

INSTITUTE FOR THEOLOGICAL ENCOUNTER WITH SCIENCE AND TECHNOLOGY

BULLETIN

DATE:

WINTER, 1997

VOL:

28

NO. 4

FALL

As we read in the Book of Job, "One day the Sons of God came to attend on Yahweh, and among them was Satan. So Yahweh said to Satan, 'Where have you been?' 'Round the earth,' he answered 'roaming about.' So, I too in my mind have been roaming about the earth seeking signs of new developments. I observed that there were many recurring problems, but it doesn't seem that there are any brand new issues, problems, opportunities.

That does not mean that any of the problems have been solved nor even mitigated in some cases. The paper of Dr. Charles Elliott is a case in point. That paper, developed at the ITEST conference of the same name in April, 1972, comments on the split between environmentalism and some aspects of development. This split is still evident. The population control people and those who support development instead of control are still at odds on the issue of how best to stabilize population.

Page 1	DIRECTOR'S MESSAGE
Page 2	ANNOUNCEMENTS
Page 2	ENVIRONMENTAL CRISIS-INTERNATIONAL JUSTICE DR. CHARLES ELLIOTT
Page 8	BOOK REVIEW Dr. JOHN HUBISZ
Page 11	LETTERS TO THE EDITOR
Page 15	DIRECTORY UPDATE
· · · · · · · · · · · · · · · · · · ·	

IN MEMORIAM

Page 17

The same is true of reproductive science, biotechnology and the science and technology of genetics. The eugenicists still exist among us. The unlimited technologists still very much have a say in where we will go as a culture. Technology always seems to outstrip our 'ethical sense.' But, isn't this precisely our task — ever to stretch our ethical reach? It seems that our task is to develop an overall view of the human, especially of the body, if only because the body has been downplayed religiously. Christians have not been overly concerned with our physical being.

This will be the last *Bulletin* of the year. Therefore, it is a duty, but even more of privilege, to wish you a blessed Advent season as we remember the past and strain for the glory of Christmas. In His body lives the fulness of divinity. Christmas is the time when we celebrate Jesus' birth in the body. Let us remember his embodiment and even more the 'spiritual' embodiment that will come for us all later. Have also a Happy New Year. God's blessings be with you.

Robert Brungs, 8.7.

The ITEST Bulletin: Publisher, Robert Brungs, S.J.; Editor, S. Marianne Postiglione, RSM

ITEST Offices: Director, Robert Brungs, S.J. Director of Communications, S. Marianne Postiglione, RSM 221 North Grand Boulevard St. Louis, Missouri 63103 USA

ANNOUNCEMENTS

- 1. The ITEST Board has decided that the October 16-18, 1998 workshop will focus on aspects of marriage and the family. We welcome any recommendations on pertinent research in this area: theological/faith considerations, sociological and psychological analyses, and so on, as well as suggestions for specialists we could invite to prepare essays in the area of the "family."
- 2. Thanks to a grant from the Our Sunday Visitor Foundation, we have just published a collection of essays, Readings in Faith and Science, designed primarily to assist discussion groups, particularly campus ministry, and parish adult discussion groups on issues of faith and science. This collection of articles had its genesis in discussions with the Campus Ministry Programs at Kansas and Iowa State Universities. The spiral bound book contains 22 essays written by scientists, theologians, social scientists, artists, philosophers and others. Some titles: Reproductive Biology, What Kind of Salvation?, Animal Research, Chance/Chaos vs a Planned Design in the
- Universe: Pointers to God?, Nuclear Waste, Environment and the Believer, The Spirituality of the Scientist, and others. We have sent complimentary copies to more than 700 campus ministry departments throughout the United States as well as to selected groups and individuals overseas. We are confident that some bulk orders will be forthcoming as the directors of campus ministry programs see the value of this "collected wisdom" of practitioners in the field. Copies are available now at \$6.95 each. For orders of 20 volumes or more, the price is \$5.95 each.
- 3. With the approval of the Board, the sub-committee planning the big ITEST "Celebration '99" (the 31st anniversary of ITEST) has settled on location and dates for the celebration Loyola University, the Lake Shore Campus in Chicago, August 1 (evening) to August 5 (noon), 1999. Mark your calendars and join us for this event. We encourage family attendance since we are planning activities for all ages in addition to the formal meetings. Look for more information and a progress report in each bulletin.

ENVIRONMENTAL CRISIS—INTERNATIONAL JUSTICE

[The following paper was delivered by Dr. Charles Elliott at the April, 1972 ITEST Conference on Environmental Crisis — International Justice. Dr. Elliott received his degrees at Oxford. He taught economics at Oxford, the University of Nottingham and is founder Professor of Economics at the University of Zambia. While there he was Government Advisor on Agency Planning to the government of Zambia. Dr. Elliott was Assistant Secretary of the Commission on Society, Development and Peace (SODEPAX) of the World Council of Churches in Geneva, with special responsibility for economics and theological research. He is now working with the Overseas Development Group in the United Kingdom, based at the University of East Anglia.]

Thank you all for your welcome to St. Louis. I was telling someone on the aircraft that I was coming to St. Louis to a meeting concerned with the environment. He looked at me askance and said "Oh yeah, St. Louis - the one place in the midwest where you can throw open the window in the morning and hear the birds cough." However I find that to be untrue. I listened this morning and I heard no coughing.

I was asked to speak about the relationship between development and environment. I feel at this point like the man who was to speak for a half hour on God, man and the world. It is a huge theme. I don't pretend for one moment to be able to see all its ramifications myself or to expound them to you this morning. I say it's a huge theme. It's effectively two

huge themes, and the mishandling of either could literally destroy the world before the end of the century.

Many of you will already be familiar with the MIT-Club of Rome study on the limits of growth. However much one may differ with the precise formulation of the model, however many reservations one may have about the data Meadows and Forrester used in that model, the basic contention that there are finite limits to the earth's carrying-capacity seems to me to be almost self-evident. To that extent the whole environmental issue is concerned with ultimates in a very demanding way - just as many of us would say that the development issue is involved in ultimates. Much recent conflict research, particularly that done at the University of Hawaii and in Japan has pointed up the

fact that you cannot separate development and conflict. For if patterns of underdevelopment continue, then the sort of conflict we have seen in Ceylon, in Bangladesh and increasingly in Latin America cannot but become more frequent, nastier and more lethal. Therefore one is faced with the problem of bringing together two concerns that approach ultimate significance. The issue before us, as I understand it, is the extent to which these two concerns are mutually consistent or mutually exclusive.

What I want to do is to try to suggest ways of looking at the development issue and the environment issue, to try to analyze, or suggest ways of analyzing, their divergences and their consistencies. As a prologue, I would like to start by a statement of faith which many people in this room would have no difficulty in sharing: that is to say, the analysis that we are to begin is probably the biggest single intellectual challenge of the 20th century. And that leads on to the observation that the biggest moral, ethical, and therefore ultimately political, challenge of the 20th century seems to me to be to ensure justice and ultimately the avoidance of conflict at the interface between development and environment.

Now my aim in what I want to do is much more modest than to try to accept that challenge. I would like to divide what I have to say into three separate parts of very different lengths: First, I want to distinguish some areas of conflict and consistency at the interface between development and environment. Secondly — perhaps the main part of what I have to say — I want to suggest some of the economic effects on the poor countries of specific parts of the environmental concern. Finally, in very brief conclusion I want to consider what those economic dimensions imply for the regulation of international relationships in environment and to a lesser extent in development.

I must confess immediately to gross over-simplification. This is inevitable. I shall be talking about the Third World, not because I approve or accept the title, because, to lump together countries as different as India, Paraguay, Columbia and Lesotho is absurd, but it is a very convenient shorthand and one can tease out some of the implications of the differences of the Third World at a later stage. Also I am going grossly to over-simplify the environmental issue. Although I want to distinguish between three different aspects of it, I shan't lay much emphasis upon the relationships between them. The three elements I would like to separate for the moment are: (1) resources, the whole question of the supply of resources, the concerns that Meadows and Forrester built into the MIT Model, for instance, that resources are finite.

that one cannot go on using up non-renewable resources forever and that this by definition implies limits. This raises the whole question of re-cycling and the use of non-renewable resources and this level of concern is usually associated with a relatively pessimistic view of the potentialities of technology. If you assume that there cannot be developed a technology that makes something out of nothing then you obviously are committed to a pessimistic view of the finite limitations of the whole ecological system. (2) The second element is pollution in all its forms. This is the result of use, misuse, abuse, of resources. I don't think it is necessary at this point to say more than that. (3) The third element of the environmental concern that I want to highlight is much more the way in which the Third World would define its environmental concerns.

To the Third World, the environmental issue as it is often defined in the First World looks like fat cats worrying about the disappearance of the 14th sub-species of the Arctic grebe, while the majority of the population in the Third World is ill-fed, ill-housed, ill-nutritious and ill-used.

The Third World would surely lay much greater emphasis on the whole physical milieu in which people live and in which people ultimately die. And therefore this third element of the environmental concern comes much nearer to social welfare, not in its administrative sense as used in the United States, but in its wider sense of the conditions under which people live, including their access to water, the quality of housing, the quality of education, the quality of nutrition, and that whole set of problems which certainly are discussed in the First World environmental concern but which have a much greater significance if you come from Recife, Lagos or Calcutta.

Now, the state of play, I think, between the Third World and First World at this point is for the Third World to dismiss often with contempt the First World's concern with the first two components which I mention, namely resources and pollution. They say these are the rich man issues and that to define environment without laying almost exclusive emphasis on the third component — the social welfare component — is absurd. So we have immediately a conflict raised in definitional form. To the Third World, the environmental issue as it is often defined in the First World looks like fat cats worrying about the disappearance of the 14th sub-species of the Arctic grebe, while the majority of the population in the Third World is ill-fed, ill-housed, ill-nutritious and ill-used. And for

the First World in contrast, the Third World's refusal to define the issues of environment in their own terms, that is in the First World's terms, is further evidence of a combination of ignorance and the refusal to take reality seriously.

One has often heard, certainly in Europe, environmental scientists insisting that the developing countries must take the environmental reality seriously. To that the Third World replies: whose reality? And this seems to me to be in some ways the central fulcrum around which the debate is bound to be conducted. Whose reality are we talking about? Are we talking about the reality as it is lived, suffered and died by the vast majority of the world's population, or are we talking about the reality as it is enjoyed and polluted by the minority of the world's population. Now that it is putting it in deliberately emotive terms because the issue very soon becomes emotive. And to suggest that it can be discussed as though the emotional overtones did not exist is quite false. This is a fact of life, and for us to sit coyly here pretending that there is no ideological conflict and therefore no emotional conflict, is to distort the quality of the debate.

The central issue that I want to raise is "whose reality?" That reality looks immensely different to the First World and the Third World. The conflict that is therefore engendered results exactly from this difference of reality. I would add as a footnote to this, that the usual fulsome praise for the Founex Statement needs to be tempered by the recognition that it doesn't adequately reflect the lack of consensus that certainly exists. I think that if you take that as in any sense typical of the Third World-First World reaction or interaction on these issues you are likely to be very badly misled, because this is a consensus statement. It is in some sense — I don't say this in disparagement — it is in some sense a deliberate fudging of issues. What I want to do in the next few minutes is to tease out some of the conflicts that the Founex Statement smudges over.

Well, let's start with a very simple one. Whose reality are we talking about on the whole question of the flow of resources, resources in the economic sense, i.e., cash and real resources, real resource flows between the rich countries and the poor countries? As you will all be well aware, this has been a major issue — some people on the extreme left would say a far too major issue — in the whole development debate over the last 15 years. And the international strategy for the second development decade, as I'm sure you're aware, has established a norm of 0.7% of GNP to be transferred from the rich countries to the poor. Now, that issue becomes somewhat sharpened by the revel-

ation that most developed countries, having resisted the United States more strongly than any other — the suggestion that they should give 3/4 of 1% of their GNP to the Third World, most countries are now planning to spend between 2 and 5% of their GNP on improving their own environmental status. These figures are extremely rough and vary very much from one country to another. Five percent would, perhaps be the maximum a country like Holland with very high concentrations of population, very serious environmental problems, would certainly be expecting to spend 5% of its GNP to reach already declared targets of environmental improvement, whereas other countries, the United States for instance, might spend between 1-2% of its GNP, on already declared targets of improvement.

Now, the point of conflict is precisely this. Developing countries say they have, on their definition, enormous environmental problems in terms of housing, in terms of health, in terms of nutrition, in terms of agricultural development, and are asking the rich countries to give 0.7% of GNP. Many of them are giving less than 0.5% of GNP to help solve those problems. Yet those countries that are niggardly in terms of aid are proposing to spend 5% of GNP on improving their own environmental status. You cannot be surprised if many developing countries see that set of facts in a somewhat sombre light. And it seems to them that this implies an extraordinary misorientation of priorities whereby the rich countries spend a high proportion of their resources on improving their own environmental problems while fighting tooth and nail to resist paying a much smaller proportion of their resources to help the poor countries improve their acknowledged environmental conditions.

Now take another example. Whose reality are we talking about when, in the context of the development debate, we talk about justice in world trade? There certainly is a very serious fear in the developing countries that the environmental concerns of the rich countries will lend to a more hostile environment for the trade expansion of the poor countries. They have some evidence for this fear. If you look at what has happened in the whole area of non-tariff barriers to trade, the prognosis is not good. I would not seek to judge the United States' stance on this. Certainly the British stance has been one of consistently using environmental and health concerns as a way of excluding competitive products, particularly agricultural products from the developing countries. Let me give you a concrete example. As you know, Britain is a relatively inefficient producer of beef and therefore the domestic price of beef is high by world standards. Kenya has a comparative advantage in the production of beef and

could export beef to Britain. The Board of Trade imposed, perhaps properly in the first case, health controls on the importation of Kenyan beef which excluded practically Kenyan beef from Britain. When Kenya spent a large sum of money meeting the new standards that Britain had laid down, the regulations were then changed and made more stringent so that Kenyan beef was still excluded. That is the position today. That is one small example of the way in which the environmental concern, or one small part of the environmental concern, is used deliberately to protect domestic markets. There are many other examples. The current concern about mercury, the current concern about DDT, have been used in precisely the same way, as a convenient way of excluding competitive products from the domestic markets of the rich countries. The fear of the developing countries is that the heightened consciousness of environment — some would say the heightened neurosis about environmental standards - will be used in this way to oppress, exploit (use whatever vocabulary you find most sympathetic) the poor countries.

There certainly is a very serious fear in the developing countries that the environmental concerns of the rich countries will lend to a more hostile environment for the trade expansion of the poor countries.

The other major worry on the trade front is that the concern of the rich countries for the protection of their own environment will result in a fall in the demand for some primary products. As you are, of course, well aware, many developing countries depend on the export of primary products for a very large proportion of their export earnings and, in some cases, a very large proportion of their national income. It isn't only the oil countries, though they may be hit first and hardest. Some of the other mineral and agricultural product countries depend to a very large extent on the export of primary products. The fear is that the concern for both the husbandry of non-renewable resources and the desire to limit pollution will result in a fall in the demand for these primary products. This is a real fear. There seems to me to be little evidence for it at the moment and you could well argue that there is evidence the other way (the current increase in the demand for lead, for instance, which is a product exported by a very few developing countries, is a direct result among other things, of pollution control). It seems to me for too early to say whether this particular anxiety on behalf of the developing countries will have any foundation in fact. But it is there and one has got to take

cognizance of it.

The other part of this is the natural desire for the developing countries to cash in on the environmental concern by promoting natural products like cotton in the place of the synthetics. I think many of us were not entirely convinced that Mr. Farvar's vision of American housewives gladly buying Guatemalan cotton shirts for their husbands would come about. There is — who knows, it's for too early to say — but there is a chance that some natural products like cotton and perhaps wool, perhaps leather, will increase in demand by a very small amount as a result of the environmental issue. As in the physical sciences, I think there are very few economists at this point in time who would want to be dogmatic about the likely effects. My own "guesstimate" at this point would be that any effects on the pattern of trade in that sense are likely to be very small. Perhaps this quantification is irrelevant. What is more immediately real is not what is likely to happen, but the fear of the developing countries that the worst will happen. That is why I insist on the distinction between the emotive reaction, the gut reaction, of a number of developing countries to this issue and the likely realities that might result in the foreseeable future. The likely realities are likely to be quite small in this particular aspect but the fear is very real and one has got to find ways of assuring the developing countries that they will not be oppressed or exploited as a result of the environmental concerns.

If costs are raised, prices will almost certainly be raised and, therefore, the environmental concerns of the rich countries are likely to result in a deterioration of the terms of trade, of perhaps a significant magnitude, of the poor countries.

Let's move on to technical progress. Again, the question that has to be asked is whose reality we are talking about. If we're talking about the reality of the First World, then obviously the emphasis will be on finding technological ways of dealing with pollution and the substitution of renewable resources for nonrenewable resources. If you're looking at it from the Third World point of view technical progress is a much more ambiguous possibility, particularly technical progress in the area of environmental improvement, because I think everyone is convinced that environmental technological progress is likely to be costraising. Leontief and Ford have produced some estimates of the likely increase in the costs of different industries to meet different environmental standards. For instance, — I'll just pull out some fairly dramatic examples to give you an idea of what we're talking

about — for the primary non-ferrous metals, mainly copper, to comply with the Clean Air Act of 1967, would raise costs of that industry by about 17%. Now that is certainly the highest figure in the Ford-Leontief list. But take the next highest, electrical utilities. Compliance with the same act will raise costs by about 7.5%. To substitute low-sulphur fuel for high-sulphur fuels, another much discussed environmental measure, would raise costs in heavy industrial chemicals by over 10%, and in the plastics and synthetics industries by over 6%. I must repeat, I am deliberately quoting the highest figures. Some are less than 1%.

The fact is that environmental technology raises costs, and for the Third World this is a problem. It's a problem in two areas. It's a problem insofar as poor countries import the products of these industries. If costs are raised, prices will almost certainly be raised and, therefore, the environmental concerns of the rich countries are likely to result in a deterioration of the terms of trade, of perhaps a significant magnitude, of the poor countries. In other words, to put it at its most rhetorical, it could well happen that some of the poor countries will be required to contribute to the reduction of pollution in the United States. There are some of us who would question whether that was an entirely just situation.

The second element is that, insofar as the developing countries buy the technology of the rich countries, they may find themselves having to buy high-cost technology, because plant manufacturers will simply incorporate these kinds of environmental improvements in the plants they design and supply. This raises some difficult questions. It raises the whole area of the extent to which the developing countries themselves want to incorporate environmental technology in their own industrialization.

It seems to me that there is very little that we can say about that. This is an issue that must be solved by the developing countries themselves. What I think we can say is that the rich countries as a whole have to be extremely careful about the extent to which we oblige the developing countries to develop prematurely our own standards of environmental control. I am not a scientist, but I would have thought it was true that pollution, for instance, is a result of concentration of industry such that very few poor countries have. If you exclude Latin America and some of the more heavily industrialized pockets of India, very few developing countries have areas of concentration of industry that pose a real environmental problem. If you go to virtually any African country, for instance, the level of industrialization is so low that to impose environmental technology would be quite inappropriate because the local conditions, the atmosphere, the water, etc., can absorb at this stage a much more polluting technology, and therefore a much cheaper technology, than the highly industrialized concentrations of industrial production in the West can do.

So, I think the basic fear the developing countries have is that they find that not only the costs of their imports but also the costs of their own production raised by a series of concerns that are not applicable in their own condition at the moment. Of course there will come a time — in some areas in Latin America, in Sao Paulo, perhaps in Santiago, perhaps in Buenos Aires, it has already come — when the concentration of industry is such as to present a real environmental problem. That time for most countries is not yet, and to that extent there is a real concern that the imposition of environmental standards will be resource-consuming for the poor countries.

Whose reality are we talking about when we talk about the relocation of polluting industries? There is an argument that industrialization in the poor countries will be accelerated by the need of the rich countries to export their environmentally distinctive industries to areas with lower concentrations of industry. Japan is cited as a case in point. Most economists would say that this is improbable. It is a great deal cheaper to reduce the level of pollution, even if you have to pay 17%, rather than to move the whole industry to a developing country. But the fear exists amongst the developing countries that they will be given increased aid, to produce those products with which pollution is usually associated, and leave the rich countries with relatively non-polluted industries.

What I think most of the developing countries, or most of the people I have spoken to in the developing countries, expect to happen, and would welcome in a way, is that they will experience what economists call the J-curve. In other words, environment couched in the terms of pollution may well deteriorate to some critical point, such as you have already reached in Sao Paulo for instance, and then steps will be taken to improve it. And most of the developing countries, as I understand their reaction at the moment, would be very prepared to go through the down stage of the J, if that meant a serious attack on what they consider their real environmental problems, which are the unemployment, the bad housing, the lack of education, the bad nutrition and the rest of it. They would happily trade a rise in the sulphur content of the atmosphere against higher employment, for a time. But, I think most of them now acknowledge that there will come a time when they will have to adopt the environmental technology now under development.

Let me raise two more issues very quickly. Let's think about renewable resources, scarce resources but fundamentally renewable resources. The developing countries find it difficult to take seriously the rich countries' concern in this area, when they observe the rich countries exploiting the renewable resources of the poor countries but doing nothing to renew those resources. Mr. Bassow mentioned yesterday the forests in the Philippines. There are two other examples that have come to my notice very recently. One is the fisheries off Peru and the other is the fisheries off Indonesia. In the first case, the Peruvians are complaining most bitterly of the ingression of American fishing boats into those fisheries with the result that the stock of the fishery seems to be falling. Now here it seems to me that you have the whole issue of international social justice raised in a particularly acute form. Because the United States controls a high level of technology in fishing, it exploits the fishery despite the fact that the protein and the foreign exchange resources represented by that fishery for Peru has a much higher proportionate value to Peru than to the United States. The fisheries south of Indonesia have been practically annihilated firstly by over-fishing by Japan and Russia and secondly by oil pollution.

We talk about the governments of the Third World, forgetting that in many countries of the Third World, the government is in no sense representative of anything, except an elite.

Now here you see, as I say, a microcosm of this whole part of the problem, the rich countries exploiting a resource for marginal gains while the poor country, near whose shores the resources are found, is unable to do so. As I say, the developing countries note with some mixture of scepticism and bitterness the newfound interest of the rich countries in the whole future of renewable resources when they behave in this way toward the resources of the poor countries themselves.

Lastly, I want to make a very quick remark on population. The Limits to Growth study lays enormous emphasis on population, and, doubtless this is important. But I heard a story of one of the young systems analysts on the MIT program in West Africa two weeks ago. He was expounding to a meeting of some 100 African physical and social scientists the Limits of Growth thesis, and, of course, laid great emphasis on population and the need to control it. It was quite clear that this message was not getting across. At the end of the meeting a somewhat venerable Nigerian got up and said, "Professor, you tell us that we must

control our families. I am one of fifteen but I have only five children and I am in disgrace with my mother and father because I've only five children. So don't you tell me to control my family."

This again is a microcosm of the problem. But the issue is not simply one of cultural conflict. At the level of arithmetic, population times consumption per head equals total consumption. The developing countries say that, if the rich countries are concerned about total consumption, they should reduce their consumption when they insist that the poor countries reduce their population. "We'll swap zero growth in population for zero growth in consumption." That seems to be a very — you can say it's unreal, you can say it's naive, you can say it's impossible, but it's an entirely understandable reaction when we handle the traditions, the aspirations and the hopes of the Third World so callously and so insensitively.

Now one marginal comment to this before I finish off with one or two remarks on the future. I've been talking about the Third World. I started by putting a mental caveat against this by saying that the Third World is a rag-bag of very disparate elements. I think there's a grave danger that when we talk about the Third World we talk about the elites of the Third World. We talk about the governments of the Third World, forgetting that in many countries of the Third World, the government is in no sense representative of anything, except an elite. For instance who will pay for zero growth in Sao Paulo? The people who will be hurt by a policy of zero growth in Sao Paulo are the really poor, the people who are already in the squatments. I think one's got to develop a certain awareness, a certain caution when one's talking about the environmental concern of the Third World. This is in the Third World often a very elitist concept. I remember discussing with the wife of a Minister in Zambia the siting of the new international airport in Lusaka. She told me that she had managed to persuade her husband, a cabinet minister, to insist that the airport be 14 miles out of the city, because her house was in the flight-path of the existing airport. The result of putting the airport 14 miles out of the city was that all the people who worked at the airport, (and this was to be a major employment creator in the first national plan), found it almost impossible to commute between the city and their work. This posed all sorts of problems of absenteeism, of nutritional problems, of family problems for the people working on the job. I mention this because it seems to me that one has to be terribly careful to ensure that the people who are speaking, in this case, for the Third World really have some sort of stance. Very often you find that it is an elite in the Third World, it's the First

World in the Third World, who are making themselves heard.

So, what have we got? We have a widely differing set of interests and a widely differing set of criteria resulting from wholly different sets of historical experiences. And these differences result in non-reciprocity between nations. In the development issue we have become a little bit more sensitive, I think, to the fact of non-reciprocity, the fact of the total inability of. let's say, Chile and the United States to bargain as equals. The fact is that the Group of Ten, the industrialized countries, do not have reciprocal relationships, equal relationships, with the Third World. Now, historically, this non-reciprocity within nations has been largely overcome, perhaps I speak over-optimistically, by law. The role of law, as it was developed in Europe, was precisely designed to ensure some reciprocity between unequal partners, and so at its best a peasant could get justice against a lord.

The problem on the international level is that we have not learned a way of making the law an agent of reciprocity between nations, precisely because the nations are so wholly unequal. You can get some sort of reciprocity, some ability to negotiate, between Germany and Holland, between France and Holland, between the United States and Canada, on environmental problems. It's very much more difficult to get that sort of negotiation between Japan and Indonesia or between the United States and Peru. It's for that reason that some of us are more interested in the development of countervailing power among the Third World and why some of us feel that the only way forward in both development and environment is the development of a countervailing power amongst the Third World.

Certainly the Group of 77, the Lima Declaration and so on, don't hold out much hope for the construction of a countervailing power. But until one gets that, it's very difficult to see how the development of reciprocal relationships in law can be achieved. Mr. Bassow was very pessimistic about this issue with respect to the Stockholm Conference. "Sovereignty is simply not on the agenda," No, of course it isn't because the sovereignty of the United States and the sovereignty of Paraguay look so entirely different.

Perhaps when one gets the construction of a genuine reciprocity between the First World and the Third World, then this issue can become discussable and real. For the moment I think most of us would agree that, while some kind of international control in both development and environment is highly desirable, it is also highly improbable. From that stems the observation: it follows, that the outlook in both fields is grim, because unless there is the possibility — more than moral suasion — of enforcement, then it is unlikely that anything more than fairly weak palliative measures will be taken, both in environment and in development. And we have seen palliative measures in development over the last 15 years which leaves us with little optimism.

Here, finally, I see food for theological thought. In both areas we are given possibilities to decide for ourselves whether we go forward in responsibility to some greater freedom or whether we forfeit that freedom in some kind of implosion, explosion or just whimpering end. In that, it seems to me, lies the basic challenge.

The Cross and the Rain Forest: A Critique of Radical Green Spirituality by Robert Whelan, Joseph Kirwan, and Paul Haffner published by William B. Eerdmanns Publishing Company (1996) paperback \$16.00 xi + 163 pages index ISBN: 1-880595-07-9

Here we have four excellent essays: "Greens and God," "Greens and People," "Greens and Animals," and "A Christian Ecology," with an introduction that sets the tone and an Appendix, "Science Facts," that should be read first!

You may have seen the bumper stickers "The Earth does not belong to us; we belong to the Earth," or "Respect your mother" accompanied by a picture of the Earth, and other variants of this message. Knowing that I am a child of God and not the Earth, these pagan notions irritate me. The authors of these essays

agree.

Each essay can well stand on its own, but the appendix does an excellent job of getting the reader into a more receptive frame of mind especially those of us who might be so swamped by the Greens' propaganda through television, the newspapers, books, or recruitment letters, that we believe them. I require my students to support their arguments with evidence for their claims and when appropriate to do some order of magnitude calculations to get a "feel" for the significance of the effect. I expect no less of so-called

"environmental" groups.

The appendix deals with "Global Warming," "The Hole in the Ozone Layer," "Species Extinction," and "Deforestation." In each instance the problem is put in perspective and then with supporting documentation shown to be not the problem as presented in the media.

As far as "global warming" is concerned, a quote from a letter signed by over 50 leading members of the American Meteorological Society in response to policy initiatives supported by environmental groups should suffice:

. . . derive from highly uncertain scientific theories. They are based on the unsupported assumption that catastrophic global warming follows from the burning of fossil fuel and requires immediate action. We do not agree.

The "hole in the ozone layer" (actually it is not a "hole," but a thinning of the layer in some places) suffers the same fate when looked at critically. The supposed changes due to man's activities are many times smaller than the natural fluctuations of the layer's thickness and thus lie in the noise. Richard Benedick, the US negotiator for the Montreal Protocol, writes:

Perhaps the most extraordinary aspect of the treaty was its imposition of short term economic costs to protect human health and the environment against unproved future dangers . . . dangers that rested on scientific theories, rather than on firm data. At the time of the negotiations and signing, no measurable evidence of damage existed. There is still none. Of course many lives will be lost due to the curtailment of the production of CFCs which are necessary for refrigeration just as many lives are being lost due to the curtailment of the production of DDT.

"Species extinction" is such a vague term that much of the literature in the promotional brochures of the "environmental" groups is meaningless. If we do not know the number of species that existed in the past or exist today we can not say anything meaningful about the rate of disappearance or appearance of species at present. So-called extinct species have had a bad habit of reappearing unexpectedly.

"Deforestation" succumbs to the numbers game as well. If one finds elementary mathematics difficult it is easy to see how people can be misled. Most of the "rain forest" is actually "rain jungle," but supporting the "rain jungle" would not get many people to send in their \$35 to keep the "environmentalists" in business. Almost 75% of the world's industrial wood needs come from the northern temperate zones and the forests in these areas are increasing. Similar stories hold for the tropics, notably in India and Brazil. It is simply easier to get our wood from farms (plantations) rather than from the so-called "rain forests." Al Gore's Earth in the Balance is quite rightly taken to task for promoting nonsense about this issue.

If you are still with me you are now ready for the core.

In approximately 50 pages Robert Whelan examines the "Greens and God." The "Greens" (I would call them the "pseudo-environmentalists") are a broad mix of vegetarians, population-controllers, animal rights activists, organic food faddists, anti-nuclear groups, wildlife and heritage preservationists, advocates for holistic medicine, advocates for "alternative lifestyles" and other fringe interest groups, that for the last 15 years or so have come together as a formidable political action group bent on changing society in ways that are anti-Christian, anti-science, anti-technology, and anti-people.

Whelan shows that the Greens claim to be the first political movement based on science is demonstrably false by showing their close connection to Nazism, so close that one can see the Green movement as a revival of the Nazi program. The Nazis claimed that they were introducing the "science" of eugenics into their program. Nothing could be done about "bad" genes except eliminating them. No other possible explanation for behavior such as education, environmental factors or religious belief, was allowed. The blood told all. They stuck to their "science" despite evidence to the contrary and used it as justification for everything that happened. Rudolf Hess used to say that Nazism was just "applied biology." This abuse of science led to the horrors of the concentration camp "experiments" where humans were treated as laboratory animals.

Nazism placed great emphasis on the strong, dark forests and pure streams of the Fatherland as a source of strength. They were the first in Europe to set up nature reserves. As soon as they gained power they began legislating to protect rare species, and on August 17, 1933, Goering issued orders that "persons who engage in vivisection of any kind will be deported to concentration camps." (JAMA September 30, 1933, page 1087.) There was great interest in holistic medicine, astrology, and vegetarianism. Hitler did not

drink or smoke and was a vegetarian. Nazi propaganda emphasized Hitler's vegetarianism as a result of his "general attitude towards life and his love for the world of animals" and that he considered killing animals "pure murder." This is not to suggest that vegetarianism or any other positive action on behalf of the environment makes one a Nazi, but it does emphasize a fundamental similarity between the Nazis and the Green agenda: their attitude toward science.

The lack of evidence to support programs promoted by the Greens lead them to adopt the language of religion to encourage their followers. Despite evidence to the contrary, the Greens continue to promote recycling of certain materials even when shown to be wasteful and inefficient and attempt to ban the use of materials shown to require less energy and to make a smaller impact on the environment.

Whelan uses the Greens own writing to demonstrate the absurdity of many of their positions: goats entering Yellowstone National Park from the northeast and south constitute an "unnatural" presence and should be destroyed while those (same species!) entering from the west are to be welcomed and protected; fires in the same park are to be extinguished only if "manmade" (bulldozers, however, cannot be used as they would leave tracks which would be "unnatural"), while natural fires are allowed to burn. This is not science and it requires a religious faith to accept such distinctions. Pantheism and paganism in general are promoted throughout the Green literature and this is amply demonstrated in the essay. All of this contrasts sharply with the Christian worldview: science is possible in a worldview that has a linear concept of time, things happen once and then never again; progress is possible. Pantheism and a cyclical concept of time lead to a worldview that says that nothing, no event, has any great significance. A common theme throughout Green literature is that Christianity is to be blamed for ruining the planet. Nature replaces God in the Green movement.

The author constantly contrasts Green teaching with that of the Judaeo-Christian world view and thus provides the reader with an excellent resource for holding one's own in the public forum. We are children of God, not of the Earth, and thus do not have to thank the water spirit for allowing us to drink from the stream or ask permission of the oak to cut its branches for a fire or its trunk to build a home. In the long run "Science and Christianity do not just coexist; they support each other." To promote their agenda the Greens must undermine Christianity and science and that is clearly their program.

Chapter Two also by Robert Whelan is almost as long and entitled "Greens and People." That the Greens hate people and blame them for all manner of the planet's "ills" is obvious from their literature. People are "the most dangerous form of life on Earth," a "horde of rats," an "uncontrolled virus," an "infestation," and other characterizations such as vermin, scum, swarming insects, spawn, and so on. People are referred to in all manner of negative terms leading to a de-sensitization of the reader in the way the Nazis prepared for the Holocaust.

In Mein Kampf Hitler writes, "The discovery of the Jewish virus is one of the greatest revolutions the world has seen." Having placed animals on the same level as man, the Nazis began to treat men as animals. But it was not only the Nazis. Leading figures in European culture a century ago such as Bernard Shaw, H.G Wells, Virginia Woolf, E.M. Forster, and others, practiced the same game against "the masses" and are heroes to the Greens as are John Muir, Ralph Waldo Emerson, Henry David Thoreau, and others with strong pantheistic beliefs.

Pantheism is the religious world view that sees god and nature as indistinct. God to the followers is not transcendent, but a spirit presence in the world. To believers Jesus Christ is the ONLY begotten Son of God. There are no other gods. Believers in the Incarnation reject animals, trees, rivers, and so on, as being divine and the Nazis' and Greens' efforts to place them above or even on an equal footing with man must be rejected.

Planned Parenthood and abortion are constantly promoted. Ban DDT so that more people will die. Ban CFCs so more people will die. Ban asbestos so that more people will die. The Green agenda is quite clear. The author counters with quotes from the Bible and the actions of Christ on OUR behalf NOT the animals, vegetables, and minerals or the Earth. Whelan makes it clear that Christians should be concerned with problems stemming from misuse of the environment as our faith does indeed direct us, but it must be clearly understood that the environment was made for man, not man for the environment.

"Greens and Animals" is taken up in Chapter Three by Joseph Kirwan and is about 22 pages long. Robert Whelan alludes to it and Kirwan argues strongly from a long history of thought on the matter: animals do not have rights. The Greens do not accept John 1:14 nor Luke 12:24 nor any part of the Testaments that does not support their worldview. The Greens claim that man's rights are limited by those of other creatures and, in fact, are lessened because of man's

destructive activities. In a relatively short space the author does an excellent job of getting to the point that right flows from duty and because men have duties, they have rights. Animals, having no duties, have no rights. Mankind is unique in the Creation (Jew, Christian, Muslim), but the Greens do not accept that. Man cannot love or sin against nature (with or without a capital "N") and yet the Greens insist that we give to animals rights that we are not empowered to give. The author continues with thoughts on the scale of importance in nature, paganism and animal rights, vegetarianism, whether animals feel pain, and the use and misuse of animals. All in all another excellent essay.

In ten pages Paul Haffner takes on the task of setting out "A Christian Ecology." He distinguishes the science from the pseudoscience. The latter is based on a reductionist view of man and his environment. Thus the author clarifies what constitutes the environment. Not only must we consider the physical, the vegetative and animal species that surround man, but we must also include his culture and his supernatural calling to God. Freudianism, Darwinism, and Marxism with their distorted views of man and woman, evolution, and society, have had a strong influence on the ideology of the Green movement. Thus a Christian ecology will recognize that an answer must include God, the human person and nature. The moral dimension of the problem is often not recognized. The Church has a strong theological tradition of respecting the Earth and all that it contains. Two examples from the complementary approaches of Saint Benedict and

Saint Francis are illustrated. The formerly intimate relationship between faith and science was broken down and fragmented after the Middle Ages and "scientists no longer drew upon the moral truths propounded by the Church in order to evaluate rightly the technological applications of science." It is this moral consciousness that must be brought once again to the forefront of the discussion of environmental problems. "Human activity must be seen as a participation in the divine work of Creation following God's laws, whether natural or revealed."

All the chapters, the Foreword, and the Appendix have extensive bibliographies for further reference and support of the authors' positions. Many church groups and others are using *Renewing the Face of the Earth:* A Resource for Parishes as a starting point for discussion groups on environmental issues. While the U.S. Bishops statement is quite good, the supplementary materials starting with "The Challenge of Environmental Problems" are quite disturbing in that the authors have swallowed hook, line, and sinker, the Green agenda. The Cross and the Rain Forest will serve as a much better resource.

Dr. John Hubisz
Professor of Physics — N. Carolina State University
1604 South Salem Street
Apex, North Carolina 27502-7251

LETTERS TO THE EDITORS

Dear Editor:

I have read with interest "Theologians Visit the Environment" by John E. Kinney (Summer, 1997). This author had a heart attack immediately prior to what was to be a mutually shared panel in the Spring, 1996 ITEST symposium on Christianity and the Environmental Ethos. When I read his preparatory essay I presumed he was taking the role of devil's advocate, for no one could really hold such outlandish views. Now I am beginning to believe he means what he says. His sweeping doubt about an environmental crisis is baffling as is his doubt about the qualification of the US Catholic Conference staff. He is naive in saying that this supposedly unqualified USCC staff is "trivializing the teaching role of the hierarchy" — whatever this means. It would be improper to dignify his work with a point-by-point rebuttal. I would rather remind him

that when a 2,500 person panel of scientific experts conclude that the climate of the Earth is significantly warming in ways not entirely predictable, prudence (a beloved virtue of our Catholic theological tradition) would hold that we should take the matter seriously and even err on the side of caution. We also need to imitate the USCC staff and call into question such terms as economic development, technological advancement, and that accumulating capitalistic wealth that Kinney seems to espouse — with no theological proof and certainly without a Catholic Tradition to back up his stance.

I suspect that Kinney will be Kinney the rest of his life. Highlighting his position by this essay says something about the ITEST environmental stance. Why even entertain such nonsense? If any of you readers want to see threatened forests, eroded landscape, or

areas with endangered species, I invite you to leave the comfort of home and academia and come to Appalachia. It is prudent to get out and see for yourself.

Sincerely,

Albert Fritsch, SJ ASPI 50 Lair Street Mt. Vernon, Kentucky 40456-9806

Editor:

I do not like to write refutations for articles previously written because this activity is an absolute sink of time, energy, and emotions. I get upset at writing them, and the authors(s) of the work being challenged also feel offended. However, after reading the article, "Theologians Visit the Environment" by John E. Kinney, I could do no other but respond to this warped and misguided article.

I have not seen the three volumes Kinney reviews in the first half of his article and therefore I will have little to comment about this portion of his article. I suspect some politically-correct (or incorrect) positions are being brought out as Kinney chastises these three publications. I do not understand the politics of Roman Catholicism as it deals with social problems like environmental degradation. After lampooning these three Catholic(?) studies, Kinney then expands his doubting concerns about the environment to the general topic of environmental degradation. It is this general "knock" on the environmental problems and the alarms about the environmental restoration that I choose to address.

Kinney writes:

The USCC was sold a bill of goods by the Union of Concerned Scientists that promoting the theme of "eco-justice," so-called "social justice" will solve the environmental crisis touted as jeopardizing the world.

The Union of Concerned Scientists, while admittedly sometimes a "loose cannon" among society, is nonetheless a respected and authoritative group which includes many Nobel prize-winning scientists as members. Sometimes, their message is grating, alarming and strident, but few scientists have publicly tried to degrade them or their message.

The secret for Christians as we deal with the environmental crisis at hand is to stress *social justice*, for it is in the realm of social justice that the Church can

speak authoritatively. Generally, Christians are not trained as demographers or atmospheric scientists or as resource experts; we cannot be experts in the biochemical effects of pesticides nor as understanding the atmospheric chemistry of the breakdown of stratospheric ozone by the insertion of CFC-11, 12 or 13. But we all share in the sacred message of Jesus to "Love one another even as I have loved you." Therefore, when ecological damage occurs (and it is occurring with greater frequency daily), it occurs most heavily on those persons and segments of society that can do the least to avoid the crushing effects of pollution or degradation of their environment. In my judgment, this is where the Church Universal and each of us Christians must enter the fray. If one of my brothers or sisters in Pakistan, Costa Rica or Uganda suffers from loss of biodiversity, overpopulation, loss of grazing land, pollution, deforestation or defiled water, I as a Christian (and all other Christians) should be deeply troubled at this loss of ecological quality and a degraded life style. This is what ecojustice means! It means that we have a serious obligation to try to take care of each of our brothers and sisters - wherever they may be. Is this not what the Church - and Christians - do best? To be sure, science and technology can be powerful allies in our attempt to resolve many of the ecological problems, but much of the solutions will have to come from the ground swell of Christians who manifest their faith daily to those in need.

Kinney continues,

Unless there is competent technical involvement to answer the question "Is it true?" about ecological crises, the Bishops will not be aware that they are being used to promote needless fear, to encourage wasting money and committing the poor, particularly those in Third World nations, to perpetual poverty. There has been no evidence of such technical involvements to date by independent authorities.

What in the world is Kinney saying? Is he saying that "technical authorities" do not agree that there are serious and perhaps life-threatening problems? Is he saying that the Bishops are being used to promote "needless fear, to encourage wasting money and committing the poor . . . to perpetual poverty."? How is this to be done? Social justice would have exactly the reverse effect, i.e., it valiantly attempts to release the poor from their bondage to perpetual poverty - not to commit them to it. Even I know enough about Catholic purposes to understand that what Kinney is trying to articulate is precisely 180 degrees wrong. Kinney's argument is, at best, specious and poorly thought out.

Finally, Kinney challenges many of the principles and facts undergirding global warming by saying that 1) that we are in a cooling trend, 2) observed temperatures have decreased considerably since the 1940s, 3) that global warming is a mechanism to keep the Third World nations subjugated, and 4) that we now have more forests (140 million more acres than in 1920). Mr. Kinney must be reading completely different scientific journals than the rest of us read. There are reams of unambiguous data that global warming is continuing up to the present resulting in ever-increasing global temperatures. We have much fewer acres of forests now that at any point in our history - especially in tropical rain-forests and in old-growth forests. The number of references to these statements of mine are legion, numerous and available to even every person who is even marginally interested in basic planetary events. I could provide hundreds of scientific references to substantiate the phenomenon of global warming. Global warming continues, temperatures continue to rise, and we lose ever-more precious forests each year. Perhaps in some circles, global warming is a method to subjugate Third World countries, but the scientific community is deeply concerned at the enormous ramifications that will ensue as global warming progresses - to both the lesser-developed countries (Third World) and to more developed countries (like those in North America and Europe). The urgency is very evident to everyone who studies this complex of problems; we must get on with arresting the phenomenon of global warming before we all suffer greatly. I am not trying to scare, I am only trying to warn that we must turn from of our destructive ways of environmental destruction - and do so very, very soon!

Finally, Mr. Kinney represents the Chamber of Commerce, an organization that espouses continued economic growth and development invariably at the expense of the environment. The Chamber of Commerce would certainly not be willing to admit to global warming or depletion of the stratospheric ozone layer or that continued destruction of tropical rain forests are all impediments to growth. However, preservation of the environment will mean some curbs on growth that is achieved at the expense of the environment. The Chamber of Commerce (and undoubtedly Mr. Kinney) has a lot to gain economically by downplaying the various forms of environmental degradation. I, and all of my colleagues on the other hand, have absolutely no economic benefits to reap from our position - only attaining environmental sustainability! Further, we desperately need the tireless efforts of the Church to achieve these critical goals. Won't you help?

Dr. Paul E. Lutz Visiting Professor of Biology Lenoir-Rhyne College Hickory, N.C. 28603

Editor:

I found the paper by John E. Kinney well below the standards of ITEST.

* * * *

Kinney claims that someone (the USCC staff?) did not supply data (on what? for what?) on the various facets of environmental degradation. But he provides none to bolster his many wild claims. But he knows full well the reams of data provided by World Watch, UCS, NAS; he knows of the appeal signed by nearly 100 Nobel Laureates and thousands of scientists to take minimal steps (e.g. on CO₂) to minimize future exposure to serious risk.

His point on providing dignity by working for alleviating poverty would play well in Rome. Yet he fails to point out that it is the Grameen Bank in a very poor Muslim country which has achieved exactly that.

Sincerely yours,

Dr. Rustum Roy
Evan Pugh Professor of the Solid State
The Penn State University

Editor:

The summer 1997 ITEST Bulletin contains an exceptionally articulate article by John Kinney, which sheds some very welcome light on a subject (global warming) that lately has been overrun with hype emanating from the Clinton Administration's notion of political correctness. The ease with which well-meaning church leaders are taken in by bad science carrying a government approval sticker is becoming a major problem, one that ITEST ought to address.

The recent ITEST conference on *The Patenting of Biological Entities* was prompted by the surprising action of over 100 leading churchmen who signed onto a document promoted by Jeremy Rifkin; at the ITEST conference, it turned out that the alarmed people didn't even understand what a patent really is in the first place. Already American clergymen are well on the way to making a similar mistake on the subject of global warming.

There are several very fundamental lapses in scientific practice going on today in the global warming debate:

(1.) Some large computer models predicted major global warming in the future, based on increasing CO₂ emissions by mankind. These models disagreed with experimental data when applied to this century.* A computer model that cannot correctly predict the past is seldom considered a good model. More refined models show how terribly complex the problem is, and thus the most capable and responsible scientists in this field have backed away from earlier predictions.

In particular, it now seems possible that global warming may actually increase water evaporation, increase precipitation, and thicken the polar icecaps, thus reducing the ocean level. This possibility is in direct contrast to the earlier, simpler model that would have the ocean level rising as warmer water expands. This complex outcome is considered too difficult for the public to understand, and hence is ignored by the media.

(2.) The pressure of political correctness is getting in the way. Of 2500 scientists who signed an IPCC document asserting that global warming is on the way, the great majority were ecologists and life scientists with no knowledge of atmospheric physics and chemistry. Yet they found it prudent to sign on, in order to be seen as "part of the team."

Meanwhile, the cautious and tentative conclusions that the IPCC report actually contained were distorted in the executive summary (which is all most people read anyway) to say that mankind has changed the climate. This set off a firestorm among responsible scientists, and the leading computer modelers insisted that their statements were far more modest than the claims in the executive summary. Once again the media paid no attention.

(3.) Respected scientists with long-proven reputations who disagree with the Administration's position have no chance whatsoever of getting an EPA grant to continue their research. Meanwhile, their politically correct opponents, unable to win on the facts, resort to dismissing whatever scientific criticism is raised by these experts on the grounds that they are funded by industry and therefore must be lackeys.

In addition to these scientific lapses, there are severe human consequences of the present "call to action" against CO₂ emissions: A large fraction of Kinney's article is devoted to showing that economic development is an essential component of social justice. Kinney closely follows Christian teaching on this subject. But what are we seeing from our national leaders? We are treated to a spectacle in which the same people who "didn't know they were at a fund-raiser," consider withholding documents from Congress to be a "minor oversight," etc. etc., are trying to tell us that global warming is a certainty, and the only way to avoid it is with population control measures. The Clinton Administration cheerfully gives China "Most Favored Nation" status despite its brutal policy of forced abortion, because China is limiting its population that way.

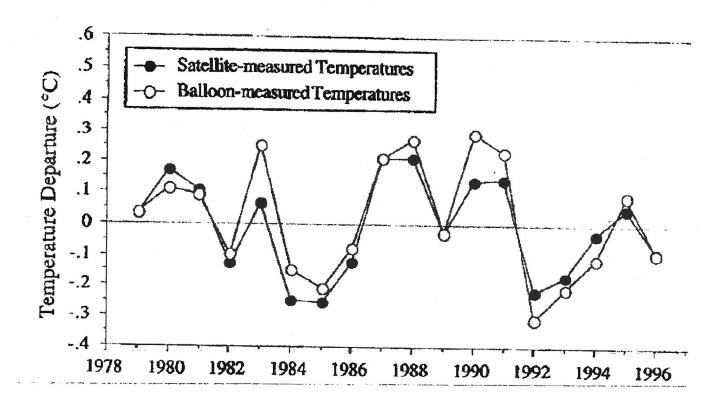
Still, religious leaders are not exempt from this unrelenting environmental hype. In a recent syndicated column serving Catholic newspapers, Bishop McHugh of Camden, New Jersey cited the case of former Boston College faculty member, Fr. Robert Drinan, S.J., who failed to oppose such blatant human rights abuses because of environmental fears. In Kinney's words, "Panic promotes fear and undermines education." In the same way, Kinney shows how the USCC bought into the blurring of "social justice" with "Ecojustice" promoted by the Union of Concerned Scientists.

It is worth reflecting about the notion that the Galileo fiasco, which has been a continuing source of embarrassment for 400 years, was driven almost entirely by the political correctness of the time: "Everybody knows" . . . (that the earth is the center of the universe) . . . That is an extremely dangerous way to make decisions when science is at the center of an issue. We should learn from past mistakes.

Kinney also states 5 points that are an excellent summary of the Pope's teaching on the proper mutual respect needed between theologians and science. All ITEST readers should take these to heart.

Summarizing, Kinney's central point is that third world poverty is being prolonged by elite westerners' unwarranted concerns about global warming. ITEST members can contribute to solving this problem by insisting that only reliable scientific facts, never political correctness, be used to formulate global environmental policy.

Thomas P. Sheahen Physicist 305 Westside Drive #303 Gaithersberg, MD 20878



^{*} A figure of global temperature departure data.

[Mr. John Kinney died on October 6, 1997. He knows now definitively whether he was correct in his estimates of the environment situation and global warming. We recommend him to your prayers. His love for the people of Uganda and Central Africa was paramount in his arriving at his position. Editor]

NEW MEMBERS

ACOSTA, Julius Caesar C.; 112 Old Samson Road, Balintawak, 1106 Quezon City; Philippines; Student.

BANNON, MD, Anne E.; 39 Tealwood Drive, St. Louis; Missouri, 63141, U.S.A.; Physician; Pro-life & med ethics; (314)-567-3446.

BARTON, Mr. Gary; 719 Forsheer Court, Chesterfield; Missouri, 63017-7011, U.S.A.; Public Relations; Monsanto Company; (314)-694-7233; FAX (314)-694-4228; E-MAIL gfbart@monsanto.com.

BEHE, PhD, Michael J.; 111 Research Drive - Lehigh University, Bethlehem; Pennsylvania, 18015-4732, U.S.A.; Associate Professor of Biochemistry; Lehigh University; (610)-758-3680; FAX (610)-758-4004; E-MAIL mjbl@lehigh.edu.

ELLIS, MD, Dr. Jacob P.; 4406 Calion Hwy, El Dorado; Arkansas, 71730, U.S.A.; Physician (ret.); Univ of Arkansas for Med. Sciences; (501)-862-3528.

HYNES, Dr. Thomas V.; 39 Stanstead Place, Nashua; New Hampshire, 03063, U.S.A.; Physicist/Materials Sci.; Army Research Lab; Physics, cosmology, ethics; (603)-880-6539.

LANGSFELD, Monsignor Paul; Mt. St. Mary's Seminary, Emmitsburgh; Maryland, 21727, U.S.A.; Professor; Mt. St. Mary's Sem.

MAC ENTEE, Mr. Barry F.; 13760 Cedar Road, University Heights; Ohio, 44118, U.S.A.; Student; John Carroll University.

MIRO, Charles R.; 6507 Queens Chapel Road, University Park; Maryland, 20782-2135, U.S.A.; Engineer; ASHRAE; Faith and science; (202)833-1830; FAX (202)-833-1830; E-MAIL chuckmiro@aol.com.

MURPHY, MD, ScD, Edmond A.; Carrosca i Formiguera 8-2-1, Sant Cugat del Valleo; Barcelona, 08190, Spain; Medical Geneticist; Jesuit Borja Institution; Medicine, genetics, medical philosophy; (343)-589-0107; E-MAIL eamurphy@abaforum.es.

PETERS, Dr. Karl E.; 63A Loomis Drive, West Hartford; Connecticut, 06107, U.S.A.; Philosopher of Religion; Rollins College; Science and religion; (860)-521-6395; E-MAIL kpeters909@aol.com.

REGIS COLLEGE; 235 Wellesley Street, Weston; Massachusetts, 02193, U.S.A.; Library; Regis College.

RHODES, Mr. Charles C.; 1377 Montclaire Court, Los Altos; California, 94024, U.S.A.; Computer Engineer; Silicon Graphics, Inc.; Astronomy, computers; (415)-968-7221; FAX (415)-962-8713; E-MAIL rhodes@sgi.com.

SANDERS, Rodney; 12172 Ameling Road, Maryland Heights; Missouri, 63043, U.S.A.; Computer professional, philosophy instructor; Monsanto Corporation; Philosophy, ethics; (314)-434-5961; E-MAIL Rosanders@aol.com.

SCARDIGLIA, Frank; 3139 Kingsley Road, Shaker Heights; Ohio, 44122, U.S.A.

UBILI OP, Chidube; P.O. BOX 2847, Oshodi, Lagos; Nigeria, West Africa; Parish Minister/transitional deacon; Dominican Community; Environmental problems; FAX 810-0011; E-MAIL ibpriory@infoweb.abs.net.

CHANGE OF ADDRESS

BERTELS OSF, Sister Thomas More; 2409 South Alverno Road, Manitowoc; Wisconsin, 54220, U.S.A.; Professor of History (emerita); Silver Lake College.

CARTER, Mr. Lee; P.P. Box 44242., Rio Rancho; New Mexico, 87174-4242, U.S.A.; Engineering economist, chem. engineer; Private practice; Feasibility studies, world affairs.

CAVANAUGH, Jean; 50 Alex McGregor Road, Pawtucket; Rhode Island, 02861, U.S.A.; Director of Communications; RSM's of the Americas/Providence.

CURRIE, SJ, Fr. Charles L.; One Dupont Circle - AJCU, Washington; D.C., 20036, U.S.A.; Priest-educator, chemist; Assoc. of Jesuit Colleges & Universities; Science/theology, environment; E-MAIL ccurrie@sju.edu.

FOWLER, Rev. John; 6330 Shady Brook Ln., Apt 2151, Dallas; Texas, 75206, U.S.A.; Parish priest; Diocese of Dallas; Theology, science, philosophy.

FRITSCH, SJ, Fr. Albert; A.S.P.I. - 50 Lair Street, Mt. Vernon; Kentucky, 40456, U.S.A.; Environmentalist; ASPI; Environment conservation; (606)-453-2105.

GEORGE, OMI, Most Rev. Francis E.; The Pastoral Center, PO BOX 1979, Chicago; Illinois, 60690, U.S.A.; Archbishop; Chicago; Faith/culture, phil. of social science.

HARMAN, PhD, Laurinda; 2967 W. School House-Lane Cambridge 406, Philadelphia; Pennsylvania, 19144, U.S.A.; Assoc. Professor & Chair - Health Information Management; Temple University; Genetics, information management; (215)-707-4823; FAX (215)-707-7819; E-MAIL lharman@vm.temple.edu.

KELLEY, Rev. David F.; 45 Lovett Avenue, Newark; Delaware, 19711, U.S.A.; Catholic Priest; Theology; philosophy; theology; (302)-368-4728.

LAWRENCE, SJ, Deron; Campion House - 518 N. 19th, Omaha; Nebraska, 68102, U.S.A.; Jesuit Novice; Wisconsin province; Ecology, bioethics, theology; (402)-341-2408; E-MAIL deronl@creighton.edu.

LEITNER, Father Thomas; Benedictine Mission House - PO BOX 528, Schuyler; Nebraska, 68661, U.S.A.; Benedictine Priest; Benedictine Mission House.

LUTZ, PhD, Paul E.; Lenoir-Rhyne College; Box 7155, Hickory; North Carolina, 28603, U.S.A.; Environmental Advocate, Prof. of Biology; Lenoir-Rhyne College; E-MAIL pelutz@goodall.uncg.edu.

POUCH, Dr. Greg; 1502 Dustin Road #2, Normal; Illinois, 61761, U.S.A.; Geologist; Kansas Geological Survey; Evolution resources; R & D; Co-creation; (913)-865-4384; FAX (913)-864-5317; E-MAIL gwpouch@excitemail.com.

RAYMOND, PhD, Patricia M.; 1633 George Allen Road, Chepachet; Rhode Island, 02814, U.S.A.; Clinical Psychologist; Neuropsychology Services; Health services; learning disabilities; aging; (401)-751-7772 (0); 567-0115 (h); E-MAIL PMRaymond@msn.com.

ROY, Dr. Rustum; 102 M.R.L., University Park; Pennsylvania, 16802, U.S.A.; Chemist; The Penn State University; Pan-entheist theology incorporating S/T; (814)-865-3421; FAX (814)-863-7040.

SHEAHEN, Dr. Thomas P.; 305 West Side Drive, #303, Gaithersburg; Maryland, 20878, U.S.A.; Physicist; Higher-dimensional theology; (301)-869-2628; FAX (301)-869-6844; E-MAIL 103131,1446@compuserve.com.

VAN HOVE, SJ, Fr. Brian; 1225 Otis St., N.E. - Carroll House, Washington; D.C., 20017, U.S.A.; Priest, Graduate Student; Catholic University of America; (202)-529-1252 ext.127; FAX (202)-529-2605; E-MAIL 75337.1641@compuserv.com.

WOLBERT, Jerome J.; 7290 South Fork Drive, Swartz Creek; Michigan, 48473, U.S.A.; Mathematician; University of Michigan; Mathematics, philosophy of science, linguistics; E-MAIL wolbert@member.ams.org.

WOLFERSTEIG, Mr. Robert; P.O. BOX 11235, Daytona Beach; Florida, 32120-1235, U.S.A.; Public Relations; Embry-Riddle Aeronautical University; Aviation-aerospace; (904)-238-8870; (home e-mail) WHXD96b@prodigy.com; E-MAIL wolfersb@cts.db.erau.edu.

CORRECTIONS

JERRY CHANDLER	change E-MAIL jlrchand@erols.com,
RICHARD CUSACK	Change area to (847) from (708)
GLEN KESSINGER	E-MAIL gfk@inel.gov;
REX KOCHANSKI	Change phone number to (908)-424-9298
WILL LEATHAM	Change spelling from Latham to Leatham
JUDITH LARSEN	E-MAIL larsenjudy@aol.com
ROBERT MILLER	E-MAIL remiller@coop.crn.org
JUSTIN RIGALI	Correct phone # is (314)-533-1878

IN MEMORIAM

Dr. Joseph Stanton Mr. John E. Kinney

We also ask your prayers for ITEST members who are ill. May they feel the restoring hand of the Lord.