Zeszyty Naukowe
Uniwersytetu Przyrodniczego we Wrocławiu
BIOLOGIA I HODOWLA ZWIERZĄT LXIX, 597, 2013
BIOLOGY AND ANIMAL BREEDING LXIX, 597, 2013
ISSN 1897–208X
ISSN 1897–8223

ABSTRACTS

TI: BEHAVIOUR OF RING-TAILED LEMURS (*LEMUR CATTA*) KEPT IN ZOO

AU: Budny A., Kupczyński R., Korczyński M.
AD: Department of Environment Hygiene and Animal Welfare, Wrocław University of Environmental and Life Sciences

LA: Polish

AB: The aim of this study is behavioral research of a group of ring-tailed lemurs (*Lemur catta*) kept in zoological garden, with social behavior and domination aspect. The group of lemurs counted eight individual. The behavioral observations were continuous in nature and consisted in making a time budget each social behavior and separation of the dominant individual in the herd based on aggression and the frequency of the meanings of the land. During following observation the botanical plant species fed on the run was made. Most were selected purple dead-nettle (*Lamium purpureum* L.). Time spent on the ground in individuals from Wrocław Zoo was 46.77% of the time in total, while the trees 52.40%. In individuals living in the wild, these proportions are opposite. Dominant individual in the herd is a female, which was determined based on interaction with other group members. Male aggression shown to be during mating season, for which the European climate can be considered in August. During the experiment index of aggression in females was 0.32, while the males 0.55. Frequency of scent marking was 0.30 in females, males 0.38. Juvenile (age 3 months) follow-up time was in the weaning period, as indicated by rare milk intake from mother and spend just 6.9% of the time on her back. Social behavior of the study group-tailed lemurs on interactions between individuals was similar to the behavior found in the wild.

DE: ring-tailed lemur, social behavior, time budget, hierarchy
SO: Zesz. Nauk. UP Wroc., Biol. Hod. Zwierz., LXIX, 597: 9–19.

TI: PASTURES AND GREEN FORAGE IN HIGH-YIELDING COWS FEEDING

AU: Kuczaj M.[1], Bodarski R.[2], Preś J.[2], Wolski K.[3], Orda J.[2], Panek P.[1]
AD: [1] Institute of Animal Breeding, Wrocław University of Environmental and Life Sciences
[2] Department of Animal Nutrition and Feed Quality, Wrocław University of Environmental and Life Sciences
[3] Department of Grasslands and Green Areas Management, Wrocław University of Environmental and Life Sciences

LA: Polish

AB: This review paper describes the current systems of dairy cows feeding on pastures in many countries around the world. The concentration of conjugated linoleic acid (CLA) in milk is positively correlated with green forage in dairy cows feeding dose for. Feeding cows using the TMR system ensures the highest milk yields; however, the use of pastures lowers fodder costs. Pasture also possesses attributes significant for cow health, welfare and fertility. Adding 30–40% fodder from pastures or 25–30% green fodders to TMR mixtures does not

decrease cow milk yield or fodder intake. The application of an entirely silage-based diet (in TMR) during the summer season considerably lowers CLA content in cow milk and causes deficiency in some amino acids important for milk protein synthesis. Intensively cultivated perennial ryegrass gives higher production-economic effects than natural grasslands and cows produce milk with higher CLA concentration.

DE: dairy cows, grazing, milk yield, conjugated linoleic acid, amino acids

SO: Zesz. Nauk. UP Wroc., Biol. Hod. Zwierz., LXIX, 597: 21–33.

TI: COMPARATIVE OSTEOMETRIC STUDY OF SELECTED LIMBS BONES OF COMMON FOX (*VULPES VULPES*) AND ARCTIC FOX (*ALOPEX LAGOPUS*)

AU: Kulawik M.[1], Frąckowiak H.[1], Przysiecki P.[2], Nowicki S.[3], Nabzdyk M.[1]

AD: [1] Department of Animal Anatomy, Poznań University of Life Sciences.
[2] Institute of Agriculture, Jan Amos Komeński State Higher Vocational School in Leszno
[3] Department of Small Mammals Breeding and Animal Origin Material, Poznań University of Life Sciences

LA: Polish

AB: In the study compared the osteometric traits of limbs bones of the common fox, *Vulpes vulpes* (37 females and 40 males) and the arctic fox, *Alopex lagopus* (41 females and 40 males). The investigations indicated statistical differences between the species and between sexes within a species. Analysed bones of the forelimb was the scapula, humerus, radius and ulna. Bones of the hindlimb selected for analyses was the femur, tibia and fibula. Statistical analysis was performed based on measurements of selected bone traits. Comparative analysis of date of bones of the forelimb in males of both species showed that statistically significant differences at $P \leq 0.001$ were found for two measurements of the scapula. When comparing traits of bones of the forelimb in females of both species it was shown that statistically significant differences at $P \leq 0.001$ were found for five analysed measurements of the scapula, as well as one trait of the humerus and the ulna. The greatest effect on sexual dimorphism in the common fox was found for such parameters of the forelimb as ŁHS, ŁDHA, RGL and KłDPA, while in the arctic fox sexual dimorphism was connected with ŁHS, ŁBG, RGL, RBd and KłGL. Comparative analysis of results of measurements of the hindlimb in males common and arctic foxes showed no statistical differences at $P \leq 0.001$. When comparing parameters of the hindlimb in females of the common and arctic fox four traits of the femur were found to differ statistically significantly at $P \leq 0.001$. Sexual dimorphism in the common fox is connected with such metrical traits of bones of the hindlimb as: UBp, UBd, UDC and PiSD. In turn, in the arctic fox sexual dimorphism is connected with the following traits: UGL, UGLC, PiGL, PiBp and SGL. Values of metrical traits of limbs bones may provide species identification of the common and arctic foxes. These animals also exhibit sexual dimorphism identifiable based on some osteometric traits.

DE: osteometry, limbs bones, common fox, arctic fox

SO: Zesz. Nauk. UP Wroc., Biol. Hod. Zwierz., LXIX, 597: 35–53.

TI: MILK PERFORMANCE OF WHITE IMPROVED GOATS BREED

AU: Pawlina E., Gonera L., Kruszyński W.

AD: Department of Genetics, Wrocław University of Environmental and Life Science

LA: English

AB: The analysis of white improved goats breed lactation was conducted based on milk control results. The study included 200 goats from the first to seventh lactation (447 lactations in total). An average year milk yield per lactation was 521.07 kg for 237.64 days of milking. An average fat yield per lactation was 15.93 kg with fat content of 3.13%, while these values for protein were 13.61 kg and 2.8%, respectively. Milk, fat and protein yield in lactation were significantly affected by the age of goats, however no significant influence of

subsequent lactation in fat and protein content in milk was noted. The yield of milk, fat and protein in the second lactation as well as its length were highly significantly influenced by the kidding season.
DE: goat, lactation, milk yield, kidding season, lactation endurance
SO: Zesz. Nauk. UP Wroc., Biol. Hod. Zwierz., LXIX, 597: 55–62.