

AN ANALYSIS OF SOME TEXT BOOKS IN ZOOLOGY

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In a questionnaire which was sent out something over a year ago to a number of the high schools of the middle west, an inquiry was made as to the title of the text book, which is being used in the high school course in zoology. Returns indicate that there is a surprising variation in the book adopted. It is true that one text was used predominantly, yet a great many were found in use and several of these were texts of the older type, dating their publication back forty years or more. This suggested an attempt at an analysis of the various texts in zoology. With the aid of a class of graduate students, some thirty text books were analyzed. It was evident as the analysis proceeded and the results were tabulated, that the text-books in use during the history of zoology instruction in this country indicate in the main, the changing conceptions of relative values in the instruction. It would be beyond the limits of this paper to undertake to present all of the data, so certain texts are selected from the lot analyzed which will be representative of the various types of zoology instruction which have been in vogue, and which will show, in a measure at least, the tendencies which are now at work in the instruction in high school zoology.

These figures will in no case foot up a total of 100 per cent because the topics selected are only representative ones from the group of some twenty-five topics that make up the complete analysis of the several books. The methods of getting at the figures were as follows: The book was read, and an estimate made, of the number of pages or fractions of a page (estimated in lines) devoted to each subject. Frequently, therefore, several subjects might be considered upon the same page, and these subjects might re-appear at many points in the course of the book. A summation of the pages and fractions of a page was finally made for each of the several topics and the percentage was computed which this total made of the entire number of pages of the book.

Certain tendencies are very apparent from this analysis. The oldest text evidently approaches the subject of zoology from the physiological point of view. There ensues then what may be termed the natural history point of view, stressing external features and habits. Then comes a period represented by Orton and particularly by Colton in which the morphology

Comparative physiology	28.4	0.	0.5	0.9	0.	3.	7.8	8.	2.6	3.8
Embryology	8.8	3.2	4.3	1.3	5.5	1.5	3.	0.1	2.	1.7
Life History	4.3	4.7	2.4	7.3	3.4	8.6	5.5	7.9	14.5	4.3
Habits	2.8	34.1	3.4	0.	28.	11.3	6.1	14.	14.5	20.
Economic Zoology	0.	7.1	0.	0.	5.4	4.	4.8	9.5	20.	10
Geographical distribution	9.8	5.1	3.	0.	5.6	3.5	4.4	28.	0.	5.
External morphology	0.	43.6	40.	32.3	24.9	34.3	31.8	3.3	23.3	31.3
Internal morphology	0.	0.	27.4	41.6	0.2	23.3	28.8	3.2	7.6	9.6
Evolution	0.	0.	0.	0.	0.	1.6	6.2	4.9	3.8	0.

of the animal seems to be the matter of supreme moment. Linville and Kelly, the text most widely used now, is to be classed with this group. Davenport's Introduction to Zoology seems to swing back toward the old natural history point of view, emphasizing external features, especially those that relate to habits, in other words it takes the ecological view point. While not the most recent therefore, it may be looked upon as marking, perhaps, the most advanced stand in modern zoology. In the very recent books there is an evident tendency to include a good deal of practical or economical material; this is especially true in Davidson, but not as true in the Daugherty's Economic Zoology, although its name would indicate that the effort of the book is to stress this particular phase.

It is very evident from this abstract of the complete table and much more evident from the complete table itself, that the texts in zoology are far from indicating any unanimity of opinion as to the proper content of a high school zoology course.
