

THE RAISING SYSTEM FOR MARISMEÑA EQUINE BREED IN THE NATURAL PARK OF DOÑANA (SPAIN)

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SUMMARY

The park has had a livestock use from century IX for the raise of a horse that nowadays have been identified like the ancestor of the actual Spanish horse breed.

The racial identification of this population and the expression of the special characteristics of their raising in freedom in a protect area determine the content of this work. The progenitors are distributed in 4 zones in which are divided the park between March and August, the dry season. After they go to the highest zones in the period of November to March, in that the salt marshes are flooded.

The farmers have an average number of 10 mares to which usually they must give extra food during the dry season. The 26 of June all the animals remove the mares from the park with their colts and their control and identification are transferred to facilities for, being the only moment at which these animals can be studied.

Key words: Doñana, Marismeña, Wetlands, Equine, Raising, Management.

INTRODUCTION

In the beginning of the year 2003, the Marismeña started a campaign for the recuperation of “Marismeño” horse, an old horses grouping since their disappearance through cross-breeding was a danger in National Park of Doñana. Over the years, this racial grouping have bred in a wild form and nowadays we still having this type of breeding in them.

The system of breeding is an important feature of this racial grouping on account of the environment, the same as occurs with other Spanish, Portuguese and French breeds, (Galician Pony, The Astucon , Losino, Garrano and Pottoka breeds) also raised on an open-range system.

GEOGRAPHICAL ENVIRONMENT

The Natural Park of Doñana is in the southeast of Spain with an area of 55,000 hectares. It is located in the Almonte, Hinojos and Puebla del Rio villages, which account for 70% of its area.

Its climate is Mediterranean with an Atlantic influence. It has a dry season from April to September and a wet season from September to April, (during which time 80% of the rain).

The average temperature is from 16-19 degrees, with very high temperatures in summer (>40°C) and 8-10 degrees in winter.

The landscape is wetlands and hunting grounds with different weather conditions. In the wetland zones, the vegetation are made up mainly by *Arthrocnemum spp*. *Scarcocoma spp*. *Sueda vera vera*, *Hordeum*, *Bromus*, *Poa*, *Plántago spp*, *Cynodon spp*, *Aeluropus spp*. etc... In low wetlands ,there are mainly *Junmcus Subalatus*, *Stirpus maritimus*, *S. Lacustris*, etc... because this is the poorer area because is the zone flooded in the wet season. with *Stirpus Maritimus* and other weeds. The *Stirpus Lucusrtris* is under water the greater part of the wet season. Most of the crops grown in this area

The vegetation of the establish sand area is formed by v.g. *Chaetopogon spp*, *Vulpia spp*, v.g. *Cynodon spp*, *Panicum spp*, etc...

PRESENT SITUATION

The grassing zones are of public property and they can be used by diverse cattle breeder associations. The most numerous domestic animal is the bovine, followed of the equine, amounting itself this one in a 1000-1500 heads, formed by mares, younger colts of 2 years and castrated males.

Four years ago the horse breeders constituted the Andalusian Association for Marismeño Livestock (for bovine and equine) that nowadays have more than 500 members, of which four hundred and twenty are horse breeders.

In the process of recovery of the old Marismeña horse was taken in count the morphological description of the racial grouping described by Ruy D'Andrade (1953), but in 2004 a new standard has been made with all the information given our study the year before and the description of the breed made by this author in the last century. This standard has been applied by a group of judges formed to the effect and it has been very useful for the identification of the animals with the right characteristics of the racial grouping.

RAISING SYSTEM

The raising system is very peculiar, because they live in freedom all the year in National Park of Doñana. Each horse breeder has granted rights to be able to have in the Park a variable number of mares, usually they are among 3 and 5 females.

The animals distribute themselves in the four zones which form the Park, occupying all its area between March to August, the dry season. And they go to the dry zones during the period between September to November wetlands areas are flooded.

The handling is very exceptional, only in time to time when they need a nutritional supplementation if the pastures are totally finished in the dry season or going out the animals when the raising areas are flooded at the time of rains.

Any worn treatment is used during all their life and neither other preventive treatment to save their healthy is made, which is an index of its great rusticity and capacity of adaptation to the environment where they live.

They never have horseshoes and it exists an adaptation of their hoof to the humid areas and wetlands. This is physiological adaptation and they have not alterations by the high humidity index. At the same time it is of physical character, it being remarkable the bigger extension of the hoof that it allows to reduce the sink of the extremity in the wetlands.

Another very particular adaptation to this environment is the special conformation of the inferior lip, bigger and hanging than in other horse breeds as an

adaptation to submerged pasturing, since they are animals that cut to the grass introducing part of the snout in the water.

The author Ruy d'Andrade (1953) emphasized the high movements with a lot of drive of these animals, with fast step who crossing long distances without getting tired and walking on difficult lands.

Also it is necessary to remarks their temperament, because they are wild animals but it is possible very soon to put under the taming and they offers a great disposition and capacity of learning.

Once to the year, these animals are lead in groups of about 50 denominated "tropas" (animal troops), to a special place made for such effect in the neighborhoods Almonte village from the Natural Park of Doñana. It is the traditional "*Saca de las Yeguas*" traditional party, this event that has been made uninterruptedly from year 1504.

In Almonte village, each horse breeder comes for identification of the young colts (Iron with fire and microchips). After two or three day to realize this management the colts can come back to the Natural Parks with the adults or be sold for cattle use. At the same time during these days the horse breeders make the cut of the horse hairs and the check of the state of the mares.

El sistema de explotación de este tipo de caballo es muy peculiar, ya que pastorea en libertad durante todo el año en el Parque Nacional de Doñana. Cada uno de los ganaderos tiene concedido unos derechos para poder tener en el Parque un número variable, pero que suele estar entre 3 y 5 hembras.

Los animales se distribuyen por las cuatro zonas en las que se divide el Parque, ocupando toda su extensión entre Marzo y Agosto, época seca, y se dirigen a las zonas secas en el periodo de Septiembre-Noviembre a Marzo en el que se inundan las marismas.

El manejo se circunscribe a la suplementación alimenticia en la época seca y la retirada de los animales de las zonas de pastoreo cuando son inundadas en la época de lluvias, manteniéndose en los establos de la localidad de Almonte, pero solo muy excepcionalmente.

No se realiza ningún tratamiento de desparasitación a lo largo de la vida de los animales, ni ningún otro tratamiento de carácter preventivo, lo que es un índice de su gran rusticidad y capacidad de adaptación al medio en que se desarrolla.

Tampoco son herrados, existiendo una adaptación del casco al medio húmedo, pantanoso, en el que pastorea buena parte del año. Esta adaptación es de índole fisiológica, puesto que no sufre alteraciones por el alto índice de humedad y al mismo tiempo es de carácter físico, ya que se produce una notable ampliación de la superficie solear que permite reducir el hundimiento de la extremidad en el terreno pantanoso.

Otra adaptación muy particular es la producida en la conformación del labio inferior, más desarrollado y colgante que le ayuda en el pastoreo sumergido, ya que son animales que cortan la hierba introduciendo parte del hocico en el agua.

En cuanto a sus características, Ruy d'Andrade (1953) resaltaba sus movimientos elevados y seguros; de rápido paso, recorriendo grandes distancias sin fatigarse y andar sobre los terrenos mas difíciles. A todo ello hay que añadir su temperamento, con las características propias de un animal asilvestrado, pero que en cuanto es sometido a la doma, ofrece una gran disposición y capacidad de aprendizaje.

Una vez al año, estos animales son conducidos en grupos de unos 50 animales denominados tropas, a unas instalaciones fabricadas para tal efecto en las cercanías del pueblo de Almonte. Es la tradicional "*Saca de las Yeguas*" de las marismas del Parque Nacional de Doñana y su conducción a la localidad de Almonte con las crías de la paridera del año, evento que se ha realizado ininterrumpidamente desde el año 1504. Una vez en Almonte, cada ganadero procede a la identificación de las crías (Hierro al fuego y microchips), las cuales pueden ser devueltas a la marisma o destinadas a la

venta para uso ganadero, realizando al mismo tiempo el corte de las crines y el control del estado de las madres.

BIBLIOGRAPHY

- GERBET, M. C., 2003.** *La ganadería medieval en la Península Ibérica*. Barcelona, pág. 35.
- MUÑOZ BORT, D.** 2004. La ganadería caballar en la villa de Almonte. Quinto Centenario de la saca de las yeguas, cuadernos de Almonte, número extraordinario. p.p 150.
- RUY DE ANDRADE.** 1954. Alrededor del caballo español. Lisboa.
- SAIKI, R.K.; GELFAND, D.H.; STOFFEL, S.; SCHARF, S.J.; HIGUCHI, R.; HORN, SANCHEZ GARCÍA, I., A. IGLESIAS, A. FERNÁNDEZ, J.L. VIANA.** 1996. Caballo gallego de monte (poney gallego). Animal Genetics Resources Information. F.A.O., nº 19, 51-63.