

Evaluation of temperament characteristic of Czechoslovakian Wolfdogs in Czech republic 1982 - 2004

Abstract

The Czechoslovakian Wolfdog is a breed of dog that was bred from crosses between a German Shepherd and a wolf, originating from an experiment that was conducted by cynological divisions of the Border Guard since 1958. The breed has been listed in the (civil) pedigree register since 1982. The prerequisite for inserting an individual into breed is to pass a valuation, part of which is also judging the character of an animal.

The character of an animal has been standardized into 10 categories on a non-linear scale; essentially, it is a classification based on three criteria: strength – resistibility of the nervous system, stability of excitement and inhibition processes, and temperament – activity. The valuation committee assigns one of ten codes of character Oa-Oj to every individual, following a fixed methodology. These data are suitable for statistical handling.

The aim of this study was to analyze the results of classification of Czechoslovakian Wolfdogs' traits of character, based on valuations arranged between 1982-2004. The source data was a file of 1031 records of judging the Czechoslovakian Wolfdogs' character at valuation, of which 464 were males and 567 females. These data were assigned by data of parents, total of a 988 valuation codes of the father and 934 valuation codes of the mother of the judged individual. The file was classified by the animals' sex and date of birth. The research shows a statistically significant shift in relative frequency of particular character types. In individuals of both sexes born since 2000, the rate of desired well-balanced characters is 80,2 %, in comparison to 70,9 % which is long-term average, and to a mere 64,2 % of individuals born before 1987. Both in males and females, relative distribution of individuals assessed by the „ideal“ character code Of (sanguine, controllable, well-balanced) is continuously increasing. Together with this, the distribution of „weak“ (Oa, Ob) and „unbalanced“ (Oc-Oe) individuals at valuation is decreasing.

The dependence of judged individuals' traits of character on individuals' parents' traits was proved by a chi-square test for independence; the relation between mothers' and offspring's character was stated as being closer than the relation between fathers' and offspring's character. The genetic profit in the observed trait can be attributed especially to positive selection, which is more intensive in the male part of population, i.e. to preference for breeding males with desired character. The selection differential was determined by the difference between the frequency of fathers' and mothers' desired characters in comparison to the total assessed population. With male selection differential $d_m=12\%$ and female one $d_f=1\%$, genetic profit 16 % was achieved during 22 years of breeding, i.e. on an average 2,6 – 3,2 % for a generation (generations overlap each other). This corresponds to the effective heritability value of the observed trait 40 - 49 %, it is to a higher value than ascertained in published cases. This can be explained by a high genetic (additive) variance of the trait, which is in virtue of origin of the breed.