



THE ROYAL BANK OF CANADA

MONTHLY LETTER

VOL. 53, No. 8

HEAD OFFICE: MONTREAL, AUGUST 1972

Conservation is a Way to Stay Alive

IN THE BEGINNING, natural forces kept in order the animal and vegetable resources of the earth. Not until man learned to use fire and invented tools was the balance upset.

Nature has not been able to keep control in competition with our increasing technical skills. As a consequence, the world of living things is in great danger of damage or destruction.

This does not mean that everyone should panic, but that everyone should do what he can to reduce the harmful effects upon nature of his way of living, and even to go so far as to adapt his way of living so as to meet the needs of nature.

When the first settlers came to Canada about 370 years ago their presence mattered little. They were few in number and this is a huge continent. The coming of the railway, the highway and the airplane, and the building of cities, have separated us from consciousness of the basis of life as it was then and still remains: the land, the water, the wild creatures that inhabit them, and the air.

Some people look upon the effort to conserve nature as being nothing else than a desire to preserve beauty. This is a mistaken idea. Unless we conserve our natural resources we forfeit life.

Man stands at the apex of the life pyramid, but his indifference to the needs of other forms of living beings threatens to undermine the entire structure and bring it tumbling down.

It is commonplace in this age to elevate "realism" to almost the status of a religion, but it is not practical realism to eat, drink and smell dirt; it does not indicate the possession of great intelligence to wait until the prairie blows in dust storms before acting to preserve it; or to procrastinate until disease flows abundantly through kitchen taps before compelling cities and towns to purify their waste water; or to linger until thousands of people die of disease imposed upon them by smog before banning the pollutants that poison the air.

Individuals and their societies speak fluently of this or that, according to their special interests, as being a

desirable way of life. Conservation of our resources goes far beyond that: conservation is, literally and unmistakably, the only way to *preserve* life.

Without conservation, the people of the world are emptying the icebox for a glorious feast tonight, disregarding the need for meals tomorrow.

Spaceship Earth

While we are mapping the moon and Mars, dropping scientific instruments on Venus, and sending messages to Jupiter and the Milky Way, we need to do some constructive thinking about our own planet. Geologic evidence leads to the conclusion that the earth will continue to be a comfortably habitable abode for creatures like ourselves for perhaps hundreds of millions of years to come if we do not destroy it.

The most important spaceship in orbit is this planet, yet it has no commander, no trained crew, and no subsistence plan. It possesses strictly limited life-support systems, limited energy capability, and limited material resources. It carries 3,600 million passengers, and it is expected to accommodate 8,000 extra passengers who come aboard every hour.

After stating the case in this graphic way in an article in *The Manchester Guardian*, Anthony Tucker says: "There are no emergency plans on the spacecraft for sensing and dealing with any approach to instability." He adds: "Few of the passengers seem to care."

Look at the facts about how small is the area on which we and our natural resources of animal and vegetable life exist. The circumference of our spacecraft at the equator is 25,000 miles, a distance covered by a jet passenger airplane in a little over 45 hours. Its surface land area is about 58 million square miles, not all of which is habitable or productive.

Human beings exist and enjoy life on this spaceship only by virtue of the bounties of nature: air, water and food, and countless microbes, plants and animals that convert earth's inanimate matter into a highly integrated living structure.

If a shortage of food threatens our spaceship there will be competition among the passengers for what is available. A thought voiced by Winston Churchill in an address at Boston in 1949 adds this spectre to that of privation: "It is certain that mankind would not agree to starve equally, and there might be some very sharp disagreements about how the last crust was to be shared."

No need for extremes

Some people say that those who plead in favour of conservation of natural resources and elimination of pollution are using scare tactics. But if low-key educational efforts failed — as they had failed — to awaken interest in measures to preserve life today and to make an environment fit to live in tomorrow, then something more was needed to stimulate our instinct for self-preservation. As someone with an insight into human nature remarked: "Education of people is very necessary, but you can speed that up a little by scaring the dickens out of them."

Extremism, even in favour of a good cause, is harmful. It leads enthusiasts to overkill. It prompts exaggerated statements, and when in some instances these are shown to be unfounded the public tendency is to lump all warnings, even those given with authority, in one package and throw them out with the garbage.

The word "conservation" has, unfortunately, become a catchword under which to group anything in the environment someone wishes to (1) change; (2) not change.

Agreement is practically unanimous on the essential points: conservation is a good thing and pollution and waste of resources are bad things. From that hub speculation radiates in every direction, so that not only erosion and poisoned air are attacked, but every other unexplained or unpleasant phenomenon is in some way attributed to waste and contamination. Over-enthusiasm is likely to blur the basic facts, facts which are strong enough and well enough authenticated to carry persuasion without exaggeration.

Nevertheless, if it were not for extremists, such as inventors and geniuses of various sorts, and enthusiasts for causes, mankind would not have survived or made the progress it has made.

There is no need to burden our minds with anxiety about things that may never happen, but it is less than intelligent to brush aside warnings of demonstrated dangers.

Few scientists believe that the ecological risks have yet reached the point of no return. Equally, few scientists would deny the real possibility that this might happen. There are thresholds in natural systems which, once passed, seem to preclude any restoration of life and balance.

Sincere conservationists do not desire hysteria, but they respect the legitimate fears of people who know.

Common sense knowledge has been found among all peoples for hundreds of thousands of years. But here we have a problem of great magnitude and complexity with which the common sense of the individual citizen is inadequate to cope, so we call upon science. Science involves not only common sense knowledge but special kinds of knowledge, rigid methods of analysis, and techniques of prediction.

Here is the voice of knowledge

The message of the scientists is that the future of the human race is in serious question. Here are some examples of statements made by professional people who have no axes to grind, economically or politically.

Speaking at the University of Sherbrooke, Que., Dr. R. O. Greep of the Harvard School of Medicine said to two hundred scientists and medical doctors in 1970: "If voluntary methods of controlling the population fail, then logically involuntary controls will have to be imposed . . . That would be an unhappy stage, and one we hope won't have to be faced."

"Unless man changes his ideas and behaviour, his future on this biosphere may have to be calculated in decades." That is from a booklet published by the College of Education, Ohio State University.

The Club of Rome report entitled *The Limits to Growth* (Burns and MacEachern) is a sober, if chilling, technical examination of the likely trends in the next 130 years. If the calculations are even approximately right, the cost of delay could be appalling.

Blueprint for Survival, a book endorsed by thirty-three leading scientists, concludes that by pursuing current trends we shall hasten the day when the world grinds to one mighty eco-catastrophical halt.

In view of these, and many other opinions expressed by people who know, to deny the need for conservation of nature and the abatement of pollution is to fly from reality.

What about technology?

Science and technology must be applied to the identification, avoidance and control of environmental risks and the solution of environmental problems.

The course of progress of human life through the use of fire, chipped rock, agriculture, the domestication of animals, energy development and the building of machines has led to the modification of environment. This has gone too far, and men must start adjusting themselves so as to bring the natural and the man-made environments into harmony.

Here is a key question: is it possible to reduce the impact of technological change to a pace more closely compatible with the physiological and psychological tolerance of the average human being and the receptivity of nature?

Conservationists are not concerned with altering the course of nature but with the problem of balancing

human beings and the rest of nature so that both may survive. They know that throughout the course of life upon the earth one species after another of animal and plant has disappeared because of its failure to adjust to environmental change. They know, too, that if the present trend continues to a crisis not only plants and lower animals will perish, but also man, who depends so completely upon them for his sustenance.

Some opponents of conservation assert that ecologists are against technology. What the ecologists want is that technology shall take note of the fundamental fact that nature cannot be trifled with. They also seek to enlist technology, with all its qualifications, to supply the means to adjust our behaviour so that we do not destroy the basis of our lives. We have acquired scientific and technical resources which can be mobilized by intelligent organization to cope with every conservation problem: what is lacking is political and social skill in getting together to do the job.

The only way

There is only one way to go: forward, using natural and acquired skill to fit man to his environment. This is why the United Nations Organization has become so deeply involved in conservation. It alone has the world-wide system through which the essential co-operative and international response to the global challenge can be launched.

More than a thousand delegates from member nations met in Stockholm in June to focus attention of governments and people on the urgent physical and social problems caused by technology, industrialization, and population pressures. Secretary-General of the Conference was Maurice F. Strong, former president of the Power Corporation in Montreal. He retired from industry to become head of the Canadian Government's external aid programme.

The United Nations working paper declares that population pressure, pollution and plunder of resources "cannot continue indefinitely without placing the future of all mankind in serious jeopardy."

This is very different from the "passion for beauty" referred to by some political and economic groups as the only objective of conservation movements.

However, the thought of beauty should not be lost sight of. Many people hope that they may live in a peaceful, blooming countryside, but acquiesce when improvers go about their business of using up and defiling natural resources bit by bit. They are tranquillized by the glossy prospectus of the employment and wages to be provided, the taxes to be received from the new development, and the useful things to be produced and sold. In the name of adding things to living, they are allowing destruction of the things that make life worth living.

We cannot side-step the economics. We need to face up to increased taxes if municipal, provincial and federal governments are to push through a clean-up job. There may be higher prices if industry finds it

beyond its capacity to finance the changes that will prevent pollution by its factories and waste of resources by its methods.

Most municipalities see the need, but they are awaiting their share of provincial or federal funds. They are not inclined to raise municipal taxes until they are persuaded by public opinion to take conservation measures. A *Montreal Star* editorial said in March, under the heading "The price of life": "Unless efforts to provide us all with cleaner air and purer water are accelerated, eventually there may be no economy for factory owners to worry about. . . . Will it be too costly? The answer is contained in another question: What is the price of life?"

Pollution is nasty

We have known the word "pollution" since our school-days: now we are meeting it face to face, and it is just as nasty as teacher made it sound. Sight, smell and taste register its unpleasantness every hour, telling us that the wastes and effluents produced by modernized agriculture, industry and urban concentration are poisoning the rivers, polluting the air, and covering the land.

To pollute is defined in the dictionary: To make physically impure, foul or filthy. Some of the pollution that plagues us is an undesired and unforeseen by-product of manufacturing the goods and providing the services we want.

Pollution is not merely a problem for scientists and technologists: it is also of social concern. The extent to which we allow our environment to become fouled is a measure of our cultural and aesthetic standards. The least that we can do to maintain our self-respect is to clean up as quickly as possible, using all available physical, financial, and technological means, and then put into practice plans that will prevent this state of depravement from happening again.

Here is a segment of life wherein young people can become dominant in a creative way. Youth is animated by idealism and has excellence in view. It wants results at once. It has in its ranks many thousands of young men and women who are not revolutionary, not anarchistic, but who seek to put right what is wrong with the world.

All across the land, young people are already engaged in the fight against pollution and waste. They are working diligently to collect solid garbage for recycling and to inform the public about anti-pollution measures.

The word "recycle" is so new that it does not appear in most dictionaries. The core of its meaning is that resources be used over and over again, thus reducing the drain upon natural resources and helping in the seemingly impossible task of disposing of solid garbage. In January, one day's edition of the *Chicago Sun-Times* was printed on recycled paper. The recycling paper plant conserves one and a half million trees a year.

Education and information

Education is the only means of mobilizing an enlightened and responsible population to co-operate in work like this. Almost from their birth children should be introduced into surroundings conducive to their intelligent understanding of their part in nature and the respect due to nature's laws.

National Wildlife Week stressed that "Conservation education is survival power". Elementary and secondary schools are not fulfilling their function of preparing young people for their future role as citizens if they turn out students who are ecologically uninformed. That is, said *Wildlife News*, "not if the species *homo sapiens* hopes to survive."

The crusade to overcome the damage that is being caused to our way of life by pollution and waste of resources is not only for young people. It was by chance that mature people of this year found themselves in environmental trouble. When they were young, not enough was known about pollution and other harmful effects of technology to raise a warning signal. But now they recognize that they are living in a rapidly deteriorating environment and must do their part in correcting the condition.

Preservation of man's place in living nature is not something to be left entirely to specialists. Those who are engaged in the scientific and technical work need mass support. Only widest use of newspapers, educational machinery, film, radio and television, will sway the public toward giving the help that is necessary. Intellectual awareness of the need must be followed by action massive enough to meet the crisis.

United Nations Action Plan

The United Nations Action Plan tells about the scientific efforts and the co-operation needed on the professional level. Scientific and professional people possess impressive means for information exchange, such as professional journals. These publications will not spark effective activity unless the public is informed in terms it can understand about the issues, dangers and prospects. With this in mind the United Nations guidelines say: "education at all levels, from pre-school to university, should evolve to reflect the environmental dimension."

That is not going to get things started soon enough, if we judge the urgent necessity by the many expert opinions expressed after years of study.

Redemption and preservation of earth's natural resources cannot be pushed off into the future. The world's welfare depends upon the setting in motion today of remedial and corrective actions made public at the conference. National jealousies and the sanctity of parochial boundaries need to be brushed aside in this planet-wide effort. Governments in all lands need to take the initiative in establishing and publishing guidelines for their citizens. They should present to their people periodic reports telling the state of the environment, the outlook for the succeeding year, and the key activities on which particular emphasis

should be placed. The situation calls for individual initiative within a large pattern of action.

What is civilization?

Almost anyone interviewed on a street corner will say without hesitation that mankind is the highest form of life. Why is it, then, that the other forms of life almost invariably go into decline whenever man takes possession of a piece of the earth?

Some people regard "civilization" as consisting of the possession of things. Well, Jean Henri Fabre, the French naturalist, wrote in his monumental encyclopedia: "Man will be killed by the excess of his so-called civilization."

We need a gradual shift over to a civilization built around the knowledge of the oneness of all living things. The extinction mankind imposes upon animals and plants is neither normal nor moral, and these are virtues we usually associate with being civilized.

Even in countries like Canada, with relatively high levels of affluence and material prosperity, there are growing indications of a social tension symptomatic of man's dissatisfaction with his lot and with the absence of qualitative choices. Enlightened people do not equate ease and irresponsibility with the best that life has to offer, but seek quality of living. They look toward excellence.

The plain fact is:

It is said that the sins of the fathers are visited on the children to the third and fourth generation. Well, if the ecological sins of our fathers are to be paid for by our children's children, it will be because we allowed the sins to go uncorrected. Horace, who wrote his *Odes* in the first century B.C., put it this way: "Posterity, thinned by their fathers' crimes, shall read, with grief, the story of their times."

Much can be done to preserve and replenish the world we are used to and to heal the hurt places. What we do should not be done half-heartedly, but appropriately to the greatness of the enterprise.

Improvement is not to be made without inconvenience, but that is a little thing to suffer since we have the knowledge, the science, and the technology to accomplish the grand endeavour. To default would be a crime not only against all humanity but against ourselves.

To take part, in however humble a way, in conserving natural things, is to give ourselves a chance not otherwise obtainable of gaining a conception of the eternal verities at first-hand. How superior that is to the plight of the man told about in *The Wisdom of Gibran*, who sat by his fireside and watched the fire go out, then blew vainly upon the dead ashes.

It is obviously impossible to correct all past mistakes overnight, but it is possible to start correcting them at once and to prevent the worst of the problems from arising in the future.