

NEWS ITEMS

FAO/UNEP ANIMAL GENETIC RESOURCES DATA BANKS - A PROGRESS REPORT

An outline of the work being undertaken on this subject was given in the last issue of *AGRI* (No. 3). This note briefly brings the latest news. The Pilot Trials to investigate a methodology for preparing genetic characterizations of indigenous breeds of livestock and poultry in Africa, Asia and Latin America were concluded at the end of 1984. Regional evaluation meetings were held in Bangkok for the trials in Malaysia, Sri Lanka and Thailand, and in Maracay for the trials in Mexico and Venezuela. The trials in Africa were of a different nature, since a regional planning meeting was held in 1983, which resulted in individual scientists working on the subject. Their reports were received in 1984.

A consultant expert in computer system analysis was present at the regional evaluation meetings. He subsequently worked on the experiences gained in each region, and made recommendations on the most suitable hardware and software for data banks on animal genetic resources.

The recommendations from the regional evaluations and from Africa were then studied, and compiled by two experts with the aim of taking all the desirable features from each trial and compiling them into a uniform system suitable for global use. FAO/UNEP have been committed to the definition of such a unified methodology for data banks for animal genetic resources. This is needed to achieve the objectives of making genetic characterizations available to users throughout the world in an easily accessible form, without loss of any important information. The two experts are Mr. John Turton, Director of the Commonwealth Bureau of Animal Breeding and Genetics in the UK, who worked with the mammalian species, and Dr. Roy Crawford, Professor in the University of Saskatchewan, Canada, who worked with domestic bird species.

These two experts produced draft Descriptor Lists for each species and also draft Descriptors for the Environments. With experience coming from 3 regions of the world and from the many scientists who had worked on the Pilot Trials, they had a wealth of information from many natural environments and different management systems. These, together with a recommended methodology for the Data Bank and the recommendations of the systems analyst, were presented to an FAO/UNEP Expert Consultation which was held in Rome from 17 to 21 June 1984. At this Consultation, experts in each species and with interests in different parts of the world, and connections with regional animal genetics and production professional societies, considered these draft descriptor lists and methodology with the aim of defining the approved FAO/UNEP methodology. A full report of the recommendations of the Expert Consultation will be given in the next issue of *AGRI*.

PRZEWALSKI'S HORSE

The Przewalski Horse (*Equus Przewalskii*), also known as the Mongolian Wild Horse, was first described by the Russian Zoologist Poliakov in 1881, who named the horse after Colonel Nikolai Przewalski, a Polish-born soldier in the Czar's army. Colonel Przewalski had obtained the skull and skin of a wild horse in the Mongolian District of Kobdo. Przewalski's Horse is the only true wild horse. The feral horses of the world are all derived from the domestic horses (*Equus caballus*). The last confirmed sightings of the Przewalski Horse in the wild in Mongolia were in the 1960s. Fortunately, living Przewalski's Horses were brought from the wild in Mongolia from 1899 onwards, and in 1980 there were 388 animals in captivity in some 70 institutions throughout the USSR, Europe and North America. Many of these are in zoos in small numbers. The largest group is at Askaniya Nova, a nature reserve in the Ukraine (USSR), comprising about 55 animals in a semi-wild state. A herdbook is maintained by Dr. Jiri Volf at the Prague

Zoo, and pedigree information exists on all animals. All the Przewalski Horses now in captivity derive from twelve *E. przewalski* and one *E. caballus*. The percentage contribution of each founder can be traced in each currently living animal.

The Government of the Mongolian People's Republic have requested restoration of the Przewalski's Horse to Mongolia in the area from which it came. FAO and UNEP are cooperating with the Government of the USSR to draw up an Action Plan to achieve this. Funding is being provided by UNEP and FAO is responsible, with the Centre for International Projects of the USSR for the organization of an Expert Consultation to design the Action Plan. IUCN, who have promoted much recent work with Przewalski's Horse, are also involved in the programme design. The Expert Consultation is planned for Moscow at the end of May 1985. A report of the Expert Consultation and the Action Plan will be given in the next issue of AGRI.

MOST THREATENED ANIMALS

According to a report in The Times of London of 17 November 1984, the International Union for Conservation of Nature (IUCN) at its meeting held recently in Madrid, highlighted the grave situation with regard to certain plant and animal species threatened with extinction. Among the six "most threatened" animals listed by them were the Kouprey wild ox of Southeast Asia and the Pygmy hog of the Himalayan foothills; others being the Sumatran rhinoceros, the Mediterranean monk seal, Orinoco crocodile and the Brazilian woolly spider monkey. The Kouprey ox, which has dwindled in numbers to only one small herd after Indo-China's various wars, is believed to be resistant to rinderpest. If this could be confirmed, the disappearance of this breed is a matter of genuine concern. It may interest AGRI readers to know that the Kouprey ox is a humpl6ss animal which is classified in the sub-genus *Bibos* along with the Banteng - the wild ancestor of Bali cattle in Indonesia. When interbred with domestic cattle, the male hybrids will therefore be expected to be sterile.

INTERNATIONAL GENETIC RESOURCES PROGRAMME

The IGRP was founded by the Rural Advancement Fund International to address the problem of the loss of genetic resources in plants and animals. (The RAFI is a nonprofit organization chartered in the Netherlands.) Work to date includes the following:

- Initiation of educational campaigns on the loss of genetic diversity in agriculture.
- Promotion of the establishment of an international network of gene banks and a legal convention mandating the full exchange of genetic materials between countries.
- Support of national groups in several countries in their efforts to block legislative moves that would encourage the monopolization of genetic resources.
- Assistance to organizations around the world in their efforts to initiate genetic resources education and conservation programmes.
- Publication (shortly) of a book on the politics of genetic resources.
- Production of a slide show on the loss of genetic resources.

IGRP Report, Vol. 1, No. 2 was published in October 1984. Most of its 6 pages are devoted to plants. In fact there are only two references to animals - a short paragraph about the work of the Rare Breeds Survival Trust in the UK and a note about a herd of Belted Galloway cattle in the USA.

IGRP also has a speakers' bureau and undertakes consulting work on special projects.

For further information write to: IGRP, RRI (Beresford), Brandon, Manitoba R7A 5Y1, Canada, or P.O. Box 1029, Pittsboro, NC 27312, USA.

ANIMAL PRODUCTION IN ARID ZONES

The Animal Science Division of the Arab Centre for the Studies of Arid Zones and Dry Lands (ACSAD) is planning an international conference on animal production in dry zones to be held in its headquarters in Damascus from 7-12 September 1985. It will cover sheep, goats, cattle and camels and the disciplines of breeding, nutrition, reproduction, socio-economics, animal health and management. For further information write to: Dr. Ousama A. Awa, Director, Animal Science Division, ACSAD, P.O. Box 2440, Damascus, Syria.

N'DAMA CALVES BY EMBRYO TRANSFER

Embryo transfer technique has been successful in introducing the trypanotolerant N'dama breed to the International Laboratory for Research on Animal Diseases (ILRAD) located in Kenya. This technique was resorted to, because not only is live animal transfer expensive but animal health regulations also restrict the movement of animals from West Africa to Kenya. N'dama embryos were obtained from selected donors in The Gambia, frozen and then shipped to Kenya where they were surgically transferred to Boran recipient heifers. These animals will be used at ILRAD to elucidate the mechanisms underlying resistance to trypanosomiasis including a search for associated genetic markers.

INTERNATIONAL CENTRE FOR GENETIC ENGINEERING AND BIOTECHNOLOGY

Since our report in the Animal Genetic Resources Information issue 1/84 on the proposals for setting up an International Centre for Genetic Engineering and Biotechnology, further developments have taken place. At a plenipotentiary meeting of the United Nations Industrial Development Organization held in April 1984, it was decided to set up the centre with locations in Trieste, Italy and New Delhi, India. The Italian Government is providing US\$ 400 000 to a UNIDO trust fund to finance a number of preparatory research, training and development activities in addition to its offer of considerable financial assistance in the establishment of the centre.

FROZEN EMBRYOS AS CONTROLS IN A BEEF CATTLE BREEDING PROGRAMME

An interesting experiment has been designed using frozen embryos at the Wokalup Research Station in Western Australia to study the genetic response in a beef cattle selection programme. The first phase of this experiment which involves freezing embryos from 130 cattle of the Wokalup multi-breed and Hereford purebreds is now complete. These embryos will be kept frozen for 10 years and transferred to recipients to obtain calves in 1994. The frozen embryo calves which will be genetically similar to calves born in 1984, when compared with contemporary calves born in 1994 out of normal matings will give an estimate of the selection response during that period.

PRO SPECIE RARA

The foundation "Pro Specie Rara" was formed in December 1982. It has as its aim the maintenance of the cultural heritage of genetic resources of livestock and vegetation. At present its field of action is chiefly in eastern Switzerland. Its first annual report, for the year 1982/83, describes projects on the Stiefelgeiss (Booted goat) of St. Gallen, on the Hinterwalder cattle of Germany, on local sheep breeds (particularly the Tavetscherschaf which was believed extinct), on the Spitzhauben hen and on fruit and vegetables. Conservation herds of Stiefelgeiss and Hinterwiilder cattle are maintained. The address for further information is: Pro Specie Rara, Postfach 125, 9003 St. Gallen, Switzerland.

PIG NEWS

Two publications which may be of interest to animal breeders and geneticists working with pigs are: (i) Index of Current Research on Pigs; and (ii) Pig News and Information. Both are published by the Commonwealth Agricultural Bureaux in the UK. The Index is published annually, and the current issue (No. 31) covers the year 1984 and contains more than 6000 entries from 52 countries listing projects in progress and publications from about 450 institutions, including for the first time the People's Republic of China. Pig News and Information is published quarterly and has the pig abstracts from all the CAB abstracting journals, together with reviews and notes from correspondents. Although both publications cover all aspects of pigs, they include, of course, the breeding and genetic aspects.