

**THE OLD - KLADRUBY HORSE AS A NATIONAL HERITAGE
OF CZECH REPUBLIC****Eva Sobotková, Barbora Zurovacová**

The Old Kladruby Horse is only national autochthon breed in the Czech Republic that arose in the 16th and 17th centuries with influence of Old Italian-Spanish Horses. This breed is included in Genetic Resources and in 2002 it was also declared the Czech national cultural monument.

This breed has been recognised as a historic landmark since 1995, and as such is unparalleled in the world. These facts best characterise the uniqueness of the Old Kladruby horse and make it our duty to preserve its uniqueness.

The centre of his breeding is in The National Stud-Farm at Kladruby nad Labem. The Old Kladruby horse is originated in the Czech Republic at the Bohemian Court Stud Farm in 1579, by Rudolf II, son of Maximilian II. It was derived from the Spanish Horse and the Old Neopolitan Horse from Italy. The intent of creating this breed was to produce a heavy and beautiful carriage horse, mainly for presentation ceremonies.

Charles VI, who had a great interest in horses, had the original buildings at the Bohemian Court Stud Farm, demolished and in their place, a whole new set of buildings, as well as a castle, built. These are still in place today. During that time, there were more than 1,000 horses at the farm. Today, it is a rare breed, with currently only about 300 mares (as of 2006) left in the genetic resources. Being very inbred, it is particularly at risk. The Lipizzan were occasionally used to revitalize the grey line of the breed. 1.1.1996 the Stud book of Old Kladruby Horse was closed for using any other breeds, including Lipizzans.

The grey Old Kladruby horses was founded by a stallion named Generale who was born in 1787. The black ones was founded by two lineages: Sacramoso (born in 1799), and Napoleone (born in 1845). The grey Kladruby line is a bit lighter in build, yet larger than the black. The black Kladruby is smaller and heavier than the grey, and has a different shape to it's head and neck. It is also shorter in the croup. The blacks were commonly used as carriage horses for dignitaries.

Eva Sobotková, Barbora Zurovacová, Department of horse breeding and agricultural tourism, Faculty of Agriculture, Mendel University of Agriculture and Forestry, Brno, Zemedelska 1, 60200 Brno, Czech Republic. Contact: xzurovac@mendelu.cz, Tel: +420545133233

The Old Kladruby Horses should be built for strength, with wide, oval hindquarters, a long, muscular neck, and a wide, deep chest. The back is usually slightly long, and the shoulder should be a bit upright, to facilitate higher knee action. The horse is convex in profile, and the legs have strong joints, although they may possess slightly long pasterns. The mane and tail should be thick, and set on a swan-like neck. The horse should have cadenced and elastic movement with high action. They are generally long lived.

Table 1 – STANDARD OF THE BREED (AGE FOUR YEARS)

Trait	Stallions			Mares		
	min	average	max	min	average	max
Tape measure (cm)	172,00	176,00	185,00	169,00	174,00	181,00
Stick measure (cm)	162,00	165,00	174,00	159,00	164,00	171,00
Girth (cm)	190,00	195,00	205,00	190,00	197,00	207,00
Bone (cm)	21,50	22,50	24,00	20,50	21,50	23,00
Weight (kg)	560,00	600,00	680,00	550,00	590,00	670,00

Both the grey and black lines today are used for sport driving, as well as under saddle sports such as dressage, and pleasure riding.

We made a statistical estimation of the body conformation of horses entered in the stud book of the Old Kladruby horse according to the factor of colouring, the owner, the male line, section of the stud book, age and sex; all this on the basis of the measured body size, angles of joints of the extremities and calculated hippometric indices. At the same time we compared the exterior properties of the Old Kladruby horse with the initially related breed of the Lippizaner horse.

We took measures of 26 body dimensions, 9 angles of extremity joints and we specified 12 hippometric indices of 166 Old Kladruby white and black horses in the possession of the National Stud Farm (NSF) Kladruby, of 70 Old Kladruby studhorses bred by private owners in the Czech Republic.

The breeding history of two colour variants of the Old Kladruby horse is somewhat different and for a long time was reflected in their dissimilarity. Even today we see clearly evident differences between the white and black horses. The most important difference is that the head of the black horse is more rugged, the chest of the white horse is more robust and the difference in the angular position of the extremities between the two is highly significant in favour of the white horse.

We compared the horses from the NSF Kladruby with private breeds and we came to the conclusion that the stud-farm horses were higher at the withers, with a more robust chest, sturdier build and that they were qualified for more typical gait of this breed. Horses of the regional breed were wider both in the chest and cox and their head was bigger.

As for the line comparison we saw that in the framework of the colour variants, in most of the studied characters the lines were homogeneous. We detected more marked differences from the Old Kladruby type only in the Rudolfo, Romke and Siglavi Pakra lines. We can use most of the deviations among all lines in a positive way for further breeding by combining the respective lines taking into account their specific properties.

When comparing the individual sections of the stud book of the Old Kladruby horses we discovered that the most typical mares were mares entered in the master stud book and that most of the differences from the average breeding standards appeared in mares recorded in the 1st and 2nd subsidiary stud books of mares.

Analyses of the age factor proved the well-known changes in the body conformation developing during the animal's life. It is namely the gradual increase in the size of the chest of the youngest horses during breeding, and particularly in mares we saw the formation of the so-called saddled back. The assumption that the body conformation of the Old Kladruby horse has changed over the past 20 years was confirmed.

On the basis of the results of an analysis on the effect of sex we proved differences between mares and stallions in 24 of the 35 investigated body dimensions and in 3 of the total 12 hippometric indices; 21 differences of the 47 characters were highly significant.

In our opinion measuring can give a more precise definition of most of the characters assessed in the Old Kladruby horses than linear description, which is used to assess the exterior of the Old Kladruby horse.

In this connection we believe that it is necessary to eliminate the subjective influence of the judge when evaluating the exterior of the Old Kladruby horse. This can be achieved if we combine the linear description with measurements of more than three basic dimensions of the horse body. We recommend the following complementary body dimensions, which should not be evaluated on the basis of linear description, but directly by measuring: oblique body length, width of chest, and the accredited breeding establishment, i.e. National Stud Farm Kladruby nad Labem, should also consider incorporating the evaluation of the head dimensions and not only subjectively by judges of the linear description.

REFERENCES

1. Bílek, F. et al. (1957): Speciální zootechnika - Chov koní. Praha, SZN, 1030 s.
2. David, J. (1987): Hlavní plemení šlechtitelského chovu koní v Kladrubech nad Labem v letech 1951 – 1985. Praha, SZN, 152 s.
3. Dušek, J. (1981a): Hodnocení proporcionality tělesné stavby chovných stád klisen kladrubského vraníka a bělouše. Bulletin VSCHK Slatiňany, č. 35, s. 129 – 150.
4. Dušek, J. (1988): Odhad dědivosti tělesné proporcionality u koní. Bulletin VSCHK Slatiňany, č. 55, s. 34-41.
5. Dušek, J., Richter, L. (1965): Hodnocení dědivosti výkonnosti a tělesné stavby potomstva plemenných hřebců ve starokladrubském vraném stádě. Vědecké práce výzkumné stanice pro chov koní ve Slatiňanech, s. 197-210.
6. Dyková, Z.: Současná situace chovu starokladrubských koní. Ústní sdělení, Hřebčín Slatiňany, 14. 7. 2006.
7. Gassebner, H. (1896): Die Pferdezucht - Die Hof- und Privatgestüte. Wien, Hof und Staatdruckerei, 330 s.
8. Jakubec, V., Jelínek, J., Volenec, J., Záliš, N. (1996): Lineární systém popisu a hodnocení tělesné stavby koní, Modelová aplikace – starokladrubský kůň. Hipologický věstník VSCHK Slatiňany, č. 1, s. 5 – 32.
9. Jakubec, V., Záliš, N., Schlote, W., Scholz, A., Ondráček, M. (1998): Linear type trait analysis in the sire lines of the Old Kladrub horse. Scientia agriculturae bohemica, roč. 29, č. 1, s. 17-28, ISSN 0582-2343.
10. Jakubec, V., Záliš, N., Jelínek, J., Ondráček, M., Volenec, J. (2000): Analýza znaků lineárního typu a ukazatelů výkonnosti v genové rezervě „Starokladrubský kůň“. Hipologický věstník VSCHK Slatiňany, č. 2.
11. Jakubec, V., Záliš, N. (2000): Zdůvodnění minimálního počtu koní v genové rezervě „Starokladrubský kůň“ v Národním hřebčíně Kladruby nad Labem. Hipologický věstník VSCHK Slatiňany, č. 2.
12. Jakubec, V., Volenec, J.: Stav, problémy a výhled šlechtění genetického zdroje „Starokladrubský kůň“. In Sborník VÚŽVU NH Kladruby, Kladruby, říjen 2003.
13. Lerche, F. (1956a): Starokladrubský kůň. Praha, SZN, 293 s.
14. Volenec, J. (1983): Vyhodnocení zevnějšku (typu a exteriéru) a růstové intenzity podle kohoutkové výšky páskové českého teplokrevníka a kladrubského koně. Bulletin VSCHK Slatiňany, č. 42, s.1-42.
15. Řád plemenné knihy starokladrubských koní. [online]. [cit. 2006-22-03]. Dostupné na <http://www.nhkladruby.cz/dokumenty/radpk05.pdf>