

Scientific Criteria for Environmental Quality - Achievement for harmony

A body of scientific experts freed from constraints of legislation and enforcement of environmental standards share their concern for the balance of the environment. Publication of the findings of the Associate Committee on Scientific Criteria for Environmental Quality provides a firm basis upon which to design environmental law.

The anthropologist Claude Levi-Strauss observed that the notion of progress, and indeed the notion of an evolving historical time, is not recognized in many of the world's cultures. Technological societies, however, have developed side by side with the ideal of progress and capitalization of the environment. Such civilizations have produced modifications of the earth which rank second only to those of the coral polyps that constructed the Great Barrier Reef.

It is only within recent times that a new sensitivity to our position within nature has come about. For many, nature is no longer seen as an adversary to be overcome but as a complex set of relationships interconnected with society. It has been realized that while some natural processes are resilient, others are remarkably sensitive to intervention and, as the effects of perturbations of the environment unfold amongst the interlocking weave of nature, civilizations find themselves in the grip of a disastrous, and possibly irreversible, change.

An immediate reaction to this realization is to minimize any intervention with nature, the extreme example of which is the proposal to return to a more "primitive" way of life. Such solutions to the problem are as dangerous as the cause and it is only through an understanding of the mechanisms and relationships of nature's processes,

which include the evolution of human societies, that beneficial conditions may come about. To this end, the legislator, from the international to the municipal level, who is concerned with the establishment of controls and standards for our interactions with the environment, must look for expert guidance. The National Research Council of Canada began to provide such guidance when, in 1970, it formed the Associate Committee on Scientific Criteria for Environmental Quality to collect, collate and publish scientific criteria on the environment. By means of such criteria, it becomes possible to make objective evaluations about the quality of the environment. In creating a scientific body free from the duties of legislation and enforcement of environmental standards, its members are able to concentrate solely on the scientific facts.

Committee members comprise scientists chosen from industry, universities and different levels of government across the country, under the chairmanship of Dr. L. Piché of the University of Montreal. An important arm of the Committee is its Secretariat, housed in the Council's Division of Biological Sciences, under Dr. I. Hoffman. The Committee is divided into various subcommittees whose interests include water, air, pesticides, heavy metals, biological and energy phenomena.

Environmental Secretariat, NRC

Secrétariat de l'environnement, CNRC



The effect of contaminants in the atmosphere is illustrated by damage to tobacco leaves. Lesions on the leaf are produced by nitrogen dioxide injury.

L'influence de polluants atmosphériques est illustrée par des dommages causés aux feuilles de tabac, ici, des lésions causées par le bioxyde d'azote.