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NATURE STUDY.

(Continued)

(A PLEA FOR THE PRESERVATION OF LIFE, BY J. B. WALLIS.)

In the earlier work everything must be observed in its natural environment. One might just as well go to a prison and observe through a grating a convict in a cell six by eight and expect to get a clear idea of the progress and dignity of man, as to catch a grasshopper, put him in a tumbler, cover the tumbler with a book so that the unfortunate insect may not jump out and then tell the pupils to look at him and find his beauties! As the pupils advance it is permissible, however, to bring in objects for study for it would be almost impossible to always study everything in its native place. This bringing in may be either for the purpose of watching the stages of life say in a frog, or for closer examination of the parts of some living thing. The value of the former is too obvious to need pointing out and the interest of the children is simply boundless. In the latter case the great point to be remembered is that you are not dealing with structure, but are striving to rouse your pupil's sense of the beautiful through his own powers of observation, and at the same time lay in a knowledge of facts of form, color, etc., which will be of the greatest value when the study of adaptation is more fully taken up. The pupils having thus gathered at first hand much information next proceed to classification and the study of adaptation and the latter of these must be taken up by a study of the object in its own home, for in most cases it is only by seeing the object at home that we can fully understand why it has its peculiarities. When a pupil has done all this and sees that everything is so perfectly, so wonderfully, adapted to its purpose, surely he will realize, behind all, that Great Power which leads all and guards all to its destined end.

THE VIEW OF UTILITY.

So much then for the *Æsthetic* standpoint and we next come to the side of Utility. Herbert Spencer says that the right education is the one which best answers the question: "What knowledge is of most worth?" and he deduces the answer "Science." Now we may or may not agree wholly with Mr. Spencer, either as to question or answer, but no one will deny that utility must be a factor in deciding what should be taught. If then it can be proved that the study of nature would be useful to us then it follows that we should give it a place on our list of studies if only with this end in view.

In this consideration it is important to notice that each division of nature bears a certain definite relation to all other parts, hence we must always take every living thing in its relation to its environment, animal or vegetable, and even the inorganic. Plants depend on the soil for an important portion of their food, but much of that soil was formed from dead plant or animal life by the action of minute organisms. Earth worms, too, in places where they occur are most useful to plants in mixing vegetable matter through the soil. Many insects feed upon plants and in return perform the important service of fertilization. Darwin has stated that the red-clover would become extinct if it were not for the humble-bee which fertilizes it