THE RULES OF THE WORLD

Based on a speech by Francis Gardner, Presented to the Prairie Conservation Coordinating Committee 13 May 1993

I have always called the factors that support the planet, "the rules of the world." In the television program Trading Futures, David Suzuki referred to them as the "sources of life." They are the underlying realities of the world that have resulted in the present condition, which we call normal.

Our country's economic future, which we seem to consider as guaranteed, relies directly upon the accumulation of air, soils, plants and fuels that we use so freely. The evolution of our country has followed closely the continual opening of new land for development by man. We have in the last 90 years seen the shift of employment from almost solely agriculture to one of mostly industry and the use of nonrenewable resources.

Individually, we do not notice the impact of our day-to-day actions, as we move forward clearing land, turning the sod over, driving our cars and flying in 747s. Reality dictates the view of, "Nature as a resource we can extract and use, instead of the foundation of all life on earth." (1). The extraction carries on unceasingly, and communities are formed with the wealth that follows. Today the wealth is being drawn away from the land, to pay bills in other countries from which we borrow. "Jobs and economic options are being pulled away from local communities and concentrated elsewhere." (1).

Since initial settlement by Europeans in Canada, the standard of living of Canadians has undergone a five-fold increase (1), which is measured in economic terms alone. The costs to the planet in terms of pollution and degradation are not in the formula. As much as we would like to think otherwise, with recycling and so forth, all production will eventually be consumption, and all products will eventually go to the waste barrel.

Human numbers destroy species and ecosystems, and that loss will never show on the balance sheet of any government. An example is the northern cod of the Atlantic Ocean. The more scarce a resource becomes, the search for it rises in intensity in response to a rise in price. We currently select products from the planet using methods that practically guarantee the eventual destruction of that resource. We will eventually, as Suzuki said, "strip the planet and turn it into a garbage dump." (1).

The Laws of Biology

"The laws of biology are the fundamental lessons of history." (2). If it appears that these laws no longer apply to some of us, it is only because we are protected by the group we

live in. The reality is that the group will eventually have to face the survival test based on the rules of the world. According to Durant and Durant (2), the first biological lesson to history is that life is competition. It is not only the life of trade, but the trade of life.

The second lesson is that life involves selection. In natural systems, this selection refers to the matching of adaptations of species to their environment, so that only those with superior adaptations can survive. In human societies, freedom and equality have always been, and will always be, "sworn and everlasting enemies, and when one prevails the other dies." (2). It has often been said that only those people that are below the average in economic ability are interested in equality, while those who have gained superior economic ability desire freedom, and in the end that superior ability will have its way. It is here that we must be aware of another "superior" ability, which many farmers and ranchers possess, to be in touch with the "sources of life." These individuals must become aware of the awesome job before them.

The third biological lesson is that life must breed (2). Nature is far more interested in the species than in the individual. For a number of reasons, the more industrial a society is, the lower its birthrate, and the opposite is true. The net result is predictable in the long run. Somalia and other lands are the more graphic examples of this biological lesson. We will either sink or swim as we respond.

Thomas Malthus (2), in 1798, stated that famine, pestilence and war would eventually be the only control on our numbers. The advance of agricultural and contraceptive technology in the nineteenth century seemed to prove him wrong. Exports of grain and foodstuffs were abundant. The unfortunate thing is that we are still the same people we have always been, from a biological perspective. "Evolution has been social not biological." (2).

Analysis

Much of what we call intelligence is the result of individual education and opportunity. For example, the sum total of my view of the fescue grasslands is standing on the foundation I have been exposed to as a person. We fit our knowledge into the mosaic of our own experiences.

Due to the isolation of our valley in the 1950s, I took the first eight years of my schooling at home by correspondence courses. The results were traumatic when I finally entered the public school system. I was unable to understand the reasons that motivated my friends to perform all the antics that school kids do, and as a result I spent a lot of time analyzing, rather than just accepting them as the norm.

The habit has carried over to this point in time, and I find myself asking why do we disrupt all the basic functions of the environment. To be honest, the reasons are clear enough when we see the accumulation of wealth or prestige.

The wonderful thing about some of the new range management schools of thought is that they have shattered many of the ingrained paradigms. In some cases, the profit motive is

placed above the long-term well-being of the native grasses. The important thing is that there has been an evolution of reality on the part of range managers, a re-examination of long-term assumptions and a lowering of the "land of plenty" frame of mind. "It requires reorienting rangeland management toward maintaining functional ecosystems rather than maximizing beef production." (3).

The reasons for all the pressures on ecosystems have roots that go far beyond the livestock industry. The demand for land by speculators drives farming and ranching away, as prices and hence taxes rise. The ecosystem approach is a non-entity in the realm of real estate. Regional ecological considerations need to be presented to the agricultural community, so that an objective view can be put forward regarding the destination towards which we are headed.

"Changes in livestock sector policies cannot alter these factors, but addressing them directly would dramatically transform the livestock economy." (3). If the population of North America were to reduce fat intake to recommended levels, we could expect a rise in the demand for grass-fed beef, and a drop in the demand for corn and soybeans of some 25 percent (3). Feed grain production per capita has been declining since 1984 (3), and unless family planners and farmers, together, are able to reverse this decline, there could be consequences for the livestock industry (that is, demands for more land to go to cultivation).

Native grasslands that can, with good management, sustain both livestock and their own condition may hold the key to the demands of the public in the future, as well as the demands of the wide variety of species that inhabit them.

Economy/Environment

"Expansion of the physical scale of the human economy, now increases environmental costs faster than it increases production benefits. So, at the margin, we are increasing costs faster than benefits—we are getting poorer, not richer." (4). The sad part is that we, as a people, only judge the future based on past experience.

With that in mind, all the good things in life seem to have increased for us in Canada only as population has increased. We may be heading for the boiled frog syndrome—that's where a frog will stay in a pot of water that is slowly being heated, rather than hop out, because at any point the water is only just a little warmer than before; eventually the degrees accumulate until the water is so hot that the frog is stewed (in the literal sense).

To complicate matters, governments use economic criteria to make biological decisions. In Mexico, agricultural land has been largely abandoned meaning the loss of some 10 billion hectares, or 40 percent of their farmland, because the government has forced prices down on crops and farmers were forced to seek paid employment. Food production has been shifted toward high value export crops. They now import 5 billion dollars of food every year, and the debt keeps rising (1).

Mexico is very competitive in the global arena, but the cost is being borne by the people and their ecosystems. Wages are low, pollution and soil degradation are high, and standards of living are below the worst in Asia. These people are feeding us with their future. They are caught in the vice of debt, and the decisions of trans-national corporations. There, but for fortune, go we. The mechanics of global economics ignores the local cost.

To the present point in time, the road to prosperity has been through corporations looking for profit, supported by governments looking for revenue. The entire operation has been supported by the elasticity of species and ecosystems. The geometric rise in population is compounding the traditional road to wealth. We will be faced with win-lose decisions on the survival of native ecosystems in the near future. Will we be capable of making these decisions when we need to, or would it not be wiser to lay the foundation to the future by protecting small solid blocks of native ecosystems now?

Canada is losing 300 million tonnes of top soil per year; the world, 24 billion tonnes (1). On top of that grim statistic, we are adding 92 million people annually, worldwide. The collision of these two statistics will be inevitable, and profound. More often than not, we refuse to face such things and let the dogs of famine, pestilence and war do the job.

If we, as agriculturalists and prairie conservationists, offer to the country a system of foundations that support and protect the intact native ecosystems, we will at the same time be offering the only possible support to human numbers in the future. For the first time, the words "carrying capacity" will have a define meaning to people at large. Ranchers are already on intimate terms with these two words.

Carbon

"A frighteningly large gap looms between projected growth rates in carbon emissions and the level that scientists believe is necessary to maintain a climate that can meet human needs." (5). Carbon emissions took 10 years to grow from 2 billion to 3 billion tonnes annually, and 6 years to grow from 3 billion to 4 billion tonnes annually. The U.S. Environmental Protection Agency has estimated, based on expected population increases, we need to cut emissions by 50 to 80 percent down to 1950 levels [some hope!]. Automobiles pump 550 million tonnes of carbon into the air annually, and this amount is projected to increase by 75 percent by the year 2010 (5).

Where do we in agriculture rank when it comes to carbon inventory? Where do farms and ranches rank in the eyes of the people that will be impacted by our actions? We had better find out. What is the carbon cost of a pound of beef off native range, as compared to other feeding methods? Is there a way to modify our activities now to assist the transition to a more sustainable future?

The opportunity to be proactive is here, which should be a part of the mandate of a group like the Prairie Conservation Coordinating Committee. For example, can anyone in the committee tell me how I should go about doing a carbon balance of my ranch? I would like to know where my ranching activities fit into the picture.

Sustainability

Getting back to population trends, "it seems inevitable that adequately nourishing a world population 60 percent larger than today's will preclude feeding one-third of the global grain harvest to livestock and poultry, as is currently being done." (6). How will thoughts like that affect native cover types and the people that are intimately involved with the care and management of that vegetation?

We have the potential to show the value of the expertise that range managers possess and to demonstrate how critical it is that such information is not lost because of an economic shakeup. By recognizing the value in ancient ecosystems, we acknowledge some implications: "Conservation means maintaining the ecological conditions to renew living things and to replenish soil, water and air." (7).

This assertion about conservation suggests that the things that man has achieved may be contrary to what is necessary to sustain life for the long-term. It also suggests that we had better treasure those people who have kept in touch with the ancient ways. The rapid and catastrophic degradation of the planetary biosphere has been the main catalyst for a radical reassessment of the power and limits of scientific insights and application. Multigenerational wisdom is a precious guiding light that may easily burn out in a very short flash (8). Youth and governments make assumptions that need to be tempered with the more perpetual outlook of the aged. This tempering will reduce our mistakes and justify our advances.

If there can be a policy of sustainability aimed at native grassland, we can proceed on a different tack. Research and protection initiatives such as those of the Prairie Conservation Coordinating Committee could be focused at the local level in a way more conducive to the involvement of producers. Smaller projects that may be less useful scientifically, but more relevant for local conditions, would give some dimension to changes as they occur, and help dispel the helplessness that rapid change can induce. The future will be one of small adaptations to a multitude of local conditions.

The one thing that worries me about your committee is the absence of a goal to be part and parcel of the local people upon which this country stands. There will be little to be gained if the committee action and the accompanying, encumbered decisions fail to take the wisdom of the land user as its foundation. To bow only to the god of preservation is no more valid than to bow only to the god of economics.

Conclusions

Finally, the future may hold many shocks for us all, particularly regarding wealth. If, for any reason, the wealth to support environmental initiatives should falter, it may be helpful to consider where that may put us. Governments will always support economics over environment. It has happened time and time again, and there is little reason to expect it to change. The eventual result is something like what happened to the government of Peru—after passing legislation that was expensive, unenforceable and

impracticable they were subsequently fired for their lack of realism. The Peruvian government allowed their view of reality to be clouded by their desire, rather than looking at the reality of poverty and the destruction of the rural matrix.

How necessary is that matrix here in Canada? What will a deflationary collapse or major economic upheaval, like the Great Depression, do to that fabric? How can we protect the native areas of grassland from the legal right, which a ranch like myself has, to subdivide 10 acres from every quarter section in the Municipal District of Foothills?

The only answer is to have the people who understand the consequences also on your team, no matter what. Try not to legislate the answers; reason them out and be tenacious about setbacks. I have yet to meet any people who would not stand up proud for their land, and especially for the native areas they have nurtured.

You send a helicopter over for one day with no explanation and I get spooked. You send it over for two days and I start looking for answers. We all live under this dome of uncertainty. My area is classified as only "other unimproved lands," according to the Canada Land Inventory. Somewhere we need to feel that we have a friend, a partner in a common goal.

Right now, I feel that the tigers of society, including sometimes the government, are licking their lips. What support group can we turn to when times are hard and some entrepreneur arrives with the big money?

The future for all of us may lie in the courage to travel a path that is novel, and to recognize the potential of the common landowner. The courage to raise the landowners' awareness and to delegate to them the responsibility and consequences they deserve. It will be a team effort or it may fail. This time, we are approaching the final finish line in the race to control ourselves.

There is no question that preservation of representative prairie is crucial, but there needs to be a similar support group at our boundaries, or we may all wash away in desert sands of progress. We must try to slow the ever-increasing spiral of fewer and fewer people on the land, and fewer and fewer votes to protect that land from the economic vision of the uninformed. Money must be kept in the country to keep people involved and caring. Whether that is possible or not, while we try to pay down the massive provincial and federal debt, will be the mystery of our age.

A focus on support for natural ecosystems will provide us with the great event for our time. As Winston Churchill so nicely put it, "every young man should be part of the great event of his day." Let's try to have everybody involved in the battle to protect the everlasting foundation of our existence.

- (1) David Suzuki, Trading Futures, CBC television program, 1993
- (2) Will and Ariel Durant, The Lessons of History, Simon and Schuster, 1968

- (3) Alan Thein Durning and Holly B. Brough, Reforming the Livestock Economy--State of the World, W.W. Norton and Company, 1990.
- (4) Herman Daley, Trading Futures, CBC television program, 1993.
- (5) C. Flavin, Slowing Global Warming--State of the World, W.W. Norton and Company, 1990.
- (6) L.R. Brown, C. Flavin and S. Postel, Picturing a Sustainable Society--State of the World, W.W. Norton and Company, 1990.
- (7) Prairie Conservation Action Plan, 1989-1994, (page 4).
- (8) Peter Knudtson and David Suzuki, Wisdom of the Elders, Stoddart Publishing Co. 1992.