66th WAZA Annual Conference | p 2
African Rhino Status and Trends | p 8
45 Years in the Zooworld | p 12
Dear WAZA Members!

The 66th WAZA Annual Conference was a big success and accompanied by many important decisions and a fascinating programme. I would like to start with a big thank you to our host, the Prague Zoo! The whole team of the zoo made all participants feel well and we were all taken care of perfectly well. The beautiful city of Prague was a perfect venue and the participants enjoyed Czech hospitality together with the famous beer.

In this edition of WAZA News you will find a selection of the photos which are presented on the WAZA website, they illustrate work and fun at the same time. Animal population management, animal welfare, business and marketing and the UN decade on biodiversity were the big topics of this year’s conference. WAZA endorsed the decade on biodiversity by adopting the resolution 66.1 and a project will now be developed in order to provide support to WAZA members in implementing public awareness within this 10 years’ framework. WAZA committees changed a bit in composition and the handover of presidency concluded the conference.

I wish to thank all members for their ongoing support of WAZA and especially the WAZA Council under the leadership of Mark Penning for supporting me personally and the whole executive office team.

Being on the cusp of WAZA’s 77th Anniversary year in 2012, I hope you are all enjoying the 2012 WAZA calendar.

Season’s greetings and best wishes for a successful and prosperous Year 2012!

Gerald Dick
WAZA Executive Director
Taking up the role as WAZA President is a great honour and a challenging task for me! I like to use this opportunity to thank all members for their confidence in me and to thank my predecessor Mark Penning for his outstanding work and his dedication to our community during the last two years! I will try hard to meet all of the expectations that are linked to this position and work to further develop our organization to the best of its possible achievements.

Coming home to Leipzig after a successful and thrilling WAZA Annual Conference and prior CBSG Annual Meeting, for which I am most grateful to our marvellous host, the Prague Zoo. I have again realised how close the links between zoos and this important IUCN specialist group are. My sincere thanks go to Dr Robert Lacy for his work as CBSG Chairman during the last 8 years and my congratulations to Dr Onnie Byers for taking up this role. We can be very happy to profit from their expert’s advice, especially over the next years within the International Decade on Biodiversity.

What are the main topics that we have to deal with in the coming years?

First of all and as mentioned above we enter into the Decade on Biodiversity 2011-2020 which was declared in Nagoya during CoP 10 of the Convention on Biological Diversity 2010. The UN adopted the so called “Aichi targets” as a strategic plan to halt the loss of biodiversity. Especially the targets number 1 “awareness raising” and number 12 “stop of extinction of known threatened species” are goals that the zoo community is most suitable in helping to achieve them. During the WAZA Conference we adopted the proposal to apply for a major grant of the Swiss based Foundation in order to develop a three years pilot project that will enable our members to jump into this huge task.

I feel that this is a most important opportunity for WAZA members to join the international conservation community in a broader context and contribute measurable input for the sake of future generations!

Secondly and strongly connected to the above mentioned target 12 we need to address the problems of sustainable management of many of our zoo populations. Analyses in North America, Europe and Australia have revealed that a high percentage of studbooks and breeding programmes is not in good shape and may fail to conserve the genetic heritage of threatened species. I think we have to deal with this task from an inter-regional point of view in many cases in the spirit of “planning globally and managing regionally”. The Committee on Population Management chaired by Dave Morgan has suggested six species in order to start forming true Global Species Management Plans between the regions. Additionally, we should consider taking up the “One Plan Approach” that CBSG has discussed and link many of our populations of rare species with those in the field with a view to manage them jointly. Only then we will have populations with a sufficient amount of individuals that are well placed to ensure the future survival of those species.

For the handling of these and other tasks which were discussed in Prague we have to ensure that our Executive Office has the necessary budget and number of staff. WAZA had a good growth in membership during the last years and I personally hope to contribute to this development by focusing on China and South East Asia. These fast developing regions aim to catch up with modern zoo standards and we should help them in this process. I am eagerly looking forward to cooperate with all WAZA members and the potential new members for a successful future!
Over 200 participants from 40 different countries came together in Prague in order to discuss how to intensify partnerships for sustaining viable animal populations. The conference included over 20 high level presentations from experts around the world, addressing the future situation of animal populations, animal welfare and conservation. Additionally the program included workshops and a discussion on the UN Decade on Biodiversity declared by the United Nations General Assembly for the period of 2011 to 2020. The related resolution was unanimously adopted.

The incoming president, Jörg Junhold, defined in his inaugural address the main challenges or themes for his term of presidency:

- Involvement of all WAZA members for the United Nations Decade on Biodiversity
- Commitment of WAZA members to cooperate on the sustainable management of animal populations
- Improvement of ethical standards for the future
- Further WAZA membership growth with a focus on Asian countries
- Improvement of WAZA communication outreach

As a very encouraging result of the conference survey, 90% of the participants rate the conference facilities as good or excellent, 75% of the participants were very satisfied with the technical presentations on the 1st day and more than 90% of the participants really enjoyed the organized social events. A detailed analysis will go to the WAZA programme committee for further consideration.

...The zoos and aquariums of the world are important partners in conservation, in raising awareness and in providing assistance in capacity building to governments at all levels...
Dear Dr. Dick,

On behalf of all of us here at the Convention, allow me to extend our heartfelt congratulations and thanks to the entire membership of the World Association of Zoos and Aquaria (WAZA). Your vision, initiatives and community contribution to the work of the Convention and to the United Nations Decade on Biodiversity has been extraordinarily constructive.

I was extremely pleased to learn that WAZA enthusiastically views to develop their support and efforts in support of the Aichi Biodiversity Target. It is incumbent upon each of us to find innovative ways of implementing the Convention and to bring greater awareness to governments at all levels.

As we move through the decade and towards implementation of the Strategic Plan, I know that our efforts will be multiplied.

Jana Hlínárová

Dr. Gerald Dick
Executive Director
World Association of Zoos and Aquaria (WAZA)
E-mail: gerald.dick@waza.org

Sincerely yours,

With appreciation,

[Signature]

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Group photo 1971.

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Group photo 2011.

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Rob Hilsenroth, Heribert Hofer, Lesley Dickie.

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Jana Ptačinská-Jiratová, Gerald Dick and Zuzana Anna Palzer.
It is 40 years since WAZA had its last annual conference in Prague and we hope it will not take another 40 years to come back again! Thanks go to the host, the Prague zoo and all its staff members for having organised such a wonderful and productive conference!

You can find all documents and presentations and photos of the conference on the WAZA website, member area/documents/66th Annual Conference, Prague.

To find out more: www.waza.org
The annual conference of the German Zoo Directors’ Association (VDZ) was hosted by the Zoological Garden Hanover from June 22nd–June 25th, 2011. The VDZ Board, comprising President Dr. Thomas Kauffels (Opel-Zoo Kronberg), Vice-President Theo Pagel (Cologne), the members Dr. Stephan Hering-Hagenbeck (Hamburg), Dr. Gisela von Hegel (Karlsruhe), Dr. Ulrich Schürer (Wuppertal), Dr. Michael Martyx (Innsbruck) and Dr. Olivier Pagan (Basel), welcomed around 150 members and guests.

At this point I would like to thank the Hannover Zoo team, with the new Executive Director Frank Werner and the Zoological Director Dr. Heiner Engel for their great hospitality and the smooth progress of the conference. The VDZ also thanks the President of the Hannover Region, Mr. Hauke Jagau, who is the President of the board of Hannover Zoo Society, for its time and the welcoming words to the audience.

As is the tradition, the conference started with an evening ice-breaker, followed by a whole symposium day, highlighting the following issues: 1. Tasks and customer perception of zoological gardens; 2. Animal Keeping and Husbandry; and 3. Associations, authorities and co-operative partners – interconnection and cross-linkage of zoological gardens.

The presentation given covered a wide variety of topics – what the polar bear “Knut” had contributed to the zoo community, co-operation between zoos and the WWF, what zoos can learn from botanical gardens, the experiences of a mixed exhibit showing bears and wolves and the successful parent-raising of an aye-aye.

The second full day was occupied with the membership meetings. The Director of the VDZ, Dr. Peter Dollinger, reported on the meetings at the Federal German Ministry for Food, Agriculture and Customer Protection, where he, the President and the Vice-President are facing delegates from German animal rights groups and animal welfare activists to discuss the “Minimum Standards for Keeping Mammals”. It was stated that it is in fact unbelievable, that within a group, which is instigated to discuss the needs of animals in captivity, are people who have never looked after an animal or have been responsible for its well-being. Nevertheless the zoos need to be very aware of current anti-zoo proliferation of these organisations, which are mostly located in the German capital Berlin and therefore have easy access to the political circles. Another main issue was the exorbitantly high invoices compared to 2010 which the members received from the ISIS. Therefore the VDZ had invited the President of the ISIS board, Dr. David Field from London Zoo, who gave a presentation on the problems which ISIS and ZIMS are facing at the moment. His talk was followed by a very lively discussion. Another issue raised was the decision of the EAZA Council to install a mandatory accreditation system to the EAZA membership. After a controversial debate, the membership voted unanimously on a proposal that the VDZ will accept the mandatory accreditation for all EAZA members in case that the EAZA Annual meeting will approve the Council decision. A further item on the agenda was the upcoming 125th anniversary of the VDZ in 2012. This event will be celebrated in March 2012 in Berlin with a social gathering, a day of presentations on the history of the VDZ and its member zoos and visits to the two Berlin zoos. Also on this occasion a book on all VDZ-zoos will be published.

The conference ended with a visit to Magdeburg Zoo, where we were warmly welcomed by the Mayor of the City of Magdeburg, Dr. Lutz Trümper, our colleague, Zoo Director Dr. Kai Perret and his staff.
Rasem Baban is head of the department for buildings, maintenance and construction at Leipzig Zoo, Germany, for 9 years. He was a real estate consultant and project manager before he joined the zoo. Since 2002, he is in charge of the most challenging and rewarding projects. Rasem kindly accepted to answer questions about his most exciting project, the establishment of tropical Gondwanaland in Europe, one of the largest constructions of its kind.

WAZA: What exactly is your role at Leipzig Zoo? Rasem: My responsibilities as General Manager and Technical Director are zoo development and project managing of all our new projects, managing the construction, logistics and maintenance department and technical department (IT, building services). Also supervising the nursery (indoor and landscape conservation) is especially a very ambitious job since the opening of the tropical hall Gondwanaland and a very "exotic" challenge managing the feeding department. So this sounds really like a diversified job.

You were trained as an architect; can you describe your career and what brought you to the zoo world? I studied architecture at the University of Applied Science in Trier and graduated in 1994. My first career steps were in construction companies as site manager and then as project manager. After this, I worked as consultant architect for international real estate projects all over Europe for many years. Changing to a zoo was motivated by my wish to create things with more sustainability. The responsibility of our society for the complex habitats of our threatened flora and fauna has to be "transported" into the consciousness of the people today, more than ever before. Species and nature conservation are current topics and zoological institutions are the best possible place to make this demanding subject matter accessible to the visitors of all ages in an emotionally appealing, and at the same time, scientific way. The fact that this can only be achieved in connection with a credible, near-natural and species-appropriate approach to the animals that we were given to look after, constitutes a special challenge I always wanted to face as an architect.

What are the main specificities of a zoo’s architect job as opposed to any other architect? The main task of a zoo architect is to look after animals' needs as if they were normal "human" clients who are in need of a new home. This demands a special grasp I can’t describe. A zoo architect also has to create natural (not trashy) theme worlds with the demand to fulfil the latest standards in species-appropriate husbandry. Last but not least he has to meet the visitors’ expectations in terms of encountering the animals.

Could you take us through a typical day of your working life? That’s difficult because in a zoo there is no one day like the other. But of course some routine work is facing me as well. The first thing in the morning is to check my emails and other correspondence. After this, I have to supervise many meetings during the projects and in the early afternoon, I go on site-inspection rounds. Between this, I must clear many situations that nobody expected (a zoo construction site is a never-ending surprise). In addition, the rest of the zoo must be checked for feedback or other things. In the evening, I find the time to calm down and to create new ideas for the future.

Can you describe what Gondwanaland exactly is, in a few words and figures? Gondwanaland is Europe’s largest rainforest hall (16,500 sqm) displaying over 40 animal and 500 plant species from 3 continents under one single roof. Visitors can explore the plant and animal world on foot, via jungle paths and suspensions bridges and by a world’s unique boat trip on our rainforest river “Gamanile” beginning with a trip trough a Dark Ride where evolution starting with the big bang until today is shown. An Asian village and Asian-style restaurant and conference centre is also integrated into the hall.

You were involved in this project in Leipzig Zoo since the beginning; what was your role? As the Project Manager of Gondwanaland, I had to develop, organize and roll out the Europe-wide architecture competition. Next steps were to negotiate all constructions contracts, time schedules and the budget. I was also supervising the entire construction progress and coordinating all involved partners in this project. A very special job was the selection of the tropic plants and trees in their native countries in Asia and America and organizing the logistics in the background. Creating the theme story near the entrance area (the Asian market place with temple wall, dragon cave and explorer’s hut) with a famous stage designer was a new experience I never want to miss.
What were the main challenges you had to face to build Gondwanaland? The main challenge was to organize the logistics between planting of more than 24,000 plants and 120 giant tropical trees (one of the biggest tropical tree was up to 12 meters high and 15 tons heavy) and continuous working process. A second problem was to create a stable climate (temperature, humidity and airflow) inside the hall during the planting period and to avoid bringing pests inside the hall, which can endanger the sensitive new plants.

The normal routine of bringing costs, time and quality together is a challenge in every project but of course, with Gondwanaland this reached a new dimension.

Did you work closely with educators and veterinarians to make this project happen and how would you describe your relationship with the animals’ specialists during this project? Without the close daily cooperation between architects, curators, veterinarians and educators this project would never have been realized.

The valuable knowledge of all these experts was an especially important source I could always rely on. The success of Gondwanaland is an example of perfect interdisciplinary teamwork.

Now that this project is finalised, what was the biggest and successful challenge, which makes you proud after all? That this “small world” will work perfectly and all animals and the plants will feel comfortable. To import all these tropical plants from abroad and to plant them just in time during a hard wintertime was a hazardous adventure. Moreover, that the project was well received by our visitors and zoo experts alike. In addition, the number of visitors has exceeded our expectations.

According to you, what are the most important qualities to work in the maintenance/construction field in a Zoo? Firstly, you need a sense for nature conservation. Secondly, you must have to keep in mind the visitors’ needs as well as those of the animals. Thirdly, be open for every unexpected situation you will be faced (even in ostensive “under-controlled” moments in a zoo!).

What is your next main project? Our master plan “Zoo of the future” contains even more exiting projects for example the theme world of South America, the Asian riverside, an insectarium and so on. We have to evaluate this master plan with great care because the original idea to locate Gondwanaland in the middle of our Zoo area (Gondwanaland was then realized on a nearby formerly industrial area) left a white place on the master plan’s map. This area must be planned anew. In other words, work is not running out!
Rhino numbers

IUCN SSC AfRSG held its ninth meeting at Mokala National Park, South Africa in March 2011. At this meeting continental numbers and trends of African rhino were updated to produce provisional revised continental estimates as of 31 December 2010.

Despite increased levels of poaching since the 2008 AfRSG meeting, numbers of white (*Ceratotherium simum*) and black rhino (*Diceros bicornis*) have increased at a continental level reaching an estimated 20,160 (496 populations) and 4,880 (134 populations) respectively by the end of 2010 as shown in Figure 1.

Since 1991 white rhino numbers in Africa have increased by an average net 6.8% per annum. South Africa remains the major white rhino range State conserving 93.2% of this species with numbers increasing to 18,800 by the end of 2010. Numbers of southern white rhino in other range States have also increased from an estimated 831 in 1997 to 1,365 by the end of 2010 (up from 1,225 in 2007) with over 300 in each of Namibia and Kenya. However, due to poaching, white rhino numbers in Zimbabwe have dropped below 300 (although indications are numbers are starting to slightly increase again). Numbers in Botswana, Swaziland and Uganda continue to grow and more white rhino have been introduced to a Zambian Park. The last four potentially breeding northern white rhino have been translocated from Dvůr Králové Zoo in the Czech Republic to a reserve in Kenya in the hope this will stimulate breeding.

Since black rhino numbers bottomed out at 2,410 in 1995, numbers have doubled increasing to 4,880 in the wild during the last 15 years (an average annual increase of 4.8%). Updated subspecies totals (and strongholds) as of the end of 2010 were 2,200 *D. b. minor* (South Africa and to a lesser extent Zimbabwe), 1,920 *D. b. bicornis* (Namibia) and 740 *D. b. michaeli* (Kenya). Black rhino also occur in Tanzania, Malawi, Zambia, Swaziland, Angola and Mozambique.

98.3% of Africa’s (black and white) rhinos continue to be conserved by four range States: South Africa, Namibia, Kenya and Zimbabwe. Botswana, Tanzania and Swaziland each conserve over 100 rhinos with smaller numbers in Zambia, Malawi, Uganda, Mozambique and Angola.

Poaching

The rise in poaching in certain range States continues to be of concern. Point 26 of the Secretariat’s report (SC61 Doc 45.1) on the implementation of Res Conf 9.14 (rev CoP15) indicated it was likely that the total number of rhinos (both species) poached in South Africa in 2011 is likely to exceed 2010’s 333 animals. This year (as of the 3rd August 2011) 239 rhino have been poached in South Africa. Extrapolating (assuming a similar rate of poaching for the rest of the year), gives an estimated possible 2011 poaching total of 406 animals.
The slight decline in poaching in 2011 since peak levels at the end of 2010 (Figure 2) suggest that in South Africa the increased law enforcement effort, formation of the National Wildlife Crime Reaction Unit, elevation of rhino crimes to top priority crimes, appointment of advocates to prosecute cases, increasing use of DNA evidence, use of the army in Kruger National Park, a number of well publicized arrests, some convictions and other initiatives might be starting to have an effect.

Current poaching levels in South Africa in 2011 (extrapolated for the full year) represents 1.96% of the current number of rhinos in the country and as this is well below the maximum potential population growth rate for rhinos with a stable age structure (of around 8–9%), and below actual underlying metapopulation growth rates (which tend to be less than this level). Current levels of poaching are therefore sustainable and numbers are continuing to increase in South Africa. Reported poaching levels in Kenya in 2010 were similar at 2.29% and these poaching levels, although of concern, are also sustainable. What would not be sustainable would be for the rate of poaching to continue to escalate at the rate it did in South Africa from 2007 to the end of 2010 or as it did in Zimbabwe from 2006 to 2008 (with the latter causing rhino numbers in that country to decline). For example, the loss of 333 rhino in South Africa in 2010 represented a poaching level 2.73 times greater than average 2010 levels, the poaching rate in the first seven months of 2011 is 8.4% lower than the peak rate recorded in the last 4 months of 2010.

While numbers continue to increase at a continental level, there is absolutely no room for complacency. The escalation of poaching in recent years is a crisis needing a major effort to bring it under control before it threatens to reverse the successes achieved.
Table 1 shows that in recent years, in terms of absolute numbers, rhino poaching has been highest in South Africa and Zimbabwe. Poaching (as a proportion of rhino numbers) has been most severe in Zimbabwe with current rhino numbers in Zimbabwe now lower than they were in 2007 as a result. The recorded numbers of rhinos poached in Zimbabwe have declined since peak levels in 2008, and there are signs that rhino numbers are starting to slowly increase again. However, the level of poaching in Zimbabwe in 2010 as a percentage of current rhino numbers remains very high. Poaching would not need to increase much more to once again cause numbers to decline. Although a cause for concern, current poaching levels in Zimbabwe are starting to slowly increase again. However, the level of poaching in Zimbabwe in 2010 as a percentage of current rhino numbers remains very high.

Poaching remains low in Namibia. Pseudo-hunting1 appears to have increased again in a couple of South African provinces. There has been a recent well publicised arrest and investigations are also underway into this issue. The South African government is currently investigating the best ways to deal with this issue. Plans are also being made to revise the country’s white rhino conservation strategy.

Warning – Increased thefts of rhino horn worldwide – Need for vigilance

Zoos worldwide need to be on their guard to protect their rhinos and especially secure any rhino horn they may have (on display or from natural mortalities) given increased thefts of horn internationally. It is recommended that only models of horn and not real horn are put on display.

Appropriate Penalties for Rhino Crimes

Res 9.14 (revCoP15) calls upon range States “to be vigilant in their law enforcement efforts including … the application of appropriate penalties to act as effective deterrent”. In the case of Kenya, penalties are currently in the process of being reviewed and revised. As was highlighted in the joint IUCN/TRAFFIC report on rhinos to CoP14 (CoP14 Doc 54), legislated penalties in Mozambique are inadequate to act as an effective deterrent. This issue has increased in importance given that intelligence and investigations have revealed that many of the poached horns from South Africa are being couried via Mozambique, with many of the poachers (especially in Eastern Kruger National Park) also coming from there.

Acknowledgements

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News Box

BBC reported on 25 October 2011: A critically endangered species of rhino is now extinct in Vietnam, according to a report by conservation groups.

The WWF and the International Rhino Foundation said the country’s last Javan rhino was probably killed by poachers, as its horn had been cut off.

To find out more:
www.rhinos-irf.org/afrsg/

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1 Pseudo-hunting refers to the suspicious hunting of a rhino by someone who doesn’t appear to be a normal or proficient hunter and who comes from countries not previously known to have a culture of big game hunting and who is prepared to pay high prices to hunt rhino and seems primarily interested in getting the horns rather than undertaking the hunt.
Comment from the Chair of the Committee for Population Management, Dave Morgan:

The stipulation by the South African Department of Environmental Affairs that White Rhinos may only be exported from South Africa to WAZA members is indeed a privilege and a clear demonstration of the level of credibility and standing that WAZA enjoys with international licensing and permitting authorities. However the responsibilities that ensue from such a licensing condition and the onus of its implementation may have far-reaching consequences for the Association. Whilst the rationale behind this stipulation is fully recognised and understood, WAZA Council is concerned that the membership screening procedure presently utilized by WAZA is not sufficiently robust to the extent of these responsibilities. Communication with the South African Department of Environmental Affairs going forward will recommend very strongly that this proviso be limited to current and present institutional members of WAZA and to members of WAZA regional associations where a recognised membership screening protocol or accreditation programme is in effect.
45 Years in The Zoo World – How Time Flies!

For a zoo director to have the name "Adler", which means "eagle" in English, is – from a marketing point of view – a blessing. But it's not because of my name that I have been the Director of Münster's Allwetterzoo since 1996, but rather because of a number of coincidences during my career in the zoo world.

I was actually born in the Leipzig University animal hospital (appropriately, given my name), because my father was a vet and had a flat there that went with the job. I had barely started crawling when my father found me in the stable sitting under a horse, enthusiastically shouting "woof woof". I later made up for this zoological lapse when, with the small hands I had at the age of 12 or 13, I helped to deliver ten piglets with a little help from my father and with some astonished farmers looking on. I now knew what I wanted to be – a vet! However, the grades in my final school exams in what was then the GDR were a definite obstacle to this aim – so it was more by chance that I embarked on what has become a career lasting exactly 45 years. In 1966 I started working at Leipzig Zoo as an assistant zookeeper. It was autumn, and in the concrete ungulates enclosure to which I had been assigned I had to sweep up the leaves every day. In order not to have to sweep up leaves for the rest of my life, I quickly embarked on professional training to become a zookeeper. This training was very demanding in the GDR, also serving as an example for West German zoos.

In 1968, then, I was a fully trained zookeeper, so I had a proper job. This was my good fortune because at this time I met my future wife, who probably never have married someone who swept up leaves for a living. I became the head keeper of the ungulates area, which meant that once again I was among cattle. This was a job which gave me a lot of pleasure, despite the physical exertion involved. At that time there was no technical equipment such as leaf-blowers (I still had to sweep up leaves as a head keeper!), mini-tractors or electric loading ramps. Every 30 kg sack of animal feed had to be carried on my back. In the winter we drove the drinking water to the enclosure in a water tank as the water pipes had frozen (and they regularly burst in the spring).

The most interesting time of the year was always one month in late summer, when the traditional animal traders from West Germany "bought up" the entire stock of ungulate followers – not for coveted hard currency, but in exchange for other zoo animals which we wanted more than "Deutschmarks". There wasn't any anaesthetic equipment for cases when animals had to be loaded or be given medical treatment. The senior zookeeper opened the gate of the enclosure and we got started with ropes, nets and wooden planks. Admittedly, the anaesthetics and transportation used today are easier on animals and zoo staff alike, but a touch of romance has gone our of the job – and no monkey can be caught without a blowpipe any more.

Meanwhile I had become a father, and I loved my work, but I couldn't get veterinary medicine off my mind. In the GDR at that time there was a course of study leading to a degree as a "veterinary engineer", a sort of assistant vet. I gave up my job at the zoo, although I was now well established there, and embarked on this course of study. I completed it by 1973 with top grades and then began work as an assistant vet in precisely the same animal hospital at Leipzig University in which I had grown up 30 years earlier. I actually had every reason to be satisfied now, but I had caught the bug of working with exotic animals and in 1975 I returned to Leipzig Zoological Gardens to stay. In addition to having responsibility for work safety I was, as an assistant vet, the contact for the vets from the university animal hospital who provided external support for the zoo.

1978 was a special highlight for Leipzig Zoo, and therefore for myself, too. On the occasion of the zoo's 100th birthday celebrations the annual congress of the IUDZG (today's WAZA) was held in Leipzig. The most celebrated zoo directors – who I had only known from articles and photos up to then – came to our zoo. As I had developed a certain talent for organization (which was quite valuable in the GDR's economy, in which everything was scarce) I was given the task of organizing and looking after the cultural programme at the congress. At that time the status that these social events enjoyed was incomparably higher than today, and as a result I got to know personally all the "silverbacks" from the world's zoos. This acted as a strong motivation for me in my further work at the zoo, and from then on I was always present at the numerous visits that colleagues from other countries paid us. As a result I met Ulysses Seal, who even then was known worldwide as a driving force behind international wildlife conservation. From then on...
we enjoyed a close friendship, and his unmistakable, charismatic manner has always influenced me – especially later, in the 1990s, when my period of active work in the field of wildlife conservation began as well as my active participation in CBSG.

In 1977/78, and at the urging of my then boss and mentor, Prof. Siegfried Seifert, I started on an external university course of agricultural science, in order to obtain the academic degree necessary to be a curator. In 1982/83 I then had the choice of becoming a curator for ungulates and elephants or for primates. I opted for the primates, resulting in a few exciting but turbulent years for my family. In those days it was customary for baby apes which were not reared by their mothers to have as close a contact as possible to someone who looked after them – ideally in a family. As a result, from 1984 to 1989 we had in our care – in addition to our own three children – numerous babys of Northern white-cheeked gibbons and Yellow-cheeked gibbons (a zoological rarity in European zoos at this time), several chimpanzees and an Orangutan. These were unforgettable years with their own ups and downs.

One lasting aspect of my career was the beginning of my work in Vietnam which started in 1984. A high-ranking delegation from Ho Chi Minh City, one of the cities twinned with Leipzig, also visited the zoo, accompanied by prominent Leipzig politicians. I was present when the leader of the Vietnamese delegation chose animals from our zoo which didn’t exist in Vietnam: a zebra, a lion, a hippopotamus and many more besides. I indicated to the Leipzig hosts that I would be very pleased to transport these animals to Vietnam. And so I was preparing this unique animal transport and I embarked in October 1984, a six-week journey to Vietnam on board a freighter with three containers full of zoo animals (including a hippopotamus, a lion, a tiger, zebras and ponies, further ungulates and a variety of waterbirds). Let me just mention two highlights of this journey on the Ark. In the Suez Canal an oversight on the part of my colleague travelling with me meant that an adult lion escaped from its crate, left the container and – visibly confused – went for a walk around the ship. This odyssey lasted for hours and I managed to end it with a piece of meat that I had spiked with my own sleeping tablets. The other thing happened towards the end of the voyage, when I visited the zoo in Singapore harbour during a brief stop there. We two Leipzig curators were probably the first colleagues who had come from eastern Europe, making us a pair of exotic creatures in this particular zoo – a zoo which overwhelmed us in every respect.

Vietnam! The country is an integral part of both my professional life and my private life. In the years before 1989 there were further voyages to and from Vietnam with chimpanzees, an orangutan, another hippopotamus, a pygmy hippopotamus and a variety of ungulates for Saigon Zoo. I brought back elephants from Saigon for Leipzig Zoo. Today, elephants from these transports live in various European zoos.

My life experienced a profound change at the end of 1989, at the turn of the year, because my family and I left the GDR and my beloved Leipzig Zoo (which I still dream about at night, 20 years later!), primarily in order to start a new life for our children in West Germany. Thanks to my unforgettable colleague Dr. Wolfgang Gawalt, I found sanctuary for my family and myself initially at Duisburg Zoo, where we moved into a guest room in the bird house – which provided a great story for the press: “Adler (Eagle) family from the east finds sanctuary in the bird house!”

Developing this zoo philosophy in Münster has been one aspect of my work so far. However, the most important field of work for me personally, as well as for the international reputation of the Allwetterzoo, is in-situ conservation. I had already dedicated myself to conservation during my Leipzig years when I met Ulysses Seal. And it is to my time in Leipzig that I owe the contacts with Vietnam. In November 1990 these contacts led to the unexpected re-discovery of the Delacour’s langur in Cuc Phuong National Park, Vietnam. This marked the birth of the in-situ projects for primate conservation in Vietnam which the Münster Allwetterzoo looks after today. Further projects in Vietnam grew up over the years, supervised by other zoos such as Frankfurt, Cologne and especially, my “home zoo” of Leipzig. In 1991, and almost by chance, I took the first photos of a hitherto unknown species of douc langur which I published in the ZOONOOZ of San Diego Zoo. This species now is known as the grey-shanked douc langur.

Today the Allwetterzoo is responsible for two prominent projects in Indochina, www.catbalangur.org and www.accb-cambodia.org, including such species as Cat Ba Langur, Greater Adjutant and Bengal vulture.

Regarding in-situ conservation: as long ago as 1993, at the EEP Conference in Salzburg, I suggested setting up a Conservation Committee in the EAZA. At the time I reaped a measure of derision in the auditorium, but today I am now a long-standing member of this Committee, as well as of the WAZA. Way back in 1996 the Allwetterzoo set up a budget for in-situ conservation and hired the first in-situ curator at a German zoo. There followed the establishment of the Westphalian Wildlife Conservation Society and, ten years ago, the now internationally renowned “Stiftung Artenschutz” based in Münster.

45 years as a “zoo worker”: in October 2011, when I reached my 65th birthday, I should by rights have retired. But I have been given an extension of three years, because there are still a few projects I got off the ground that I want to – and have been asked to – complete before I say goodbye to the zoo world, probably in 2014. However, I will definitely not be saying goodbye to an active role in wildlife conservation!
World Wetlands Day

2 February each year is World Wetlands Day. It marks the date of the adoption of the Convention on Wetlands on 2 February 1971, in the Iranian city of Ramsar on the shores of the Caspian Sea. Each year since 1997, the Ramsar Secretariat has provided materials so that government agencies, non-governmental organizations, conservation organizations, and groups of citizens can help raise public awareness about the importance and value of wetlands.

World Wetlands Day 2012: Wetlands and Tourism

The overall theme for WWD 2012 is Wetlands and Tourism. This theme is linked directly to the work of Ramsar and WAZA on sustainability, education, and biodiversity conservation – and especially to the efforts of the 300 WAZA member zoos, aquariums, and associations from around the world that host more than 700 million visitors annually. Tourism is important for both of our organizations.

Wetland tourism has benefits both locally and nationally for people and wildlife – stronger economies, sustainable livelihoods, healthy, informed people and thriving ecosystems. At least 35% of the 1,952 Ramsar sites around the world record some level of tourism activity. When environmental awareness and conservation education are part of well-managed tourism activities in wetlands, the value of wetlands is obvious. Appreciating this value is essential to understanding the need to maintain biodiversity and support conservation efforts globally.

What Have We Produced for WWD 2012?

Each year since 1997, the Ramsar Secretariat has offered a new selection of posters, stickers, children’s activities, and more – free of charge, with a unifying theme. To help support your WWD 2012 activities, we have produced a poster, a sticker, a brochure, an activity for children, and three comic strips by Pattie, our cartoonist in Argentina. To view and download the materials, please visit www.ramsar.org/WWD.

How Can You Get Involved?

Anyone who is interested in wetlands, including WAZA member organizations worldwide, can promote World Wetlands Day 2012 by customizing the WWD materials and hosting events with local wetland partners and conservation organizations on WWD. The WWD 2012 materials are ideal for use in a zoo, aquarium or other educational setting, so we would encourage you to use them to show your visitors and students how healthy wetlands, healthy wildlife, and responsible tourism are connected.

To see how other conservation organizations have adapted and customized WWD materials, please see: www.ramsar.org/WWD-adaptations. If you would like to receive a DVD with WWD 2012 design files, please write to wwd@ramsar.org.

Ramsar has key contacts in the 160 Convention Party countries – and if you would like to get in touch with them to consider hosting a World Wetlands Day 2012 activity, please see: www.ramsar.org/Key-contacts.

You may contact the Administrative Authority or the National Focal Points for Communication, Education, Participation and Awareness (CEPA Focal Point).

Please join us in celebrating Wetlands and Tourism for World Wetlands Day 2012!
A lifelong photographer got struck by "penguin-mania" and spent two summers sailing the southern oceans in order to take photos of all 17 penguin species. David Salomon is also a part-time writer and a full-time real estate developer from Dallas, Texas. Fifty cents of the proceeds of each book go to the Dallas Zoo.

The book is beautifully illustrated by over 300 stunning images; it provides species accounts, personal stories, facts and figures on all 17 species and descriptions of the habitat, foraging behavior, breeding biology and much more. If it was the intention of the author to convey lots of information in an easy to read style as well as via those outstanding wonderful photos, then he has succeeded. The credo, which is mentioned in the book is “knowledge is a prerequisite for help” and this is clearly visible throughout the book. In addition to the book a website was created and people can ask questions online. It is hoped that through a better knowledge also conservation of the species can be supported. The sections called David’s observations cover the adventures of the author during his trip throughout Antarctica and present personal views, reflections and his field observations. Those very personal parts are then followed by descriptions of biology, habitat etc. for each species. This textbook style section is then always concluded by some tables highlighting major facts, such as weights of the birds, breeding data, prey and others. Finally the sections “Where to find a penguin in a zoo? And where to find them in the wild? conclude the book together with an extensive bibliography.

Whether you are just enjoying beautiful photos or are looking for detailed information on penguins or prefer to read adventure stories related to penguins, this is the right book, enjoy!

Species on the Edge of Survival by IUCN
Collins Bartholomew, 2011.
400pp. ISBN 978-0-00-741914-2

All you wanted to know about the red list, but never dared to ask, you will find it in this beautifully illustrated book. The book inspired by IUCN’s Species of the Day initiative, dating back to the UN Year of Biodiversity 2010, features a selection of 365 plants, animals and fungi listed on The IUCN Red List of Threatened Species™. Each profile includes a description of the species, its conservation status, threats, geographical range and the conservation action that is needed to protect it. All of this is accompanied by a striking photograph of the species, making the book a must-read for nature lovers, young and old. Environmental enthusiasts and anyone who is concerned about the state of the world’s wildlife will find it a useful guide to our planet’s biodiversity, the threats it faces and methods to conserve it.

This book provides not only concise information about charismatic species and makes everybody understand what biodiversity means, but leads through the concept of red listing. The red list became a benchmark against which to measure the success of conservation actions and besides a bit of history the book provides also current summaries on overall conservation status, such as that 1 in 4 mammals and 1 in 8 birds and even more than 1 in 3 amphibians face extinction.

It is hoped that also this book will help to better understand the current biodiversity crisis and trigger more action.
**Zoo Conservation Biology**
by John E. Fa, Stephan M. Funk and Donnamarie O’Connell
Cambridge University Press, Cambridge, 2011 | 336 pp

In the face of ever-declining biodiversity, zoos have a major role to play in species conservation. Written by professionals involved in in situ conservation and restoration projects internationally, this is a critical assessment of the contribution of zoos to species conservation through evidence amassed from a wide range of sources. The first part outlines the biodiversity context within which zoos should operate, introducing the origins and global spread of zoos and exploring animal collection composition. The second part focuses on the basic elements of keeping viable captive animal populations. It considers the consequences of captivity on animals, the genetics of captive populations and the performance of zoos in captive breeding. The final part examines ways in which zoos can make a significant difference to conservation now and in the future. Bridging the gap between pure science and applied conservation, this is an ideal resource for both conservation biologists and zoo professionals. Zoo Conservation Biology is essential reading for anyone who wants to understand the role – and potential – of zoos in conservation. A critical, wide-ranging synthesis, this book sets out the potential of zoos as a component in conservation’s toolkit, and addresses the challenges, biological and educational, for modern, integrated conservation. This book is currently only available in German language.

**Sustainability in Zoo Operations: Nachhaltigkeit im Zoobetrieb**
by Udo Ganslosser (Ed)

The call for more integration of sustainability concepts into every-day zoo operations can regularly be heard in international as well as regional meetings, as well as publications (compare: International Zoo Yearbook 2009). However, so far no textbook or even collection of case studies is available for the general readership. At least, in German, there is now a sort of primer available for this concept: A collection of case studies and overviews for different areas has been published.

The book has been written by experts from the field, many of them zoo staff or engineers/architects working closely with zoos, but mostly without too much technical jargon, and addresses zoo personnel as well as students and zoo enthusiasts. The book consists of 5 parts and ten pages of references:

- Part one setting the stage: Why, and how does the need for sustainable operations influence the zoo community? (Dick, Townsend)
- Part two describes exemplary projects addressing several German zoos with different specialities.
- Part three highlights technical examples for programmes to save energy
- Part four covers building and construction, examples to save water, energy and addresses different construction material
- Part five is dedicated to education approaches, both formal and informal education, including some examples for in-situ work of Schwerin zoo’s own “backyard”

It is be hoped that by providing examples taken deliberately also from smaller, regional zoos and parks, it can be convincingly demonstrated that applicability of sustainable measures exists not only for very large zoos with huge financial and staff resources.

This book is currently only available in German language.

To find out more:
www.cambridge.org

To find out more:
www.filander.de
Announcements

WAZA Executive Office

WAZA Training Grant 2011 Goes to Amphibian Ark and CBSG

WAZA Council decided to grant the 2011 WAZA training grant to Amphibian Ark for the project Training for sustainability of amphibian rescue programs in Ecuador with financial support of €8,704. Additionally, CBSG Europe, based at Copenhagen Zoo is granted €8,296 for the project Expanding ex situ population management capacity in Asia: Building upon past training activities in Indonesia, China and Japan.

WAZA Anniversary Calendar 2012

The WAZA Anniversary Desk Calendar 2012, on the occasion of 77th WAZA birthday, is now available. Copies can be ordered from the Executive Office, only shipping costs of 15 CHF will be charged. Every month you will find a short story related to the evolution of WAZA, accompanied by a full colour photo. Please go to the WAZA website (homepage) for ordering.

Gordon McGregor Reid Receives WAZA Highest Honour: Heini Hediger Award 2011

Gordon McGregor Reid is both a zoo man’s zoo man and an academic’s academic, having kept and bred tropical fish as a wee boy, carried out research on freshwater and tropical fish for many years, and looked after aquatic exhibits in several museums. He is highly respected both as a zoo professional and an academic by his colleagues and peers around the world, and has been honoured appropriately by having two newly discovered species of fish bear his name. He is the author of more than 200 published works including books, peer-reviewed scientific papers, and popular articles. He has acted as a consultant for the World Wide Fund for Nature, Conservation International, Fauna and Flora International and many other agencies; and has extensive field experience in Africa, Central America, India and the Middle East. He continues to be active in the IUCN as a member of several specialist groups, and he is the Global Chair of the IUCN SSC Freshwater Fish Specialist Group. He served as Global Chair of the Amphibian Ark Project, and was elected by his peers to serve as President of WAZA.

In acknowledgement of Gordon’s extraordinary vision and support of the whole international zoo and aquarium community, WAZA presented the Heini Hediger Award at the 66th Annual Conference in Prague, 6th October 2011.

WAZA Conservation and Sustainability Resource Center Online

The new WAZA website resource tool www.unitedforconservation.org is prepared to find information about conservation topics, animal welfare, education and international organizations. It follows the structure and highlights all the recommendations laid out in the World Zoo and Aquarium Conservation Strategy, and will enable both the general public and those in the worldwide zoo and aquarium community to use and suggest information for the Resource Centre. The Resource Center can be accessed via the WAZA website’s homepage and directly as well. The first new link that we received was to the Conservation Centers for Species Survival www.conservationcenters.org.
Johannesburg Zoo
Is Going “Batty” This October

Throughout October, Johannesburg Zoo highlighted the role bats play in urban environments. For centuries bats of all shapes and sizes have gained a bad reputation through stereotypes stemming from scary stories of vampires and cultural myths. These stereotypes are heightened around holidays such as Halloween which occurs in October. It is for this reason the Johannesburg Zoo celebrated bats at a time when public attitude and phobias towards bats are at their greatest.

The themes of Bat Month are “Dispelling the Myth” & “Urban Bat Conservation”, where the zoo hosted a number of events including talks and bat tracking evenings which focused on general bat education and urban conservation of bats. Presentations were made by stakeholders with expertise in the field. The talks took place in the zoo’s recently opened “Temple of the Ancients”, where guests have an opportunity to view the new Seba Bat enclosure.

On the 29th of October the zoo celebrated Howlo’ween, a fun event where public dress up and explore the haunted zoo. In addition to the events fun programme educational displays attracted bats using bat boxes and urban bat species were identified using sonar devices.

On the 30th of October the zoo hosted a fundraising Bat Walk where money was raised towards maintaining the zoo’s three bat boxes. After the event Ecosolutions, a non-profit organisation, involved in urban wildlife conservation, gave visitors an opportunity to build their own bat boxes to attract wildlife in their own homes.

To find out more:
www.jhbzoo.org.za

Meetings of Old Zoos
Budapest
17–19 May 2012

This Second Ivy Zoo Symposium is supported by WAZA and the zoos of Leipzig, Vienna, London, Melbourne and Lincoln Park.

Suggested topics of this rare and joyful event include:
• How can historic zoos meet the expectations of the public in the 21st century?
• Space matters: how can you make a small zoo big?
• The role of art and design, built heritage and cultural missions
• The changes of animal collections and exhibits through a century

Please address your expression of interest and any questions to:
golob@congressline.hu

© Johannesburg Zoo
Cape Serotine Bat (Neoromicia capensis)

© WAZA
Old zoos meet modern challenges in Budapest, 2012.
2012 Amphibian Ark Calendars Are Now Available!

The twelve spectacular winning photos from Amphibian Ark’s international amphibian photography competition have been included in Amphibian Ark’s beautiful 2012 wall calendar. The calendars are now available for sale, and proceeds from sales will go towards saving threatened amphibian species. As well as ordering calendars for yourself, friends and family, why not purchase some calendars for re-sale through your retail outlets, or for gifts for staff, sponsors, or for fundraising events?

Pricing for calendars varies depending on the number of calendars ordered – the more you order, the more you save! Orders of 1–10 calendars are priced at US$15 each; orders of between 11–25 calendars drop the price to US $12 each; and orders of 26–99 are priced at just US$10 each. (These prices do not include shipping). Order your calendars: www.amphibi- anark.org/2012-calendar

Leaping Ahead of Extinction: A Celebration of Good News for Amphibians In 2012

What is planned? Encouraging as many people as possible to visit their closest zoo or facility with amphibian programs, on or around Leap Day 2012 (29th February), so that they can discover important conservation programs. Amphibian Ark promotes the event through international media releases, on the Ark web site, in the newsletter and Facebook page, through regional and national zoo associations and amphibian groups.

More information about the event will be added to the Leaping Ahead of Extinction web site www.leapday2012.org over the coming weeks and months.

WAZA Signs MoU With United Nations / CBD

On 20 September Dr. Gerald Dick, WAZA Executive Director, took part in a signing ceremony in New York in support of the UN Decade on Biodiversity. Together with 25 other global organisations, such as FAO, WTO, CITES, IUCN and WWF WAZA is in support of biodiversity conservation globally and will take part in the work of a newly established task force under the auspices of the Convention on Biological Diversity (CBD).
The WAZA Training Grant 2010 was awarded to Wildlife Reserves Singapore and Vienna Zoo to hold range-country training workshops on primates and elephants, respectively.

Primate Training Workshop in Singapore

Wildlife Reserves Singapore (WRS) and San Diego Zoo Global (SDZG) conducted an extensive two-week training workshop from 1 to 15 May 2011 at Singapore Zoo to enhance the technical capacity of primate conservation professionals in Asia for primate research. Thirty-two participants from the Asian region, including Indonesia, Malaysia, India, Thailand, Laos, Vietnam, Nepal, China, Taiwan and Singapore, participated in this programme. Eight zoology staff members from the host organisation WRS also participated in the workshop.

Lectures and discussions encompassing broad overviews of primate taxonomy, behaviour and conservation, sampling and recording methods and compilation of scientific data, reports and presentations were conducted by primate conservationists from SDZG and WRS, as well as several visiting guest primatologists based in Singapore, Japan, Malaysia and Australia. Participants were also put through the process of designing and conducting mini behavioural projects on primate species at Singapore Zoo and presenting their findings in a simulated formal conference setting to provide them the necessary experience and exposure. During the workshop participants also had the opportunity to present their personal research work in their home countries and to interact with their peers from the Asian region on primate conservation and research issues.

Through two weeks of intense instruction in primate behaviour, behavioural observation techniques and welfare assessment, participants were equipped with the basic knowledge and skills to conduct primate studies and monitoring independently and to better contribute to primate conservation in the Asian region.

This workshop was funded by WAZA and contributions from the Wildlife Reserves Singapore Conservation Fund (WRSCF), San Diego Zoo Global, Offield Family Foundation, Primate Conservation, Inc. and Primate Action Fund.

Elephant Training Workshops in Sri Lanka

Since 2006 ASERC marks a cooperative effort between Vienna Zoo and Sri Lankan experts in elephant research and management, veterinary medicine and technical resources. In 2010, three training workshops were held at three different locations. The workshops consisted of both lectures and practical components. Instructors were Dr. Harald Schwammer, Zoological Curator and Vice Director of Vienna Zoo, Gaby Schwammer, Head of the Zoo Education Department at Vienna Zoo, and Dr. Wolfgang Zenker, a zoo and wildlife veterinarian from Switzerland.

From 27 to 30 June 2011, a workshop on “Zoological collection planning and zoo management in Sri Lanka” was held at Dehiwala Zoo in Colombo. For the first time in Sri Lankan history it was possible to bring people with different professions together in such a workshop, with a total of 58 participants (curators, veterinarians, wildlife rangers and animal keepers). Dr. Bhashwara Senanka Gunaratna, the new Director of Dehiwala Zoo, is an active and progressive person with a vision for the future. Therefore, the workshop was in the right place at the right time, and all participants were very enthusiastic.

From 1 to 2 July 2011, a workshop on “Elephant management and care” was held at the Pinnawala Elephant Orphanage with 23 participants. Pinnawala is the world’s best-known elephant orphanage with currently more than 90 elephants. Another workshop was held on 3 July 2011 with 35 participants (veterinarians and wildlife rangers) in the Elephant Transit Home, an elephant orphanage with currently 39 elephants almost 5 years of age. The main topic was first aid for rescued elephants, treatment and care management.

The workshops were funded by WAZA and Vienna Zoo.
Update on International Studbooks

There are currently 121 active international studbooks (ISBs), including 158 species or sub-species (some ISBs cover more than one taxon). The following events regarding ISBs occurred since 1 July 2011:

**ISBs archived**
On 26 September 2011, CPM decided to archive the ISB for the grizzled grey tree kangaroo (*Dendrolagus inustus*).

**ISBs established**
• None.

**Transfer of ISBs to new keepers**
• On 26 September 2011, CPM approved the transfer of the Goodfellow’s tree kangaroo (*Dendrolagus goodfellowi*) ISB to Megan Richardson (Melbourne Zoo, Australia).

**Transfer of ISBs to new institutions**
• On 26 September 2011, CPM approved the transfer of the cotton-top tamarin (*Saguinus oedipus*) ISB, kept by Hollie Colahan, to Denver Zoo (USA).

**Further decisions**
• On 27 July 2011, CPM decided not to replace Jo Gipps (previously Bristol Zoo Gardens, UK) as the co-keeper of the giant panda (*Ailuropoda melanoleuca*) ISB and that Xie Zhong (Chinese Association of Zoological Gardens) should serve as the sole ISB keeper for this species.

**Pending issues**
• As of 30 September 2011, the Edward’s pheasant (*Lophura edwardsi*) ISB, Vietnamese pheasant (*Lophura hatinhensis*) ISB, Matschie’s tree kangaroo (*Dendrolagus matschiei*) ISB and sand cat (*Felis margarita*) ISB are vacant. An application to establish an ISB for Buffon’s macaw (*Ara ambiguus*) by Sandrine Silhol (Zoo des Sables d’Olonne, France) is pending.

Cuvier’s Gazelle International Studbook

The international studbook for Cuvier’s gazelle (*Gazella cuvieri*) provides information on the location, date and place of birth, date and place of death, ancestors and transfers of any individual in the captive population of this species. It represents the most important tool for managing the population in captivity, assisting holders to make breeding decisions so that genetic diversity can be retained and inbreeding avoided.

Its history began in Almería (Spain) where the first individuals arrived in 1975 (2 males and 2 females). They were collected by Prof Valverde in the Western Sahara where they were part of a captive population in the Oued Drâa Valley. The captive population seems to be self-sustainable; it sums up to 280 individuals distributed among 11 zoological institutions in Europe, Canada and the United States. The largest captive population is in Almería (Estación Experimental de Zonas Áridas; EEZA–CSIC) where there are 57 males and 94 females. Collaboration with the regional (North American) breeding programme is critical in order to ensure the sustainability of the captive population worldwide.

1 Estación Experimental de Zonas Áridas, Almería, Spain
Recent Updates

With the transport of 23 dorcas gazelles (Gazella dorcas) from the Geumbeul Fauna Reserve to the Katané enclosure (North Ferlo Fauna Reserve) in March 2009 started the third phase (2009–2011) of the reintroduction of dorcas gazelles in Senegal. The main objectives of this third phase were to monitor the adaptation of dorcas gazelles to the semi-wild conditions and to make the local human population sensitive to the need of combining the use with the preservation of natural resources. Moreover, we continue monitoring the development of dorcas gazelles in the Guembeul Fauna Reserve.

After a 6-week period of acclimatization, the 23 dorcas gazelles were released into the entire Katané enclosure (660 ha) where they are living in semi-wild conditions with other native (Gazella rufifrons) and reintroduced ungulate species, the mhorr gazelle (Gazella dama mhorr) and the scimitar-horned oryx (Oryx dammah).

While adaptation to natural food was not a problem for the dorcas gazelles, facing predators (mainly jackals) was a challenge during the first year living at Katané. For the first time, the feasibility of using GPS collars to monitor dorcas gazelles was tested. During almost 6 months we monitored three males bearing GPS collars, which allowed us to collect a set of accurate data about habitat use, territoriality and daily activity of dorcas gazelles in semi-wild conditions.

In order to approach the Peul culture and to draw their attention to the needs of their natural heritage, we implemented various actions of sensitising based on their cultural way of life. For example, during every visit we spend time talking with them in front of a cup of tea, discuss with women or ask youngsters to help identifying certain species of plants and animals. An all-day event with food, games, drawing competition, dancing, photos and presentations resulted in better knowledge about and understanding of the project, and was critical in initiating change in their vision of and collaboration in the project.

The third phase of this project was largely funded by the CSIC and Barcelona Zoo, with collaboration of the National Parks Authority and Environmental Ministry of Senegal as well as Bioparc Zoo de Doué-la-Fontaine.

The first edition of the international studbook was produced in 1992; in 2008, the second edition was published. This second edition includes management and husbandry guidelines that are helpful for holders to manage the captive population. The use of studbook data is crucial to improve the management of the captive population, not only from a genetic perspective but also for demographic reasons. Hence, studbook data have been used to identify, for example, those traits of mothers that can affect the mortality of their calf or even their sex.

The gene pool of the captive population seems to be satisfactory, in spite of having so few founders. Indication of this is the fact that in 2008, for the first time in captivity, two different females gave birth and reared triplets. They were born on 26 March (2 males and 1 female) and 21 April (1 male and 2 females). Triplets are rare in ungulates; even twins are not common in most species. However, Cuvier’s gazelles produce twins in a relatively high proportion, at least in captivity (39%). To produce and rear twins is more costly for mothers than to produce and rear singletons, and only females in very good body condition (vigorous as well as physically and genetically healthy) can afford the extra cost of having and taking care of twins. So, the two mothers having triplets are assumed to be in very good condition. As Cuvier’s gazelle females have only two nipples, brothers and sisters within the triplet fight to suckle first; this behaviour is most frequently observed early in the morning.

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The banded leaf monkey (*Presbytis femoralis femoralis*) occurs on the southern Malay Peninsula and is critically endangered in Singapore. Recent taxonomic and genetic analyses suggest that the southern Malay Peninsula sub-species is likely to be a distinct species, highlighting the importance of conserving the populations. In order to help with conserving this Singapore native, we propose to test hypotheses regarding population size, reproductive biology and feeding behaviour.

Continuous monitoring on banded leaf monkeys will be important in detecting changes in population and group demographics. Current data indicate that banded leaf monkeys may have at least one breeding cycle (birth in July) and the project aims to confirm this finding by monitoring one additional year. Besides identifying food plant species through feeding observations, existing data will be complemented by extracting plant DNA sequences from faeces. These sequences can then be identified by comparing them with the DNA from plant specimens collected during vegetation sampling of the habitat.

With accurate data on the feeding behaviour, behavioural ecology and reproductive biology of banded leaf monkeys, the project proposes to carry out a population viability assessment that will be important for examining the long-term prospects of the species in Singapore. These data will contribute to the conservation of banded leaf monkeys in Singapore.

...a population viability assessment will be important for examining the long-term prospects of the species in Singapore...
Leopard Cat Ecology and Conservation

The leopard cat (*Prionailurus bengalensis*) is a small wild felid (60–90 cm head–body length, 28–37 cm tail length, 2–8 kg body weight) found throughout Asia. Though fairly widespread and common in other parts of Asia, it is poorly studied and little is known about it regionally. In Singapore, leopard cats are so rarely sighted that they were once thought to be locally extinct on the main island and likely to be on the brink of national extinction. It was last seen alive in the wild on mainland Singapore in 1968.

The species is now listed as being critically endangered in the Singapore Red Data Book. This is mainly due to alteration of its natural habitat on the main island. It is currently known to persist only on Pulau Tekong and Pulau Ubin, although road kills were recorded in the central and western catchment areas in 2001 and 2007. Leopard cats are protected by law in Singapore under the Wild Animals and Birds Act and listed in Appendix II of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).

The project will study various aspects of the ecology of leopard cats in Pulau Tekong and the possible population in the western catchment areas, including their population size, distribution, diet and genetic variation. Findings from this research could shed significant information on the biology of this threatened species and contribute greatly to conservation efforts of Singapore’s last wild cat.
The northern river terrapin (*Batagur baska*) is a large (carapace length up to 59 cm), critically endangered river turtle that previously occupied most rivers and estuaries of South Asia (India, Bangladesh and Myanmar). Populations of river terrapins occurring in South East Asia (Thailand, Cambodia, Malaysia and Indonesia), previously referred to this species, are now considered a separate, closely related species, the southern river terrapin (*Batagur affinis*). Exceptionally large concentrations of this species that resided in the Hugli River of West Bengal in India and the Ayeryawady Delta in Myanmar during the 19th and early 20th centuries are now extirpated. Nesting throughout the northern river terrapin’s former range is now extremely rare and seems to be the product of only a few scattered survivors. The terrapins are traditionally kept in local fish ponds for good luck, and its flesh and eggs are consumed on special occasions. Indirect threats include habitat alteration and destruction (e.g. sand-mining, dam building, water projects and pollution) that have degraded the turtle’s nesting areas and feeding habitat. Recently, remnant populations have also suffered from the introduction of efficient mechanised fishing craft with lethal wide-area nets throughout much of the remaining habitat.

Conservation action for *Batagur baska* has been inadequate in the past. *Batagur baska* is now one of the three rarest turtle species worldwide. Various organisations such as the local non-governmental organisation CARINAM (Center for Advanced Research in Natural Resources and Management), the Forest Department of Bangladesh and international turtle experts have been failing to locate a single northern river terrapin in the wild. If there is a remaining wild population, it is believed to live in the Sundarbans, the largest single block of tidal halophytic mangrove forest in the world. Focus area of *in situ* activities of the project will be the Meghna estuary in the Sundarbans of Bangladesh, a location where a fisherman recently might have caught a *Batagur baska* specimen, and Mechua Island, a historic nesting site in West Bengal in India.

Other than in local fish ponds, only few specimens are kept and can almost be counted on one hand. In this project, first emergency measures are *ex situ* breeding activities to create a stable population that could eventually be reintroduced if possible and necessary. In Bhawal National Park, a breeding facility has been assigned by the Forest Department, improved with financial contributions from WWF Canada. There, a sufficient number of animals purchased from local fishermen should be secured to carry out managed breeding on a genetically wide scale. So far, 10 males and three females could be collected (through funds provided by ZGAP, TSA and Vienna Zoo) by field coordinator Rupali Ghosh, who is currently sponsored by Vienna Zoo. Captive populations in Austria should serve as an assurance colony and for breeding. Here, it has also been possible to successfully raise two hatchlings and collect valuable information on incubation times and temperatures. As soon as enough animals could be gathered for *ex situ* breeding, an awareness programme will be started within the local human population.
Pilot studies by the Tropical Marine Science Institute, National University of Singapore using opportunistic observations have shown that several species of coastal dolphins – particularly the Indo-Pacific humpback dolphin (*Sousa chinensis*) and the Indo-Pacific bottlenose dolphin (*Tursiops truncatus aduncus*) – are frequently sighted in Singapore waters, and there have been occasional sightings of the Irrawaddy dolphin (*Orcaella brevirostris*), the finless porpoise (*Neophocaena phocaenoides*) and an herbivorous marine mammal, the dugong (*Dugong dugon*).

It appears likely that Singapore and neighbouring waters are important for coastal and riverine marine mammals in that together they form a habitat for these animals, all of which are listed in Appendix I or II of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). The seasonal nature of local observations combined with a strategic geographical location suggests that Singapore might be a significant component of migratory routes in Southeast Asia. However, information to support this concept is very limited. Increasing coastal development and changes in global climate strengthen the need to collect information on local marine mammal abundance, distribution and behaviour to help ensure their long-term survival. This project aims to monitor marine mammal ecology in Singapore.

The first phase of the project includes a public education campaign to raise awareness of marine mammals seen in Singapore. This is aimed most actively at people who are regularly at sea, but also the general public to encourage reporting of sightings. Survey forms are available online and hardcopies have been distributed to dive organisations and locations frequented by people working near to or at sea. Researchers are also conducting field studies. By building on our current professional network and developing a volunteer network, the Marine Mammal Research Laboratory at the Tropical Marine Science Institute, National University of Singapore hopes to gain valuable information about marine mammals in this region and their habitats, which will be developed into a novel database and user information system.
The contribution of a specific sector to any academic endeavour is routinely measured by how well this sector is represented in scientific publications. To our knowledge, such an analysis has never been done specifically regarding the contribution of zoos and aquariums to the science of conservation biology.

All 12 issues of the 2009 and 2010 volumes of the journal Conservation Biology, the leading scientific periodical in the field of biodiversity conservation, were screened. First, the percentage of authors with a zoo or aquarium affiliation were calculated. Second, the percentage of published articles where at least one author had a zoo or aquarium affiliation was calculated.

From a total of 424 articles published by 1,784 authors, 3.4% of authors had a zoo or aquarium affiliation and 8.3% of published articles had at least one author with a zoo or aquarium affiliation. Backed by a 2006 authorship analysis of 2,060 articles published in Conservation Biology, our results suggest that zoo-affiliated scientists do indeed fairly frequently publish in the leading journal in the field of biodiversity conservation.

It is hoped that this preliminary analysis stimulates in-depth research into the contribution of zoos and aquariums to the science of conservation biology by covering further journals and volumes, which would also allow for an assessment across journals over time.
**New Corporate Member**

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**Obituary**

Jack Lacroix Throp in Memoriam

*25 August 1926
† 17 July 2011

Jack Throp’s lifelong love of nature began in the 1940’s in Arizona and his fascination with animals grew into a zoo career, beginning at the San Diego Zoo. Later, Jack managed the largest collection of exotic birds in the US at a bird-breeding farm in Vista, California. In 1959 Jack was the bird expert for the making of the Disney movie, Swiss Family Robinson. A love of popcorn (so the family story goes) brought Jack and Dorothea Lyle together at the San Diego Zoo where both worked. They married in 1950.

In 1960 Jack and his family relocated to Arizona for the groundbreaking of the Phoenix Zoo. Jack served as Head Bird Curator and later, General Curator of all animals. In 1965, after a national search was conducted, Jack was chosen to be the Director of the Honolulu Zoo in Hawaii. A highlight of his 15 years in Honolulu was the successful breeding and conservation of approximately 80 Galapagos Tortoises. Becoming increasingly well known across the world for his success in creating natural habitats for animals, Jack was later appointed Director of the world-renowned Taronga Park Zoo in Sydney, Australia and open-range Western Plains Zoo at Dubbo.

After Jack retired from Taronga Park Zoo in 1987, he and Dorothea moved to Birmingham where Jack was the Director of the Zoological Society until his retirement in 1991.

Source: Birmingham News

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Giant Panda Breeding Center, Sichuan, China.
Recent Updates

Membership Application
Nominated as institutional member

National Zoological Park
New Delhi, India

- Sponsors: Sally Walker (SAZARC) and Miroslav Bobek (Prague Zoo)
- Founded: 1959
- Area: 1.2 ha
- Member: Indian Zoo Director’s Association, Indian Zoos Association, World Pheasant Association
- Collection
  Mammals: 47 species and 612 specimens
  Birds: 53 species and 816 specimens
  Reptiles: 10 species and 79 specimens
- Staff: 118 permanent and 70 temporary
- Visitors: number of paying Rs. 20/per head. Free entrance below 5/year
- Owned by: Government of India, non-profit
- Director: Mr. Amitabh Agnihotri
- Address: Mathura Road, New Delhi 110 003, India

National Zoological Park is one of the finest and largest zoos in Asia and efforts have been made to provide an almost natural habitat to the animals and birds therein New Delhi. Established in 1959 and is spread over a massive area of 214 acres. Delhi Zoo is home to more than 2000 species of animals and birds from Africa, America, Australia and Asia. It is regarded as one of the finest zoos in Asia and efforts have been made to provide an almost natural habitat to the animals and the birds. It is a good spot for picnics. It has an early 17th century Kos Minar, which was one of the many, put up by Jehangir, son of the emperor, Akbar. As you climb up the red sandstone gate, you get a chance to admire the vast expanse of the Zoological Park. The winding pathways here are laid with the red Badarpur gravel, and the green shrubs demarcate the red with the undulating brown-green vast stretches of grass.

To find out more: nzpnewdelhi.gov.in
Recent Updates

Membership Application
Nominated as institutional member

**Saigon Zoo – Botanical Garden Company Ltd., Vietnam**

- **Sponsors:** Kumar Pillai (Wildlife Reserves Singapore) and Sophon Dumnui (ZPO Thailand)
- **Founded:** 1864
- **Area:** 17 ha
- **Member:** SEAZA – South East Asian Zoo Association
- **Collection**
  - Mammals: 52 species and 291 specimens
  - Birds: 42 species and 345 specimens
  - Reptiles: 17 species and 233 specimens
- **Staff:** 377 permanent
- **Visitors:** 1.5 million
- **Owned by:** Private Company
- **Director:** Dr. Phan Viet Lam
- **Address:** 2 Nguyen Binh Khiem Str., Ward Ben Nghe, Dist. 1, Ho Chi Minh City, Vietnam

As one of the oldest zoos in the world, the Saigon Zoo and Botanical Garden is famous not only with Vietnamese but also with foreign visitors. It is the home for many rare orchids, ornamental plants, and over a hundred species of mammals, reptiles, and birds. Saigon Zoo and Botanical Garden is a cultural place of Ho Chi Minh City (Saigon). It was ranked eighth among the oldest zoos in the world. Up to now, it is 133 years old.

At present the Saigon Zoo Botanical Gardens homes 869 animals belonging to 116 species, many of which are endangered species in Vietnam and the world. The plant collection comprises 3000 trees many of which are over 100 years old. There are also different species of cacti, orchid and bonsai of great value.

To find out more: [www.saigonzoo.net/lang/en](http://www.saigonzoo.net/lang/en)
Recent Updates

Membership Application
Nominated as institutional member

Nashville Zoo at Grassmere, USA

- Sponsors: Dennis Pate (Omaha’s Henry Doorly Zoo) and Phil Frost (Baton Rouge Zoo)
- Mission: Nashville Zoo’s mission is to inspire a culture of understanding and discovery of our natural world through conservation, innovation and leadership.
- Purpose and Goal: Building a first class zoological facility for Middle Tennessee; Developing this facility with excellence in animal care, global conservation and strong community value in mind; Striving to be the best at employing unique designs and innovative architectural and horticultural components to enhance exhibits for the benefit of the animals, visitors and zoological community; Integrating a comprehensive educational and interpretive component into every exhibit and program in order to promote conservation awareness and action; Conducting these activities in a fiscally responsible manner.

- Founded: 1990, re-opened at Grassmere in 1996
- Area: 188 acres (76 ha)
- Member: AZA, Association of Zoos and Aquariums
- Collection Mammals: 47 species and 204 specimens
  Birds: 67 species and 225 specimens
  Reptiles: 82 species and 704 specimens
  Amphibians: 22 species and 656 specimens
  Fishes: 98 species and 978 specimens
  Invertebrates: 22 species and 92 specimens
- Staff: 110 permanent and 56 temporary
- Visitors: 338,784 paying and 295,000 free entrance
- Owned by: Nashville zoo board of directors
- Director: Richard Schwartz
- Address: 3777, Nolensville Pike, Nashville, TN 37211, USA

Nashville Zoo is a dynamic and progressive zoological park serving middle Tennessee, southern Kentucky and tens of thousands of tourists and travelers each year. Nashville Zoo specializes in natural immersion exhibitry transporting guests into a multi-sensory adventure at each habitat, utilizing horticulture either from or closely resembling the native geographical locations, soothing sounds from the region, and natural, invisible barriers whenever possible. Nashville Zoo is home to 1,809 animals that represent 280 different species. Nashville Zoo is voted the number one attraction in Middle Tennessee for 2011.

To find out more: www.nashvillezoo.org

© Nashville zoo
Lynx at Nashville zoo.

© Nashville zoo
Bamboo trail in Nashville zoo.
Vancouver Aquarium, Canada

- Sponsors: Deborah Jensen (Woodland Park Zoo) & Joanne Lalumière (Granby Zoo)
- Founded: 1956
- Area: 1.2 ha
- Member: AZA – Association of Zoos & Aquariums, CAZA – Canadian Association of Zoological Parks & Aquariums, AMMPA – Alliance of Marine Mammal Parks and Aquariums
- Collection
  - Mammals: 11 species and 288 specimens
  - Birds: 9 species and 21 specimens
  - Reptiles: 20 species and 51 specimens
  - Amphibians: 37 species and 578 specimens
  - Fishes: 297 species and 17,120 specimens
  - Invertebrates: 287 species and 32,550 specimens
- Staff: 211 permanent and 226 temporary
- Visitors: 841,812 paying and 40,456 free entrance
- Owned by: Non-Profit
- Senior Executive: Mr. Clint Wright
- Address: Stanley Park, PO Box 3232, Vancouver, Canada

The Vancouver Aquarium Marine Science Centre

A recognized leader in connecting people to the natural world, the Vancouver Aquarium Marine Science Centre is a world-class learning facility that welcomes nearly one million visitors annually and reaches millions more through our digital channels. The Vancouver Aquarium is active in a number of conservation, research and education initiatives with the aim to inspire personal action and effect conservation.

In addition to the 60,000+ school children that visit the Aquarium each year to enjoy a variety of curriculum-based programs, the Aquarium also offers conservation-based learning outside and beyond the classroom through our award-winning mobile AquaVan. The Aquarium operates some of the largest national conservation initiatives including the Ocean Wise sustainable seafood program and the Great Canadian Shoreline Cleanup, providing direct action opportunities for Canadians to participate at a local level. Furthermore, the Aquarium is active in aquatic research including the B. C. Cetacean Sightings Network, Marine Mammal Rescue Centre and Rockfish studies.

The Aquarium has partners from around the world with which it shares knowledge and best practices to elevate the important role of aquariums and to increase the impact its conservation-minded programs and services have on public stakeholders and the world around us.