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**COLOPHON**

EAZA News is the quarterly magazine of the European Association of Zoos and Aquaria (EAZA)

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**FROM THE EDITORS**

Looking back on 2005, we can say that it was a very successful and productive year. Loads of work was done by the many people involved in EAZA's activities. We thank everyone who contributed to this great success. We look forward to working with you in 2006 and are convinced that with your contributions 2006 will also be a successful and productive year!

We continue to keep you updated on the many activities and developments within our region in EAZA News. In this issue we highlight results of several EAZA surveys that took place in 2005. The EAZA Executive Office supervised a record number of surveys in 2005, including:

- EAZA Programme Animals Survey 2005;
- EAZA Theft Survey 2005;
- EAZA Research Questionnaire 2005;
- EAZA survey on sharing information through a digital resource centre.

EAZA member institutions (as well as zoo associated authorities in some surveys) were asked for their contributions, and many kindly returned the completed questionnaires to us. Responses were carefully collated by students at the EAZA Executive Office and processed in extensive reports (supervised by the office's staff). The surveys have been valuable in gaining a better understanding of the trends and the perceptions within EAZA on the relevant subjects, and will be useful tools when formulating strategies to be followed by EAZA regarding these issues.

Results of three of these surveys are summarised on pages 9 to 13 of this issue. In the next issue of EAZA News we will highlight the results of other EAZA surveys. We hope you will appreciate reading about the survey results, and will conclude that the precious time you devoted to these efforts in 2005 was well spent.

**We wish all readers of EAZA News a Happy New Year.**

MEMBER OF



**EAZA EXECUTIVE OFFICE**

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PHOTO EMMEN ZOO



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PHOTO TORSTEN HARDER/NABU

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PHOTO ROB DOOLAARD (IZP)/ROTTERDAM ZOO

PHOTO EAZA EXECUTIVE OFFICE

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03



A cold-blooded crisis

Amphibians worldwide are in major trouble. Of the around 6,000 known species of amphibians about one-third is currently threatened with extinction. Of these, approximately 400 species are listed as critically endangered. An additional 1,300 species are listed as data deficient. Since 1980 at least 122 species of amphibians have become extinct, and current estimates are that several hundreds of species will meet the same fate within the next years.

The reasons for this alarming situation are only too familiar: habitat destruction, pollution and exploitation being the main causes. But in addition amphibians are threatened by a fungal disease (Chytridiomycosis) that is spreading across the world, decimating many amphibian populations and bringing about species extinctions. A global meeting of conservationists, scientists and other amphibian specialists, held in September 2005, concluded that for many species the only hope for their short- and medium term survival lies in captive management. The IUCN is therefore calling upon the global zoo and aquarium community to do their utmost to provide every possible assistance in stemming this mass vertebrate extinction.

On 7 December 2005 a small group, consisting of representatives of the EAZA Amphibian and Reptile TAG, CBSG Europe and the Collection Coordination and Conservation department of the EAZA Executive Office, met in Amsterdam for initial discussions on what EAZA's role in this emergency operation could and should be. There can be no question that EAZA and its members must respond to IUCN's call for action, and that this is going to be a major and very complicated undertaking. At the same time, this is an extraordinary chance for the European zoo community to put the words of the World Zoo and Aquarium Conservation Strategy into action. It is a chance to demonstrate the great potential of zoos in active conservation, and in an area that is our specialty: captive management.

Exact details of a possible action plan of EAZA and its members to fight off the global amphibian crisis are yet to be worked out. However, you can be assured that amphibians will be taking centre stage in the months and years to come.

PHOTO ROB DOOLAARD (IZP)/ROTTERDAM ZOO



Bienvenidos en Madrid

Invitations for the upcoming EAZA Annual Conference in Madrid – to be held from 3 to 7 October 2006 – will be distributed amongst the membership within the next few weeks. Madrid Zoo has selected a modern, state of the art conference centre 'Palacio Municipal de Congresos' close to the international airport and with a good metro connection to the centre of the city. Several major hotels are situated close to the conference centre for those participants that register early. EAZA and Madrid Zoo are working hard on organising the 23rd EAZA Annual Conference and look forward to greeting as many of you as possible in October 2006.

Intensifying inter-regional cooperation

Travelling in Asia in November 2005, EAZA director Koen Brouwer and chairman of EAZA's Committee on Technical Assistance and Animal Welfare Dominique Tropeano, visited several zoos in Thailand, i.e. Dusit Zoo, Chiangmai Zoo and Khao Kheow Open Zoo, in the framework of intensifying inter-regional zoo cooperation. Furthermore meetings with Khun Sophon, the chairman of the Thai Zoo Parks Organisation (ZPO) and SEAZA board member, and his staff were held during the visit. A report on the ZPO zoos visited was written by the EAZA team following a request for review by our Thai hosts.

PHOTO EAZA EXECUTIVE OFFICE



EAZA and CAZG meet again

Two years ago, on 13 November 2003, the EAZA Executive Office was honoured by the visit of ten Chinese zoo directors and a representative of the Chinese Zoo Association (CAZG) during their brief tour of European zoos. It took the EAZA director some time before he was able to visit China in return. In November 2005



PHOTO EAZA EXECUTIVE OFFICE

Koen Brouwer met with Liu Sahnghua, the secretary general of CAZG and several of his staff members to further discuss potential cooperation between the EAZA and Chinese zoo regions. Further meetings were held with Wu Zhao Zheng, the director of the Beijing Zoo, Hu Weiyong, general manager of the Beijing Aquarium, as well as with bureaucrats at the State Forestry Department to discuss animal exchange, the avian influenza crisis and CITES issues. Possibilities to organise a CAZG-EAZA zoo cooperation workshop with the Ministry of Forestry in 2006 are currently being explored.

Spectacular final fundraising results

As reported several times before, the EAZA Tiger Campaign 2002/4 has been a major success. The preliminary fundraising results (€663,853.61) of the EAZA Tiger Campaign were proudly presented at the campaign's official closure during the EAZA Annual Conference in Kolmarden, on 23 September 2004. However, since then some EAZA members continued their fundraising activities and several zoos recently transferred additional funds for the selected tiger conservation projects.



In total, 133 EAZA members, originating from 24 countries, participated in this third EAZA conservation campaign, either through raising funds and/or awareness on the need for tiger conservation. A spectacular amount of €750,898.18 has now officially been received on the bank account of 21st Century Tiger in the framework of the EAZA Tiger Campaign 2002/4 (see Table 1). Besides the results achieved through the EAZA membership, the campaign also inspired several non-EAZA institutions to raise funds for tiger conservation. ARAZPA, the Australasian Regional Association of Zoos and Aquariums, even reproduced the EAZA Campaign Info Pack and several of its member zoos participated successfully in the ARAZPA Tiger Campaign!

EAZA would like to thank all the participants in the EAZA Tiger Campaign, and their visitors, for their enthusiastic participation and generous donations in the EAZA Tiger Campaign 2002/4.

Table 1: Total amount of tiger funds per participating member institution received on the 21st Century Tiger account in the framework of the EAZA Tiger Campaign 2002/4.

EAZA shortname	Funds €	ZURICH (CH)	10,696.88	BANHAM (UK)	4,351.50	LODZ (PL)	1,713.60	LEEUWARDEN (NL)	607.74
COLCHESTER (UK)	61,070.01	MUNSTER (DE)	10,627.00	DVUR KRALOVE (CzR)	4,350.00	FED-NVD (NL)	1,622.00	PLAISANCE-TOUCH (FR)	600.00
WIEN-ZOO (AT)	36,993.17	HALLE (DE)	10,342.55	OVERLOON (NL)	4,218.66	WARSAWA (PL)	1,584.51	KYIV (UA)	506.76
DUBLIN (IE)	33,463.52	RHENEN (NL)	9,827.16	BORAS (SE)	4,020.62	BRNO (CzR)	1,582.50	BERLIN-TIERPARK (DE)	485.13
BROXBORNE (UK)	30,000.00	ANTWERPEN (BE)	9,655.50	AUGSBURG (DE)	4,006.41	GDANSK (PL)	1,578.00	KRENLBACH (AT)	435.00
ROTTERDAM (NL)	28,362.92	KOBENHAVN-ZOO (DK)	9,423.79	COLWYN-BAY (UK)	4,004.57	TOURNAI (BE)	1,568.06	SALZBURG-ZOO (AT)	416.21
LEIPZIG (DE)	27,502.43	AMSTERDAM (NL)	7,779.47	HAMERTON (UK)	3,771.26	WUPPERTAL (DE)	1,536.00	PUERTO-CRUZ (ES)	415.50
BLACKPOOL (UK)	25,760.40	LISBOA-ZOO (PT)	7,646.09	AMERSFOORT (NL)	3,714.20	DUDLEY (UK)	1,530.00	ORSA (SE)	362.00
CHESTER (UK)	20,782.13	PAIGNTON (UK)	7,575.95	TWYXCROSS (UK)	3,455.82	NANTWICH (UK)	1,419.65	RIGA (LV)	317.69
HILVARENBEEK (NL)	18,917.21	KRISTIANSAND (NO)	7,151.76	AUNEAU (FR)	3,391.86	MARLOW (DE)	1,418.54	DECIN (CzR)	299.16
KOLN (DE)	18,425.64	EMMEN (NL)	7,051.29	PRAHA (CzR)	3,144.96	OLOMOUC (CzR)	1,398.48	HERBERSTEIN (AT)	229.50
WINCHESTER (UK)	17,972.60	VALENCIA (ES)	5,968.60	MAGDEBURG (DE)	2,908.48	ALPHEN (NL)	1,387.71	VESZPREM (HU)	200.00
FOTA (IE)	17,674.63	BELFAST (UK)	5,957.02	GREAT-YARMOUTH (UK)	2,250.00	SABLES-OLONNE (FR)	1,350.00	BARCELONA-AQUA (ES)	183.00
LONDON (UK)	17,127.63	WHIPNADE (UK)	5,869.34	LISIEUX (FR)	2,250.00	ST-AIGNAN (FR)	1,028.03	FARJESTADEN (SE)	163.59
AALBORG (DK)	16,609.31	OSNABRUCK (DE)	5,721.00	PLOCK (PL)	2,175.00	CHEMNITZ (DE)	986.63	JIHLAVA (CzR)	149.04
APELDOORN (NL)	16,330.64	BUDAPEST (HU)	5,654.10	VALLET (FR)	2,109.00	HAREWOOD (UK)	974.16	GAVLE (SE)	144.92
STUTTGART (DE)	15,875.64	ROMANCHE (FR)	5,487.59	POZNAN (PL)	2,049.00	MOSKVA (RU)	843.00	LJUBLJANA (SI)	144.42
ODENSE (DK)	15,671.07	LINTON (UK)	5,250.00	KREFELD (DE)	2,017.91	OSTRAVA (CzR)	808.01	USTI-NAD-LABEM (CzR)	126.45
STRAUBING (DE)	15,386.59	BARCELONA-ZOO (ES)	5,155.35	ROMA (IT)	2,009.21	BERLIN-ZOO (DE)	750.00	PLZEN (CzR)	120.00
ARNHEM (NL)	15,325.86	LIGNANO (IT)	4,896.98	RHEINE (DE)	1,888.43	KRAKOW (PL)	727.54	LIBREC (CzR)	45.00
KOLMARDEN (SE)	15,264.00	EPE (NL)	4,818.39	DUISBURG (DE)	1,845.97	DORTMUND (DE)	706.91	KAUNAS (LT)	44.00
EDINBURGH (UK)	12,411.84	DOUE-FONTAINE (FR)	4,614.95	MULHOUSE (FR)	1,751.62	KATOWIC (PL)	700.20		
HEIDELBERG (DE)	10,930.82	WOBURN (UK)	4,551.00	WIEN-VIV (AT)	1,725.27	GELSEN-KIRCHEN (DE)	700.00	<b>TOTAL</b>	<b>750,898.18</b>

Expansion of EAZA coloured leg band service

An evaluation of the EAZA coloured leg band service in 2004 revealed that the service is highly appreciated by the EAZA members.

Furthermore it appeared that many users would be interested in a possible expansion of the service with leg bands for vultures and leg bands in other colours. These issues have been discussed with the relevant TAGs and the vulture EEP coordinators and ESB keepers.

As a result, a pilot project with leg bands of 30 mm in diameter and 20 mm in height (30 - 20 mm) was started in January 2006. These bands have two horizontal digits, and can be used for individual identification of Eurasian griffon vultures (*Gyps fulvus*) and similar-sized *Gyps* species. The 30 - 20 mm bands are also suited for other vulture species such as Eurasian black vulture (*Aegypius monachus*) and bearded vulture (*Gypaetus barbatus*).

Additionally, white and yellow bands (both with black engraving) will be provided in addition to the already available green, blue and red bands (all with white engraving). In first instance, these new colour combinations will only be available for the most popular leg band sizes (i.e. 14 - 18 mm, 19 - 37 mm and 39/22 - 40 mm).

**For more information** and an updated order form please visit the 'Service' section on the EAZA website member area or contact Martijn Los at the EAZA Executive Office (martijn.los@nvdzoos.nl).

The new leg bands for vultures

PHOTO EAZA EXECUTIVE OFFICE



# EAZA RHINO CAMPAIGN



## Launch of 'Save the Rhinos'

Only four months after the official start of Save the Rhinos, the EAZA Rhino Campaign 2005/6, thirty-four of the registered participants have already started their campaign activities! In total now 78 EAZA members and six non-EAZA organisations have registered as participants, over 50% of the targeted number of participating institutions!

Much has happened over the past months: the first few donations to the campaign were received on the campaign account, fundraising certificates have been designed and are ready to be distributed, and companies that kindly produced campaign merchandise have finalised their rhino products and order forms. Additionally information on the campaign websites ([www.eaza.net](http://www.eaza.net) and [www.rhinocampaign.net](http://www.rhinocampaign.net)) is constantly being updated and made more attractive and informative to visitors. And this is also where we need your contributions. Please do send articles on your successful campaign fundraising and awareness activities to the EAZA Executive Office so that we can share this with the membership. The first few notes that we already received from active campaign participants are printed in this issue of EAZA News for your information.

## Fundraising certificates

All participating institutions will receive a special Save the Rhinos certificate when they reach - and hopefully pass! - certain fundraising targets. The following four fundraising certificates are available:

### Save the Rhinos Fundraising Certificates

Platinum	€20,000.-
Gold	€10,000.-
Silver	€5,000.-
Bronze	€2,000.-



## Baby boom

November and December 2005 have been good months for rhinos in EAZA institutions: young of three rhino species were born. We would like to congratulate Magdeburg and Dvur Kralove (black rhino), Tierpark Berlin and Rotterdam (Indian rhino) and Knowsley Safari Park (white rhino) with their successful breeding results!

PHOTO DVUR KRALOVE ZOO



## Attractive campaign merchandise

Several of the companies working with the EAZA Rhino Campaign have produced new product sheets and order forms, which can be downloaded from the online Save the Rhinos Shop on the EAZA website (<http://www.eaza.net/rhino/shop.html>). All the companies supplying campaign

merchandise to EAZA members have agreed to donate 10% of their sales price to the campaign funds. Ordering these attractive products is therefore a great way to collect funds for the campaign and at the same time to draw attention to the campaign and the importance of rhino conservation.



news  
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► Bushmeat ► Rainforest ► Tiger ► Shellshock ► Rhino



Save the Rhinos,  
the EAZA Rhino Campaign 2005/6

RHINO SHOP

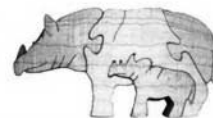


HOME >>



### Save the Rhinos Merchandise

Selling Save the Rhinos merchandise in your souvenir shop is a good way to raise funds for the Campaign. That is, if you allow part of the profit from the sales to go to the Campaign.





PHOTOS COLCHESTER ZOO

## Yet another successful campaign at Colchester Zoo?

source Rebecca Perry, Colchester Zoo

Campaign activities have got off to a flying start this year at Colchester Zoo. The Halloween half term, which was soon after the launch of the EAZA Rhino Campaign, seemed a perfect opportunity to get the campaign up and running. A shadow puppet show ran daily throughout this holiday, promoting the campaign and explaining how animals are persecuted for their body parts.

Reggie, our cuddly rhino mascot, is now based at the KD theatre where he appears daily to tell children of his plight in the wild. Our four white rhinos can be found in their mixed paddock in the African zone, where visitors can read all about the different species of rhinos, their adaptations to the wild and the problems they are facing. Visitors can also listen to our presenters' rhino talks or get close to their own rhino by having their picture taken with our life-size bronze rhino statue which is situated in the 'Kingdom of the Wild'.

The year ahead will be busy with rhino activities. The fundraising and children's activity packs are all in the final stages of production and will be ready for visitors soon. Children can also take part in our Rhino Ranger Week, where they can follow our rhino-orientated trail, try and guess the weight of 'Simba' our male rhino, or take a look at our rhino stall. Adults have not been forgotten – they can buy themselves some rhino dung for their gardens! We hope that with the combined efforts of our education, marketing and keeper teams we will have another successful fundraising year here at Colchester Zoo.



## Dutch campaign tradition

source Jeannette van Benthem, NVD

As with all previous EAZA Conservation Campaigns, the members of the Dutch Zoo Federation (NVD) collectively prepare campaign materials and organise a joint national campaign launch. A special campaign working group has designed three education panels (1 x 1 m), which will be



PHOTO AMERSFOORT ZOO

placed in all 15 member institutions, and will inform the visitors about the campaign and its goals. In addition, preparations have been made for a national kick-off, which will take place in Safaripark Beekse Bergen (Hilvarenbeek) on 18 February 2006.

On this day, a 'Rhino Run' will be organised between the five rhino keeping NVD member zoos (Hilvarenbeek, Emmen, Rotterdam, Amersfoort and Arnhem), which will start with a group of WWF Rangers walking from the Tilburg train station to Safaripark Beekse Bergen (about 8 km). To ensure national media attention for the rhino campaign and its launch, a famous Dutch TV-personality will be present during this activity. The 'Rhino Run' will continue between the other four rhino keeping institutions on the succeeding days.

All 15 members of the Dutch Zoo Federation will furthermore organise their own campaign activities, e.g. raising funds for the rhino conservation projects through collection boxes and selling the campaign merchandise as well as raising awareness through special rhino education programmes.

Amersfoort Zoo for example already started a 'Save the Rhinos' exhibition. The zoo has placed a rhino transportation container in a public area, together with information on the campaign – using the Rhino Info Pack and sample posters – and a small rhino statue. A money spinner is also placed near the container to inspire visitors to donate funds.





### Collaboration of Czech and Slovak zoos for 'Save the Rhinos'

source Kristina Tomasova, Dvur Kralove Zoo

On 25 October 2005, the Council of the Union of the Czech and Slovak Zoos (UCSZ) met with its rhino working group and PR specialists in Dvur Kralove Zoo. The zoos agreed on a collaborative approach for the benefit of 'Save the Rhinos', as working together has become a tradition in EAZA Conservation Campaigns.

Much attention was paid to the promotion of the campaign. Slovak zoos already announced the campaign at the occasion of World Animal Day on 4 October. The Czech zoos agreed on organising press conferences announcing the start of the campaign in each zoo (or several zoos of one region together) on 14 December 2005. At this occasion, each zoo published the start of a rhino art competition – the acquired artworks (pictures, sculptures etc.) will be sold in zoo auctions in spring 2006, whereas each zoo will select a special date for a 'Rhino Day' according to their local traditions, i.e. on Earth Day. At the same time it has been agreed that, again traditionally and in order to significantly economise the costs, Prague Zoo took care of the design and production of three campaign panels of 1 x 1 m in Czech language to be presented to the public in each participating zoo. Last but not least, zoos have committed to collectively provide Czech/Slovak translations of all texts of the Info Pack as well as of all educational materials.

PHOTOS OSTRAVA ZOO



PHOTO COR VAN MEEL

### Americans join Europe in campaigning to 'Save the Rhinos'

source Julie Anton Dunn, International Rhino Foundation

Zoos in North America will soon have the opportunity to participate in a Save the Rhinos Campaign that was catalyzed by and complements the EAZA Save the Rhinos Campaign in Europe. The North American campaign will be managed by the International Rhino Foundation (IRF) in partnership with the Rhino Advisory Group/Species Survival Plans of the American Zoo and Aquarium Association (AZA RAG/SSP). The concept of a North American campaign was also ignited by the multi-year commitment of Ecco Unlimited, a successful young urban wear company that uses the rhino logo.

Unlike EAZA, AZA does not have a tradition of association-wide species campaigns. However, a recent development opened the door for zoos to participate in a campaign organised by IRF. In August 2005, the AZA RAG/SSP and IRF formalised the historic bond between IRF programmes in the wild and RAG/SSP activities involving rhinos in North American zoos. Signing a memorandum of understanding, the RAG/SSP and IRF agreed to work closely to identify, rank, and fund field projects and research consistent with the *in situ* and *ex situ* conservation priorities of RAG/SSP institutions and IRF's mission.

The North American campaign is focused on three critically endangered species of rhino – the black rhino, greater one-horned rhino, and Sumatran rhino – with the goal of reinforcing protection measures and expanding rhino populations and ranges. The fundraising goal is US\$850,000 (€744,830) to supplement the US\$1,150,000 (€1,007,710) in funds already pledged to IRF programmes. The campaign will target the approximately ninety zoos in North America with rhinos, as well as corporations, foundations, and individual donors. The campaign launches publicly in January 2006.

**For more information** about the North American Save the Rhinos Campaign, please contact Julie Anton Dunn, campaign manager (e-mail: [NASavetheRhinos@rhinos-irf.org](mailto:NASavetheRhinos@rhinos-irf.org))



# Animal theft, a serious problem

Jill Vega, student-researcher HAS Den Bosch, the Netherlands and Martijn Los, project supervisor, EAZA Executive Office, Amsterdam, the Netherlands

**At least 580 animals have been stolen from EAZA member institutions in the past five years (2000 - 2004). Birds and reptiles were the most likely victims, but even an (unsuccessful) attempt to steal a lion was made. These are just some of the results of the EAZA theft survey that was carried out in the first part of 2005. A total of 187 EAZA member institutions took the time to complete this survey. It is likely that even more than the 580 animals reported in the survey have been stolen, making it even more obvious that animal theft is a serious problem for EAZA members.**

## Results of the 'EAZA Theft Survey 2005'

The theft survey aimed not only to get an idea of the size of the theft problem, but also to find out whether there is a need for an EAZA theft policy or reporting structure. There is currently no standard reporting procedure within EAZA. Sometimes other institutions in the region and/or the EAZA Executive Office are informed, but many incidents probably remain unknown to the zoo community or the outside world. This decreases the chance that stolen animals are ever recovered.

### A major problem

The results clearly show that theft is a major problem. Over the years 2000 to 2004 one or more cases of animal theft occurred in almost 40% of the responding institutions. The majority reported one to three incidents, but eleven institutions suffered up to eight thefts in the five-year research period. Most animals were never recovered, only 9% of all stolen animals were found and returned to the zoo.

### Two types of theft

It seems that just as many animal thefts occur during opening hours of the zoo as at night, when the zoo is closed. The possibility exists that these are two different types of theft, professional theft carried out in a planned action at night and more impulsive actions occurring when a zoo is open, i.e. a visitor takes away an easily accessible single animal when no one is around. Figure 1 shows that the most likely victims of animal theft are birds (especially parrots) and reptiles (mainly turtles and tortoises). Mammals are less often targeted, with the exception of primates (mainly callitrichids) and rabbits and guinea pigs, which are stolen relatively often. Reptiles are more often taken during opening hours, while mammals (and to a lesser degree also birds) are mainly stolen when the zoo is closed. The most remarkable incident was the attempt to steal a lion. The animal was tranquilised and its claws removed. Fortunately the thieves were caught in the act and the animal could be saved.

### ID increases chance of recovery

Most animals that were stolen did not have any form of identification

(e.g. chip, leg band, tattoo); only 13% of the stolen animals had some kind of identification. Interestingly the presence of a means for identification seems to increase the chance of recovering an animal; a recovery rate of 24% for animals with an ID against a mere 6% for animals without. This suggests that using a method of identification on (vulnerable) animals can help fight the problem of animal theft.

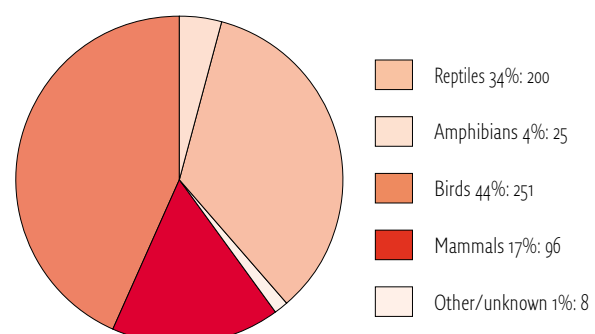
### Prevention

Many institutions that suffered from animal theft have taken measures to prevent further thefts. These measures range from increased security (personnel) to better protection of the enclosures. It might be a good suggestion for all EAZA members to evaluate their vulnerability to theft and if necessary take preventive measures, opposed to taking measures after theft has occurred.

### Reporting structure

The final conclusion of the report is that an EAZA reporting structure for animal theft would very much be appreciated by the membership. Many victims already inform the local authorities, other zoos and/or the press if an animal is stolen. There is however no single reporting point or database where all stolen animals can be reported. The possibilities to create such a database will be considered by EAZA in the near future. •

Figure 1: Percentage and exact number of stolen animals per class



# Results of the 'EAZA Programme Animals Survey 2005'

Tamara Lohman, Tim van Schaik, student researchers HAS Den Bosch/Writtle College and Koen Brouwer, project supervisor EAZA Executive Office, Amsterdam, the Netherlands

**Zoo animals have been used in demonstrations and commercial activities for centuries, but only in recent times this topic has become the subject of discussion. This discussion mostly involves the distinction between what does and does not constitute an acceptable practise. Yet, there are no clear figures on how many and what kind of species are used in programme activities, nor is there an overview on how zoos interpret these activities. The long-term goal is to reach consensus and define precisely the limits and ethics of using animals in demonstrations and commercial activities. Therefore, it is important to gain a clear understanding of the use and perception of programme activities within EAZA zoos, but also to know the opinions and perceptions of associated and related authorities (e.g. legislators and zoo related associations). To gain insight into the current use of animals in these activities the EAZA Executive Office initiated a study on the subject 'programme animals' in the summer of 2005.**

## Programme activities

Animal demonstrations in most zoos place a great deal of emphasis on the natural behaviours of animals and are very much committed to instilling respect for the animals involved in the particular demonstration. Animal demonstrations that are thoughtfully and sensitively executed can provide entertainment while also raising awareness of conservation issues and respect for animals.

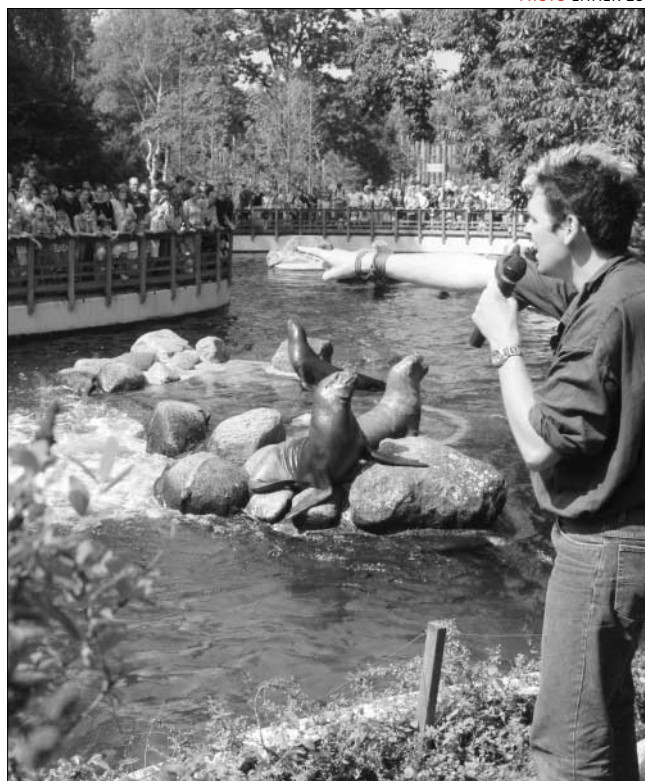
Many zoos have a tradition of arranging animal shows, or programme activities, where keepers or trainers demonstrate how various animals are adapted to the environment in different ways. The shows are often accompanied by a talk given by the keeper, trainer or a member of the education staff. Programme activities used in zoos have various presentation settings. Examples are amphitheatre shows (e.g. marine mammal show pool), demonstrations in children's farms (e.g. goat milking), naturalistic animal shows (e.g. wolves put into the – temporary empty – bison enclosure for a period of time), walk-through exhibits and interactive 'hands-on experiences'. While one of the primary justifications for animal demonstrations is public education, the training involved in these presentations can also benefit zoo animals, assuming the role of 'occupational therapy'. In an environment with superabundant food resources and in the absence of prey, zoo animals are often inactive and/or exhibit stereotypic behaviours. Biologically suitable training can increase activity levels and/or decrease stereotypies.

## Ethical and welfare implications

Both benefits and risks are involved when using zoo animals in programme activities. Programme activities can have huge educational values but also involve ethical and welfare implications for the animals used in these activities.

The most common drawback of using animals in activities is the presentation setting. The inclusion of animals in educational presentations, when done correctly, can be a powerful educational tool. However, it is important to analyse the context in which the animals are used in other ways than just presenting them in exhibits. But even so, an exhibit can be looked at and perceived as an animal demonstration.

PHOTO EMMEN ZOO



Here a distinction must be made between educational animal demonstrations and circus-type performances, which tend to be demeaning to both the animal and the viewer. Seen from an interpretative point of view, the circus-like show can be directly detrimental to the educational work and conservation message. Treatment that may be regarded as degrading or significantly damaging to the animal's identity should be avoided, especially if it has no purpose other than human pleasure or amusement. Disputable welfare questions concerning this matter could be: does the animal suffer? Does it affect the welfare of an animal? Is the animal aware of what humans perceive?

PHOTO ERWIN CHEIZOO/APENHEUL



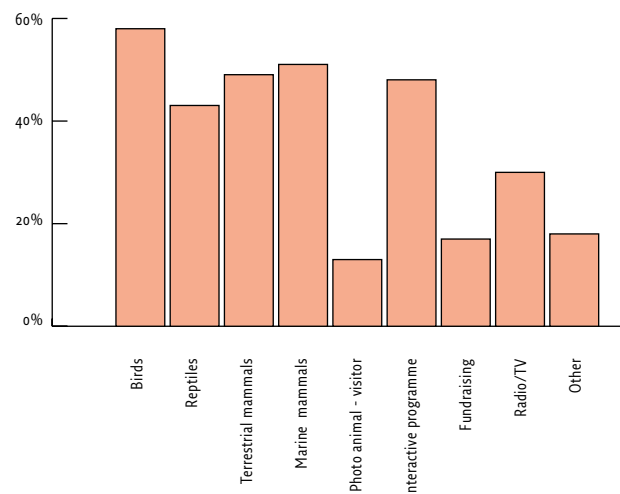
The educational value of programme animals within zoos is directly related to the expression of normal patterns of behaviour by these animals.

Educational programmes in zoos normally focus on environmental education and they need good exemplars of the species concerned. Many facilities with living collections use live animals as ambassadors for communicating their conservation and educational messages.

Some animals that are used for programme activities are hand-reared so that they will become accustomed to the close proximity of people. But hand-rearing involves many risks, when not utilised correctly. The absence of a mother at an early age could result in autoerotic stimulation and other abnormal sexual behaviours. Self-aggression and other self-directed behaviours may develop when physical contact is restricted or deprived during the first months of life. Hand-reared animals can also pose a special threat to their keepers. These animals are not inherently frightened of humans and they may treat their keepers as members of the same species, either as sexual rivals or as partners. Neither is desirable.

Another welfare implication is the zoo visitors' influence. Zoo visitors can serve as a source of stress for the animal. However, research regarding the effect that visitors have on the lives of captive animals is conflicting. Visitors can provide a unique and complex form of stimulation for many species of zoo animal. Nonetheless, captive-housed animals often find it difficult to escape the attention of, and disruption caused by, the general public. This lack of control over the environment can lead to compromised animal welfare.

Figure 1: Class of programme animals and types of programme activities used in EAZA institutions



## Results

### Use and interpretation of programme activities

The EAZA study clearly showed that programme activities are utilised in most zoos. The activities most utilised are shown in Figure 1.

The most commonly cited programme activities occurring in EAZA zoos are bird, marine mammal and terrestrial mammal presentations. Fourteen national and other regional zoo associations contacted also indicated that bird, reptile and marine mammal presentations are interpreted as programme activities. Therefore, these results indicate that these particular presentations are acts that are commonly accepted as programme activities.

The EAZA respondents indicated that education of the general public plays a fundamental role in modern zoo policies. Since the main objective of all zoos is typically education and conservation, it is not surprising that most activities attempt to integrate a conservation and education message.

A wide variety of species is used in programme activities. Species of the taxonomical orders snakes (Serpentes), fur seals and sealions (Otariidae), birds of prey (Falconiformes), owls (Strigiformes) and rodents (Rodentia) are considered the most suitable for inclusion in programme activities (see Table 1). Zoo associations worldwide, deem a wide variety of reptiles, amphibians, birds, marine- and terrestrial mammals equally suitable for use in programme activities.

### Definition of 'programme animal'

To ensure a 'programme animal' was interpreted the same by all respondents, the EAZA questionnaire contained the following definition: 'Programme animals' are animals that are used:

- for show/presentation/educational/commercial purposes and/or;
- to enable regular physical contact with the public.

The results pointed out that the definition, as used in the questionnaire, was deemed suitable by around three quarters of the EAZA respondents. In contrast, zoo associations from a variety of countries and regions found the stated definition unsuitable. Any criticism was mainly directed towards the description of what constitutes to a programme activity as



# RESEARCH

Table 1: Genera/Species most commonly utilised for programme activities in order of importance

Genera		
1	Snakes	(Serpentes)
2	Carnivores	(Carnivora)
3	Diurnal birds of prey	(Falconiformes)
	Owls	(Strigiformes)
	Rodents	(Rodentia)
4	Parrots	(Psittacidae)
	Tortoises and turtles	(Testudines)
5	Even-toed (wild) ungulates	(Artiodactyla)

Species		
1	Ball python	( <i>Python regius</i> )
2	Corn snake	( <i>Elaphe guttata</i> )
3	Californian sea lion	( <i>Zalophus californianus</i> )
4	Eurasian eagle owl	( <i>Bubo bubo</i> )
5	Blue and yellow macaw	( <i>Ara ararauna</i> )
6	Domestic rabbit	( <i>Oryctolagus cuniculus</i> )
7	Barn owl	( <i>Tyto alba</i> )
8	Domestic ferret	( <i>Mustela putorius furo</i> )
	Harris's hawk	( <i>Parabuteo unicinctus</i> )
9	Red and green macaw	( <i>Ara chloroptera</i> )
10	South American sea lion	( <i>Otaria byronia</i> )

well as to the degree of conditioning that occurs in concurrence with these activities. Additionally, several surveyed zoo associations remarked that all zoo animals are maintained for commercial purposes, not only those selected for programmes.

### Professional standards

The EAZA study clearly showed that professional standards, concerning the use of programme animals, are desired by the majority of EAZA members. Encouragingly, almost three quarters of the respondents believe EAZA itself is best equipped to develop such standards. Respondents also indicated that professional standards are necessary for all groups of animals with no distinction being made between species, when utilised in programme activities. Numerous respondents called for standards that have a practical basis. Indeed, it is important that any standards should not be simply viewed as increased 'bureaucracy' but as a valuable document with enough flexibility for EAZA member zoos and aquaria to further develop their own ideas.

Subjects which respondents indicated they believed should be incorporated in the standard concerning programme animals, are shown in Table 2.

Table 2: Indicated standard contents when working with programme animals

Subjects	
Animal health and welfare	94%
Educational message	89%
Staff training	80%
Human health and safety	77%
Animal training	75%
Animal housing	66%
Programme intensity	61%
Species specific (management) protocols/guidelines	59%
Presentation setting	53%

### Zoo associations

EAZA's objectives seem to share many similarities with those of other zoo(-related) organisations. Therefore, examination of the position and opinions of these associated and related authorities provide relevant information on what is commonly viewed as acceptable and conversely, what is unacceptable when using zoo animals in programme activities. The American Zoo and Aquarium Association (AZA) has developed the most extensive guidelines for the use of zoo animals in programmes. AZA members are required to develop an Institutional Programme Animal

Policy that clearly identifies and justifies those species and individuals approved as programme animals and details their long-term management plan and educational values.

Collective guidelines from all associations contain subjects that relate to natural behaviour, animal welfare, education message of the programme activity and appropriate handling and training. In contrast, other subjects such as programme intensity, presentation setting and staff training are rarely, if ever, described and species specific protocols solely relate to the use of birds of prey in flying demonstrations.

A considerable portion of responsibility must, naturally, rest with the member zoos and aquaria of such organisations whilst the standards and guidelines of each organisation may be used to establish reference points from which to evaluate the knowledge, performance and skills of the zoos and aquaria.

### Legislation

European or national legislation in relation to zoo animals is only of a very general nature. On the whole, attention is paid largely to conservation, education, research and animal welfare. Only Swedish legislation states that the use of certain animal species is prohibited in programme activities. Whilst British legislation is extensive, it contains only recommendations for the use of zoo animals in shows and demonstrations.

In reality, when considering legislation it is important to take into account not only what is necessary in terms of scientific knowledge and established experience, but also what is politically and legally feasible. Subsequently, it is to be expected that a considerable portion of the responsibility regarding the welfare of programme animals is conferred upon the zoos themselves. Additionally, the effectiveness of legal measures may depend not only upon the actual parameter instigated but also, to a great extent, on the knowledge of animal users and competent authorities. Therefore, measures which encourage the initiation of dialogue and dissemination of advice are important tools. However, particular goals may never be achieved without a certain level of pressure.

Certainly, one of the strongest results gained from this study can be viewed as its highlighting of the discussion concerning the use of programme activities in zoos and aquaria that is very much alive amongst the members of EAZA. It is strongly evident that EAZA members endorse the continuation of establishing professional standards. ●

# Where are we regarding research?

Bart Hiddinga, EAZA Executive Office, Amsterdam, the Netherlands

## Results of the 'EAZA Research Questionnaire 2005'

During 2005, a survey on research was conducted among EAZA members, upon request of the EAZA Research Committee. The survey had two main aims:

1. to obtain baseline data (where are EAZA members now regarding research?);
2. to identify how the EAZA Research Committee can best support EAZA members to achieve their research potential and requirements (e.g. EU Zoos' Directive).

The questionnaire was developed by Stephanie Wehnelt (Schmiding), Cathy King (Rotterdam) and Bart Hiddinga (EAZA Executive Office). Production, distribution and analysis of the survey results were carried out by Annika de Ridder (student at the Hogeschool Inholland) as part of an internship at the EAZA Executive Office.

A total of 133 questionnaires were completed, representing 44% of the EAZA membership. After compilation and analysis of the results a full report was produced for the EAZA Research Committee, and the main results were presented to the membership at the EAZA Annual Conference 2005 in Bristol/Bath.

### Results

#### Staff

Currently 25 EAZA zoos that responded to the questionnaire have a research department, and research is included in staff job descriptions in 70% of the remaining 106 institutions. Thus 75% of the responding EAZA members have research formally included in the zoo's activities. Together the responding zoos employ more than 130 Full Time Equivalents (FTEs) in research staff.

#### Relationships

Many zoos have either a formal or an informal relationship with research institutions. In this survey a formal relationship was defined as one in



PHOTO ARCHIVE ROTTERDAM ZOO

which the cooperation between the zoo and a research institution has been specified in a written contract, memorandum of understanding etc. The survey revealed that 50% of responding zoos have formal relationships, and 88% of zoos have informal relationships. The responding EAZA zoos collectively maintain links with over 170 universities around Europe.

#### Research budgets

The total minimum amount of money spent on research annually by the 133 institutions that provided figures is € 2,680,500.

**In conclusion** we can say that with:

- more than 130 FTE employed staff (plus many students doing research at zoos);
- formal relationships with almost 200 universities (and many more informal relationships);
- over €2.5 million spent on research annually;

EAZA zoos put significant resources into research. Needless to say, however, with so much still to be learned about our animals, and how best to care for them, there will always be a need for even more emphasis on research. ●

**A more detailed report** on the results of the research questionnaire will be included in the Proceedings of the EAZA Annual Conference 2005, which are due for publication in early 2006.



### Building a future for wildlife

Further copies of the English version of the WZACS for distribution amongst zoo staff, boards, local authorities, libraries etc. may still be ordered from the EAZA Executive Office. Reduced rates are available to member zoos ordering more than ten copies. More information is available in the 'Shop' on the EAZA website.

# Successful reproduction of the pig-nosed turtle at Rotterdam Zoo

Henk Zwartepoorte and Gerard Visser, Rotterdam Zoo, the Netherlands

**Rotterdam Zoo has kept pig-nosed turtles (*Carettochelys insculpta*) in its animal collection since 1978. Rotterdam Zoo now successfully breeds this species (16 pig-nosed turtles hatched in 2005!) and by sharing our knowledge and experiences we hope that more zoos and aquaria will be able to breed this magnificent species.**

## Husbandry

Since 1978 this species has been kept, in the company of other large freshwater turtles and fishes, in several combinations and in several tanks. In November 2004 we had to split up a trio, that was housed in a 15,000 l aqua-terrarium, because one individual, later determined to be a male, had damaged one of the others. Two males are now housed in 6,000 l aquaria, a smaller female in a 1,600 l aquarium and the two older larger females remained in the large aqua-terrarium. This exhibit measures 15 x 1.5 x 1 m and has steep edges with overhanging tropical plants. The aquarium itself does not have any plant decoration. A 2 m<sup>2</sup> heated area with 30 cm deep sandy bottom is situated on one side of the aqua-terrarium for egg-laying. A sloping haul-out is provided on the edge for easy access to the nesting area.

The aquarium is filtered by an open biological filter, consisting of two 150 x 75 x 50 cm tanks filled with sand and gravel. Crude waste material is filtered out by a cotton-wool filled section. One third of the water volume is changed twice a week. The water temperature is 28°C and this level is maintained by the central heating system and thermostat, situated in one of the two filter compartments.

## Diet

Pig-nosed turtles in the wild are opportunistic, omnivorous feeders, but consume a relatively high proportion of herbivore food, such as fruits, flowers and leaves gathered from the river bank, or after falling into the water. It was initially difficult to get the animals to feed in Rotterdam Zoo, probably due to bad transit conditions from New Guinea to the dealer's

PHOTO EAZA EXECUTIVE OFFICE

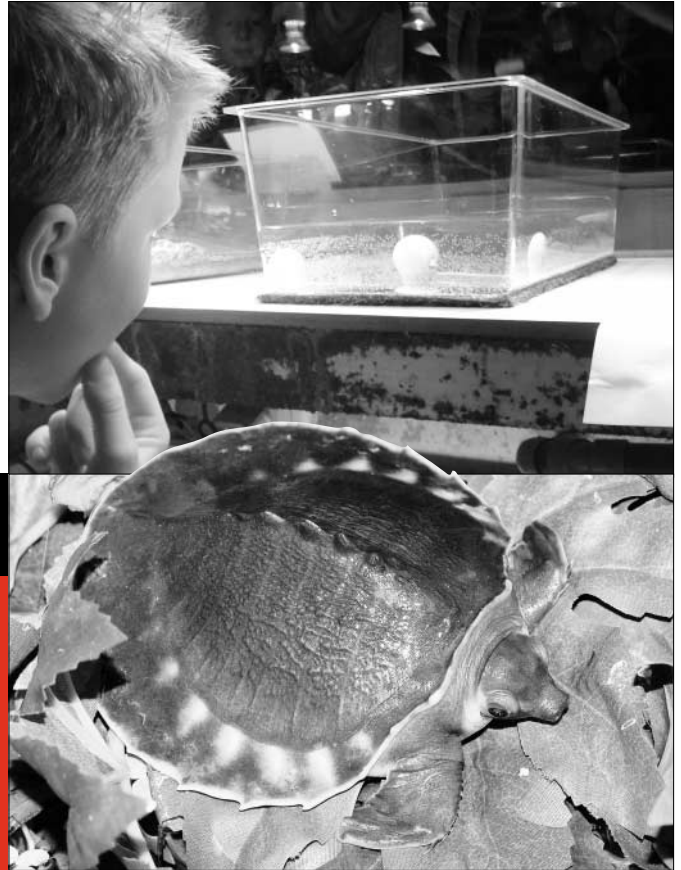


PHOTO HENK ZWARTEPOORTE/ROTTERDAM ZOO

shop in Rotterdam (the animals were acquired in an era – the late 1970's – that it was not yet against the policy of the zoo to obtain animals from pet shops). Keeping staff of the Berlin Zoo recommended trying boiled potatoes, and these were a success. Freshwater turtles at Rotterdam Zoo received a mixture of minced meat, vitamins and calcium/mineral supplements twice a week and vegetable matter as lettuce, endive, tomatoes, apples and bananas three times a week in the past. Now they are fed with the gel food developed in Germany by both Sachsse and Pauler. This gel food replaces the minced meat mixture and is made in-house in the zoo. It consists of freshwater fish, commercially manufactured dog food, ox heart, beef, spirulina algae, shrimps, milk, water, vitamins, calcium/mineral supplements and high quality gelatine.

## Breeding

Nesting attempts and oviposition of pig-nosed turtles have been observed in several zoos, but on many occasions the eggs have been deposited in the water. During spring 2004 there was much aggression between the trio in the large aqua-terrarium and nothing indicated that copulations had taken place. However this aggression was probably mating behaviour as a female, which arrived as an adult in 1978, produced her first clutch of fertile eggs on 10 January 2005. The male had already been taken out of the tank in November 2004. In search of a suitable nesting site, the female ignored the specially-made beach and left the exhibit through the plant barrier separating the aquatic part of the tank from the public area. She was found early in the morning by night watchmen at the bottom of the stairs leading to the public men's room, where she had laid three eggs. She was put in an off-exhibit container with a layer of peat, where she



PHOTO ROB DOOLAARD (IZP)/ROTTERDAM ZOO



PHOTO EAZA EXECUTIVE OFFICE

produced the rest of the eggs, 21 in number, approximately one hour after injection of Calcium-Sandoz and Oxytocine.

### Incubation

As hatchling sex is influenced by the incubation temperature, the eggs were incubated in five human incubators at different temperatures: 28, 30, 31.5 and 32°C. Vermiculite was used as a substrate, with two exceptions: two eggs were incubated on a peat/vermiculite mix, one at 30°C and one at 32°C. After 27 days after laying it was seen that 15 eggs were fertile, containing embryos about 20 mm in length.

The stimulus for hatching in the wild is flooding or the start of the rainy season. Thus after 61, 66 and 75 days of incubation a test-egg was submerged – but without any result. At day 84 the egg sank and hatched

after twenty minutes. The next day three more 32°C-incubated eggs hatched after being submerged for 15, 20 and 23 minutes. On day ninety another 32°C-incubated eggs hatched after 32 minutes of submersion. This egg was specially selected and kept to hatch in front of the press and the audience as a special event when the Rotterdam Zoo and the Dutch Zoo Federation (NVD) launched the EAZA Shellshock Campaign in the Netherlands. In total 16 turtles hatched between 7 April and 27 May 2005. The 16th egg to hatch was the one egg salvaged from a clutch of five at the bottom of the aquarium laid by the second female.

### Rearing of hatchlings

All hatchlings were first housed separately in small plastic containers. After three days they were fed with aquatic plants, zoo-made gel food, Tetramin (a blend) and floating plants. All items were readily taken. At the age of one month some hatchlings started to feed on smaller earthworms.

### Discussion

It is certainly possible to breed pig-nosed turtles in captivity. All three previously known breeding events – in Wilhelma (Stuttgart), the Bronx Zoo (New York) and Miami Metro Zoo (Florida) – happened with animals that had spent a long time in captivity. Aggression between the animals, and consequent female carapace damage is related to reproduction behaviour. As was to be expected, the eggs hatched after being submerged in warm water, but also one egg hatched in the incubator. The problem seems to be how to offer suitable nesting beaches that the females will indeed make use of; in Rotterdam Zoo this will be the focus of attention for the following breeding seasons. •



## Françoise Delord

Position Director of Zooparc de Beauval Last book read

'The pillars of the earth' by Ken Follet. Favourite colour Red

Last trip made abroad USA - for the WAZA congress, then a trip

to San Diego Last time in the theatre 'Les fourberies de Scapin'

by Molière, together with my grandson Favourite animal Cats,

small or big Hobbies Zoos and travelling to visit zoos all around the world, reading

**What made you decide to have your own zoo?** I have always been in love with animals, but also had another dream when I was a young girl: to act in the theatre. So I studied at a classic school of theatre and played in Paris.

I once adopted two small exotic birds I saw in an exposition, and adopted two others, then ten more, plus... That's how my hobby grew and I became a specialist in breeding birds such as parrots, toucans, mynahs and tanagers. I wrote two books, called 'Mes oiseaux et moi' and 'Perroquets perruches' about the care and breeding of birds. To host my own birds (several hundreds) I opened a birdpark 'Parc de Beauval' in the small city of Saint Aignan Beauval in 1980. I transformed it into 'ZooParc de Beauval' in 1989, with the arrival of my first mammals: eight species of monkeys and also leopards, jaguars, pumas and bears. My big luck is that my son is as passionate as I am about animals and zoos.

*"As I am passionate about the animals I spend much energy trying to do what is best for them."*

**Zooparc de Beauval celebrated its 25th anniversary in 2005. Looking back over the past 25 years; what do you think have been the major changes in the history of the zoo?**

I imported a pair of white tigers from the USA. They were then quite unique in Europe. The tigers have been an incredible success, more than anybody imagined before, and their popularity offered me the opportunity to develop the zoo. The next year I built our first tropical house, for orang utans and chimpanzees, and we have continued to enlarge step by step, with big exhibits or small ones, year after year.

**What is the most memorable or fascinating event in your career so far?** Several events have been fascinating.

We have undertaken some animal imports of our own that were extraordinary adventures, including the white tigers from the USA and rhinoceroses from South Africa. The arrival of the first gorillas, and of the manatees that we transported ourselves were also fascinating. The arrival of the koalas, which I had

dreamed of for ten years, was another great moment. Some births, like the twin manatees, have also been amazing moments.

**What do you enjoy most about your job?** What I enjoy most is to create exhibits that are as comfortable as possible for my animals and are beautiful settings for them too. I like to imagine new ways of housing them, and to watch and study them. I have had several occasions when a baby is not reared by its mother, and quite often I take care of them myself. Hand-rearing animals, especially cats is always a real joy for me even if it is a lot of work if I adopt them when they are one or two days of age.

**Besides being a zoo director, what other activities do you have within the zoo world?** Being a zoo director fills all my days, but I am also chairman of the Association Nationale des Parcs Zoologiques (ANPZ - the National French Association of Zoos) and an EAZA Council member. I am also member of the national commission of 'Certificat de capacité' in Paris, and I am involved in many commissions for the Ministry of Ecology.

**What are the main challenges for the chair of the ANPZ?**

Being the chairman, I developed relations and work closely together with the Ministry of Ecology, Ministry of Agriculture and the Labour Ministry, mainly on laws concerning zoos. To defend or protect the profession in all these ministries is a challenge. Another one is to try to help everyone to apply all the changes that have happened in the zoos in the past years, mainly conservation and education, and also about the new feeling of creating new exhibits with enrichment for animals and so on.

**Which important changes do you see happening in the zoo world in the next ten years?** What I will say is not very

new but I think, and hope, that the changes that we have observed in the last twenty years in zoos will continue. Zoos will be increasingly involved in education and research; but above all, in *in situ* conservation. Important questions for the future are: how will we manage collection plans and animal surplus? •

**Rheine GERMANY**SOURCE  
ACHIM JOHANN

PHOTO NATURZOO RHEINE

Six **gelada baboons** (*Theropithecus gelada*) were born at NaturZoo Rheine in October and November 2005. These young are valuable and very welcome additions to the steadily growing EEP population of this unique primate species. The short time range in which the births occurred is remarkable (16, 27 and 28 October (two births), 1 and 4 November), especially as they occurred in two separate (but in close proximity and limited contact) groups, each with two subgroups.

The past 15 years of studbook data for the EEP population of geladas was analysed to reveal a general tendency towards synchronised births. There is a slight seasonal peak during the months from October to January, but births happen at each time of the year. Much more obvious is some kind of clustering of births from time to time in different zoos. There is a strong indication that birth-synchronisation is caused by changes in the group-composition, i.e. introduction of new males, harem take-overs or combination of unrelated animals as founders of new groups. Female dominance seems to influence oestrous cycling and to suppress conception of lower ranking animals.

After a harem take-over and resulting infanticide happened in one group earlier this year, births occurred as soon as possible after this event in the second group. This suggested that this traumatic social event affected the second group like a 'hormonal stimulus'.

On 31 December 2004, 131 gelada baboons were held in 15 EEP-participating zoos, of which 37 are at Rheine. There is increasing interest in this species by a number of additional zoos. Because of the low natural reproduction rate and the efforts to keep geladas in more naturally composed social groupings it is currently impossible to fulfil all wishes of respective zoos. Nevertheless it is the close and conscientious cooperation in this EEP



which has led to the gradual increase of the European gelada population. The species has proved to be more delicate than previously thought, with very special nutritional requirements and general management needs for a multi-level social structure. The future of the captive population depends solely on the further success of this EEP as there is no longer a viable population in North American zoos, and imports from the wild are currently unlikely.

Gelada baboons are the only endemic species of Ethiopian wildlife in captivity, and therefore may be seen as a flagship species for this region. In addition to their conservation value, geladas are a very good species for educational purposes, as they offer excellent possibilities for explaining social structure and behaviour. Finally, the appearance and charm of these primates infect everyone involved in working with them, and breeding results like these recent births are most rewarding.

**Dvur Kralove CZECH REPUBLIC**SOURCE  
LUDEK CULIK

Dvur Kralove Zoo started keeping the **Somali wild ass** (*Equus africanus somalicus*) five years ago. Two stallions ('Dante' and 'Mike') were obtained from Usti nad Labem Zoo in 2000, a pair ('Toni' and 'Torry') arrived from Tierpark Berlin in 2001 and an unrelated male

PHOTO DVUR KRALOVE ZOO



named 'Quoray' came from Liberec Zoo in 2003. Torry and Quoray were the first pair socialised in our zoo in 2003. They spent the season in the North African exhibit, mixed with the breeding herd of addaxes and a dromedary camel pair. Their first offspring, female 'Tiffany', was born in May 2004. We obtained a pregnant female 'Ajulla' from Liberec in December 2004. Finally, at the beginning of 2005, we obtained another male 'Aidini', our future breeding stallion, from Stuttgart Zoo. There were two Somali wild ass births in our zoo in 2005: Torry gave birth to her second daughter 'Taipi' (sired again by Quoray) on 25 June and Ajulla gave birth to her first foal, male 'Arbo' (sired by stallion 'Marco' in Liberec), on 9 August. Both foals were normal-sized and were mother-reared. At present, we keep 3.4 Somali wild asses. The births of our foals are very significant for the EEP and also for the global population of this highly endangered species, as not many births occur. According to the Somali Wild Ass International Studbook, only 17 foals were born in 2004, 11 of which occurred within the EEP.



## Walsrode GERMANY

In the seventh year of 'Project Tsimbazaza', a cooperative endeavour between the Parc Botanique et Zoologique de Tsimbazaza (PBZT), the Ministère de l'Enseignement Supérieur à Madagascar and VogelPark Walsrode (VPW), we can again report on great steps forward in our efforts to establish Madagascan species in captivity.

We imported our first four **Madagascar crested ibis** (*Lophotibis cristata*) in December 1998, added another small group of five in January 2000 and two more birds in December 2001. After the first captive breeding in 2001, the population has increased to 39 birds, 27 (22 at VPW alone) of which were bred in captivity. Meanwhile, the species has also reproduced successfully at Zurich Zoo, San Diego Zoo and PBZT. We hand-reared all the offspring to quickly increase the initial captive population. The youngest female to produce fertile eggs was only 18 months old at that time. Hand-rearing proved not to be detrimental to breeding success, as ibises hand-reared at VPW successfully reared offspring at San Diego Zoo and Zurich Zoo.

There are currently seven holding institutions, and the species is now well established, and is expected to number a hundred birds in captivity within the next five years.

Madagascar blue pigeon chick



The **Madagascar blue pigeon** (*Alectroenas madagascariensis*) has apparently never been kept in captivity before we imported seven birds in early 2004. The birds were mist-netted near fruiting bushes in rain-forest patches (six birds), and easily accepted pieces of fruit, fruit eater pellets, and small berries collected in the wild. One bird was taken from the nest at the age of approximately five days and hand-reared. These pigeons receive a mixed fruit and pellet diet for frugivores offered to all our fruit-doves and cotingas. Even the birds captured in nets were remarkably placid when compared to many other doves and pigeons. In March 2005, the hand-reared female bird and one of the males incubated a single egg in a halved coconut. Incubation took approximately 17 days and the chick fledged after another 17 days. The young bird resembles squabs of *Ptilinopus* doves; the species-specific dark red upper tail coverts were present in the chick at fledging time.

The **Blue coua** (*Coua caerulea*) is a spectacular member of its genus, the ten species of which are endemic to Madagascar. Together with the blue pigeons, we received nine birds, which turned out to be seven males and two females. All had been taken from nests at an age of between five and ten days and were hand-reared.

One pair laid three eggs, one per clutch, which is the usual number in this species. All eggs hatched, but unfortunately, only one chick was reared, which turned out to be a female. With its low reproductive rate, this species may take a long time to become established.

**Madagascar pond herons** (*Ardeola idae*) are becoming increasingly rare due to habitat conversion and replacement by the rapidly increasing number and spreading of the squacco heron (*Ardeola ralloides*), which together with the cattle egret (*Bubulcus ibis*) now dominates mixed heronries throughout Madagascar. There are reports of hybridisation between the Madagascar pond heron and the squacco heron, but although not yet verified, it seems possible since the latter now greatly outnumbers its Madagascan congener.

Indeed, one of the ten birds imported in early 2004 seems to be a hybrid. In March 2005, we received another ten birds, which will hopefully form a viable captive nucleus for the future of this rare species.

The **Madagascar sacred ibis** (*Threskiornis bernieri*), together with its subspecies on Aldabra (*T. b. abbotti*) is now considered a separate species from the African sacred ibis (*T. aethiopicus*). It differs in habitat, size, extant of black colouration of the wing tips and iris colour, which is brownish-red in *aethiopicus* and pale blue in *bernieri*. Because of this distinctive character, we suggest the name blue-eyed ibis for the species. We imported twenty young birds in March 2005 that had been collected from markets along the north-western coast of Madagascar, where blue-eyed ibises breed on remote mangrove islands. The birds were reared by Mario Perschke, VogelPark's representative at PBZT, and shipped to Walsrode shortly after fledging. All the birds acclimatised very well and are in perfect condition.

This species is listed as endangered because of large scale destruction of its mangrove habitat, hunting of adults, and collecting of juveniles and eggs for food. There may be fewer than 2,000 left in the wild. VPW has a long history of successful reproduction of Threskiornithidae, and having twenty birds as founders, we are confident that we will establish a strong and genetically diverse population in captivity.

Blue-eyed ibises in quarantine



## Erfurt GERMANY

SOURCE  
NORBERT NEUSCHULZ AND DIETMAR KULKA

Thüringer Zoopark Erfurt is one of the few zoos in Europe in which **Southern white rhinoceroses** (*Ceratotherium simum simum*) are regularly bred and reared. The foundation of this successful breeding group was laid with a new rhino house and enclosure and the purchase of two young females ('Numbi' and 'Temba') that arrived from South Africa on 25 November 1998.

With the onset of the oestrus cycle of Numbi, the older female (then 2.5 years old), the bull 'Kiwu' (born 1981) became sexually active for the first time. He had grown up in the company with female 'Kenya', but had never shown any reproductive interest in her. Numbi gave birth to her first calf on 6 December 2001 and to her second calf on 26 September 2004. Both calves were bulls. The inter-birth interval was two years, nine months and twenty days. The female Temba showed her first signs of an oestrus cycle during July 1999. More than twenty copulations with Kiwu were observed, but she did not become pregnant.

Thomas Hildebrandt and his colleagues of the IZW Berlin discovered a 4 cm long polyp on Temba's reproductive organs on 6 June 2003. It was situated at the caudo-ventral cervix and had a cauliflower-like surface. Obviously, the semen could not pass this obstacle. An artificial insemination was planned and done on the same day with semen from the bull 'Dale' of Burgers' Zoo in Arnhem. Although multiple food supplements containing gestagens and  $\beta$ -carotin were given to support the pregnancy the female aborted after a gestation period of 79 days. But the procedure was successful in a different way: after further copulations with Kiwu, Temba got pregnant. On 11 June 2005 she gave birth to a bull calf of 61 kg. Unfortunately – being an inexperienced mother – she behaved inadequately. She accepted the calf peacefully but did not let it suckle. The only alternative was to hand-raise it. It was only possible to get 60 ml colostrum milk from the mother. Feeding started with 'Salvana' artificial foal milk but because of heavy diarrhoea was changed to a milk mixture recommended by San Diego Wild Animal Park.



Aborted rhino foetus

PHOTO RUDI TOLL

The young bull suffered from diarrhoea for prolonged periods and had skin problems. The epidermal layer gradually came off his entire body, even the foot soles. Apart from the standard veterinary treatments (gruel, yoghurt, parenteral application of antibiotics and sulphonamide drugs, permanent intravenous line with serum electrolytes and oral application of unsaturated fatty acids) a homeopathic therapy was started. Details about the treatment can be obtained from the EAZA website ('Magazine' section). Although suffering from several diarrhoeic periods as well as from an *Urachus fistula* that was detected when he was 11 days old (but closed itself within a few days), the young rhino showed a remarkable will to survive. The zoo visitors have chosen a fitting name for the bull calf: 'Amari' which means 'the one who never gives up'. After 17 days his conditions started to stabilise. Amari accepted solid food in his 15th week.

PHOTO NORBERT NEUSCHULZ



Newborn rhinos that are suckled by their mothers gain 1 kg body mass per day. It is quite likely that the rate should double with the third month of life. At 143 days of age Amari weighed 228 kg. This is regarded as normal based on the calculation above. Starting 19 October 2005, he was gradually and successfully introduced to the adult females and the bull offspring born 2004. Copulations by Kiwu and Temba were observed on 6 August and 8 September 2005. Currently 3.2 Southern white rhinoceroses live at Erfurt Zoo.



## Fuengirola SPAIN

SOURCE  
GONZALO FERNÁNDEZ-HOYO

The **false gaviol** (*Tomistoma schlegelii*) is a flagship species within Fuengirola Zoo's southeast Asian riverine forest area. This area is composed of a series of mixed-species exhibits around an artificial flowing river. The false gaviol enclosure is spacious and outdoors. It depicts a sandy shoal on the edge of a dense forest. The water part of the exhibit is 1.70 m deep, sand-filtered and treated with ozone, and heated to 22°C to 24°C during the winter months.

Several species of turtles and tropical freshwater fish share the enclosure with the false gavials. Additionally, gibbons and green peafowl may enter the enclosure at will. There has never been any aggression towards the other species, although we are aware of the implicit risks.

Barcelona Zoo lent us a single female *Tomistoma* in spring 2004 to pair with the male that we received from Randers 1.5 years earlier. The male wanted to mate her immediately upon arrival, but she then proved to be evasive.

Things turned for better in spring 2005, and during April the female started fasting. A single egg was found on the bottom of the pool. Several full copulations were recorded during May, some of them lasting as long as 45 minutes. Four turf and dry leaves nests were added to the enclosure, and keeper access was minimised. The female chose the nest closest to the water access area, and guarded it fiercely during the day, visiting it at night. The nest was checked for eggs once every two days.

Twenty-two eggs were found inside the nest on 1 July, half of which were partially or totally damaged. Most of them were removed for artificial incubation. This was carried out on a water-saturated bed of vermiculite at a temperature of 31°C.

A spoiled egg opened on 30 August revealed an embryo inside, confirming fertility.

To everyone's delight a baby finally hatched on 23 September 2005. This hatchling seems healthy, and is certainly a big step in captive breeding of a species that is becoming increasingly rare in the wild.

The other eggs were eventually discarded; two contained dead embryos at different stages of development.

PHOTO RAINFOREST S.L.



## Reflections after reading the article 'Establishment of a prairie dog exhibit in Attica Zoological Park'

(see EAZA News 52, p. 22 – 23)

Lars Lunding Andersen, Copenhagen Zoo, Denmark

*When zoo people meet they normally talk about conservation, EEPs, collection planning and other important issues. We seldom spend time discussing our visitors' basic need for good experiences and how we, by choosing the right animals (not necessary EEP animals) can create simple and inexpensive enclosures which attract the visitors and have a strong holding power (people stay at the exhibit longer than average).*

The new prairie dog exhibit in Attica Zoo is such an exhibit and that is why the short article is of general interest. By choosing an animal which is day-active, social, small, inexpensive to accommodate and feed, you have all ingredients you need to succeed from the visitor experience and educational point of views. When visitors come to our facilities they neither come to be educated, nor to learn about endangered species. A zoo visit is a social event and an opportunity to have fun together.

If we are talking about entertainment and we want to tell a good story about communication and social behaviour in the animal world, a well-established group of prairie dogs in a good exhibit can deliver the show and beat most of the other animals in the zoo. For years the prairie dog colony in Copenhagen Zoo has been one of the highlights in our education programmes about animal behaviour.

Of course I am not arguing for having only fun and active animals in the zoo. I am not neglecting the EEP species and the conservation and biodiversity issues either. All zoos today compete with other attractions in the leisure industry, and therefore – like it or not – we need animals like the prairie dog in our collections together with many other non-EEP species.

As in many other situations in life, collection planning in a zoo (where most or perhaps all the income comes from the entrance fee) entails balancing different aspects: contribution to EEP, conservation, visitor experience, education and so on. Perhaps the time has come to discuss zoos' role in society in a more holistic way, not only looking upon zoos as lifeboats for nature. Seen from a historical and cultural point of view – a zoo is much more. •

**YOUR OPINION?** We hope that through sharing opinions on modern zoo-related topics in EAZA News, we can stimulate thought and communication about these topics and eventually evoke discussions among zoo colleagues. Those people who would like to add their opinion to this section can write an e-mail to [jenny.van.leeuwen@nvdzoos.nl](mailto:jenny.van.leeuwen@nvdzoos.nl). Responses received to the opinion article by Lars Lunding Andersen, will be published in the next issue of EAZA News and/or on the EAZA website.



## JUST ANOTHER EDUCATOR

# Bea Golovanova

Budapest Zoo, Hungary

### Your personal goal as an educator?

The main thing is to let children know that they can do something concerning conservation and sustainability, that these are not just 'adults businesses'. Secondly, education must be fun as well. Children must experience the educational activities as fun, otherwise they might get bored – which would of course be bad for our work and the goals we try to achieve through education.

### Most difficult aspect of your work?

Our zoo educational team (four full-time educators and one assistant) mainly has one mandate: formal education. There still is a very poor connection between the educators and the exhibit design and the collection

planning teams. I believe we need to communicate better because then we could all achieve a lot more!



### Your biggest success?

The 'Zoo Playhouse'! This is a programme for children and their parents in the children's farm. We have been running this weekend programme for eight years now. It deals with only one species or taxonomic group at the time. The programme has three main goals: families play together, learn together, and do handicrafts together. Besides transmitting the biological or environmental message, our aim is very simple: for families to have fun and just be together. At the end of the programme the family receives a story about the animal we dealt with during the programme to take back home – to remember the fun and the knowledge gained! The playhouse is one of the most popular educational programmes in the zoo, which makes me very proud.

## Educating educators Report on the first EAZA Training Seminar for Zoo Educators

Constanze Melicharek, Apenheul Primate Park, Apeldoorn, the Netherlands

The new World Zoo and Aquarium Conservation Strategy clearly stresses the importance of continuous intense training of zoo educators and of 'networking' to improve the skills of those responsible for zoo education. The first EAZA Training Seminar for Zoo Educators, hosted by Copenhagen Zoo, was a perfect opportunity for a more intense delve into different topics on informal education.

### Dealing with informal education

Five years ago a successful training programme for zoo educators from eastern Europe took place in the Netherlands, as an initiative of the International Zoo Educators Association (IZE). It was obvious that more opportunities for training were desirable, leading Copenhagen Zoo to organise the 2005 seminar. The maximum number of participants was initially set at twenty,

but because of the huge interest 26 participants from 13 different countries eventually met in Denmark for a seven-day training dealing with informal education; i.e. interpretation towards the common visitors. The organisers initially planned to orient the seminar towards zoo educators from eastern Europe and educators with little experience, but abandoned this plan when it appeared that participants came from all over Europe and varied in experience from a few months to more than 25 years! Eventually four stable working groups were established that discussed and worked together for a week on a variety of themes.

### What's inside?

Apart from signs and interactive displays the topic 'how to give a good presentation' was discussed. Verbal information seems to bring across the message very effectively, and talks – whether

given by keepers, educators or students – during animal feedings have become one of the main attractions in many zoos and aquaria. It is crucial to decide what the main message should be in these presentations, and that the presenter links what can be seen at that very moment to the message conveyed in his general story. Seminar participants had the chance to compare very different oral presentations at Copenhagen Zoo: a training and feeding of the sea lions, a commented feeding of the lions, a presentation of birds of prey and the programme for which Copenhagen Zoo is quite well known in zoo educators' circles: 'What's inside a chicken?'. During this programme a student takes out the intestines and other organs of a freshly slaughtered chicken in front of the public.

### Evaluation of education

One of the afternoon sessions

was devoted to the adequate evaluation of the effectiveness of exhibitions and signs. After no more than an hour of research, each of the working groups presented a sound idea of which elements of a certain exhibition were used (in the proper way) by different target groups, and which signs were 'consumed'. It became clear that there is little attention for this kind of evaluation in most zoos and aquaria, in general due to time shortage. This definitely is an area that deserves substantial improvement!

### Save the Rhinos!

The last one and a half day were 'Rhino Campaign days'. All working groups came up with a variety of original and useful ideas on how to fill in the 2005/6 EAZA Rhino Campaign. Copenhagen Zoo will further work out these ideas and pass them to the Rhino Campaign working group in due course. ●

## NEW ENCLOSURES

PHOTOS ALLWETTERZOO

# Inauguration of the BioCity in Münster Zoo

Martina Raffel, Allwetterzoo, Münster, Germany

**The International Centre for Turtle Conservation (IZS) started operations in October 2003 with the first breeding room for critically endangered Asian turtles. Adjacent to this facility, an information and education centre on biodiversity, BioCity - with the Asian turtle crisis as one of its major subjects - was inaugurated on 5 July 2005.**

Many prominent guests and friends of the zoo attended the ceremony, which started with short talks by director Jörg Adler, Bernhard Blaskiewicz (president of VDZ), Leobert de Boer (chairman of EAZA), Alex Rübel (past president of WAZA), Helmut Pechlaner (director of Vienna Zoo and president of WWF Austria) as well as representatives of the city of Münster and the 'Nordrhein-Westfälische Stiftung für Umwelt und Entwicklung', which funded the information and education centre.

### Conservation, education en research

The new facility, located at the entrance of the zoo, informs the visitors about the threats to nature in general and turtles and tortoises in particular, but also about the chances of biodiversity. The associated 'Forscherwerkstatt' (research workshop) with a laboratory, computer work stations and media equipment aims to inspire pupils for science, engagement in nature conservation and sustainability.

Since the public can not be given open access to the IZS due to the turtles' susceptibility to stress and possible threats to the valuable turtle population, big viewing windows looking into the breeding centre were integrated in the information centre. These viewing possibilities are supplemented by exhibition tanks with attractive species (e.g. *Chelodina mccordi* and *Ocadia sinensis*) as well as information panels about the threats to and exploitation of turtles and tortoises. Additionally, large signboards with information about the species kept within the breeding centre are presented together with three exhibition tanks housing recent offspring as well as hands-on elements for children. A touch screen playfully presents short films on the *in situ* conservation projects of Münster Zoo and its partners, including a presentation on the EAZA Shellshock Campaign (modified version of a presentation produced by Landau Zoo), and a big wooden turtle puzzle shows photos of three species kept in the IZS with information about them. ●



### Visitors' acceptance

The acceptance by the visitors is enormous and the interest in turtles and conservation in general seems to have increased significantly as can be concluded from the average time visitors spend in the information centre and the number of general questions we receive concerning conservation and/or biology. Finally, also the 'Forscherwerkstatt' has a very high acceptance (measured in terms of requests for bookings and performing projects) - and we think this is also a result of interdependency with the information centre.

## NEW ENCLOSURES

PHOTOS LISBON ZOO



# New okapi facility at Lisbon

Eric Bairrão Ruivo and Patrícia Vilarinho, Lisbon Zoo, Portugal



## Long-lasting dream comes true for Lisbon Zoo

**Lisbon Zoo has been pursuing the dream of having okapis for many years. The first request was made to the EEP in 1994. No surplus animals were available until 2004, when, as a result of increasing breeding success, Bruno Van Puijenbroeck (Antwerp Zoo and EAZA Okapi EEP coordinator) informed Lisbon Zoo that there were two males available to be sent to Lisbon Zoo and two other males available to be sent to Dvur Kralove Zoo.**

These animals would help these two institutions to acquire husbandry experience before receiving females and trying to breed the species. Following this exciting news, plans for this new facility were immediately developed, with the very important help of the EEP coordinator himself. Senior technical staff involved in this project was sent to visit other institutions keeping okapis (Antwerp, Rotterdam, Cologne and Stuttgart).

### Final green light

Ongoing work on other major new buildings (for primates, large cats, elephants, giraffes and a new hospital) necessitated postponement of the okapi project for a few months. This was a really bad stroke of luck for everyone involved and the efforts to get the project going were increased to the maximum. At last, in late 2004, the final green light was given to one of the most wanted projects of all time at Lisbon Zoo, and the construction started.

### Facility

The facility faces south, protected from dominating northern winds by the ground slope and by the stall. The building is made of wood (indoor and outdoor) with insulation between the two faces. The cement substrate is covered with a 10 cm deep bio-floor layer. The roof is made of red clay tiles. Sliding doors are present between enclosures (two in each face, 1 x 2.40 m) and from the indoor facility to the keepers' corridor (1.20 m x 2.40 m). The bottom 0.80 m of the panel between the stables is made of wood and the remaining 1.60 m is metal (bars). Heating is provided by a natural gas boiler, with radiators distributed throughout the keepers' corridor. Two air-conditioning units, with air flux orientated to the facility's ceiling, are present for cooling.

The kitchen and keepers' area are in the centre of the facility, and provide a complete overview of all stables. Eight okapi stalls are available (four to the left side of the kitchen and another four to the right side), all

connected by sliding doors and/or through the keepers' corridor and outdoor area. Each stall has an automatic water dispenser, a grain feeder and a green-hay dispenser, as well as hooks for suspending browse and enrichment items.

### Outdoor facility

The outdoor substrate is flat, natural soil slightly compacted and covered with grass. A nylon net, 1.60 m high and fixed between steel poles, separates the different outdoor facilities. Shade is provided by poplar, olive, willow, acacia, lime and other trees, many of which were planted especially for this purpose. Automatic water dispensers are available. Nylon netting bags are hung and filled with browse for environmental enrichment purposes. Information panels with general information regarding okapi origin, biology, behaviour, curiosity facts are present.

### Contributing to the success of the EEP

The facility was officially inaugurated on 31 May 2005 and opened to the public on 1 June. The okapis 'Djugu' and 'Basongo' are completely adapted and already are together in the outdoor enclosure for most of the day. We are convinced that the high quality of the enclosure and of the husbandry provided, together with the magnificent climate that Portugal has almost year round, will strongly contribute to the success of this species at Lisbon Zoo and of the EEP. We now look forward to receiving two females to start breeding at Lisbon Zoo.

We would like to thank everyone involved in this project, especially Bruno Van Puijenbroeck, Angela Glatston, Waltraut Zimmermann, the okapi keepers at the Antwerp, Cologne and Rotterdam zoos and their institutions and finally the board of administration of Lisbon Zoo! •



## NEW ENCLOSURES

PHOTOS DORTMUND ZOO



# Rumah hutan, the new rainforest house at Dortmund Zoo

Frank Brandstätter, Dortmund Zoo, Germany

**Dortmund Zoo recently opened its newest building: the rainforest house 'Rumah hutan' – one of the most important buildings in the zoo's fifty-year history. It is exclusively dedicated to the fauna of southeast Asian jungles. Sumatran orang utans and Malayan tapirs are key species, and both have been kept at Dortmund Zoo for years. Dortmund Zoo is one of the few regular breeders of Malayan tapirs in Europe. Now, tapirs and orang utans will for the very first time be kept together in one enclosure – adding another one to the numerous mixed-species exhibits at Dortmund Zoo.**

### House of the forest

The Indonesian name Rumah hutan means 'house of the forest' and describes the concept perfectly, which is to show a semi-natural species community as part of the complex ecosystem of the southeast Asian forests – a zoogeographic counterpart to the Amazon jungle which is already represented in the zoo's Amazon house.

### Multi-level viewing opportunities

Rumah hutan is a three story building. Visitors enter at the medium level and cross the house on a bridge-like structure surrounded by a three-dimensional enclosure for the animals. This unique way of exhibiting the species gives the visitors a chance to meet the animals 'eye-to-eye' or to view them from above or below. In the centre part of the building visitors can take a spiral staircase to the lower level, where they can enjoy the tapirs taking a bath in their indoor pool or dwelling on the grounds. The whole setting is completed by plantings surrounding the enclosures and visitor areas. Several glass walls allow for a 'mesh-free' view of the animals. All other parts are separated from the visitors' area by a steel wire mesh, giving the whole building a 'bright' sense. Visitors leave the building through an information hall, where numerous panels provide information about the animals, the ecosystem and various efforts to protect the environments of the animals shown in Ruman hutan. The room is also used for marriages and meetings such as press conferences.

### Comfortable animal facilities

The animal area can be divided into three compartments in case animals have to be separated for whatever reason. There are individual compartments behind the scenes where the animals can be individually fed or medically treated. The interior of the main exhibit area is decorated with natural trees, ropes and only a few artificial constructions such as steel baskets to serve as a base for the orang utans' nest building. One part of the enclosure (approximately a quarter of the total surface area) is only accessible

to the orang utans. The floor in this area is covered with a mulch bed. There is a pool for the tapirs in the main part of the enclosure. Ropes and branches have been installed close to the water surface to assist the orang utans in climbing out should one of the apes fall into the pool. Plants protected from the animals by the wire mesh surrounds the animal area. This gives the whole enclosure a green backdrop, additional to the planted area in the centre part with plants from the southeast Asian region (amongst others).

### Tapir toilets

There are three tapir toilets spread in the enclosure. Surprisingly the tapirs learned very quickly to use these 'toilets' – little water pools in the corners. When they first came into the house the pool was simply left dry until they had learned to use the toilets. Thus, massive defecation into the pool is avoided and the toilets can be cleaned more easily.

### Outdoor area

The outdoor enclosure is accessible to the animals through the individual compartments only. It is equipped with a pool for the tapirs as well as numerous natural, grown trees. The outdoor enclosure is surrounded by a water moat, that is inaccessible to the animals through a wooden barrier and electrified fence. Visitors have a perfect view into the enclosure from three points: a terrace on the roof of the main building (accessible from the information hall), a terrace close to the tapir's pool and the main visitor's path.

### The two species getting used

Meanwhile the first contacts have taken place between the two species and to the surprise of everybody involved it worked well. The tapirs were of course nervous and the orang utans were curious but also afraid of the tapirs. The situation calmed down after just a few meetings, and both species now use all parts of the indoor and outdoor enclosures accessible to them. ●

PHOTO COR VAN MEEL



# Colchester Zoo's exciting new development

## Creating a wildlife reserve in South Africa

Alex Burr, Colchester Zoo, United Kingdom

**Colchester Zoo has always wanted to be able to fund its own conservation project. As the zoo has been in a profitable situation for the last two years, it has now become possible to achieve this ultimate goal. In an exciting development, Colchester Zoo has announced plans to create a wildlife reserve in South Africa. Negotiations are currently underway to purchase three adjacent cattle farms in an area of Kwazulu Natal in South Africa. The land, which covers more than 20,000 acres (8,100 ha), will cost more than UK£1 million (€1.5 million). To be able to create this reserve we have formed a sister company: Colchester Zoo South Africa PTY Ltd.**

### Rehabilitation of wildlife

Once the cattle have gone to other farms a huge perimeter fence will be constructed, making it possible to rehabilitate the land. Wildlife will include rhinos, giraffes and kudus as well as three species of small antelope (bushbok, oribi and duiker). Cheetahs and African wild dogs may later be introduced to the reserve due to their critical conservation status.

### Research and education programmes

A research programme will be initiated to determine the species currently within the park as well as to monitor the impact of the new species that are introduced. It is also likely that some of Colchester Zoo's keeping staff will go out to train at the reserve to give them knowledge of the wild species that they care for at the zoo. An education programme will be set up to keep Colchester Zoo's visitors and school children informed about the project.

### Benefit for local communities

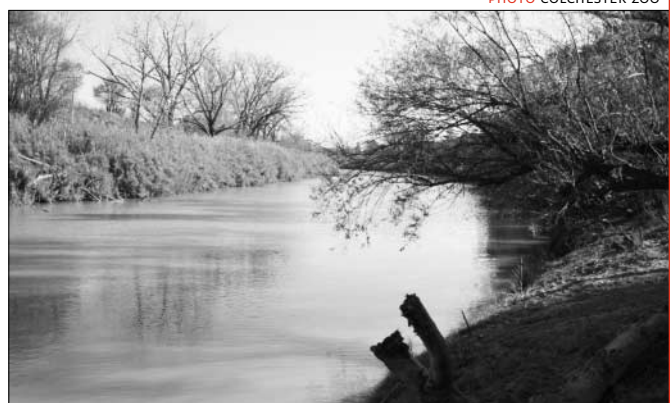
It is hoped that the local Zulu communities will gain from the development; creating employment for the construction of a road, the perimeter

fence and sewage and water systems. The local communities will be assessed to see if the reserve needs to become involved in creating more facilities for the villagers.

### Realisation of a dream

It is likely that it will take three to four years for the project to be fully up and running but it is the start of the realisation of a dream that has been many years in the planning for Colchester Zoo's director, Dominique Tropeano. ●

PHOTO COLCHESTER ZOO





# Declining numbers of wild snow leopards

International collaboration urgently needed to ensure long-term survival of snow leopards

Leif Blomqvist, coordinator EAZA Snow leopard EEP, Helsinki Zoo, Finland and  
Birga Dixel, Naturschutzbund Deutschland (NABU), Berlin, Germany

**International collaboration to ensure the long-term survival of snow leopards (*Uncia uncia*) in the wild is today more acutely needed than ever! Trade in live snow leopards, their skins and bones, has become so extensive during the last decade that the species is in danger of being wiped out from many of its former habitats. All recent surveys report declining populations throughout most of its range. In the mid-1990's, the global population was estimated to number between 3,500 to 7,000 specimens, inhabiting the 12 most mountainous and rugged countries of central Asia.**

## Difficulties in protecting the species

With such a vast range, stretching across that many countries with different cultures, it is not surprising that the threats currently facing the snow leopard are both diverse and challenging. This species has been listed in Appendix I of CITES since 1975, all commercial trade is forbidden, and the snow leopard has full protection in every range country. Yet its protection only appears on paper. With the exception of Bhutan, all other range countries (Afghanistan, India, Kazakhstan, Kyrgyzstan, Mongolia, Nepal, Pakistan, China, Russia, Tajikistan and Uzbekistan) have difficulties in providing snow leopards with the protection they urgently need. Recent reports reveal that the driving forces behind its demise vary from country to country but threats are present in 11 of the 12 countries. The different threats are often closely interwoven and make it difficult to identify causes and effects. Killing for trade seems to be the biggest threat in the Russian Federation and in the former CIS states, while habitat loss and conflicts with herders create major problems in the Himalayas. Kyrgyzstan, earlier considered to be one of the strongholds for snow leopards, with an estimated 1,200 - 1,400 snow leopards in the early 1990's, has lost 80% of its population during the last 15 years.

## Habitat loss

26 Due to the remoteness and inaccessibility of snow leopard habitats, the

degree of fragmentation has until recently been relatively limited. Due to intensified human encroachment in search for new grazing grounds for domestic livestock, construction of new roads and conflicts with human settlements, this has changed. The prolonged war in Afghanistan, which since 11 September 2001 has also led to intensified military operations in Pakistan and northern India, has had devastating impacts on not only snow leopards, but on all wildlife.

## Loss of prey base and conflict with herders

Over-grazing by domestic livestock, poaching and human disturbance lead to reduced populations of wild Caprinaes such as markhors, Siberian ibex and bharals that are basic to the snow leopards' diet. Marmots and picas, important prey species in summer for lactating snow leopards, are legally hunted on a broad scale by local people who view these rodents as vermin. Shortage of natural prey leads to increased snow leopard predation on livestock. Although occasional killing of domestic sheep and goats is tolerated, large-scale predation on domestic animals provokes herders to kill snow leopards either in retaliation or to prevent future attacks. With the exception of the new independent states of central Asia where the state-owned agricultural holdings have reduced their number of livestock since the break-up of the Soviet Union, predation on livestock is causing severe problems throughout most of the snow leopard's range.



**Trade and financial gain**

Poaching is considered to be a major threat to the diminishing populations. The prime motive for poaching in Russia and the former CIS-countries is an obvious result of the social and political changes since the downfall of the Soviet Union. Poverty, inflation, shortage of food and demand for foreign currency have had devastating effects on wildlife in central Asia and Russia. Earlier state-controlled farms have ceased to function, resulting in high unemployment. Financial problems and new market opportunities, especially in China, have led to intensified exploitation of wildlife resources. Black markets and corruption have turned rural people, including previous wildlife wardens, towards natural resources as their only hope to survive.

According to official statistics, more than a hundred snow leopards have been poached in the Qinghai Province since 1990. In the neighbouring Xinjiang region, twenty to thirty animals are estimated to have been killed on a yearly basis. The city of Kashgar, situated close to the Kyrgyz border, is known to be one of the main markets for snow leopard skins from China and Kyrgyzstan. Prior to Kyrgyzstan's independence, up to thirty snow leopard pelts were illegally caught per year for the skin market. In the 1990's, the number increased to 120 skins per year.

**Poaching for zoos**

A TRAFFIC report states that hundreds of snow leopards were exported from range countries during the 20th century, mainly 'to supply demands for zoos'. Prior to 1970, an average of 12 live animals per year were known to have been transferred by the Kirghiz Soviet Socialist Republic (now Kyrgyzstan) to foreign zoos. No less than 425 live animals were reported to have been exported from Tajikistan between 1937 - 1969. According to the TRAFFIC report, 25 live snow leopards from range countries were internationally traded between 1975 - 2000. The Kirghiz anti-poaching team confiscated five live snow leopards between 2000 - 2003. One of the animals died, one was transferred to Zurich Zoo (where it bred in 2004) and 1.2 are kept in the NABU Wildlife Refuge Centre in Kyrgyzstan. Wild-caught animals are still in high demand in Russia and China, and the demand for live snow leopards seems to be bottomless.

During 1881 - 2004, more than 2,500 snow leopards were maintained in captive conditions, 84 (48.36) of which were wild-caught between 1975 - 2004. Half of these (24.16) were captured in China and were transferred directly to domestic zoos, while the USSR accounted for 38% (19.13) of the transfers. Europe and North America both obtained three wild-caught snow leopards during this time-span. Data from the international studbook show that 1.2 additional wild-caught animals were transferred to zoos in Japan and northern India after 2000. Eighty-six percent of the wild-caught specimens have therefore been captured for zoos located in China and the USSR where breeding success has been considerably lower than in the west. There are breeding programmes in North America, Japan, Australia and Europe. Once a rare species in *ex situ* collections, the snow leopard is no longer regarded as a difficult species to breed, with 536 (239.297) living specimens recorded in the international studbook and 174 (85.89) recorded in the EEP at the beginning of 2005.

PHOTO TORSTEN HARDER/NABU



The primary purpose of snow leopard breeding programmes is to contribute to conservation of this species by providing genetic and demographic reservoirs that might be used to re-establish or revitalise fragmented wild populations. Both the SSP and the EEP have responded to declining wild populations by rejecting additional wild-born specimens in their stock. Intensified cooperation between the breeding programmes benefits the preservation of the species' gene diversity. Further exchange of data with Chinese colleagues on behaviour, nutrition and veterinary care would promote the breeding results of the wild-caught snow leopards currently kept in Chinese zoos. F1-animals from China can be exchanged with captive-bred animals from the west, thus enriching the global founder representation in captivity.

**Outlook**

The future for snow leopards in the wild looks bleak unless international attention is intensified and more stringent measures implemented to stop the illegal cross-border movement of skins, bones and live animals. The successful EAZA Tiger Campaign, which aimed at educating the public of the plight of the tiger and generated much needed funds for tiger conservation, could serve as a model approach also for the snow leopard. Snow leopards are unique in their adaptation to a harsh alpine habitat and could well serve in public campaigns as ambassadors for these ecosystems which today are under increasing pressure.

Reintroduction of the species is not currently a realistic option and all efforts should therefore be focussed on conserving the remaining populations in the wild. ●

PHOTO TORSTEN HARDER/NABU



The illegally poached cub, 'Djamila', was found in a terrible condition in Kyrgyzstan in December 2000 and was confiscated by NABU. She was urgently transferred to Europe where she got proper care and treatment. Today she is kept in Zurich Zoo where she successfully raised her first cub in 2004 (see photo on page 26).

Helsinki Zoo is currently investigating possibilities to support *in situ* conservation together with WWF Finland and WWF Nepal. This will hopefully start in 2006.



# CBSG conference and workshops

Bengt Holst, CBSG Europe, Copenhagen Zoo, Denmark

## CBSG Europe annual report

**It was a pleasure to present the annual report of CBSG Europe during the annual CBSG conference in Syracuse (USA), from 29 September to 1 October 2005. Table 1 summarises the activity report, and for a new branch of CBSG this is not bad at all.**

Table 1: Summary of CBSG Europe activities 2004/2005

<b>December 2004:</b>	PHVA facilitation training course, Indonesia, population modelling
<b>December 2004:</b>	Proboscis monkey PHVA, Indonesia, population modelling
<b>March 2005:</b>	Facilitation of ZIMS data standard workshop, Rotterdam
<b>May 2005:</b>	Facilitation of ZIMS data standard workshop, Orlando
<b>June 2005:</b>	Planning and conducting Lion tamarin PHVA, Brazil, facilitation and population modelling
<b>June 2005:</b>	VORTEX Training Workshop, Brazil, population modelling
<b>August 2005:</b>	VORTEX Training Workshop, Madagascar, population modelling
<b>August 2005:</b>	Madagascan tortoise PHVA, Madagascar, population modelling

### Successful use of GIS

Additionally, we reported on the successful use of Geographical Information Systems (GIS) during the Lion tamarin PHVA in Brazil in June 2005. GIS offers many possibilities; we just have to learn how to use them. For conservation planning purposes GIS mapping is a new important online tool with VORTEX, and we will include a combined GIS and VORTEX training workshop during the conservation planning workshop planned for mid-2007. Invitations for this workshop will be distributed early 2006.

### Open tasks

CBSG Europe now has two modellers, Kristin Leus from Antwerp Zoo and Frands Carlsen from Copenhagen Zoo. Both are trained in the use and development of the VORTEX population simulation programme and know when and how to use it. But in order to be able to conduct more conservation planning workshops we need to have more modellers and also skilled GIS users. The conservation planning workshop next year will be a good opportunity for us to recruit these people. Our goal

is to have at least two full functioning CBSG teams including facilitators, modellers and GIS users. We can then increase our activities and ensure a European input on the further development of valuable conservation tools.

Another open task for people interested in getting directly involved with CBSG Europe is translation. As we all know, we have numerous languages in Europe, and we sometimes need to translate brochures, reports and workshop proposals into local languages. Such translations are best made by local people, and we are therefore very interested in contact with those of you who are willing to take on such tasks when they occur. We have received valuable help from Jean-Luc Berthier in translating important documents into French for the Madagascan tortoise PHVA in August 2005, and later for translation of the CBSG annual report from English into French. If you are interested in providing translation support, please contact one of us in CBSG Europe: Bengt Holst (beh@zoo.dk), Kristin Leus (kristin.leus@zooantwerpen.be) or Frands Carlsen (fc@zoo.dk). •

### EAZA Zoohorticulture Group meets German ZooGrün-Gruppe

After the successful joint meeting of the EAZA Zoohorticulture Group (EZG) and the Zoo Plant Group (United Kingdom and Ireland) in Chester Zoo in 2005, the EZG has now been invited by the German ZooGrün-Gruppe for a joint meeting in Berlin Zoo from 19 to 22 May 2006. The ZooGrün-Gruppe compiled an interesting programme and made arrangements for lodging. It is a pleasure for the EZG to be able to invite all EAZA zoo horticulturalists to participate in this joint conference and meet with colleagues from all over Europe.

For more information, please contact conference organiser Uwe Hahn (Berlin Zoo) at [u.hahn@zoo-berlin.de](mailto:u.hahn@zoo-berlin.de)

# Ten simple things

PHOTO ROB DOOLAARD (IZP)/ROTTERDAM ZOO



Bart Hiddinga, EAZA Executive Office, Amsterdam, the Netherlands

**The European Endangered species Programmes (EEPs) are a very important flagship of EAZA. The better they work the stronger we all are. With many different programmes and several hundreds of participants from countries across Europe, having different languages and cultures, it is impossible to completely avoid problems, and sometimes even conflicts. However, we can all do our part to facilitate the process and thus to make the EEPs even more efficient and effective than they are now. Here are ten simple things we all can do to make EEP life easier. For a full list of what to do please see the Working Procedures for EEP Coordinators that is available on [www.eaza.net](http://www.eaza.net) (member area).**

**A folded card, outlining the text that is printed below, has been produced and has been mailed with this edition of EAZA News to all EAZA member institutions. We hope that the card will find a suitable place on your desk or on your wall.**



## that will improve our EEPs considerably

### As an EEP participant

- 1 Keep accurate records on all your EEP animals, preferably in ARKS/ZIMS (this will be an EAZA membership requirement as of 1 January 2007 for all individually recognisable animals);
- 2 Forward your animal data to the EEP coordinator or studbook keeper whenever requested and make sure you meet the deadlines;
- 3 Send relevant information on major events (births, deaths, transfers etc.) throughout the year (as they happen) to the EEP coordinator or studbook keeper so that he/she can include the information in the planning as early as possible;
- 4 Let the EEP coordinator know whether or not you agree with any transfer or breeding recommendation that is sent to you. If you do not agree with a recommendation, explain why, and perhaps make suggestions for alternatives that the coordinator can consider;
- 5 If asked for comments (on e.g. studbooks, husbandry guidelines etc.) do so before the requested date. Even if you have no comments, do let the coordinator know that this is the case. Your opinion is essential for the functioning of the EEP;
- 6 Do not arrange animal transfers without the consent of the species coordinator, and do not present him or her with a 'fait accompli'. Recommendations must be based on an overall picture of the population and not just on the view of one participant;

- 7 Do not present a problem 'out of the blue' to the coordinator and demand a perfect solution within a short time period. Please respect that negotiations take time, especially if many parties are involved.

### As an EEP Coordinator

- 8 Produce studbooks, annual reports, breeding- and transfer recommendations in a timely fashion and in the agreed formats;
- 9 Seek feedback and approval from the members of your species committee on recommendations and when dealing with complicated disagreements with a participant;
- 10 Make an agreement with your Species Committee and EEP participants on what you expect from each other. One could think about e.g.:
  - a. when participants send data to the coordinator;
  - b. when the coordinator produces the studbooks, breeding- and transfer recommendations etc.;
  - c. how long participants should be able to house any offspring in order to allow the coordinator and Species Committee sufficient time to analyze the developments in the population and provide the best possible transfer recommendation;
  - d. any other agreement that will benefit the management of the EEP. •



**CHANGES TO EXISTING TAGs**

**EAZA Falconiformes** TAG  
Shmulik Yedvab (chair),  
The Tisch Family Zoological Gardens (Jerusalem)

**CHANGES TO EXISTING EEPs**

**Palm cockatoo** EEP  
(*Probosciger aterrimus*)  
Cathy Pelsy, Zooparc de Beauval (Saint Aignan)

**Oriental white stork** EEP  
(*Ciconia boyciana*)  
Cathy King, Rotterdam Zoo

**NEW ESBs**

**San Francisco garter snake** ESB  
(*Thamnophis sirtalis tetrataenia*)  
Wlodek Stanislawski, Lodz Zoo

**Goliath heron** ESB  
(*Ardea goliath*)  
Rob van Glabbeek, Safaripark Beekse Bergen  
(Hilvarenbeek)

**Hooded pitta** ESB  
(*Pitta sordida*)  
Wineke Schoo, Burgers' Zoo (Arnhem)

**CHANGES TO EXISTING ESBs**

**Northern ground hornbill** ESB  
(*Bucorvus abyssinicus*)  
Fabrice Kanengieser, Zooparc de Beauval (Saint Aignan)

**Southern ground hornbill** ESB  
(*Bucorvus leadbeateri*)  
Fabrice Kanengieser, Zooparc de Beauval (Saint Aignan)

**Papuan wreathed hornbill** ESB  
(*Aceros plicatus*)  
Blanka Dolinar, Ljubljana Zoo

**Bar-pouched wreathed hornbill** ESB  
(*Aceros undulatus*)  
Blanka Dolinar, Ljubljana Zoo



**Data quality and submission - again!**



Frands Carlsen, co-chair EADISC, Copenhagen Zoo, Denmark and Duncan Bolton, co-chair EADISC, Bristol Zoo Gardens, United Kingdom

**EADISC**

**You probably think you have heard this before (and hopefully you have). Nevertheless reality shows us that the general effort from EAZA institutions in getting their ISIS dataset ready for transmission to ZIMS could be much better.**

**ZIMS will not clean your data for you!**

Right now that the Data Quality level for the EAZA region is below the global level (currently some 30% of our transactions between EAZA zoos are not linked in the global database – that means possible duplications, likely errors and more problems for the ZIMS conversion). Alpha testing of the application is only four months away and ZIMS will be released at the end of 2006. For your institution to successfully transfer to ZIMS, your data needs to be as clean as possible – ZIMS will not clean your data for you!

**MedARKS users** should ensure that all their data is linked properly to ARKS IDs (where these exist). Orphan entries should be linked and all 'until Further Notice' treatments should be checked to make sure that they are up to date.

**SPARKS users** should compare their data with the global database – these link rates are among the worst for the EAZA region and if they are not corrected it is possible that after the data conversion animals will be duplicated or missing and studbooks will need an immense amount of work to put them into good order.

**ARKS users**, apart from establishing the necessary links (including working with studbook keepers to ensure that local, global and studbook data matches), should also ensure that the 'Enclosure tree and log' is set up well in their system. This function will have much more use in ZIMS and sorting it now will save a lot of work later.

**Update your software**

It is very important that you make sure you have got the latest version of the ISIS software – not only ARKS/CMS (25 April 2005 version) but also SPARKS (version 1.54, 15 January 2004) and MEDARKS (version

5.52) and that the reference lists you are using in the software, e.g. Institution, Taxonomic and Drugs lists, are the latest available updates. For more information on updates go to the ISIS website ([www.isis.org](http://www.isis.org)).

**Help is out there**

Check the ISIS website and the ISIS Specimen DVD for tools to help you clean your data. Dave Brunger from Chester Zoo recently accepted the major role of Data Quality coordinator for EAZA on behalf of EADISC. Dave has started contacting individual institutions to help with their data quality improvement efforts as well as spreading the word to the entire community. Please help Dave in his efforts and let Dave help you.

**Submit your data regularly**

As we all work on our data it is essential to submit updates to ISIS regularly (even on a weekly basis if needed) so that issues that have been resolved between institutions are fully updated in the global database. Studbooks can now be submitted at any time and as frequently as you like – not just once a year.

**Complete the ZIMS Readiness Assessment Survey**

Last but not least – the ZIMS Readiness Assessment Survey has been sent to all ISIS members in good standing – ensure you have completed it, contact ISIS if you have difficulty filling it out or if you for some reason have not received it yet. Completion of this survey will help you to prepare for ZIMS and provide information relating to how soon you will be ready to make the move. •

In EAZA News announcements are published of books that have relevance to zoo staff and other people with a professional interest in zoos. On the EAZA website more information can be found on these books as well as on the publishers.

JUSTINA RAY, KENT REDFORD, JOEL BERGER AND ROBERT STENECK (EDS.; 2005)

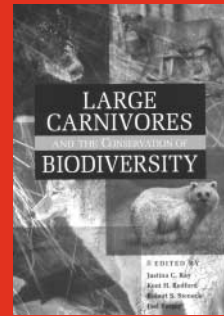
### Large carnivores and the conservation of biodiversity

'Large carnivores and the conservation of biodiversity' brings together more than thirty scientists and conservation practitioners to consider a key question in environmental conservation: is the conservation of large carnivores in ecosystems that evolved with their presence equivalent to the conservation of biological diversity within those systems?

The book is a detailed, broad-scale examination of the empirical evidence regarding the role of large carnivores in biodiversity conservation in both marine and terrestrial ecosystems. It contributes to a global understanding of when, where, and whether protecting and restoring top predators will directly contribute to the conservation of biodiversity.

Pages: 526. ISBN: 1-55963-080-9 (pb). Price: €27.50.

To be ordered from: Eurospan ([www.eurospan.co.uk](http://www.eurospan.co.uk))



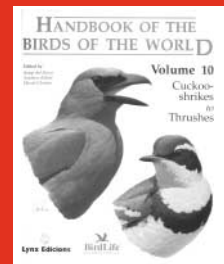
JOSEP DEL HOYO, ANDREW ELLIOTT AND DAVID CHRISTIE (EDS.; 2005)

### Handbook of the birds of the world, volume 10

In a series expected to include 16 volumes the 'Handbook of the birds of the world' will deal with all the species of birds in the world. This tenth volume of the handbook covers 14 families in the order Passeriformes (from cuckoo-shrikes to thrushes). As in previous volumes the extensive information on the birds is well illustrated by colour plates, maps and many photographs. An index and bibliographical references complete the text. The book opens with an interesting chapter dealing with the ecology and impact of non-indigenous birds.

Pages: 896. ISBN: 84-87334-72-5 (hb). Price: €175.00.

To be ordered from: Lynx Edicions ([www.hbw.com](http://www.hbw.com))



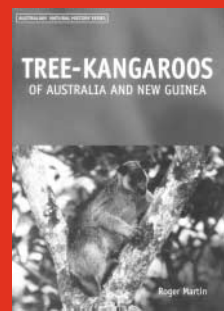
ROGER MARTIN (2005)

### Tree-kangaroos of Australia and New Guinea (Australian natural history series)

To many people, the suggestion that a kangaroo could live up a tree is fantasy. Yet, in the rainforests of Far North Queensland and New Guinea, there are extraordinary kangaroos that do just that. Many aspects of these marsupials' anatomy and biology suggest a terrestrial kangaroo ancestor. No one has, so far, come forward with a convincing explanation of how, why and when these mammals that were so superbly adapted for life on the ground should end up back in the trees. This book reviews the natural history and biology of tree-kangaroos from the time of their first discovery by Europeans in the jungles of West Papua in 1826 right up to the present day, covering the latest research being conducted in Australia and New Guinea.

Pages: 168. ISBN: 0-64309-072-X (pb). Price: AU\$39.95.

To be ordered from: Eurospan ([www.eurospan.co.uk](http://www.eurospan.co.uk))



PAN AFRICAN SANCTUARIES ALLIANCE - PASA (2004)

### PASA veterinary healthcare manual

The 'Pan African Sanctuaries Alliance (PASA) veterinary healthcare manual' is a most comprehensive guide to captive primate care.

The manual includes charts, photographs and explicit directions on everything from quarantine procedures to treatment of respiratory, neurological and skin diseases, and features sections on animal escapes, confiscations, and hand-raising primates etc.

Languages: English/French. Pages: 223. Copies (in English or French) can be obtained in printed form or on CD by contacting

PASAapes@aol.com or can be downloaded from [www.panafricanprimates.org](http://www.panafricanprimates.org)



As many as 17 Studbooks, 2 Husbandry Guidelines and 1 other publication have been received by the EAZA Executive Office as of October 2005. We are very grateful to all who have contributed to these valuable publications and are happy to have received these in printed format at the EAZA Office in Amsterdam. For a full list of received publications of interest, please refer to the EAZA website ('Magazine' section).

As of January 2006 the full list of publications received by the EAZA Executive Office will only be published on the EAZA website ('Magazine' section). Announcements of newly received publications will be posted on the EAZA website on a regular basis. Please continue to send us your printed versions so that we can incorporate these in the online publications' list.

## PERSONALIA

Mr. John Dineley is the new EAZA contact person for **Chessington World of Adventures**, United Kingdom.

Mr. Jan Vermeer is the new EAZA contact person for **La Vallée des Singes**, France.

Mr. David Field is the new EAZA contact person for the **Zoological Society of London**, United Kingdom.

## ADDRESSES AND TELEPHONE/FAX NUMBERS

The new phone number for **Dublin Zoo**, Ireland, is:  
Phone: + 353 14748900

## DIRECTORY UPDATES

The new address of **Prof. Roger Wheeler** (honorary member) is:  
17 Kirklands  
Innerleithen, Borders  
EH44 6NA  
United Kingdom

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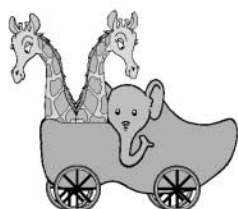
### New for 2005/6

In addition to the above we invite all EAZA members in Eire, Netherlands and the UK to select from our comprehensive range of wildlife T-Shirts and greetings cards. Please enquire for a catalogue.

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The supply of high quality food has become a major topic since the recent food crises in Europe. Local and European rules and regulations on zoo foods are currently being reviewed. The new legislation does not only affect us as suppliers, but are also extremely important to our customers: European Zoos, Bird Parks, Aquariums and Falconers. For this reason we decided to unite our interests into one organisation, The European Zoo Food Group (EZFG).

Together we aim to set up programmes on the following topics:

- promotion and improvement of R&D on food products,
- quality assurance for the production and supply of zoo food, combination of logistic resources to reduce transportation costs, risk reduction,
- improving our position towards European Commissions,
- how to operate in Europe with open veterinarian borders.

The companies who started the organisation in 2001 are:

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# EAZA AWARDS

EAZA handed out one award in the category of 'Professional Excellence' during the 2005 EAZA Annual Conference in Bath, and nine awards were presented in the 'Institutional Excellence' category, which focuses on conservation, education, exhibit design and research. Please find below summaries of the two projects that have been awarded with the EAZA Education Award. The EAZA Exhibit Award winners were presented on the back cover of EAZA News 52, and the other award winners will be presented in the next two issues of EAZA News.



EAZA NEWS 53  
2006

## Emmen Zoo - Entire educational oeuvre

During the 1970's and 1980's Emmen Zoo was effectively rebuilt with a clear purpose: to make sure that every visitor was informed, in a visually pleasing and biologically sound manner, about the wild animals that inhabit our planet. Emmen was the first zoo to develop extensive expositions that placed the animals in a special context (e.g. in nature, in time, in their relationship with mankind etc). Furthermore, the overall geographical design, the expositions on exotic cultures, the extensive information boards, and the 'Biochron', which tells a story on the history of the earth, are all clear examples of the zoo's successful dedication to education.

By developing a zoo that is dedicated to educating the public, the visitors, rather than the animal collection, become the centre of the zoo's focus. There is no doubt that Emmen Zoo was ahead of its time in this approach, now commonplace in many western zoos. Emmen Zoo was awarded for its entire educational oeuvre, as it has inspired an entire 'generation' of new zoo people.

PHOTOS EMMEN ZOO



## EAZA Education Award 2005

Emmen Zoo - Entire educational oeuvre



PHOTOS COLCHESTER ZOO

## Colchester Zoo - EAZA Shellshock Campaign project

In order to fulfill one of the key objectives of the EAZA Shellshock Campaign 2004/5, Colchester Zoo designed an education programme which incorporated both formal and informal education in order to pass on the Shellshock message to as many different audiences as possible.

The informal education programme included special events with education stalls and touch tables, fun treasure hunt trails for children, a show all about turtles and puppetry aimed at young children, and a continuous slide-show in the theatre intervals, designed to pass the message on to adults.

While the EAZA Shellshock Campaign was brought into all school talks presented in the zoo, the formal education programme included a dedicated outreach programme launched to take the message out of the zoo into schools and other facilities. Educators were booked as guest speakers for events of a number of interested social clubs and groups educating the adult market.

Incorporation of both formal and informal elements in the education programme meant that a very strong conservation message was passed on to a diverse audience of all ages.

## EAZA Education Award 2005

Colchester Zoo - EAZA Shellshock Campaign project

