

ANIMAL HYGIENE PREOCCUPATIONS IN ROMANIAN PUBLICATIONS FROM TRANSYLVANIA DURING THE 19TH CENTURY

Cristina Dinu¹, Ioana Andronie², Andronie V.³, Monica Pârnu⁴,

¹The Physiology and Ethologic Department, ^{2,3} Veterinary Hygiene Department, ⁴ Animal Production Departments, Faculty of Veterinary Medicine "SPIRU HARET", Bucharest, Romania

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*The Good
Calendar*

The first publications featuring husbandry and veterinary issues appeared in Transylvania (Romanian provinces) during the 18th century as governmental regulations: in 1786 the regulation entitled „Advice given in Beciu (Vienna) – about skinning and tannage of dead animals’ skins” and another one, known as „Arkan” (secret method) or teachings against sheep liver-fluke issued in 1787, both published in Sibiu. The first books ever translated from German and Hungarian on agriculture and animal husbandry such as „Teachings for treatment and protection against contagious disease spreading across the country [...]” translated by Petru Maior and published in 1816 feature medical terminology used among this days: amputation, wound, epidemic etc. The publishing of Romanian calendars – annuals destined to the rural population, has mainly facilitated its access to economic knowledge, to practical advice regarding agriculture, animal husbandry together with prevention and even treatment of some animal diseases. Out of the wide range of calendars published in Braşov, Arad, Sibiu, I mentioned „The Good Economist’s Calendar” in 1882 (fig.1) which recommends the farmers, among other things, the use of pastures because these „offer to cattle the most natural and convenient feed. The animal on field chooses his plants freely, eating successively and digesting properly; the fresh air and repeated movement strengthen the body, increase the appetite and intensify the blood circulation”. Our interest however was raised by two books published during the second half of the 19th century, destined mainly to farmers but at the same time significant to the history of the veterinary science. The first book was entitled „The Home Veterinarian for horses, cattle, sheep, goats and pigs [...]” (extremely rare today), published in Gherla in 1877 (fig. 2) and written by Basiliu Cornea, Master in Surgery, Obstetrics and Veterinarian, the first Romanian graduate (1868) of the Medical – Surgery School from Cluj to have chosen the veterinarian profession and who, at the end of eight

years of practice felt the need to help the Romanian peasants with animal husbandry and published the above book. In his Forward to the book he specifies that he started on the idea that „the spirit of the age dictates that all fields of science should be easily available to masses” and shows how in writing his book he dwelt on ideas from the works of Baumeister, Böhm, Neithardt, Röhl, Veith, Swoboda, Zlámal, but the register he chose was appropriately



Figure 2. „The Home Veterinarian for [...]”

construction, nutrition, water supply and animal body hygiene.

„In order for a horse to be healthy he must live in a large, well-lit, clean shed”. The windows have to be large enough and placed level with the animal, but never towards his head. Fresh air is the first necessity for a healthy horse, therefore the shed must be aired so that the animal will not be in the draught and the temperature must not rise above 12°C. Nutrition will provide good quality and in a quantity adequate to the horse’s age (barley, hay, grass, chopped straw), whereas the water supply will be clean, clear, odorless and coming from a running source (river/spring water is the best). The writer draws the farmers’ attention upon the fact that „good feed and appropriate shed is not enough for the horse’s health, it should be complemented with exercise, rest and body hygiene. In the case of horses production the author recommends that these rest for an hour after each feeding and that a litter should be made where the animals can recover their strength overnight. If they don’t work, horses must be walked so that their feet will not „stiffen”. Apart from exercise and rest the animals must be cleaned and brushed. He explains that brushing is to remove is necessary in order to „open the pores which facility removal of all useless elements from the body”. If they are sweaty the horses will be rubbed with a bundle of straw until dry. A very important issue is the hoof care, in order to be able to use the animal until and an older age.

light „so that the peasants could also understand the advice it comprises.”

The book is divided in four parts „according to the four types of domestic animals: horses, cattle, sheep and goats and pigs; each type is in turn divided in six chapters, as follows: the natural history of each species; division and description of all known animal species and breeds; ways of determining the animal age and possible frauds operated when they are prepared for sale; animal breeding; animal nutrition and diseases. We will focus in the following on the chapters dealing with rules of veterinary hygiene that are necessary in order to keep the health standards of the animal species mentioned above. The rules refer mainly to shed

During the next chapter Dr. Vasile Cornea makes recommendations regarding husbandry hygiene, namely the stables need to be well-aired and dry, they must not be surrounded by buildings which will blot out the sun. The floor must be leaned (higher to the front) so that urine and water could flow downwards and the floor could be cleaned and straw scattered on, while the manger should be off the ground. Soon after calving „we keep the cow in a warm stable, we feed her well and water her not too cold water. The author also recommends that calves should be kept in separate, clean and draught free stables and be separated according to gender after six months.

Regarding the sheep and goat stables described in the fourth part, he writes that they must be built on high locations, out of wind and not too far from the pasturing areas, they should be tall (to let the air in and be draught free) and well-lit. The stable mustn't be too warm because these animals prefer colder temperatures. The author tells the farmers that sheep prefer to rest on a dry, hard spot and recommends a layer of straw „according to sheep's necessities". He explains further the structure in floor construction: out of dry wooden boards placed at a certain distance one from another under which there must be a pit to collect urine, water „and the manure will fall in through the cracks". The sheds must be organized in sectors, namely for milking sheep, rams and lambs. Considering the fact that sheep spend quite an important amount of time on the field, Dr. Cornea makes recommendations for animal and pasture preparation for grazing. In the last part of his book the author advises pig owners to keep the animal's shed or pigsty clean and in good condition „although when we use the term of pigsty we think of dirt, idea springing from the false and unfair belief that humans share that dirt is beneficial to pigs." A good stable must be large so that the pigs have room enough to lie down and move easily and must be divided according to their number. The rules of bodily hygiene are equally important – there is a reference to the necessity of „washing the pigs several times with hot water and soap". By means of his work Dr. Vasile Cornea succeeded to organize the materials presented by following rules valid to the present days and established, among the first, attainable principles of veterinary hygiene useful both to veterinarians (few in number during those times) and more importantly, to farmers that were on their way to achieving an economic boom.

A new book entitled „Teacher Muntean shares to notable's needy knowledge following Veterinary Law and Contagious Diseases [...]" was published in Sibiu in 1891. The book is a Romanian version of Professor Tormay Bela's work, which presents the perspective of Veterinary Law concerning contagious diseases, hygiene methodology and procedures of veterinary police that had to be complied with by the village population. Here there are

presented means and procedures to eradicate contagious diseases, or at least their spreading and development. The book explains further the notion of „disinfections”, the means by which it can be operated with a detailed description of the physical ones, the specific manner of disinfections following a contagious disease applying the same strategy as the one we use today. „The manure will be collected from the yard and the stables will be loaded on a cart and will be transported to a location which cannot be reached by cattle, it will be mixed with straw and burned to ashes. All the wooden items will be taken out of the stable and will be washed, and the water residue will be drained into a 2 m deep pit, dug in a remote place. The washed items will be left outside to dry for at least two days. The ground or the floor in the stable will be dug out to 25-30cm deep, the mortar will be scraped and the ceiling will be swept. The dust and mortar residue will be thrown in the same pit. The floor will be rebuilt the next day using fresh soil and the walls will be painted. The doors and the windows will be washed with a sublimate solution while the manger will be cleaned using lye”.

It is important to notice the solution types that were used in those times, among which: ”we mix 3 parts of small pounded common salt, with one part of small pounded manganese dioxide, we add 2 parts of sulphuric acid and 2 parts of water – it will all be poured on a round bottomed bottle – called „alembic” and we will light a fire underneath. The bottle will be covered with a lid pierced by a pipe bent downwards. The lid will be placed on the top and the pipe will be introduced through a hole that reaches the stable. All the doors and windows must be closed so that the gas produced will stay in the stable. The mixture can disinfect a 10m/6m/4m stable, which will have to stay closed for at least 24 hours. The stable will not be entered before it is properly aired”. The two books we analyzed demonstrate the beneficial combination of the scientific and popular perspectives in approaching health and medical issues. A new method was found in informing and acquainting the village population – farmers and animal owners – with the scientific and legal requirements of the period. This method proved to be the most direct, productive and available for these people.

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