THE CANARY ISLANDS BREEDS: PAST, PRESENT AND FUTURE

RAZAS AUTOCTONAS DE LAS ISLAS CANARIAS: PASADO, PRESENTE Y FUTURO

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Palabras clave adicionales

Oveja. Cerdo. Cabra. Vaca

SUMMARY

We describe the means developed by official and private institutions for the conservation of Canary Breeds. We evaluate the response to concrete actions comparing the evolution of their census with presented at the Warwick Conference (1989).

RESUMEN

Se describen la evolución de las Razas autóctonas canarias y las medidas que se han de tomar de cara al futuro, tanto por organismos oficiales como por entidades particulares, para evitar el peligro de desaparición de dichas razas.

INTRODUCTION

The Canary Archipielago (seven islands and six islets) is situated in the Northwest of Africa. There are no excessive climatic variations in temperature and trade winds bring sufficient humidity on those islands which are sufficiently high.

The pluviometry is variable, thus favouring the establishment of diverse

microclimates, to which animal and vegetable species, have adapted developing diverse authochtonous breeds.

Until the colonization towards the end of the XVth century, the archipielago was populated by people of different origins who exploited different animals, goats, sheep, pigs and dogs. Other breeds, including those which formed the basis of the European agrarian economy, such as equine and bovine, were introduced later.

The America's discovery converted the Islands into a stopping off point for all the transoceanic routes of that time permitting contact with diverse cultures and their autocthonous breeds.

The primitive autocthonous and imported animals which received foreign genetic inputs, developed into the ethnically different modern breeds. The majority of the canarian domestic animals are of virtually unknown origin, although three distinct models may be admited (Delgado *et al*, 1991):

MODELS OF PREHISTORIC EXTRACTION. In this model we found animals which were developed from

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those existing on the islands before the conquest, probably proceeding from the African continent in the company of the aborigine populations which were incorporated into the blood of multiple foreign breeds after colonization. Examples are the Majorero, Presa Canaria, and the Garafiano Sheep dogs; the three types of Canarian Caprines, Ovines (Canarian and Palmeran) and the Canarian Black Pig.

MODELS WITHOUT PREHISTORIC EXTRACTION. These are breeds derived from those introduced after the Conquest, which maintain a series of homologies as the Canarian Spaniel and Canarian and Palmeran Cows.

UNDIFFERENCIATED MODELS. Certain animals introduced after the conquest, were integrated into the Canarian agriculture and have not significantly changed from its original type. Among them are hens, some lepidoptera, equines and camelidae.

Their situation has evolved in parallel to the rest of autocthonous breeds in other countries, and their effective have been reduced during the present century, principally due to the following causes:

The movement of select breeds whose production was increased by intensive farming methods. Alongside this phenomenum, mechanization has displaced the traction animal.

The decapitalization of the agrarian sector which was maintained until the fifties, with an enormous amount of emigration to the cities and abroad, making farming obsolete.

The implantation during the second half of the century towards, highly profitable vegetable cultivation for exports (bananas, tomatoes, flowers ornamental plants, etc.) which absorbed the greater part of the labour.

Lastly, the expansion of the tourist sector which has reconverted the majority of the agrarian population to the service sector, entailing competitivity for the farming use of earth.

With regard to the actual situation, some populations are stable or in expansion, such as the case of goats belonging to the Canarian Caprine Group, the Canarian Breed of Sheep, the Spaniels, Presas, Majorero and Garafiano dogs, and more recently as to be in inminent danger of extinction, such as the Palmeran Sheep and Cow and the Black Canarian Pig.

For the fact of the Canary Isles constituted the last port of the Old World, it is significant that they were used as the only means of fresh food for the long journeys for live animals. It can be supposed that some of these animals disembarked at their destination and have influenced the constitution of the autochtonous American breeds, as can be seen by morphological observation of examples. As yet, neither the influence of the canarian or european breeds in the development of the New World populations have been sufficiently studied, despite the interesting nature of the question.

A U T O C T H O N O U S CANARIAN BREEDS.

PALMERAN BOVINE BREED

GEOGRAPHICAL DISTRIBUTION. This breed is located in the centre and north of the Isle of La Palma.

ACTUAL SITUATION. It can be observed in **table I** that the methods ap-

plied haven't been sufficient and there continues to be a gradual decrease in the actual numbers of these animals comparing it with those of forties and fifties. There is a movement from the north to the centre of the Isle.

Until the present time, the conservation of this breed had been contributed by the Cabildo of La Palma with the maintenance of a herd and the Canary Departament of Agriculture with a reproduction program.

<u>PERSPECTIVE OF THE FUTURE.</u> To send different sires to Reproduction Centre of Badajoz (Junta de Extremadura).

To increase the semen and embryonic banks.

To establish a reproductive program for this breed including the formation of artificial insemination techniciens.

The posibility of a differenciated complementary premium for maintenance of this breed is being discussed.

CANARIAN BOVINE BREED

GEOGRAPHICAL DISTRIBUTION. The principal collection is found in the Isle of Gran Canaria, with another nucleus, which is continually increasing, in Tenerife, plus isolated examples in other islands.

Table I. Evolution of the census of the palmeran bovine. (Evolución del censo de bovinos palmeros).

	1.982	1.989	1.991
TOTAL	265	237	223
machos	43	32	30
hembras	147	140	135
< 12 months	75	65	58

ACTUAL SITUATION. The census reflected in **table II** is an overestimate from the actually registred animals.

The Cabildo of Tenerife, the Canarian Association of Arrastre and the Consejería de Agricultura have contributed to maintain the breed.

The succes of these methods is fundamentally due to the enthusiasm which has been awoke in the recuperation of these animals and the rescuing of the practise of the autocthonous and traditional sports.

<u>PERSPECTIVE FOR THE FUTURE.</u> In crease in the bank of semen with the incorporation of new sires.

Introduction of the embryonic bank in the reproduction Centre in Badajoz Reproducion programme with the formation of techniciens.

Table II. Census of canarian bovines. (Censo de bovinos canarios).

	1.982	1.989	1.991
TOTAL		4.050	5.700*
machos		550	
hembras		3.500	
* Cabrera y R	oig, 1992		

BLACK CANARIAN PORCINE BREED

GEOGRAPHICAL DISTRIBUTION. The most stable nucleus is in the island of La Palma, althoug there are small nuclei in the rest of the islands, excepting El Hierro. In the last few years an important nucleus has been created in Tenerife which is outstanding.

ACTUAL SITUATION. The significant increase show in **table III** is basically

due to the support of the Cabildos of Tenerife, La Gomera and Lanzarote coworking with the Cabildo of La Palma. The creation of these nuclei augurs a better future for this breed.

One of the principal dangers which faces this breed is that of the apperance of cross-breeds.

PERSPECTIVE FOR THE FUTURE. Support of the breed in the different isles of the Archipielago.

Program reproduction to reduce consanguinity.

Study of aids to maintain animals.

Evolution of its products; meats, cured meats, etc., on a small scale as luxury articles.

Table III. Distribution of the black canarian pig. (Distribución del cerdo negro canario)

	1.982	1.989	1.991
TOTAL	36	37	82
machos	4	6	12
hembras	32	31	70

OVINE PALMERAN BREED

GEOGRAPHICAL DISTRIBUTION. The meagre numbers are found on the island of La Palma, generally in high and humid zones.

ACTUAL SITUATION. Numbers of this breed are greatly reduced (table IV). They are to be found in three nuclei, two derived from assignments made by the Cabildo of La Palma, although one of these disappeared last years.

The strategy followed to date has meant that the few examples that there are have not disappeard, but this is insufficient.

<u>PERSPECTIVE FOR THE FUTURE.</u> Guarantee the sale of the younstock.

Differenciated aid to manteinance the population.

Plan of conservation and reproduction supported by the Departament of Animal Production (Consejería de Agricultura).

Support of the creation of a protective society.

Table IV. Distribution of the Palmeran Ovine. (Distribución de la Oveja Palmera)

	1.982	1.989	1.991
TOTAL	40	51	51
	3	4	4
	37	55	47

OVINE CANARIAN BREED

GEOGRAPHICAL DISTRIBUTION. This population is to be found in all the islands of the Archipielago

ACTUAL SITUATION. During the last few years an increase in the numbers of this breed have been observed (table V), the principal measures have been taken by different administrations, emphasize the support of the Cabildo of Tenerife, its subsides and the establishment of a milk control nucleus. The aids of the Cabildo of El Hierro and the Consejería de Agricultura for buying these animal are also laudable.

PERSPECTIVE OF THE FUTURE. The principal danger suffered by this breed is that of crossbreeding with

foreign breeds, among the most important measures foreseen the following are included:

Support for the creation of a Breeders Association wich would be responsible for the Genealogical Book.

Involution of the milk control nuclei and sanitary defence groups. The giving of prestige to the shepp's

Tabla V. Evolution of the census of the canarian ovine. (Evolución del censo de Ovino Canario)

	1.982	1.989	1.991
TOTAL	18.153	27.783	27.672
	1.566	901	887
	13.039	20.829	21.036
< 12 months	3.548	6.053	5.749

milk cheese by means of quality denominations, above all for cheese from El Hierro and Flor de Guia.

CANARY CAPRINE GROUP (A.C.C.)

GEOGRAPHICAL DISTRIBUTION. The Palmeran and Tenerifian types are bred in their isle of origin, whilst the Majorero is distributed throughout all the islands.

ACTUAL SITUATION. Despite a slight decrease, this sector is consolidated (table VI) and none of the three ethnic types forming the group is in any danger.

This is one of the most relevant species within the farming subsector. It has a Breeders Association which manages the Genealogical Books, milk control nuclei and sanitary defence groups and also promotes and supports its principal products. Additionally it is involved in the development of national investigational projects carried out by the Departament of Animal Production of the Consejería de Agricultura y Pesca, in collaboration with diverse institutions, specially the Genetics Departament of the Veterinary Faculty of University of Córdoba.

PERSPECTIVE FOR THE FUTURE. This stock has enormous possibilities not only in the Canary Isles but also in the exportation of selec stud animals to arid and semi-arid zones. The principal means are centred on the following points:

Denomination of the origin of the Canary Goats Cheese Support from the different associations.

Declaration of the Canary Isles as being free from the principal illnesses of this species, tuberculosis, brucelosis, paratuberculosis and C.A.E.

Table VI. Evolution of the census of the canarian caprine group. (Evolución del censo de la Agrupación Caprina Canaria).

	1.982	1.989	1.991
TOTAL	145.326	153.374	152.851
	5.297	5.570	5.321
	122.358	126.434	125.721
< 12 month	17.671	21.370	21.809

MEASURES TO BE TAKEN FOR ALL THE CANARIAN AUTOCH-THONOUS BREEDS

Promotion of the Associations for the improvement of production and also the conservation of the breeds which are in danger of extinction.

Support of competitions and fairs in which these animals take part.

Creation of a detailed census in which characteristics and management systems are inclued.

Differentiation of a E.E.C. bonus with a greater economic quantity contemplated in POSEICAN (R (CEE) n° 1601/92) (with the exception of pork farming).

Complementary indemnity for the obligatory slaughter during Sanitary Campaigns.

REFERENCES

- **Alderson, L. 1989.** The chance to survive. A.H. Jolly Ltd. Northamptonshire.
- Alderson, L. 1990. The relevance of genetic improvement programmes within a policy for genetic conservancy. In: genetic conservation of domestic livestock. CABI Wallingford U.K. pp 206-220.
- **Bodo, I. 1990.** Special problems of conservation of domestic levestocks. In: Proceding of the 4th World Cong. of Gen. Appl. to Livestock Production. Edinburg. Alemania. pp 423-427
- **Bodo, I. 1990.** Methods and experiences with "in situ" preservation of farm animals. In: FAO, *Animal Production and Health Paper.* 80: 85-102
- Cañón, J. 1985. Las razas autóctonas como reserva del futuro genético. Zootécnica 34: 164-167
- Capote, J. M. Fresno, A.M. Díaz, E. Rodero, J.V. Delgado, E. Camacho and I. Serrano. 1989. Rare autochthonous breeds from Canary Island. Proceding of the 1st meeting

- of the Rare Breeds Survival Trust. Warwick. (In press).
- Capote, J., J.V. Delgado, M. Fresno, E. Camacho and S. Mayans. 1991. Ultimas investigaciones acerca de la caracterización y conservacion de razas autóctonas del sur de España II. Razas Canarias. ITEA 111 (2): 622-624.
- Consejeria de Agricultura y Pesca. 1991. Censos Agrarios
- Delgado, J.V., J. Capote, M. Fresno and E. Camacho. 1.989. Exposición de animales domésticos autóctonos canarios. CAP. Gobierno de Canarias. 16 pp Tenerife
- Delgado, J.V., S. Mayans, J. Capote, E. Camacho and M. Fresno. 1991. La conservación de las razas de animales domésticos autóctonos Canarios. Canarias Agraria y Pesquera: 25-29.
- Reig, M., F. Cabrera. 1.992. El vacuno Canario.
 Publicaciones del Excmo Cabildo de Gran
 Canaria. 72 pp.