

STUDIES ON SOME PATHOLOGICAL ISSUES THAT APPEARED IN A FARM OF AMERICAN BISON

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Abstract

Bison is part of the bovine family, originally from Asia, which has reached both America and Europe. There are two subspecies - Bison (American prairie bison) and Bison Atabascae (Canadian forest bison). The European brother also had two subspecies, Bison Bonasus Caucasicus and Bison Bonasus Karpathicus.

Key words: bison, diseases, natality

INTRODUCTION

Bison growing is still a niche business in Romania. It does not require special halls and farm-type spaces, but it does require fenced pastures to ensure optimal living conditions and productive pasture management. The cost of such an investment depends on the number of animals and the area of pasture which will be surrounded by perimeter fences with wire mesh and professional electric fences.

Feeding of animals is done naturally in summer, by grazing in the ad libitum system, in winter by the administration of fan and minerals. Due to this mode of growth the nutritional value of the bison meat is higher. Bison are handled as little as possible, they are not domesticated, they spend their lives in the pasture without being locked up in a stable. Treatments and vaccinations are applied only in case of need. Bison is clearly a better choice with far less fat and calories, less cholesterol, but higher amounts of protein, iron and vitamin B12 than beef, pork and chicken.

MATERIALS AND METHODS

The studies were conducted at Euro Buffalo Bison Farm in Salonta, Bihor County. The entire number of animals from the farm was studied, starting with the year of establishment of the farm (2012) until 2018, which at the present time numbered about 851 copies. The number of fetuses, dystocias, neonatal mortality, respectively occurrence of all episodes of animal diseases were studied.

RESULTS AND DISCUSSIONS

In 2012, the American bison farm began to be popularized by an import of 37 animal heads from Austria. In 2013, these animals were abducted, resulting in 25 offspring. The low birth rate of 36% was due to the accommodation and acclimatization of the mature specimens.

As a result, the number of American bison from the Salonta farm increases during 2013 from 37 cows imported in 2012, to 78 heads, to which we can add the young born in 2012. Also at the end of the year we count 38 calves from females imported from Poland and 25 calves from females imported in 2012.

In 2014 the females gave birth to 76 calves, of which 6 heads died, the cause of death being their crushing by adults.

Also in May, a number of 61 females from France and Belgium are purchased, these animals are 2 years old. Due to the reduced body development, it was decided to introduce them to the mountain.

In 2015, there were 87 born heads, a relatively small number of newborns, which is due to the still unfinished acclimatization process of American bison arriving from other parts of Europe.

In 2016, in March the calves begin to exist on the females existing on the farm, most of the calves run until the end of June, but late calves have been noticed from the point of view of the year (autumn and winter months).

This year resulted in 98 calves, of which about 18 were lost (chicks unborn at birth, or crushed by adult congeners).

Also this year, there is a purchase of 96 American bison from Bulgaria. Of these animals 75 survive, the remaining 21 heads die because of their poor maintenance, unsupported transport, or die after calving, their body being very weak. The surviving animals give birth soon (1-2 months) to viable and unviable products. In the deceased animals, a massive infestation of intestinal, pulmonary, hepatic, chronic pneumonia, with pulmonary lobes entering the stages of gray hepatization, peritonitis and traumatic pericarditis was found following the necropsies. Animals imported from Bulgaria have undergone parenteral de-parasitization and vitamin treatment.

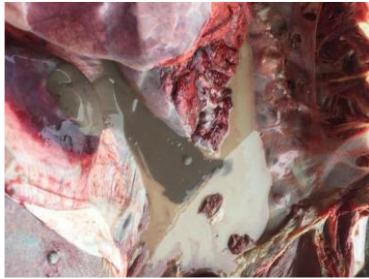


Fig. 1. Presentation of the accumulation of sero-purulent fluid in the thoracic and intracardiac cavity



Fig. 2. Presentation of the areas of pulmonary sclerosis due to insufficient oxygenation of the lung

In 2017 we have a number of 131 calves born, of whom 121 survive, mortality due to the causes mentioned above.

The birth rate in 2018 is 78%, a percentage that is due to reproduction problems manifested by dystocia, followed by partial or total placental retention at a lot of American bison located on a common plot. This lot consisted of primeparous animals aged 2-2.5 years. The facade took place about two weeks before the deadline, the products being unviable or dying within a few hours postpartum. It was found that the process of product development did not end, manifested by the presence in the oral cavity of very soft teeth, the small size and weight of the products, the impossibility of performing the sucking act from the mother, to live made products.

CONCLUSIONS

As it is observed during the period studied, the bison generally did not have serious illnesses if they received adequate maintenance.

Major problems arose in 2016 at the group imported from Bulgaria due to the maintenance conditions of the animals in the farm of origin. In 2018, in the batch of primiparas following the laboratory analysis of the samples (dead fetus, portions of placenta, blood samples from the dead fetus and mother, vaginal secretions from females), the suspicion of infectious disease was excluded. Following the findings it was concluded that the females were introduced too early for breeding although they showed good body development. That is why we recommend that the females of American bison raised on farms be introduced to the herd only after the age of two, taking into account their health and their body development, respectively.

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