

number of studies, thoughts and new departures. I am very happy to participate in this debate and would like to limit my remarks mainly to the establishment of the new Department of the Environment.

The establishment of this department is a giant step forward which should go a long way toward overcoming the so-called pollution crisis about which so many people in Canada and in the world are concerned. I am not one of those who cries doom and gloom and thinks that everything is lost. I agree, however, that there are some serious problems in respect of air, water, soil and other kinds of pollution and that there remains much to be done. Because of the great concern shown by Canadians in the last few years, and the strong legislation brought forward by this government, I believe the battle against pollution is beginning to be won and that even greater strides will be made toward winning the battle in the next few years.

Yesterday the Leader of the New Democratic Party said that the creation of a new Department of the Environment lacks goals. I do not agree with this assessment. I believe it is very clear that the goal established here is to ensure and create a better and cleaner environment for Canadians. The creation of this department brings together in a single ministry those federal agencies which deal with our so-called renewable resources. I think it is a great idea to have one department deal with water, air, soil, fisheries, forestry and wildlife. In establishing a Department of the Environment, the government is following an integrated or indeed an ecological approach to the improvement of our environment. The key word here should be "ecology".

As one who has studied ecology, at least plant ecology, I am very pleased to hear the word used in much of our everyday conversation. Ecology is quite an old science. Indeed, it has been pointed out that it goes back to the days of Socrates. Just for the record, the term "ecology" was composed in 1885 by a zoologist named Reiter. His combination of the Greek roots "oikos", meaning home, and "logos", meaning study or discourse, etymologically implies study of organisms at home, although he made little further attempt at definition. A year later Haeckel, another zoologist, formulated a simple definition which was in keeping with the original usage of etymology and which remains today the most widely accepted definition of the scope of the word. Haeckel defined "ecology" as the study of the reciprocal relations between organisms and their environment.

A great many problems, indeed most of those involving the conservation of biologic resources, greatly over-reach the limits of any one field of specialization. Ecology is a science that integrates separate disciplines, synthesizes them and presents them as a system. It is very natural and right that the Canadian Wildlife Service should be with fisheries, forestry, and the other disciplines of the Department of the Environment. The minister outlined many of the reasons this should be so. The basic orientation of this branch is scientific in nature. For a long time I have felt the Wildlife service was rather out of place in the Department of Indian Affairs and Northern Develop-

ment and would be better located in a department which was functionally oriented in the same direction as it. The same can be said in respect of the Water Resources Branch.

I also hope that as the new department begins its monumental task one of its functions will be to encourage more education in the environmental sciences. Ecological, or environmental education if you like, has been very lacking over the years in our Canadian universities. By and large, if a Canadian student wished to receive any kind of specialized education in the ecological sciences he had to go to a United States university. I am glad to note that recently courses in environmental studies are being offered at certain universities. At the University of Calgary they are offered up to Master's level; at the University of Manitoba up to Bachelor's level; at the University of Waterloo up to Bachelor's level; at the University of St. Jerome up to Bachelor's level and at York University up to the level of a Master's degree. Perhaps by definition I am omitting some very valuable courses offered by other universities, but I believe I have made my point. I hope the new Department of the Environment will do everything it can to rectify this situation.

In addition, I believe the Department should be involved in assistance at the pre-university level. With the type of expertise it has, it should be in an excellent position to give leadership in this field. Some schools boards and teachers' organizations have been doing some great work in this area but they need some encouragement, guidance and assistance. Just the other day I received a submission from the Kamloops School District No. 24, specifically from supporters of the McQueen Lake Environmental Study Centre, in which assistance was asked from this new department. I think they have an excellent program and I hope that their request meets with some success. The objectives of their projects are very laudable indeed. I should like to point out a few of them. The first is functional on-side activities of man and also an aesthetic appreciation by man of nature. Some examples of environmental studies approached by students are these: In art, simple mosaics from leaves, grass and twigs; landscape painting and inspiration for landscape painting.

● (5:30 p.m.)

In the field of ecology there is human, ecological history of homesteaders, pond life, grasslands, forests and over-all environment. I could go on. In zoology, they suggest the migration of birds and animals, nesting of birds, life cycles of small mammals, and insect life. All these should be studied more intensively. This is the kind of thing that the new department could encourage by helping out the organizations that I have named.

I was very pleased to hear the hon. member for Kootenay West (Mr. Harding) suggest that an environmental council should be established to advise the minister and to bring attention to the things that are being done in the field of environmental sciences, particularly the work that is being done by the new department. I suggested