GUEST COMMENT

The View Ahead*

As we commemorate the Sierra Club's centennial, we are certainly celebrating our past. Our history is rich and varied, and we take pride in it. But we also need to look forwards and ask ourselves: What kind of world will the Sierra Club face in the next hundred years?

Planting the seeds for the next century, we wonder what kind of future we should prepare for. As no one is clairvoyant, how can we think about the future? Well, we might imagine ourselves at the next centennial banquet of the Sierra Club in the year 2092. Looking backwards from that vantage-point, what will we say of this next hundred years? Probably we will be able to claim a long list of accomplishments once again. But what will we be able to salvage of the physical world? What will its condition be? How much of Nature will have survived?

We might think of the future in terms of alternative scenarios and their probability. Unfortunately it is far easier to imagine a pessimistic scenario than an optimistic one. The pessimistic scenario would say that conditions will be much worse. For those who say that we have only 10–20 years to save all that will be saved, or to reverse directions, things are bound to be worse. Recent decades show little political will to turn things around drastically, and it is unlikely that this will change much in the next 10–20 years. There may be a few political victories ahead in terms of keeping things from being worse than they otherwise would be, but the net conditions of the physical world seem inevitably to continue in decline. Only fragments of Nature would survive. One could foresee a world in which:

- 90% of the plant and animal species currently surviving would be lost
- human population levels would have quintupled
- only 15% of the world's wilderness would be left (and none in biologically active areas)
- only 5% of the original tropical rain-forests would have survived (and mostly in blocks too small to be lastingly viable)
- heavy pollution loadings would choke over two-thirds of the globe
- toxic substances would be everywhere, and the majority of children, accordingly, would be ill
- skin cancer would be rampant
- the remaining glaciers would be melting
- the seas would be rising
- desertification would be spreading across the American Mid-west and also extending elsewhere
- California would be in permanent drought
- and agriculture would be collapsing, with too little water, too many chemicals, and too many resistant pests.

Clearly there would not be much to celebrate in AD 2092 if the above is what will come to pass. But can humanity want to live that way? Will there not be political will to resist? Do things always get worse in absolute terms? Fortunately the historical record does show some reversals (e.g. where species have not reached extinction). For example:

- the American Bison (Bison bison) was brought back from the edge of extinction
- Gray Whale (Eschrichilus glaucus) stocks have recovered
- more forest-land is found in the eastern US today than when the Sierra Club was formed
- forests are being restored in countries such as Spain and Israel
- ambient levels of airborne lead are declining in the US and some other countries
- nuclear fallout in the global atmosphere has diminished drastically.

The human forces that have worsened conditions can also decide to reverse direction. Cars today emit 98% less pollution than those built before the first Earth Day. In the quarter-century since the Wilderness Act was passed, the amount of wilderness protected in the US has increased ten-fold. Political will can make a difference!

If some political will is summoned, one can imagine a mildly optimistic scenario. One could then foresee:

- massive tree-planting world-wide to offset growth in industrial CO₂ emissions a 'greening of the world', with rains returning to areas having new forests.
- the drying of the Mid-west might lead to reversion of more cultivated land to grassland; with less land tilled, the chemical burden on the region would be reduced; and with the high price of chemicals, more farmers would turn to low-input, sustainable agriculture.
- the levels of industrial pollution world-wide would be stabilized as the newly industrialized countries (NICs) cleaned themselves up (as the Japanese have done) and the formerly communist-block countries would gradually do so also.

^{*} Adapted from the remarks of the Chairman of the Sierra Club at its Centennial Celebration Banquet, held in San Francisco, California, USA, on 2 May 1992, and entered into the *Congressional Record* of 12 May 1992 (pp. E1352–4). — Ed.

- human population numbers might stabilize in most parts of the world, albeit at levels which are too high, such as 12 thousand millions overall.
- and there would be steady growth in the percentage of land put in protected areas world-wide; the current rate of increase, which is 25% per decade, would continue well into the next century; the majority of countries would come to have from 5% to 10% of their territory set aside in protected areas.

But is this the most that is likely? Can we find no plausible bases for doing better? Yes, I think we can. For, oddly enough, the very forces that have been our problem since the industrial revolution began, may now unwittingly be turned into the instrument of our rescue. I am speaking of large business corporations, which are now moving into a different era. In having to compete on a world-wide basis, they are globalizing their operations. They seek the least expensive sources of supply and locations for production, and sell their products all over the world. This they do in order to minimize distortions in competitive advantage among nations and to maximize the size of markets having similar environmental requirements with respect to products. These large multinational corporations want rational, stable, and predictable, operating climates. Through GATT (General Agreement on Tariffs and Trade) and various regional trading agreements, they will, through backdoor means, be seeking a kind of world government to govern trade.

The job for environmentalists will be to seek parity in this process for environmental concern and for democratic and bioregional values. They need to 'tame the trade monster'. They need to checkmate a headlong plunge towards a one-sided approach that serves only industry and sacrifices the environment. However, if they could succeed in getting parity for environmental concerns, the result would be a better world — a world where environmental standards are raised without imposing ceilings on them, where backward, dirty industries die, and where literacy rises. What might that world look like as far as the environment is concerned?

- 1) It is not implausible to imagine a century hence in which human populations have been stabilized at levels much lower than in the pessimistic scenarios. Reproductory levels would fall as standards of literacy and education rise to meet the needs for technological competence of a globalized economy, and public health would rise to protect employers' interests in that work-force.
- 2) As multinationals see themselves operating everywhere, they would want to avoid 'fouling their own nests' and instead become a force for elevating environmental standards in the Third World. They would bring improved standards to the rest of the world from their operations in advanced countries. Technologically backward and dirtier companies would not be able to compete, and would go out of business. The skies and the waters would begin to clear over much of the Earth.
- 3) Also, the spread of factories to remote areas to capture labour values there would make those areas less dependent on exploiting natural resources in irrational ways, such as by over-heavy logging. Many of those exploitive businesses would disappear as they became displaced by better alternatives. New plantations could provide cellulose more cheaply than by shipping it in bulk from remote areas. Clean sources of alternative energy would end the search for hydrocarbon resources in remote and fragile areas.
- 4) A global climate treaty would regulate emissions of CO₂ and other 'greenhouse' gases in all nations, and would help to move the world into a post-fossil-fuel era. Hydrogen pellets produced by solar power from sea-water would fuel most vehicles. Electricity would come largely from photovoltaics, and power would be stored in fuel cells. The world economy would both get the energy it needs and would prosper from selling new technology having few environmental disadvantages.
- 5) Most tropical countries would preserve their remaining rain-forests to maximize their chance of earning substantial sums from discoveries in biotechnology, having found that they can make more money that way than by selling them for wood. Some of the forests would have been leased on a long-term basis to a foreseeable World Climate Authority.
- 6) Higher levels of education would also create demand for more environmental reform and democracy. Populations in Third World countries would no longer be willing to accept apocalyptic situations such as now are found in Mexico City. They would punish politicians who throw up smokescreens over 'jobs *versus* the environment', and would demand delivery of improved air and a better life.
- 7) The world would gradually learn that life is better in every way when it practises good Earthcare. Corporations would come to understand that the price of getting global trading rules for their economic operations carries with it the obligation to provide for parallel rules to require environmental cleaning-up. The price of admission to the world trading system would include living up to certain standards for environmental care.

With all of this, the skies clear; the waters revive; wildlife returns; and the remnants of wild Nature are treasured once again. The legacy of the phase of brute industrialization cannot be overcome for centuries, but the siege is lifted, the trends are turned around, and the damage is contained. Gradually a process of healing is commenced, and vast efforts aimed at restoration are undertaken.

The US and some other advanced countries are hard at work creating new wetlands, protecting wildlife corridors, zoning key areas to protect biological values, and recreating ecosystems and even wider ecocomplexes that have become hard pressed.

Only our successors a century hence will know which of these scenarios is closer to the truth. But what we can know is that the worst scenario is more likely to be the truth unless the Sierra Club, and groups like us

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everywhere, are able to make differences as never before. Groups such as ours are in the vanguard of new forces for empowering people, reforming civic processes, and breaking the bond of pessimism.

The Sierra Club has made a profound difference through this past century especially in America. Look at what those on our honour role, which is listed in our programmes, have been able to accomplish. We can make an even more profound difference in the world of the next century. The job is not hopeless. There are powerful forces that can be harnessed to help us. The abiding question is, whether we will have the vision to see what is possible and the political will and stamina to carry it through.

There can be only one answer. It is the answer that John Muir himself gave us when he said: 'When we try to pick out anything by itself, we find it is hitched to everything else in the universe.' It is the job of picking up these pieces which lead to saving the world that is our challenge in our next hundred years. The Sierra Club can assuredly do it for North America, and others comparably for other regions comprising the rest of The Biosphere — our own and Nature's only home and life-support.

MICHAEL MCCLOSKEY, Chairman Sierra Club 408 C Street, NE Washington DC 20002, USA.

UPDATED NOTICE
Index of Titles and Authors
published in
Environmental Conservation
during
1974–86,
with Supplements for 1987–88
and further ongoing Supplements

The above Index for 1974–86 (both years fully inclusive), and its first Supplement covering the years 1987 and 1988, are available from the undersigned at the price (including surface postage) of US \$35 or 50 Swiss francs as long as stocks last. It is anticipated that many of our subscribers, at least, who did not do so before, will wish to purchase a copy of this pioneering Index of which the first part, with its 9,399 entries occupying 159 pages in the format of the Journal, alone approaches twice the basic length of one of our issues but costs much less — especially as the above price will include full payment also for a further Supplement, covering the 5 years 1989–93, which is due to be sent free in 1994 to all registered purchasers of the original Index.*

Referencing, as it does, surely the vast majority of leading Authors and topics that emerged during the formative years of the environmental—conservational movement or 'revolution', the Index with its Supplements should represent a valuable tool for research workers and a propitious guide for writers. This was borne out by our own experience during its original compilation, when already it proved to be a most useful work of reference, '... altogether constituting a unique chronicle of the environmental—conservational concerns of modern times' (according to the Foreword by the then Executive Director of the United Nations Environment Programme, Dr Mostafa K. Tolba who contributes the important Guest Editorial opening this issue).

We still have a very few complete sets of *Environmental Conservation*, from its beginning with the Spring issue of 1974, available for purchase by or for worthy 'homes'.

(MRS) LYNN M. CURME Environmental Conservation 7 Chemin Taverney 1218 Grand-Saconnex Geneva, Switzerland: Tel. (022) 798 2383/4 Fax (022) 798 2344.

^{*} At the recent large and well-patronized Recycling Trade Fair and Congress, of which an account will be published in due course in a later issue of this Journal, the sheet of paper on which were hand-written the names and addresses of purchasers at the Fair, unfortunately disappeared near the Fair's end, so that copies of this further Supplement cannot be supplied to those purchasers unless they identify themselves at latest shortly after its publication in mid-1994.