



Section 14, poster 19, bmarkovic@t-com.me

Donkey's population in Montenegro and its exterior characteristics

Markovic B. and Markovic M.

University of Montenegro, Biotechnical Faculty, Department for Livestock Science, Mihaila Lalića 1, 81000 Podgorica, Montenegro

INDRODUCTION

Donkey's population has been reared for centuries in the south - coastal region and in the central - carst part of Montenegro. Adaptability to the severe conditions, strengths, resistance and modest requirements in nutrition have favored donkey comparing to a horse in those regions. However, depopulation of remote rural areas together with intensification of the agriculture have caused constant decline of Montenegrin donkey population. The total population counts up to 2000 animals, which is considered as threatened by extinction.

There was no interest for research of this species, thus relevant scientific facts on donkey's population in Montenegro do not exist.

The aim of this research is to determine basic exterior characteristics of the donkey's population in Montenegro.



MATERIAL AND METHODS

Data on exterior characteristics were investigated on 65 animals, for:

- a) exterior description (hair color, characteristic pigmentations in dorsal stripe and lower parts of legs); and
- b) data on body development: withers height (WH), chest depth (CD), body length (BL), chest width (CW) measured by Lidthin's stick and chest circumference (CC) and canon bone circumference (CBC) both measured by ribbon in cm. Body weight (BW) is calculated by using Pejic's formula:

$$BW (kg) = \frac{CC^2 \times BL}{11877}$$

All data are statistically analyzed by using software Statistics 6.

Body measures and body weight of donkeys (n = 65)

Traits	Mean	Standard deviation	Range
Withers height	98.6	4.3	90 - 110
Chest depth	42.6	2.1	38 - 47.5
Body length	103.2	4.8	91 - 116
Chest width	24.0	2.7	19 - 31.5
Chest circumference	117.9	5.9	106 - 134
Bone circumference	13.3	0.8	12 - 15
Body weight	121.4	16.4	94.7 - 172.3

RESULTS AND DISCUSSION

a) Exterior description:

Gray-brown heads with dark or black line along the back and cross line on the shoulders prevail in the total population (85%). Ventral part of the body and lower legs are usually lighter pigmented with black rings around lower part of the legs. Animals with dark to black pigmentation of hairs are present by 12-13% in the population, while animals with white pigmentation of hairs are very rare.

b) Body development:

By measuring 65 adult animals (45 males and 20 females), average values for the body traits were determined as follows: withers height 98,6 cm; chest depth 42,6 cm; body length 103,2; chest width 24,6 cm; chest circumference 117,9 canon bone circumference 13,3 cm and body weight 128 kg.

Relatively wide range of variation determined for withers height, body length, chest circumference and body weight are primarily due to the different rearing and nutrition conditions.



