

Environmentalism for the Twenty-first Century

PATRICK MOORE

AS we prepare for the twenty-first century, environmental thinkers are divided along a sharp fault line. There are the doomsayers who predict the collapse of the global ecosystem. There are the technological optimists who believe that we can feed twelve billion people and solve all our problems with science and technology. I do not believe that either of these extremes makes sense. There is a middle road based on science and logic, the combination of which is sometimes referred to as common sense. There are real environmental problems and there is much we can do to improve the state of the environment.

I was born and raised in the tiny fishing and logging village of Winter Harbour on the northwest tip of Vancouver Island, in the rainforest by the Pacific. I didn't realize what a blessed childhood I'd had, playing on the tidal flats by the salmon spawning streams in the rainforest, until I was shipped away to boarding school in Vancouver at age fourteen. I eventually attended the University of British Columbia studying the life sciences—biology, forestry, genetics—but it was when I discovered ecology that I realized that, through science, I could gain an insight into the mystery of the rainforest I had known as a child. I became a born-again ecologist, and in the late-1960s was soon transformed into a radical environmental activist.

I found myself in a church basement in Vancouver with a like-

minded group of people, planning a protest campaign against US hydrogen bomb testing in Alaska. We proved that a somewhat rag-tag looking group of activists could sail a leaky old halibut boat across the North Pacific Ocean and change the course of history. By creating a focal point for opposition to the tests, we got on national news and helped build a ground-swell of opposition to nuclear testing in the US and Canada. When that bomb went off in November 1971 it was the last hydrogen bomb ever detonated on planet Earth. Even though there were four more tests planned in the series, President Nixon cancelled them due to public opposition. This was the birth of Greenpeace.

Flushed with victory and knowing we could bring about change by getting up and doing something, we were welcomed into the longhouse of the Kwakiutl Nation at Alert Bay near the north end of Vancouver Island. We were made brothers of the tribe because they believed in what we were doing. This began the tradition of the Warriors of the Rainbow, after a Cree legend which predicted that one day when the skies are black and the birds fall dead to the ground and the rivers are poisoned, people of all races, colours and creeds will join together to form the Warriors of the Rainbow to save the Earth from environmental destruction. We named our ship the *Rainbow Warrior* and I spent fifteen years on the front lines of the eco-movement as we evolved from that church basement into the

world's largest environmental activist organization.

Next we took on French atmospheric nuclear testing in the South Pacific. They proved a bit more difficult than the US Atomic Energy Administration. But after many years of protest voyages and campaigning, involving loss of life on our side, the tests were first driven underground and eventually stopped altogether.

In 1975, we set sail deep-sea into the North Pacific against the Soviet Union's factory whaling fleets that were slaughtering the last of the sperm whales off California. We put ourselves in front of the harpoons in little rubber boats and made Walter Cronkite's evening news. That really put Greenpeace on the map. In 1979, the International Whaling Commission banned factory whaling in the North Pacific and soon it was banned in all the world's oceans.

In 1978, I was arrested off Newfoundland for sitting on a baby seal, trying to shield it from the hunter's club. I was convicted under the draconian Seal Protection Regulations that made it illegal to protect seals. In 1984, baby sealskins were banned from European markets, effectively ending the slaughter.

Can you believe that in the early 1980s, the countries of Western Europe were pooling their low- and medium-level nuclear wastes, putting them in thousands of oil drums, loading them on ships and dumping them in the Atlantic Ocean as a way of 'disposing' of the wastes? In 1984, a combined effort

by Greenpeace and the UK Seafarers' Union put an end to that practice for good.

By the mid-1980s Greenpeace had grown from that church basement into an organization with an income of over US\$100 million per year, offices in 21 countries and over 100 campaigns around the world, now tackling toxic waste, acid rain, uranium mining and drift net fishing as well as the original issues. We had won over a majority of the public in the industrialized democracies. Presidents and prime ministers were talking about the environment on a daily basis.

For me, it was time to make a change. I had been against at least three or four things every day of my life for 15 years; I decided I'd like to be in favour of something for a change. I made the transition from the politics of confrontation to the politics of building consensus. After all, when a majority of people decide they agree with you, it is probably time to stop hitting them over the head with a stick and sit down and talk to them about finding solutions to our environmental problems.

All social movements evolve from an earlier period of polarization and confrontation during which a minority struggles to convince society that its cause is true and just, eventually followed by a time of reconciliation if a majority of the population accepts the values of the new movement. For the environmental movement, this transition began to occur in the mid-1980s. The term 'sustainable development' was adopted to describe the challenge of taking the new environmental values we had popularized, and incorporating them into the traditional social and economic values that have always governed public policy and our daily behaviour. We cannot simply switch to basing all our actions on purely environmental values. Every day, six billion people wake up with real needs for food, energy and ma-

terials. The challenge for sustainability is to provide for those needs in ways that reduce negative impact on the environment. But any changes made must also be socially acceptable and technically and economically feasible. It is not

***I had been against
at least three or
four things every
day of my life for
15 years; I decided
I'd like to be in
favour of some-
thing for a change***

always easy to balance environmental, social and economic priorities. Compromise and co-operation with the involvement of government, industry, academia and the environmental movement are required to achieve sustainability. It is this effort to find consensus among competing interests that has occupied my time for the past fifteen years.

Not all my former colleagues saw things that way. They rejected consensus politics and sustainable development in favour of continued confrontation and ever-increasing extremism. They ushered in an era of zero tolerance and left-wing politics. Some of the features of this environmental extremism are:

- Environmental extremists are anti-human. Humans are characterized as a cancer on the Earth. To quote eco-extremist Herb Hammond, 'of all the components of the ecosystem, humans are the only ones we know to be completely optional'. Isn't that a lovely thought?

- They are anti-science and technology. All large machines are seen as inherently destructive and unnatural. Science is invoked to justify positions that have nothing to do with science. Unfounded opinion is accepted over demonstrated fact.
- Environmental extremists are anti-trade, not just free trade but anti-trade in general. In the name of bioregionalism they would bring in an age of ultra-nationalist xenophobia. The original 'Whole Earth' vision of one world family is lost in a hysterical campaign against globalization and free trade.
- They are anti-business. All large corporations are depicted as inherently driven by greed and corruption. Profits are definitely not politically correct. The liberal democratic, market-based model is rejected even though no viable alternative is proposed to provide for the material needs of six billion people. As expressed by the Native Forest Network, 'it is necessary to adopt a global phase-out strategy of consumer-based industrial capitalism'. I think they mean civilization.
- And they are just plain anti-civilization. In the final analysis, eco-extremists project a naive vision of returning to the supposedly utopian existence in the garden of Eden, conveniently forgetting that, in the old days, people lived to an average age of 35, and there were no dentists. In their brave new world there will be no more chemicals, no more aeroplanes, and certainly no more polyester suits.

Let me give you some specific examples that highlight the movement's tendency to abandon science and logic and to get the priorities completely mixed up through the use of sensationalism, misinformation and downright lies.

THE BRENT SPAR OIL RIG

In 1995, Shell Oil was granted permission by the British Environment Ministry to dispose of the North Sea oil rig *Brent Spar* in deep water in the North Atlantic Ocean. Greenpeace immediately accused Shell of using the sea as a 'dustbin'. Greenpeace campaigners maintained that there were hundreds of tonnes of petroleum wastes on board the *Brent Spar* and that some of these were radioactive. They organized a consumer boycott of Shell, and service stations were fire-bombed in Germany. The boycott cost the company millions in sales. German Chancellor Helmut Kohl denounced the British government's decision to allow the dumping. Caught completely off guard, Shell ordered the tug that was already towing the rig to its burial site to turn back. It then announced that it had abandoned the plan for deep-sea disposal. This embarrassed British Prime Minister John Major.

Independent investigation revealed that the rig had been properly cleaned and did not contain the toxic and radioactive waste claimed by Greenpeace. Greenpeace wrote to Shell apologizing for the factual error. But it did not change its position on deep-sea disposal despite the fact that on-land disposal would cause far greater environmental impact.

During all the public outrage directed against Shell for daring to sink a large piece of steel and concrete it was never noted that Greenpeace had purposely sunk its own ship off the coast of New Zealand in 1986. When the French government bombed and sank the *Rainbow Warrior* in Auckland Harbour in 1985, the vessel was permanently disabled. It was later refloated, patched up, cleaned and towed to a marine park where it was sunk in shallow water as a dive site. Greenpeace said the ship would be an artificial reef and would support increased marine life.

The *Brent Spar* and the *Rainbow Warrior* are in no way fundamentally different from one another. The sinking of the *Brent Spar* could also be rationalized as providing habitat for marine creatures. It's just that the public relations people at Shell are not as clever as those at Greenpeace. And, in this case, Greenpeace got away with using misinformation even though it had to admit its error after the fact. After spending tens of millions of dollars on studies, Shell recently announced that it had abandoned any plan for deep-sea disposal and will support a proposal to re-use the rig as pylons in a dock extension project in Norway. Tens of millions of dollars and much precious time wasted over an issue that had nothing to do with the environment and everything to do with misinformation and fundraising hysteria.

To make matters worse, in 1998

***During all the public
outrage directed
against Shell ... it was
never noted that
Greenpeace had pur-
posely sunk its own
ship off the coast of
New Zealand in 1986***

Greenpeace successfully campaigned for a ban on all marine disposal of disused oil installations. This will result in hundreds of millions, even billions of dollars in unnecessary costs. One obvious solution would be to designate an area in the North Sea for the creation of a large artificial reef and to sink oil rigs there after cleaning them. This would provide a breeding area

for fish and other marine life, enhancing the biological and economic productivity of the sea. But Greenpeace isn't looking for solutions, only conflicts and bad guys.

THE INVISIBLE POISONS

Beginning with the Natural Resources Defense Council's scare tactics about the use of the pesticide Alar on apples, the environmental movement has been very clever at inventing campaigns that make us afraid of our food. They conjure up invisible poisons that will give us cancer, birth defects, mutations, and otherwise kill us in our sleep. We will all soon be reduced to a hermaphroditic frenzy by endocrine-mimicking compounds as we approach the Toxic Saturation Point.

Meanwhile, the National Cancer Institute of Canada conducted a joint study with US counterparts beginning in 1994 to investigate the possible relationship between pesticide residues in food and cancer in humans. The findings, published in the peer-reviewed journal *Cancer* in 1997, concluded that it could not find 'any definitive evidence to suggest that synthetic pesticides contribute significantly to overall cancer mortality', a careful way of saying they found zero connection. And yet, the article pointed out, over 30 per cent of cancers in humans are caused by tobacco, a natural substance. And another 35 per cent are caused by poor diet, mainly too much fat and cholesterol and not enough fresh fruit and vegetables. The main effect of the environmental campaign against pesticides is to scare parents into avoiding fresh fruit and vegetables for themselves and their children.

The same kind of scare tactics are now being employed in the campaign against biotechnology and genetically modified foods. Even though there is no evidence of negative human health effects and environmental concerns are blown completely out of propor- ▶

tion, great fear has been whipped up in the public. Large corporations are in retreat and governments are scrambling to get control of the issue. Unfortunately, some biotechnology companies and associations continue to belittle public concerns and resist disclosure of food ingredients. There is no escaping the fact that this is a new technology and that it must be introduced carefully and sometimes slowly.

In response to the fact that there is no evidence of negative impacts, environmentalists invariably resort to the so-called 'precautionary principle', which is actually not a principle at all. If it were, we could do virtually nothing because we never know all future outcomes of actions taken today. It would be better if it were called the 'precautionary attitude' or the 'precautionary approach'. While it is perfectly legitimate to be cautious we cannot allow that to freeze us in our tracks. It is sobering to consider that the terrible side-effects of DDT, now largely corrected, are not a sufficient argument to ban pesticides altogether, any more than those caused by Thalidomide are sufficient to ban all pharmaceuticals.

FORESTS

In March 1996, the World Wildlife Fund held a media conference in Geneva during the first meeting of the UN Panel on Forests. It stated that there are now 50,000 species going extinct every year due to human activity, more than at any time since the dinosaurs went extinct 65 million years ago. Most significantly, WWF stated that the main cause of these extinctions is 'commercial logging'. This was largely due, according to WWF director-general Claude Martin, to 'massive deforestation in industrialized countries'. The statements made at the media conference were broadcast and printed around the world, giving millions of people the impression that forestry was the main cause of species extinction.

I have tried to determine the basis for this allegation, openly challenging the WWF to provide details of species extinctions caused by logging. To date it would appear that there is no scientific evidence on which to base such a claim. WWF

It is entirely beyond reason to suggest that three-quarters of the forested areas of North America will become 'extinct', yet this is what WWF is proclaiming to the public

has provided no list of species that have become extinct due to logging. In particular, the claim of 'massive deforestation' in industrialized countries runs counter to information provided by the Food and Agriculture Organization of the United Nations. According to the FAO, the area of forest in the industrialized world is actually growing by about 0.2 per cent per year, due to the reforestation of land that was previously cleared for farming.

In May 1996, I wrote to Prince Philip, the Duke of Edinburgh, in his capacity as President of WWF. I stated in part:

Myself and many colleagues who specialise in forest science are distressed at recent statements made by WWF regarding the environmental impact of forestry. These statements indicate a break with WWF's strong tradition of basing their policies on science and reason. To the best of our knowledge, not a single species has become extinct in North America due to forestry.

Prince Philip replied:

I have to admit I did not see the draft of the statement that [WWF spokesperson] Jean-Paul Jeanrenaud was to make at the meeting of the Intergovernmental Panel on Forestry in Geneva. The first two of his comments [50,000 species per year and the dinosaur comparison] are open to question, but they are not seriously relevant to the issue. However, I quite agree that his third statement [logging being the main cause of extinction] is certainly contentious and the points that you make are all good ones. All I can say is that he was probably thinking of tropical forests when he made the comment.

Since this exchange of correspondence, WWF has changed the way that it characterizes the impact of forestry in relation to species extinction. At its 'Forests for Life' conference in San Francisco in May 1997, there was no mention made of forestry being the main cause of species extinction. Instead, WWF unveiled a report stating that 'three quarters of the continent's forest ecoregions are threatened with extinction, showing for the first time that it is not just individual species but entire ecosystems that are at risk in North America'. The word 'extinction' is normally used to mean that something has been completely eliminated. It is entirely beyond reason to suggest that three-quarters of the forested areas of North America will become 'extinct', yet this is what WWF is proclaiming to the public.

BIODIVERSITY

I have been a subscriber to *National Geographic* since my father first gave it to me as a gift when I was in school. I have always looked forward to the latest edition, with all the wonders of the world between its covers. Lately, however, even this stalwart of objective science has fallen prey to the prophets of doom who believe a human-caused

'mass extinction' is already under way.

The February 1999 special edition on *Biodiversity—The Fragile Web*, contained a particularly unfortunate article titled 'The Sixth Extinction'. This refers to the fact that there have been five main extinction events during the past 500 million years, the two most severe of which are believed to have been caused by meteor impacts. It may well be that all five were of extra-terrestrial origin. During the most recent mass extinction, 65 million years ago, 17 per cent of all the taxonomic families of life were lost, including the dinosaurs. An even greater extinction occurred 250 million years ago when 54 per cent of all families perished, including the trilobites. ('*Family*' is a term used in taxonomy, two levels up from individual species, for example the cat family, the lily family, and the hummingbird family. Each family contains many, sometimes hundreds, of individual species).

The first two pages of the article contain a photo of Australian scientist Dr Tim Flannery looking over a collection of stuffed and pickled small extinct mammals. The caption under the photo reads: 'In the next century half of all species could be annihilated, as were these mammals seen in Tim Flannery's lab at the Australian Museum. Unlike the past five, this mass extinction is being fuelled by humans'. To be sure, mention is made later in the article that the Australian extinctions were caused by the introduction of cats and foxes when Europeans colonized the region over 200 years ago. This resulted in the loss of about 35 animal species, mainly of flightless birds and ground-dwelling marsupials that were not able to defend themselves against these new predators. This is hardly a 'mass extinction' and the cause was a one-time introduction of exotic species. The rate of extinction of Australian mammals has slowed considerably in recent decades, partly because the most vulner-

able species are already extinct, and partly because people started caring about endangered species and began working to prevent them from going extinct. In Australia today, there are programmes to control wild cats and foxes, some of which have resulted in the recovery of native animal populations.

The use of the Australian example to justify claims that we are experiencing a mass extinction is put into focus by Brian Groombridge, editor of the IUCN Red List of Threatened Species when he states, 'around 75% of recorded extinctions ... have occurred on islands. Very few extinctions have been recorded in continental tropical forest habitat, where mass extinction events are predicted to be underway'. It is clearly misleading to point to the specific and exceptional case of extinctions caused by the introduction of new species to islands as evidence of a worldwide mass extinction. The *National Geographic* article goes on to quote biologist Stuart

***It is very frustrating
when a trusted institution
such as the National Geographic
resorts to sensationalism,
exaggeration and misleading
illustrations***

Pimm: 'It's not just species on islands or in rain forests or just birds or big charismatic mammals. It's everything and it's everywhere. It is a worldwide epidemic of extinctions'. Yet nearly every example used in the article involves islands such as Aus-

tralia and Tasmania, Mauritius, Easter Island and the many islands of the South Pacific.

On pages 48 and 49 of the 'Sixth Extinction' article there is a graph depicting the number of taxonomic families that have existed on earth for the past 600 million years. The graph shows that despite the five great extinctions that have occurred during this period, the number of living families has risen steadily, from around 200 families 500 million years ago to over 1,000 families today. This tendency to diversify over time is one of the major features of evolution. The line of the graph is a thick, solid one until it reaches the present day whereupon it turns abruptly downward as if to indicate a loss of families due to the 'mass extinction' now under way. But the line does not remain thick and solid; it turns fuzzy right at the point where it turns down. I wrote to *National Geographic* and asked, 'Why does the line turn fuzzy? Is it because there are actually no known families that have become extinct in recent times? I do not know of any families of "beetles, amphibians, birds and large mammals" that have become extinct as implied in the text.'

The reply to my inquiry came from Robin Adler, one of the researchers who worked on the article. She thanked me for 'sharing my thoughts on this complicated and controversial issue' but offered no answer to my question about the graph. Instead she asked me to 'Rest assured that ... the many members of our editorial team ... worked closely with numerous experts in conservation biology, paleobiology, and related fields. The concept of a "sixth extinction" is widely discussed and, for the most part, strongly supported by our consultants and other experts in these areas, although specific details such as the time frame in which it will occur and the number of species that will be affected continues to be debated'.

Nowhere in the *National Geographic* article is there any mention ►

that the 'sixth extinction' is a controversial subject; it is presented as if it is a known fact. It is clear from the reply that the 'mass extinction' is actually in the future ('the time frame in which it *will* occur'). In other words, there is no evidence that a mass extinction is actually occurring now, even though the article plainly implies that it is. The reply also refers to the sixth extinction as a 'concept' implying that it is just an idea rather than a proven fact. Perhaps a better title for the article would have been 'No Mass Extinction Yet, Maybe Some Day'.

It is very frustrating when a trusted institution such as the *National Geographic* resorts to sensationalism, exaggeration and misleading illustrations. There is enough bad science and misinformation in the popular press as it is. One can only hope that the present tendency to ignore science and logic, rightly referred to as a 'bad intellectual climate' by environmental philosopher Henry H. Webster, will eventually come to an end.

ENVIRONMENTALISM FOR THE TWENTY-FIRST CENTURY

It's easy to see that the mainstream of the environmental movement has fallen prey to misguided priorities, misinformation, dogmatism and self-interest. Soon after I left Greenpeace in 1986, I found out that it had initiated a pension plan. I knew I had got out just in time. In the early days, many of us realized that our job was to work ourselves out of the job, not to give ourselves jobs for life. I feel the same way about my efforts to promote sustainability, sustainable forestry, and the application of science and logic to environmental issues. I am sometimes amazed by the fact that this seems more difficult than my original work to promote awareness of ecology and the environment. Perhaps this time I do have a job for life. Still no pension plan, however!

What are the main features of a rational environmental policy for

the twenty-first century? Some points to consider are as follows:

- Wherever possible, we should move towards an economy that is based on renewable energy and material resources. Sustainability is not synonymous with renewability but it is strongly linked to it. Where we do use non-renewable resources, they should be used wisely and recycled whenever practical.

***Soon after I left
Greenpeace in 1986,
I found out that it
had initiated a
pension plan.
I knew I had got
out just in time***

- We should learn to manage our population voluntarily. The UN Conference on Population, held in Cairo in 1994, concluded that the most effective way to manage population growth is the education and empowerment of women. This leaves no place for patriarchy, religious fundamentalism or dictatorships.
- We should develop a more globally unified analysis of the relationships among land use, energy and resource consumption, forests and biodiversity, and population. Policies that have global implications must not be logically inconsistent one with the other.
- We should learn to be better gardeners at both local and global scales. With six or eight billion mouths to feed, this will require more intensive agricultural production including the use of fertilizer, synthetic pesticides and

biotechnology. It is a simple fact of arithmetic that the less land we need to grow our food the more is available for forest and wilderness.

- Urban sprawl must be brought under control. We have allowed the automobile to determine urban form by default. 300,000 hectares of forest are lost in the United States every year, all of it due to 200 cities spreading out over the land. Denser, more livable, cities must be designed if population continues to grow.
- Deforestation in the tropics must eventually be stabilized or reversed. This can be accomplished by the transfer of intensive agricultural practices, the establishment of fast-growing, sustainable fuel-wood plantations, and the management of population growth.

As an ecologist and environmentalist, not a political scientist or political activist, I have always shied away from strong opinions on poverty and class. But it seems unacceptable to me that so many hundreds of millions of people live at a material standard that we in the industrialized countries would not consider acceptable for a dignified life. I believe that there is a great deal to be learned by exploring the relationships between ecology and politics. In some ways politics is the ecology of the human species. The two subjects have developed such completely different disciplines and terminologies that it is hard to think of them together. But I believe that we must if we are to gain a truly holistic understanding of the relationship between ourselves and our society, and the Earth on which we ultimately depend.

Patrick Moore (patrickmoore@home.com) was a co-founder of Greenpeace and founder of Greenspirit—'May The Forest Be With You'. A longer version of this article as well as many other excellent articles can be found at www.greenspirit.com.

IP A

REVIEW