

## INTRODUCTION

FOR a long time botanical science, in the popular mind, consisted chiefly of pulling flowers to pieces and finding their Latin names by the use of the analytical key. All the careful descriptions of the habits of plants in the classic books were viewed solely as conducive to accuracy in placing the proper label upon herbarium specimens. Long after the study of botany in the universities had become biological rather than purely systematic, the old method held sway in our secondary schools; and perhaps it still does in some of our to-day know of high schools still working in the twilight of that first ray that pierced primeval darkness. However, this has practically passed away, and to-day life and its problems, its successes and its failures, absorb the attention of the botanist and zoölogist. The knowledge of the name of the plant or animal is simply a convenience for discrimination and reference. The systematic relations of a plant or animal are used in showing present anatomical affinities and in tracing their development. The absorbing themes of investigation are the life processes and the means by which the organisms are living in the world to-day have climbed upward and fitted themselves in the great realm of the "fit."

When the idea of nature study first dawned in the educational world, it was inevitably confused with the sciences on which it was based. Hence in earlier times we tried to teach the nature study of plants by making the children pull