

EAZA turtle rescue action, two years later

by Ivan Rehak, Chair, EAZA Amphibian and Reptile TAG, Prague Zoo, Czech Republic

Chilly weather ruled most parts of Europe on 17 January 2002. Frozen roads were extremely unfriendly for drivers. Nevertheless, trucks from British, Czech, Danish, Dutch and Polish zoos were approaching Amsterdam, and a KLM aircraft coming from Hong Kong had the same destination. Nearly one thousand confiscated turtles, originally intended for Chinese food markets, were on board. These turtles would be transported to about thirty EAZA member zoos, as part of the turtle rescue action (see EAZA News 38/2002, p.18-19). Four weeks of feverish efforts were rewarded – at around 18:00h 185 boxes with turtles arrived at Schiphol Airport and the same night the turtles were all on their way to new homes. The first period was a struggle for the survival of the stressed, and in most cases severely damaged, turtles. The losses were reduced significantly thanks to heroic efforts and professional skills of veterinarians, curators, keepers and other involved specialists.

Genetically valuable input

The presence of five southeast Asiatic geoemydid turtle species in the shipment increased opportunities to form *ex situ* EAZA populations. The EAZA Amphibian and Reptile TAG, in close cooperation with the EAZA Executive Office, evaluated the best ways to manage the confiscated turtles. Five ESBs were proposed, and were approved by the EAZA EEP Committee during 2002 and 2003:

- Spiny hill turtle ESB (*Heosemys spinosa*), studbook keeper Eric Ruivo, Lisboa Zoo;
- Malaysian giant turtle ESB (*Orlitia borneensis*), studbook keeper Ivan Rehak, Prague Zoo;
- Giant Asian pond turtle ESB (*Heosemys grandis*), studbook keeper Ivan Rehak, Prague Zoo;
- Malayan box turtle ESB (*Cuora amboinensis*), studbook keeper Aleksander Niwelinski, Plock Zoo;
- Black marsh turtle ESB (*Siebenrockiella crassicollis*), studbook keeper Aleksander Niwelinski, Plock Zoo.

Status in the wild

All five species suffer uncontrolled and overwhelming exploitation for food and traditional medicine in their range countries. Collection of these turtles has shifted from incidental local use to an intensive, export-oriented business, resulting in concentrated harvesting across wide areas. Removing significant numbers of mature, reproducing individuals particularly impacts species with life history strategies involving low annual reproductive output sustained over a long adult lifespan. Abundance of wild populations has rapidly declined, but the harvesting in unsustainable numbers continues. Additionally, turtle habitat is being fragmented, polluted and destroyed at an alarming rate.

All turtle species included in the Hong Kong shipment are listed in the IUCN Red List as endangered or vulnerable, and are all now included in CITES II. They represent ecologically and ethologically different (mostly poorly known) forms covering a wide spectrum of ecological niches occupied by geoemydids. This makes them attractive for exhibition, and valuable for education, research and as models for improving our know-

ledge and ability to manage turtle *ex situ* populations. The management of *ex situ* populations is an important task: the number of critically endangered turtle species is increasing rapidly and captive reproduction is now an important component in their conservation.

STATUS OF THE ESBs

Spiny hill turtle ESB

The spiny hill turtle, a primarily terrestrial species distinguished by a bizarre appearance, is restricted to small, isolated, frequently critically endangered populations. Twenty-five EAZA member institutions in nine countries (and five private collections) collectively received 283 animals from the rescue operation. The post-import mortality rate was unexpectedly high (57%), predominantly caused by digestive tract problems associated with stress and consequent lowered immune system efficiency.

Malaysian giant turtle ESB

The impressive Malaysian giant turtle, a highly aquatic species associated with large fresh water bodies in Borneo, Sumatra and Malaysia, is among the largest geoemydid turtles (exceptionally over 100 cm). This species is extremely rare in captivity. The 126 animals received during the Hong Kong rescue action form the basis of the European captive population. The body condition of the imported animals was very poor.



Malaysian giant turtle

Photos: Prague Zoo

Collection Planning

Fortunately, the mortality rate of 12% was not as high as originally expected, thanks to effective post-transport veterinary treatment and care in Rotterdam Zoo and Burgers' Zoo, Arnhem, as well as to the efforts of zoo staff receiving the turtles in their collections. This species was distributed among 16 EAZA member institutions in five countries; the shortage of males limited establishment of more groups. Because of their size and extreme intraspecific aggression, these turtles have remarkably large space requirements. Progress has been made in husbandry of this species: we have learned how to significantly reduce incidence of dangerous aggressive encounters, how to meet eco-ethological as well as nutritional requirements of Malaysian giant turtles, and we were able to select groups with promising sexual activity, although successful reproduction has not yet occurred.

Giant Asian pond turtle ESB

This terrestrial swamp turtle from continental southeast Asia is the largest representative of its genus. The rescue action resulted in allocation of ninety specimens among 12 EAZA member institutions in seven countries. The post-import losses of 25% occurred in most cases soon after the turtles arrived. The animals that survived are stable and provide us with excellent opportunities to form a strong *ex situ* population with numerous potential founders. The good news from Prague



Giant Asian pond turtle

EEP Committee

The following new EEPs, ESBs, new TAG (co-)chairs, EEP (co-)coordinators and European studbook keepers were approved:

NEW PROGRAMMES

SOUTHERN CASSOWARY ESB

(*Casuarius casuarius*)
Ing. Joost Lammers, Alphen, the Netherlands

ROCKHOPPER PENGUIN ESB

(*Eudyptes chrysocome*)
Ms. Sue Woodgate, Alfriston, United Kingdom

SLENDER LORIS EEP

(*Loris tardigradus nordicus*)
Dr. Rüdiger Dmoch, Frankfurt, Germany

RED BELLIED TAMARIN ESB

(*Saguinus labiatus*)
Dipl. Biol. Michael Schröpel, Magdeburg, Germany

RED TITI EEP Upgraded from ESB

(*Callicebus cupreus*)
Mr. Darren Webster, Blackpool, United Kingdom

NEW TAG (CO-)CHAIRS

EAZA FALCONIFORMES TAG

Mr. Campbell Murn, Andover, United Kingdom
(replacing Jemima Parry-Jones)

EAZA BEAR TAG

Drs. José Kok, Rhenen, the Netherlands
(replacing Lydia Kolter)

NEW EEP COORDINATORS

ANDEAN CONDOR EEP

(*Vultur gryphus*)
Mr. Peter Litherland, Colwyn-Bay, United Kingdom

MOLUCCAN COCKATOO EEP

(*Cacatua moluccensis*)
Mr. Ron Willis, Dublin, Ireland

RED-TAILED AMAZON EEP

(*Amazona brasiliensis*)
Mr. Colin Bath, Paignton, United Kingdom

RED-BROWED AMAZON EEP

(*Amazona rhodocorytha*)
Dipl. Biol. Matthias Reinschmidt, Puerto-Cruz, Spain

BLUE-THROATED MACAW EEP

(*Ara glaucogularis*)
Dipl. Biol. Matthias Reinschmidt, Puerto-Cruz, Spain

ALAOTRAN GENTLE LEMUR EEP

(*Haplemur griseus alaotrensis*)
Dr. Tim Wright, Jersey, United Kingdom

BABIRUSA EEP

(*Babyrousa babyrousa*)
Dr. Thomas Kauffels, Kronberg, Germany

SOMALI WILD ASS EEP

(*Equus africanus somalicus*)
Dr. Olivier Pagan, Basel, Switzerland

HARTMANN'S MOUNTAIN ZEBRA EEP

(*Equus zebra hartmannae*)
Mr. Erich Kocner, Usti-nad-Labem, Czech Republic

EASTERN BONGO EEP

(*Tragelaphus euryceros isaaci*)
Dr. Jake Veasey, Woburn, United Kingdom

ARABIAN ORYX EEP

(*Oryx leucoryx*)
Mr. David Field, Whipsnade, United Kingdom

NEW STUDBOOK KEEPERS

BINTURONG ESB

(*Arctictis biunturong*)
Mr. Clive Barwick, Colchester, United Kingdom

LOWLAND NYALA ESB

(*Tragelaphus angasi*)
Ms. Lucilia Tibério, Lisboa-zoo, Portugal

Collection Planning

Zoo is that we already succeeded in forming a breeding group and three clutches of fertile eggs are currently in our incubators. Furthermore, we reared one young (hatched on 13 May 2002) from an imported female.

Malayan box turtle ESB

The Malayan box turtle is a smaller, morphologically remarkable poly-typical terrestrial swamp turtle. The import of 285 new specimens (mortality rate of about 33%) increased the number found in EAZA zoos significantly. The turtles were allocated to 17 institutions in nine countries (partly also to private persons under the umbrella of the European Studbook Foundation). Currently, the ESB manages nearly two hundred animals. Two viable babies were born in Prague Zoo in 2003.

Black marsh turtle ESB

The black marsh turtle – a smaller, rather aquatic turtle, relatively widely distributed in southeast Asia – was uncommon in zoo collections before the rescue action. Eighteen EAZA member institutions in eight countries received 204 imported specimens (mortality rate was about 50%). The ESB registers approximately one hundred animals at the moment.

The way forward

We have stabilised promising captive populations of all five species imported two years ago. We are optimistic about the growth of the populations, although successes in reproduction of the confiscated animals are still sporadic. The turtle crisis continues, but fortunately, conservation efforts are becoming increasingly intensive. Remarkable

progress has been achieved during the last two years: additional turtle taxa have been included in CITES Appendices, the Turtle Conservation Fund published the 'Global Action Plan for Conservation of Tortoises and Freshwater Turtles', and an International Centre for the Conservation of Turtles was opened in Münster Zoo, and other work also goes on.

The EAZA Amphibian and Reptile TAG feels the necessity to increase public awareness of the global turtle crisis. A preliminary proposal for the EAZA Turtle Campaign 2005/2006 was presented in Leipzig during the EAZA Annual Conference 2003. Two years ago the Hong Kong rescue action made it clear that it is an excellent time to focus on endangered turtles. We did not miss that message.

Directory Updates

PERSONALIA

Mr. David Armitage is the new EAZA contact person for **Baguley Brow Farm**, United Kingdom, as of November 2003.

Mr. Miguel Oti is the new director of **Parque de la Naturaleza de Cabarceno**, Spain, as of 1 December 2003. He replaces Mr. Jose Miguel Acosta Berruero.

Dr. Mirko Sinkovic is the new director of **Palic Zoo**, Yugoslavia, as of 1 December 2003. He replaces Dr. Ignacije Tonkovic.

Drs. Henk Hiddingh is the new Chairman of the **Dutch Zoo Federation (NVD)**, the Netherlands, as of 4 December 2003. He replaces Dr. Leobert de Boer.

Ms. Dafna Tzuri is the new EAZA contact person for **Hai Park**, Israel, as of December 2003. She replaces Mr. Shay Oved.

Ms. Gwen Fraser is the new EAZA contact person for **Chessington World of Adventures**, United Kingdom, as of January 2004. She replaces Mr. Phil Barron.

Ms. Sonia Tortschanoff, DVM, is the new EAZA contact person for **Le Pal**, France, as of February 2004. She replaces Mr. Arnaud Bennet.

ADDRESSES AND TELEPHONE/FAX NUMBERS

Mr. Carsten Knott is the new EAZA contact person for **Berufsverband der Zootierpfleger (BdZ)**, Germany, as of February 2004. He replaces Mr. Peter Zwanzger.

The new fax number for the **Royal Zoological Society of Antwerp**, Belgium, is:
Fax: +32 32024547

The new contact details for **Berufsverband der Zootierpfleger (BdZ)**, Germany, are:
Egerlander Weg 9
61476, Kronberg
Tel: +49 6921236984
Fax: +49 6921237855

The new street name for **Zoo Parco 'Punta Verde'**, Italy, is:
Via Scerbanenco, 19/1

The new address for **Novosibirsk Zoo**, Russian Federation, is:
71/1 Timiryazeva Str.
630001, Novosibirsk-1

The new PO Box number for **Arabia's Wildlife Centre**, United Arab Emirates, is: 29922

