

## A DIRTY POEM

Poetry can add variety, flavor, and spice to any lesson. The ideas for the following poem were stimulated by an NSF summer workshop on environmental education. I have used this poem in my high school biology class as an introduction to the unit on ecology and have found that it initiates a fruitful discussion on environmental problems.

People throwing garbage in the street,  
Others cleaning up and trying to keep things neat.

Burning refuse polluting the air,  
Tell me now, is it fair?

Shortening your life day by day,  
This is what the experts say.

People stuffing themselves to be well fed,  
But all those chemicals can make one dead.

Killing insects one by one,  
But is the battle really won?

Dumping raw sewage into rivers and streams,  
Bring toxicity levels to enormous extremes.

Drinking water from the sink,  
Smell it, is it any wonder that it stinks?

Looking at the evening sky to see a star,  
But smog prevents us from seeing that far.

Wasting our coal, gas, and oil,  
Instead of putting back what we take from the soil.

Propagating people all over the land,  
Soon there won't be any empty place to stand.

Not caring at all about pollution,  
Caring, however, is the primary solution.

*Martin B. Rosenman*  
Walton High School  
Reservoir Ave. and 196th St.  
Bronx, N.Y. 10468

---

## Man—Enzyme of the Biosphere

In the quest for survival, success, and fulfillment, the ecological view offers an invaluable insight. It shows the way for the man who would be the enzyme of the biosphere—its steward, enhancing the creative fit of man-environment, realizing man's design with nature.

From *Design with Nature*, by Ian L. McHarg

## Coping With Natural Hazards

Disaster research in the United States must move in new directions, according to two University of Colorado researchers who recently completed a study for the National Science Foundation.

The study, "Assessment of Research on Natural Hazards," by Gilbert F. White, director of the University's Institute of Behavioral Science, and J. Eugene Hass, sociology professor, was published in May by the MIT Press.

White and Haas assert in their more than 400-page study that the United States is becoming "increasingly vulnerable to natural hazards" because of the concentration of populations and that the present pattern of federal spending in natural hazards research "is in studies which enforce rather than reduce the likelihood of catastrophe."

According to the two researchers who worked closely with experts in other disciplines, as well as with responsible federal agencies, "Redirection of federally funded natural hazards activity could sharply reduce human suffering, substantially curb the nation's annual billion-dollar disaster-caused economic losses and bring about a marked reduction in federal and state expenditures required to cope with such losses."

Haas says the research to date suggests there needs to be a shift away from an almost exclusive emphasis on technology as a mode of coping and more emphasis on adopting the technology available in a balanced perspective with other modes of approach, such as land use management and improved warning systems.

---

## NSF Chautauqua-Type Short Courses For College Teachers

The National Science Foundation has for the fifth year provided funds to the American Association for the Advancement of Science to continue the short course program for college teachers. Over 30 courses will be offered in one or more locations at colleges and universities across the United States. Courses of interest to biologists include the following: Perspectives in Bio-Ethics; BioSociology; Analysis and Evaluation of Biological Data; Principles of Ecology; Biology and Human Affairs; The Earliest Ancestors of Man; Aging, Death, and Social Values; Human Sexuality; Alternatives in Science Teaching; and Biofeedback.

Each two-day course will be offered twice—once in the late fall and again in early spring. Funds are provided for four nights' lodging and instructional materials for participants.

To obtain a copy of the program announcement containing course descriptions, class schedules, and locations at which classes will be held, write to NSF Chautauqua-Type Short Courses, Box J, AAAS, 1776 Massachusetts Ave., N.W., Washington, D.C. 20036.