

ACTUAL SITUATION AND PROBLEMS IN CONSERVATION  
POLICY AND PRACTICE IN EUROPE

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After the domestication of wild animals, domestic livestock has been spread in whole Europe in the period of great migration. The military conquests of Roman Era and other movements of the Middle Ages caused some mixture within populations but more and more local breeds developed with special breed characteristics. The breeders' associations were established only in the 18-19th centuries and the breeds became genetically distinguished and stabilized.

The wild ancestor of cattle, the Aurochs died out in Europe in 1627 but that of swine and sheep survived.

In the second half of the twentieth century modernization of life, development of transport and information and the requirements of urbanized people caused competition among all domestic breeds.

The best ones - from a production point of view - spread world-wide and with increasing numbers per breed in most countries, while the others declined, and some of them became extinct. E.g. the Holstein-Friesian cow in dairy production and the White Leghorn hen in egg production replaced the local cattle and poultry breeds.

There are some feral populations of domestic livestock in Europe, the most famous of which is the Chillingham cattle herd in Great Britain which exists evidently since 1270 without any introduction of foreign genes. It can be considered as one of the oldest gene bank of the world.

Between the two world wars the Heck brothers attempted to reconstruct the wild ancestor of cattle in the Berlin and Munich zoos. This experiment resulted in an Aurochs-like population of cattle which proved only that it is not possible to resuscitate perfectly an extinct breed.

Recently in some countries there are a lot of local breeds threatened by extinction and some of them already perished.

Some examples: In Switzerland the original pure bred Simmental breed numbers only 25 000 cows since Red Holstein bulls became available. In Great Britain 43 domestic breeds can be considered as endangered and more than 20 breeds are extinct. This does not mean that British breeders neglect the maintenance of rare breeds more than others but the number and development of breeds was bigger than elsewhere.

In France 22 breeds of cattle, 36 breeds of sheep, 8 of pigs, 4 of goats and 4 breeds of horses were declared as "races en péril".

In Norway the modernisation of dairy industry resulted practically in one breed /the Norwegian Red Cattle/ which is a synthetic breed. This procedure resulted in a formerly unknown high milk production but the local breeds nearly disappeared.

The number of breeds considered as endangered in Europe is summarized in table 1

Table 1: Number of breeds considered as endangered  
(22 replying countries, from MAIJALA et al., 1984)

Species	Number of breeds			considered as endangered
	Total	Existing in ...countries in one only	at least in two	
Cattle	181	147	34	64
Horses	149	121	28	41
Pigs	66	54	12	30
Sheep	264	220	44	61
Goats	77	65	12	12
Total	737	607	130	208

Conservation activities in Europe are performed by governments and by private organizations. The need for conservation was recognized by law in France in 1966 and in Spain in 1979 (MAIJALA et al., 1984). In Hungary state farms became engaged in live animal preservation since 1961. In Poland a national programme for preservation has been effective for several decades, in Italy and FR-Germany state support is given for conservation, e.g. for cryoconservation of semen and embryos.

Private organisations are very important for live animal preservation; main emphasis of their activities is from the cultural-historical point of view and with much personal commitment. Generally speaking the idea of conservation of endangered livestock breeds becomes more and more popular in Europe. Table 2 lists some major events important for conservation of domestic livestock in Europe.

The European Association of Animal Production EAAP is engaged in surveying breed informations in member countries. The intention is to repeat these surveys in meaningful intervals in order to recognize a decline in the number of breeding animals of a breed. This information can help in decisions to start actual preservation activities for a given genetic resource.

#### References:

- FAO, 1981. Animal Genetic Resources Conservation and Management. FAO Anim. Prod. & Health Paper 24: 388 pp.
- MAIJALA, K., Cherekaev, A.V., Devillard, J.M., Reklewski, Z., Rognoni, G., Simon, D.L. and Steane, D. 1984. Livest.Prod.Sci. 11: 3-22.

Table 2: Major events in the context of preservation of animal genetic resources in Europe

1270	Establishment of the Chillingham herd
1961	Beginning of preservation by the State Farms in Hungary
1964	The London Zoological Society's decision for preservation
1972	Establishment of the Society of Ethnozology in Paris
1972	Establishment of Rare Breeds Survival Trust in U.K.
1974	Round table conference on conservation of genetic resources at the World Congress in Madrid
1974	The State Farm of Szozytno in Poland begins to preserve rare non commercial breeds of farm animals
1976	Establishment of Dutch Sticking Zeldzame Huisdierrassen
1976	Government program for Conservation of domestic livestock in USSR
1976	The Spreenhagen farm in DDR for conservation of poultry breeds
1976	The beginning of the survey on rare breeds in Italy
1980	FAO Technical Consultation on Animal Genetic Resources Conservation and Management
1980	Creation of EAAP working group on conservation of genetic resources in Munich
1980	Governmental subsidy for rare breeds in Bulgaria
1982	EAAP discussion on the conservation of genetic resources in Leningrad
1982	Activity of conservation is going on in BRD /Ges. zur Erhaltung alter und gefährdeter Haustierrassen/ and also in Spain, Portugal and recently in Switzerland
1982	Establishment of ÖNGENE in Austria
1987	Another scientific discussion on conservation problems in Lisbon, EAAP
1988	FAO-EAAP agreement on the unified data bank at global level
1988	Establishment of Scandinavian organization on conservation of genetic resources of farm animals
1989	RBST meeting at Warwick University on conservation at global level
1989	Establishment of DAGENE for the Danube region
1989	Establishment of IDAAM for Greece
1989	FAO Expert Consultation Programmes for the Preservation of Animal Genetic Resources