#### JOSEF JANEČEK

# BREEDING STATION FOR EXTREMELY ENDANGERED ANIMAL SPECIES

J. Janeček: Breeding Station for Extremely Endangered Animal Species. – Geografie – Sborník ČGS, 103, 3, pp. 362 – 366 (1998). – The idea and endeavor of putting through and realising the project Breeding station for extremely endangered animal species in Ralsko. The development and preparatory works on the project from 1994 to 1997 and presupposition for 1998.

KEY WORDS: breeding station - endangered animal species - preservation programs -

financial and technical support of NATO/CCMS.

## 1. Introduction

The concomitant phenomenon of technical development and progress in recent decades is the unimaginable devastation of the Earths environment, followed by a catastrophic decrease in the number of wild animals in their natural habitats. Ecosystems with which particular animal species are connected are being liquidated. This situation is partly due to bands of poachers who, envisaging big profits, shoot some animals and trade in them or slaughter them as trophies. Other causes are natural disasters, fires and civil wars. A dramatic decrease in animal numbers in some species can result in their total extinction, as has already happened in some cases.

One of the urgent problems of contemporary civilization is the protection of nature and with it the connected question of the rescue of endangered animal species. Zoos are becoming a very significant element and sometimes are the last refuge in the fight to rescue rare and endangered species. A conception for a project was made by the World zoological gardens association, presented by the International Union of Directors of Zoo Gardens (IUDZG), European Association of Zoo Gardens and Aquaria (EAZA), which resulted in a system of protection programs for particular continents. For Europe there is the so-called European Preservation Programs (EPP).

Data for the realization of the preservation programs was compiled, but problems exist in that zoos don't have enough room for some species. Reproduction of big animals especially brings a lot of almost unsolvable problems, so it is necessary to look for other ways. One possibility is to build extensive runs – breeding stations. This possibility is offered by the former military area Ralsko, where we found the right area of 250 ha at the location Syébořice.

To make concrete the breeding station project, a building study and realization study were carried out. I delivered information on the purpose of building the breeding station at a NATO council scientific conference in 1995, which took place in Liberec. The project was received with great interest and

an extraordinary response. The expert comission NATO/CCMS, which deals with reusing former military areas, even visited the area of interest, got closely acquainted with the presented project and recommended that the Czech republic ask NATO for financial and technical support for this project.

# 2. The project proposal

# 2.1 Area characteristics

The former military training zone Ralsko occupied  $250~\rm km^2$  and was the second largest military area in the Czech Republic. It was founded in 1949. In 1968-1991 it was used by troops of the Soviet army. After their withdrawal it was closed. At the present time we are looking for a new use for it.

Ralsko is above all an exceptional area from the natural values point of view. According to expert data nearly 90 % of its area hasn't been touched by human influence in the last 50 years. It is rare in central Europe to find such a large and continuous area left, in essence, to natural development. From this point of view Ralsko can be considered an interesting and valuable area. It's one of two areas in the C.R., which have been proclaimed as "biogenetic reservations in the European network" (ECONET).

The founding of the breeding station is projected on approx. 250 ha near the former village of Svébořice, including the building of a necessary technical and service background. The selected area complies with a number of important conditions and requirements: enough big space, favourable weather conditions, very well-preserved nature and landscape, enough feed, sources of drinking and utility water, isolation from settlements, quiet, suitable ground, built-up thoroughfares and technical infrastructure, closeness of Liberec and Prague cities and zoos. Another contribution to realization is the possibility of problem-free aquisition of the needed lands and buildings, which are state property. Closeby, there is the former military airport and base Hradčany with a still usable area and estate of flats and buildings still free following the depature of the Soviet army.

The projected area is the former Soviet army shooting-range. It contains mostly deforested areas, ponds chain, the remains of liquidated settlement in Svébořice and buildings constructed during the army occupation.

Part of the selected area is subject to the monitoring of the quality of underground water, which is connected with the chemical method of mining and working of uranium in this area during the last 30 years. In 1994-95 pyrotechnical research and the clean-up of buildings and their immediate surroundings were carried out at the same time. Pyrotechnical clean-up for the needs of the station to a depth of 0.5 m will continue in the framework of the project realization.

# 2.2 Economical analysis

The breeding station will indisputably attract scientific and educational activities, which Czech as well as foreign universities, high schools and research institutions should actively get involved in, including in financing. The high appeal of the bred animals as well as the appeal of the nature and landscape will attract tourism and specialized groups of visitors. Therefore part of the proposed project consists in modifying the nearest surroundings –

revitalizing the ponds chain, followed by their reuse, and also the reconstruction of presently free housing and other funds for accommodation and scientific-educacional needs.

The station is purpose-built to breed rhinoceros as well as 80 to 120 other animals of different species, e.g. genetically important males of endangered animal species, which there is now no room in other zoos for and whose reproduction is decreasing due to that scarcity of room. Part of the project is also the building of a quarantine station.

A professional estimate of budget expenses for the building of the breeding station, including the necessary pyrotechnical clean-up and building of the necessary technical and service backgrounds for staff and visitors, arrived at the figure of 600 mil. CZK. A professional estimate of the operational expenses for the breeding station itself is approx. 10 mil. CZK annualy for the first period. The building of the breeding station in this area and at this time presents an exceptional and unrepeatable chance to use, preserve and reproduce the genetic potential of endangered animal species. The investment cannot be calculated only in ecomonic terms. In Europe they haven't yet found a suitable area of the right size, which could be used for this purpose. The freeing of the former military-used area at Ralsko and all the recently done preparatory work form very hopeful expectations for the realization of this project.

# 2.3 Project realization

The breeding station project fits with research already done in this area. It also corresponds with the approved Land-use Plan of Ralsko, which was approved by the Czech government in 1994 and is a part of the building study Hvězdov-Svébořice. The project proposal comes mostly from requirements and conditions needed for the breeding of endangered animals. The character of the landscape, its weather and geologic conditions, but also the availability of enough basic kinds of feed and water are favourable for breeding in this area. Another advantage consists in the possible use of some present buildings, and also the nearness of other usable buildings and areas.

The whole area of the breeding station will be delimited within an izolation zone and secured against the entry of other animals and persons. A throughflowing stream will form natural watering-places. The area is well accessible by a road from Mimoň. The movement involved in building and later mechanization inside the station is possible on the still-existing tank tracks. The local drilled wells can be used as a drinking-water supply. It will be partly possible to make use also of the distributing network of the technical infrastructure. However it will be necessary to build a sewage system and to cleanse drain water. The construction process is intended to be in three phases.

# 3. The latest development

In April 1997 on the basis of the presented project the expert group NATO/CCMS visited the CR. Participants viewed the mentioned area Ralsko, including its surroundings and were shown a completed pyrotechnical cleaning. In the proceedings, requirements were raised for adding to the project, concerning mainly contents specification, expected expenses and the balance of the investment already made in the prepatory works.

At the turn of April and May 1997 the first sitting of the 2nd Pilot study phase took place in London. The breeding station project was put forward together with other projects for collective judgement and the choosing of the best, which could then apply for the financial and technical support of NATO. The project was among six assessed and registered for a presentation, which took place on 18. – 19. September 1997 in Washington, U.S.A. According to the conclusions made in London, it was necessary to clearly express and prove the necessary guarantee and interest of the state, mainly from the point of view of guaranteeing its future running. Dealings at ministries for this purpose were very difficult and complicated, because following the floods in Moravia there were quite different priorities concerning what needed solving.

The main program of the dealings in the U.S.A. at the Institute of Defence Analysis in Alexandria, Virginia consisted in meeting the representatives of industrial and financial communities from the U.S.A and Canada. It was a meeting to attract potential investors to the projects put forward. The presentation of the Czech delegates at the meeting mentioned was considered the best prepared and most successful. The project was added to a further offer of possible continued utilization . The next meeting of the pilot study took place on 6.-7.10.1997 in Berlin. The evaluation of previous presentations of the proposed projects of former military area reuse, which took place in U.S.A and Germany, reciprocal comparison, information, organization of the course and determining the goals for the next period was carried out in Riga in Latvia 29.-31.10.1997.

According to information obtained from Dr. Tumarkin, an IDA expert, who is insolved in the NATO-CCMS Pilot Study and who during his visit to ČR also saw the zoo in Liberec, the dealings will continue in 1998 too. So the hope for help coming from the NATO remains.

#### References:

HEREJK, J. et al. (1995): Chovná stanice zvláště ohrožených druhů zvířat Ralsko. Feasibility Study.

HEREJK, J. (1995): Připomínky k závěru hodnocení stavby chovné stanice zvláště ohrožených druhů zvířat Ralsko.

JANEČEK, J., POŠTOLKA, V. (1996): Chovná stanice pro zvláště ohrožené druhy zvířat v bývalém vojenském výcvikovém prostoru Ralsko.

JANEČEK, J., ŠVANCER, P. et al. (1995): Urbanistická studie – Chovná stanice zvláště ohrožených druhů zvířat Ralsko. Building study.

ŠMÁKAL, L. (1995): Odborný posudek stavebně technického stavu objektů tankové střelnice Svébořice se zaměřením na možné využití objektů pro účely chovné stanice a předběžný odhad nákladů stavební části jejich využití.

POŠTOLKA, V. (1997): Nové využití bývalého vojenského prostoru Ralsko v ČR – projekty – náměty – možnosti.

Návrh územního plánu velkého územního celku (ÚPn VÚC) Ralsko. (Project of area planning of big area unit Ralsko approved by government ČR decree nu. 722 from 19. 12. 1994.)

### Summary .

# BREEDING STATION FOR EXTREMELY ENDANGERED ANIMAL SPECIES

Technical development and human activity has had an unfavourable influence on the environment of the Earth and in connection with that also on the life of some animals. One of the goals of the present civilization is to avoid it. A significant share of zoological gardens

have. A conception of preserving programs at the European and world levels has been worked out. The lack of space is the main barrier to success. A suitable solution is the breeding station, built in a large enough area with the possibility of big runs.

When looking for a possibile new use for the former military training area at Ralsko an unique opportunity was found. The area of 250 ha fully complies with the geographical, weather, geological and strategic conditions needed for founding the breeding station. The idea was also supported by the expert comission NATO/CCMS, which deals with revitalization of former military areas. They recommended the CR ask for technical and financial help from NATO to realise this project.

In the breeding station it's intended to breed rhinoceros and 80-120 other animals of different species e.g. genetically important males, endangered animal species, who there is no room in other zoos for and whose reproduction is decreasing. A component is also the quarantine station. The breeding station would also serve for scientific and educational activities.

A professional estimate of budget expenses for the building of the breeding station including the necessary pyrotechnical sanation and building of the necessary technical and service backgrounds for staff and visitors is 600 mil. CZK. A professional estimate of the operational expenses on the breeding station itself came up with the figure of approx. 10 mil. CZK annually for the first period.

The breeding station project was dealt with 1997 May at the sitting of the pilot study NATO/CCMS in London. The next presentation was in the U.S.A in September. In October the project was evaluated in Berlin and Latvia. The dealings should continue this year. It is important, that the hope of recieving the support from the NATO remains.

(The author is with Liberec ZOO, Masarykova 1347, 460 01 Liberec.)

Arrived at the editors office on April 20, 1998 Recommended for publication by Václav Poštolka and Zbyněk Ryšlavý