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BOOK REVIEW

Domestic animals from the zoological perspective

Hautiere – zoologisch gesehen. Herre W. and Röhrs M. Gustav Fischer, Stuttgart, New York, 1990, pp. 415 ISBN 3-437-20446-7.

Domestic animals are so common in the contemporary countryside that, in the majority of ordinary consumers (also of these animals and their products), they do not evoke philosophical associations or questions, such as: "How did they enter human habitats?", "What are they in comparison with other wild species?", "Do they undergo changes, and if so, how quick are these changes?" Scarcely anyone asks about problems like the bilateral interaction of domestic animals and people. This indifference and lack of broader interest results from various causes, one of them, which plays a substantial role, is the fascination with modern technique which stirs up more emotions than the seemingly unalterable realm of domestic animals.

Obviously, the technocratic modern world has not lost completely its interest in biology. That interest has been preserved by scientists, hobbyists, and professionals involved in stock production. For the three groups, both the causes and directions of interests are different. Nevertheless, those people maintain a certain system of values opposing a narrow technicalization of life. Thank to it, teddy bears have not been completely forced out by car models from among children's toys; and a real fun for both adults and children is the company of domestic animals, not only dogs and cats, but also guinea-pigs, hamsters and others.

Recently an attractive book, wrote by two outstanding zoologists, about domestic animals viewed from the zoological perspective has been published. It is a very interesting study which contains comprehensively many problems connected with animal domestication, the changeability of forms, modifications influenced by this domestication and the man-animal interaction. It should be stressed that the authors used a great number of literary sources from Darwin through Adametz to the abundant works of the 1980's. In spite of many citations with other authors' opinions, the study is not compilatory in character. The expressed views are the effect of the authors' own considerations. Besides, the opinions of other explorers, quoted or mentioned, are frequently not in harmony with the authors' opinions, and as such, they enable to follow the reasoning and conclusion-drawing by the authors.

The book consists of five parts of varied volumes. The titles of these parts give the best representation of the work's content.

Part A: Introduction, in which the authors base the opinion why research in domestic animals has a zoological aspect, and a chapter in which they deal with the essence of the domestication process and the "domestic animal" notion, as well as with an attempt to formulate a definition of this notion.

Part B: The question of species origin. First the authors investigate the intricacy of determining domestic animals' ancestors. Then they proceed to more detailed considerations, i. e. to the origin of domesticated mammals and birds through the contemporary processes of taming new species, e. g. fur animals, fish, and insects.

Part C: Foundations, time, and the course of domestication. First more general questions are discussed, then the authors focus on detailed descriptions of the process of taming particular species.

Part D: The creation and development of domestic animals' races is presented in two chapters, one of which covers briefly the environmental influence, mainly of the geographical environment, as well as the influence of man on the emergence of diversity in domesticated species and race creation. The other chapter is an extensive and interesting study of detailed issues related to forming races of particular domesticated species.

Part E: The contrastive considerations of the changes occurring in the state of domestication constitute the most spacious part of the work – about 2/5 of it. It comprises ten chapters which describe comprehensively the morphological and physiological changes in domesticated species, e. g. metabolism, reproduction, hormonal regulation, or behaviour. The last three chapters are probably most interesting as they form a kind of a summing up of the book.

In the first of these chapters, entitled "Borderline Problems", the authors touch on several very important issues, if only to mention the return to the wild state, as a process inverse to domestication, or the issue of human "self-domestication". The second of these chapters is an attempt to make some generalization in the form of the zoological valuation of domesticational phenomena. Domestication vs evolution, a question of fundamental biological significance, is considered here too. Other important subjects are: selection and variability, specific domesticational features, heredity of parallel phenomena.

The final chapter of the book is devoted to the bilateral relations between people and animals against the background of their common environment. Among other things, the authors touch on the significant problem of human attitude towards animals; they justify the right to protect animals from heavy exploitation. This reasoning, however, remains rational as the authors do not forget that human beings cannot withhold from their development, and will depend on animal utilization. On the other hand, animal conditioning to the environment created by man is so great that tamed species would not be able to survive without human care. Consequently, since both people and domestic animals are bound to live side by side, it is important that this coexistence should not inflict suffering on the latter.

The value of the book is even greater thanks to excellently chosen illustrations. Some of them are really perfect, e. g. three photographs (Fig. 113) of a sheep, a dog, and a pig of long flagging ears serving as an example of parallel changes in various species. A comparison of similar portraits of a sheep and a dog is both amusing and didactic.

According to the title the authors of the work view domestic animals from the zoological standpoint. It would be interesting to add one more chapter on this subject written by a breeder. What I mean is that in the history of animal domestication and breeding gradually more and more improved methods were used, which resulted in a considerable acceleration of the achieved progress. In my opinion, for example, the progress in animal productiveness in the last fifty years equals the one of the preceding two centuries, and that one, in turn, - the whole rest i. e. the period from the first attempts to domesticate animals till the middle of the 18th century. These are not, obviously, purely zoological matters but rather questions of raising technology and breeding methods; nevertheless, they caused a wide diversity of races and usable types, and therefore, they ought to arouse some interest among in zoologists.

I have read the book with satisfaction. I consider it to be a work of high scientific value, useful for all those who are interested in the process of domestication, evolution, and animal breeding. A great amount of interesting information can be also found by specialists of other fields, not only representatives of the biological sciences, but also material culture historians or representatives of other humanities.

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