## A CRITICAL SITUATION WITH POSAVIAN HORSE IN CROATIA

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## Summary

In the Republic of Croatia there is a need for making an attempt to save Posavian horse. Croatian coldblooded horse is not endangered breed, as it is noticed in World Watch List for Domestic Animal Diversity (p. 243).

The Posavian horse in croatian scientific literature is described as an autochton breed from the Sava river valley. Its origin begins with crossings of autochton horses with Illyrian, Celtic, Roman, Avarian and other horses till the middle of our century. Posavian horse is a Przewalsky form of horse breed.

The basical external measures for mares were: Height of wither with stick: 136,30 - 137,14 cm, deepness of breast: 63,03 - 64,50 cm, the circuit of metacarpus from 17,64 - 18,06 cm.

The weight of adult mares were 311 - 342 kg.

We have started with searching for such animals in some areas for identification and determination of breed as critical or extincted.

Key words: Posavian horse, saving, critical or extincted.

In World Watch List for Domestical Animal Diversity (9) at page 243 is decribed with basical title Yugoslav draft and with local names or synonyms: Hrvatski hladnokrvnjak, Domaći hladnokrvni, Croatian Coldblood, a horse breed, with total population size of 100 females (1986).

Close to description of this breed it is mentioned the colour, and weight of 700 for males and 625 kg for females, with an average height of animals with 165 and 160 cm respectively and 45 females registered.

For our team it is unknown the source of such informations, but it was obvious made some mistakes among the name of breed, and critical status of breed. At the same time it was the reason for our intervention in connection with invitation on page 20th, and we decided to give our supplement and some suggestions.

In the Save river valley, in north part of Croatia, and even south of this region it is in breeding a heavy coldblooded horse breed with some subbreeds. In totaly, this breed is similar with descriptions in W.W.L. on page 243. We have some very good papers about this breed (8, 10, 11, 15). To our regreat there is no conform, till this moment about the suitable name of breed and this is the reason for some local names of

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synonyms as Hrvatski hladnokrvnjak, teški konj, križani konj, and in last time hrvatski posavac. In reality it is the same breed with some little differences.

In the last 20 years, and specially in some last years, by different authors more than 2.000 heads were measured. At this moment for reasons of war it is very doubtful to say what is the real number of horses in Croatia but all authorities are thinking that 80 - 95% of the total number of horses in Croatia are in this breed i.e. some thousands of heads.

At the other side, that means by the Criteria for determining breeds at risk is neither endangered nor critical (W.W.L. pp. 14 and 15).

For this reasons we suggest a correction in W.W.L. and instead of Croatian coldblooded horse register another breed - POSAVSKI KONJ (POSAVIAN HORSE), which is realy endangered if it is not extincted.

Some of croatian scientist in livestock sciencies as Romić (14), Benčević (2,3), Ogrizek and Hrasnica (12) and Rako (13) made some excellent papers about this breed. From the above mentioned works we can have a quite clear picture about exterier of this breed. Some basical measures we have at table 1 in comparison with same - measures of Croatian coldblood horse.

By the work of Romić (14) Posavian horse at the basis of his hematological analysis is a tipical warmblooded horse as arabian, lipizzan and nonius breeds.

All authors described possavian horse as a crossing from home horses with Persian, Celtic, Gothic and Roman horses in first millenium and Avarian, Mongolian and Turk horses in second millenium.

Tab. 1. NEKE RAZLIKE U VANJSKIM PROPORCIJAMA IZMEĐU POSAVSKOG I KOBILA HRVAT-SKOG HLADNOKRVNJAKA Tab. 1. SOME DIFFERENCES IN EXTERNAL PROPORTIONS BETWEEN POSAVIAN AND CROA-TIAN COLD BLOODED MARES

Autori i broj kobile Authors and number of mares Podatci iz godine Results from year	Visina grebena Lydtin Height of wiether with stick	Visina grebena vrpcom Height of wiether with ribbon	Dubina prsa Deepness of breast	Opseg prsa Circuit of breast	Opseg cjevanice Circuit of metacarpus	Tjelesna težina Body weight
Benčević N = 8 (1950)		145,87		166,25	18,06	
Ogrizek i Hrasnica n = 32 (1952)	137,14		64,5	167,1	17,70	342,60
Romić n = 126 (1965)	136,30 ± 0,32	143,72 ± 0,31	63,05 ± 0,19	159,85 ± 0,50	17,64 ± 0,06	311,00 ± 3,36
Romić n = 97 (1975)	147,89 ± 0,52	159,96 ± 0,63	69,80 ± 0,43	189,06 ± 1,26	21,57 ± 0,16	567,33 ± 5,64
Ljubešić i Sukalić n = 27 (1989)	144,96	159,81	67,36	192,03	21,05	539,69
Kovač n = 318 (1992/93)	145 ± 3	158 ± 6	72,0 ±2	195,0 ± 15	21,0 ± 1	

At this way as a result of crossing grow up a domestic breed called "BUSAK". During last 150 years there were new crossings with arabian, lipizzans, nonius, oldenburg and englishcrossings or even thoroughreed. In these crossings and of course under the influence of climate, food, soil, way of life and way of use grow up a local breed POSAVSKI KONJ. By different authors, locality of breed was left coast of Sava river especially from Zagreb till Brod in longitude around 200 km. From first World war till the Second World war, and especially after second w.w. the number of horses fell down drasticaly, and location narowed only at locations Nova Gradiška and Brod. External characteristics of breed ware: low wiether, strong neck, very strong back, relatively rude head and abrupted crupper. In the form of body posavian horse is more similar to lipizzan, nonius and thoroughreed than arabian and bosnian horses. Metacarpus ir short, and hind legs are very often like x forms legs in cows. Breed has a very strong hoof inspite of living in wet areas of Slavonia and Posavina. It is a relatively low horse breed and late in reproduction. Modest in feeding. The most frequent colours were bay and black, but it was often gray, brown and even wild. The fertility was very high.

It is obvious by comparison of external characteristics in table 1, that croatian coldblood horse (or synonyms) is quite an other breed tahn POSAVIAN HORSE.

Some authors maintains that posavian horse is endangered breed in last 40 years, and the other wrote that breed is extincted. For clearing this problem our team started with an attempt of sistematic control of whole area in the oldest location of posavian horse in searching for animals which are in descriptions and measures like horses in table 1. We started inventarization in Nova Gradiška and villages near Sava river and discovered a herd which exterior measures are very similar with old descriptions of Posavian horse. The herd consists from 4 mares, 5 foals and yearlings and 1 stallion. Around 5 years all offsprings of this herd are in very closely inbreeding.

We hope that in the next year we will make an inventarization of all nucleus location of old posavian horse area, and if we will find an adequate number of animals in old tipe of posavian horse, we will undertake aditional laboratory analissis (hematological, serological, chromosomal) which we can make in home laboratories for identification of posavian horse and undertake measures for saving the breed.

## Conclusions

- We suggest in WWL a change for Croatian coldblod horse and synonyms, for it is not endangered breed, than a very vital and actual breed in this moment.
- We need a time for undertaking an intenzive care for identification old posavian horse tipe animals, and save them at a usually way if the breed is not extincted.

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