

Situation of species and breeds of animals which are in danger of extinction in Transilvania

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Summary

The preservation of domestic animals diversity represents an essential factor for mankind need of food. This preservation of the biodiversity can be achieved only through the protection of genes reserves. Keeping the stocks of genes is important for the fight against some difficult natural conditions, of a certain kind of feeding, against infectious agents. Real steps are necessary to be taken in order to protect the stocks of animals which are in danger of extinction: for the Bovidae family (Sura de stepa- Transilvanian Grey Cattle, Rasa de Munte-Mountain Breed, Pinzgau of Transilvania), horses (Huțul, Cal de munte-Mountain Horse, Nonius, Muran of Banat), sheep (Merinos of Transilvania, Ratca, Pinzgau negru-Black Pinzgau), goats (Alba de banat-The Banat White), suina (Mangalita, Bazna, Negru de Strei-Black of Strei, Alb de Banat-White of Banat), birds (Transilvanian Naked Neck, Frisate Danubian), dogs (Erdely capo). The same steps are to be taken also for the wild animals: moufflon, European bison, bustard, hazel hen, partridge, birch tree rooster.

Introduction

After 1989 in Romania were created 25 places for the preservation of the genofond for several species and breeds. Among these places, on the territory of Transilvania, there are "banks" of genes for pigs in Turda (Bazna and Mangalita), for horses in Bontida (The Furioso North Star Horse) and in Oravita for the breed of sheep Ratca. In Targu-Mures there is a bank of genes for the species: fox (*Vulpes vulpes*), mink (*Lutreola lutreola*), nutria (*Myocastor coypus*), fitch (*Putorius putorius*), raccoon dog (*Nyctereus procinoides*). Despite the apparition of these places, many of the species mentioned above are in danger of extinction. This fact is proved by the smaller and smaller number of animals registered in the last 30 years. Many of the places for genes preservation go through serious financial problems and the existent programmes are not at all flexible as well as their applicability.

Material and methods

The inventory and the description of the characteristics regarding the area they occupy or the extent to which these species and breeds are in danger in Transilvania have been done with the help of the materials existent in the literature of specialty. The subject Animal Science from the Veterinary Faculty in Timisoara has dealt in the last two years with creating a data base to include all species and breeds of animals that exist on the territory of Transilvania. Many of these animals were taken pictures of, filmed and to some of them body measurements were done.

Results and discussions

From the analysis of the data gathered in this data base, we can appreciate the number of species of domestic and wild animals which in the last 30 years have disappeared or are in danger of extinction. For example the Bovidae breed Grey Cattle, the Transilvanian type is

practically disappeared. In the area of the Apuseni Mountains four animals were identified having a phenotype resembling to this breed. Also from the Bovidae Podolice type, five animals were identified in the area of the Banat Mountains. Near Timisoara there are in a farm two animals of Grey Cattle a male and a female, but they are from the Moldavian type. Another native Bovidae breed (Rasa de munte-The Mountain breed) is in danger of extinction, only six animals being found(four females and two males) and we are not sure they are pure breed. In the Veterinary Medicine Faculty there is not at this moment the possibility of running immunogenetic tests. According to some specialists, Rasa de Munte (The Mountain Breed) would be a separate breed, others claim it would be a variety of the Grey of Cattle adapted to the mountain area.

In Transilvania there is another breed of Bovidae created at the end of the XIXth century called Transilvania Pinzgau. The breed was formed by the crossbreeding of the Pinzgauer breed with Grey Cattle and Rasa de munte(the Mountain Breed). Before 1989, some wanted this breed to disappear though it was very well adapted for the high mountain areas with a poor vegetation. After 1989 the number of animals kept going down so that in 1993 there were left only 1700 animals. Starting 1995, there have been made imports of Pinzgauer from Austria, which helped the number of animals from this breed to increase lightly.

In Transilvania there is another breed of Black Pinzgau Bovidae which should find its place in the ecological niche of Europe. It has similar characteristics with the Transilvania Pinzgau, but the colour of the body is with black instead of red, having also some other features that distinguish it from the Red Pinsgau having an exterior resembling the Bovidae breeds Tuxer, Eringer and Evolener.

As far as the horse breeds are concerned, especially Nonius type has a number of 270 animals, most of them to be found at the haras Izvin near Timisoara, their maintainance being quite difficult because they are more oriented towards pulling instead of riding. The Furioso North Star horse which is to be found in less than 100 animals, is oriented both towards pulling and riding. We have a similar situation in the case of the horse Gidran, used in an unfortunate way in some places in the North of Transilvania for crossbreeding with the Huțul breed in order to obtain a tougher mountain horse. The Huțul breed has 18 animals pure breed, and the Mountain Horse from Apuseni Mountains has only 23 animals. In Banat area there is a variety of horses the semiheavy horse of Banat or Muran which was brought by the German population in the XVIIIth century from Austria from the Valley of Muir river (from which the local name Muran was derived). This horse has a quite large variability regarding the size and the body weight, the exact number of existing animals is difficult to mention. The Lippizaner breed must be carefully monitorized because the number of horses has decreased from 572 in 1988 to 323 in 2006. They are used for improving the horses in the central area of Transilvania. The most and best animals are to be found at Sâmbăta near Sibiu.

As far as the sheep situation is concerned on Transilvania territory, in the last 15 years the predominant breed is The Valahian sheep (Tzurcana). The spreading of this breed whose quality is not to be very sensitive to the environment conditions, has led to almost the disappearance of the Transilvanian Merino, breed of almost 200 years old. The exact number of sheep from this breed is not known, apparently it is less than 10.000 animals, having completely disappeared from many areas where it was traditionally raised. Another breed of sheep, Ratka, can be found in a number of almost 1000 animals in Oravita area.

In Transilvanien there is a breed of goats with an exterior very similar to the one of the Saanen breed (that had a big contribution to its formation) with a high potential for the milk production, but which in only ten years has decreased in number from 8000 animals to only 3000 animals, Banat White.

Among the pig breeds that are raised in Transilvania the traditional local breeds are almost entirely disappeared. The Mangalita breed has only 24 animals, the Bazna breed has 170-190 animals and the types Black of Strei and White of Banat have each 8 animals.

A species that is traditionally raised on the territory of Transilvanian is the one of buffaloes, existing the breed Buffalo of Transilvania. The number of animals from this species has seriously decreased in the last 20 years from 80.000 animals to 20.000 animals. This decreasing is continuously serious, there are areas in Transilvania where these buffaloes are completely disappeared.

In a critical situation there is the dog breed Copoi ardelenesc,(Erdelyi kopo) especially the type with short legs, called by some people slovak copoi (Slovak kopo).

Protection steps must be also taken for the breed of hens Transilvanian Naked Neck and the breed of geese Frisate Danubian, the latter being noticed in the south of Banat in a number of 72 items.

The protection of the wild species is as important as for the domestic ones. The biodiversity of the wild animals species represents a bank of genes sometimes better adapted to different aggressions against the organisms that can be used in genetic engineering to obtain some breeds of animals with special features. These species have genes that can be used to the raise of the domestic animals organism resistance to diseases, to different unfavourable factors of maintenance, feeding or defence against some infectious agents.

Transilvania still has a large variety of game species. But the knowing of the number of these species represents an issue that hasn't been entirely solved yet. Also, we know very little about the interactions between the species that belong to the same ecosystem. The disappearance of a species or their numeric reduction can lead to a serious lack of poise, practically irreversible. The recommended method to prevent wild animals from extinction is either by the repopulation of some areas where they once existed, or by creating hunting parks or zoos. For many wild animals species these steps are already too late. The European Bison (*Bison bonasus*) the most imposing animal from the fauna of Transilvania is only represented by 4 items in Hațeg reservation. These animals are old and tired.

The bustard (*Otis tarda*), 40 years ago, could be noticed frequently in large beevies in the Banat Field, especially in the Satchinez area. Nowadays this bird has disappeared from this area, a few items were noticed in 2005 in Vinga area near Arad, coming from Hungary. We have the same situation for the steppe eagle (*Acquila de stepa*)(*Aquila heliix*), the lamergeyer (*Gypaetus barbatus*), the black vulture(*Aegyptius monachus*), the birch tree rooster (*Lyrurus tetrix*), sparcaciul (*Otix tetrax*) and other 43 species of birds.

Very close to extinction are the populations of beavers (*Castor fiber*), hamster (*Cricetus cricetus*), mink(*Lutreola lutreola*), otter (*Lutra lutra*), moufflon (*Ovis aries moussimon*).

The main cause that leads to the decrease of the number of items belonging to the domestic breeds of animals mentioned above is, generally, the wrong opinion that these breeds are overrated economically by breeds modernly perfected and improved. Unfortunately, a negative propaganda in this direction is also made by the so called specialists in the field. The peasants from Transilvania without any financial support from the state institutions, under the pressure of the negative information regarding giving up the raise of these breeds, keep giving up raising these animals. Another cause is the lack of some associations for raising animals that can be of real help for the people. Some present associations favour only a limited number of members for the purpose of getting European funds. There are cases when in such an association the traditional local breeds have disappeared from the registers and replaced with pure breeds of import and rewritten in the registers as local breeds. These items are also exhibited in fairs and exhibitions of animals as being the creation of those specific people. The evidence regarding the number of animals, their productions or the breed they belong to are very brief, inexact giving the chance for different interpretations.

Another important problem that leads to the decrease of the native breeds from Transilvania is also the wrong interpretation of some state clerks regarding the raising of these breeds. Those who raise these animals are forced to give up the traditional ways of raising these animals and adapt them to very modern technologies resembling the superspecialized breeds.

The disappearance of many game species or the endangering of others' existence have as main causes the following:

- the pollution of the environment;
- massive deforestations;
- illegal hunting and excessive hunting;
- the existence of numerous packs of homeless dogs which attack especially the young members of these species;
- an aggressive tourism.

On a short term, in order to protect the species of wild animals, important steps must be taken to diminish the causes mentioned above (stopping them would be very difficult).

Conclusions

This material is to underline the necessity of imposing some serious measures for preserving genes reservations for the species and breeds of animals from Transilvania which are in danger of extinction. The farmers must be encouraged to raise these species and breeds of animals too or to protect the game species by reducing the level of the environment pollution. There must be identified as accurately as possible the species of animals, the listing of all breeds, each one with its own characteristic description including the area where it exists and, at the same time, the population' awareness must be raised regarding the importance of maintaining the animal biodiversity. It is important monitorizing statistically the populations of animals in order to observe the fluctuation of the number of individuals that it consists of.

The necessity of a publication to support this protection of the gene banks in Transilvania is considered very important.

BIBLIOGRAPHY:

- Bodo I., Gera I., Korpany G.,1996 – The Hungarian grey cattle breed, Ed.Passzer LTD.Budapest
Cristea M.D.,2006 – Biodiversitatea (The Biodiversity) , Ed.Ceres, Bucharest
Szabo P., Farkas T.,2002 – Fatty acid composition of the fat in different pig genotypes, 2 Nemzetkozi sertestenyesztési tanacskozas, Debrecen, pag.166-182
Davidescu D.,2002 – Preservation of biodiversity of vegetal and animal species, Ed.Academiei Romane, Bucharest
***World Watch List for domestic animal diversity 3rd edition , FAO, Rome, 2000

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