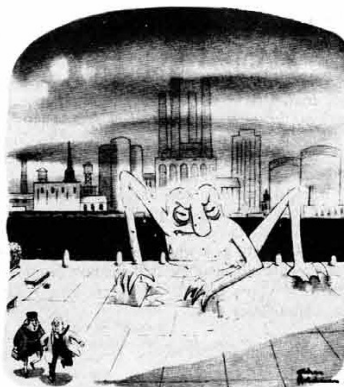


Amount of pollution produced by the various modes of Transportation

	Lead	Organic Compounds	Carbon Monoxide	Nitrogen Oxides	Particulates	Sulfur Oxides	Carbon Dioxide
Car	1	1	1	1	1	1	1
Bus	0	1/19	1/214	2/15	2 1/2*	1 1/15*	1/5
Train	0	1/37	1/410	2/29	1 1/3*	8/15	1/11
Walking	0	0	0	0	0	0	1/5
Bicycle	0	0	0	0	0	0	1/26

The amount of the several pollutants, relative to the automobile, produced per passenger mile by the four alternative means of transportation. In each case, the production of pollutants by the car is "1", and pollutants for alternatives are expressed as fractions of that produced by autos.

*The bus and train produce more dirt (particulates) per passenger mile than the auto. The bus produces more sulfur oxides.



"Now maybe they'll be moved to do something about water pollution!"

natural fertilizers and bulk limestone for enriching the soil. But unfortunately the university uses 2,4-D as a herbicide. 2,4-D is used in Vietnam for defoliation purposes. A study of herbicides was made by the National Cancer Institute and 2,4-D was among those tested. 2,4-D was found to cause birth malformations in experimental animals and is classified as potentially dangerous, but needs further study. It would be wise for the university to eliminate the use of such a potential dangerous chemical.

The university within its own bounds has done a satisfactory job in minimizing pollution but more must be done. We must use our community as an interest group to eliminate pollution from the environment.

The University as an Interest group

How can the university work in society as a whole to eliminate pollutants from Hartford's

environment? All methods of producing power pollute. The University must find and promote ways of heating that will be non-polluting. The use of natural gas is a start. Pollution control devices must be placed on smoke stacks to trap pollutants still remaining in the smoke stack's emissions. We must encourage research into new methods of production of electricity that will not pollute or ways of trapping and eliminating from the environment the pollutants made by present means of production. The university could minimize pollution by the use of mass transit, also bicycles and walking are alternatives. The university could request that the city of Hartford not incinerate trash but compact trash or at least use incinerating devices that control the emission of pollutants into the environment. Finally, the university could eliminate the use of herbicides to make the environment more pollution free and encourage research in finding alternatives to the toxic chemicals used.



Ray Fudge

Our Own Worst Enemy

by Sara Owen

Flowing through the scenic campus of the University of Hartford is the North Branch of the Park River, otherwise known as the Hog River. The headwaters of the river are in Bloomfield, and it eventually empties into the Connecticut River. Before it reaches the UoH campus, it passes through farmland, suburban residential areas, several country clubs, and pastureland. Undoubtedly, fertilizers and pesticides are washed into the river by rain. According to Dr. Theodore L. Maguder, the portion of the river which passes directly through campus is relatively unpolluted, however. It, and the pond behind Hartt College, are able to support such wildlife as trout, turtles, and ducks.

The major part of the pollution that does occur happens here on campus. Storm drains empty directly into the river, bringing in fertilizer, and gasoline and oil from the roads along with the rainwater.

Students also make a habit of discarding cigarette butts, beer cans, papers, and other assorted trash into the water. According to Dr. Maguder, again, much of the oxygen in the river is used in the decomposition of oil and wastes. And a low oxygen level makes it difficult for life support.

Even though the river is relatively unpolluted now, pollution could become a serious problem in future years unless several situations are rectified. Firstly, the storm drains should not empty into the river. An alternative would be for them to empty into the University's sewage system, which runs to the MDC sewage Treatment Plant. And secondly, students should take the responsibility of finding another means of disposing of their garbage. The river is hardly the place for it.

Pollution is not something which occurs only somewhere else. Pollution occurs here — and it is up to us to stop it.

An Analysis of the North Branch of the Park River at Albany Avenue — September — '69

Temperature — 20 degrees	.2 milligrams phosphate
ph — 7.5	less than .05 milligrams alkyl benzene phosphate
Specific conductivity — 820	.5 milligrams iron
Biological oxygen demand — 2.5 milligrams per li O2 per litre.	less than .1 milligrams copper
Each litre contained 675 milligrams of total solids:	less than .1 milligrams zinc
36 milligrams sodium chloride	6 milligrams dissolved O2
350 milligrams sulfate	36,000 coliform bacteria
.6 milligrams ammonium	24,000 e. coli.

We Are Running Out Of Oxygen

Recently, in a press release giving miscellaneous information, the National Geographic Society said that, during the last decade, oxygen content of the oceans had decreased 13 per cent. Then the Society went on to say that no one knew why.

In gathering material for an article on DDT to be published in next month's CHEMISTRY, this reporter happened on at least a partial answer—DDT. An article in March 1968 issue of Science by Charles F. Wurster, State University of New York, reported on experiments which showed that DDT concentrations as low as 100 parts per billion drastically reduced photosynthesis in phytoplankton, microscopic marine plants. Even concentrations as low as 10 parts per billion had an appreciable effect. According to the September 1969 issue of

Environment, these plants are responsible for more than half the photosynthesis on this planet. If this is true, then they supply more than half our oxygen. Further, it has become apparent that the entire globe is contaminated with DDT, although concentrations in ocean waters have not yet reached levels approaching 100 parts per billion.

In addition to supplying oxygen, phytoplankton are consumed by animal life and are an important link in the food chain. Their importance is shown by the following estimates in terms of dry weight. Each year, within a 30,000 square mile area off the coast of Southern California, 42 million tons of phytoplankton, 3 million of zooplankton, 100,000 of fish, and 300 of sea mammals are produced. Is DDT robbing us of oxygen too?



Ray Fudge