

Mobility, distribution and activity within beef cattle herd in a free ranging environment

S u m m a r y

Observations were performed on beef cattle herd grazing natural grasslands of National Park „Ujście Warty” (Warta river-mouth): 586 suckler cows of Hereford, Limousine, Simmental breed and Black-and-White crossbreds with their calves. Behaviour of cow-calf pairs, walking distances and distances between animals and their distribution as well as activities in free ranging environment were studied. Animal activities such as: grazing, suckling, laying, ruminating, standing, moving were recorded separately. There were two periods of observations: in the morning (5 hours after sunrise) and in the evening (3-4 hours before sunset). Most of the time cows were concentrated on grazing (78.8 of the time in the morning and 83.0% in the evening); calves on grazing and suckling (53.6 and 19.6% of the time in the morning and 36.4 and 31.8% in the evening, respectively). Walking took more time in the evening than in the morning (cows: 14.7 and 1.8% and calves: 20.8 and 5.2%, respectively). The average walking speed was 229 m/hour for cows and 224 m/hour for calves. Except the suckling sessions there were no space relations observed within cow-calf pairs – calves usually kept to 300 m distances to their dams. In the free ranging system in a single isolated group distances between animals in most cases (83,8%) were less than 50 m. There were no differences stated between morning and evening grouping of animals – 15,8 to 19,3% of animals preferred to be separated while the majority of them (80,7-84,2%) stayed in groups. The most common animal aggregation contained more than 2 animal categories (cows, calves, heifers, bulls) in a single group. Mixed groups were more common in the mornings (51,6) than in the evenings (38,9%). Cows-calves group was the second predominating type of animals' grouping. There was 26,6 and 36,1% of such groups in the morning and evening hours, respectively.