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the magazine for friends of the Brno Zoo

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The Content

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Polar bears

UNSALEABLE

EARAZA Organises Nine International Animal Protection Programmes

The 19th annual conference of the Eurasian Regional Association of Zoos and Aquariums (EARAZA) will take place at the end of May 2013 at Brno Zoo. I would therefore like to familiarize ZooReport readers with the association of which I have been the head since its foundation in 1994.

Vladimir V. Spitsin

The founders of our association were the zoological gardens in Moscow, Novosibirsk, and Seversk. Currently, EARAZA represents 69 zoological gardens and other institutions with a focus on zoology in 14 countries. Nine Czech zoological gardens (including Brno Zoo) can be found among its members. During its almost 20 years of existence, EARAZA has become an important conservation organization and a member of the World Association of Zoos and Aquariums (WAZA). It has acquired a great reputation in the international zoo community. EARAZA Zoo Information Centre (ZIC), which has its headquarters at Moscow Zoo, provides its members with up-to-date information concerning all aspects of zoo operations.

Our association regularly publishes proceedings from seminars and international meetings involving member institutions. It publishes an EARAZA Information Issue every year, which has been divided into two volumes in recent years. One is used as an address list (last year's publication shows the number of zoological collections involved has now reached 109), while the second contains specialized articles and essays on animal keeping and breeding issues.

In 2008, EARAZA founded an electronic library which has become a rich source of information about the activities of zoos as well as about basic research on animals which live in the wild. The EARAZA Zoo Information Centre offers over 2,000 titles, among which can be found, for instance, a database of animal species included in European and international studbooks. On 1.12.2012, the database contained information on 47 animal species kept at 64 zoological gardens. Within the framework of EARAZA, five working groups, all involved in the protection of endangered species and zoological education issues, have been established. EARAZA also organises nine international practical and research programmes focused on the conservation of endangered animal species.

During the last decade, the EARAZA Information and Methodology Department has processed over two thousand requests for consultation from zoo staff and representatives of other institutions or from private individuals. Approximately 150 letters concerning the operation of existing zoos as well as the design and construction of new zoological gardens have been sent out to the administrative and legislative authorities of various cities.

Vladimir V. Spitsin,
President of EARAZA

Vladimir V. Spitsin

has been working within the system of Russian zoological gardens for more than 50 years. For the last 35 years, he has been the Director of Moscow Zoo, into the building and reconstruction of which he has put a lot of effort. Under his leadership, a unique reconstruction project was completed in as few as five years, during which their valuable collection of rare animal species remained safe. He has also contributed greatly to the protection of various animal species. Amur tigers, Far Eastern and snow leopards, polar and spectacled bears, gorillas, orangutans, and many other species breed successfully at Moscow Zoo.

Vladimir Spitsin initiated the foundation of the Centre for Breeding and Conservation of Endangered Animal Species in the Volokolamsk District in the Moscow region, and also the foundation of a branch of Moscow Zoo, "Father Frost's Home", in the town of Velikiy Ustyug in the Vologda region. EARAZA was founded in 1994 at Vladimir Spitsin's instigation, and he has been its president since then. He is also the Chairman of the Council for the Coordination of the Activities of Russian Zoos under the Ministry of Culture of the Russian Federation, a member of the Council of the European Association of Zoos and Aquaria (EAZA), a member of the Russian Academy of Natural Sciences, the author of more than 160 articles, and the editor of numerous scientific, methodological, informative, and educational publications.

The Malagasy giant chameleon in the newly adapted exhibit

The Largest Chameleon

Last summer, our zoological gardens obtained ten young Malagasy giant chameleons (*Furcifer oustaleti*) born at Prague Zoo. Their arrival is beneficial to Brno's reptile collection. Even though Brno Zoo has been successful in the breeding of Jackson's chameleons in the past, it didn't have any chameleons in its care at the time when the Prague group arrived.

The Malagasy giant chameleon young were placed in the breeding facilities at the Tropical Kingdom pavilion and, near the beginning of the current year (February 2013), two of the larger chameleons had already been transferred to a newly adapted exhibit within this pavilion. The rest of the group remain in the breeding facilities.

The Malagasy giant chameleon is considered to be the largest representative of the *Chamaeleonidae* family, which is to say that it is the largest chameleon in the world. Their total body length can apparently reach over 80 cm, although the largest size measured has been 68.5 cm. The females are smaller than the males, mostly reaching a maximum of 50 cm in length. The head is equipped with an enlarged 'helmet' that appears compressed at the sides and is without a collar or horns. The spinal and throat ridges consist of conical scales which project outwards in dense rows. The scaly covering of the body is heterogeneous. The colouration of this species commonly features various shades of brown, grey, and white. Green also occurs in some populations, while others display additional red hues. Females are a bit more colourful than males.

This giant among chameleons is endemic to Madagascar, though it has also been introduced in the Ngong Forest Sanctuary complex on the edge of Nairobi, the capital of Kenya (in Africa). It inhabits light forests as well as open areas in which the climate is warm and wet. It can often be found on the ground but, in many places, it has also been observed in the tree tops.

The Malagasy giant chameleon is an omnivore. It can eat all kinds of insect, and is also able to catch smaller lizards, largish mice, and chicks. Indeed, in some areas of Madagascar, the inhabitants use it to kill insects and other animals in their houses.

The dimensions of the breeding facility must correspond to the size of the chameleon, and it should be equipped with thick branches and resistant plants. The layer of the substrate for pregnant females must be at least 30–40 cm thick. A winter garden or greenhouse is ideal for the keeping of a larger number of individuals, and it should have a temperature gradient corresponding to that in the animal's home country. A relatively strong spotlight source is suitable for the heating necessary to maintain this. The breeding facility, or rather the plants inside it, needs spraying once a day. It is important to feed each chameleon individually via a syringe or sprinkler at least every other day.

In this connection, I would also like to mention other giants among the chameleons. One is Meller's chameleon (*Chamaeleo melleri*), the largest on the African continent. Adult males can measure more than 70 cm in length. Another species endemic to Madagascar, Parson's chameleon (*Callumma parsonii*), has males measuring up to 69.5 cm. The warty chameleon, *Furcifer verrucosus*, which is very similar to the Malagasy giant chameleon, is also sometimes classified as a giant.

Things are somewhat less complex at the opposite end. A real dwarf, the Madagascan dwarf chameleon (*Brookesia minima*) from the island of Nossy Bé, near Madagascar, dominates here. It reaches a maximum length of 33 mm. This miniature animal is probably not only the smallest chameleon but also the smallest lizard, or even reptile, in the world.

Michal Balcar,
keeper at the Tropical Kingdom pavilion

The Malagasy giant chameleon in the newly adapted exhibit

Slavkovský Forest Protected Landscape Park

The Slavkovský Forest Protected Landscape Park (CHKO) in West Bohemia was created in 1974. Its area roughly takes the form of an inverted triangle: The spa town of Mariánské Lázně lies at its southern vertex, with its base in the north formed by the River Ohře between Kynšperk nad Ohří and another spa town, Karlovy Vary . On the southern edge one can find another smaller spa town – Kynžvart.

The main reason for the creation of this nature reserve was the protection of the sources of natural healing waters. Springs are located in all parts of the area. There are also other natural treasures that gave rise to the nature reserve and which are protected there. These are mainly waterlogged continuous pine groves with extensive peat bogs which remain largely preserved in their original condition. Valuable wetland biotopes can also be found in the open countryside, which is today primarily made up of meadows. These include the Mokřady pod Vlčkem wetlands nature reserve and the national nature monument Upolínová louka pod Křížky, a globe-flower meadow. Another interesting natural feature is a serpentine ridge which runs through the centre of the nature reserve, with outcrops hosting specific flora. Deciduous forests can only be found in the form of small remnants of beech woods and scree woodlands in the peripheral parts of the nature reserve. The canyon valleys of the River Ohře and its tributary stream, the Teplá, are very precious natural features whose bizarre rock outcrops are attractive sights for tourists. The canyon on the Teplá stream is protected in the Údolí Teplé nature reserve.

Photo Přemysl Tájek

A typical forest bog among the peaks of Slavkovský Forest

Most of the rare species in Slavkovský Forest are plants. For, example, the presence of serpentine rock formations has allowed an abundant spleenwort (Aspleniaceae) population to thrive alongside the endemic Cerastium alsinifolium. Many rare species of plants are also found in the wetlands, perhaps the most significant of which is the rare swamp willow (Salix myrtilloides).

As far as animals are concerned, the Glanville fritillary butterfly (Melitaea cinxia) should be named first, as it is a species endangered throughout the whole of Europe . In the peat bogs, a population of a very rare peat bog butterfly – the moorland clouded yellow (Colias palaeno) – still survives. As far as birds are concerned, the western capercaillie (Tetrao urogallus) and the black grouse (Tetrao tetrix) were always hallmark species of Slavkovský Forest . Unfortunately, they couldn't stand pressure from the rapid development of human society, and they have disappeared from the area. However, other species have appeared in their stead. In the thin serpentine pine woods – even at heights of over 700 metres above sea level – the European nightjar has found a suitable environment; while, in sparse waterlogged forest vegetation and in clearings left after catastrophic damage, the woodlark (Lullula arborea) has found a niche. Also, the presence of the Eurasian three-toed woodpecker (Picoides tridactylus) was recently confirmed. In the remnants of the beech woods, we recorded an extraordinarily plentiful population of the rare red-breasted flycatcher (Ficedula parva). As for mammals, the permanent residence of at least one family of Eurasian lynx was confirmed among the peaks in the area (near the village of Kladská). The westernmost location where the European ground squirrel (Spermophilus citellus) can be found is also worth mentioning: It is present near Karlovy Vary on the golf course and at the airport.

RNDr. Pavel Řepa,
Zoologist of the Slavkovský Forest Protected Landscape Park Administration

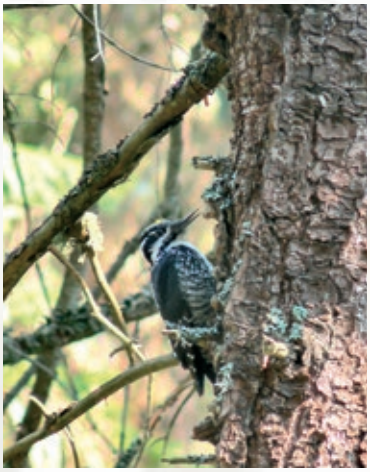

Photo Oldřich Bušek

The Eurasian three-toed woodpecker has found a sufficient amount of withering and dry spruces in the reserve's waterlogged spruce vegetation. They provide an optimum environment for the bird's search for food as well as for the formation of nesting cavities.

Photo Petr Lang

The red-breasted flycatcher lives in beech woods. In Slavkovský Forest , it can therefore only be found in several regions where beeches still remain. However, it inhabits these locales in large numbers.

Photo Tomáš Dvořák

Since December 2012, the Komodo dragon can be seen also in Zoo Brno

Brno's New Komodo Dragon

December 20th 2012 was an important moment in the professional lives of our zoo's workers, as a male Komodo dragon (*Varanus komodoensis* Owens, 1912) arrived from Prague Zoo. The Komodo dragon is a very popular animal, and is veiled in legend. The largest of lizards, it can sometimes reach a weight of over one hundred kilograms and a length of more than three metres. It will not go out of its way to eat people, but can still be dangerous for them: Its mouth is equipped with large, sharp teeth and a poison gland. It is one of the rarest animals kept at the zoo. The purpose of keeping it is to preserve an endangered species which only lives in the wild on a few small Indonesian islands, Komodo being one.

We have adapted large (50 m2) exhibition quarters in an older building with terrariums for our dragon. It is furnished with a heated pool, a feeding box, and a sprinkling device. We have achieved the essential high temperatures in the exhibit (up to 35–40 °C) by installing radiant panels on the ceiling and a heated concrete slab with an embedded heating cable and thermostat in the floor. The building's original warm-water system is also used. Powerful sources of UV radiation add to the high comfort level for our lizard.

In their original biotope, Komodo dragons feed mainly on carcasses, mostly those washed up from the sea. They are also excellent hunters whose perfectly developed senses and inborn intelligence allow them to achieve a skill similar to mammalian predators. They attack and kill smaller and weaker individuals of their own kind (cannibalism is strongly developed in this species) and various kinds of birds, reptiles, and mammals. The Komodo dragon is the only lizard which can be called an apex predator. There aren't many original mammal species on Komodo and the surrounding islands today; but goats, pigs, horses, deer, and buffaloes that have been introduced to the islands have become common prey. The prevailing hunting strategy involves lurking in wait, followed by a swift attack during which the lizard bites its prey or tears off a piece of flesh, causing its victim to bleed to death within two days. Even a small bite or scratch from a Komodo dragon will cause the hunted animal to bleed heavily. The lizard watches the bleeding animal until it judges the moment is right to jump on it, usually with other individuals of its kind, and eat it completely. The predator feeds very quickly: A fifty-kilo Komodo dragon female has been recorded as needing only 17 minutes to consume completely a pig weighing 30 kg!

It was assumed until recently that the death of the lizard's prey is caused by the fifty or so kinds of pathogenic bacteria which live in the lizard's oral cavity. However, in 2009, a group of Australian scientists confirmed the existence of a functional poison gland located in the lower jaw of the dragons. The gland produces a poison which considerably lowers the coagulability of blood, causing the injured prey to bleed profusely. The death of the victim is thus mainly the work of an efficient poison.

Komodo dragon females lay eggs in burrows, often in the extensive nesting mounds of the dusky megapode (*Megapodius freycinet*), a burrowing

Photo Michal Balcar

A view to the exposition of the Komodo dragon

Photo Jan Hrdlička

The Komodo dragon under the radiant panel

bird. Unlike their parents, the young are slim and colourful. Up to the age of two years they live in the branches of trees, where they feed on insects and small birds and escape being hunted by adult dragons, who cannot climb trees.

In 2006, another fascinating feature of Komodo dragon biology was described (thanks to a female kept at London Zoo) – parthenogenesis. Soon afterwards, a female reproduced in the same way at Chester Zoo. Both of them lived without the presence of a male and laid unfertilized eggs from which several male young hatched. The offspring born in this way have identical genetic information to their mother as well as to one another, which is not very advantageous from the evolutionary point of view. However, this phenomenon can be justified: It is better to bring one's own copies into the world than not to multiply at all when there is no male available and the conditions are favourable.

The Komodo dragon was for a long time an unknown species in the developed world, being observed for the first time on Komodo Island in 1910 and described scientifically in 1912. It was first introduced to members of the public at Washington National Zoo in 1934. Its breeding in captivity is still considered an exceptional event. This was successful for the first time outside Asia as late as in 1992, at Washington Zoo. The first breeding in Europe took place in 2004 at a private zoo in the Canary Islands which bred the dragons in natural conditions, with a run open all year round. The first baby Komodo dragons in continental Europe were born at Prague Zoo in April 2007.

Our new Komodo dragon male was born in Prague in March 2011. His mother, the legendary female Aranka, is a world record holder among the females of her kind bred in captivity: She has produced six broods, from which 70 young have hatched. She is also a twice grandmother. When she laid her third brood at Prague Zoo at the end of 2010, it wasn't clear whether the father of the expected young was the already aging 16-year-old male Leonardo, who has been living at Prague Zoo since April 2010, or Aranka's previous partner, Draco, who fathered the first 30 young. DNA tests showed that the two healthy young lizards from the third brood don't have any father: Both of them developed through parthenogenesis. Our male Rototom also came into the world in this way.

Only about 3,500 Komodo dragons live in their homeland, among which there are approximately 500 females capable of reproduction. The causes of this situation are the subject of research, as the biology of this species hasn't yet been fully examined. The Komodo dragon is listed in the Vulnerable category in the Red Book of Endangered Species, and a European Endangered Species Programme has been created for it. Indonesia recognizes Komodo dragons as a national treasure, and the export of individuals is allowed only exceptionally, in the form of a state gift. (The first Komodo dragons arrived in the Czech Republic in 1997 as a gift for Václav Havel from the Indonesian government, and that three-year-old couple were placed at Plzeň Zoo).

Brno Zoo has become only the third zoological garden in the Czech Republic, after Plzeň and Prague, where visitors can admire the Komodo dragon. The arrival of the male Rototom is yet another proof of the long-term cooperation between Brno and Prague zoos, which began in 1998 with the opening of our Tropical Kingdom pavilion. This has been reaffirmed several times, for instance in 2002, when we temporarily took charge of many animals, including several kinds of reptile, from Prague Zoo when it was damaged by destructive floods.

Michal Balcar,
Reptile keeper

Photo Michal Balcar

Komodo dragon head

Visualization: Studio Květ

A draft of the building Hlídka reconstruction

The City of Brno Has Assigned Hlídka to Zoo

In November 2012, the Council of the City of Brno placed the zoological gardens in charge of the operation of the Hlídka Environmental Education Centre. The eco-centre which is now being established is being provided with a building in the park under Špilberk Castle. It is a former gunpowder store, and has protected monument status as part of the Czech cultural heritage. This deserted, devastated house, which stands by itself at Hlídka 4, was inhabited by homeless people until recently, and was partially destroyed by fire a few years ago. The thorough reconstruction currently in full swing should turn out to be quite attractive.

The garrison of the Špilberk fortress set up a single-storey powder house at the location in 1728, placing it at a sufficient distance from the castle for safety reasons, and surrounding it with a double protective wall. As there was a guard house in front, local people started to call the place Hlídka (The Guard). In the 1860s, when the castle was no longer of military importance, the City obtained the powder house, added another storey, and opened it as a restaurant for day-trippers. It was called Hohe Warte (The High Guard), and became highly popular. Some still remember and reminisce about it. By the 1980s, however, the Restaurants and Canteens state company had allowed it to fall into disrepair and closed it down, leaving it to its fate. After a 2006 fire, a new roof was built, supported by new roof beams.

The present renovation work should be completed in June 2013. In the basement, where the Baroque cellar arcade will remain, an audio-visual hall for up to 15 people will be created. Educational programmes for pupils to age 14, and seminars for pedagogy students and teachers will take place there. The ground floor, which can accommodate 25 participants, will be used as a family centre for parents with pre-school children. This will connect with natural surroundings – a roofed outdoor area with seats, a maintained garden, and Špilberk Park. Two classrooms for children, with a total capacity of 30, will be created on the first floor. These rooms will also be used for educational programmes for future teaching professionals, and for adult education. In the summer, it will be possible to utilize the outdoor areas for teaching as well, and thus enlarge the total capacity of the centre by approximately 50%. The entry hall, information office, and other facilities (e.g., a parking place for prams) will be embedded below the level of the surrounding terrain, with greenery planted on the roof.

Hlídka will offer teaching programmes featuring a wide range of topics concerned with, for example, the protection of the urban environment. The centre will also found an ecology club, and will organize city summer camps for children during the holidays.

Brno Zoo has had many years of in-depth experience with several of these activities. At present, it provides twelve teaching programmes for all school levels, and organizes holiday stays for children every year. A Young Scientists' Station has been in operation at the Zoo since 1978, and its predecessors were promoting and practicing environmental protection for many years before that.

Eduard Stuchlík

The building Hlídka in March 2013

Six Lemurs Have Arrived

Six ring-tailed lemurs (*Lemur catta*), which were brought to our zoo from the zoological gardens in Jihlava and Zlín in February 2013, have been placed in one of our two pavilions dedicated to primates. These lemurs were born in the spring of 2012, three of them in Jihlava and the other three in Zlín.

The ring-tailed lemur is a primate of the Strepsirrhini suborder, Lemuridae family. It weighs around 2.5 kg, and is approximately 45 cm long, not including the tail. The animal is generally popular, and it is bred often in zoos. All our lemurs are male. Such a group composition is what would be found in nature: In their homeland, the island of Madagascar, lemurs live in large groups which are composed only of females with their young. As the young males mature sexually, the females chase them away. These young males (or bachelors) then create their own all-male group. They only rejoin the original group during the mating period.

About 60 kinds of lemur live on Madagascar, and their numbers are dropping continuously. Some of them are under acute threat of extinction. Ring-tailed lemurs are recorded in the vulnerable species category in the IUCN Red list. *(ed)*

Year-old ring-tailed lemurs brought from the zoological gardens in Jihlava and Zlín

Azara's Agouti Has Given Birth to a Second Baby

Our Azara's agoutis (*Dasyprocta azarae*), South American rodents which we have been keeping in the Tropical Kingdom pavilion since 2009, reproduced for the first time in 2012. The first viable baby was born on 23rd July and another was produced on 6th December. Azara's agoutis live in the primeval forest and savannahs of Brazil, Argentina, and Paraguay, where they mainly feed on plant seeds. They bury some seeds in the ground to store them in case of future need, and then sometimes forget about them. These seeds sprout, and thus agoutis contribute to the propagation of various plant species. *(ed)*

A New Hutia Exhibit

Since the beginning of 2013, we have been keeping another species of rodent, this time from the Caribbean region, in our newly adapted exhibit in the building housing terrariums which neighbours on the Tropical Kingdom pavilion. Desmarest's hutia (*Capromys pilorides*), also known as the Cuban hutia, is also sometimes called a tree nutria even though it bears only a slight similarity to nutrias. We brought two pairs from the Prague zoo in February. Desmarest's hutias live only on the island of Cuba and on smaller adjacent islands, where they spend the majority of their life climbing trees. They were previously found almost throughout Cuba but, as the majority of the island is covered by plantations at present, they now only occur in forested mountains in the interior of the country and in coastal areas where they inhabit mangroves or dry rocky biotopes. People hunt them for their tasty meat. Even though their numbers have dropped significantly, there are still relatively many of them in some places. *(ed)*

Azara's agouti female (right) with her two youngs

Desmarest's hutia

Female Kamchatka (middle) and her two offspring in a February blizzard

Kamchatka Brown Bears Love Honey and Snow

The Kamchatka brown bear cubs Kuba and Tobi, both males, celebrated their first birthday in a good mood and full of strength. The birthday boys were made aware from their menu that 31st January was not just another day: Apart from their standard food, which consists of fish, fruit, and vegetables, they also received a honey cake! Their mother, Kamchatka, got to enjoy the sweet treat as well, which was baked at the restaurant "U Tygra". Their father, Jelizar, who still inhabits a separate part of the run, received his fair share, too. After all, he also contributed to the building of the family.

It is well known that brown bears, of which Kamchatka brown bears are a sub-species, spend the winter in a den where they hibernate. Their hibernation is, however, only partial; their vital signs do not come to a standstill but only slow down: breath and pulse frequency decrease, while body temperature drops by three to eight degrees. Bears kept at zoological gardens do not sleep in the winter. They are only less active and eat less food.

At the beginning of December, Kamchatka stopped going into the enclosure with her cubs, and all three of them started spending the day in their indoor sleeping facilities. We could see from the footprints that they sometimes went for walks at night. We therefore started feeding them in their box, but with approximately half of their normal feed portions. When it got colder outside, the bears ate almost nothing at all. Despite this, we maintained the regular daily feeding because the cubs are still growing and developing.

At the beginning of January, when it got unexpectedly warmer, the trio started to appear in the run again, and feeding recommenced at the lake. The trio welcomed February's snow with excitement: The bears had fun exploring the fluffy drifts and rolling around in them. It was often moving to watch how Kamchatka, with calm and composure, fed her one-year-old cubs with her milk in the snow. After their drink, the cubs would lay right down in the snow and fall asleep.

Jelizar also entertained us this winter. He left his indoor sleeping facilities with seeming complete contempt before the first frost arrived, and dug out his own den in the run. He had moved house to an ideal place right by the glass peephole into the enclosure. Thus, visitors had a close-up view of the bear digging in the ground and peering out of his den in the following days. When the ceiling of the entrance section of this daring structure, which was located in a slope, collapsed with the first onset of snow, Jelizar wasn't put off. In two days of intensive digging, he managed to extend the corridor of his den so far that his whole body could fit inside again.

In the past year, the visitor numbers at Brno Zoo were the second highest in the last twenty years. This was certainly caused by the popularity of the brown bear twins. The highest visitor numbers of all within this period occurred in 2008, when the polar bear cubs were the main attraction. Next season, besides Kuba and Tobi, our visitors will also be able to see this year's polar bear cubs...

Eduard Stuchlík

In winter, male Jelizar dug a den

Young bears are still playful

Polar Bear Cora is Taking Care of her Second Set of Twins

The polar bear twins born on 24th November 2012 left their indoor sleeping quarters (den) for the first time on 16th March and set off to explore the outside enclosure under the supervision of their mother. On exactly the same day, the zoological gardens made the route around the polar bear enclosure accessible to the public once again, its having been closed for safety reasons since 12th November 2012. Peace is necessary during the nursing period in the den, so the measure was very beneficial for Cora and her young.

Cora gave birth in the enclosure to the first cub on 24th November. She knew just what to do, picking it up with her mouth and bringing it into the birthing box in the den at 14:36. An hour and a half later, she gave birth to the second cub in the birthing box. From then on, she remained in the den constantly, holding the baby bears close to her body and nursing them. When the cubs were hungry, they cried almost without interruption, but Mother looked after them very intensively.

We had originally planned to shut Cora in the den approximately one week before the expected birth so that she might prepare undisturbed for her noble mission. (In the wild, a pregnant polar bear will take refuge in her winter shelter approximately one week before giving birth.) However, as the weather was unusually warm, Cora remained outside until she had her first cub in her mouth. We therefore left the entrance to the sleeping facilities open, not wanting to disturb her. We stopped worrying about the low temperatures in the birthing box after consulting with breeders from other zoological gardens. They assured us that, even if the temperature in the den drops far below freezing, a female bear is able to create a suitable microclimate for young with her own body. Cora confirmed this in the initial stage of nursing by lying with her back towards the corridor which leads to the exit from the den, thus protecting her cubs against drafts.

Cora, polar bear female, with twins

Cora had already stopped eating before giving birth, and didn't accept any food for nearly four months. Only water was available for her from an automatic feeder in the den. We started to provide her with food for the first time on 14th February, when we dropped two apples, two carrots, and one mackerel (all cooked) through a narrow shaft into her birthing box. At that time, Cora was already moving away from her young for short periods, spending time observing the enclosure from the entrance to the den, but not leaving it. The cubs were very mobile by then, running across the box and entertaining themselves by fighting with each other. We gradually increased the amount we were feeding Cora, adding raw food. By the middle of March, the ratio of cooked to raw food was approximately 1:1, with the bear consuming four kilos of fruit and vegetables and four kilos of beef and fish per day. The young also tried their first pieces of meat.

On the fourth of April, we separated female Cora from her young for the first time so that we vaccinated them against infectious hepatitis, parvovirus, and canine distemper (this veterinary procedure is compulsory for all animals born at the zoo), attached an identification chip to each of them, and removed parasites from their digestive tracts (dehelmintization). On this occasion we found out their gender, cubs are male and female.

The promising development of the young so far suggests that the success with the twins to which Cora gave birth on 23rd November 2007, and which later left to strengthen the breeding programmes at Prague Zoo and at Gelsenkirchen Zoo in Germany, could be repeated this time.

Eduard Stuchlík

Polar bear twins

Kancelář Brno-Zdravé město Magistrátu města Brna připravila u příležitosti Světového dne bez tabáku 14. ročník zábavného zdravotně osvětového pořadu

zvířátka také nekouří

Smyslem oblíbené akce, která se uskuteční **v sobotu 18. května od 11 hodin v Zoologické zahradě města Brna**, je upozornit na rizika kouření, ale zároveň nabídnout pomoc těm, kdo chtějí s kouřením přestat. Kdo s sebou přinese **nefunkční elektrospotřebič** za účelem jeho ekologické recyklace, bude mít **vstup do zoo zdarma!**

Přijďte do Zoo Brno strávit neobvyklý den mezi zvířaty a dozvědět se něco i o svém vlastním zdraví. Jak jsou na tom Vaše plíce, se dozvíte při absolvování jednoduchých vyšetření. Kouření bývá rovněž příčinou požárů. Proto uvidíte i ukázky hasičských zásahů a vybavení hasičského vozu, které ocení nejen dospělí. Připraveny jsou navíc různá taneční a divadelní vystoupení včetně soutěží pro děti. Podrobný program naleznete na **www.zdravemesto.cz**.

BRNO - ZDRAVÉ MĚSTO

Z dalších akcí pro veřejnost, které se v brněnské zoo uskuteční v červnu 2013:

Den dětí 1. června

Zábavné dětské soutěže na pěti stanovištích v areálu zoo budou probíhat po celý den. Na závěr udílení cen. Informace: Ing. Tomáš Dvořák (dvorak@zoobrno.cz), tel.: 546 432 336.

Den otců 16. června

Zábavný program pro tatínky a jejich ratolesti. Informace: Ing. Tomáš Dvořák (dvorak@zoobrno.cz), tel.: 546 432 336.