50 PAPERS READ BEFORE THE B. C. ACADEMY OF SCIENCE

available, may carry out research work in their own particular lines. But here a great difficulty comes in. So many systematic papers have been published for each class, and even in some cases for each order, of plants and animals, that only those who have made an intensive study of special classes, are at all likely to have literature complete enough to do satisfactory work in classification in that field. What a hopeless task, therefore, it is to undertake to get together the literature necessary for the classification of all marine life. In very few of the world's libraries is there any pretence of doing anything of the kind. Even in many of the largest scientific libraries on this continent there is not literature enough to make it possible to attack successfully even a single class. An investigator in a new field, with only his own library to consult, has little chance to give exhaustive treatment to the classification of a great variety of forms.

How is the difficulty overcome? Only in one practical way, which is by collecting specimens and sending them to authorities for identification. This is what some of the pioneers in B. C. biology did; and in so doing they became familiar with the names, general appearance and something of the life history of such a host of fornis that it seems a marvel how their knowledge was obtained and retained. These men are of the type often spoken of as the "old time naturalist." Unfortunately there are too few of them at the present day. Some of them had to depend largely upon their own unaided efforts; but others were supported by such institutions as the Geological Survey and the Natural History Society. Chief among them may be mentioned Dawson, Richardson, Lord, Lyall, Taylor, Newcombe and Macoun. To all of these and to their assistants, the biologist of the present day owes much. All of them are too well known to require any other eulogy than the mention of their names.

In the last decade, the good work started by the pioneers mentioned has been continued under circumstances more favorable than those under which they labored. In 1901, the Minnesota Seaside Station was established at Port Renfrew, on the west coast of Vancouver Island, largely through the instrumentality of Miss Tilden, who, in years previous, had done much alga collecting in the Vancouver Island and Puget Sound regions. Much good work, especially in marine botany, was done at that station. But later Miss Tilden's interest was transferred to the algæ of the South Seas; and no regular work has been attempted since 1907. At about the same time as the Minnesota Station was established, Professor Kincaid of the University of Washington began exploring among the San Juan Islands. At first