

THE BALATON BULLETIN

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The Balaton Group



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THE FIRST BALTIC BALATON MEETING: PROPERTY RIGHTS AND THE ENVIRONMENT

- In the city of Klaipeda in Lithuania there is a long, busy street that goes the entire length of the city. The main municipal bus routes run along this street, but to reduce crowding and air pollution private cars are banned from the middle stretch, which runs through the Old Town. Since the opening to the western market economy, about 1000 privately owned minibuses have appeared in the city. The minibuses cost more than a bus, but less than a taxi; you can flag one down anywhere, and ask it to stop anywhere; and they follow one behind another along the main street all day. Because they are old (bought used from the West) and highly polluting, the city authorities are thinking of banning them from the Old Town. The owners threaten to strike, saying that the minibuses are private property; they are creating jobs and incomes and a convenient transportation system; they should be permitted to go where they want. To regulate them is an invasion of property rights.

- In Latvia's Gauja National Park 75% of the land was privately owned before the Soviet time. Now by national law the land must be returned to the heirs of the former owners. Should the new owners be permitted to clear-cut forests, to farm with agrochemicals, to put up a restaurant or golf course or bar, to subdivide their land and sell it for vacation-home development? If these rights are restricted, should the state pay them, because it has limited their property rights?

- Nearly every garden in Germany has in some strategic location a small statue of a funny, magical old man who stands for the spirit of the garden. Germans are crazy about their garden gnomes. Now an enterprising Polish village on the German border has gone into the gnome-making business. The Poles copy the traditional German designs, pay less for labor, use cheaper materials, and send truckloads of gnomes into Germany, where their price is only 1/3 that of German-made gnomes. German gnome-makers have seen their sales drop by 50% in the course of just one year. They have prevailed upon the German border authorities to seize the Polish gnomes and destroy them. They say they have a "property right" to the gnome designs. The Poles say they have a property right to the gnomes they have made.

- In the middle of Yellowstone National Park in the United States, one rich "inholder" owns a small private parcel of land, inaccessible by road (some of these inholder parcels still remain although the park is now 100 years old). Recently he hired helicopters to ferry in building materials to construct a luxury hotel, to which guests would be brought by helicopter -- creating daily noise over hundreds of miles of one of the wildest and most silent places in the country. The National Park Service sued him to stop building the hotel. He sued back, claiming that if the government wants to deprive him of his property rights, it

must pay him millions of dollars for the value of his planned hotel, plus all the income he intended to earn from it.

- In the United States “property rights” has become the central theme of a growing, well-organized, and ruthless anti-environmental movement. At both the federal and state levels, this movement is pushing -- and occasionally passing -- laws that interpret any environmental regulation as a violation of private property rights. The people behind this movement interpret the Fifth Amendment to the U.S. Constitution (“No person ... shall be deprived of life, liberty, or property without due process of law, nor shall private property be taken for public use without just compensation.”) in the strictest possible fashion. “Pay me not to pollute,” is the way environmentalists characterize the property rights position; but its threat is no joke. This movement may be able to undo most of the environmental protections of the nation.

Wherever there is private property -- whether that property is land, or manufactured goods, or farm animals, or human slaves -- there are arguments about what rights go along with ownership. “Property rights” consist of the entire bundle of things a person might want to do with property -- buy it, sell it, use it, develop it, destroy it. The exercise of one person’s property rights may interfere with other persons over space -- such as dumping sewage into a stream and sending the pollution downstream -- or over time -- such as farming in such a way that the soil erodes and future owners can raise no crops. Therefore all societies that endorse and protect the right of private property also limit that right in some ways. Along with property rights go property responsibilities.

The three Baltic nations of Latvia, Lithuania, and Estonia, like other parts of the former Soviet empire, have been suddenly thrust from a regime where property rights barely existed to the market economy, where property rights are paramount. New laws about land ownership and economic rights are being written hastily, with little time to reflect on the proper balance between rights and responsibilities. Meanwhile, the natural resources of these nations, from uncut forests to unspoiled beaches to agricultural lands, are suddenly becoming available on the market to the highest bidder. And so **Valdis Bisters** and **Raimonds Ernsteins** chose as the topic of the first all-Baltic regional Balaton meeting the topic of Environment and Property Rights. **Dana Meadows** and **Bob Wilkinson** attended as members of the global Balaton Group.

In addition to the Baltic participants -- who were lawyers, municipal authorities, national park managers, environmental activists -- land-use experts came from Sweden, Denmark, the Czech Republic, and the U.S., to discuss how property rights systems work -- and don’t work -- in their countries.

Jonathan Brownell, an environmental lawyer from the U.S. led off by defining property rights as social agreements that govern the use of land and other property. Typically these agreements don’t come from technical analysis or GIS mapping, they come from history, culture, shared understanding of what is right and wrong -- in other words, values. Jonathan

wrote on a flipchart the four major values that most often come into contention when property rights issues arise:

FREEDOM

PROSPERITY

EQUITY

SUSTAINABILITY

These four words guided our discussion for three days, as we saw how they are used in property rights debates. At first glance it seemed as if they were arranged in order from most individual (FREEDOM = the right to do what I want with my land) to most communal (SUSTAINABILITY = the preservation of the land for others, even others in the future, even other species). And it seemed as if these four values must be in eternal conflict with each other. If we want more of any one of them, we have to sacrifice some of the others.

But then we began to interpret these words more deeply. Freedom to do what I want with my property, or freedom from the consequences of what others do with their property? (Hence freedom from the fumes of minibuses or from the sewage of upstream cities.) Quick prosperity from clear-cutting the forest, or long-term prosperity from sustainable selective cutting? Prosperity for one property owner at the expense of the larger community, or well-based, sustainable prosperity for everyone?

The flipchart began gathering marginal notes, qualifications and questions. The most important questions were (FREEDOM, PROSPERITY, EQUITY, and SUSTAINABILITY) FOR WHOM? And WHO DECIDES? It is not generally appreciated by people who have little experience of the market economy that in that economy -- unless the government makes regulations to the contrary -- those who have the most money decide. And almost necessarily, given the logic of the market, the value they are most likely to maximize is not sustainability or equity, but short-term prosperity for themselves.

Presentations were made on the historic and current land use and property rights situations of each of the three Baltic countries. Here are some common points that emerged from those presentations:

- All three countries have unique and valuable environmental resources worth protecting: productive forests, unspoiled beaches, wetlands, rare species, beautiful rivers. Many of these resources are in a better state than they are in much of the rest of Europe -- and therefore they can have great market value either for exploitation and development, or for ecotourism, education, and research.
- All the Baltic countries have made the decision to return previously private lands to former owners or their heirs. The legal process of doing this is complex and will

take at least a decade -- a crucial "breathing period," within which property rights laws can be clarified and codified.

- The Soviets marked out national parks in all three countries, which are basically lines on maps around scenic areas that contain not only relatively wild lands, but also working farms, hotels and recreation facilities, and even cities. (In the middle of Gauja National Park, where our meeting took place, there is a paper mill operating not far from our hotel.) Large sections of these parks are about to be returned to private owners, perhaps with restricted deeds limiting the activities that can be pursued on these private lands. Management plans are urgently needed for all the parks. Time and staff to produce the plans are very limited.
- The Soviets also left extensive military bases covering 2-5% of each of the Baltic countries. Parts of these bases are badly polluted (with so many oil spills that the ground is actually combustible), but much of this land is untouched and rich in biodiversity.
- The old habit of central planning without involving the community affected by the plan dies hard. Environmental and property laws, park and military reserve management plans, are generally being drawn up by legal or geographical experts. The public has little or no knowledge of who is making the plans or laws, what is in them, or when they will be adopted. There are few provisions for public review or approval. The public is not organized to express its opinions. This situation may lead to good plans, if the expertise behind them is good. But it also provides ample opportunities for special favors and corruption. And in emerging democracies, plans that are not backed by the people may not be respected or implemented.
- In general the environmental regulations of all three countries are strict and impressive. But the laws are paper only; there is little money or staff to implement them.
- Under the Soviets the expressed (but rarely genuine) values behind property rights agreements were EQUITY and SUSTAINABILITY. These values were generally corrupted to produce PROSPERITY for the governing elites and FREEDOM for no one. Now there is a tremendous hunger for FREEDOM and for PROSPERITY for the masses.
- The cultures, crafts, and values of Estonia, Latvia, and Lithuania are surprisingly alive and well, as are many natural areas of the three countries. The people are tired of oppression and relative poverty; they certainly want to live well. But they also want their children and grandchildren to live well. Clever marketing from the West might be able to sell them anything at this point, but they don't need to be sold on the value of sustainability -- that value is already strong in their souls.

The participants from the three Baltic nations met in country groups to consider what values their own nations are pursuing and should pursue with regard to property rights. The participants from the West met in their own group and considered how their countries, with their long experience of the market and of democracy, should be good examples -- but are not always so. All countries, Baltic and other, saw clearly how much work there is to do to balance important values, to encourage community and democracy, and to make the legal power of the long-term community equal to the overwhelming power of the short-term market.

By the end of the meeting the group was sobered -- sustainability doesn't come easily - - but inspired. "This is a whole new way of thinking," one participant said.. "It is practically the first discussion we have had about these matters." Other comments: "In the Baltics there is almost nothing written. We need time. We need a survey of the experiences and examples of Western countries, and especially good news stories to encourage us. We need public discussions of property rights and land use and values. We need to know what is in the minds of the new property owners, and we need to give those people with values of sustainability and equity practical ways to implement those values. We need to be aware of the power of the market. We need strong, clear, implementable laws. We need to inform and involve the people."

Practical steps coming out of the conference are the following: Proceedings, including the three papers summarizing the property rights situation in the three countries, will be published in English and Latvian. Raimonds' and Valdis's organization, CESAMS at the University of Latvia, will have a new research group on sustainable development, with growing expertise in property rights. The Latvian subgroup, including several people who were unable to attend this meeting, will come together again in January to develop a political and educational agenda for property rights legislation in Latvia. And the participants in this meeting will form the core of ongoing cooperation in the Baltic region on this and other subjects related to sustainability.

(If an outside observer can make a concluding comment, our Balaton family is greatly enriched by this meeting and the network that will grow from it. The Baltic people we met are dedicated, well trained, courageous, and warm-hearted. It didn't take long for them to light up with the "Balaton spirit," combining intelligence and scientific knowledge with heart and soul power. In addition to the formal sessions, we spent time walking in Gauja National Park, touring a possible Baltic demonstration site for sustainable technologies, and, most moving of all, dancing and singing traditional songs by candlelight with children from the nearby town of Sigulda. **Bob Wilkinson** once summarized his impression of the Baltics as "places where nice people sit around at night singing and eating good food." That description proved accurate, and we can add that they are also places where good people finally have a chance to shape their own destiny and that of their land. We are excited at the possibility of working with them, and learning from them, as they use their new freedom to gain prosperity, equity, and sustainability.)

TWO PROPERTY RIGHTS STORIES

Local Land Trusts

In the United States, where private property rights are probably more ardently defended than anywhere else in the world, and where government planning is deeply suspect, people who want to protect land for community purposes have had to come up with some ingenious devices. One of the most ingenious and most popular is a type of NGO called a community land trust. There are at least 1,000 of these land trusts operating in both rural and urban areas across the country.

Here's how it works. The land trust, with a board of local citizens and a small staff paid for by community contributions, negotiates with private owners of land that has special community value -- land along streams or ponds, land with outstanding scenic value, land that protects endangered species, land with excellent agricultural or forestry or recreation potential, land that is suitable for low-income housing -- whatever the community needs. The land owner either sells or donates to the land trust a "conservation easement" on the land.

The conservation easement is a legal document that amends the ownership deed to the land. It goes along with the deed to all future owners *in perpetuity*. It specifies exactly what the owner can and cannot do to the land. Typically an easement on rural land says that one can farm the land, practice forestry, build agricultural buildings, and maintain and improve existing buildings. One can sell the land as a single parcel but not subdivide it and sell off smaller parcels. One cannot build more houses or commercial buildings, build roads, mine gravel or minerals, divert or dam streams, scrape off topsoil, etc.

An urban easement might specify that housing built on the land be kept for low-income people, that those people may own the houses but not the land, that when they want to sell, they must sell back to the trust for the value they paid, plus inflation, plus any improvement they made, but without speculative or market-inflated gains.

The land trust has the power to enforce the easement. Once a year it sends a volunteer committee (usually of neighbors) to inspect the property and be sure the easement has not been violated. These inspection parties tend to be celebratory excursions, honoring the landowners for keeping the property in good shape for the community. The monitoring also reminds the landowner and the neighbors of the conditions imposed on the land, so that if at any time someone sees a bulldozer pull in where no bulldozing is permitted, or survey stakes going up where no building is permitted, or a private sale going on at a speculative price, the land trust will be notified immediately. The land trust may, if necessary, go to court and obtain a legal injunction to prevent a landowner from violating an easement.

Restrictions like these not only inhibit the actions of landowners, they also reduce the market value of their land -- because developers are no longer interested in buying it. That produces one of the best long-term values of the easement. It sets up a new lower-cost market in protected land or low-cost housing. Farmers and nature-lovers who have no interest in developing land can afford land with easements, where they don't have to bid against

developers. Lower-income people bid only against each other for housing protected with easements; they don't compete with developers or richer people who might want the property for speculative gain.

Strangely enough, many owners are eager to put these restrictions on their properties -- simply because they love the land and want it to stay beautiful and productive, or because they recognize the need for many different kinds of people in a community. A local land trust that **Dana Meadows** helped to establish in the river valley where she lives has obtained hundreds of easements in the 10 years of its existence. In some cases -- especially large farms owned by poor farmers -- it has raised the money to buy easements. But in most cases the easements have been donated. The donating landowner gets a small income tax break, and sometimes a property tax break -- but these are always less than the drop in the land's sale value. Landowners give easements anyway. Not all capitalists are motivated by greed!

In Dana's valley there are rural roads where every landowner has donated a conservation easement. Many parcels along the large brook that runs through her farm are protected, guaranteeing the water quality of the brook, and providing a lengthy wildlife refuge for riparian species. Many of the valley's best farms will now stay in farming or forest forever. This has been accomplished not by the market, which would drive all land into shopping malls and housing developments for the rich, and not by government planners laying dictates on the people, but by the people themselves, acting on their own land and in their own community according to their own values.

Vermont's Act 250

Twenty-five years ago, during one of the market economy's periodic booms, the people of the small, mostly rural state of Vermont found that their beautiful mountains had been discovered by much wealthier people of the cities of Montreal, Boston, and New York, who wanted places to ski, to swim, to cool off in the country. Recreational and second-home development was raging in Vermont, and Vermonters had little control of what was happening.

As a consequence, they wrote a law called Act 250, which was, and still is, one of the most visionary and democratic land-use laws in the United States.

Act 250 allows "little people," who want to build just one house or impact just a small piece of land to do anything that their town zoning laws and the state's water quality laws will permit. But if a planned residential, commercial, or industrial project will disturb more than 10 acres (about 4 hectares) or if it will involve more than 10 housing units, then the project developer must get an "Act 250 permit." This permit is issued, or denied, by a board of citizens. The developer submits an application detailing the project plans and describing how the project will meet the criteria specified in the law -- criteria designed to be sure that the development does not take place at the expense of the larger community.

The development criteria are the heart of Act 250 and the part of the Act 250 process that might be most applicable to other parts of the world. To obtain a permit, the developer must show that the project:

Natural Resources

1. Water Pollution

- (i.) will not result in undue water pollution, considering soils, slopes, ambient water quality.
- (ii) will not violate water quality regulations adopted by other State Agencies.
- (iii) will not result in injection of harmful substances into groundwater.
- (iv) will use best available water conservation devices.
- (v) will not increase flood hazards.
- (vi) will not change the natural condition of a stream or its banks, or the shoreline of a lake, or prevent public access to public waters.
- (vii) will not change the natural condition of a wetland.

2. Air Pollution

- (i) will not result in undue air pollution
- (ii) will not violate air quality regulations adopted by other State Agencies.

3. Water Supply

- (i) will have a sufficient supply of water to meet its needs.
- (ii) will not put an unreasonable burden on an existing water supply.

4. Soil Erosion

- (i) will not cause unreasonable soil erosion.

Community Financial Resources

5. Traffic

- (i) will not cause unreasonable congestion or unsafe conditions on highways or other transportation systems.

6. Schools

- (i) will not cause an unreasonable burden on the community's ability to pay for school systems.

7. Government Services

- (i) will not cause an unreasonable burden on the community's ability to pay for local government services such as police, fire protection, etc.

Wildlife and Natural Areas

- (i) will not have an undue and adverse affect on scenic or natural beauty of the area, necessary wildlife habitat, or historic sites.

Impact of Growth

- (i) will not significantly affect the fiscal capacity of the region to accommodate both existing rates of growth and the projected rate of growth to be caused by the proposed development.
- (ii) will not reduce the agricultural or forestry potential of primary farm or forest soils.
- (iii) will not reduce the potential of lands for mineral extraction.
- (iv) will use the best available technology for efficient use and recovery of energy.

(v) will conform to local government plans for public utility services and will not place an unreasonable burden on those projected services.

(vi) if the development is not near an existing settlement, the development will produce taxes and benefits equal to or more than the cost of additional public services to be required by the development.

(vi) will not interfere with the function or efficiency of nearby public facilities or public lands.

All documents and plans submitted by the developer are available to the public. The public can attend Act 250 hearings and people can present their own opinions to the board about whether the development meets all the above criteria. Finally the board votes to grant or deny a permit. If either the developers or the opponents of a project object to the board's decision, they can appeal to a higher-level state-wide board, which hears and resolves appeals from all localities.

The Act 250 process is cumbersome, and developers hate it. But surprisingly few development applications have been turned down in 25 years of Act 250 regulation. What happens instead is that developers, knowing the criteria in advance, design better projects. They take into account effects on water drainage, on wildlife, on the ability of the community to support and absorb the project. If they are cheap developers, who want maximum profit and don't care about the quality of their work, they go build next door in New Hampshire, where there is no Act 250.

When Act 250 was passed, predictions were made that New Hampshire, with its loose regulations would have an economic boom, while Vermont stagnated. What has happened instead is that Vermont's economy has grown fairly steadily, while New Hampshire's has gone through painful extremes of boom and bust. During the last economic downturn, several major banks (which had financed sleazy developments) failed in New Hampshire; no large banks failed in Vermont. Vermont is getting a reputation for quality that attracts tourists and high-quality economic development. The stricter regulation of Act 250 has not doomed the development; it has made development more truly sustainable.

STEERING COMMITTEE MEETING

Alan AtKisson, Hartmut Bossel, Bert de Vries, Dana Meadows, Dennis Meadows, Niels Meyer, Zoltan Lontay, Carlos Quesada, Aromar Revi, Chirapol Sintunawa, and Bob Wilkinson gathered at **Joan Davis's** house in Zurich on December 10-11 for a meeting of the Steering Committee of INRIC (the Balaton Group).

As usual the business to be done consisted of reviewing the finances (such as they are) and policies (such as they are) of the Balaton Group and planning the topic, coordinators, and preliminary schedule for the next annual meeting.

Finances: Funds in hand at the moment are sufficient to hold the coming annual meeting, but not to cover all functioning of the Balaton Group (including the *Bulletin*) over the coming year. Proposals will be submitted to renew some concluded grants and seek some new ones. We are also working on funding for regional meetings of the Latin American and Asian regional groups. The first meeting of a Baltic Regional meeting has been fully funded (see the description of this meeting earlier in this *Bulletin*.) The Jessie Smith Noyes Foundation grant that has allowed so many fruitful exchanges for projects and training among Balaton members is now exhausted. We have submitted a proposal for re-funding but we will not know until March at the soonest whether it will be successful.

Steering Committee terms: We had to clarify the election held at the last meeting. One of the three people elected was to fill **Bob Wilkinson's** unexpired term, while two others were elected for full 3-year terms -- but we didn't specify who was which. By common agreement of the three people involved, we came to the following clarification of Steering Committee terms:

until 1995:	Carlos Quesada	Chirapol Sintunawa
until 1996:	Zoltan Lontay	Joan Davis
until 1997:	Alan AtKisson	Aromar Revi

Legal resolutions: The Steering Committee passed some simple resolutions, needed for United States legal purposes, to allow our administrator Betty Miller to sell gifts of appreciated stock (which have come to us from generous private donors) and to select our United States bank in a way that improves both our operating convenience and our interest on unexpended funds.

GATT statement: At the request of Swiss colleagues, we drafted and signed -- as individuals, not as members of INRIC -- a statement to Swiss citizens stating our opposition on environmental and social grounds to the new GATT. (Switzerland is one of the few countries holding a public referendum on this issue.) We do not feel that INRIC as a whole should take political positions without the approval of all members. Even with that approval, it is outside the stated purpose of INRIC to be visibly political as an organization. So those present at the Zurich meeting signed as individuals, listing our home institutions for purpose of identification, and not mentioning the Balaton Group or INRIC.

Attendance at annual meeting: Finally we had our annual, never-fully-resolved discussion about allocating the scarcest resource of the Balaton Group -- attendance space at the annual meeting. The resthouse at Csopak holds comfortably only about 50 people; the bus from Budapest to Csopak holds 44. There are always Steering Committee members who propose moving to another facility, to allow more members to attend. They are always outvoted by those who argue a) that a larger meeting becomes a more hectic, less communal, less friendly meeting, b) that a larger meeting is more expensive, c) that we like our Hotel Petrol home, d) that if the Balaton Group can't learn to abide by limits to growth, how can we expect anyone else to?

So for the coming year we will continue the attendance experiment we tried last year. (We are willing to try other experiments, but none has been suggested.) Attendance at the

meeting will be by invitation only. We will allocate 10 spaces to speakers, funders, and other special participants. Another 10 spaces will be reserved for young members and new members who have not attended before. To maintain the continuity and the core responsibility of the group the remaining 30 spaces will be for “old-timers.” We will allocate those invitations as best we can in order to assure fairness over time (meaning those who didn’t attend last year will have preference this year), fair geographic representation, and a desire to accommodate those who are involved in active Balaton projects and who therefore need to meet with other members.

The practical consequences of this policy are as follows:

- The first round of invitations to core members, speakers, and funders will go out with this newsletter. IF YOU RECEIVE AN INVITATION, PLEASE SEND IT BACK AS SOON AS POSSIBLE, especially if you know you do NOT plan to attend. That will release a space for others.
- If you do not receive an invitation and would especially like to attend this year’s meeting, please let **Dana Meadows** know (PO Box 58, Plainfield NH 03781 USA, phone 1-603-675-2230, fax 1-603-646-1682, d.meadows@dartmouth.edu). Your name will go on a first-come, first-serve waiting list, to which invitations will be sent as spaces open up.
- If you would like to suggest a new member for attendance, especially an up-and-coming young person who you think will be a likely sustainability leader and good long-term Balaton member, please send a description of that person, with address, phone, fax, etc. to Dana Meadows BEFORE APRIL 1, 1994. On that date we will send out invitations to persons Balaton members have nominated. If more than 10 nominations come in, we’ll do our best to make an equitable choice and place the other names on the waiting list.
- If AT ANY TIME your plans change and you find you have to cancel your participation, PLEASE LET US KNOW IMMEDIATELY, so we can invite someone else. Please, in the name of Balaton Group solidarity and for the sake of those waiting, be very responsible about this.

We know that this policy is not entirely satisfactory -- no policy that excludes anyone can be. If you have specific complaints, please let us know clearly and quickly, so we do something to help, if possible. If you have a better idea about how to solve this problem, please let us know. Every year we have an opportunity to try a new experiment.

Regional meetings: One of our hopes for expanding Balaton participation without increasing meeting size is to hold regional meetings, planned, administered, and ideally funded from within each region. Members are encouraged to suggest regional meetings on topics of particular interest for each region. We will do our best to help these meetings happen. The Steering Committee discussed plans, in various states of completion, for first regional meetings in the Baltic republics and in Africa, and for second meetings in Asia and Latin America.

“Balaton Library”: **Bob Wilkinson** showed up at the last annual meeting with three large boxes of books -- some of the classic books in English dealing with sustainability and the environment. The books were on display during the meeting, and participants put their names on the back covers of books they wanted to borrow. On the last day the books all went home with members, on the understanding that when they have been read, they will be passed on to the next person on the list or sent back to next year’s meeting.

This idea was so popular that the Steering Committee discussed how to add to the library. We allocated some money to acquiring more books, and we will start assembling a “wish list” of books our members request. Already on the list are more books about systems, including the Productivity Press system dynamics books, and also some videotapes and software. A list of the books already in the library is attached to this Bulletin. **IF YOU WOULD LIKE TO BORROW ONE OF THESE BOOKS, OR IF YOU HAVE OTHER BOOKS YOU WOULD LIKE TO ADD TO THE LIST, PLEASE LET BOB WILKINSON KNOW.** (1428 West Valerio, Santa Barbara CA 93101, USA, phone 1-805-563-2338, fax 1-805-569-2718, wilkinson@psych.ucsb.edu). Also, please let Bob know **IF YOU HAVE BOOKS TO DONATE** (this may include books you have written, books that have been sent to you, or books you no longer need). The books will receive a Balaton nameplate and start circulating around the world.

Next annual meeting: The dates of the meeting will be, as announced in the last *Bulletin*, AUGUST 31 - SEPTEMBER 5, 1995. The Steering Committee considered a long list of plenary topics, suggested by Balaton members. They included:

- A number of interrelated topics related to “post-capitalism” -- the design of alternative and more sustainable economic systems, employment and the environment, over-consumption and under-consumption, trans-national corporations, international trading systems such as NAFTA, the EU, and GATT.
- Topics related to political skills and systems -- how to relate to decisionmakers, how to make government more participatory, how to think about alternative, more long-term, and more democratic systems of governance.
- Topics related to worldviews, mindsets, the context within which the content of environmentalism and sustainability is shaped -- with particular emphasis on the mindsets and viewpoints of indigenous peoples.
- Time -- its allocation and management as a scarce resource.
- Space -- networks, dynamics, management.
- The 50th anniversary of the United Nations, an opportunity for evaluation and redesign -- with special attention to international regimes for environmental management, such as the Montreal Agreement on the ozone layer and the CITES agreement on trade in endangered species.
- Water
- The Codex Alimentarius, the international regulation that, especially under the new GATT, will regulate the standards for the world’s food supply.

As always there was a spirited discussion, especially in trying to strike a balance between topics that are huge and important versus topics that can somehow be bounded and structured, topics that are currently timely versus topics that are always timely, topics about which there is considerable expertise within the Balaton Group versus topics about which we would all like to develop more expertise.

Finally the consensus of the Steering Committee moved clearly and inexorably toward a subject that we alternately titled: "Consumption," or "Sustainable Lifestyles," or "The Economy of Enough," or "Sustainability and Sufficiency," or "Meeting Nonmaterial Needs Nonmaterially," or:

SYSTEMS OF CONSUMPTION

Measures to be undertaken at the international level for the protection and enhancement of the environment must take fully into account the current imbalances in the global patterns of consumption and production.

-- Agenda 21

$I=P*A*T$, as we all know. Environmental Impact equals Population times Affluence times Technology. The reasons that the material and energy throughputs from the planet through the economy and back to the planet are too high to be sustained is that there are too many people consuming too many things with too wasteful technologies.

This formulation makes satisfying physical sense and it also has political appeal, because it distributes the work of attaining sustainability to all parts of the world. The poor who account for 90% of the births in the world need to work on reducing P; the rich need to reduce A; the inefficient former and present socialist economies have to clean up their T.

The Balaton Group has spent considerable time talking about technology -- energy efficiency, organic agriculture, biological waste processing, recycling. We have spent some time talking about population and about the ending of poverty and empowering of people (especially women) that are the precursors, as far as we can see, to population stabilization. We talk at almost every meeting about how to raise consumption in the poor parts of the world and how to reduce it in the rich parts, but that talk has never been the focus of a whole meeting. We have not brought our systems skills formally to the topic of consumption, investigating the structures that produce stagnating consumption among those who have less than enough and exponentially rising consumption among those who have more than enough. We haven't thought together about what we can do, individually and collectively -- really do, practically do -- to reduce the throughput of the rich, which accounts for so much of the unsustainability, not to mention the injustice and the ugliness, of the human economy.

The lack of clarity of our thinking has become painfully obvious in discussions with some U.S. foundations that have now become serious about the "A" part of the $I=P*A*T$ equation. What shall we fund? they ask. Who is doing good work on this? If we have a conference on

this topic, whom should we invite to help us find the answers? If you were dictator for a day or year, what kinds of changes would you make to bring consumption to a sustainable, satisfying level. What “work program” would you suggest to the U.N. Council for Sustainable Development, when it meets on this topic next April?

How should we answer those questions?

As the Steering Committee thrashed around trying to do so, we found ourselves coming at the subject of consumption from different angles and with different size lenses, from the micro-behavior of individuals to the macro-working of the global economic system. Since we know that most systems with great staying power are hierarchical, we decided -- at least in our first-draft pass on this subject -- to structure our four days of plenary discussion starting with the “bottom” of the hierarchy -- the individual -- and moving progressively up to the larger systems of the consumer culture, the manufacturers and advertisers, and finally the driving force of industrial capitalism itself -- a subject to which we may want to return in future meetings for an analysis, or perhaps a new design, of a post-socialist, post-capitalist, sustainable, just, and sufficient economy.

We will only begin to approach that larger goal in this coming meeting. Here is our preliminary plan for a schedule and possible speakers. As always at this stage in the planning of a meeting, we have not yet frozen the schedule, and we have not yet contacted the speakers. This is the beginning of a conversation that will shape and clarify itself as the year progresses. We’ll keep you informed of its progress in future *Bulletins*, and we welcome your suggestions, reactions, objections, or reformulations.

The committee responsible for this program consists of **Alan AtKisson, Hartmut Bossel, Bert de Vries, Dana Meadows, Niels Meyer, Aro Revi, and Bob Wilkinson.**

* * *

Day One: Overconsumers and Underconsumers

Sooner or later the discussion of sustainability is going to have to move from efficiency, which you can measure, to sufficiency, which you can't. That's going to drive all the rational Cartesian minds crazy.

-- Wes Jackson, 1991

System Structure of the Day: Addiction

video -- “Toast”

Overview -- Hartmut Bossel: the big and little pictures; two dynamic scenarios of the future development of the global economy

Michael Thompson: Types of consumers in the Western world

Helena Norberg-Hodge: Good lives without overconsumption

A psychologist or theologian or Buddhist monk: Why do we consume?

Day Two: The Culture of Consumption

Some people need a psychiatrist, and some people just need something new to wear.

-- Swiss apparel ad

System Structure of the Day: Competition and Escalation

An advertiser: How the advertising industry works

Paul Hawken: The business of selling

Alan Durning: How much is enough?

Bishan Singh: Consumerism comes to the South

Day Three: The Driving Positive Feedback Loops

I shall argue that it is the capital stock from which we derive satisfactions, not the additions to it (production) or the subtractions from it (consumption); that consumption, far from being a desideratum, is a deplorable property of the capital stock, which necessitates the equally deplorable activity of production; and that the objective of economic policy should not be to maximize consumption or production, but rather to minimize it, i.e. to enable us to maintain our capital stock with as little consumption or production as possible.

-- Kenneth Boulding, 1949

System Structure of the Day: Capital Growth

Teddy Goldsmith or Donald Worster: The long history of the capitalist system

Faye Duchin: What would happen to the macro economy if consumption patterns change?

David Korten: Does the world need large corporations?

Herman Daly: Adding scale constraints to capitalism

Day Four: Where are the Leverage Points?

Any discovery which renders consumption less necessary to the pursuit of living is as much an economic gain as a discovery which improves our skills of production.

-- Kenneth Boulding, 1945

System Structure of the Day: Embedded Hierarchy and Self-Organization

Vicki Robin: Transforming the lives of consumers

Gar Alperowitz: Replacing capitalism with community

Luc Tissant: Limits to competition

Niels Meyer: Opposing globalization

Our civilization is, in effect, addicted to the consumption of the earth itself.

-- Al Gore, *Earth in the Balance*, 1992.

THE CONSUMPTION OF ONE BALATON MEMBER

In preparation for a conference on consumption, we should all come up with statistics about our own, personal consumption, said some members of the Balaton Group Steering Committee.

That would be terribly embarrassing, said others.

If we don't start with ourselves, then we have no business preaching to anyone, said the first group.

The purpose is not to preach, not to make anyone feel guilty. We will get nowhere on reducing consumption if we make people feel guilty, said the second group.

In the interest of breaking this stalemate -- which arises every time the topic of consumption is broached among people who live in cultures that virtually require them to consume -- one Balaton member, who prefers to remain anonymous, volunteered to reveal a year's data on her personal consumption. She happened to have such data, in excruciating detail, because she had been faithfully following the steps laid out by Vicki Robin and Joe Dominguez in *Your Money or Your Life* (reviewed in the Winter 1994 *Balaton Bulletin*) -- steps that lead to much lower consumption and finally real independence from the Consumption System. Step 3 along the way is a big one -- keep track of every penny you spend. (This prepares for an overview revealing how much of that expenditure is actually necessary.)

So this Balaton member happened to have just compiled a record of all her expenditures for 1994 and she agreed, on condition of anonymity, to reveal that record -- not to feel guilty, not to be exposed to the harsh judgement of others, but simply to acknowledge as fact what a concerned and thoughtful worker toward sustainability, one who fully recognizes the consumption of the rich world as a major threat to planetary ecosystems, actually consumes.

Explanatory notes. This record counts household consumption only; it does not include the office (where a lot more paper would be added!) -- though several small businesses and a working farm operate out of the household and are included here. The record counts in some cases one person's expenses (groceries, services, entertainment) and in some cases the expenses for a household of 5 people (electricity, garden, property tax, heating oil). They leave out a major capital improvement -- renovation of part of the house -- which was both labor- and material-intensive but largely used recycled materials. Physical capital improvements should not count as consumption.

The units in the list below are 1994 US dollars. Money expenditure is not necessarily directly related to physical throughput, and it is physical throughput, not money expenditure, that is limited by the carrying capacity of the earth. So where possible in the following list, money amounts have also been translated into physical flows.

animal feed	3,634	(for sheep, chickens, geese, ducks, cats, dogs, and wild birds)
auto: fuel	348	(at \$1.10/gal, this comes to 316 gal or about 1200 liters)
: parking	60	
: service	864	
: registration	172	
: insurance	1,003	
<u>total auto</u>	<u>2,447</u>	(for private car and farm truck)
clothing	1,313	
copying	1,224	(at \$.03/page, this comes to over 40,000 pages)
electricity	902	(at an average of \$.12/kwh the total is 7,516 kwh)
entertainment	475	(movies, compact disks, etc.)
farm equipment	524	
garden	873	(seeds, plants, soil amendments)
gifts	721	
groceries	1,822	(for one person, low because of big garden)
heating fuel	935	(1,298 gal of heating oil at \$0.72/gal)
household equipment	1,130	(small appliances, tools)
insurance: home	801	
: health	2,400	
: auto --	see above	

medical expenses	997	(health insurance is \$1500 deductible)
office supplies	761	
postage	2,241	
publications	1,379	(books, magazines, newsletter subscriptions)
repairs	3,205	(including replacing a cracked chimney)
services	420	(haircuts, legal fees, accounting, etc.)
taxes: federal	13,750	
state	308	
local (property)	5,249	
<u>total taxes</u>	<u>19,307</u>	
travel	7,547	(not counting business travel reimbursed from other sources)
GRAND TOTAL	55,058	

Was this “too much” consumption? Too much of some things, too little of others? Was it sustainable?

SINTUNAWA SPEAKS OUT ON LAOTIAN DEVELOPMENT

(An Inter Press Service Feature by Leah Makabenta)

BANGKOK, Dec 3 (IPS) - In its 4,200 km journey from the Tibetan Himalayas to the South China Sea, the mighty River Mekong lingers to feed the streams along the highlands and mountains that make up all but a tenth of tiny, landlocked Laos's entire land area.

This accident of geography is why the sleepy, gentle country that is also one of the world's poorest has become the innocent prize in a tug-of-love between green groups, development experts, international funding agencies investors and plain do-gooders.

Laos possesses fully half -- 18,000 megawatts -- of the hydro-power potential of the Lower Mekong, the 2,400 km stretch of South-east Asia's longest river that drains the entire country and parts of Thailand, Cambodia and Vietnam.

The promised windfall in electricity exports has induced Laos's planners to place their faith in a planned course of hydro-electric power development.

Now, the rush of foreign investor interest threatens to overwhelm the country's decision-makers who at last count listed 56 proposed power projects with an estimated total output of more than 10,000 megawatts, most of it for sale to power-hungry Thailand.

The prospect of dams blocking Laos's part of the Mekong is horrifying to green activists anxious that Laos does not go the way of Thailand's environmentally damaging development.

Chirapol Sintunawa, chairman of the faculty of environment and resource studies at Thailand's Mahidol University, says Laos is already suffering severe environmental problems from deforestation and illegal logging, without having to face the threat of damage to watershed areas from dam-building.

Laos also depends on the Mekong for trade, communications and fishery, all of which would be lost if the river is dammed. Farmland along the river and tributary valleys would be drowned to make way for reservoirs.

Critics like Chirapol do not blame Laos, which is regarded almost with affection in environment and development circles for the special sensitivity it has shown in its economic growth plans.

Lao ambassador to Thailand Bounkeut Sangsomsak sums up his country's development policy thus: "While we can achieve eight percent annual economic growth by the year 2000, we don't see the need to do so. Instead we ponder on how we can improve our society by strengthening our culture and improving education and health."

The way critics see it, Laos is being led unsuspectingly down the path of ruinous development by profligate power user Thailand and the highly developed dam technology expertise of the West, particularly the Scandinavian countries.

After squandering its forests and water resources, Thailand faces water and energy shortages and dam failures. It has been wooing Laos with large-scale investments and contracts for huge electricity purchases.

In July, Bangkok and Vientiane concluded a power purchase pact for 1,500 megawatts of electricity for a 10-year period. Thailand's Electricity Generating Authority has pledged to purchase 95 percent of the output of the 210 MW Nam Theun Hiboun dam, the only project now in the implementation stage.

The 300 million dollar project is a joint venture between a Thai firm, the Swedish and Norwegian Nordic Hydropower Group and the Lao government. It is scheduled for completion in 1997.

Theun Hinboun is jointly financed by the Asian Development Bank and the Norwegian Agency for Development Cooperation. Nordic Hydropower is responsible for the planning, operation and training.

Chirapol says far too many experts and investors are coming to Laos looking to develop projects when the country has not even developed the institutional capacity to evaluate such projects.

For instance, Laos lacks the people with the training to read English, much less to evaluate environment impact assessments. People should not take advantage of Laos from knowing too little about development projects, he says.

Laos still has no rules nor proper guidelines for environmental and impact assessments, nor monitoring capacity.

Witoon Permpoonsacharoen, director of the Toward Ecological Recovery and Regional Alliance (Terra) environmental group says there is a crucial link between bilateral aid and the whole process of development, especially dam projects, in Indochina.

Scandinavian countries are the most active in Mekong countries, with Finland, Denmark and Sweden the biggest contributor to the Mekong Committee set up by the United Nations to promote development projects in the Mekong basin, he says.

Notes Witoon: "The highly sophisticated dam industry in Scandinavia can no longer construct dams in their countries and is lobbying their governments to fund Mekong dam construction projects through export subsidies and aid."

Nordic Hydropower project director Carl-Eric Norlander admits their move to Laos was partly because the expansion and development of energy production in Europe had reached capacity.

He says, "You can't be in the forefront of a technology staying in the backyard of your own country, you must go international."

Green groups say Laotian officials are confident that the strong environmental concern in the Nordic countries would guarantee that the project would not be harmful to the environment.

Indeed, Norwegian authorities turned down a feasibility study by the Norconsult firm and recommended an independent review of the dam's environmental effects before implementing the project.

Norlander now says the dam is a small run of the river type and would have very limited impact on the environment and with less sedimentation. And environmental management programme would be a permanent feature in the operation and maintenance of the plant.

"This will be the first and a very good opportunity for Laotians to learn how to manage and operate a project of this size and complexity. This is very important because they have very few possibilities to get management training," says Norlander.

Income from the dam would enable the government to provide health care, education, electricity services, not to mention the many industries that would be spawned by the dam which could make a difference to many people, he says.

But unlike Laos's Nam Ngum dam that was funded fully by the Mekong Committee, the Theun Hiboun will be operated by the foreign joint venture partners for 25 years before reverting to the state-owned Electricite du Lao.

Says Chirapol: "We are not sure if the money from these projects will even have an impact on the problems they already have. The money will be taken out of the country by investors and the local people will be left with the environmental problems."

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BAD NEWS IN THE GLOBAL FISHERIES

(NOTE: The Sea Shepherd Conservation Society, a direct action environmental organization, led by Captain Paul Watson, outfits ships to monitor and, if necessary, confront fishing vessels from around the world which routinely violate international law with regard to whale hunting, setting multi-mile drift-nets and other banned practices. The following is abstracted from an unattributed article in Sea Shepherd Log (2nd and 3rd quarters 1994) entitled "The Escalating Global Fish Wars")

Dateline -- Southern Oceans: Atlantic Krill populations have fallen by 80% over the last ten years according to Australian studies. Krill are being depleted due to ozone deterioration and by large scale harvesting by Japan, Russia, Chile, Poland, Korea and Spain. The krill are being used for animal feed.

Source: Jon Sumby -- Australia: Many marine biologists and fishery analysts are predicting a worldwide fish crisis that is too advanced already to halt. Never before in human history have major fish species been so severely reduced. Four of the world's major fisheries are commercially depleted, according to the U.N. Food and Agriculture Organization, and nine more are in serious decline. The U.N. declared in April 1994 that all commercial fish species in all the world's oceans and seas are presently classified as "depleted," "fully exploited," or "overexploited."

The developed world is presently engaged in stealing fish from the territorial waters of those most needy of nations. Recently, foreign fishing fleets took advantage of the chaos in Somalia to close in on unpatrolled Somalian waters. In addition to blatant poaching, undeveloped nations are selling off their fish resources in exchange for foreign cash.

Much of this fish is processed into animal feed for developed nations. Approximately 30% of all fish taken from the sea is processed into animal feed for hogs and fish farms.

"Of the world's estimated 12.5 million fishermen, the majority, perhaps 11 million, are subsistence fishers who live in the third world. But most of the world's catch is taken by first world commercial fleets and sold in Europe, North America, and Asia.

According to Captain Paul Watson of the Sea Shepherd Conservation Society, this rapid decline will provoke major political and economic conflicts and there is no way of stopping it.

'It's the tragedy of the commons,' he said. 'There is every economic incentive to overexploit and very few incentives to conserve. It's a money grab, without a thought given to the future consequences.'

Science and technology have made commercial fishing so efficient that there is absolutely no escape for the finny citizens of the sea. The fishermen can now scour the oceans, locating and apprehending any fish they want. Electronic fish finders not only locate fish beneath the surface but identify them by species and even determine the quality of the catch. Dragnets the size of city buses, drift nets up to fifty miles long, dolphin-killing tuna purse seine nets, mid-water, bottom and top trawls, and ten-mile long-lines are harvesting the oceans more efficiently than an army of grain combines on the prairies.

Grouper and red snapper world wide yields have fallen by 80 percent over the last ten years. Tuna and marlin have fallen 50 percent. Swordfish, yellowtail, and summer flounder populations cannot maintain their populations. Haddock and halibut have disappeared from the waters of New England. The U.S. and Canadian cod fishery has ceased to exist. Lobsters and scallops are rapidly being diminished.

Ten pounds of so-called 'trash' fish are wasted for every pound of harvested shrimp, and yet there is not a single law in the United States or any other nation regulating by-catch by the shrimp industry.

As these fish species are decimated and then decimated again and again, the impact on other marine life is devastating. Seals, sea-turtles, sea-birds, dolphins, whales, and sea-otters are having their source of food taken from them at the same time as humans pollute and devastate their habitats.

In addition to unprecedented exploitation, the world's fish are assaulted by the destruction of wetland habitats, agricultural run-off of fertilizers, pesticides, herbicides, and silt. Some fish die unused in discarded monofilament nets. Fish habitats are scoured clean by draggers. Industrial waste like PCBs and chlorine are pouring into oceanic ecosystems. In addition to increasing occurrences of red tides, there are now brown tides, massive coral die-offs, billions of pounds of wasted and discarded by-catch, and oil and chemical spills at sea.

The destruction of wetlands is very significant. More than 50 percent of the major commercially exploited species depend on coastal estuaries and wetlands to provide sanctuary and breeding grounds. Salmon spend their early stages of development in inland waterways and coastal salt marshes.

These coastal wetlands are disappearing at an alarming rate. Around the globe, hundreds of thousands of important wetland sites have been cleared for urban development and the construction of resorts, landfills, waste dumps, and vast fish farms.

Civilization is destroying entire ecosystems to make room for fish and shrimp farms to replace the fish being destroyed in the sea. This aquaculture in turn destroys the wetlands needed for wild fish species.

Additionally fish-farming pollutes because of the chemically intensive nature of the industry, an industry that relies on mega-doses of antibiotics, molluscides, and taste and color enhancers.

According to the article, international conflict over dwindling marine resources is becoming more and more common and skirmishes have been escalating in many areas. The article details some of the scuffles between Japan and Russia, U.S. and Canada, Norway and Iceland and others.

SUBSCRIPTION INFORMATION

Mail subscriptions for the Sea Shepherd Log (\$25), to Sea Shepherd Conservation Society, 3107A Washington Blvd., Marina Del Rey, CA 90292; Tel: 310-301-7325; Fax: 310-574-3161; information on local addresses in Canada, Great Britain and Australia is also available.

ENVISIONING A SUSTAINABLE WORLD

(This was the plenary lecture given by **Dana Meadows** at the Third Annual Meeting of the International Society for Ecological Economics, October 24-28, 1994, San Jose, Costa Rica.)

To bring our world toward sustainability -- or any other goal -- we need to take different kinds of steps, which require different kinds of knowledge, talent, skill, and work.

We need, for example, to make things happen -- pass laws, make budgets, find resources, hire people, establish and manage organizations, invent technologies, build, restore, protect, tax, subsidize, regulate, punish, reward, DO THINGS. Implementation is the active, visible phase of achieving a goal, and therefore it is the most discussed phase. Probably 90% of all public discourse involves arguing about implementation. Most policy debates start and end with this phase, unfortunately.

I say "unfortunately," because any talk of implementation is necessarily based on models, which explain how we got to whatever state we are in, and what we should do to get to a better state. Models may be in computers, on paper, or in our heads. They may be

sophisticated, but usually they are very simple -- for example: "freeing the market from regulation will make things better," or "new technology is all we need to solve our problem." We debate and challenge our models far too little, especially the models in our heads. Most of them are too narrow, too linear, too lacking in understanding of feedback, time-lags, exponentiality, variability, diversity, and other aspects of real-system complexity. Obviously, if our models are faulty, all the skillful and well-funded implementation in the world will not get us to sustainability or any other goal.

There are at least two more ingredients of the policy process that precede and are even more important than modeling. One of them is information. We need to know where we are and where we have been. Information not only validates or disproves our models, it helps us form and develop them and turn them into action. If information about our history and present situation is biased, delayed, incomplete, noisy, disorganized, or missing, our models will be wrong, and our implementation will be untimely and misdirected. Improving information means, among other activities, monitoring, organizing data, choosing wise indicators, education, communication (especially through the public media), and -- an issue vital to ecological economics -- the removal of bias from price signals.

If 90% of policy discussion focuses on implementation, virtually all the remaining 10% focuses on modeling and information. That leaves 0% for the last step of policy formation, which should be first -- the establishment of clear, feasible, socially shared goals. What do we want? Where would we like all these models, this information, this implementation to take us? What is our vision of the world we are trying to create for ourselves, our children, and our grandchildren?

Environmentalists have failed perhaps more than any other set of advocates to project vision. Most people associate environmentalism with restriction, prohibition, regulation, and sacrifice. Though it is rarely articulated directly, the most widely shared picture of a sustainable world is one of tight and probably centralized control, low material standard of living, and no fun. I don't know whether that impression is so common because puritanism is the actual, unexpressed, maybe subconscious model in the minds of environmental advocates, or whether the public, deeply impacted by advertising, can't imagine a good life that is not based on wild and wasteful consumption. Whatever the reason, hardly anyone envisions a sustainable world as one that would be wonderful to live in.

The best goal most of us who work toward sustainability offer is the avoidance of catastrophe. We promise survival and not much more. That is a failure of vision.

Even if information, models, and implementation could be perfect in every way, how far can they guide us, if we know what direction we want to move away from but not what direction we want to go toward? There may be motivation in escaping doom, but there is even more in creating a better world. And it is pitifully inadequate to describe the exciting possibilities of sustainability in terms of mere survival -- at least that's what my vision of sustainability tells me.

But I didn't always have such a vision. I had to learn, or perhaps I should say relearn, to create and express vision. In our industrial culture, particularly in the cultures of science and economics, envisioning is actively discouraged. We have to rediscover and practice it again. Perhaps if I tell you the story of my own experience with vision, you will understand what I mean.

A World Without Hunger

About ten years ago I ran a series of workshops intended to figure out how to end hunger. The participants were some of the world's best nutritionists, agronomists, economists, demographers, ecologists, and field workers in development -- people who were devoting their lives in one way or another to ending hunger.

Peter Senge of MIT, a colleague who helped design and carry out the workshops, suggested that we open each one by asking the assembled experts, "What would the world be like if there were no hunger?" Surely each of these people had a motivating vision of the goal he or she was working for. It would be interesting to hear and collect these visions and to see if they varied by discipline, by nationality, or by personal experience.

I thought this exercise would take about an hour and would help the participants get to know each other better. So I opened the first workshop by asking, "What is your vision of a world without hunger?" Coached by Peter, I made the request strongly visionary. I asked people to describe not the world they thought they could achieve, or the world they were willing to settle for, but the world they truly wanted.

What I got was an angry reaction. The participants refused. They said that was a stupid and dangerous question. Here are some of their comments:

- Visions are fantasies, they don't change anything. Talking about them is a waste of time. We don't need to talk about what the end of hunger will be like, we need to talk about how to get there.
- We all know what it's like not to be hungry. What's important to talk about is how terrible it is to be hungry,
- I never really thought about it. I'm not sure what the world would be like without hunger, and I don't see why I need to know.
- Stop being unrealistic. There will always be hunger. We can decrease it, but we can never eliminate it.
- You have to be careful with visions. They can be dangerous. Hitler had a vision. I don't trust visionaries and I don't want to be one.

After we got those objections out of our systems, some deeper ones came up. One person said, with emotion, that he couldn't stand the pain of thinking about the world he really wanted, when he was so aware of the world's present state. The gap between what he longed

for and what he knew or expected was too great for him to bear. And finally another person said what may have come closer to the truth than any of our other rationalizations: "I have a vision, but it would make me feel childish and vulnerable to say it out loud. I don't know you all well enough to do this."

That remark struck me so hard that I have been thinking about it ever since. Why is it that we can share our cynicism, complaints, and frustrations without hesitation with perfect strangers, but we can't share our dreams? How did we arrive at a culture that constantly, almost automatically, ridicules visionaries? Whose idea of reality forces us to "be realistic?" When were we taught, and by whom, to suppress our visions?

Whatever the answers to those questions, the consequences of a culture of cynicism are tragic. If we can't speak of our real desires, we can only marshal information, models, and implementation toward what we think we can get, not toward what we really want. We only half-try. We don't reach farther than the lengths of our arms. If, in working for modest goals, we fall short of them, for whatever reason, we reign in our expectations still further and try for even less. In a culture of cynicism, if we exceed our goals, we take it as an unrepeatable accident, but if we fail, we take it as an omen. That sets up a positive feedback loop spiraling downward. The less we try, the less we achieve. The less we achieve, the less we try. Without vision, says the Bible, the people perish.

Children, before they are squashed by cynicism, are natural visionaries. They can tell you clearly and firmly what the world should be like. There should be no war, no pollution, no cruelty, no starving children. There should be music, fun, beauty, and lots and lots of nature. People should be trustworthy and grownups should not work so hard. It's fine to have nice things, but it's even more important to have love. As they grow up, children learn that these visions are "childish" and stop saying them out loud. But inside all of us, if we haven't been too badly bruised by the world, there are glorious visions.

We discovered that in the hunger workshop. Having vented all the reasons why we shouldn't share our visions, we shared our visions. Not just what we expected, but what we really wanted. It was the first time I had been in a prolonged, shared, visionary space. As we constructed together a picture of the world we wanted to create, our mood lifted, our faces softened, our bodies woke up, we gained energy and clarity and solidarity.

The vision we pulled out of each other that day has gone on powering me for years. The end of hunger need not just mean that the hungry fifth of the world's people become like the rest of us, with all our stresses and strains. It need not mean massive, constant, expensive transfers of food from the rich to the poor. It would not, in my vision, mean chemical-intensive agriculture taking over the world, or populations exploding, or centralized control of anything. The world seems to expect the end of hunger to be like that -- if it thinks of ending hunger at all -- and so it's no wonder that we don't work very hard to achieve it.

In my vision of the end of hunger, every child is born into the world wanted, treasured, and lovingly cared for. Because of that, many fewer children are born and not one of them is wasted. Every person can become all that she or he is capable of becoming, in a world that is

beautiful, where cultures are diverse and tolerant, where information flows freely, untainted by cynicism. In my vision food is raised and prepared as consciously and lovingly as are children, with profound respect for nature's contribution as well as that of people. In a world without hunger I can take care of my own nearby community and be taken care of by it, knowing that other people in other communities are also doing their caring close at hand. There would be plenty of problems to solve -- I want problems to solve -- but I could travel anywhere in the world without encountering deprivation, terror, or ugliness. What I would find, everywhere, would be natural integrity, human productivity, working communities, and the full range of human emotions, but dominated not by fear and therefore greed, but by security, serenity, and joy.

I could go on. I can see this vision clearly and in detail. I can see the farms; I can see the kitchens. But you get the point. Maybe you are already filling in your own details, or maybe you are uncomfortable in the presence of such visionary language. Whatever your reaction, notice where it comes from, notice what has been laid upon you by your culture, and notice that there is a place inside you, close to the surface or deeply buried, that desperately wants a world something like the one I've just sketched out. I have noticed, going around the world, that in different disciplines, languages, nations, and cultures, our information may differ, our models disagree, our preferred modes of implementation are widely diverse, but our visions, when we are willing to admit them, are astonishingly alike.

Some Generalizations about Vision

So I have been honing my capacity to envision. I rarely start a garden, a book, a conference, or an organization, without formally envisioning how I want it to come out -- what I really want, not what I am willing to settle for. I go to a quiet place, shut down my rational mind, and develop a vision. I present the vision to others, who correct and refine it and help it to evolve. I write out vision statements. When I lose my way, I go back to those statements.

Sometimes I still feel silly doing all this. I was raised in a skeptical culture, after all, and worse, I was trained as a scientist, with all "silly irrationality" drummed out of me. But I keep practicing vision, because my life works better when I do. Here are some things I have learned about the way vision works:

- Envisioning is not a left-brain activity, it doesn't come from the part of me that does rational analysis. It comes from whatever part of me informs my values, my conscience, my sense of morality. Call it heart, call it soul, whatever is the source of vision, it is not rational mind.
- I have to keep filtering out any remnants of past disappointments, any tinge of negativism, any analysis of "reality." I have to work actively to focus on what I want, not what I expect.
- I have stopped challenging myself, or anyone else who puts forth a vision, with the responsibility of laying out a plan for how to get there. A vision should be judged by its clarity of values, not by the clarity of its implementation path.

- In my experience that path is NEVER clear at first. It only reveals itself, step by step, as I walk along it. It often surprises me, because my computer and mental models are inadequate to the complexities and possibilities of the world. Holding to the vision and being flexible about the path is the only way to find the path.

- Vision is not rational, BUT rational mind can and must inform vision. I can envision climbing a tall tree and flying off from its top, and I might very much want to do that, but that vision is not consistent with the laws of the universe; it is not responsible. I can envision the end of hunger, but careful modeling tells me that it can't be accomplished tomorrow; it will take time. I use every rational tool at my disposal not to weaken the basic values behind my vision, but to shape it into a responsible vision that acknowledges, but doesn't get crushed by, the physical constraints of the world.

- One essential tool for making vision responsible is sharing it with others and incorporating their visions. Only shared vision can be responsible. Hitler was indeed a visionary, but his vision was not shared by the Jews or the Gypsies or most of the peoples of Europe. It was an immoral, insane vision.

- Staying in touch with vision prevents me from being seduced by cheap substitutes. If what I really want is self-esteem, I will not pretend to achieve it by buying a fancy car. If I want human happiness, I will not settle for GNP. I want serenity, but I will not take drugs. I want permanent prosperity, not unsustainable growth.

- Vision has an astonishing power to open the mind to possibilities I would never see in a mood of cynicism. Vision widens my choices, shows me creative new directions. It helps me see good-news stories, pockets of reality that could be seeds of a wider vision. I see what I should support; I get ideas for action.

- People who carry responsible vision become, in some sense I can't explain, charismatic. They communicate differently from cynical people. Even if the vision isn't overtly expressed, it's there and it's noticeable. Inversely, many progressive, dedicated, "realistic" people unconsciously communicate their underlying hopelessness. Being around them is a "downer;" being around visionaries is a constant inspiration.

- I have rarely achieved the full expression of any of my visions, but I have learned not to be discouraged by that. I get much further with a vision than without it, and I know I'm going the right direction. I can take comfort in my progress, even while I continue to bear the tension of knowing I'm not there yet.

I am a practical person. I think of myself as relentlessly realistic. I want to create change in the world, not visions in my head. I am constantly amazed, but increasingly convinced, that envisioning is a tool for producing results. Olympic athletes use it to make the difference between the superior performance their trained bodies can achieve and the outstanding performance their inspired vision can achieve. Corporate executives take formal classes in vision. All great leaders have been visionaries. Even the scientific, systems-analyst

side of me has to admit that we can hardly achieve a desirable, sustainable world, if we can't even picture what it will be like.

Envisioning a Sustainable World

So I invite you to join with me in building that vision. What kind of sustainable world do you WANT to live in? Do your best to imagine not just the absence of problems but the presence of blessings. Our rational minds tell us that a sustainable world has to be one in which renewable resources are used no faster than they regenerate; in which pollution is emitted no faster than it can be recycled or rendered harmless; in which population is at least stable, maybe decreasing; in which prices internalize all real costs; in which there is no hunger or poverty; in which there is true, enduring democracy. But what else? What else do YOU want, for yourself, your children, your grandchildren?

The best way to find your answer to that question is to go to a quiet place, close your eyes, take a few deep breaths, and put yourself in the middle of that sustainable world. Don't push, don't worry, and don't try to figure it out. Just close your eyes and see what you see. Or, as often happens for me, hear what you hear, smell what you smell, feel what you feel. Many of my visions are bright, detailed, and visual, but some of the most profound ones have come not through "seeing," but through sensing in other ways.

In short, relax, trust yourself and see what happens. If nothing happens, don't worry, try again sometime, or let your visionary talent surface in your sleeping dreams.

But keep asking yourself: What would my home be like in a sustainable world? What would it feel like to wake up there in the morning? Who else would live there; how would it feel to be with them? (Remember this is what you WANT, not what you're willing to settle for.) Where would energy come from, and water, and food? What kinds of wastes would be generated and where would they go? When you look out the window or step out the door, what would it look like, if it looked the way you really want? Who else lives near you (human and non-human)? How do you all interrelate? Go around your neighborhood and community and see it as clearly as you can. How is it arranged, so that the children and the old people and everyone in between will be surrounded by security and happiness and beauty?

What kind of work do you do in this sustainable world? What is your particular and special role? With whom do you do it? How do you work together and how are you compensated? How do you get to work? (Do you have to "get" to work? Is "work" a distinguishable activity in your ideal world? Is it separate from the rest of life?)

Travel farther in your vision, to surrounding communities. Look not only at the physical systems that sustain them -- water, energy, food, materials -- but look at how they relate, what they exchange with each other, how they know of each other. How do they make joint decisions? How do they resolve conflicts? (How do you WANT them to resolve conflicts?) How do they treat different kinds of people, young and old, male and female, intelligent and talented to different degrees and in different ways? ?) How do they fit within nature? How do they treat, how do they think about plants and animals, soils and waters, stones and stars?

Look at your nation (if your visionary world has nations -- if it doesn't, what does it have?). How does it meet its physical needs sustainably? How does it make decisions, resolve conflicts within and without its borders? What do your people know of other people, and how do they think about them? How much and what kinds of people and goods and information travel between your place and other places? Is your nation and your world diverse or homogeneous (the way you WANT it, not the way you expect)?

How does it feel to live in this world? What kind of consciousness or worldview, or tolerance of diverse worldviews do people use to keep things sustainable? What changes in this world, and what stays the same? What is the pace of everyday life? How fast, if at all, do people travel and by what means? What fascinates them? What kinds of problems do they work on? What do they regard as progress? What makes them laugh?

Whatever you can see, or can't see, keep looking. NOT being able to see something in a vision may be as meaningful as seeing it. Once when I did a visioning session with some German engineering students, they had no trouble seeing sustainable farms, sustainable forestry, even "sustainable chemistry." (That, seen by a chemist, was interesting. It involved minimizing rather than maximizing the amount of chemical needed to do any job, deriving chemicals from nature, making them the way nature does -- at low temperatures in small batches with no harmful emissions -- and recycling them as nature does.) But none of these engineers could envision a sustainable transportation system, though some of them actually worked in designing solar vehicles. Finally they concluded that transportation is a cost, not a benefit, that it's noisy, disrupting, energy- and time-consuming, and inherently unsatisfying, and that it would be best if everyone were already where they wanted to be, with whom they wanted to be. In a sustainable society, they concluded, travel would be almost unnecessary. (But they wanted to have, for fun, sailboats and horses and hang gliders!)

Conclusions, Caveat, and Manifesto

Of course having a vision isn't enough. Of course it's only the first step toward any goal. The grandest vision will get nowhere without proper information and models and implementation (and resources, labor, capital, time, and money). There are great difficulties in all these steps of social change and much work to do. I'm by no means indicating that we all become nothing but visionaries. I think what I'm advocating is simply that we make the world safe for vision.

That means, at the least, that we take a mutual vow not to go around squashing vision -- our own, or anyone else's, and especially not that of young people. That we don't try to keep our loved ones or ourselves from disappointment or from looking silly by urging them to "be realistic."

Beyond that we could occasionally take the social risk of displaying not our skepticism but our deepest desires. We could declare ourselves in favor of a sustainable, just, secure, efficient, sufficient world (and you can add any other "value word" you like to that list), even at the expense of being called idealistic. We could describe that world, as far as we can see it, and ask others to develop the description further. We could give as much credit to the times

when we exceed our expectations as to the times when we fall short. We could let disappointments be learning experiences, rather than fuel for pessimism.

Above all, we could strengthen ourselves to endure the pain of the enormous gap between the world we know and the world we profoundly long for. I believe that it's only by admitting, permitting, and carrying that pain that we can gradually move our world away from its present suffering and unsustainability and toward our deepest values and dearest visions.

BOOK REPORT

***Beyond Optimism: A Buddhist Political Ecology*, by Ken Jones, Jon Carpenter Publishing, PO Box 129, Oxford OX1 4PH, UK, 1993.**

Alan AtKisson has been carrying around this book, savoring it slowly and underlining all over it. **Dana Meadows** picked it up from him, and we both recommend it to Balaton members. The author is a British Buddhist environmentalist. The environmentalist part of him makes his argument a sympathetic one to all of us; the Buddhist part makes him doubt everything, even environmentalism, especially as practiced by the British Greens and other partisan and disputatious environmental groups. Power trips, politics, egos, working within a defective system in order to reform it from within, these are definitely not Buddhist approaches to change. Ken Jones's approach is summarized well by the quote from E.F. Schumacher with which he begins his book:

It is no longer possible to believe that any political or economic reform or scientific advance could solve the life and death problems of the industrial society. They lie too deep in the heart and soul of every one of us.

The book starts with chapters on familiar territory, sketching out the unsustainable global situation, commenting on population, on consumption, on industrialism, on socialism. The discussion is less about the "facts" or the "history" of these subjects than on how we think about them, how we have mythologized them, how they have come to inhabit our mental landscape. The position from which they are viewed and discussed is the classic Buddhist one of an amused and compassionate skeptic. All worldviews are only worldviews. All ideas are only ideas. All paradigms are faulty and incomplete.

The next section takes on the classic responses to global unsustainability, from environmentalism to ecological economics to feminism, with the same loving refusal to be taken in. Yes, these are all steps in the right direction, but what matters is not that they are taken, but HOW they are taken, which is to say by whom -- people who bring to them the same old ego, or people who have done the "inner work" that Jones regards as the necessary individual foundation of social transformation.

The best way to make his point is to quote at length from the final chapter of his book, which is called "Psycho-Spiritual Liberation (The Inner Work)." The remainder of this review consists of excerpts from that chapter.

“Green parties have been marked by vehement strife, with little attempt at conciliation and conflict resolution. Similar experiences have been commonplace in the peace, women’s, and other overlapping movements. Commenting on an episode of ‘childish and destructive squabbling’ among the editorial group of *Peace News*, one observer confessed that he had ‘always found peace meetings and peace groups to be the most unpeaceful environments I have ever worked in, compared to which a meeting of NATO generals must be a truly soothing experience.

“Many radical activists invest their selves -- their time, energy, and idealism -- with a wholehearted commitment. And so stress, frustration, and obstruction can ignite explosions out of all proportion to the issues at stake. Reflecting on a lifetime’s experience as an international mediator, the Buddhist Quaker Adam Curle came to see that ‘the way we perceive human nature, *especially our own*, is of overarching importance. It is indeed an absurd illusion to consider that we can work for peace ... if we are inwardly turbulent and ill at ease; or to help people change their lives for the better if our own existence is disordered and impoverished.’ It is for this reason that a few prominent radical greens have consistently maintained that (in the words of Petra Kelly) ‘the greens must become a spiritual movement, not in any fixed religious sense, but in the sense of transforming certain values and conserving others, such as solidarity and tenderness.’

“It is the hunger for meaning and identity in the face of existential fear and insecurity that has powered human history. The ever-failing struggle to satisfy this need through aggressiveness, acquisitiveness, and often fanatical forms of belongingness has created social structures and processes which have in turn amplified and inflamed them. We have, in Gary Snyder’s words, become ‘economically dependent on a fantastic system of stimulation of greed which cannot be fulfilled, sexual desire which cannot be satiated, and hatred which has no outlet except against oneself, the persons one is supposed to love, or the revolutionary aspirations of pitiful, poverty-stricken, marginal societies.’

“All the world’s spiritual traditions bear witness to our potential to transcend our fear-driven self-destructiveness. Findings in psychology and anthropology point in the same direction. And with even a modest experience of meditation one can begin to confirm this for oneself. Repressive societies and violent individuals are not inevitable. On the contrary, in the light of perennial spirituality, they are remediable deviations from our quintessential nature, our original blessing.

“It would be misleading to set up some kind of hierarchy of the different kinds of inner work. One person may embark on some advanced spiritual practice and become progressively more rigid and closed off, whilst some quite modest psychotherapy might release another into a flowing and joyful openness. It is important, therefore, to keep an open and inclusive mind in considering the relevance to our radical green project of the many different kinds of inner work, ranging from small-group dynamics to tantric meditation, from playing with clay to nonviolence training, from bioenergetic therapy to consciousness-raising skills with the disempowered and dependent. A proselytizing religious tradition, claiming a monopoly of truth, is unlikely to offer

an inner work experience which nurtures open-minded and receptive relations with others. Neither will a cult which creates neurotic dependency on a guru. The contrast is with what Paul Tillich described as 'the strength of people who have deep convictions without being fanatical, who are loving without being sentimental, imaginative without being unrealistic, disciplined without being submissive.'

"To respond effectively and realistically to demanding problem situations means to confront them in full awareness, without the (largely unconscious) need protectively to filter out whatever too much discomfits us (a major function of ideology). This implies wholehearted acceptance of complexities and contradictions which disconcert our accustomed ways of thinking, a willingness to suspend judgment, and to make creative use of unknowing. It implies contextual decision making and situational morality, rather than the security of always knowing what's right and what's wrong. It implies a willingness to trust feelings and the courage to accept one's own mistakes and inadequacies.

"This ensemble of virtues (which, incidentally, implies a nice balance of the masculine and the feminine) may recall one of those intimidating job descriptions for some apparently quite ordinary employment. A few of us are fortunate enough to have been born with them; most have to learn the hard way. Although inner work requires will power in order to keep at it, these virtues cannot themselves be willed into being. If we attempt to do so, we are likely to find ourselves saddled with their opposites. Strength of character, for instance, becomes rigidity and hardness of character. Where they are truly natural and spontaneous there is a lightness and transparency about them; they do not have to bear the anxious weight of inner need. And there is commonly an underlying sense of humor, an awareness of the black comedy of our often dangerous antics to be something other than we are, instead of just enjoying being our true selves. For that is what 'spirituality' is really about. So simple; so hard."

RECYCLING TRASH INTO LAB EQUIPMENT

(submitted by **John Peet**)

Good quality science laboratory equipment made from used soft drink cans, bottles, and other rubbish -- a reality!

Science teachers the world over want their pupils to carry out meaningful and successful experiments for themselves. But the cost of scientific equipment means that this ideal is often not possible, especially in countries of the South. Often pupils either have to watch the teacher demonstrate (not satisfactory for learning) or else work in groups so large that many never get to develop their laboratory skills.

All that is now changed! A New Zealand science teacher, Julian Earwaker, has developed a range of cheap, reliable, and environmentally friendly laboratory equipment for teaching in most areas of chemistry, physics, and biology. The equipment is made from aluminum drink cans and PET drink bottles, scrap steel strapping, and so on, together with a

range of common hand tools -- pliers and so forth, which are also used to make other special tools.

Julian has worked on this project for several years, with final development work carried out on a New Zealand Science and Technology Teacher Fellowship, working at the Department of Chemical and Process Engineering at the University of Canterbury.

Described in a teacher's manual (to be published shortly), and designed to resource the New Zealand National Curricula in Science and Technology for high school classes (ages 13-18), his apparatus designs include heating, fluid handling, mechanics, electricity, optics, chemical reactions, and biology. Apparatus that can be constructed includes (as a small illustrative set of examples) beam balances, alcohol burners, distillation apparatus, dreschel bottles, voltaic cells and batteries, and a host of other item.

Julian presented a summary of his work at the 9th ICASE-ASIAN Symposium in Bangkok in early December 1994. If anyone is interested in hearing more, Julian is now back at St. Bede's College, Christchurch, New Zealand. John Peet is happy to act as go-between (j.peet@cape.canterbury.ac.nz).

NEWS FROM THE MEMBERS

Marina Alberti has received a post-doctoral position at the Center for Conservation Biology at Stanford University. She moves to Stanford in January, 1995, to work on her project on cities and the global environment.

Her new address will be: Center for Conservation Biology, Department of Biological Sciences, Stanford University. Stanford CA 94305, phone 415-723-5923, fax 415-723-5920

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Gerardo Budowski, as president of the Worldwide Ecotourism Society recently organized an "Ecology Development Forum" at Maho Bay in the U.S. Virgin Islands. He presided over several events and presented a paper on the design of interpretive trails in tropical rainforests.

Immediately preceding that conference, Gerardo attended the Central American "Ecosummit" meeting, which brought together all six presidents of the Central American countries and the prime minister of Belize. The assembled dignitaries signed an "Alliance for Sustainable Development" agreement, with Vice-President Al Gore present as a key witness. "Money is coming forth," writes Gerardo, "Although there were bitter complaints that now that peace is installed in Central America, very little money from USAID is channeled to the area."

At this meeting Gerardo was presented, along with Maurice Strong, the "Semper Virens" award for his contributions to conservation and the environment in Central America.

Milan Caha writes:

It looks like we have finally solved our dispute with the Ministry of the Environment. The audit proved that the technical problems with accounting have been fixed, and the Ministry at the very last moment decided to reimburse some of our costs for 1994 and agreed to negotiate 1995 support. The atmosphere is much more cooperative. Project "Education for Sustainability" has been approved, and I plan to concentrate my activities on this project for the next 12-18 months. In the frame of the project, I will use the Balaton Team-Building Workshop (both complete and selected parts) and cooperate closely with Balaton friends. I will hand over my administrative duties and focus on training, writing, and building a network of people interested in promoting sustainable lifestyles by education, gaming, and systems thinking. It looks like there will be a lot of interest both on the side of teachers and learners.

Another positive news is that my wife Monika has survived a car accident in early December. It was quite serious, but thank God nobody was seriously wounded.

The Czech translation of *Beyond the Limits* is almost ready. We expect that the book will be published in June-July. The Czech version of Fishbanks will be completed in early January. We have received good support for preparation and publishing from the Ministry of the Environment. We plan to use the money from the game to publish Stratagem too.

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Kim DeRidder of the Asia Foundation in Bangkok has spent the fall term in the graduate ecology program at the University of California:

I assume I will be back in Asia in January. I just wanted a break from Bangkok and to regenerate a few dead or dormant brain cells. I'm taking courses in renewable energy resources, environmental impact assessment, restoration ecology, and theoretical ecology. I decided I would take courses for a single term only, at least for the time being. I still have to find the PhD program that is a healthy blend of the sciences and policy, particularly geared toward international (especially development oriented) settings. That's okay. This one term alone will be a significant contribution to my personal goals.

I expect I will spend the first few months of 1995 in Bangkok with the Asia Foundation, after which I will be scouting for something new.

* * *

Ashok Gadgil wants to notify the Balaton Group about a new book:

Cambridge University Press has finally released the book *Industrial Ecology and Global Change*, ISBN 0-521-47197-4, edited by Scofflaw, Andrews, Breakout and Thomas. The book address the questions raised by the industrialization process in the developing countries, and the evolving industrialization in the industrial countries, and how all this can be shaped (if at

all) so as to avoid/delay overwhelming natural systems in the long run. Thus the issue relates to future of industrial civilization.

The book has chapters written by authors that participated in a workshop by the same title in 1991 summer in Snowmass, CO. (I participated in the workshop and have a chapter titled "Development, Environment, and Energy Efficiency").

The book has 5 parts:

1. Vulnerability and Adaptation
2. The Grand Cycles: Disruption and Repair
3. Toxics and the Environment
4. Industrial Ecology in Firms, and
5. Industrial Ecology in Policy-making

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Ulrich Loening writes from Scotland:

I am trying to organise two workshops, for end of April and/ or end of May. The first is with Vladimir Kollontai on the social and economic barriers in the transitions to ecological sustainability; the second with David Orr on ecological education; the practice as well as how to fit into the narrow faculty structures. The latter workshop may combine with another: I have a European grant for cooperation with Russian scientists on the same subject: how to bring ecological understanding to the wider public and politicians.

We recently had a most appreciated visit from **Chirapol Sintunawa** after the meeting in Switzerland. I certainly plan to come to the next Balaton, and am booking time now!

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Zoltan Lontay says that the energy efficiency business is suddenly booming in Hungary, since prices of electricity and gas were just raised 70 percent, and are due to reach full-cost pricing (including the costs of decommissioning and environmental ameliorization) by 1997.

Zoltan serves on the advisory board that is helping the government decide how to regulate the newly privatized utilities (see the news item about MOL below!). He is working with utilities on demand-side-management, in which they are already interested, although there are not yet any regulations requiring them to do it. He is also working with the World Bank on a joint venture for third-party financing of energy efficiency investments.

As if all that weren't enough, Zoltan and his colleagues are:

- giving seminars on energy efficiency for managers in the energy, chemical, and food industries, and managers of hospitals and universities,
- building NGO capacity in this field,
- engaging in debates with government officials and on the media,

- designing school curricula and local events,
- conducting a community advice program,
- studying how to improve Budapest's district heating,
- designing demonstration projects on residential energy efficiency.

Zoltan has spoken on national TV on energy efficiency four times since September, and is now preparing a 10-part radio series.

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Amory and Hunter Lovins's long-delayed article on hypercars, "Reinventing the Wheels," is in the 1/95 *Atlantic Monthly*. The last 2,000 words, on nega-km and negatrips, was cut out and will appear soon in the *Washington Post Magazine*. Joe Romm's and Bill Browning's demonstration of 6-16 percent higher labor productivity in green buildings was released 12 December 1994. RMI's publications (orders@rmi.org) will soon become more accessible through Internet homepage:

http://infosphere.com/clients/rockymtn/rmi_Homepage.htm/

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Dana Meadows was one of many Balaton members who attended the ISEE (International Society for Ecological Economics) biannual meeting in San Jose, Costa Rica, in October. Others present included **Bob Costanza** (President of the Society), **Herman Daly**, **Faye Duchin**, **Jim Hornig**, **John Peet**, **Carlos Quesada**, -- and about 1400 others. It was an exciting meeting and a tribute to the readiness of people all over the world to welcome and develop the ideas of ecological economics.

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During the past several months **Dennis Meadows**, **Valdis Bisters**, **Bert deVries**, **Carlos Quesada**, **Milan Caha**, and **Chirapol Sintunawa** have collaborated with many others to design and conduct three sessions of the Sasakawa workshop. This 4-5 day program is designed to strengthen the teams that manage environmental NGOs. Using games, outdoor initiatives, simulations, case studies, and a variety of personality assessment and management planning tools, the workshop is being designed as a complete kit. Eventually all the videos, instruction manuals, questionnaires, computer programs, overhead slides and other materials will be translated into six languages for use in centers throughout the world.

In December the design team tested the full-length workshop for the first time at the Academy for the Environment in Geneva. Attending the Geneva session were 35 participants from 14 countries. Their response was generally enthusiastic, though there was consensus that the workshop contains too much material for effective assimilation. And much more thought must be invested in achieving integration and reinforcement of the various themes: systems thinking, principles of sustainable development, and team effectiveness.

The next trial will be in Costa Rica, hosted by Carlos Quesada, March 13-17.

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Niels Meyer sends a report on what it is like to run for the Danish Parliament:

First of all, you cannot run as a party before you have collected about 20,000 signatures which have been through a complicated bureaucratic procedure, in order to make it even more impossible. To obtain those signatures requires a lot of hard work and money (about 40,000 US dollars). We were unfortunately only half way when the election was called.

On the other hand, it is extremely important to try to have more people elected who oppose the European Union, because new negotiations are starting with the aim of establishing a centralized superpower, the United States of Europe. The present Danish parliament has a strong majority in favor of this monster, so the election was an important possibility to bring more opponents into parliament.

Because our party (Solidaric Alternative) could not run as a party, the only possibility was to run as an individual. The problem is, so far in Danish history no one has succeeded to be elected in this fashion. Therefore people don't like to vote for individuals, because they are nearly certain to waste their vote.

So I was pressed by my party to run as an individual in spite of all the odds against. It was an interesting experience to suddenly become a candidate for parliament. Twenty-nine candidates were running as individuals. I came in as number two, with about 2500 votes. This was far from being enough; to win I would have needed 15,000 votes. A practical joker and comedian called Jacob Haugaard made Danish history by actually being elected as an individual. He had tried six times before and was supported by TV, since he was a well-known performer. The main points of his political program were a promise of tailwinds on all bicycle paths and less sex in high school staff rooms. His election was a warning to Danish politicians that the voters are dead tired of the traditional political style. Haugaard himself will have a difficult time now, because he can't live as a joke for the whole parliamentary period.

For me the campaign was three weeks of hard work, as I had very little money. I had to produce my posters myself with the assistance of volunteers from the party. (Note the solar symbol. I made the posters triangular, so I could get two out of each sheet of paper.) I learned to climb light poles in order to find the best places for my posters. I did manage to get into TV a few times, because they know me in other roles. Creating sustainable development is the basis of our program.

The election as a whole was very close. We barely avoided a right wing government. The present social-democratic government has chosen to work closely with the conservatives, and 90% of the parliament is pro the European Union. So our party is working hard to get the necessary signatures in order to run next time. I think we have a good chance to get at least 10 seats at the next elections, which may come within a year or two.

I canceled three international trips because of the election, including the Balaton meeting, but I went to Thessaloniki, Greece, in October to give an invited talk at the ISES (International Solar Energy Society). The meeting was held at a well-known tourist place at the beach, which was completely spoiled by ugly hotels, bars, and petrol stations. Funded by money from the European Union.

I am coming to Zurich for the steering committee meeting. In this way I hope to catch up with my Balaton friends. Life is too short to allow large intervals between our close contacts!

* * *

News of our Balaton host, the Hungarian Oil and Gas Company, abbreviated in Hungarian **MOL**. According to the November 30, 1994 *Financial Times*:

Hungary's new socialist-led government has announced sweeping privatization plans for its energy sector. They will transform the sector from full state ownership to one of the most privately controlled and liberalized in Europe over the next three years.

The government is to sell off 100 percent -- minus one golden share -- of its five regional gas suppliers. It will also sell the non-nuclear electricity generation and power supply companies held by MVM, the state electricity monopoly. MVM will retain full control of the Paks nuclear plant and the national grid, but will sell off 50 percent, minus one vote, of its national distribution center.

In addition it aims to sell of 30 percent of MOL, the oil and gas monopoly, to strategic investors, and to reduce state ownership to 25 percent plus one vote.

The government's decision marks a significant change from the previous conservative administration, which aimed to keep a majority stake in most companies in the sector. The government hopes the sales will help it raise between \$1.5 billion and \$2 billion over the next year.

* * *

Says **John Peet**:

Katherine and I are piloting a Sustainable Christchurch program in our community after Christmas, with the aim of getting the process out of the hands of the local government bureaucrats and into the community. **Alan AtKisson** and others are valuable exemplars!

Since returning from the ISEE meeting in Costa Rica, I've been in the thick of exam grading, etc., so haven't had as much time to think about the meeting as I'd like. But my main reaction was very positive. There were so many valuable contributions from people outside the academic mainstream, who weren't too worried about academic purity but concentrated on their own real issues. The problems they described always seemed to me to come back to the perpetual issue of power, in all its forms, and the meaning of democracy. Who benefits? Who loses? Who decides? and so on. So what's news?

I'm now waiting for the dozens of reprints I asked to have from conference contributors, after having missed so many interesting sessions, because of attending other interesting sessions. It worries me that many of those from Southern NGOs don't have adequate funding for photocopying and postage, whereas those of us from Northern educational institutions have no problems. I don't know what to do about it, but it concerns me. Maybe ISEE conference organizers in the future could help somehow?

Right now we have **Jane King's** daughter Sophie and her friend Andrew touring the South Island, with our place as home base. It's nice to maintain contact with friends through their offspring!

* * *

Email from **Carlos Quesada** at the University of Costa Rica:

Yesterday I took **Joe Alcamo** to the airport after a two-day Latin American workshop on IMAGE 2.0 (an integrated global climate change model) held in our University and organized jointly with RIVM, the Regional Commission on Hydraulic Resources, and my center.

The meeting was very successful, despite the fact that we had just about a month to organize it. Now we have the model installed in two different locations in our University to be used for teaching, research, and policy, especially in the joint implementation of the climate convention.

This was one more link in the long chain of Balaton partnerships, and another important environmental step forward for Costa Rica. Besides the Netherlands, we are the third country to have this model, along with an institute in Germany and the EPA in the U.S.

Working together in this new venture, Joe remembered the idea I presented at Balaton about making a publication of a selection of papers of the best presentations over the past 15 years, to celebrate our 15th anniversary. He felt it would be something to consider seriously. I also think it would be great, even if it were just for our own knowledge and for our donors, to make a list

of all the different environmental initiatives and outcomes born or strengthened from interactions among Balaton members.

The results from our linkages have been so amazing that I doubt if there is another informal network that has been so successful and has operated for so long in so many countries with so little money.

Now that we have email, I think we could make this publication, if we decide to do so.
(ANYONE WHO AGREES AND HAS PRACTICAL SUGGESTIONS FOR HOW TO PROCEED, PLEASE CONTACT CARLOS AT)

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An **ALERT** from **Aromar Revi**:

ALERT ON POWERBOOK 100, 140, 145, 170 MALFUNCTION

My Powerbook 145 died a sudden death at **Joan Davis's** house in Zurich, while hooked onto the Swiss powergrid. I always had the intuition that the Indian voltage fluctuations (>50 V) might kill it, but that didn't happen. The problem is with Apple's lousy design of the voltage regulation system.

The older Powerbooks have no fuse mounted on the auto-voltage transformers or the power supply section of their motherboards. In fact, unlike larger machines, the powerboard is integrated onto the motherboard which means that if the power supply surges or the power adapter shorts (as in my case) it blows the motherboard, which is unfortunately worth a small sum of \$ 400.

The first sign of this is a low or no battery charging message from the OS. This is an indication that the main bus "fuse" has blown and it is a matter of time before the motherboard crashes. The shorting of the adapter comes at a most unexpected location: the O-ring insulator between the + and - ve terminals of the standard input connector to the Powerbook.

The mistake that many of us make is to plug this into the machine every time we set it up afresh. This causes wear of the ring and sometimes a spark or short across the input terminal, blowing the motherboard. Therefore, (according to the dealer who fixed my machine) keep the adapter plugged into the machine. Plug the adapter socket into the main power every time you change location.

The unfortunate thing seems to be not only with Apple design but also its business practice -- I always thought this was the people-friendly company. Apple evidently knows about this problem, and instead of warning customers of it, has asked dealers to provide an additional fuse on the motherboard on the Powerbook 100 at a price of \$50. This is because large numbers of Powerbooks were coming in damaged. Both Dennis and Joan had similar motherboard crashes -- both were lucky enough to be in warranty -- mine expired in August. In addition, the \$400

price on the motherboard has built into it a hidden subsidy of \$ 100, which you have to pay if you want to keep the old fused board -- because Apple sends them to Ireland to be reconditioned and replaced in new machines.

Moral of the story: watch out for your power adapter; always keep them plugged into the machine; check the adapter end for wear; use a spikebuster before the adapter if possible; get a fuse fitted on your motherboard at additional cost, or sue Apple!

Aromar Revi TARU@UNV.ERNET.IN

* * *

Anupam Saraph has returned to Pune, triumphant with his new PhD from the University of Groningen, and ready to start the rest of his life:

My activities will gather pace gradually. I have lined up some brochures for workshops and training programs for the management and development audiences. These one-day introductory courses should help many people to participate, and should also lead to longer and deeper relationships with the participating institutions. The courses are aimed at creating a reactivity to the new ideas. Especially in the dominant actors (called senior management!).

A colleague of mine has chalked out a route plan for a "Balaton Maharashtra," proposed for May/June 95. He is hoping to raise some funds to cover part of the cost.

* * *

Chirapol Sintunawa has just finished drafting a report to the Thai government for a national environmental policy. His environmental NGO called ADEQ has been given a four-story building in Bangkok, where 9 full-time people now work, with 12 more about to be added. One of their projects is to develop, with \$1 million in Thai government funding, an energy information and demonstration center in downtown Bangkok, with frequently changing exhibits and a shop where people can buy efficient light bulbs and shower heads. ADEQ is also drafting a new law for Thailand on packaging and bottles. And it has just completed organizing a national conference bringing together 150 Thai NGOs to talk about public participation in resource management.

Another donor has offered ADEQ a 25-acre plot for its own energy-efficient building. (Chirapol says that he generates offers like these by "thinking loudly.") An architect is designing the building. Chirapol says he will have to think loudly again to find the money to build it.

* * *

John Todd sends a Christmas letter full of exciting news:

We were recipients of major U.S. Environmental Protection Agency support to demonstrate ecological concepts for water purification and healing damaged aquatic ecosystems. In Frederick, Maryland, we have built a showcase, Washington area, Senator-friendly Living Machine for sewage treatment. This 40,000-gallon-per-day facility uses one-third the area per gallon and one-half the electrical energy of our facility in Providence, Rhode Island, which has been operating successfully now for five years.

An even newer facility has just pulled up at the Oceanside sewage treatment plant in San Francisco. This one is a Living Machine on wheels, a large tractor-trailer complete with ecological fluidized beds, an aquaculture facility, and an onboard laboratory. It will upgrade and purify 50,000 gallons per day of secondary quality sewage to high quality advanced wastewater. The treated water will be recycled by the city of San Francisco. Byproducts will include bait fish and striped bass for lake restocking programs.

Our third EPA-sponsored project is the restoration of Flax Pond at Harwich on Cape Cod. It began in the fall of 1992 when we installed a floating Living Machine, which has since been purifying 100,000 gallons of pond water daily. Back in 1991 the pond was almost devoid of animal life because the sediments were toxic. By 1994 benthic life had been re-established, and biological diversity had increased more than threefold. The equivalent of 8,000 dump truck loads of bottom sediments have been digested, and beaches, long hidden under mucky sediments, have begun to reappear. This project has saved the town of Harwich over half a million dollars in sediment dredging and removal fees.

We designed the fourth Living Machine for the Audubon Society at Corkscrew Swamp near Naples, Florida. It is a "zero discharge" facility, recycling wastewater through the toilets of the visitors' center, rather than discharging it into the swamp.

Looking ahead, we intend to convert the Living Machine in Providence from a sewage treatment plant to a facility that demonstrates state-of-the-art ecological technologies for urban food production. We want to employ inner city youth in food culturing programs. The facility will be part training center, part commercial food production, and part community agri-enterprise.

* * *

Diana Wright announces the birth of Eliza Wright Hoffman on October 19, 1994. At birth Eliza weighed 6 lbs 5 oz and was 19 inches long. She has dark curly hair like her father and is, in the opinion of unbiased members of the Dartmouth Environmental Studies Program, one of the most beautiful babies ever born. She comes in to work with her mother, learning by osmosis, perhaps, how to work Word6 and Aldus Freehand and the intricacies of the Dartmouth library. At night she gives her parents lessons in advanced sleep deprivation.

Diana says: Deciding to have a baby is the most self-centered thing I have ever done. After all, the world would be better off with fewer humans. And yet ... I have more of a real stake in the future we are now creating. Everything I do, from designing home and land improvements to deciding how to use my work time, is done with the thought of how it will affect Eliza and her grandchildren. I've never felt so connected to the future.

Day to day, Steve and I are having a great time with Eliza. She is my constant companion. When she was a month old, she and I came back to work part-time. Arrangements evolve, trying to keep pace with her rapid development. These days, I have my computer on the floor, so I can keep her company as she wiggles around. In the library she travels in a sling, gazing out at the stacks of books. At home, when Steve and I are doing outdoor carpentry or hiking, Eliza rides under my jacket in a front carrier. She benefits from the heat I generate, and I don't have to worry so much about her getting frostbite.

So... sleep is in short supply, patience is a more bountiful resource than I ever realized, and we are all very happy.

STORIES, QUOTES, JOKES

Be patient toward all that is unsolved in your heart and try to love the questions themselves.... Do not seek the answers which cannot be given you because you would not be able to live them and the point is to live everything. Live the questions now. Perhaps you will then gradually, without noticing it, live along some distant day into the answer.

-- Rainer Maria Rilke, *Letters to a Young Poet*

A man can do something for peace without having to jump into politics. Each man has inside himself a basic decency and goodness. If he listens to it and acts on it, he is giving a great deal of what it is the world needs most. It is not complicated, but it takes courage ... for a man to listen to his own goodness and act on it. Do we dare to be ourselves? This is the only question that counts.

-- Pablo Casals

Handbook for Economic Conferences

(The following by George J. Stigler of the University of Chicago is excerpted from an article in the *Journal of Political Economy*, vol. 85, no. 2, 1977. The fact that it still is funny 17 years later says a lot about the progress of the field of economics.)

There is an ancient joke about two traveling salesmen in the age of the train. The younger one was being initiated into the social life of the traveler by the older one. They proceeded to the smoking car, where a number of salesmen were congregated. One said,

“87,” and a wave of laughter went through the group. The older salesman explained to the younger that these men traveled together so often, repeating the same jokes, that they had numbered the jokes to save time.

The younger salesman wished to participate in the event, so he shyly ventured to say “36.” No one laughed. The older salesman took him aside and told him, “that one’s not funny.” (Another version of the story says that the joke was funny, but the young salesman didn’t tell it right.)

This parable has often occurred to me as I attend conferences of economists. The following is a preliminary list of numbered comments, which will cover a large share of the comments elicited in most conferences. From now on, we can save time by just shouting out the numbers instead of belaboring the points.

1. The paper is a splendid review of the literature; unfortunately it does not break new ground.
2. The paper admirably solves the problem it sets for itself; unfortunately it is the wrong problem.
3. I can be very sympathetic with the author; ten years ago I was thinking along the same lines.
4. It is always good to have a nonspecialist looking at our problem. There is always a chance of a fresh viewpoint, though usually, as in this case, that doesn’t happen.
5. Adam Smith said that.
6. There is an identification problem that is not dealt with in the paper.
7. Theorizing is not fruitful in this case; we need case studies.
8. Case studies are interesting, but no real progress can be made without a theory.
9. Have you tried two-stage least squares?
10. You didn’t use probit analysis?
11. I proved the main result in a paper published years ago.
12. The market cannot, of course, deal satisfactorily with that externality.
13. But what if transaction costs are not zero?
14. Of course the demand function is highly inelastic.
15. Of course the supply function is quite inelastic.
16. The author uses a sledgehammer to crack a peanut.
17. What happens when you extend the analysis to a later (or earlier) period?
18. The motivation of the agents in this theory is so narrowly egoistic that it cannot possibly explain the behavior of real people.
19. The flabby economic actor in this impressionistic model should be replaced by the utility-maximizing individual.
20. It is unfortunate that the wrong choice was made between M1 and M2.
21. The speaker apparently believes that there is still one free lunch.
22. The problem cannot be dealt with by partial equilibrium methods; it requires a general equilibrium formulation.
23. The conclusion rests on the assumption of fixed tastes, but of course tastes have surely changed.
24. The trouble with the present situation is that property rights have not been fully assigned.