

ZOOQUARIA

QUARTERLY PUBLICATION OF THE EUROPEAN ASSOCIATION OF ZOOS AND AQUARIA

WINTER 2012

ISSUE 80

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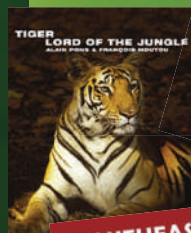


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STAFF CHANGES AT THE EAZA EXECUTIVE OFFICE

This year the team at the EEO have been joined by new face Sofieke Bouwman as Executive Coordinator Communications and Membership, replacing Anouchka Jacquier who finished working for EAZA earlier in the year and returned to her home country of Switzerland to embark on the next stage of her career. Sofieke began her career as an animal keeper in Apenheul Primate Park, and participated in research on the new Animal Directive and into the welfare of circus animals. Prior to joining EAZA Sofieke worked for the Dutch Ministry of Economic Affairs, Agriculture and Innovation as a permit officer for the CITES Management Authority, where her tasks included issuing CITES permits, cooperating with international bodies and law enforcement agencies, and communicating on policy and legislation. Sofieke was also responsible for executing the EU Zoo Directive for the Netherlands, including assessment of new zoos and compliance with the Directive. At the EEO Sofieke is responsible for handling new membership applications and planning and accompanying screening visits for new members. Sofieke also assists with the organisation of EAZA's programme of conferences and events, and is the EEO liaison for the Technical Assistance Committee.



Zooquaria

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From the Director's Chair

Another annual conference is over for another year. And what a conference it was. Packed full of great work, excellent presentations, guests from IUCN Specialist Groups and committees adding to the overall energy of the meeting, and amongst the best hosting we have ever had at an EAZA conference by Michael Martys and all the team at Alpenzoo, Innsbruck. Has there ever been a more spectacular backdrop to a conference centre? The hills were alive with the sound of EAZA members for that week in Innsbruck and I for one am looking forward to returning to this wonderful town in the near future. Thank you Alpenzoo.

Over the past several months the new EAZA Accreditation Programme (EAP) for existing members has been introduced and is now in full swing. A number of EAZA's members have already enthusiastically volunteered their zoos and aquariums for an accreditation inspection and are finding it a rewarding experience. Upon receiving their first invitation to take part, others are also making plans for their inspection visits. It is wonderful to see loyal, committed members taking the initiative to show that they believe in EAZA standards and that they are prepared to demonstrate that their zoos and aquariums reach or surpass the standards required. This is the kind of member that is the backbone and lifeblood of any organisation and we thank them for showing such leadership in the task of cyclical accreditation.

Ensuring that members maintain the standards they have committed to is probably our most important task as a membership organisation. Without good standards, and without members maintaining those standards, all our tasks as a community are made harder to achieve. Those standards pertain to animal welfare, most importantly, but also to education, conservation and the undertaking of managed breeding programmes.

At our recent annual conference, our chairman, Simon Tonge, in his introductory speech, spoke clearly about the actions of a few selfish members who continually flout the rules and obligations of the EEPs and ESBs. The numbers who do this are small but their actions negatively impact on the whole membership. So we have to ask a very simple question: why are they members? Why, if they don't agree with the rules that they and everyone else has signed up to, do they continue to pay a membership fee each year? Presumably there are a few reasons. Do they want the credibility of EAZA and know that if they were not members they may find it harder to have certain animals? Or are they arrogant enough to think that everyone else is wrong and they know how to do things better (or at the very least better for themselves)? Or is it because they think they

can get away with it and believe that EAZA as a community is not going to act?

I think it's a combination of all of the above, but perhaps most of all the latter – they think they will get away with it. And they will unless we as a community decide that enough is enough. A single institution doing the wrong thing, in any sense, be it not maintaining good standards of animal welfare, treating customers poorly, or flouting the rules of EAZA and, in some recent cases in my opinion, deliberately trying to cause harm to EAZA and their fellow members, will result in a poorer overall public opinion of zoos and EAZA zoos in particular. Yet, we know that when people visit our great zoos and aquariums and find out about the innovative and exciting education and conservation work that is happening, they become passionate supporters. But they have to visit first and their opinion of zoos is usually predicated on the one bad report rather than the multiple good reports, and that may be the deciding factor on how they spend their hard earned money.

So, it is up to us as a community. What do we want for the future? That as a community we enforce the highest standards, making sure that we can all continue to be proud of our EAZA membership? Or do we want a very few members to get away with disobeying the rules? Let the Council, the Executive Committee, the Membership and Ethics Committee and the EEP Committee know that we want decisive and tough action that benefits us all – and make sure that this minority will not damage the hard work of everyone else.

I hope you have a productive and happy holiday season.

Dr Lesley Dickie
Executive Director, EAZA

NOTICEBOARD

SAVING THE UNKNOWN: EAZA AND THE SAOLA

IN 1992, ALONG VIETNAM'S BORDER with Laos, biologists from Vietnam and the World Wildlife Fund made perhaps the most surprising zoological discovery of the 20th century, the saola (*Pseudoryx nghetinhensis*), writes William Robichaud, Coordinator, Saola Working Group of the IUCN/SSC Asian Wild Cattle Specialist Group.

Twenty years on, we still know little about this beautiful and mysterious animal, other than that it is one of the world's most endangered large mammals (at best, no more than several hundred likely survive, and numbers could be as low as just double figures).

EAZA made an insightful and courageous decision to make this little-known animal the emblem of its current campaign for threatened wildlife of Southeast Asia. The decision, like all good ones, was also timely: saola conservation efforts have lagged in the past two decades in part due to the difficulty of raising funds for an animal which few (including donors) have heard of. EAZA's leadership and support, and the campaign's lifting of saola's profile, could prove to be a turning point in the species' conservation.

A significant boost came at EAZA's annual conference, in Innsbruck in September. In those few days, we went beyond EAZA simply providing campaign



Saola Working Group
IUCN SSC Asian Wild Cattle Specialist Group

funds, to saola conservation, and a close partnership between EAZA and the Saola Working Group (part of the IUCN/SSC Asian Wild Cattle Specialist Group). This was embodied by EAZA members quickly and enthusiastically forming a team (from within the EAZA Cattle and Camelid TAG) to provide technical advice to the SWG, particularly on the topic of captive management. Simultaneously, some individual zoos committed funds to help implement the tech team's recommendations – foremost, a reserve of emergency funds to allow us to maintain saola caught incidentally by villagers in Laos and Vietnam.

The Innsbruck meeting felt like one of the most important weeks for saola conservation since the species' discovery 20 years ago. There are many to thank in EAZA, but in particular Lesley Dickie, Gary Batters, Terry Hornsey, Douglas Richardson, Michael Sullivan and Mirko Marseille.

BEAR FARMING IN ASIA

Bear bile is an important component of traditional medicine in Eastern Asia, writes José Kok, *Ouwehands Dierenpark Rhenen*, EAZA Bear TAG chair. Yet over-exploitation has led to the decline of many Asian bear populations, especially Asiatic black bears (*Ursus thibetanus*). In order to reduce poaching of wild bears, the bear farming industry has been supported in order to increase the supply of bile. However, there is severe doubt that farming of bears has aided conservation of wild bears.

Therefore, in preparation for the IUCN World Conservation Congress held in Jeju, Korea in September 2012, a motion was developed that pushes for closing bear farms stocked with wild bears. The motion was developed by members of the IUCN SSC Bear Specialist Group and external experts and was sponsored by EAZA Associate Member Alertis, the fund for Bear and Nature Conservation (Netherlands), with strong support from the Wildlife Conservation Society,

Conservation International, Wildlife Trust of India, and Wildlife Trust of Bangladesh.

The motion was opposed for several reasons by the Chinese delegation, but intense negotiations led to compromises from both sides. The amended motion was approved overwhelmingly by the full Congress, becoming a resolution which encourages the Republic of Korea and Vietnam to continue their efforts towards ending bear farming. Furthermore, it calls for the closing down of illegal farms as soon as possible and the establishment of a scientifically sound monitoring system to track trends in wild bear populations and the factors that drive these changes. This independent research must lead to a thorough analysis of the effect of bear farming on wild bears. On top of that it calls for research and promotion of alternatives to bear bile as a medicine and no further increase in the number of bears kept for bile on bear farms. In the case that negative (market-driven) effects are revealed, bear bile farming might come to an end in the future.



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ASIAN BLACK BEAR (*URSUS THIBETANUS*)
IN THE WILD © OUWEHAND ZOO

NOTICEBOARD

RASHMI THE ELEPHANT © PAVEL VLČEK

AN ELEPHANT AWARDED WITH AN ELEPHANT!

WAY BACK IN 1994, A NUMBER OF WISE GENTLEMEN IN THE Czech Republic and Slovakia realised that animals in zoos needed some publicity to flourish and thrive, writes *Lubomir Moudry, Union of Czech and Slovak Zoological Gardens*. They came up with the idea of a nationwide competition called 'Offspring of the Year', which was accompanied by its sibling 'Exhibit of the Year'. Supported by donors, it went on to highlight, promote and award zookeepers and designers for their efforts every year. In 1999, the Union of Czech and Slovak Zoos joined the long row of supporters by formally recognising the contest as a flagship event of both states' zoo world.

In 2012, Kunín, a small Moravian town, hosted year 18 of the competition. Packed with members of zoo staff, as well as guests and donors, the main hall of the local chateau hosted the Master of Ceremonies who read the names of 30 animal contenders, in

addition to five exhibits, in the running for the main prize called The Great Elephant. Having carefully examined details of each breeding success as well as exhibit design, the jury gave the award to... an elephant! It was in fact the first ever Asian elephant born in the two nations, in Ostrava, in 2011 (see *Zooquaria* 79). The event afforded a pleasant opportunity to make use of the enchanting location to meet and talk on various matters, including new offspring that might be on their way. Since the event has just been announced by organisers, Česká ZOO Association, for another year, we will keep an eye on everything and let you know who to applaud next year.



PENGUINS GET HELPING HAND

DRUSILLAS PARK IN EAST SUSSEX HAS HANDED OVER a cheque for the sum of €1,241 to Falkland Conservation, to assist the wild penguin populations of the South Atlantic, writes *Claire Peters, Head of PR, Drusillas*. The sum was raised due to the generous support of visitors, taking the grand total collected at the zoo to over €12,500.

Falkland Conservation is a registered charity, which seeks to help wildlife based on and around the Falkland Islands. It undertakes practical conservation work, such as rescuing oiled penguins, in addition to studying the native wildlife and campaigning for their protection.

Thousands of penguins nest in the Falklands every summer representing five of the world's 17 species; king, gentoo, rockhopper (shown left at Drusillas), macaroni and Magellanic.

Drusillas Park cares for two rockhopper penguins at the zoo, now regarded as a threatened species in the wild. Slasher and Granite were both born at Edinburgh Zoo and were first introduced to each other at Drusillas in 1993. They live alongside 17 Humboldt penguins. Drusillas Park holds the European studbook for rockhopper penguins based on Zoo Manager Sue Woodgate's knowledge and interest in this species. 'It is fantastic to have raised so much money to help with this important conservation project,' she says. 'This species is in decline in the wild and any help that can be given is necessary for the preservation of these beautiful animals.'



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NEW AND REACCREDITED MEMBERS

EAZA welcomes the new members approved by Council in Innsbruck on Friday 28 September 2012 and commends members newly accredited under the EAZA Accreditation Programme (EAP). In addition to the following new and accredited members, Leningrad Zoo in Russia joins the EAZA Candidate for Membership programme.

APENHEUL Reaccredited



History: Apenheul is a nearly exclusively primate zoo, with a unique focus on free roaming animals and large natural exhibits. Set in a national forest, the exhibits blend into the natural background, giving a wild and open experience to the guests. There is a focus on education and exploration, and modelling primate behaviour with play areas. The large and natural habitats have produced breeding success for many species, including some more challenging species. They are also home to the only proboscis monkeys in the western hemisphere. Apenheul also has its own conservation fund that supports *in situ* primate conservation around the world.

Director: Coen de Ruiter
Contact: Frank Rietkerk
Tel: 0031 (0) 55 357 5700
Email: office@apenheul.nl
Website: www.apenheul.nl
Shortname: Apeldoorn
Date of opening: 12 July 1971
Staff: 65
Number of Species: 69
Number of visitors: 447.000
Organisational type: Non-Profit

COPENHAGEN ZOO Reaccredited



History: Over 150 years old, Copenhagen zoo is a large city zoo that covers over 11 ha and is home to more than 3500 animals of 240 different species. It has seen continuous renovation through its years, including an elephant house (2008) designed by British architect Norman Foster, and a new walk through aviary with free flying flamingos, spoonbills, ibis, and other water fowl. In late 2012/early 2013, the Arctic Ring, a new polar exhibit with bears, birds and seals will open. Copenhagen is an institution dedicated to conserving global wildlife through keeping a large number of endangered animal species and participating in many conservation programmes. Today the Zoo is an active nature conservation organisation with a global perspective and network.

Director: Steffen Straede
Contact: Bengt Holst
Tel: 0045 72 200 200
Email: zoo@zoo.dk
Website: www.zoo.dk
Shortname: Copenhagen
Date of opening: September 1859
Staff: 131
Number of Species: 238
Number of visitors: 1.150.000
Organisational type: Non-Profit organization

GIARDINO ZOOLOGICA DI PISTOIA New



History: Pistoia was opened to the public in 1970 and it is still operated by its founder's family, Mr. Galardini, with his grandson, Dr. Cavicchio being the current director. The zoo is set amidst pines, oaks and tropical trees and houses about 400 animals of 100 different species. In 2001 the zoo developed a master plan

which includes the renovation of some exhibits to ensure animal welfare and to promote conservation education and support *ex situ* conservation of threatened species. In line with this master plan, the zoo is currently building a new elephant enclosure. Nowadays the zoo is working to become a centre for conservation and is currently focusing on flagship and endangered species to develop and support conservation education programmes.

Director: Paulo Cavicchio
Contact: Paulo Cavicchio
Tel: 0573 911 219
Email: info@zoodipistoia.it
Website: www.zoodipistoia.it/
Shortname: Pistoia
Date of opening: 1970
Staff: 24.5
Number of Species: 100
Number of visitors: unknown
Organisational type: Private

KRISTIANSAND Reaccredited



History: Kristiansand dyrepark covers an area of 150 acres of wild Nordic terrain. The park is divided in different themed areas: Jungle, Africa, Asia, Nordic Wilderness and Farm. It holds both Scandinavian animals and exotic animals in wide open natural spaces in which they can roam freely. The park aims to inspire all ages through active experiences and live impressions. Although it became famous in the 1970s for its camels, the park has a long tradition and experience in keeping different primate species and nowadays participates in many primate EEP and ESB programmes as well as many other species programmes.

Director: Per Arnstein Aamot
Contact: Helene Axelsen
Tel: 0047 – 970 59 700
Email: post@dyreparken.no
Website: www.dyreparken.no/
Shortname: Kristiansand
Date of opening: 25 June 1965
Staff: 91
Number of Species: 142
Number of visitors: 820.000
Organisational type: Private for Profit

LA BOURBANSAIS Reaccredited



History: Zoological Park of La Bourbansais opened to the public in the 1960's and was one of the first private zoos in the west of France. Nowadays the zoo is owned and run by the founders' grandson, Mr. Olivier de Lorgeil. The zoo is built on the origins of the Domain dating back from the first century and around a Castle that was built in the sixteen century. The zoo currently houses 270 animals of 65 species of which 34 are mammal species. La Bourbansais participates in 11 EEP programmes and 9 ESB's. The castle and the Zoological Park of La Bourbansais is essentially a conservation area, preserving the history and architecture of its historical monument and all its surroundings and land, but also its animal collections of endangered species.

Director: Olivier de Lorgeil
Contact: Arnoud Dazord
Tel: 0033 – 299 69 40 07

Email: contact@labourbansais.com
Website: www.labourbansais.com/
Shortname: Pleugueneuc
Date of opening: early 1960's
Staff: 23
Number of Species: 80
Number of visitors: 92.000
Organisational type: Company

LE PAL PARC Reaccredited



History: Parc Le Pal was established in 1973 and is an amusement park/zoo situated in a rural area of France. Mr. Bennet overtook the management of the park in 1990 and shifted the focus of the park to the animals in the zoo and invested in further developing the enclosures in themed areas with natural habitats. Le Pal holds 18 EEP species and 10 ESB species and has a separate conservation fund, Foundation Le Pal Nature, that does extensive *in situ* work, including bonobo conservation in Congo, chimpanzee rescue and release in Guinea and gibbon release sites in India. Via these activities, Le Pal wants to contribute to the conservation of the biodiversity for the wellbeing of the future generations.

Director: Arnaud Bennet
Contact: Wendy Noordermeer
Tel: 0033-(0)4 70 42 68 10
Email: info@lepal.com
Website: www.lepal.com
Shortname: Dompierre
Date of opening: 1973
Staff: 115
Number of Species: 115
Number of visitors: 507.000
Organisational type: For-Profit Company

OCEANÁRIO DE LISBOA Reaccredited



History: Oceanário de Lisboa opened to the public in 1998 as the central piece of the World's Fair, under the theme "The Oceans, a Heritage for the Future". The total facility area is 20.000 m2 which holds 7.500.000 liters of seawater and 500 different species. Four different bodies of water represent the North Atlantic, the Antarctic, the Temperate Pacific and the Tropical Indian Ocean. These areas surround the central aquarium, the Open Ocean, which holds a lot of species including sharks, sun fish and large school of Atlantic mackerel. In 2011 a new building opened dedicated to temporary exhibits, starting with "Sea turtles. The Journey".

Director: João Falcato
Contact: Nuria Baylina
Tel: 00351 – 21 891 7002
Email: info@oceanario.pt
Website: www.oceanario.pt
Shortname: Lisboa-ocea
Date of opening: 1998
Staff: 50
Number of Species: 503
Number of visitors: 952.000
Organisational type: State government Company

Saint Laurent SAS

The company was created in 1946 by Francis Grésillon to supply food for the lions in the Pinder Circus. In 1965, the Prince of Monaco asked the company to supply the meat for his big cats. It was the beginning of a long road which led to his son, Sylvain Grésillon, succeeding him in 1982, and to supplying frozen food for big cats in zoos.

Over time, the company progressed and extended to supplying food for other species, such as chicks for birds of prey, fish for aquariums and dolphinariums, and live and frozen insects for terrariums. Always with the aim of providing a healthy and well-balanced diet to as many zoo animals as possible, in 2007, Sylvain Grésillon bought the company, Top Duck, specialist in dry food for psittacidae and breeding equipment, which was followed, in 2008, by the development of a range of food for primates and herbivores.

This French company, specializing in food and equipment for wild animals, is not stopping there. Always concerned with improving the quality and the welfare of animals in captivity in close collaboration with zoo and parks, this year, Saint Laurent has built a new warehouse with the capacity to store 1000 tons of frozen goods and 440 tons of dry goods.

The current building has been completely remodelled to allow extremely fast freezing, in less than 5 hours for certain foodstuffs, giving our products a superb quality, particularly whole unviscerated products, whilst maintaining the bacteriological quality of the food.



**For further details,
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NEW AND REACCREDITED MEMBERS

OPEL ZOO

Reaccredited



OPEL-ZOO
Georg von Opel-Freiheime für Tierforschung e.V.

History: Opel Zoo covers 27 hectares and features animals from Europe, Asia

and Africa. Known mainly for larger, charismatic African species (elephant, giraffe, hippo), the zoo also has a large collection of deer and antelopes. The goal of the zoo is to present animals to the public in normal social groups, natural habitats, and with as little visible barrier as possible. The zoo has undergone a major refurbishment in the last 25 years, culminating in the current construction of a new elephant exhibit. Opel Zoo also participates in breeding and reintroduction programmes for European species and the previously extinct-in-the-wild Mesopotamian fallow deer.

Director: Thomas Kauffels
Contact: Thomas Kauffels
Tel: 0049 (0) 6173 325 9030
Email: info@opel-zoo.de
Website: www.opel-zoo.de/
Shortname: Kronberg
Date of opening: 20 September 1956
Staff: 46
Number of Species: 214
Number of visitors: 683.00
Organisational type: Non-Profit Foundation

RANDERS REGNSKOV

Reaccredited



History: Randers Regnskov opened in 1996 after six years of planning. The park

focuses on exotic reptiles, bird, insects and primates in a free-ranging rainforest exhibit. Originally opening with two smaller domes, in 2003 Randers opened a new 2,000m² dome, restaurant and aquarium. The exhibit themes are Madagascar, Asia and South America and they continue to develop and open new exhibits. There are interactive educational opportunities for guests, and a conservation education programme that reaches 7,000 students each year. Randers has its own conservation fund for purchasing nature reserves in the Ecuador rainforest.

Director: Henrik Herold
Contact: Henrik Herold
Tel: 0045 - 87 10 9999
Email: post@regnskoven.dk
Website: www.regnskoven.dk
Shortname: Randers
Date of opening: June 1996
Staff: 62
Number of Species: 252
Number of visitors: 290.00
Organisational type: Non-Profit Organisation

SHEPRETH WILDLIFE PARK

New



History: Shepreth Wildlife Park was originally created as a rescue centre and over the years developed into a small sized zoo focusing on conservation and education. Nowadays, the zoo houses around 38 species in natural enclosures, with many exotic animals deriving from closed down animal collections, rescued as unwanted pets or which are part of an EEP. Furthermore, the institution owns a small extra indoor facility called Waterworld and Bug City, focusing on invertebrates, reptiles and fish, and it also created the Shepreth Wildlife Conservation Charity, which enabled the Park to build and fund another off-site rescue centre for hedgehogs.

Director:

Terry Willers

Contact:

Rebecca Willers

Tel:

01763 26 22 26

Email:

office@sheprethwildlifepark.co.uk

Website:

www.sheprethwildlifepark.co.uk

Shortname:

Shepreth

Date of opening:

1984

Staff:

21

Number of Species:

38

Number of visitors:

72.000

Organisational type:

Private

ZAGREB ZOO

Reaccredited



History: Zagreb zoo was founded in 1925 and is situated in the 200 year old Maksimir Park, close to the city centre of Zagreb. Currently the zoo holds 273 species from almost every continent. In 2008 Zagreb zoo developed a master plan to create

new, more spacious and natural enclosures to guarantee and improve animal welfare standards and to continue their renewal and improvement of education and research. This master plan already resulted in a new exhibit called "China Sichuan" and will result in the near future in new enclosures for bears, sea lions and tigers. Furthermore, the zoo aims to contribute to species conservation through research and conservation programmes and want to convey the message of importance of environment conservation to the visitors.

Director:

Davorka Maljkovic

Contact:

Andrea Bracko

Tel:

00385 1 2302 198

Email:

zoo@zoo.hr

Website:

www.zgzoo.com

Shortname:

Zagreb

Date of opening:

1925

Staff:

101

Number of Species:

273

Number of visitors:

260.000

Organisational type:

Municipal government

ZOOMARINE

Reaccredited



History: Zoomarine opened to the public on 3 August 1991 and by 1992 had already had its first successful birth of a common bottlenose dolphin. The park wants to promote knowledge, preservation and environmental education in a fun and passionate manner. They want to transport adults and children to a world of dreams and fantasy, touching hearts and awakening minds with unique thrills and sensations. Whether in husbandry and animal welfare, rehabilitation of stranded specimens, or education, Zoomarine teams are dedicated to find different and better ways of addressing any challenge that we might face. Zoomarine recently constructed new habitats and exhibits for raptors and other bird species and also began constructions of the new walk-through habitat for exotic birds.

Director:

Pedro Roberto Lavia

Contact:

Élio Salvador Vicente

Tel:

00351 289 560 311

Email:

algarve@zoomarine.pt

Website:

www.zoomarine.com

Shortname:

Albufeira

Date of opening:

3 August 1991

Staff:

217.75

Number of Species:

139

Number of visitors:

350.000

Organisational type:

Company

ZOO ZURICH

Reaccredited



History: Zoo Zurich opened its doors in September 1929 and already in 1955 surpassed the magical threshold of a half million visitors for the first time. Since then the zoo has grown to be one of the most popular attractions in Switzerland with a large varied collection. In 1991 the current director, Alex Rübel, was deputized as new director and created a master plan for how to develop the zoo till 2020. This master plan led to the realisation of many new areas, each representing a different continent and integrating many enclosures and species from each continent. The park holds animals from 38 EEP and 19 ESB programmes and participates in many *in situ* projects all over the globe, in line with their mission statement: The zoo aims to act as an ambassador between humans, animals and nature.

Director:

Alex Rübel

Contact:

Hans Schmid

Tel:

0041 44 254 25 00

Email:

zoo@zoo.ch

Website:

www.zoo.ch

Shortname:

Zurich

Date of opening:

7 September 1929

Staff:

118.7

Number of Species:

347

Number of visitors:

1.741.000

Organisational type:

Non-Profit Stock Company

ROMANIAN ZOO AND AQUARIUM FEDERATION

New



History: The Romanian Zoo and Aquarium Federation was founded in June 1997 and now has up to 20 member institutions, among which two are EAZA Candidates for Membership. Starting in 2009 as a temporary Associate Member of EAZA, the RZAF worked closely with BIAZA to develop their federation even

further and with great results. In 2010, the federation started working with a five year plan, aiming to prepare an animal transaction policy, implementation of a keeper training programme and arranging different workshops and courses for their members. Nowadays, the federation has already organized several courses and workshops for its members, such as the 'enrichment and enclosure design workshop' and the 'South and East European Enrichment workshop'. Since September 2012, the RZAF is a full associate member of EAZA and a good example of the importance of a national organisation in countries.

Director:

Mate Csaba

Contact:

Dana Canari

Tel:

+40 21 269 06 00

Email:

contact@federatiiazoo.ro

Website:

www.federatiiazoo.ro

Shortname:

Fed-RZAF

Date of opening:

n/a

Staff:

n/a

Number of Species:

n/a

Number of visitors:

n/a

Organisational type:

n/a

BIRTHS & HATCHINGS

SUCCESS WITH WHITE SPOTTED EAGLE RAYS

Thanks to the birth of twins in August 2012, Burgers' Zoo, Arnhem, The Netherlands has become one of the largest breeders of white spotted eagle rays in the world, writes *Max Janse, Burgers' Zoo*. The total count is now 21, and the next young are on their way. In Europe, Burgers' Zoo is the only one to have been able to breed eagle rays, while world-wide only six other aquariums have been known to have had success in breeding this species.

Both young eagle rays, weighing 2.5kg each, appear to be healthy. Eagle rays are ovoviviparous and after eight months up to four young are born. Eagle rays make great demands on their environment, swim space and water quality: ours live in the second largest basin of Burgers' Ocean, which has a volume of 1.6 million litres. In addition they are very susceptible to disease.

Our eagle rays are individually fed each day, so an exact record can be kept of what each animal eats and how much. The rays were introduced into the display in 2001 and have been growing ever since, reaching a wingspan of 1.7m with a long, thin tail of over 3m metres.

Burgers' houses four adult females and two males, all of which are reproductively active, while of the 21 young, several have been moved to other public aquariums in Valencia, Plymouth, Hamburg, Montpellier and Boulogne-sur-Mer. This last batch of young rays will be sent to Madrid Zoo and Oceanário de Lisboa.



LORISES LIKE LONDON

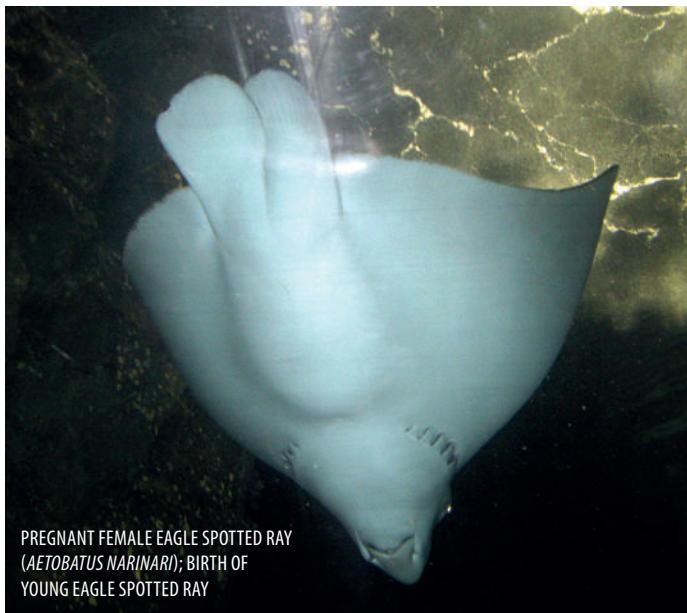
In the four years since the refurbishment of the nocturnal area in the Clore Pavilion at ZSL London Zoo, several breeding successes have occurred, the most significant being with Lorisidae, writes *Malcolm Fitzpatrick, Curator of Mammals, ZSL*. Two potential breeding pairs of grey slender loris (*Loris lydekkerianus nordicus*) were established, following imports of further loris from Bochum University and Frankfurt Zoo. The ZSL London Zoo keeper team researched existing husbandry guidelines and visited ZSL field programmes in Sri Lanka to study Lorisidae habitat and behaviour. The outcome is an exhibit design, husbandry and enrichment programme that encourages loris behaviours, locomotion and reproduction.

These improvements in husbandry are reflected in the breeding success in both pairs, with 12 lorises born since 2009. Four of these have occurred this year with twin births in January and April.

All young born have been reared by respective parents and each of the family groups now numbers six.

The contribution of these births to the Grey Slender loris EEP population is significant and has made animals available for transfer to other zoos.

The success of these exhibits also allows an opportunity to highlight ZSL's Edge of Existence Programme and conservation efforts with Lorisidae in Sri Lanka (for more information, visit www.edgeofexistence.org).



PREGNANT FEMALE EAGLE SPOTTED RAY
(*AETOBATUS NARINARI*); BIRTH OF
YOUNG EAGLE SPOTTED RAY



ZSL

MAX JANSE



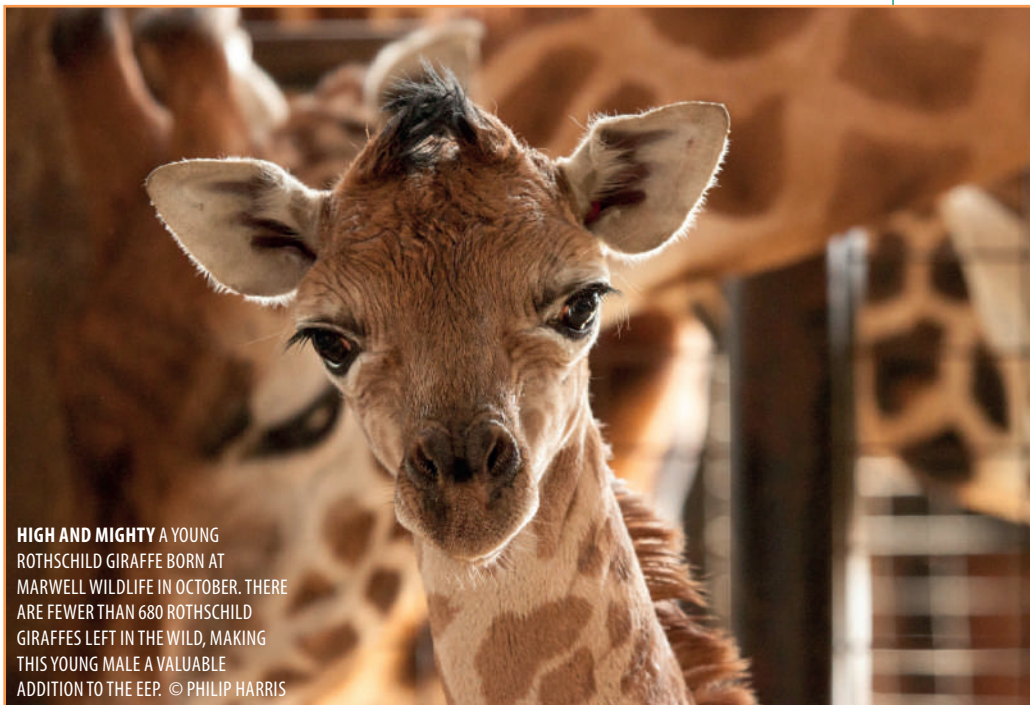
TRUMPETER REARED BY PARENTS

ON 19 AUGUST, TWO COMMON trumpeters (*Psophia crepitans*) were hatched in GaiaZOO after a natural incubation period of 28 days, writes Hanneke de Boer, Education and Communication, GaiaZOO.

GaiaZOO has kept the common trumpeter in the Amazonian part of the zoo since 2005, and in 2011 (when the group consisted of one female and one male) the first eggs were laid, but turned out to be infertile. The couple could, however, practise their parental skills with some fertilised chicken eggs. Soon after hatching, the male started to feed the chicks, but sadly the female killed both chicks.

The common trumpeter naturally displays a cooperative breeding system. Luckily, in 2012, we were able to expand our group of trumpeters to three males and two females. Though most adults were seen in or entering the nest box (2m above the ground), there were two individuals that took on the lion's share of the incubation. After 28 days, two chicks hatched and left the nest box (the third chick died inside the egg). One of the chicks was severely injured by the females, and died shortly after hatching (it weighed 39 grams). The females were separated straightaway, but could maintain contact with the chick and the males through the wire mesh. The males took care of the other chick and protected it very well. One of them did most of the feeding (mealworms). One of the females showed interest in and tried to feed the chick through the wire. After two weeks she was reunited with the chick and the males. However, during several attempts to reintroduce the other female as well, she kept pecking at and chasing the chick.

GaiaZOO is very proud of this naturally incubated and parent-reared common trumpeter. Please contact h.deboer@gaiazoo.nl if you're interested in more details.



HIGH AND MIGHTY A YOUNG ROTHSCHILD GIRAFFE BORN AT MARWELL WILDLIFE IN OCTOBER. THERE ARE FEWER THAN 680 ROTHSCHILD GIRAFFES LEFT IN THE WILD, MAKING THIS YOUNG MALE A VALUABLE ADDITION TO THE EEP. © PHILIP HARRIS

OSTRAVA'S FISHING CAT SUCCESS

A separate lineage of fishing cats (*Prionailurus viverrinus*) coming from Sri Lanka has recently been recognized within the EEP population. At the moment, there are only four adult animals of proven Sri Lankan origin within EAZA – a male in Port Lympne Zoo, another male in Prague Zoo and a breeding pair in Ostrava.

Ostrava's pair of fishing cats arrived from Colombo Zoo, Sri Lanka in 2007. Both animals were rescued as pets and came from the wild. Male Awiss was estimated as 7 years old, and female Wella as 5 years old. The first birth from this pair took place in May 2009, but Wella was a very shy and nervous animal and kept moving her kittens from one box to another, resulting, sadly, in their deaths. Despite several measures taken (closed visitors' path, reedy mat on the enclosure mesh, limited passing of zoo vehicles), none of the births that followed in April 2010, April 2011 and 28 July 2011 were successful.

The fifth parturition took place on 26 October 2011. This time we decided to add another box into Wella's indoor enclosure and give our cats even more peace and quiet than before. From the day of the birth, all feeding and watering was carried out only through the mesh surrounding the outdoor enclosure. Keepers did not enter the facility at all and the very first veterinary control and proper cleaning took place six weeks after the birth. The visitors' path remained closed for another five weeks. Wella's absence from the outdoor enclosure and her carrying food into one of the boxes were the only signs of possible rearing we had during that time.

On 19 December, all our efforts paid off and we found Wella together with two healthy kittens. Fortunately, both kittens are females and we hope they will support the rare lineage of Sri Lankan Fishing cats within the EEP.



Building up protection for the Sumatran rhino

THE EAZA IUCN/SSC SOUTHEAST ASIA CAMPAIGN COMMITTEE HAS SELECTED SIX FIELD CONSERVATION PROJECTS AS EXAMPLES OF THE KIND OF WORK THAT WILL BE SUPPORTED BY THE EAZA IUCN/SSC SOUTHEAST ASIA CONSERVATION FUND. THE SIX PROJECTS ARE EVENLY DISTRIBUTED AMONG MOST ASEAN COUNTRIES AND COVER A WIDE AND DIVERSE RANGE OF SOUTHEAST ASIA SPECIES INCLUDING THE MEKONG CATFISH, RUFOUS-HEADED HORNBILL AND THE TOMISTOMA CROCODILE. THE FOURTH PROJECT TO BE INTRODUCED IN THIS SERIES IS THE SUMATRAN RHINOCEROS PROJECT OF THE INTERNATIONAL RHINO FOUNDATION IN PARTNERSHIP WITH YAYASAN BADAK INDONESIA.

Bibhab Kumar Talukdar, Asian Rhino Programme Coordinator & Mirko Marseille, Executive Coordinator Communications and Membership, EAZA

The Sumatran rhino (*Dicerorhinus sumatrensis*) is one of the most critically endangered Asian species, found currently in Malaysia (various localities in Sabah) and Indonesia (in Bukit Barisan Selatan National Park, Way Kambas National Park and Gunung Leuser, all on Sumatra). The current global population of wild Sumatran rhino ranges from 150-220. Way Kambas National Park, about 1,300 sq km, has 25-30 Sumatran rhinoceroses with at least six mothers and calves recorded in the past year; it thus holds a significant future for the species. As the price of rhino horns in international markets is increasing rapidly, leading to countries like South Africa losing almost one rhino a day to poachers, threats to Sumatran rhino with regards to poaching are also immense and can only be kept in check with stringent vigil.

ANTI-POACHING

Rhino Protection Units (RPUs) are highly trained anti-poaching teams that are effectively protecting wildlife and habitat in Way Kambas National Park. Way Kambas is a high biodiversity area, containing significant (25-35) populations of Sumatran rhino, the Sumatran tiger (*Panthera tigris sumatrae*) and Malayan tapir (*Tapirus indicus*). This project is part of a long-term effort to ensure the survival of the Sumatran rhino, as well as other threatened Sumatran species through intensive protection and monitoring. The five RPUs operating in Way Kambas have been successful in preventing poaching of rhino or other wildlife. However, the current political and economic situation in Indonesia still poses a significant challenge for the conservation of rhino and other wildlife, and active protection is still needed. Pressure on the natural resources is continuing

and accelerating in all conservation areas in Indonesia, including Way Kambas, while the effectiveness of the Park staff to counter the pressure is being reduced by lack of support from other sectors of Government and a general lack of morale. The RPUs are the most stable and most effective force in the protection of the Park when confronted with illegal activities, working closely with police to prosecute illegal activities. It is essential that ongoing RPU activities continue in Way Kambas. Patrols by the RPU are the main methodology used by this project; prevention of rhino poaching is the main RPU objective. Patrols focus on key rhino areas such as saltlicks, wallows and other concentration areas, and also cover important access routes. Key areas are visited at varying but regular intervals. Each RPU is an anti-poaching team that intensively patrols rhino areas to destroy traps and snares as well as to interdict or apprehend poachers. Secondly, the RPUs collect data on rhino, tapir, tiger, elephant, and other wildlife species.

In 2009-10, encroachment in western parts of Way Kambas NP was halted by the Government of Indonesia, leading to more areas being occupied by Sumatran rhino. This needs further strengthening of protection with regular monitoring. In the northern part of the park, there is a need for a guard post – which could be in the form of a floating boat – to monitor the area through the Way Kanan river.

Funds from the EAZA IUCN/SSC Southeast Asia Campaign will be used towards supporting existing RPUs and also a floating boat camp to enhance the vigil in the northern side of the park to check poaching and illegal activities. Each RPU is deployed on patrol a minimum of 15 days per month. The leader of each RPU is a fully qualified ranger, who has the authority to carry firearms and arrest suspected poachers. The ranger is armed when appropriate and follows regulations set down by the Government of Indonesia regarding firearm use. The other members, including the field supervisors and





YABI

coordinators, have been recruited from local communities in the vicinity of the rhino areas in which the RPUs operate. Thus the RPUs not only protect the area's megafauna, but also contribute to the local economic wellbeing. All members attend, and must pass, a rigorous training course before being recruited. Training includes classroom instruction and field exercises, focusing on navigation, record-taking and law enforcement practices. Only candidates that pass the final test are recruited. At the last recruitment, more than 100 people applied for six open positions; eight underwent the training and six were selected as RPU members. A refresher/upgrading course is conducted periodically, and a special team of trainers has been formed to provide field training for guards, both from the programme and from protection programmes in other areas.

The RPUs are an integral part of the Conservation Strategies of the Government of Indonesia, with the model being promoted by the Indonesian Ministry of Forestry as an excellent means of providing protection for many other threatened species in other areas.

PROJECT PARTNERS

The International Rhino

Foundation (IRF) is a non-profit organisation dedicated to ensuring the survival of the five living species of rhinoceros through conservation and research. IRF was formed in 1989, initially to assist in the conservation of black rhinos in Zimbabwe through both *in situ* and *ex situ* efforts. It has since expanded its mission to encompass all five species of rhino. IRF programmes concentrate on the species most in need of, and most appropriate for, intensive protection and management. For its programmes in captivity, IRF facilitates management and sponsors research with the ultimate objective of helping captive populations become truly viable and hence an integral part of conservation strategies for rhinos. (www.rhinos-irf.org).

The **Yayasan Badak Indonesia** (YABI) was formally established in December 2006 with the support of the Indonesian Ministry of Forestry – Directorate General of Forest Protection and Nature Conservation (PHKA) which is responsible as the authority for the protection and conservation of species including rhino in Indonesia. A Memorandum of Understanding between YABI and PHKA has been signed. YABI's strategy and action plan are in line with both government policies on species conservation as well as other groups, such as IRF and the IUCN/SSC Asian Rhino Specialist Group, for both *in situ* and *ex situ* programmes. YABI focuses on rhino protection, breeding, research and education, fundraising and ecotourism, and communication and information, and its Board includes representation from Indonesia, the Netherlands, Malaysia and Australia. (www.badak.or.id)



LEARN MORE

Find out more about the EAZA IUCN SSC Southeast Asia Campaign at www.southeastasiacampaign.org.



Danke Innsbruck

EAZA'S ANNUAL CONFERENCE 2012 IN PICTURES

Michael Sullivan, Communications and Membership Manager, EAZA

In the last week of September nearly 700 members of the international zoo community descended on the Tyrolean capital Innsbruck, nestled in the Austrian Alps. Travelling from all corners of the world, some arrived by car, some by train and some braved the thrilling descent into the valley by aircraft, surely one of the most dramatic and beautiful approaches to any city. Many had travelled a little earlier to enjoy a weekend exploring the stunning scenery and wildlife surrounding the city, or to participate in the celebrations of the 50th anniversary of Alpenzoo, hosts of the EAZA Annual Conference 2012.

Perched above Innsbruck with spectacular views of the city, Alpenzoo houses a unique collection of over 150 species which are or have been typical of the Alps – and is the only zoo in the world devoting itself to this field. The zoo and the city welcomed conference participants with great warmth and memorable hospitality, and for four days Congress & Messe Innsbruck was home to nearly 700 delegates participating in over 60 TAG meetings, workshops and plenary sessions. The conference was welcomed to Innsbruck by Dr Bernhard Tilg, Tirol Minister for Health, Science and Traffic. Speaking at the opening session on Wednesday 26 September Dr Tilg praised the high standards and progressive outlook of the EAZA community and said that Tirol was proud to have been chosen as the location of the conference.

During the opening ceremony, EAZA Executive Director Dr Lesley Dickie introduced a topic that would be prominent throughout the conference – that of collaboration, namely between zoos and the *in situ* conservation community. She

highlighted an initiative between EAZA and the IUCN (International Union for Conservation of Nature) tacitly named 'Building Bridges', focusing on strengthening the ties between EAZA's TAGs (Taxon Advisory Groups) and the Specialist Groups of the IUCN's Species Survival Commission (SSC). The same topic was addressed in a video presentation from keynote speaker IUCN Director General Julia Marton Lefèvre, who had unfortunately been unable to attend the session in person. Lefèvre observed that, when done properly, conservation really does work. She emphasised the importance of the zoo community as a public communication network, noting that for most people a visit to the zoo was their first or only opportunity to see species that are increasingly rare. Her video address is available to view on the EAZA YouTube channel.

Another example of collaboration was highlighted at a plenary session focusing on the Southeast Asia Campaign, a partnership between EAZA and the IUCN. In recognition of the urgent need to tackle the extinction crisis in Southeast Asia the campaign has been extended to run for a second year. This session provided an opportunity for an update on the campaign, and a reminder of its urgency: in his talk on wildlife trade, Vincent Nijman from Oxford Brookes University demonstrated the dramatic impact trade was having on species in the region. The conference was also attended by Bill Robichaud from the Saola Working Group; the rare and elusive saola is the flagship species of the campaign, and Robichaud's presence at the conference helped raise awareness of



CLOCKWISE FROM TOP: GREY WOLF (*CANIS LUPUS*) ©FRANCK HAELEWYN, PARC DU REYNOU; ALPENZOO DIRECTOR DR. MICHAEL MARTYS WELCOMES DELEGATES TO INNSBRUCK 2012 ©EAZA; ALPINE IBEX (*CAPRA IBEX*) ©ANGELICA CURLISCA, RZAF; BEARDED VULTURE (*GYPAETUS BARBATUS*) ©PETER LUPTAK, BOJNICE ZOO





the plight of this species, the work already being done to save it and the valuable contribution the zoo community could make to secure its ongoing existence.

In support of the Southeast Asia Campaign, campaign merchandise was made available for delegates to buy at a dedicated stand in the exhibition area manfully staffed by Robichaud, campaign co-chairs Gary Batters from Banham Zoo and Will Duckworth from the IUCN, and EAZA's Mirko Marseille. By the end of the conference over €2,000 had been raised on sales of saola plush toys, javan rhino t-shirts and campaign keyrings and wristbands. If you missed out, merchandise is available via the EAZA Executive Office – visit www.southeastasiacampaign.org or email info@southeastasiacampaign.org for more information.

EAZA was delighted to have 12 other exhibitors attending, including a number of EAZA's corporate members, with a dynamic exhibition taking place in the Krystall Foyer, well attended by conference participants during coffee breaks and lunches (many of whom took home complimentary commemorative conference t-shirts provided by one of EAZA's corporate members – t-shirts still available from the EEO for those who missed out). EAZA recognises the important contribution made by exhibitors, full details of whom can be found on the EAZA website. Information for exhibitors for next year's conference will be available in January 2013.

In addition to plenary sessions focusing on animal welfare and sustainable animal populations, over 60 TAG and committee meetings were held over the four days of the



THE LOVELY TOWN OF INNSBRUCK FROM HIGH ABOVE © DR ABEDA DAWOOD, NATIONAL ZOOLOGICAL GARDENS OF SOUTH AFRICA



TOP LEFT: COMMON WALL LIZARD (*PODARCIS MURALIS*) VZUZANA MIHALOVOVA, BOJNICE ZOO
LEFT: WALLCREEPER (*TICHOODROMA MURARIA*) © ALEX KANTOROVICH, KIRYAT MOTZKIN
BELOW: ALPINE MOUNTAIN HARE (*LEPUS TIMIDUS VARRONIS*) © KLAUS RUDLOFF, TIERPARK BERLIN



ABOVE: CALPINE IBEX (*CAPRA IBEX*) ENCLOSURE AT ALPENZOO © MARY KANTARELOU, ATTICA PARK
BELOW: NOSE-HORNED VIPER (*VIPERA AMMODYTES*) © FRANCK HAELEWYN, PARC DU REYNOU





conference. For the successful delivery of all these meetings, thanks are due not only to session chairs for their hard work but also to the staff of Congress & Messe Innsbruck for their helpfulness and professionalism. This year the quality of TAG meetings was widely considered to be good, with the Prosimian TAG proving to be extremely popular and regarded as an example of best practice. Some participants, however, still felt that a number of sessions could be improved if there were fewer presentations of statistical data (which could be circulated prior to the meeting or made available on the EAZA website) and more time spent on husbandry topics and discussions. This year an EAZA Academy workshop on facilitation was attended by TAG chairs and committee chairs prior to the conference and the EAZA Executive Office will continue to explore ways of supporting the delivery of TAG meetings at the conference.

On the last day of the conference an unexpected obstacle to the work of the association was encountered when not enough participants were in attendance at the AGM to form a quorum for voting. The crisis was averted thanks to some last minute proxies and extra attendees gathered from other meetings by staff of the EEO. However, if a quorum had not been reached then the AGM would have been unable to approve any of the decisions made during the year by Council, or the budget for 2012/13,

resulting in a serious delay to EAZA's operations. For future conferences the scheduling of the AGM alongside other meetings will be addressed, and the importance of attendance from all members emphasised.

In addition to all the hard work, conference participants enjoyed a warm and engaging social programme in Innsbruck, including a successful zoo visit courtesy of Alpenzoo. On the afternoon of 27 September over 600 delegates were shuttled from outside the conference centre up to the zoo by the Innsbrucker Nordkettenbahnen, with cable cars departing promptly for the scenic journey. On arrival guests were served local beers and wines and offered a remarkable variety of local produce, from sausages to salads and schnapps. Guests were so reluctant to leave that many elected to stay on after the departure of the last cable cars, choosing instead to brave the wooded walk back to the city centre or opting for a taxi. Equally successful was the farewell dinner, taking place on the evening of Saturday 29 September in the magnificent Dogana hall of Congress & Messe Innsbruck.

During the conference's closing ceremony, Alpenzoo Director Michael Martys handed over the EAZA flag to 2013 hosts Edinburgh Zoo, represented by CEO Chris West. West introduced a short film which gave participants an exciting glimpse of what awaits them in this magnificent historical and dynamic city. The road to Edinburgh 2013 begins!



FROM TOP: LESLEY DICKIE WITH ABEDA DAWOOD AT THE GALA DINNER ©DR ABEDA DAWOOD, NATIONAL ZOOLOGICAL GARDENS OF SOUTH AFRICA; LITTLE BITTERN (*IXOBRYCHUS MINUTUS*) ©ACHIM JOHANN, NATURZOO RHEINE; CHAMOIS (*RUPICAPRA RUPICAPRA*) ©SHEILA WALKER, BLAIRDUMMOND SAFARI AND ADVENTURE PARK



THE TOAD HAS COME HOME!

The title of this article is a reference to events in Kenneth Grahame's classic British novel *The Wind in the Willows*. It also perfectly describes the conservation of the common spadefoot toad in the Netherlands

Warren Spencer, Curator, Artis Royal Zoo

The common spadefoot toad (*Pelobates fuscus*) is known to the Dutch as the knoflookpad (garlic toad), which in some respects is a preferable name as there is nothing at all common about this species. It is so-called because when alarmed it can exude a noxious secretion which smells a little like garlic.

The male knoflookpad grows to a length of approximately 6.5cm and the females are a little larger at 8cm; it also has the largest tadpoles of any European species. It has a hard protrusion on its hind feet to help with digging in its sandy soil habitat – the reason for its English name. Skin colour varies between individuals, but is usually light-grey to beige-brown on the dorsal surface, while the ventral surface is usually white with grey mottling. The presence of the knoflookpad in the Netherlands marks the most western fringe of this species' distribution. Before 1990, there were 105 extant populations of this toad recorded in the archives of the RAVON (Reptile, Amphibian and Fish Conservation Netherlands). However, due to threats

such as habitat loss or degradation, invasive species and suspected climatic pressures, many populations have sadly become extinct. Today there are only 38 populations left, of which very few are in good condition. As a consequence the knoflookpad is one of the most threatened species in the Netherlands. It is also important to note that it appears to be in decline throughout the rest of Europe and we must pay attention to this in our European community.

Over the last 10 years, actions have been taken to improve the terrestrial and aquatic habitat of as many of the remaining sites as possible. Unfortunately, despite all these measures populations failed to flourish. Evidence suggested that this is most likely a result of genetic deterioration in these populations, with the consequence that there is no increase even when the habitat has been improved and is optimal. In fact it is probable that most Dutch populations of this species were isolated for more than 40 years, and the projection was that without further

assistance this species would ultimately become extinct. This realisation was the main trigger for the initiation of the *ex situ* phase of 'Project Knoflookpad'.

A key project goal was to break through this negative population spiral by restocking from head-started specimens; these needed to be reared in captivity up to the point of late-stage tadpoles for reintroduction.

Partnerships are extremely important and Artis Royal Zoo, Amsterdam, was fortunate to team up with RAVON who had already done a significant body of work on the knoflookpad and had prepared an action plan for this species. RAVON ecologist Wilbert Bosman and Artis curator Warren Spencer worked together to develop a working strategy that would play to both partners' strengths: RAVON with its experience of this species and its work in the field and ARTIS with its knowledge of amphibian husbandry.

The day our participation was confirmed was an extremely exciting time for the Artis team! Not only the anticipation of working with a new species but also that we were about to embark on a conservation project that focussed on an amphibian found in the Netherlands.

We began by constructing a facility isolated from our main amphibian collection, which would support the capacity of animals we had targeted to rear. Once our facility was online, RAVON field workers began searching for egg clusters; an extremely difficult task to say the least. Thankfully, egg clusters were discovered and harvested throughout April from 10 Dutch locations and the project began with a sigh of relief!



CLOCKWISE FROM LEFT: AT THE POINT OF RELEASE;
KNOFLOOKPAD READY TO BE RELEASED; KNOFLOOKPAD
METAMORPH; THE PROJECT KNOFLOOKPAD TEAM. ALL PHOTOS:
ARTIS ROYAL ZOO, RONALD VAN WEEREN.



MAIN PROJECT KNOFLOOKPAD GOALS:

1. Rear and release head-started specimens to a number of pre-determined sites around the Netherlands over a four-year period.
2. Continue with important fieldwork and population monitoring programmes to assess the success of the subsequent reintroductions.
3. As a high priority, continue ongoing habitat management and improvement with the development of new populations on former sites. Expand the re-introduction of this species to other favourable sites within the distribution area in the Netherlands.
4. Develop conservation research projects on nutrition, UV exposure trials, genetic analysis of the different populations and growth development studies.
5. Promote the conservation of the knoflookpad with the help of a joint media strategy and help visitors recognise the decline of other amphibians globally, regionally and nationally.

Once acclimatised in our facility, larvae measuring approximately 8mm in length began to hatch. They were then observed to lie immobile in the hatching tanks as if to take a quick rest before the real business of rapid development began. After a few days they started to swim around their environment, so we began to move them to larger vats where we could keep manageable populations of approximately 500-900 per vat. They started to feed very enthusiastically on a mixture of blanched greens and pellet food and over the following weeks it was very interesting for the team to see such rapid growth in these tadpoles. In terms of management, the facility's environmental parameters were kept as close to natural levels as possible. Daily water changes to maintain excellent water quality and meticulously strict cleaning were critical and with fourteen large vats that can be a great deal of time-consuming work. We also took precautions to work with an appropriate level of bio-security ensuring that tadpoles were kept disease free, healthy and strong.

After months of hard work and successful development of the larvae to target size we reached the reintroduction phase which had been scheduled for July. A transfer plan was developed to determine which site our knoflookpad would go to and when, and we began to send out our tadpoles which had reached an approximate size of 70mm to a number of receiving locations.

For our main media opportunity RAVON had chosen a site where

knoflookpad had been lost due to the activities of the invasive pumpkinseed fish (*Lepomis gibbosus*); whenever this species is introduced to a water system in the Netherlands significant problems always ensue.

The site had been painstakingly cleared of the pumpkinseed fish and brought back to excellent condition by RAVON and was ready to receive our knoflookpad. We had planned a day when representatives of local government and stakeholders could be present to see the big event. It was wonderful to see such an enthusiastic turn out of colleagues and friends interested in this species.

After health screening, Project Knoflookpad released in excess of 10,400 late-stage tadpoles to preselected sites by the end of July 2012. In addition we have developed a display in our aquarium to show Artis visitors this species up close and to represent the conservation of this amazing amphibian.

Although we must concentrate and support efforts to counter the global decline in amphibians, it is equally important to support the conservation of local amphibian species. In some instances declines in national populations can herald a worrying downward trend for the whole distribution of a species despite a lower assessment of endangerment from a global perspective.

It was a great experience and tremendously satisfying to be part of Project Knoflookpad and we hope that this project will continue to be successful over the following years. I would like to thank and acknowledge the hard work, enthusiasm and dedication of the staff at Artis Royal Zoo and RAVON.





FROM LEFT: THE EDUCATIONAL CENTRE BUILT AT DECAN;
ARRIVAL OF THE ANIMALS TO DJIBOUTI AIRPORT; GREVY
ZEBRA AFTER ITS RELEASE IN THE DECAN SANCTUARY

Sounding out the Horn of Africa

A MEETING ON THE CONSERVATION OF BIODIVERSITY IN DJIBOUTI HAS SET AN EXAMPLE FOR HOW PRODUCTIVE COOPERATION BETWEEN EAZA INSTITUTIONS AND IUCN SPECIALIST GROUPS CAN BE

Eric Bairrão Ruivo and Laure Pelletier, ZooParc de Beauval and Association Beauval Conservation et Recherche

Djibouti is currently known as 'the land of gazelles', and has a rich biodiversity that is important to protect. The country is currently politically stable and the government is committed to the protection of its fauna and flora, making Djibouti an ideal country for conservation efforts in Africa. For these reasons, Beauval and its association ABCR (Association Beauval Conservation et Recherche) decided to get involved in conserving Djibouti's rich biodiversity, working in collaboration with DECAN association (DECAN means DECouvrir et Aider la Nature – Discover and Help Nature), a local NGO based in the country. In 2009, ABCR and ZooParc de Beauval, in cooperation with some EAZA zoos and the government of Djibouti, organised the return of animals born in EAZA member zoos (Beauval, Chemnitz, Gdansk, La Palmyre Liberec, Montpellier, and Tabernas) to Djibouti. The transport of these animals was fully funded by the Djibouti Government. The species transported were those that had become rare, or had already disappeared in Djibouti (Grevy's zebra, Somali wild ass and Beisa oryx).

In 2010, ABCR developed the PICODE programme (Programme Intégré de Développement pour la Conservation – Integrated Development Program for Conservation) in partnership with DECAN and TER_RES (a French NGO, it means TERritoires RESponsables – Responsible Territories). The PICODE programme's

main objective is to integrate all stakeholders in conservation efforts, and link them to the economic and social development of human populations. Through this programme, an educational centre was built in 2011. This centre hosts schools and national and international researchers wishing to study wildlife in Djibouti. In addition, two protected areas have been created at Djalélo and Addoua-Bouralé, and a network of eco-guards has been introduced.

In order to continue the valuable conservation work and to turn the various efforts into an even more integrated conservation programme, the IUCN SSC was approached with the idea of organizing a major international meeting in Djibouti. This meeting was planned with a high degree of stakeholder participation and with attendants from both national and international NGOs and GOs with the overall goal of discussing the overall strategy for the conservation of biodiversity in Djibouti. Furthermore, this meeting aimed to develop an action plan in the short and medium term for sustaining and integrating the various conservation efforts already in place in Djibouti, and to fill any existing gaps.

Following ABCR's initiative, an international meeting for the conservation of terrestrial wildlife was therefore organized to take place in Djibouti in March 2012. Beauval, CBSG (Conservation Breeding Specialist Group) Europe, and the IUCN's Species Conservation Planning

Sub-Committee spent a year planning this meeting with indispensable local help from the DECAN association.

The meeting brought together the key institutions and conservation stakeholders such as relevant IUCN Specialist Groups, (Antelopes, Equids, and Galliformes), CBSG who coordinated the meeting (there were four facilitators, three of which were from CBSG: Bengt Holst, Kristin Leus and Arnaud Desbiez, and a fourth, local facilitator Abdirahman Ahmed), representatives from EAZA members, international NGOs, and all local stakeholders (NGOs, GOs, authorities, villagers's associations, etc.). The participation and commitment of Djiboutians in the meeting was remarkable, not only concerning funding for several activities, but also concerning the provision of necessary logistics, and notably the presence of four ministers at the opening ceremony, and two ministers at the closing session.

The workshop was attended by more than 60 people (35 from Djibouti) and was preceded by a seminar updating the participants on the status of the Djiboutian wildlife and discussing the problems concerning conservation in Djibouti. The seminar was open to everybody interested and was attended by around 150 people. The main goals of the workshop were to gather, systematise and discuss all available data and relevant information concerning the conservation of land animals in Djibouti, to refer this information to existing conservation action plans



and use this information to establish research, management and conservation priorities for the area, with a focus on the following species: Somali ass, Grevy's zebra, gerenuk, beira, East African oryx, leopard, cheetah, Soemmering's and Pelzeln's gazelles, Salt's dik-dik and Djibouti francolin.

MOVING FORWARD

The outcome included the development of a strategic conservation action plan for the relevant species in as much detail as was possible, including both short and long term goals for the respective species as well as conservation consequences for other species in the same area. Where some planning work had already been done, for example for the francolin, it was ensured that the developed action plan matched current needs. The conservation plan covers both the relevant taxonomic groups as well as rural land use, legislation and protected areas, research, education and awareness. It is now being edited by a selected editor group among the participants and will, after having been

approved by IUCN, be forwarded to the Government of Djibouti, who will then be responsible for its execution. To assist with the implementation of the plan a group of people from the various groups were identified during the workshop, and together with the governmental officials it is now up to them to transform the plan into action.

We believe that this event was very valuable and represents another step forward for the role of zoos in *in situ* conservation, and Beauval has been credited with taking this initiative and seeing it through to the end. All that remains is to implement the various actions identified in the plan, and we are sure that Beauval and its ABCR association together with the local NGOs will also play an important role in this next stage. We also hope that the success of this meeting will encourage the government of Djibouti and the various national and international stakeholders, to organize, in the near future, the same kind of meeting for marine wildlife and plants which are also under tremendous pressure in this

country. The ABCR and ZooParc de Beauval are ready to work with all stakeholders towards this objective. To better perform its role in favour of sustainable development of human populations, the conservation and protection of species and ecosystems, as well as in the field of research, ZooParc de Beauval in 2008 created a non-profit Association – Beauval Conservation and Recherche (ABCR) – exclusively dedicated to the development, management and support of conservation and research programmes all over the world. In 2009 ABCR developed a conservation education programme in Djibouti named “Back to Africa” with the purpose of re-establishing populations of antelope and equid species that are native to Djiboutian wildlife, but now more or less extinct in Djibouti. The success of this programme led to the development of a new broader integrated conservation programme named PICODE (Integrated Conservation Programme for Development) which is now the main programme of ABCR.

ACKNOWLEDGEMENTS

The authors would like to thank the following institutions that contributed to this important meeting in Djibouti

- ZooParc de Beauval and Association Beauval Conservation et Recherche for taking the initiative of organising this meeting, for their main financial contribution, and for the very active participation of their staff during the preparation, participation and reporting of the meeting.
- The Presidency of the Republic of Djibouti in particular His Excellency Ismail Omar Guelleh.
- The Government of Djibouti, in particular the Ministry of Housing, Urbanization and the Environment, the Ministry of Agriculture, and the Ministry of Higher Education and Research.
- The DECAN association and its President Dr Bertrand Lafrance.
- The TER-RES association and its Director Dr Alain Laurent.
- IUCN (the Specialist Groups for Antelopes, Equids and Galliformes, CBSG and the Species Conservation Planning Sub-Committee), and the IUCN Eastern and Southern Africa Regional Office.
- Fota Wildlife Park, Zoo de la Palmyre, Zoo La Boissière du Doré, CERZA Zoo, the Zoological Society of London and AAB (Atelier Artistique du Béton), and the Species Conservation Planning Sub-Committee of the IUCN, for their financial contribution to this meeting.
- Nina Giotto, the world leading expert in beira antelope.
- All participants who attended the workshop on the conservation of the terrestrial fauna of Djibouti.
- All those not already mentioned who contributed not only to organising this meeting but also to developing Beauval programmes in Djibouti.



The recycled roost

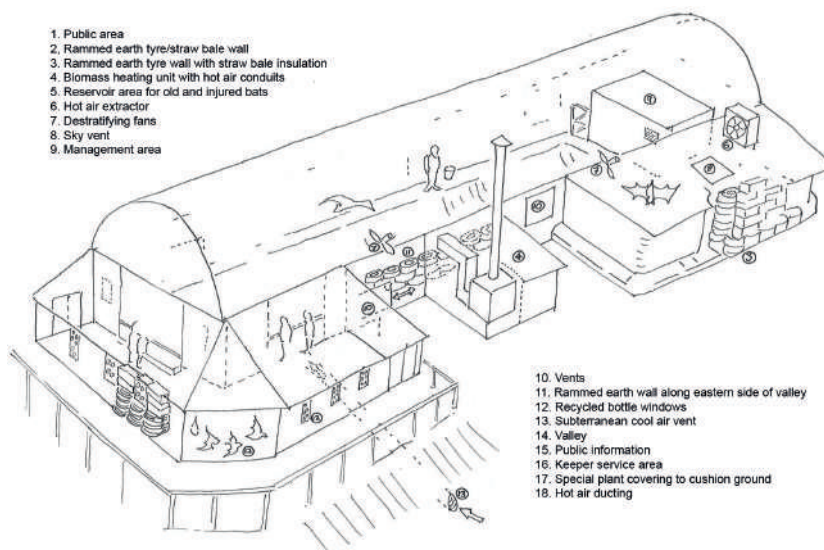
INNOVATION AND CREATIVITY HAVE PLAYED A MAJOR ROLE IN AN EXCITING NEW BAT EXHIBIT

Dominic Wormell, Head of Mammals, Durrell Wildlife Conservation Trust

Critically endangered Livingstone's fruit bats have been resident at Durrell Wildlife Park for nearly 20 years, since 20 individuals were brought back from the wild in the early 1990s to begin a captive breeding programme within Europe. Their home for eight years was a modified agricultural polytunnel that provided ample space for flight but unfortunately was difficult to heat effectively. Visitor viewing was also limited.

A redesign was needed to create the right environmental conditions for the bats and provide an all-weather exhibit for visitors, allowing them to see these magnificent animals in a naturalistic environment all year round. In addition we needed to greatly increase the building's energy efficiency and structural strength, making it a durable enclosure for years to come.

We wanted the development to be carbon neutral, carried out in an environmentally friendly way using recycled materials with a low environmental impact, and involve the local community and businesses in as many ways as possible. Sustainability and conservation are intrinsically linked and these themes will continue to be of growing importance if we are going to save endangered species such as the Livingstone's fruit bat, and the ecosystems they come from. Involving the local community would



engender ownership of the project, raise awareness of the bats and conservation efforts to save them, and provide opportunities for education on sustainability issues.

Construction started in November 2010 and was completed by April 2011. Building over the winter period, which was particularly cold that year, added extra challenges.

In order to save money the new design was based around the existing metal structure of the original polytunnel, but incorporated extensions for sheltered visitor viewing and an additional animal area.

Initially, a 1.5m deep valley was excavated along the centre of the

enclosure, which increased the available flying space for the bats and, crucially, provided the large quantities of earth which would be used in a 'tyre wall' construction. This 'earthship' building technique was initially developed in the US but has never, to our knowledge, been used in an animal exhibit. About 700 old (and free) car tyres were rammed with earth – roughly three wheelbarrow loads in each. Once packed, the tyres weighed approximately 100 kg each and were then used like building blocks. Apart from this ingenious, practical use of a product that would otherwise be discarded, the packed tyres also provide a means to passively heat the building,



as they have a high thermal mass and thus the capacity to store heat. During the day, when the sun is shining into the structure, the tyre walls accumulate heat, and then release it overnight when the temperature falls, something that will happen even on cold, bright winter days. Straw bales were added to provide insulation and they were then finished with an adobe mud plaster, using horsehair – and the occasional tuft of orangutan hair – as a binding element. An external lime wash provided a weather-proof finish.

The ceiling and remaining wall sections of the enclosure were covered in clear, 4-cavity polycarbonate sheeting, a strong durable product with excellent insulating properties, which allows the sun's energy to enter the structure during the day to be stored in the tyre walls, and prevents heat loss during the night and in cooler weather. The wood used throughout the build was largely second-hand timber from the dismantling of our old visitor centre, and the recycling theme continued with the use of old bottles of varying colours to make decorative windows, some in the shape of flying bats – an attractive and changing



feature viewed from inside as the sun moves around the building.

Maintaining a comfortable temperature for this tropical species was crucial. One hundred extra rammed-earth tyres were used to construct the eastern bank of the internal valley to provide additional thermal storage. Within this bank, a large buried pipe extends underground, emerging outside the building. Similar to the passive cooling system found in termite mounds, this underground ducting draws in cool air during hot weather,

acting as a free air-conditioning unit.

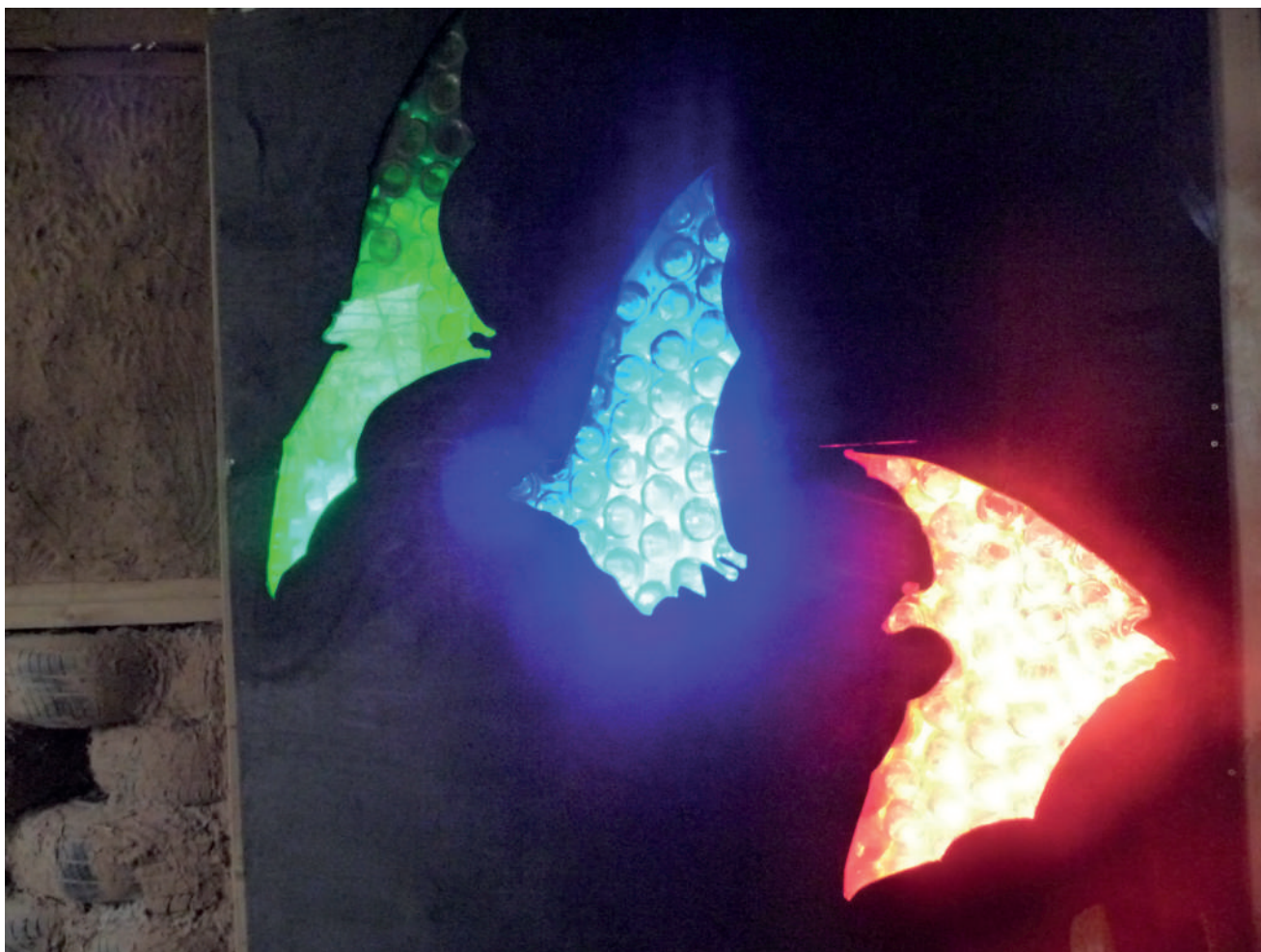
Two second-hand desk-top fans prevent the accumulation of warm air at the top of the building, reducing heat loss in the winter and also helping to cool the air in the summer.

During the coldest months of the year, when solar gain is at a minimum, additional heating is supplied by a 45kW biomass hot-air heater, which burns waste material from the site, such as used wood shavings, garden waste and old perching. We now not only have a sustainable and eco-friendly

PEOPLE POWER

Community involvement was central to this project, not only to engender local support, but also because packing 700 car tyres with earth takes an awful lot of effort and perspiration. More than 400 people helped, including 330 employees from HSBC (one of the project sponsors), teams from the probation service, local scouts and school children. These volunteers worked closely with Durrell staff and thus developed an understanding of the Trust's work. Many volunteers and their families have since visited Durrell to see the completed enclosure. Perhaps most important is the sense of pride and ownership instilled in those involved, who now feel they also have a stake in the future of these Critically Endangered bats.





heating system but the waste from this burner is itself an excellent fertiliser and is used on Durrell's organic farm.

As Livingstone's fruit bats are quite clumsy in flight we needed to create a safe environment without any hard edges that could cause injury. The interior of the tunnel was lined with nylon mesh, which protects the bats from the metal structure of the building and also provides a substrate to climb and roost on. Extensive planting, mostly donated by local horticulturists, further softens the enclosure and cushions any falls.

A shut-off shed at the keeper-service end of the enclosure allows us to isolate individual bats when needed. At the rear eastern side of the structure, not on view to the public, an annexe area was created, which is used to house old and injured individuals who would not be able to compete in the main colony space. This area is only divided from the main exhibition area by nylon mesh and therefore the bats living there can interact and feel part of the colony as a whole.

Recycling resources for the build and using volunteer labour

drastically reduced costs, an important consideration for us in difficult financial times. The overall cost of the enclosure was €57,345, which came from generous donations. However, the 3,560 volunteer man-hours that were put in are probably worth significantly more! We have also adopted a new approach to managing the animals within the building. Unlike many bat exhibits the animals are maintained on a natural day/night cycle (ie not a reverse lighting schedule). Not only is this more natural for the animals but it enables normal plant growth. The birth of four Livingstone's bats since the rebuild shows that this works for them.

PLENTY TO SEE

Contrary to pervading wisdom the bats are very active during the day, and, with various forage feeds and a major feed late afternoon, visitors can witness a wealth of animal activity. Netting is the only barrier between people and bats, although a wooden barrier keeps visitors at an appropriate distance from the animals so physical contact is prevented.

The opportunity to see the bats very clearly at close quarters, and in full daylight, has a very positive impact on most people, and this is reflected in the overwhelmingly positive comments in the visitors' book at the exhibit, and a viewing area that is often full, with many visitors staying for extended periods to watch the bats. A keeper talk held within the enclosure at 3pm each day has also proved extremely popular, now rivalling our gorilla talk in terms of attendance.

The sheltered public viewing area provides an intimate and memorable glimpse into the lives of these fascinating creatures, and also crucial opportunities to relay messages about the plight of the bat, issues around unsustainable resource use and finally, but perhaps most importantly, that there are things that can be done by all of us to reduce our negative impact on the environment.

Where better to do this than in a structure that itself demonstrates recycling and an intelligent, environmentally friendly building technique that will be relevant for many years to come.

Simon Stuart

Position: Chair of the IUCN Species Survival Commission (SSC)

Last book read: *Hannah's Child* by Stanley Hauerwas **Last film watched:**

I don't go very often **Last concert attended:** Again, I don't really have

time **Last trip you made abroad:** The IUCN congress in Korea

QUESTIONS:

You've been at the IUCN for over 25 years. What changes have you seen in the state of the world's biodiversity during that time?

Overall, things have deteriorated, mainly due to the negative consequences of economic growth. In the last five years, there's been more of a deliberate push back against conservation measures, usually due to corporate pressure on politicians. This is particularly so in the US, where there seems to be less shame about ignoring environmental issues. But nonetheless, I do think there are signs of hope.

What are these signs?

For a start, despite those points I've just made, it's now very difficult to win elections anywhere in the world on an anti-conservation agenda. The conservation community has grown in the last quarter century, and there are more active groups than ever before, creating a bigger voice. Conservation biology was unheard of as an academic discipline some decades ago, but it's now becoming a staple of the educational system. As a result, small steps are being made. Although total global funding is currently around only 1% of what is needed to reach globally agreed conservation targets, recent top-level meetings have secured intergovernmental agreement to double funding by 2015. Another example: although the illegal killing of rhinos in South Africa is currently increasing, strong conservation measures by the government have so far succeeded in keeping the poaching below the level at which it would start to cause population declines. Small, small steps; but all in the right direction.

What role can zoos play in helping to enlarge those steps?

In the past, the zoo world rather tended to keep themselves to themselves when it came to conservation. But this is changing, and zoos are now beginning to punch their weight. This is excellent. The links between the IUCN Specialist Groups and EAZA's TAGs, for example, are growing to mutual benefit. Today, zoos are more able to find out exactly what's happening out in the field, and by forging links with this work, help raise valuable funding. These links also help give the zoos greater depth for visitors back in their individual countries. There was a time when *in situ* and *ex situ* conservation work barely overlapped, but not any more. Take EAZA's SE Asia campaign: it's been excellent, and lots of people have been working together across all sorts of disciplines. There's been great collaboration on the saola, and this is all truly positive.



You mention the saola, and there's a lot of talk about the inherent value of species being an increasing part of conservation's toolkit. Do you think this is a strong approach?

Valuation of ecosystems is very difficult, and of course it's often tackled in reverse. We don't so much put positive values upon species or habitats or ecosystems, as calculate the cost to us should they be lost. Some groups get quite alarmed at this approach. Personally, I think it makes sense to factor the costs of destroying nature into decision-making, as it provides the conservation world with extra leverage, providing we do not also give up also promoting the intrinsic values of nature. Yet it should not be the be-all and end-all. We need to be able to forge links between economic values and intrinsic values of wildlife. The two valuations don't need to be enemies of each other.

After all these years, what is it that continues to drive you forward with the IUCN?

The IUCN commission system is unique, and I think it's the most effective approach, not just to conservation, but to any discipline about which people are passionate. The SSC's remarkable structure of Specialist Groups was the brainchild of former SSC Chair Sir Peter Scott, starting in the 1960s. There was no sense of territoriality with Peter. If you had a passion for wildlife, in one form or another, he would, quite simply, empower you by giving you a Specialist Group to develop and run. The IUCN still works by empowering people. There are several thousand people around the world working with the SSC alone, all striving to achieve their particular goals, and I'm proud of the fact that we're able to help them achieve what they want to achieve, rather than what they're told to achieve. In my view, this gives the organisation great strength.

Are you on the lookout for more members?

Anyone, whether within a government or NGO, who passionately believe they can make a difference, and who wants to be part of a larger network of similarly minded people, is always welcome. There's a list of contacts at the Specialist Groups section of the website (www.iucn.org/about/union/commissions) for anyone who'd like to know more.



The saiga saga

IT'S TIME THIS TROUBLED UNGULATE WAS BROUGHT BACK TO MORE EUROPEAN ZOOS

EJ Milner-Gulland, Saiga Conservation Alliance, and Imperial College London

I recently attended the EAZA Conservation Forum in Vienna and was asked: 'whatever happened to the saiga?' This distinctive species of nomadic ungulate, an ice age relict, used to roam the steppes and deserts of Central Asia and Russia in huge numbers. But with the break-up of the Soviet Union in 1990, its population declined by 95% in 10 years, one of the fastest declines ever recorded for a mammal. This is because its horns are used in traditional Chinese medicine; the socio-economic breakdown in rural areas and the opening of the border with China meant the saiga was massively poached both for its horns and for its meat. Only males bear horns, and so one consequence of this rampant poaching was an extremely skewed sex ratio: just one male per 200 females at one point, leading to low pregnancy rates. In 2002 it was listed as Critically Endangered on the IUCN Red List.

The saiga has never been a successful captive species. It is very flighty, easily injured, prone to disease and it thrives in steppe-type conditions. It has been kept in various zoos in the past, including most recently Cologne, San Diego and



TOP: MALE SAIGA IN THE CENTRE FOR WILD ANIMALS CAPTIVE BREEDING CENTRE, PHOTO BY NAVINDER SINGH

ABOVE: MEMBERS OF OUR EMBROIDERY GROUP IN UZBEKISTAN DISPLAYING SOME PRODUCTS. PHOTO BY A. ESIPOV

Moscow, but nowadays the general public can only see saigas at the wildlife park at Askania Nova, Ukraine, where they roam in large enclosures. It's also kept at a few specialist captive breeding centres in Russia (including a very small number at the Moscow zoo breeding centre), and one in China (Gansu Breeding Centre). There are proposals to start captive breeding centres in Mongolia and Kazakhstan, but currently there are no European or American

collections that I know of which are keen to keep saigas. Perhaps this should change!

Despite the low profile nature of the species, EAZA members were quick to respond to the conservation emergency which was brought to the world's attention in the early 2000s. Small grants from a number of zoos helped Yuri Arylov to set up the Centre for Wild Animals (CWA) captive breeding centre in Kalmykia, southern



FROM LEFT: A WINNER OF A CHILDREN'S ART COMPETITION IN KALMYKIA WITH HIS PICTURE. PHOTO BY EJMG; MEETING WITH PARTICIPATORY SAIGA MONITORS AT THE CENTRE FOR WILD ANIMALS. YURI ARYLOV IS 3RD FROM LEFT, EJMG SEATED, MIDDLE OF THE FRONT ROW.

Russia, to act as a reserve should the wild population reach critically low numbers, as well as an educational and scientific centre. This was the first captive breeding centre successfully to keep saigas over a long period, with an expanding population; elsewhere saigas still don't thrive, so this is a major achievement in animal husbandry.

The CWA continues its work, despite extremely difficult circumstances and very limited funding. It is a centre for environmental and conservation education, particularly for children. It coordinates Saiga Day in Kalmykia, which is an international celebration of saigas for children involving painting competitions, sports, drama and singing. It runs a network of participatory monitors; local farmers who keep logs of saiga sightings, which help us track the seasonal distribution of saigas and give an idea of population status. The Centre also carries out research, and is particularly interested in developing artificial insemination techniques. They periodically re-introduce males to the wild, and are keen to track them to see how they integrate into wild herds. However all this takes partnerships and funding, which are very limited at the moment.

OUT IN THE WILD

For saigas in the wild, the picture 10 years on from the crisis is very mixed. There are only five saiga populations in the world. One, in Central Kazakhstan, has received a lot of support from international organisations and the

government, and has been rapidly increasing in size since the mid-2000s. The Mongolian population, a different sub-species, is very small (in the low thousands) but apparently stable. Moving to less rosy pictures, the population in the west of Kazakhstan has been hit twice in the last three years by mass die-offs in the spring; in 2010 this involved more than 12,000 animals, mostly females which had recently calved. The causes are still not clear, but it seems likely that they are pasture-related. The Russian population is still subject to heavy poaching and there are concerns that it is declining rapidly at the moment; a lack of consistent and standardised monitoring makes it very hard to know exactly what the population's status is. Finally, the most recent dramatic development was in the transboundary Ustiurt population, which spends the summer in Kazakhstan and the winter in Uzbekistan. This summer, the Kazakh government constructed a high barbed wire border fence for national security reasons; we are very

concerned about what will happen when this already highly depleted, poached population starts to migrate south for the winter in the next couple of months.

GET INVOLVED!

Yuri Arylov is very keen to partner with EAZA members, share experiences of saiga husbandry, and work together on scientific research. The SCA is currently setting up an small enterprise in the Ustiurt population, tackling the underlying drivers of poaching. This involves helping local women set up embroidery collectives, which give them an income allowing them to move from buying cheap saiga meat to pricier sheep meat, and involving their families pledging to stop poaching saigas. The embroidery products are very high quality, so we are looking for zoos to partner with us in this business or share experiences and advice. We are also keen to share ideas with anyone in the zoo community who would like to get further involved in conserving this amazing species.

FIND OUT MORE

If you would like to contact the Centre for Wild Animals and learn more about their work, send an email to Yuri Arylov at saiga-center@mail.ru.

The Saiga Conservation Alliance publishes a 6-monthly newsletter, Saiga News, which can be downloaded from www.saiga-conservation.com. If you'd like to be on the mailing list, or to get in touch with the SCA about anything else, write to mail@saiga-conservation.com, or visit our website at www.saiga-conservation.com.

We are about to launch a Saiga Resource Centre, funded by the Convention on Migratory Species, which will be a depository for all types of information about saigas and their conservation. www.saigaresourcecentre.com.

Meet the scholars



FIND OUT MORE ABOUT SEGRÉ SCHOLARSHIPS AND WHO THEY HAVE BEEN AWARDED TO

Myfanwy Griffith, Training officer, EAZA Academy

The Segré Scholarships were launched in 2011 alongside the expansion of the EAZA Academy. They are made possible due to a generous donation from Fondation Segré. So far, over €7,000 has been awarded to nine successful candidates, enabling individuals to attend a variety of courses from animal training to zoo management. Successful scholarship candidates have come from a range of backgrounds and job roles including education, animal keeping and curatorial. Here are two short profiles of recent successful scholarship candidates.



TAMAR QURKHULI

Course attended: Animal Behaviour and Applications to Husbandry, based at Artis Zoo, March 2012

Position/job title: Enrichment Coordinator, Tbilisi Zoo, Georgia

Hobbies: Reading books, dancing, cooking, being outdoors in nature

Last book read: *Environmental Enrichment for Captive Animals*, Robert.J Young

Last movie seen: Kokowääh (by Til Schweiger)

Why did you want to attend the course?

Because of several reasons, so I was really motivated: to learn more about theory and refresh my knowledge, to gain new experiences, to find something new to think about, to get inspiring ideas to act in a new way, to bring all the benefits from the course back to the zoo, and to make new contacts and new friends in the zoo world. I have just started my job

in Tbilisi Zoo and I am always looking for opportunities for further professional development; EAZA Academy courses are just right for that. Also my achievements and newly gained skills and knowledge are very valuable for my zoo to increase its standards and fulfill all the requirements of EAZA membership.

Last but not least the reason why I wanted to attend the course was my desire ever since the time when I was a wildlife management student to visit Artis Zoo and the EAZA office, and meet the EAZA team.

What did gaining the scholarship personally mean to you?

If not for the scholarship I would not have been able to attend the course; there was no possibility for me to get the funding from the zoo itself. I did not dare to believe there was a good chance to be nominated, so I was very happy to get it. I felt my interest and my choice of being in the zoo world were supported a lot (many thanks to the people who gave me references and to the scholarship committee). It gave me self-confidence and motivated me to study more and work harder for my zoo. To be short – and even more honest – gaining the scholarship from EAZA was the very first personal success in my zoo career.

What did you like best about the course?

I have to mention at least two things: how the course was organized, and the content. Although the duration of the course was quite short, it covered many important and useful topics. And although it was so intense, it was interesting all the time, and it was also fun. The course had a very good combination of theoretical issues and lectures followed with more interactive discussions and practical tasks. Of course, both the teachers and the group members were very nice.

How will you use information from the course in your institution?

To be an enrichment coordinator also means to be responsible for animal welfare. Therefore, I have to know a lot about animal behavior, effects of captivity on them and think of the best husbandry regimes to guarantee their wellbeing in the zoo. But even if you have the knowledge and are continually learning, implementation of knowledge can still be difficult. When I return to the zoo after attending workshops or courses, I give a presentation or seminar to my colleagues to have their support and to share the benefits. Then we try to find a way to implement what we were taught. That's not easy. The hardest part is to overcome limitations, and adapt the knowledge and experiences to Georgian reality, which can be very different from the European one.

The information from this course helped us to plan new enrichment programs considering the species behavioral aspects. Beside that I used some of the course information to participate in other tasks and activities as well and to make recommendations – for exhibition design, for social

group composition planning, for giving public talks with the keepers about their animals, even for the Master's student who did a short-term research project in the zoo; I found many interesting and useful things from the EAZA course to share with her.



VENISLAVA RACHEVA

Course attended: Visitor Studies: Survey Design, based at Chester Zoo, August 2012

Position/job title: Head of Education, Sofia Zoo, Bulgaria.

Hobbies: Work is what inspires me – the work on educational programmes with children, especially field trips, nature, and the animals of course. I also enjoy skiing, hiking, and swimming

Last book read: *The Twilight Saga* – now I understand why teenagers became so obsessed with it

Last movie seen: *We Bought a Zoo*. I watched it on the plane coming home from Chester hiding telltale tears

Why did you want to attend the course?

I wanted to take part in this course so that I could realise what I had so far only imagined – how to develop the field of Visitor Studies in my zoo.

WANT TO FIND OUT MORE?

Usually one Segré Scholarship is offered per EAZA Academy course. The scholarships are open to employees of EAZA Members and Candidates for Membership and aim to: promote professional training; support motivated, committed zoo staff to further their skills development; and, aid progress of the wider EAZA community. Scholarships cover the course fee and travel to the course, and are particularly intended to support staff from institutions that would benefit most from this type of financial support.

Further details about Segré Scholarships, the application process and forms are available on the EAZA Academy pages of the EAZA website: www.eaza.net/activities/academy/Pages/Apply.aspx

What did gaining the scholarship personally mean to you?

An opportunity. Recently all of my experience has been learning by doing. This scholarship is an opportunity to further develop myself as a professional and my department as an instrument of sharing knowledge.

What did you like best about the course?

The sessions were professional, with perfectly elaborated methodology and capable presenters. Even for a foreign speaker of English, everything was easy to follow and understand. The environment was relaxing so everyone felt comfortable to ask any questions and to share all concerns. This helped to clarify any detail in a projected study. The most valuable experience for me is that now I know the basic concepts of a visitor study and I feel confident enough to conduct one.

How will you use information from the course in your institution?

Now I have better knowledge, course materials, and a direct impression of how a research project should be organized and work. I have knowledge to share with my colleagues in Sofia Zoo and together we may design our next steps. Surely, the first one will be to analyze the obtained data from our Summer Zoo School. Later we plan to develop teachers' questionnaires and also a general survey for the visitors. We are also planning to assess our new information panels which we created as a joint project with volunteers from Bulgarian Wikipedia.



EAZA ACADEMY PROSPECTUS 2013

A copy of the new EAZA Academy Prospectus has been included in the mailing of this issue of *Zooquaria* to all members. Courses are taught by experienced zoo professionals keen to share their knowledge and experience. Courses offered in 2013 include:

- Advanced zoo and aquarium management
- Animal training
- Collection planning
- Introduction to zoo and aquarium education
- Designing animal feeding programmes

Due to the practical activities involved places are limited on some courses. Do not be disappointed – to find out full course details and how to apply please visit www.eaza.net/activities/academy today!

Golden years

TEN YEARS OF CONSERVATION RESEARCH FOR GOLDEN-HEADED LION TAMARINS AND THE ATLANTIC FOREST ARE LEADING TO A BRIGHTER FUTURE

Kristel De Vleeschouwer, Project Director, Project BioBrasil and Zjef Pereboom, CRC Manager, Royal Zoological Society of Antwerp

LINDA VAN ELSACKER

The threatened Brazilian Atlantic rainforest harbours an incredibly high level of biodiversity, both for plants and animals. Reduced to less than 7% of its original extent, it contains several hotspots of endemism, one of which is located in Southern Bahia, the home of the charismatic golden-headed lion tamarin (*Leontopithecus chrysomelas*). Endemic to the region, and classified as Endangered, this primate serves as a flagship species, calling attention to the devastation of its habitat due to logging and other degrading anthropic activities. Ten years ago the Centre for Research and Conservation, the research institute of the Royal Zoological Society of Antwerp (RZSA) initiated Project BioBrasil to contribute to the development of a science-based action plan for the conservation of golden-headed lion tamarins (GHLTs).

As the GHLT EEP coordinator and international studbook keeper, the RZSA embraced GHLTs as one of its ambassador species. Since 1987, the RZSA has been conducting zoo-based research to accommodate the challenges and demands of running the GHLT conservation breeding programme, for example investigating factors affecting breeding success and infant survival, and, at a later stage, contraceptive methods. When new population surveys in Brazil revealed a higher number of GHLTs surviving in the wild than previously thought (approximately 6,000 instead of 600), PHVA (Population and Habitat Viability Analysis) recommendations changed, emphasising the importance of long-term protection of natural habitat. In response, the RZSA broadened its research focus to include *in situ* activities for GHLTs and sent Kristel De Vleeschouwer to Brazil to set up Project BioBrasil in Southern Bahia. The project's research activities were strongly directed by the successive PHVAs for lion tamarins of 1990, 1997 and 2005.

What initially began as a three-year post-doc project funded by the



Belgian National Lottery, gradually developed into a comprehensive research project involving various Brazilian and international students, and close collaborations with other research groups, local and international conservation organisations. From the start, contributing towards in-country capacity building was a key objective of the project. Overall four MSc projects were completed, and scientific and logistical support given to various other MSc, PhD and post-doc projects, nearly all conducted by Brazilian students. Between 2002 and 2010, Project BioBrasil has monitored up to six GHLT groups on a weekly basis, resulting in a huge database with information on the ecology, demography and biology of GHLTs in degraded forests. This information is currently being analysed, and based on the results guidelines will be generated to direct conservation actions for GHLTs.

LOOKING AHEAD

Between 2002 and 2010, BioBrasil's activities focused primarily on conservation research, and together with research partners and stakeholders we organised a workshop in 2011, summarising the existing knowledge and defining future research priorities. From 2012 onwards, a new research programme will be implemented,

focusing more on the ecology of GHLT groups in small fragments, and the factors affecting their survival (eg climate change and hunting). In addition, we aim to incorporate the scientific insights gained so far into projects that will directly contribute to the protection of GHLTs and their landscape. A new collaborative study with the State University of Santa Cruz (Ilhéus, Bahia) will investigate conservation attitudes and use of natural resources by the rural population in and around the Una Biological Reserve and the National Park Serra das Lontras. Maintaining integrity and connectivity within this forest corridor is critical for ensuring a self-sustaining population of GHLTs (PHVA 2005). Knowledge on existing positive and negative attitudes of local communities towards wildlife conservation will generate important information that will be useful for developing conservation actions for GHLTs and other local wildlife, allowing for an integrative conservation approach with broad involvement of civil society.

As such, Project BioBrasil is an example of how PHVAs and zoo-based research can lead to field-based conservation research in range countries, and how zoos can collaborate with local universities and NGOs in conservation projects. Capacity building has enabled the project's conservation activities to be increasingly conducted by Brazilians, offering prospects for BioBrasil's long-term independence and continuation.

For more information on the Centre for Research and Conservation, visit www.zooresearch.be.

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