

Air, Water, Land... All Are Dead...

By Gerald van Gorp

"Man's standard of life is more important than his standard of living." An understanding of this value is essential if the present rate of environmental pollution is to be stopped and life is to continue on this planet.

In an attempt to increase public awareness of the threatened environmental disruptions caused by industry, D.A.G.S. council held its first Educational Conference on pollution, man and his environment, Nov. 26 in the Dal SUB.

The program opened with a fifteen minute film by Watson and Lapierre, which revealed numerous representative cases of air and water pollution and their ecological effects.

Commentary in the film was provided through interviews with people directly concerned with the problem — ranging from industrial leaders who rationalized a defence for their firm's role in contributing to pollution; or individuals whose only swimming facilities were sewage-filled rivers. The film ended by emphasizing the fact that the most essential tool in combating pollution effectively is public consciousness.

Keeping this fact in mind, DAGS council continued to educate the hundred and fifty people who gathered in the McInnes Room for the well publicized conference, with the aid of four guest speakers. Eric Mills, associate Professor of Biology, Don Waller Associate Professor at NSTC, John Bracken, Dalhousie Law School and Kim MacKey, Graduate student in Biology, spoke on the main aspects of air and water pollution in Canada.

The speakers emphasized that beyond a doubt the most dangerous pollutant in any part of our physical environment is the chlorinated hydrocarbons, especially the much used insecticide DDT. Under government food standards, the human body would be rejected as meat.

Any DDT introduced into the atmosphere, remains stable for fifty years. The average person's body contains almost twice the percent DDT permissible in most meats sold for human consumption.

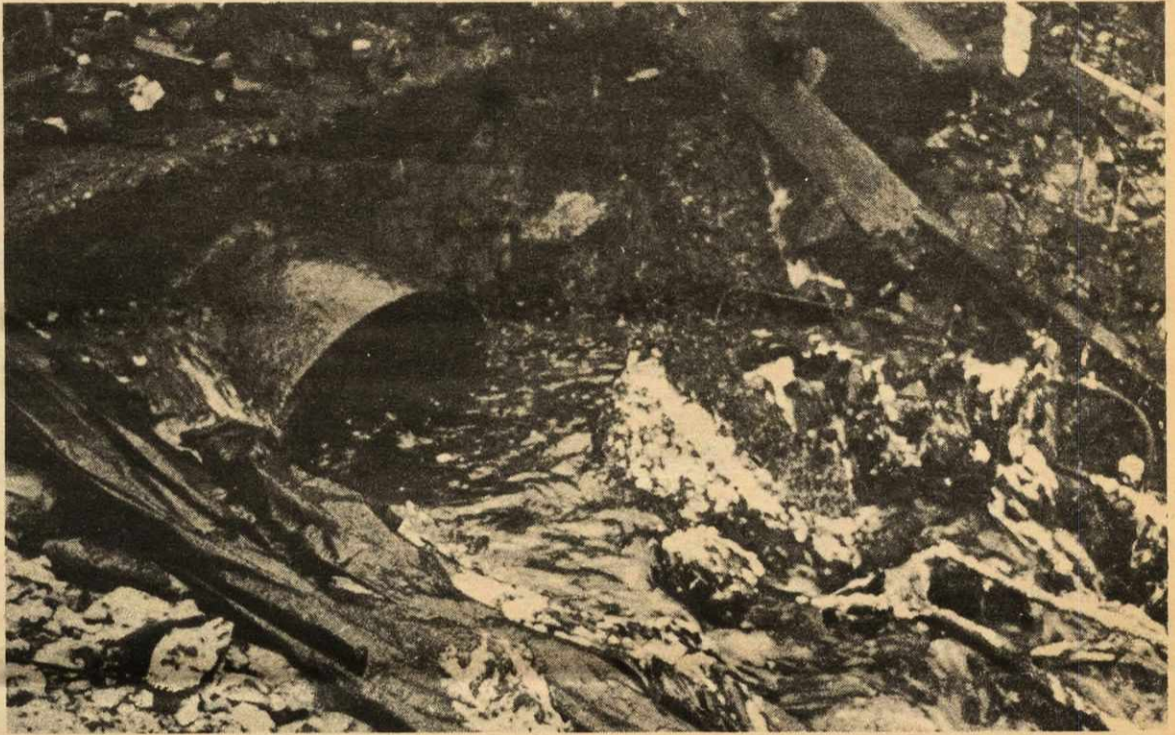
Its presence in the air has threatened at least 150 bird species in North America with local extinction. Even if the pesticide were banned by all governments immediately, much of it would remain in the environment for generations.

Because of publicity, and pressure by a socially conscious U of T group, the Ontario government decided to ban the use of DDT starting January 1. Its use is still unrestricted in nine Canadian provinces, including Nova Scotia.

The pollution of water, presents an equally dangerous threat to the safety of our physical environment.

A recent survey conducted by the Federal Health and Welfare Department, shows that only eight major Canadian cities have 100% treatment of their sewage. Out of the 19 cities surveyed, only 3 — Quebec City, St. John's, Newfoundland and Halifax have no treatment of their waste before it is discharged into nearby waters.

Up until September of this year there was no real restriction on industries such as the one in Long Harbour,



Newfoundland which disposed of its poisonous colloidal phosphorous in Placentia Bay.

This act directly resulted in ruining all fishing in the area thus destroying the livelihood of whole communities.

Just before the Labour Day weekend, the Federal Government initiated an important policy under the Canada Water Act, in uniting the provinces with Ottawa to launch united effort against pollution in the country.

In the Act itself, there are a number of areas of uncertainty. For example, the proposals include a scale of fines applied to industries that pollute waterways with a maximum of \$5000 a day. Will the fines be levied on those influential organizations which most deserve them?

In Nova Scotia, the emphasis seems to be on encouraging and protecting industry rather than on conservation. Highways Minister I.W. Akerly, President of the National Council of Resources Ministers, reacted to the proposed Canada Water Act by saying, "I don't think (pollution) is something we should push the panic button on." "We have to protect the corporations," he continued, "as well as the province." Does the provincial government serve the corporations or the general public?

In 1967, E.L.L. Rowe, Director of the N.S. Water Authority stated that the province "does not need stronger

and more uniform legislation to deal with pollution control."

In reaction to the Canada Water Act proposals, he said, "It is all right to talk about setting high water pollution standards, but another thing to enforce them. We'll see how far they get when they start dealing with some of the problems."

The provinces have objected that strong anti-pollution law will hamper economic development.

Often, new industries are assured that these laws will be largely ignored and treatment facilities need not be complete.

Usually, statements are made, assuring the public that economic development is the only prime concern and pollution will be taken care of. Regardless of the great importance of industry, all the capital in the world can't make up for clean water, the disease and death caused by a polluted environment.

The proposed Canada Water Act is a vital beginning but only through public pressure can it be effective.

It was with this realization, that the D.A.G.S. Council and nearly a quarter of the people who attended last Wednesday's conference, decided to join forces with ECO, an organization already active in attempting to overcome the pollution problem.

McGill Conference

Teaching Methods Discussed

A group of 14 students and three professors from Dalhousie attended a conference held at McGill University from November 19-22 on "Instructional Innovations in Higher Education". It was sponsored by the McGill Centre for Learning and Development in cooperation with l'Association des Professeurs d'Education des Universités du Québec. The McGill Centre was set up in August to "act as a focal point for the evaluation of existing learning and teaching methods and experimentation with new methods", as stated in their news-letter. Professors and students from all levels of schooling and from all across Canada listened to presentations by experts in educational research from the United States and Canada. The Dalhousie group was the largest out-of-town group present. They hope to achieve something with the ideas they gathered from the presentations. McGill president Dr. H. Rocke Robertson said in opening the conference, "My hope is that the conference will attract and interest those not now concerned". This is one of the aims of the Dalhousie group.

Motivation was one of the prime concerns of students attending the conference and they felt most of the presentations attacked the problem from an exterior angle. An example cited by many was Dr. Richard Malott's introductory course for psychology. He attempted to set up an environment in which the student could learn more and better. The course tried to deal with four problems of higher education: student underachievement, large faculty-

student ratios, the high cost of education and the common complaint that a liberal education is difficult to achieve and irrelevant to the world of affairs.

One student complaining about this set-up said, "He puts you into an environment where you are pushed to learn and he was sort of zapping you." There was no internal motivation, he thought. However, he did agree that Dr. Malott got certain basic facts into the course and the students learned them, something not easily done now.

One suggestion to alleviate motivation problems was reward or payoff. "You have to work hard in my class to get a low grade", said Dr. Jack Michael of Western Michigan University. He provided students with a set of objectives and reading assignments every week. They were tested on Monday and if they obtained an A, or 100% mastery of the section, did not have to attend any more classes that week. Remedial sessions were held Tuesday and Thursday, and tests Wednesday and Friday. Those who scored an A on any of these tests received an A for the section.

Achieving 100% mastery of a subject, or of individual sections of it, was emphasized by Don Kingsbury and Dr. Malott as well. "Any student who gets a 55 in math, doesn't know his math," said Mr. Kingsbury. He wants to set up a Math learning Centre at McGill dealing out "packages". Each "package" would include objectives on section of the course and material to achieve it. A student works at his own rate and does not go further until the "package" has been totally mastered. If problems are encountered, he gets help from the math people at the Centre or experts who can fix the package up. This feedback is very important, feels Kingsbury.

In Dr. Malott's course complete mastery was accomplished by letting the students write up experiment reports until they got an A and requiring an A on daily quizzes. Going on in a subject when one section is not understood and mastered is ridiculous. Dr. Micheal felt practically



all students are capable of mastering any subject and remedial work helped them achieve this.

Dr. Geis with the best presentation of the conference, was concerned about the system and what could be done to change it in relevant terms. In his paper he states, "There is often a confusion in education between two aims. On the one hand skills and knowledge seem to be taught for their own sake, and on the other, they seem to be vehicles for the development of traits, strategies, viewpoints and attitudes which, it is hoped, extend far beyond the content area. All concerned members of society must have a voice in defining needs and determining which deserve attention... The generating of people who are themselves flexible and who in turn generate change might well be Education's most important output."

The students who went to the conference hope to achieve some of the goals and ideas set out by Dr. Geis and others. The system is not good. That was evident at the conference. Change is necessary. It is hoped it will happen at Dalhousie.