

LAYING WASTE TO PLANET EARTH

by Kenneth W. Hammond

None of us can ever remember a time when there was as much concern and foreboding about the future of our planet as at present

THE STAGE:

Picture the earth from the moon - that beautiful grey ball called "Earth", - 93 million miles from the sun and captive of it, turning on its axis. As you approach the earth you notice the various features: the oceans, the continents, the mountains, the rivers and the others. Some 20 million species of plants and animals live on the resources of this planet, trying to survive and all reproducing to fill the space available to them, often at the expense of other species. One of these species is *homo sapiens* - human beings. It is the only species with three-dimensional thinking. It is the species that developed the "economy of waste", the system that takes far more from the resource base than they need, often at the expense of other species and the environment.

THE STATE OF THE PLANET

The earth is in disarray - an economic, demographic, societal, technological and political mess. Yet, in spite of the warnings that have been given for decades, many of us do not recognize the signposts that are out there, nor the precarious nature of our hold on civilized life. What is ahead, for our children and our grandchildren, if we do not recognize it soon.

How did we get into this mess? What are the immediate threats? how do we get out? People are asking these questions - but there are few answers. Politicians stall for time we no longer have. They call for more study, more research more committees and more consultation. We may need some of this but what we need more than any thing is a positive approach and appropriate action. To have any effect in time to avoid total catastrophe the action must be on a grander scale than anything in the history of the human race. It must start now. We may already be too late.

THE PREDICAMENT: A brief overview.

Not in the history of our species has humankind been confronted with changes as catastrophic as those that are now imminent. We live in times of great change. It is therefore incumbent on us to make an objective appraisal of what we have - and what we do not have. Having achieved that, it is our duty, not with alarm but with complete detachment, to determine what our options are for an acceptable way of life for present and future generations.

Historically, there have always been worlds to conquer, either through necessity or in quest of adventure. Such luxuries no longer exist and humans have to make do with what is in view. There will be no recharging of the resource base - only decreasing and degrading. It is this fact that has urged many people to unite in discussion to appraise the events and, if possible, to suggest appropriate courses of action.

The world population is increasing at an exponential rate. We are over-running the planet like an uncontrolled malignancy. There are more human beings than any other type of mammal on the planet and we are adding about 96 million more each year. The growth must, quite obviously come to halt, whether by conscious effort or by nature's often drastic methods. Food will not be in sufficient supply to feed the world's peoples with an adequate diet, nor could we distribute it if it were available. There is a limited carrying capacity to the system.

Sources of energy, ever in greater demand, are dwindling at a very rapid rate. In spite of promising new discoveries, these sources are inadequate for the long-term future. Living space and, equally important, space for recreation are being restricted by ever-increasing demands for industrial and agricultural pursuits. Added to all this, the pollution (poisoning) of our environment has reached alarming proportions. It is evident that these problems do not stand in isolation but each influences and is influenced by all the others.

A population of 6.25 billion by the year 2000 is the current expert estimate. There seems to be only a scant possibility of effective control. Possible new food sources, while projected for the future with some optimism, are not going to be spectacular in the next few years. The shortage of prime agricultural land, the dwindling supply of fertilizer and other chemical inputs and the increasing cost of energy do not encourage optimism.

At the crux of most problems is the amount of available, inexpensive energy. The end of the world supply of oil and natural gas is only about 40 to 50 years away. Coal is more abundant, but its increased use brings with it the increased prospect of more pollution, thus exacerbating the already severe overloading of soil, air and water. Nuclear fission energy cannot conceivably meet more than a limited demand, even if it were able to overcome the current design, operating, decommissioning and waste disposal uncertainties. Fusion of hydrogen, although recently reported to have been achieved, is still decades and many millions of dollars away. There remain other energy sources such as wind, tide and sun but these can only generate small quantities of energy compared with the demand and then, often at high cost.

Bleak as is this view of the world *Problematique*, we must not give up. We must accept the realism and the challenge of the situation and try to effect a change.