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ZOO report

the magazine for friends of the Brno Zoo

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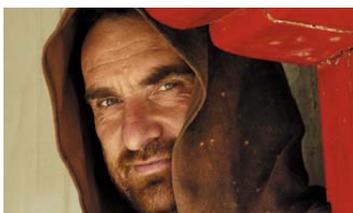


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Zooreport

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UNSALEABLE



Photo: Přemysl Rabas

Przewalski horse on the Mongolian steppe

The Comeback of Wild Horses

The Union of Czech and Slovak Zoos established in the year 1990, before the breakup of Czechoslovakia, strives to protect endangered species in its nearby surroundings and distant regions in accordance with the world-wide trend.

I am standing in the green rolling countryside of Hustai National Park. Bushes are quite rare here, a tree seems like a fantastic treasure. Though it is hot, a shiver of emotion is running down my spine. This is one of three places in the Mongolian steppe where Przewalski horses are running around again after almost a hundred years. The horses became completely extinct in the wild and hardly fifty of them were in captivity by the middle of the past century when an international studbook was established in the Prague Zoo. Currently,

there are several thousands of Przewalski horses all over the world, and so in the 1990's the first of them could start for a long journey home. If the world association of zoological gardens did nothing else for the wildlife preservation, the wild horse comeback to the nature merits their entry in the hall of fame.

However, the zoological gardens united in European or world associations have much more on their conscience. The conservation activities of Jersey Wildlife Preservation Trust and the reintegration of many species born in captivity to the wild were popularized significantly by the brilliant Gerald Durrell in the 1970's and 1980's. This work was continued by a lot of other organizations, among them the zoos associated in the Union of Czech and Slovak Zoos.

Their common work lies in releasing dozens of bred Ural owls, barn owls, goldeneyes, lynxes, European bison, grouse, wildcats and an array of other rare species of European fauna. However, the zoological gardens of the two small countries of former Czechoslovakia also participated in a great number of large world projects long before the Czech Republic was admitted into the European Union. Thanks to this cooperation, scimitar-horned oryx and Arabian oryx came back to their home.

MVDr. Přemysl Rabas

The forty-one-year-old director of Podkrušnohorský Zoopark in Chomutov grew up in Kadaň. After finishing his apprenticeship in Chomutov, he continued his training completed with the school-leaving examination in Louny. Later he graduated from the Veterinary University in Brno. During his studies he established contacts with a number of zoological gardens and state conservation organizations in the Czech Republic and abroad. From 1988 to 1990 he was head of department in the Genofond Conservation Institution at the Zoo in Dvůr Králové. In September 1990 he became head of the Zoological Department in the Chomutov Zoopark and its director two years later. In 2003 he was elected president of the Union of Czech and Slovak Zoos for the first four-year period. He is also a member of the presidium of the Eurasian Association of Zoos and Aquariums. In 2003 he was appointed to the Zoo Committee at the Czech Ministry of Environment and subsequently to the same committee at the Slovak Ministry of Environment. He publishes his articles in scientific and popular anthologies, journals and magazines. In 2002 he published a travel book *Pil jsem ze Zambezi* (I drank from the Zambezi). His personal interests include ethnography, archaeology and history.



MVDr. Přemysl Rabas

The Union also sponsors the satellite monitoring of black storks, a project entitled New Odyssey that has been taking place in Asia for the past three years. It was just this project which brought me to the steppes of Hustai National Park. Black storks had been rounded up in Siberia for two years. This year's task was to tag two storks in Mongolia. Monitoring of their flight will give answers to a lot of questions of ornithologists and will assist in revealing risks withstood by the birds during their winter migration. This information will then enable the adoption of more efficient provisions for their protection.

I highly appreciate the chance to participate in such projects of the Union of Czech and Slovak Zoos with my fellow colleagues.

MVDr. Přemysl Rabas
President of the Union of Czech and Slovak Zoos



Photo: Eduard Stuchlik

Young sacred ibis in the nest



Photo: Eduard Stuchlik

Young sacred ibis (back) with its mother

Sacred Ibis Does Not Lose Popularity

At the Brno Zoo, the first of this year's young sacred ibises (*Threskiornis aethiopicus*) hatched on 8th May. Over a month later, on 16th June to be exact, when the parents stopped feeding their progeny, enabling it to fledge, another young ibis hatched in the same nest. It is unusual for a female ibis to lay eggs in such intervals but it sometimes happens. It seems that the second egg was laid to the nest by another female. The latter juvenile was doing so well that it exceeded its older sibling in growth after a month or so.

Currently, the group of ibises numbers twelve members. The birds occupy an aviary equipped with two wicker baskets that are used as supports for building nests. In July, a young female ibis started to build a nest in an entirely different place. Though she had a lot of building material, she was stealing it from an already-completed nest of an older pair with a youngster. Ibises are sociable, young birds learn by watching the behaviour of older ones. After practicing how to build a nest, the young female may lay eggs next year.

The Brno Zoo has been breeding sacred ibises for several dozens of years, the first juvenile hatched in 1987. However, breeding was rather sporadic as the birds had to be transferred to a more remote building for the

winter. Since 2001, when they could enter their winter habitat right from their aviary, they have been building nests and laying eggs every year. Perhaps, the reproductive ability of the birds increased even more after their dietary regimen was changed: freshwater fish were replaced with marine ones.

Sacred ibises live in large colonies along the banks of rivers and lakes. They mostly eat invertebrates, small fish, frogs, and carrions. They belong to the category of waders. Their home is situated in Subsaharan Africa as far as Cape Town, smaller populations occupy Madagascar, Seychelles, and Iraq. In earlier times, the birds lived on the lower Nile. Ancient Egyptians venerated ibises

and believed they brought life-giving water because they appeared regularly during periods of floods. After 1850 sacred ibises disappeared from Egypt. But they are widespread to the south of Sahara. The ibis is not a migrating bird, should it appear free somewhere in Europe, it surely did not stray there from Africa but escaped from captivity.

There is an array of rarer kinds of ibises than sacred ibis. Nonetheless, the sacred ibis is still popular and bred frequently in zoological gardens. Certainly, it is due to the important role that the sacred ibis played in a significant chapter of development of the human civilization.

Eduard Stuchlik



Photo: Eduard Stuchlik



Photo: Eduard Stuchlik

The young ibis hatched last year (left) is well distinguishable from an older ibis: its head and neck are still plumbed. The neck and head of the adult ibis (right) are bare, covered with black skin so that it may forage better in the wetlands

Bojnice Zoo to Celebrate Its 50th Anniversary

The oldest Slovak zoological garden is situated in Bojnice. The zoo raises 1860 animals of 271 species on the area of 42 hectares, 21 of which are bred within the framework of EEP. The zoo is a member of EAZA and WAZA since 1994 and 2003, respectively.

Next year the Bojnice Zoo will celebrate its fiftieth anniversary. Foundation of the garden was encouraged and supported by employees of the Regional Nitra Museum in Bojnice. When creating their biological section they came upon an idea to breed animals in the moat around the Bojnice castle.

The idea was warmly accepted by the public and so the museum curators decided to rear animals not only in the moat but also in the proximities of the castle. Subsequently, this live part of the biological section was



Photo: Marian Křeháček

Young Pallas' cat.

made independent and transformed into the first zoological garden in Slovakia. It happened upon the resolution of the Council of the Regional National Committee in Nitra at the end of December 1954.

The Bojnice Zoo was established on 1st January 1955 and was opened to the public on 1st April 1955. The existence of the first Slovak zoo was supported and justified by the experience of the zoos in former Czechoslovakia (Liberec, Dvůr Králové nad Labem,



Photo: Marian Křeháček

A pair of Bornean orangutans.

Ústí nad Labem, Děčín). Until the end of May 2004, 18,499,200 visitors passed through the gates of the zoo.

At the beginning, the zoo was to have an appearance of a zoopark focused on breeding Slovak animals; its first name was Bojnice Regional Zoological Garden. Gradually, the animal collection adjusted to the development observed in other zoos and to the wishes of visitors who wanted to see exotic animals too. The Bojnice Zoo started to establish cooperation with all the zoological gardens in former Czechoslovakia and in Europe and since 1960 with the newly established zoo in Bratislava.

The Bojnice Zoo has been growing professionally and has started to achieve significant rearing results: The first lynx reared artificially in Central Europe was born in Bojnice in 1962, the first Paraguayan anaconda in European captivity and simultaneously the third one in the world was reared in Bojnice in 1972, a Pallas' cat was bred artificially there in 2001. Material and space conditions also changed significantly in the zoo. The reconstructed pavilion for monkeys was granted the title Building of the Year in 2004 for its air conditioning, and its technical and space parameters.

Educational activities should be mentioned too. The zoo school, which was the first one founded in the Czechoslovak zoos,

will celebrate its twenty-fifth anniversary this November. Nowadays, the Bojnice Zoo offers a lot of educational programmes including programmes for mobility impaired, blind and visually impaired, and deaf visitors. All these educational programmes are attended by 2 % of all zoo visitors annually.

Ivan Kmeř



Photo: Marian Křeháček

Chapman's zebra with a several-day-old foal.



The exhibit of the Mackenzie Valley Wolf is situated on the west hillside of Mniší hora



Photo: Eduard Suchlik

"Santon" (the male)



The upper lookout

Photo: Eduard Suchlik



Photo: Michal Příkora

The head of "Santon"



The lower lookout is situated near the waterfall

Photo: Eduard Suchlik

Wolves Brought a Piece of Canada to Brno

On 6th June this year the Brno Zoo opened a new exhibit of Canadian wolves. I think their run of almost one hectare will exceed with its concept of many similar buildings in the Czech Republic and abroad. Monk's Hill was enriched namely with

a piece of real Canadian nature, created on the area planted mostly with northern woods, with finishing touches of many hilly terrains and a system of lakes with a waterfall. An artificial brook takes water from the run to the neighbouring lake occupied by Canadian beavers. The whole complex is completed with a monumental wooden building imitating houses of Haida Gwii Indians who live in the north of America where wolves make their home. And it is just this building, serving as a small information centre, which provides one of the most fascinating views of the run of Canadian wolves.

The wolf belongs to the beasts of prey that fascinate both children and adult visitors. Watching the animals, many children hear once again the fairy tales about the Little Red Riding Hood, the three naughty little goats, or the three little pigs who built their houses that were destroyed by a big bad wolf. The adult is occupied with a ferocious sheep-killing beast that resembles his most faithful four-footed friend, the dog, so much. This all makes the wolf one of the best animal attractions in all zoos. If you watch the wolf through impartial eyes, you will find out that it is neither bad nor cruel, but it is an absolutely perfect predator playing its unsubstitutable role in the food chain.

The common wolf (*Canis lupus*) occupied a large area including a great part of North America, Europe and Asia, but it was driven off by man to inaccessible regions. A variety of its subspecies was created. There are wolves with black, white, grey and red fur or with combinations of these colours. However, a lot of described subspecies do not exist any more, some became extinct, some crossbred. The subspecies of wolves living in the Arctic are the biggest canines reaching a weight up to 90 kg. In comparison to them, the subspecies from the Israeli coast weighing 23 kg are wolf dwarfs.

All the wolves bred formerly and currently in the Brno Zoo are called Canadian



Photo: Eduard Svecelik

The female is a bit older than the male, and that's why she's a bit more pale

wolves. However, several subspecies are included in this designation. For example, zoologists described only eight subspecies in British Columbia and the Yukon. Our Canadian wolves belong to the subspecies *Canis lupus occidentalis*. Their fur is grey in youth, but it becomes white in maturity.

The new run is occupied by three animals. Both females were born in the Brno Zoo in 1995 and 1996. The male was born in the Norimberk Zoo in 2000. There he got the name Siegfried but after he came to Brno in April 2004 he was renamed Santon. The first Canadian wolves, i.e. females Bodo and Bola born in the Prague Zoo in 1980, came to the Brno Zoo in 1981. After some time, the male Eros came from Prague too and later, he was followed by several others. The Brno Zoo raised 16 pups, the last ones in 1997.

The Canadian wolves reared in Prague at that time came from one group raised in the Norimberk Zoo. The first wolves came to Norimberk from the Zürich Zoo in 1973, that is, to be exact, five puppies were born in Zürich from a pair coming from the wilderness. The pair came to the Zürich Zoo in 1970. The male was captured in Northern Montana near the Canadian border and the female was captured about 200 km further to the north, in the Canadian province Alberta. Thus, the Brno wolves are also offspring of these two animals.



A boy observes a pair of wolves. The male chose his mate and since then they're together

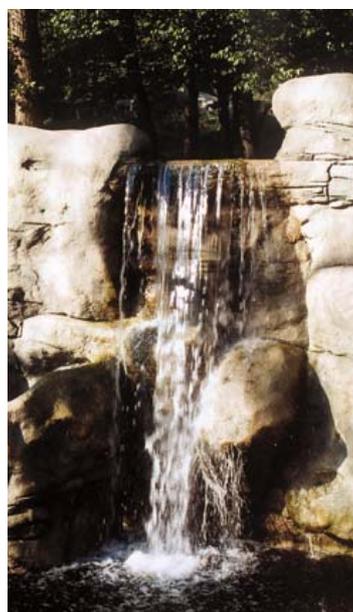


Photo: Eduard Svecelik

The waterfall in the exhibit of Wolves

The male Santon has already chosen one of the females to be his partner. It is known that the wolves live in a permanent lifelong union making a base of a pack formed of growing offspring. They only unite in bigger groups during severe winters. Thanks to their specific way of hunting in well-organized packs, they are able to survive in the areas where an individual would die.

Only the strongest and healthiest wolves reproduce both in captivity and in the wild. They are often relatives but their crossbreeding doesn't have a negative impact on their qualities in further generations. That is

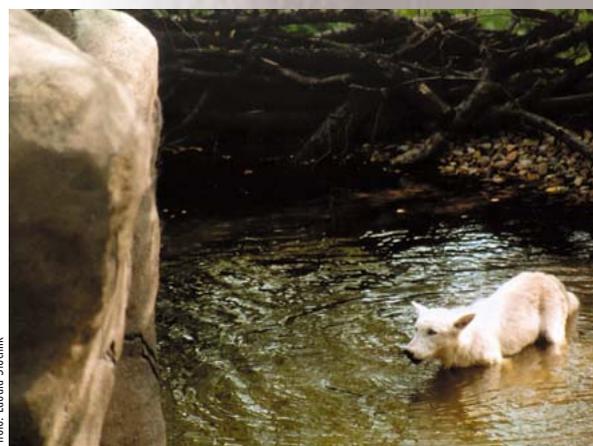


Photo: Eduard Svecelik

The pool above the waterfall



Photo: Eduard Svecelik

After the bath

why our wolves remain beautiful and without apparent negative signs of inbreeding, although they come from one pair. We hope that Santon has made a good choice and we will all enjoy healthy pups next year.

Ing. Jiří Gábrš



Photo: Eduard Svoblik

The terrace in front of the Safari exhibit is the place, where visitors often contravene the ban on feeding the animals

Don't Feed the Zoo Animals

During weekends, christening of newborn animals or other public cultural events the Brno Zoo is visited by great numbers of people, which surely delights the zoo employees. However, successful days have their reverse side as well – the health of reared animals is suddenly impaired, intestinal complications appear in increased numbers. Probably all zoological gardens all over the world face, to a certain extent, the fact that their visitors do not observe the prohibition of animal feeding.

The visitors caught at committing the offence usually claim they wanted to improve the animals' feeding a bit. This motivation is unfounded, no zoological garden, perhaps except those ones situated in warring countries, does not dare to breed undernourished animals. When lack of money is a concern, all other activities are stopped but feeding is never stinted.

The above so-called improvement of feeding may have horrible consequences. Dozens of "feeders" force themselves on a few animals in one day. After the animals consume a high number of crackers, hot-dogs or other delicacies brought from visi-

tors' homes, a disproportion between calories intake and energy output arises, as well as other problems. Intensive fermentation of glycodes starts in the animals' digestive systems and livers are not able to compensate the violated biochemical balance. According to the entrails of two female reindeers which died in Brno last year, it is supposed that such overfeeding caused their demise.

More informed visitors bring animals stale bread which does not ferment so much. However, it is often full of toxin-producing mildew. Some people scatter chestnuts into the animal corrals. Gamekeepers feed chestnuts mainly to wild boars, moufflons and fallow deers, but the animals in the zoo do not move as much as forest animals and nobody will hunt them for their meat. Moreover, not every animal is able to chew the hard fruit. Eighteen undigested chestnuts were found in the rumen of a female capricorn this summer.

I think animal feeding is a source of entertainment for undisciplined zoo visitors. "For my money I can do here what I want," snapped back a mother who coolly cut down vegetation with her children to feed the

giraffes. If she passed them a piece of branch, it was a natural feed for the giraffes. But people do not notice if they hold by accident a poisonous lily of the valley in their hands. A cow on the meadow knows very well it must not eat meadow saffrons, but a giraffe knows nothing about Central European plants. Nevertheless, it gets various delicacies, such as sweets or ice cream, over and above in Brno (cotton candy, the most-favoured treat, had to be withdrawn from sale).

Some zoological gardens sell low-calorie provisions to visitors for feeding animals on exhibit. The use of such feed does not eliminate the risk completely, particularly dominant males are jeopardized as they are able to swallow huge batches. Even in this case, the practice confirms the popular saying that a hundred nothings killed the ox. It also makes us realize how misleading it is to think that an animal is sensible enough to know when to stop or that an animal knows that for example a chocolate that tastes so wonderful can easily be lethal.

The culture of a nation is also recognized according to the behaviour of people in the zoo. There are countries where prohibitions are observed much more, though only because of severe sanctions. The experience from our zoo reveals the attempt to circumvent prohibitions is deeply rooted in the Czech mentality. While we are not able to perceive the needs of animals yet, our own desire for diversions brings us closer to them.

Jan Kamenik



Photo: Eduard Svoblik

The Takin looks minatory, but it is a trusting animal that eats anything the visitors give to it

Twenty-Three Iguana Siblings

A female of a four-member group of adult green iguanas became famous for its record laying of 32 eggs. In the course of June, 23 juveniles hatched gradually as the eggs were laid in different intervals. In 1999, the green iguana multiplied successfully for the first time in the Brno Zoo and since then 115 juveniles have hatched on Mniší hora. Since 2002, green iguanas born in the Brno Zoo have participated in the reproduction cycle.

The Zoo Rehabilitates Seized Turtles

Since 14th July, the Brno Zoo has been taking care of almost three hundred turtles seized by custom officers from a businessman from Zlín. They are mostly Hermann's tortoises, four of them are Hors-



Photo: Lubomír Štehlík

The consignment of the seized turtles is being unpacked

field's tortoises. A lot of them came to the zoo in a bad state of health. They were mostly dehydrated, their eyelids were puffy, their soft shells showed evidence of vitamin and mineral deficiency, and they suffered from bronchitis. More than 70 turtles were ill. Six dead ones were found in the consignment, another 38 turtles had died by the middle of August. The fate of the young turtles (at present, approx. 7 cm long) will be decided by court. Custom offi-



Photo: Eduard Študlík

The Green Iguana hatchlings

cers seized seven hundred turtles, the Prague Zoo took in approximately four hundred of them.

Shell Exhibit

The shell exhibit entitled Treasures of the Seas and Oceans was opened by the Brno Zoo on 1st July. The exhibit situated in the cellar of building no. 6 in Radnická Street, which houses the Permanent Aquarium Exhibition, is open to the public until the end of the year and includes mostly shells of sea snails and clams. Visitors can see seven thousand mollusc shells of six hundred species, from half-centimeter Carychiums to half-meter giant tritons, in thematic expositions and in illuminated display cases under the gothic vault. Most exhibits come from The Moravian Museum collections. The exhibit also features the production of pearls, the processing of nacre and the use of shellfish in the food industry.

Two Brave Little Beavers

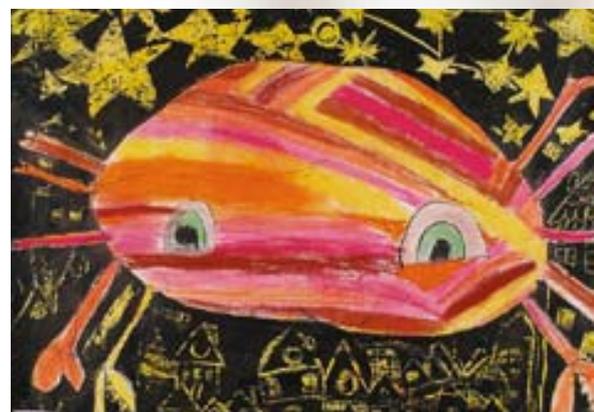
The group of Canadian beavers, which came to Mniší hora from the Chomutov Zoo a year ago, got used to the new milieu very well. One of females gave birth to twins on 28th July. Several days after birth, the cubs found a way from the castle by passing

through the hole to the lake where their mother taught them lessons of swimming disciplines.

Animals among the Stars

Until the end of summer holidays, the minigallery in the Tiger restaurant exhibited drawings and paintings sent to the children's literary and art competition Water Animals among the Stars. The competition was organized jointly by the Brno Zoo and the M. Kopernik Observatory and Planetarium. Of the total number of 111 participants, 14 pupils were awarded. Competitive works described constellations in whose name there is an animal related to water.

(red)



An octopus as seen by Michaela Křenková (7 years)



Photo: Eduard Stuchlik

Baby yellow-handed Tamarins (half a year old)

The First Yellow Handed Tamarins Raised

The Brno Zoo has been rearing yellow handed tamarins (*Saguinus midas*) since 2003 when a male born in 2001 and a female born a year later were acquired. In February 2004, the female gave birth to twins. Though it was their first delivery in captivity, the infants developed well. In the first days, mainly the father took care of them and handed them over to the mother only for nursing and grooming. At first, it was not possible to find out how the juveniles were being handed over or to discover the intervals between feedings because the parents were very watchful.

During suckling the young cling to their mother's back. They are blind in the first days of their life and cannot probably find their way to the milk. The mother must exert great effort to show them the way. She finds the smallest crevice, in this case between a crate and the ceiling of the dormitory. She lies on her back and starts to turn with the infants who are forced to move from their mother's back to her side. The mother takes advantage of the movement; she grasps one baby and puts it to the nipple. The juveniles try to get free and get back to their mother's back where they probably feel best. The mother tries to teach her young how to find nourishment themselves.

Evidently, such a way of feeding tires her very much. The described behaviour was observed in the first three days of life of the infants. Owing to the risk of rejection of the babies due to unexpected stress, longer intervals were left between observations. Thus, many pieces of interesting information were lost, but it was in the interest of successful raising the tamarins naturally.

Further observations revealed that the infants were still blind on the sixth day. We saw their eyes open after a week. The method of handing over the babies was discovered at the end of the third week of their lives. We

saw how the male sat down by the female, gripped the infants with his hands and put them on himself. They moved towards his back. The male hands over the young to the female in the same manner. On the 27th day, the infants were climbing on branches by themselves. The mother let them free for about half an hour. Then she caught them and put them on her body again. Sometimes the parents have the infants separated (mostly during nursing), sometimes both of them are with father, another time with mother. On 25/03/2004, the second month of their life started without complications.

The infants had their first solid food on 6th April. They ate pieces of banana brought by mother and started to go for pap by themselves. They were almost independent in moving along the dormitory. They sometimes climbed on their parents' backs. Their growing was intensive in that period. We did not find out their weight or growth because their raising was successful and so we did not intervene.

The baby tamarins went for solid food as early as on 5th May and reached about one third of their parents in growth. Currently, an outside run is available to them where staying in the sun is evidently doing them good. We believe they will live to maturity in health.

Ing. Peter Lukáč



Photo: Eduard Stuchlik

Baby yellow-handed Tamarins (half a year old)

Sensible Water Management in the Zoo

To reconstruct Monk's Hill into a zoological garden meeting all current requirements of animal breeding and exhibiting is only possible with significant improvement of water management in the given locality. The most relevant problem seems to be the improvement of the service water distribution system. That is why, based on the directive determined by the zoo, the Hydroprojekt company prepared a feasibility study for the construction of a new service water takeoff object with a pumping station. The study is waiting for approval of the Brno City Council.

Among other things, the new object would eliminate risks of using the outdated supply conduit bringing raw water from the Brno Lake. This system built in 1940 was handed over to the city and, simultaneously, to the zoo's use as late as last year. The study also recommends reconstruction of the service water main connected to the supply conduit and distributing service water in the zoo. Though the lake water shows an increased content of cyanobacteria, it meets technical purposes such as plant irrigation or cleaning of equipment.



Photo: Eduard Suchlik

One of the animals that fully depend on water is the Beaver

Should it be necessary from the qualitative point of view, individual places of consumption will be equipped with water-treatment plants so that the water could also be used for breeding purposes.

The supply conduit starts in the collecting basin on the bottom of the lake, at the elevation point of 214.58 m above sea level. From there, 250 m of DN 1000 mm concrete piping leads as far as the dam and through the dam and then it is connected to 580 m of DN 600 mm cast-iron piping ending in the former area of Technical University (VUT) in Rekreační Street. There, the supply conduit is connected to the zoo's service water main. Currently, the supply conduit is in a state of disrepair, with many leakages.

The service water main leads service water from the former VUT area by DN 150 mm steel piping 287 m long to the zoo's lift station and then by the DN 150 force main 530 m long to the Hydroglobus water tower having the volume of 200 m³. The water tower is situated at the highest elevation point of the zoo, 309.11 m above sea level. From there, water runs through supply lines Z-23 to individual places of consumption. The length of DN 100–150 supply lines is 1,490 m. This water main was mostly built



Photo: Lubomir Stehlik

A revolving sprinkler in the South American Exhibit

by zoo workers in very difficult field conditions from 1971 to 1975. In respect to the current state of disrepair of the distribution lines, the use of service water is very limited, on average 5000 m³ per year. Thus, drinking water is used for needs where service water would do. That is why, the consumption of drinking water is relatively high – in 2002, it was 25,500 m³.

According to the feasibility study, the sensible water management in the Brno Zoo may be achieved by two implementations: Firstly, by construction of a bank object with a pumping station for service water takeoff from the Svatka river under the dam, and secondly, by putting the current water conduit into a harmless state filling it with a mixture of ash and cement along its whole length.

Substitution of drinking water with service water where possible will bring considerable financial savings besides a trouble-free supply to the whole zoological garden.

Ing. Josef Kundera, CSc.



Mackenzie Valley Wolves