The Chinese River Dolphin (*Lipotes vexillifer*) occurs only in Dongting Lake and in Yangtze River. Total population was in 1993 about 150 individuals.

Promotion of Conservation in Hunan (People's Republic of China)

A cooperative project of the Forestry Department of Hunan Province and

the Finnish Forest and Park Service

The main part of Siberian Crane population (2500 individuals) is wintering in Hunan and Jianxi.

> Z.) SAHALLIT

Only 30 to 80 South China Tigers (Panthera tigris amoyensis) exist in the wild.

A threatened Mandarin Duck (Aix galericulata) winters in Hunan.

Nature Conservation cooperation between Hunan and Finland

Metsähallitus – the Finnish Forest and Park Service (FPS) and the Forestry Department of Hunan Province (FDH) have concluded an agreement for cooperation in nature conservation. The project is part of the Partnership and Exchange Programme of the EUROPARC Federation (Federation of Nature and National Parks of Europe, FNNPE). The objective is to promote cooperation in the planning of the management of protected areas and, especially, in the protection of biodiversity.

The cooperation will concentrate on -

- planning the management of protected areas
- environmental education and interpretation, including exhibitions at visitor centres
- inventories of fauna and flora
- protection of the biodiversity of subtropical forests
- protection of birds and wetlands
- monitoring of biodiversity



Bird monitoring on Dongting Lake in 1996. In practice, the cooperative project was commenced in January 1996, when two Finnish bird experts visited the East Dongting Lake Nature Reserve, which is one of the main targets of the project. The Finns investigated the lake's population of wintering birds, trained the staff of the reserve in bird counting, and established four counting routes at the lake. In future, the staff of the reserve will count along the routes three times each winter, to monitor changes in the wintering bird populations. The Finns also introduced the staff to bird counting methods used in Finland. • In summer 1996, as part of the programme, the FPS introduced Hunan conservation experts to Finnish conservation approaches. The trip encompassed education in the production of interpretive material, nature inventorying and monitoring methods, and the management of protected areas especially. The trips included visits to several Finnish protected areas.

• A Biodiversity Action Plan covering the whole of Hunan Province is being prepared cooperatively by Finnish and Chinese experts. The objective of the plan is to preserve and as appropriate enhance Hunan's biodiversity. Special attention is being given to mountain forests and wetlands.





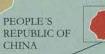
Hunan Province

Yueyang City

Hunan is situated on the south side of the middle reaches of the Yangtze River, in southeastern China. The province is for the most part low-lying, but mountain ranges rim it on the east, west and north. With an area of 212 000 km² (the size of England and Scotland combined), it is one of China's largest

provinces. There are 62 million inhabitants, who live mainly in the valley

East Dongting Lake Nature Reserve



Hunan

Province

of the Yangtze. The soil of the valley has been famous for its fertility for centuries. The valley is China's most important area for production of grains, especially rice. Fishing is another important occupation in the area.

• In terms of its plant life, Hunan Province is part of the mid-subtropical evergreen-broadleaf zone. About 5 000 species of vascular plants are known to exist in the area; of these, 1 900 are woody and 200 are commercial

plants. Hunan's fauna is likewise diverse; 750 vertebrates are known, 66 of

them mammals; there are over 300 bird species, 40 amphibians and 72 reptiles.

• The large human population has caused problems for the area's natural environment. Forest lands in their natural state have shrunk significantly, lakes have been drained for agricultural purposes, hunting has reduced populations of many animals to critical levels, and there is significant environmental pollution. A ma-



Wulingyuan Scenic and Historic Interest Area was included in the World Heritage Site list in 1992.

jor reforestation project is underway. Its aims are to prevent erosion and ensure supplies of raw materials for firewood and paper. In terms of their flora and fauna, however, the planted forests are very undiverse in comparison with the natural forests.

• The diverse wetland and forest environments also interest travellers. The rapidly developing tourism requires effective planning of protected areas on the one hand; on the other it provides an opportunity for development of ecotourism and environmental education.

3

More than 10 000 fishermen fish on the lake.



The East Dongting Lake Nature Reserve



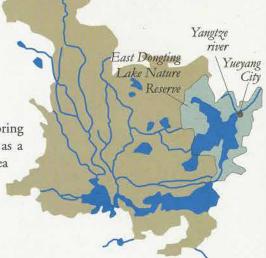
Trees are decorated by grass in summer floods.

Overing 2 700 km², Dongting Lake is China's second largest. It forms in winter, during the dry season, from wet grasslands and several large, shallow lakes and marshes. A dense network of canals built primarily for fishery needs unites the lakes. During the rainy season, in summer, the lake reaches its greatest extent, the water's surface then being some ten metres higher than during the winter. The lake is surrounded by a dyke, which prevents water from reaching the surrounding fields and settlements.

 The East Dongting Lake Nature Reserve was founded in 1984. Its surface area is 151 000 ha. The reserve is subject to the Convention on Wetlands of International Importance especially as Waterfowl Habitat – the so-called Ramsar Convention. A management plan was completed for the reserve in 1993.

• Three rivers empty into the lake. These bring the lake large amounts of silt each year, as a result of which the lake's water surface area is continually decreasing. In future a giant hydroelectric dam being built on the Yangtze River will reduce the amount of drifting silt. However, the dam will not be completed until the year 2014 – when, according to some experts, Dongting Lake will no longer exist, having filled up with silt before then.

• In addition to the soil deposition, the lake has other problems – such as overfishing, environmental pollution, overgrazing of cattle, using of reedbeds for the needs of the paper industry, uncon-



trolled recreational use, and poaching. Furthermore, in the last 30 years, the lake has been drained for agricultural uses. In rainy seasons, this has caused major floods in the area, since the pools which formerly functioned as water reservoirs are gone.

Water Buffalos cause overgrazing in the area.



An internationally important wintering area for birds



ANTTI BELOW

The total population of the Oriental White Stork (Ciconia boyciana) is only 3000 individuals.

The East Dongting Lake in winter.

Dongting is an extremely important wintering and resting area for migratory birds. Many globally threatened species are to be found at the lake. These include the Siberian Crane (Grus leucogenanus), Hooded Crane (G. monacha), White-necked Crane (G. vipio), Chinese Egret (Egretta chinensis), Black-faced Spoonbill (Platalea minor) and Oriental White Stork (Ciconia boyciana). • The lake is a wintering place for tens of thousands of water birds. In January 1996 the Finnish experts counted large numbers of threatened Swan Geese (Anser cygnoides), Falcated Teals (Anas falcata) and Baer's Pochards (Aythya baeri). In prior years, Baikal Teals (Anas formosa) and Scaly-sided Mergansers (Mergus squamatus) have been observed. Populations of both species have declined sharply in recent decades. • In January 1996, the Finnish experts also saw a flock of 1 700 Lesser Whitefronted Geese (*Anser erythropus*). The world population of the species is estimated at 20-25 000 individuals. According to current knowledge, Dongting Lake may be the world's most important wintering area for this species.

• The lake is important as habitat for many other life forms as well. Since 1985, 113 water plants and 114 fishes have been found in the lake. Dongting Lake and the Yangtze River are the only places in the world where the rare Chinese River Dolphin (*Lipotes vexillifer*) occurs.

The Forestry Department of Hunan Province



The biodiversity of natural forests in Hunan is high.

The Forestry Department of Hunan Province (FDH) is responsible for both forestry and nature conservation in the province. It manages a protected area network established to protect globally important and exceptionally diverse ecosystems - wetlands and mountain forests in particular. Thirty-one protected areas, with a combined surface area of 400 000 ha, have been established in Hunan. In the whole of China there are about 600 protected areas, with a total surface area of 40 million ha, or 4 % of the country's area. Fifty-five per cent (12.1 million ha) of Hunan is forest. Of this, almost half is reforested, the objective being to produce wood for commercial use and prevent soil erosion.

• The FDH has about 110 000 workers. The unit engages in cooperation with 40 countries, but only with Finland is it engaged in nature conservation cooperation.

Metsähallitus – The Finnish Forest and Park Service

quarter of Finland's land area is owned by the state and managed by Metsähallitus – the Forest and Park Service (FPS). The FPS is a state enterprise, whose functions include nature conservation, forestry and recreational services. The FPS manages, utilizes and protects the natural environment on the principle of sustainable use.

• The FPS manages almost all of the state's protected areas. The tasks of the FPS Nature Protection Unit are to manage protected areas and other areas im-

portant from the standpoint of conservation; to protect and manage threatened species; to manage prehistoric sites, monuments and old buildings; and to promote the sustainable use of natural resources throughout the FPS. The Nature Protection Unit is Finland's largest governmental conservation organization.



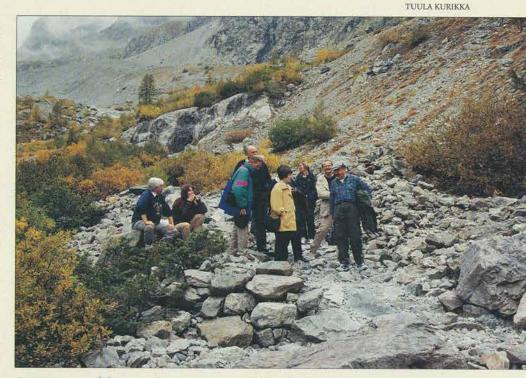
A natural taiga forest in Seitseminen National Park, Finland.

EUROPARC Federation (The Federation of Nature and National Parks of Europe)

he Federation of Nature and National Parks of Europe (FNNPE) is a pan-European organization whose members are national parks, regional parks and nature parks, as well as non-governmental organisations and government agencies, across Europe. FNNPE has more than 200 members in 34 European countries. Members use the network of the Federation as a forum to share management experience, and to promote and extend the ideals of conservation. FNNPE holds yearly assemblies, which have a series of workshops on specific themes, such as training needs and tourism appropriate to protected areas.

Partnership and Exchange in cooperation with EU

• The Partnership and Exchange Programme of FNNPE is established to support the projects for sustainable development and nature conservation in developing countries. This exchange programme to forge partnerships between protected areas in Europe, Asia and Latin America is one of the projects funded by the European Union. It represents an innovative approach towards furthering the sustainable management of tropical forests. The Hunan project described in this brochure is a part of this programme.



In connection of the annual EUROPARC meetings the members get acquainted with the protected areas of the host country.

In order to promote international cooperation in nature conservation, the programme aims to:

• encourage the establishment of long-lasting partnerships world-wide between national parks, biosphere reserves and other protected areas

- promote staff exchanges to work together on common management problems
- organize training seminars for programme participants to improve the management of protected areas

EUROPARC FEDERATION (FEDERATION OF NATURE AND NATIONAL PARKS OF EUROPE, FNNPE) Postfach 1153 D-94475 Grafenau Germany Tel: +49-8552-96100

Fax: + 49-8552-961019

 METSÄHALLITUS – FINNISH FOREST AND PARK SERVICE (FPS) Nature Protection PO.Box 94 FIN-01301 Vantaa Finland Tel: +358-9-857 841 Fax: +358- 9-8578 4350 Internet: http://www.metsa.fi/

FORESTRY DEPARTMENT OF HUNAN PROVINCE WILDLIFE PROTECTION BUREAU 39 Nan Da Road 410007 Changsha Hunan Province

People's Republic of China Tel: +86-731-555 0801 Fax: +86-731-555 3982

Editor: Antti Below 👁 Drawings: Jari Kostet

- Maps: Pekka Routasuo Design: Juha Ilkka
- English translation: Wortexport Oy Ltd

Metsähallitus – Finnish Forest and Park Service, Nature Protection 1996 Printing: 5 000, printed on 100% recycled paper