

In tropical regions this is likely to be much more serious because the soils are so poor in nutrients in the first place, but you would have to study this situation in Vietnam to tell whether you are doing something that will prevent that rain forest from regenerating.

Mr. DADDARIO. The opportunity to study it ought to be taken advantage of.

Dr. COLE. I would think so; yes.

Chairman MILLER. I think that it is highly essential that you study it.

Mr. DADDARIO. Would you proceed?

Dr. CANTLON. I would like to start off with paraphrasing the remarks of a scientific colleague at an advisory committee for one of the Federal agencies in which we were discussing ways of attacking our burgeoning environmental problems. His remarks brought this discussion to a climax and this is approximately what he said:

I keep hearing strong pleas for encouraging the investigation of natural purification phenomena and the need for more and better ways to halt increasing pollution. Why aren't we concentrating our scientific efforts instead of increasing tolerance to pollution?

That is a rather interesting thought, and at a quick assessment, it looks like this is indeed an oversight. Yet with a little quiet reflection, you can see that such a view is itself symptomatic of the aimlessness with which we have addressed ourselves to our environment because it is based on two rather false premises.

First, it assumes that the present forms of pollution that we now suffer are themselves essential and inescapable byproducts of our modern industrial living; and, second, that man and a very few domesticated plants and animals are the only creatures on earth that we need to worry about.

Now setting aside one's own moral and ethical considerations about which organisms deserve to live on this planet, we can address ourselves to man's strategy for maintaining a satisfactory environment in a more coldly scientific way.

It has been said many times that resources out of place really are pollution. Pollution wouldn't exist if we effectively managed our resource system. Sewage-contaminated water is not only degraded water, it also represents potentially useful organic materials. Heat pollution from our powerplants might actually be utilized in a more effective waste processing system. An engineer faced with designing a system for processing wastes would like to have a cheap source of energy, while in another part of the same suburban area unutilized heat may be creating its own separate pollution problems.

An approach which looks at the overall pollution mix may well yield not only useful insights into improving environmental quality, it could lead to intrinsically valuable technological breakthroughs. I think it would be a disaster indeed to assume we are stuck with our present kinds and amounts of pollutants. We surely shouldn't expend scarce public funds to increase tolerances to today's stupidities. I think this would be the worst possible thing to do.

However, generating even more trauma in ecologically aware persons is this widely held nonsense that man and a veritable handful of domestic plants and animals are all that are essential to maintain the ecosystems that sustain us. If this were true, we could learn to love