Plantes, Paris, France;
TAG vice chair Douglas Richardson, Highland Wildlife Park (RZSS), Kingussie, United Kingdom

Two formal meetings were held by the Sheep & Goat TAG during 2011. In June there was the joint midyear meeting held at Hannover, Germany along with the Cattle & Camelid and the Antelope & Giraffe TAGs, and the TAG meeting during the EAZA Annual Conference in Montpellier in September. At the midyear meeting, as well as the normal activities of giving programme updates and refining the RCP in individual TAG sessions, a key joint session covered the topic of the lack of founders for most of our programmes, a problem not unique to the Sheep & Goat TAG. It was decided to develop a joint document detailing the founder status of each programme, and the potential locations of new founders, either to be found in a specific foreign zoo or region, the logic being that

if there were key potential founders for multiple programmes in one location, a joint import would be more efficient.

At the annual conference meeting, the overarching items discussed within the TAG were: looking at the programmes that needed genetic research to clarify founder representation and levels of relatedness; application of the recently approved EAZA Euthanasia Statement, in particular where it would assist with the significant surplus male problem; and a further discussion on the general founder issue and a re-ranking of the programmes to prioritise new founder acquisition based on IUCN status.

The TAG currently has two EEPs, eight ESBs and monitors four other taxa. A number of the programmes cover multiple taxa. For example, the Takin ESB manages three takin species/subspecies, and the urial monitoring programme covers multiple taxa from the genus *Ovis*. The RCP continues to be updated on an almost annual basis and the Musk ox EEP has been evaluated and was found to be satisfactory. The Markhor EEP was only recently established and therefore the evaluation has been postponed.

As detailed out above, TAG members were or are involved in the formulation of two important documents: the EAZA Euthanasia Statement, which from a population management perspective is of significant importance for the viability of harem

ALPINE IBEX (*CAPRA IBEX*)
© RCAUCINO



species programmes, ie the surplus male problem; and the ongoing EAZA Ungulate Programme Import Chart, whose aim is to highlight how founder needs and solutions can be addressed in a coordinated way.

There is a need for us to increase the level of activity in a number of programmes, and in particular more of our ESBs need to actively manage their populations, especially in the supply of annual recommendations. This is complicated by some of the confusion regarding founder origins and parental data, but these problems are beginning to be addressed, especially for the more threatened taxa, irrespective of the level of programme management. The surplus male problem, which is inherent for most of the TAG's taxa, has already been discussed above, but more important is a lack of interest in this group of species amongst many EAZA member institutions, even though a number of them are in the highest IUCN threat categories. This space problem is compounded by the large numbers of low threat and domestic taxa that are maintained in many EAZA collections. We are endeavouring to address these problems by exploring more imaginative solutions, and this process is assisted by the TAG's very close working relationship with our colleagues in the AZA Caprinae TAG, which includes exploring a joint management approach to commonly held taxa.

ACRONYMS

AI	Artificial Insemination
ALPZA	Latin American Association of Zoological Parks and Aquariums
ARKS	Animal Record Keeping System
ASMP	Australasian Species Management Programme
BPMC	Breeding Programme Management Course
CBSG	Conservation Breeding Specialist Group
CEO	Chief Executive Officer
CfM	Candidate for Membership
CITES	Convention on International Trade in Endangered Species
DNO	Do Not Obtain
EADISC	European Animal Data Information Systems Committee
EAZA	European Association of Zoos and Aquaria
EAZA A/W list	EAZA Available and Wanted List
EAZA News	Quarterly published magazine by EAZA, now referred to as <i>Zooquaria</i>
EEO	EAZA Executive Office

EEP	European Endangered Species Programme
EEP Cie.	EEP Committee
eNews	Electronic newsletter sent out by EAZA
EPMAG	EAZA Population Management Advisory Group
ESB	European Studbook
EU	European Union
F1	First generation
FL	Fork Length (when measuring fish)
GASP	Global Animal Survival Plan (also referred to as GCS - Global Conservation Strategy)
GCAR	Global Captive Action Recommendation
GD	Gene Diversity
GSMP	Global Species Management Plan
IATA	International Air Transport Association
ICP	Institutional Collection Plan
ID	Identification
ISIS	International Species Information System
IUCN	International Union for Conservation of Nature
IUCN Red List	IUCN Red List of Threatened Species
IUCN SSC Specialist Group	IUCN Species Survival Commission Specialist Group
MAI	Maximal Avoidance of inbreeding
MON-P	Monitored by Person
MON-T	Monitored by TAG
MoU	Memorandum of Understanding
Mx	Age Specific Fecundity
NREC	No recommendation yet
NREV	Not reviewed yet
PM2000	Software for analysis and management of pedigreed populations
PMP	Population Management Plan
Qx	Age Specific Mortality
RCP	Regional Collection Plan
REPL	Replace
RES	Research
SPARKS	Single Population Analysis & Records Keeping System
SSP	Species Survival Plan
TAG	Taxon Advisory Group
TL	Total length (when measuring specimen)
WAZA	World Association of Zoos and Aquaria
ZIMS	Zoological Information Management System
Zooquaria	Quarterly published magazine by EAZA, formerly known as <i>EAZA News</i>
Zootrition	Zoo Nutrition Software Programme

