# POSAVINA HORSE INDIGENOUS HORSE OF CROATIA

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#### Summary

The Posavina horse, which is the topic of the author's first work, really exists. The proof of its existence are numerous written records of the experience and tradition of its breeders and its apperance on the centuries-old pasturelands of Posavina, its natural habitat characterized by heavy rainfall, frequent floods, fog, snow and mud, with which the Posavina horse creates almost a symbiotic relationship. The organized breeding work is aimed primarily at the protection of this indigenous breed and symbol of Croatia, which now becomes a part of the European and world natural and cultural heritage.

### Introduction

The basic motivation for our work with the Posavina horse is related to two contradictions, illogical in their mutual consideration:

First, the information provided by the authoritative world literature on the non-existence of the Posavina horse, which can be seen in "A World Disctionary of Livestock Breeds, Types and Varieties", 3rd edition (see p. 179 - Horse);

second, now incontestable evidence on the existence of the Posavina horse in his centuries-old traditional breeding area, and on their owners and breeders which have been cherishing the centuries-old breeding tradition and experience through generations, without stud-farm work and exclusively based on their personal observations. This is the essence of the breeding which is now called indigenous to Croatia.

The aim of this work is to provide evidence of the existence of the Posavina horse within its breeding area and with its all particularities.

# Geographical Position of Posavina Horse Breeding Area

The breeding area of the Posavina horse is located in Croatia. The closest pastures, on which the Posavina horse grazes for more than 8 months a year, are only 30 km away from the Croatian capital Zagreb, in the direction South-East. The breeding area of the Posavina horse is mainly characterized by flood areas, i.e. wetlands along the Sava river and its tributaries Lonja, Odra, Strug and Sunja. Bigger urban areas around

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the pastureland (Odra, Lonja and Mokro Polje) are Velika Gorica, Sisak, Sunja, Kutina and Novska.

## Climatic Features of Posavina Horse Breeding Area

Apart from other particularities of the breeding area of the Posavina horse the climatic features have important influence in the formation and genesis of that horse breed.

The most important climatic features are the following:

- air temperature: min. 24°C, max. +36,9°C,
- relative air humidity: 78% on average per year,
- precipitation: max. 256.3 mm, min. 4.6 mm,
- duration of sunshine: 2,072 1,683 hours per year,
- fog: 86,3 days per year (due to the closeness of waters might be even higher).

The common feature of all these climatic features is their changeability.

Activities of Croatian Livestock Selection Centre Concerning Protection of Posavina Horse

Due to numerous contradictions about the existence of the Posavina horse the activities of our Centre are mainly aimed at field-work and the observation of the currently existing horse population within the breeding area. In our work we mainly lean on the experience and tradition of the breeders.

The numeric data on the existing population are the following:

Up to now approximately 1,300 horses have been recorded and entered in our register (mostly of older categorires), as well as some 300 horse breeders and 47 breeding locations in the breeding area.

Each horse has been marked (branded) on the left haunch. The brandmark is a symbol for cold-blood horse breeds taken over from former Yugoslavia, consisting of the letter "H", a hammer and a two- or three-digit number. Each of the branded horses has been described in detail on the description lists, which contain all important data on the horse and its owner/breeder.

The collected data have been stored in the computer system of the Croatian Livestock Selection Centre and the first preliminary registers for the breeding of the Posavina horse have been opened.

It is important to say that our intensive work on the collection of data about the existence of the Posavina horse started in spring 1993. Apart from the mentioned facts it has also been founded upon the professional literature.

The collected data on the Posavina horses, primarily measures of the stallions have already been processed. Respecting great influence of the natural habitat of the Posavina horse, which is the most important factor in the formation of phenotype and genotype of the Posavina horse, one can conclude the following froquency of the particular measures in the existing population:

wither height: 150 cm,loins height: 154 cm,body length: 160 cm,

- breast depth: 76 78 cm,
- breast width: 56 cm,
- croup width: 64 cm,
- croup length: 56 58 cm,
- breast measurement: 210 cm,
- cannon measurement: 22 23 cm,
- colour: bay, dark bay, black, grey.

### Decription of Posavina Horse

### A) Exterior

#### HEAD

**EARS** 

Distance between ears fairly big, between tips even bigger. Ears

open outwards, with thick hairs on openings. Elliptic and not fleshy.

**FORELOCK** 

Long, thick forelock falling over eyes, often reaching nostrils.

Curly and hard.

**FOREHEAD** 

Broad and rectangular with flat bones above eyes.

**EYES** 

Elliptic with huge openings, with noble look and horizontal

eye-lashes. Eye diagonal 30 degrees.

**NOSTRILS** 

Rather big and elastic, pear-shaped with parallel inner and

prominent outer lines. Flexible and soft.

MOUTH

Upper lip elastically rectangular, lower lip firm and round.

Rather long.

CHEEK

Medium-sized with light turn from lower lip to gullet.

TEETH

Teeth position on upper jaw in relation to lower jaw and vice versa

20 degrees.

JAW

Small angle of 20 degrees, with slight concavity toward middle of

head. Ontward with relatively big distance.

GENERALLY Noble in profile and dry with prominent eyes.

# MANE

GENERALLY Medium-long, curly, thick and double. Gives noble look.

NECK

Normally set and strong. Relatively short and beautifully shapod.

Firmly set on withers. Lower line short, uppor long und slightly

bont forwards. Short occiput.

GENERALLY Neck mass dominant in relation to entire body.

#### BREAST

FRONT PART Bulging, broad and strong

**DEPTH** 

Medium (due to short legs it seems deeper).

LENGTH

Long breast (not much belly).

RIBS Round, divided toward croup. GENERALLY Very strong and well shaped.

# MIDDLE PART

BELLY

Firm and narrow.

LOINS

Flat, firm and short.

GENERALLY Closed, with firm connection

### FOREHAND

SHOULDERS Spread from each other. Medium-long, at an angle of approx.

40 degrees.

**ELBOW** 

Short, open, at an angle of 35 degrees.

**FOREFOOT** 

Short, with dry, medium-sized fetlocks and short pasterns with

thick, bristled hairs.

**HOOF** 

Flat, short, however broad and concave.

**POSTURE** 

Broad and correct.

#### HIND LEG

**CROUP** 

Rather broad than long, more often steep and medium-double with

open angles of connectin of that part of skeleton.

**JOINTS** HOOF

Medium-sized, dry with thick, bristled hairs on pasterns. Normal, slightly deeper than front one, with normal angles.

**POSTURE** 

Broad.

### **FUNDAMENT**

**GENERAL** 

Relatively dry, with short cannon and correct posture.

### SPINE

NECK

Positively rounded toward shoulders without prominent withers, then more wavy and finally

WITHERS BACK

again positively rounded toward tail, with

LOINS

short and steep loins.

CROUP

Root rather short with thick hair. Slightly lower set and medium-long. TAIL

GENERALLY Wavy upper line with light turns.

#### BODY

GENERALLY At first glance short, compact and firm, of rectangular shape with equal mass in all three parts.

# WEIGHT

GENERALLY Medium, 600 - 650 kilograms.

#### HEIGHT

GENERALLY Around 150 centimeters (measured by stick).

- B) Interior
- 1. PHYSIOLOGY adapted to environmental conditions, dependent on climatic and nutritional cycles.
- REPRODUCTION carried out without any control, however according to breeders observations. In reproductive terms, Posavina horse is very well adapted to its habitat.
- CHARACTER- very sociable toward other animals and people, obedient, loyal, with excellent memory. Good-natured and tractable. No defence mechanism against man. Very good character, full of temperament.

It is rather clear that our work so far has been mostly aimed at the observation and recording of stallions. Therefore it might seem that the mares, which are extremely important in consideration of the breeding activities, were somehow neglected. The recording of mares reguires a more complex approach and more physical work in the collection of data, which is already under way and will be the theme of the next publication.

The selection and assessment of the mares of the Posavina horse breed has already started, aimed at their recording in the main registers. The assessment panel consists of three breeders, one representative of the Croatian Livestock Selection Centre and one independent member.

The assessment is concentrated on the following criteria: breed type, exterior, correctness of gaits and horse's vivacity. According to these criteria the assessment panel gives the final mark.

According to the latest records there are some 400 mares recorded in the main registers.

Apart from the exterior assessment of stallions and mares the blood type analyses are also under way. This is the essence of out work now, in order to include the blood types as one of the most important criterira for the determination of a horse's belonging to the Posavina horse breed.

# Posavina Horse Breeders Association of Croatia - HRVATSKI POSAVAC

In order to expand the field of work beyond taking of measurements and to prove the existence of the Posavina horse breed, we have decided to organize the breeding activities according to international standards. Such an organization seemed to be inevitable in proving the existence of the horse breed and the breeders themselves.

The Posavina Horse Breeders Association of Croatia - HRVATSKI POSAVAC was founded on 30 December 1893 in Trebarjevo Desno, a village in the breeding area of the Posavina horse. The Association is a non-for-profit and nongovernmental

organization aimed exclusively at the interests of the Posavina horse breeding. The symbol of the Association is a hoof of the Posavina horse with a spermatozoon inside which stands for the indigenousness of the Posavina horse breed in Croatia.

This symbol will also be the future brandmark for branding the horses of the known origin from the original Posavina breeding.

# Contacts and Professional Cooperation in Protection of Posavina Horse

The most important contacts of the Croatian Livestock Selection Centre with which we have established outstanding professional cooperation aimed at the presentation and protection of the Posavina horse were the following:

 Ministry for Environment, Protection of Nature and Nuclear Security of FR Germany,

- 2) European Natural Heritage Fund EURONATURE, Radolfzell, Germany,
- 3) foundation "Pro Specie Rara" and "Safeguard for Agricultural Varieties in Europe", St. Gallen, Switzerland,
- 4) Trakehner Horse Breeders' Association "Croat", Rovinj, Croatia, and the domicile Association of Trakehner Breed, Neumuenster, Germany,
- 5) FAO Animal Breeding and Genetic Resources, Rome, Italy,
- 6) Institute for Immuno- and Cytogenetic Studies, Vienna, Austria (blood-type analysis),
- 7) Posavina Horse Breeders' Association of Croatia HRVATSKI POSAVAC.

### Conclusion

The primary aim of our work is to explain the contradictions concerning the existence of the Posavina horse, which as a breed deserves its place in professional literature.

Leaning upon the skills, experience and tradition of the Posavina horse breeders we wish to continue our work aimed at recognition of the breed and organization of its breeding according to international standards, by application of the most recent breeding methods and techniques.

Through blood-type analysis we wish to prove its particular features arising from the specific life and environmental conditions (life in wetlands) in the very heart of

According to the Convention on Biological Diversity we wish to croato genetic banks of blood samples, semen of the most important stallions and embryos, in order to protect the Croatian breed in form of a Croatian genetic bank. Apart from that we also wish to create and preserve the genetic park of flors and fauna for future generations, because no other habitat can preserve the Posavina horse and other wildlife that much as its centuries-old natural breeding area.