

Welcome to GPI News #5: June, 2001

Dear Friend of GPI,

Thank you for your membership, and for your subscription to *GPI News*. Your contribution directly supports the GPI research and the continuing development of the Genuine Progress Index. As a non-profit group, we depend on this support.

Welcome to our fifth newsletter. Our newsletters are designed to keep members posted on new research results, the latest GPI activities, and policy applications of the GPI.

As a member, you are entitled to a 25% discount on all GPI publications. When you order publications, simply state on your order that you are a member, and subtract the 25% discount from your cheque or credit card total. Your transaction is then recorded in our special members' database. You can order publications directly from the GPI web site at www.gpiatlantic.org.

We are delighted to send this newsletter your way, and we welcome your suggestions and opinions.

Thank you for your support.

Ronald Colman, Ph.D, Director, GPI Atlantic

IN THIS ISSUE:

•	Recent and Upcoming GPI Activities	2
	Newfoundland Government Uses GPI Voluntary Work Results	
	Nova Scotia Farmers Can't Afford to Farm.	
•	Down on the Farm Before It's Gone, by Ralph Surette	10
	Ecological Footprints, by Silver Donald Cameron	
	Trimming our Footprint, by Silver Donald Cameron	
•	Special Bonus Offer for GPI Gift Subscriptions – Free Ecological Footprint report	17
	Development of Environmental Indicators a Priority, says Federal Finance Minister	
•	Full Text of Paul Martin's speech on need for environmental indicators, May 25,	19
•	Paul Martin Comments on Reality Check	24
	Well Being Gets Reality Check, by David Swick	
	Closing Note to Friends of GPI	

GPI NEWS Vol. 1, No. 5, June 2001

RECENT AND UPCOMING GPI ACTIVITIES

Farm Viability Study Released

On April 24, at a press conference in the tiny village of Sheffield Mills, Kings County, in the heart of Nova Scotia farm country, GPI Atlantic released the first component of its *GPI Soils and Agriculture Accounts* on "Farm Viability and Economic Capacity in Nova Scotia." Report author, Jennifer Scott, presented the results to an audience of farmers, news correspondents and TV journalists. Highlights are featured in this issue of *GPI News*.

All three major television networks (CBC, ATV and Global) were present and reported the results prominently. The report made front-page news in both the Halifax *Chronicle-Herald* and the *Kentville Advertiser*, and Jennifer Scott was interviewed on CBC's *Maritime Noon* and on Kings County radio. Herald columnist Ralph Surette wrote an excellent column on the report (featured in this issue of *GPI News*) and *Rural Delivery* is planning a feature report for its next issue.

GPI Atlantic was informed that the 71-page report was tabled the following week in the Nova Scotia legislature. The report was also the first release of data for the Kings County Genuine Progress Index. It was completed with funding assistance from the National Round Table on the Environment and the Economy, the NS Voluntary Planning Agency and through member contributions.

Prior to the report release, results were presented to the Nova Scotia Federation of Agriculture Council of Leaders meeting in Truro, and the full report has now been made available to the NSFA leaders. Farmers provided invaluable feedback and input, which was incorporated into the final report.

GPI Presented to Cape Breton Mayor, Councillors and Staff

The Mayor of Cape Breton Regional Municipality, John Morgan, CBRM councillors, the Police Chief, Edgar McLeod, and CBRM staff members gathered in Council Chambers on April 27 for a presentation and discussion on the Genuine Progress Index. Particular interested was expressed in the Glace Bay GPI project, and in the potential for the GPI to function as a community development tool for the industrial Cape Breton region. The same day the GPI Voluntary Work results were featured at length on CBC-Radio in Sydney, and a keynote presentation was made to the annual Volunteer Awards dinner at the University College of Cape Breton.



GPI Atlantic Annual General Meeting Approves New Board

A 12-person board of directors was approved by members at GPI Atlantic's annual general meeting held on May 3 at the World Trade and Convention Centre in Halifax. Board members are:

- Martin Janowitz, (chair), National Operations Manager, Jacques-Whitford Environmental Consultants;
- Dr. Martha Macdonald (vice-chair), Economics Department, St. Mary's University;
- John Leon (secretary and treasurer), communications consultant;
- Meinhard Doelle, Executive Director, Clean Nova Scotia Foundation;
- Gilles Deveau, barrister and solicitor;
- Dr. Andrew Harvey, Economics Department, St. Mary's University;
- Steven Peters, chartered accountant;
- Hans Messinger, Director, Industry Measures and Analysis, Statistics Canada;
- James Gimian, publisher;
- Paulette Sadoway, economist;
- John Odenthal; economist;
- Linda Pannozzo, executive director, Nova Scotia Public Interest Research Group.

The annual general meeting also approved new bylaws, considered the treasurer's report and GPI Atlantic's pending application for charitable status, discussed future directions for GPI Atlantic, and ended with celebratory wine, hors d'oeuvres, and socializing.

New GPI Staff and Office

- Ginger Brooks, who did outstanding work as GPI administrator, has had to leave us to return to her home in Tatamagouche, and then to go to graduate school.
- Marie Palmer, formerly Executive Director of the Cultural Human Resources Council in Ottawa, and of the Nova Scotia Designer Crafts Council, joins GPI Atlantic as Director of Operations and Organizational Development, with specific responsibility to manage the Community GPI projects in Glace Bay and Kings County.
- Cliff Esler of Boutilier's Point is now both our accomplished webmaster, and has taken over many administrative duties from Ginger Brooks.
- Cheryl Armstrong of Black Point is our new GPI bookkeeper.

Starting June 19, GPI Atlantic will open its first "store-front" office in the Clean Nova Scotia building at 126 Portland Street, Dartmouth. Until now, we have operated out of home and virtual offices. The GPI office phone is 902-489-7007.

Wolfville Press Conference Launches Kings County GPI Survey

The Kings County GPI survey was launched at a press conference at the Old Orchard Inn in Wolfville April 18, and was well reported in the *Chronicle-Herald*, the *Kentville Advertiser*, and on Kings County radio. Kings GPI project manager, Cindy Trudel, with



an excellent staff of five district coordinators, an administrator, and 15 survey field staff, is currently administering the Community GPI survey to 2,000 Kings County residents.

Richard Hennigar, a Kings County apple farmer, heads up a citizens' steering committee of nine, -- the Kings County Citizens for Community Wellbeing. So far the survey response rate is excellent, and the projected completion date for the data collection is July 16. Survey administration also continues in Glace Bay, where 800 of the 2,000 surveys are already complete, and a staff of ten is in the field to finish the job.

Working closely with database designers Michael Pennock, research director at Dalhousie University's Population Health Research Unit, and Dr. Andrew Harvey, director of the Time Use Research Program at St. Mary's University, Glace Bay GPI staff have now begun data entry for the first ever Community Genuine Progress Index. First results are expected in the fall of this year.

Federal Justice Minister Announces Support for Community GPI

Federal Justice Minister, Anne MacLellan, at a news conference in Halifax, officially announced the support of the National Crime Prevention Centre's Business Action Program for the Community Genuine Progress Index projects in Glace Bay and Kings County. NS Community Services Minister Peter Christie and GPI Director, Ronald Colman, also made presentations at this news conference.

Resolution 1366 Read in NS House of Assembly

The following resolution was read in the NS House of Assembly on Monday May 28, 2001 by MLA Mark Parent:

"Whereas Kings County is one of two locations in the Province of Nova Scotia which has been chosen to be surveyed by GPI Atlantic, a non-profit research group dedicated to building a new measure of the community well-being known as the Genuine Progress Index (GPI); and

Whereas the GPI, as opposed to other economic measurements such as the GDP, is better able to measure such values as: work satisfaction, health, clean drinking water, good air quality, secure and peaceful homes, and safe and nutritious foods;

Whereas Kings County Citizens for Community Well Being has undertaken the task of surveying Kings County residents for this pilot project;

Therefore be it resolved that the members of the Legislature commend the members of the Kings County Citizens for Community Well Being for their important work, and Kings County citizens for the willingness to take part in this worthwhile survey."



Silver Donald Cameron reports on the GPI Ecological Footprint

The May 27 and June 3 issues of the *Sunday Herald* featured outstanding articles by columnist Silver Donald Cameron the GPI Ecological Footprint report. They are reproduced in this issue of *GPI News*.

June Calendar In Brief:

- May 22: Meeting of Kings County GPI survey staff, Berwick.
- May 29: GPI Atlantic presents the Genuine Progress Index to the annual general meeting of the Nova Scotia Voluntary Planning Agency.
- May 31-June 1: As an elected member of the Maritime Regional Committee of the Forest Stewardship Council, GPI Atlantic participates in a joint meeting of the MRC and the FSC Canada board in Dartmouth.
- **June 4:** Interviews with *Chatelaine* magazine on women's work hours and stress, and with *Atlantic Progress* magazine on the Genuine Progress Index as a whole.
- **June 5:** GPI Atlantic Board of Directors meeting, World Trade and Convention Centre, 7th floor boardroom, 4pm-6pm. Main agenda items: approval of financial statement and 2001 budget.
- **June 6-8:** GPI Atlantic participates in a three-day intensive Statistics Canada training session on Survey Methods, taught by Hugh Gough of the agency's Social Survey Methods Division, Ottawa.
- **June 9:** Meeting of the board of directors of NS Citizens for Community Development Society, Sobey building, St. Mary's University. The NSCCDS is GPI Atlantic's principal project partner in the Kings County GPI.
- **June 13-14:** Sydney and Glace Bay: Meetings with UCCB faculty, Glace Bay GPI project staff, and Glace Bay HRDC director.
- **June 19:** GPI staff organizational meeting.
- **June 27:** GPI Atlantic presentation on natural resource accounts and upcoming forest report to NS Department of Natural Resources strategic planning session, including deputy minister, executive director, division directors, and policy and planning staff, Dartmouth, 12.30pm.
- **June 29:** GPI Atlantic participates in meeting of the Environment and Sustainable Development Indicators Steering Committee of the National Round Table on the Environment and the Economy, Ottawa.

Upcoming Report Releases:

- **June 4:** Coinciding with the 20th anniversary of the first diagnosis of AIDS, GPI Atlantic publicly releases its report on *The Cost of HIV/AIDS in Canada*. Advance results were reported to GPI members in the last issue of *GPI News*. Results were reported in the June 5 Halifax *Chronicle-Herald*, page 4. Both the June 4 press release and the full report are available on the GPI web site at www.gpiatlantic.org
- The GPI Greenhouse Gas Accounts and The GPI Income Distribution report are undergoing final revisions. Results will be released in the coming weeks.

Newfoundland Government Uses GPI Results

The Government of Newfoundland and Labrador has expressed great interest in using GPI measurements and results to measure genuine progress towards the goals and objectives of its Strategic Social Plan. To this end, GPI Atlantic has had four sets of meetings so far this year (most recently on May 15 in St. Johns) with Alton Hollett, Director of Newfoundland Statistics, Doug May, Professor of Economics at Memorial University, and other staff members and aides.

This is a very exciting moment for GPI Atlantic. Needless to say, our goal is not to have our results sit on an academic shelf, but to have these measures used in a practical way by governments to guide policy and to focus public attention on vital but hidden aspects of our wellbeing. This is the first time a government is taking ownership of GPI results, and releasing them under its own auspices.

GPI Atlantic has already prepared briefs for the Newfoundland government on the value of voluntary work in that province. And GPI researcher Colin Dodds recently completed an extensive brief on crime rates in the province. Upcoming GPI reports for Newfoundland will focus on health issues, including the costs of tobacco and the costs of obesity, using results of a just completed health survey in that province.

On the environmental side, particular interest has been expressed in the development of the GPI fisheries accounts, which will be completed in the coming months. In short, we are delighted with this new cooperation. Newfoundland and Labrador is the first government actually to use GPI results officially, and seems set to be the leader in piloting the new measures in practice.

Minister Marks Volunteer Week by Citing GPI Results in Legislature

On April 11, Gerald Smith, Newfoundland and Labrador Minister for Human Resources and Employment, and responsible for the province's Strategic Social Plan, made a statement in the Legislature on the value of voluntary work. The statement used materials specially prepared for the Government of Newfoundland and Labrador by GPI Atlantic:

"Mr. Speaker, I rise today to recognize a very important celebration which will take place throughout Canada during the week of April 22 to 28, 2001. I am referring, of course, to National Volunteer Week which recognizes the many people who, by volunteering in their communities, make our lives richer and more secure. I also want to recognize that this year, 2001, has been designated by the United Nations as International Year of the Volunteer, to recognize globally the immense importance of volunteers.

Mr. Speaker, the Government of Newfoundland and Labrador recognizes the important role volunteers play in our social end economic growth. In our province, volunteers



contribute nearly 80 million hours a year in formal and informal voluntary work time-helping people who are sick, elderly or disabled; providing first aid and counseling; helping with Brownies, Big Brothers/Big Sisters, the Children's Wish Foundation and literacy programs; coaching sports; fighting fires, caring for the environment; organizing church picnics; and helping make their communities better places to live in countless other ways.

Mr. Speaker, volunteer work in this province has been valued at \$1.1 billion a year. That's the equivalent of about 12 percent of our provincial Gross Domestic Product. However, even though voluntary work contributes directly to our well-being as citizens and makes our communities strong, voluntary work is invisible in the economic growth statistics used to measure our progress and social well-being.

In Canada, Mr. Speaker, residents of Newfoundland and Labrador are the second largest per capita contributors of formal and informal volunteer hours. Newfoundlanders and Labradorians 15 years of age and older contribute an average of three and one-quarter hours per week in voluntary work time, well above the Canadian average of approximately two and a half hours.

In Newfoundland and Labrador, Mr. Speaker, our commitment to the Strategic Social Plan requires that the health of the voluntary sector and of community service in general be given top priority. Our volunteers are a precious resource, and their work is essential to our well-being as a people and as a province....

Mr. Speaker, as Minister responsible for the Strategic Social Plan, I am pleased to have this opportunity to acknowledge and pay tribute to the contributions of volunteers and the voluntary sector that form such an important part of the social and economic fabric of our province. The Strategic Social Plan, itself, grew out of extensive consultations with the people of Newfoundland and Labrador. Many of the people consulted were volunteers, as are many of the people associated with the regional steering committees, and it is their vision for their own future and that of the province that the Plan embodies.

That vision, Mr. Speaker, is of "a healthy, educated, distinctive, self-reliant and prosperous people living in vibrant, supportive communities within sustainable regions." Mr. Speaker, there is no single factor that makes a greater contribution to "vibrant, supportive communities" than the selfless work of volunteers.

National Volunteer Week is an opportunity for all of us to acknowledge publicly the exceptional work of volunteers in Newfoundland and Labrador. As a volunteer, the job is not always easy, but I do know from personal experience how rewarding it can be....

On behalf of the Government of Newfoundland and Labrador, thank you for your untiring service to make our province a better place in which to live. We applaud your invaluable contributions to all of our lives. Thank you, Mr. Speaker."



NOVA SCOTIA FARMERS CAN'T AFFORD TO FARM

Low Farmgate Food Prices Threaten Farm Viability

At a news conference in Sheffield Mills on April 24, GPI Atlantic released the first component of the *GPI Soils and Agriculture Accounts*, for which GPI researcher Jennifer Scott has been collecting data since 1998. Future reports to be released in the coming months, in which Jennifer will be assisted by researcher Julia Cooper, include assessments of soil quality, pesticide use, nutrient use, livestock yield, biodiversity, employment, community resilience, and trade in farm products. Here are some results from the 1st report:

Since 1971:

- Farm Net Income Declined by 46%
- Debt to Income Ratio Tripled from 300% to more than 900%
- Farm Debt Now Exceeds Farm Receipts for the First Time
- Debt per Farm has More than Doubled
- Expense to Income Ratio has Gone Up from 83% to more than 90%
- Return on Investment is Down
- Dependency on Government has more than Doubled

It's always been hard to make a living farming, but in the last few years it's become much harder. Nova Scotia farmers are spending more to produce food and getting less for their products. They are going deeper into debt and having more trouble making payments on their debt. In many cases farmers are no longer breaking even, are working other jobs to keep their farms, and may be forced to sell their land. Put simply, many Nova Scotia farmers can no longer afford to farm.

The troubling results, never before compiled and publicly presented, are part of a 71-page report on *Farm Viability in Nova Scotia* authored by GPI researcher Jennifer Scott. If current trends continue, the report warns, major parts of the province's agriculture industry will disappear.

From 1971 to 1999, the ratio of total farm debt to net farm income in Nova Scotia tripled, jumping from 300% in the early 1970s to more than 900% today. For the first time in recorded history, total farm debt in the province actually exceeds total farm cash receipts. It is increasingly difficult for farmers to make payments on debt.

Net farm income has declined by 46% since 1971, *despite* an increase in farm output and total farm cash receipts, the conventional measures of farm economic health. That's because farmers are paying nearly 40% more in real terms for farm inputs like feed, labour and fertilizer, while prices paid for farm products have hardly changed. As a result, farmers' expense to income ratio rose from an average of 83% in the 1970s to



more than 90% in the 1990s. Hog farmers reported expense ratios of more than 95%, and apple and beef farmers were actually losing money.

Outdated accounting systems like the Gross Domestic Product (GDP) and economic growth measures are misleading and send the wrong messages about farm health because they ignore costs and count all spending as economic gain. The new GPI report raises the question: "What's the use of producing *more*, if farmers can't make a living doing it?" The Genuine Progress Index can more accurately assess our true economic state because it includes costs and counts *net* benefits rather than gross income and spending."

Low farmgate food prices have made farmers more dependent on government payments for survival at the very time that subsidies are declining. Since 1971, total net farm income *before* government payments declined by nearly 60% from an average of about \$60 million to \$25 million in constant 1997 dollars. Direct payments to farmers also declined 35% from \$17 million in the early 1980s to \$11 million in the late 1990s.

Because farm market income has declined faster than the cuts in government payments, the dependency ratio (direct government payments as a proportion of total net farm income) has more than doubled in the last 28 years. This has made farmers more vulnerable and undermined their independence, says the GPI report.

"Every major indicator of farm viability is in decline," says report author Jennifer Scott. "One way to keep a viable agriculture industry in Nova Scotia is to pay farmers more for the food they produce."

Jennifer found some exceptions to the downward trend. "Supply-managed industries like dairy and poultry that can control prices have more income security and a higher return on investment. Organic farmers who market their goods directly to consumers can also get a better price for their products. Some farmers are also looking for ways to cooperate so they can gain market stability."

"When returns on investment drop below other investment opportunities like pension funds and mutual funds," says Jennifer, "there is no incentive to invest in unprofitable farming operations." As pension funds brought in an average 10.2% return on investment between 1995 and 1999, Scott estimates that a return of less than 5% will discourage farming investments and make them uncompetitive.

"Adequate returns are particularly important in farming because of high risks due to unpredictable fluctuations in weather, pest incidence, crop and livestock diseases, trade patterns and prices. Only dairy and poultry currently show an adequate return in Nova Scotia."

Jennifer notes that farm economic viability is the "bottom line" for all other indicators of farm health. "If farmers don't get an adequate return on investment, they can't devote resources to producing high quality food and investing in soil quality," she says. "They



are forced to cut corners on safety and land stewardship. Sadly, farming is no longer economically viable in many sectors of the industry, and farming communities are suffering."

GPI Atlantic recommends that indicators of farm economic viability be tracked annually as indicators of "genuine progress" for Nova Scotia agriculture. Now that we have these results for the first time, we can't ignore reality any more. We need to assess whether we are making progress turning these trends around to keep agriculture alive in Nova Scotia and to ensure food security for future generations.

The GPI report has significance beyond Nova Scotia. Instead of viewing the country's farm crisis solely through the lens of farmer complaints and protests, as is the current norm, GPI Atlantic has now produced a set of objective and measurable indicators that can be used throughout the country to assess farm economic health.

This is also the first data release in the Kings County Genuine Progress Index, where we are working with the community to construct an index of wellbeing at the county level. The GPI research for this report included in-depth interviews with Kings County farmers.

The full GPI report on Farm Viability in Nova Scotia and an executive summary of results are available through the GPI web site at www.gpiatlantic.org

Summary of GPI Indicators on Farming Viability, Viability Threshold Estimates, and Results for Nova Scotia: 1971-1999

Indicator	Level	Trends and Results	Viability Threshold	Formula
1. Total farm cash	Province	Increase of 12% over	Not a GPI	sum of all farm cash
receipts		28 years	indicator	receipts
2. Net farm income	Province	Decline of 46% over	No	total farm cash receipts
		28 years	threshold	– total farm operating
			set	expenses
3. Expense to	Province	Increase from 83% to	Less than	(total farm operating
income ratio (%)	and farm	90% over 28 years	80%	expense and
				depreciation / total farm
				cash receipts) * 100
4. Return on	Farm	Currently ranges	More than	[(net income - value of
investment (%)		from 9.7% to less	5%	unpaid labour) / (total
		than zero for		assets - total liabilities)]
		surveyed farms		* 100
5. Debt to net	Province	Increase from 300 to	Less than	(total farm debt / total
income ratio (%)	and farm	900% over 28 years	600%	net income) * 100
6. Direct payments	Province	Subsidies down but	Less than	Dependency ratio =
to producers and		dependency ratio	20%	(total direct payments
dependency ratio(%)		increase from 15% to		by government / total
		35% over 28 years.		net farm income) * 100

The following column by Ralph Surette, on the GPI Farm Viability report,

appeared in the May 5, 2001 edition of *The Chronicle-Herald*, Halifax.

DOWN ON THE FARM, BEFORE IT'S GONE

By Ralph Surette

NOTHING EVOKES the troublesome side of the new global order more than trends in agriculture. Farming is basic. Apart from being the source of the food supply, until a couple of generations ago it was the main underpinning of our then-rural social structure, and is still a necessary ingredient for any intact society.

The gradual disappearance of farming as we know it, replaced by huge conglomerates on the one hand and a few "niche" producers on the other, raises many troubling questions. Think, for example, of the Apple Blossom Festival in a decade or two as pure nostalgia for a dead industry.

The GPI Atlantic report on farm viability in Nova Scotia released last week put a sharp point on it. Alarms have been ringing about dying farms since the 1950s, but GPI's elaborate "genuine progress" measurements for 1971-99 make a compelling case that if nothing changes "the future of Nova Scotia agriculture is clearly at risk" - with apple and beef farmers, working way under the cost of production, at greatest risk.

Although total farm receipts have risen slightly in that time, net farm income - what the farmer keeps after expenses - has declined 46 per cent.

Farmers' debt in relation to income has increased to an unsustainable 900 per cent, up from 300 per cent. And while incomes declined, government subsidies declined, too (including another hit in the last provincial budget in the form of reduced services and increased fees), but not as fast - meaning that dependency on the subsidies has grown.

The only stability and adequate income found in farming, says the report, are in the quota-managed sectors - poultry and dairy - and in some direct selling by organic farmers who cut out the middle man.

But quota management, which guarantees good prices and an income, is the nub of the issue. These farm marketing boards are themselves under assault, looked on by right-wing intellectuals as affronts to free enterprise and a devious way of gouging the consumer - never mind that food is dirt cheap and has declined some 35 per cent since the 1960s as a proportion of household expenses.



Marketing boards are like medicare - in never-never land as global and hemispheric free trade kick in harder, waiting for the trade challenge that will sink them. If global economics are completely unchained, chickens and eggs will likely end up being produced on megafarms in the southern U.S. where production is cheapest, milk on megafarms in Quebec or Ontario, pork and beef out West and so on (or apples in China - a main source of competition now for Valley juice apples) - in a dangerously tentative system dependent on chemical farming and cheap fuel for transporting the produce to distant markets.

Subsidies Skew System

Meanwhile, the kink in this "free" trade and "free" enterprise is that the U.S., through subsidies and sheer market power, skews the system its way. Along with the European Community, they force everybody else to subsidize their agriculture in a system that is definitely not "free enterprise." And these subsidies, GPI affirms, are not subsidies to farmers - they are subsidies to everybody else, including the consumer, by keeping food prices artificially low.

For farming in Nova Scotia, increasingly reduced to a last stand in Kings County, these raw economics dictate that the farmer cash in by selling his or her land for real estate. This is happening now. It's why we have to twin Highway 101 to handle all that commuter traffic from Kings County.

Meanwhile, in another angle on the same picture, everything related to food supply is being ferociously consolidated nationwide. Sobeys and Superstore own pretty well everything, and they want suppliers big enough to fill the shelves nationwide. That's not us. Besides, GPI estimates Nova Scotians spend only 2.7 per cent of their food budget on Nova Scotia-produced food.

Recently, Nova Scotia farmers asked the provincial government for tax breaks in lieu of subsidies. That might help. But given the odds, much more is needed - starting with the need for government and society as a whole to take local agriculture seriously before it disappears, and stop suspecting that farmers are just looking for handouts.

e-mail: rj.surette@ns.sympatico.ca

Copyright © 2001 The Halifax Herald Limited All Rights Reserved



The following two articles by Silver Donald Cameron, based on the *GPI Ecological Footprint* report authored by researcher Jeff Wilson, appeared in the May 27 and June 3, 2001 issues of *The Sunday Herald, Halifax*

ECOLOGICAL FOOTPRINTS

Part 1 of a pair of articles by Silver Donald Cameron, Sunday Herald, 27 May, 2001

Nova Scotians consume more than their share of the Earth's resources

HERE IS A simple way to save the Earth. Exterminate the populations of North America, Japan and Western Europe.

Probably not a plan. Hard to make it fly politically. But it's a thought that flickered through my mind as I reviewed the numbers in GPI Atlantic's recent publication. Released a few weeks ago, The Nova Scotia Ecological Footprint is the first such report for any province in Canada.



Len Wagg / Herald Photo
Coal, mined here at the Prince Mine at
Point Aconi, has left its ecological
footprint on Nova Scotia.

GPI Atlantic, you may recall, is the valiant little non-profit organization which is working to produce a Genuine Progress Index for Nova Scotia - an instrument designed to measure our real well-being, not merely our capacity to succeed at pointless or damaging economic activity. To learn more, or to order this new report, visit www.gpiatlantic.org.

The Nova Scotia Ecological Footprint is a startling document. Unlike most environmental assessments, it looks not at the impact of industry, but at consumption - the effect of eating fish or using lumber rather than the impact of the fishing or forest industries.

It starts from the fact that each of us withdraws a certain amount every year from the great Bank of Nature. Each of us requires a certain amount of land to produce our food, a certain amount of energy to run our households, a certain amount of forest to absorb the greenhouse gases we produce. The total demand I make on nature is my "ecological footprint" - the resources which I personally take from the planet. How much productive land and sea does my present lifestyle require?

Conversely, we can also calculate the amount of land and sea available to the human species, and ask, "What's my fair share?"

If you add up the total productive area of the Earth's land and sea, and divide it by the number of people on Earth, you discover that the Earth currently provides 1.8 hectares



per person. But at today's level of demand, human beings are using 2.8 hectares per person. We are not just using the planet's resources; we are using them up - fishing out the oceans, demolishing the forests, impoverishing the topsoil, loading the air and the water with pollutants.

We're withdrawing our capital from the Bank of Nature.

The great strength of footprint analysis is that it reflects the complexity of the issues, and the interplay between them - population, pollution, depletion, national and global inequity, extinctions, and all the other emerging horsemen of the new apocalypse. By measuring all consumption against the same standard - hectares of productive land and sea - it provides a detailed portrait of the problem.

For example, gas-guzzling SUVs belch out twice as much greenhouse gas as compact cars, requiring twice as much forest land to absorb their emissions. It takes seven kilos of grain to produce a kilo of beef - so the agricultural footprint of meat-eaters is much higher than that of grain-eaters.

The average Nova Scotian household requires almost one full hectare to compensate for its energy use - which is four per cent above the Canadian average - partly because so many of us live in large, old, fully-detached rural houses.

Nearly 14 per cent of Nova Scotia's total energy footprint is in our food, 88 per cent of which we import. In addition, our electricity derives largely from coal, the dirtiest of all generating fuels. That's the main reason our total ecological footprint is higher than the Canadian average.

Overall, Canada's ecological footprint is 7.7 hectares per person. Nova Scotia's is 8.1 hectares, compared to 0.6 hectares for Bangladeshis, 1.3 for Africans, 1.8 for Asians, 12.2 for Americans, and 7.2 for OECD nations generally. The world's richest people constitute 30 per cent of the Earth's population, but consume 70 per cent of its resources. That's us, friends.

Footprint analysis measures the effects of consumption wherever they occur, and shows that the First World's reckless consumption is the engine which drives the global ecological overdraft.

Every Nova Scotian stresses the planet more than 13 Bangladeshis. We're part of the richest 20 per cent of the Earth's population, which consumes 45 per cent of its meat and fish, 58 per cent of its energy, and 84 per cent of its paper.

If the populations of the First World were exterminated tomorrow, the Earth's remaining 4.8 billion people could live happily ever after, since they draw from nature only what the biosphere can sustainably produce.



Probably not a plan, as I said. Still, what should we do about North America's runaway economy, which is ripping through the Earth's resources like a power saw going through a pine board?

The novel contribution of The Nova Scotia Ecological Footprint is that it measures what we're doing, reveals the trends, and pinpoints the most effective steps we could take - right here, right now - to reduce our impact on the planet.

<u>Next week</u>, we'll look at what GPI Atlantic thinks those steps might be. Award-winning author Silver Donald Cameron lives in D'Escousse.

Copyright © 2001 The Halifax Herald Limited All Rights Reserved

TRIMMING OUR FOOTPRINT

Part 2 of a pair of articles by Silver Donald Cameron, Sunday Herald, 3 June, 2001

Here's how you can reduce your impact on Mother Earth

GPI ATLANTIC'S recent report called The Nova Scotia Ecological Footprint (www.gpiatlantic.org) shows that the average Nova Scotian uses the productive capacity of 8.1 hectares of the Earth to sustain his or her lifestyle - but our fair share is only 1.8 hectares each. If everyone on Earth consumed as we do, humanity would need four more planets to support itself.

Ecologically, we are living in deficit, and GPI Atlantic proposes that we undertake to reduce our footprint to seven hectares now. It seems a modest goal, and most of us could probably achieve it simply by changing our habit



Scott Sady / The Associated Press
First World profligacy results in Third
World poverty, according to GPI
Atlantic. Here, a woman carries
supplies on her head alongside an open
sewer in Port-au-Prince, Haiti.

us could probably achieve it simply by changing our habits. There is no one simple fix; we affect the environment in everything we do. But we have actually known many of the solutions since the oil shocks of the 1970s, though we abandoned them when the oil price fell.



We can buy intelligent, efficient vehicles and resolve once again to turn down our thermostats. We can insulate our houses, drive less, walk more.

Those actions drove our provincial footprint down from 9.7 hectares in 1979 to less than seven hectares in the early 1980s. We can also use more local products, especially food. We currently import 88 per cent of our food, the average item from 2,000 kilometres away. The energy used in producing and delivering food represents nearly 14 per cent of our total energy use.

In short, we can strive to follow the dramatic example of Phil Thompson, an energy consultant on Saltmarsh Island on the Eastern Shore, who powers his small home on one horsepower, derived entirely from renewable sources.

That's about 80 per cent less energy than even frugal North American homes, and it demonstrates what a dedicated individual can accomplish even against the grain of a wasteful consumer society.

Still, there is a limit to what we can do as individuals. A deep reduction in our footprint requires serious political and social change. We need to plan differently, tax differently, build differently, think differently.

The good news is that such changes can also improve the quality of our lives. Consider food, once again. In 1921, Nova Scotia had 47,000 farms with nearly two million hectares under cultivation, and we were largely self-sufficient in food. Today the number of farms has shrunk by 90 per cent, and the area of farmland by 80 per cent. Strong support for sustainable farming and local agriculture would re-invigorate rural life while reducing both our energy footprint and our dependence on imports. Fresh organic foods would improve our diet as well, and reduce the strain on our health-care system.

Obesity, says GPI, probably costs Nova Scotia \$120 million in health care costs every year.

Other changes may be highly controversial. We should invest heavily in public transportation, for example, subsidizing trains and buses while discouraging private vehicle use.

In practice, that might mean implementing commuter rail service down the South Shore and the Valley from Halifax rather than twinning Highways 101 and 103. Some motorists would be outraged. We could also use tax incentives and regulation to discourage suburban sprawl and foster higher-density neighbourhoods. Builders and owners of suburban monster homes would scream about that, too.

But Nova Scotians are frugal people who instinctively understand that waste is ultimately immoral - a point which the GPI report underlines strongly.



Because nature's resources are limited, over-consumption in one time or place produces poverty elsewhere. Ultimately the First World can remain rich only by compelling the Third World to remain poor, and the present generation's prosperity must inevitably result in the impoverishment - or worse - of our descendants.

Hence the First World's unholy passion for free trade uber alles, unrestricted by social and environmental constraints. Such trade arrangements permit the wealthy to pillage the resources of distant places while exporting the burdens of development.

We get the sneakers and the stereos, while Asia and South America get the pollution, the child labour, the shanty towns. The weight of our footprint crushes people in very distant places.

The most difficult change will be in our attitudes. We cherish economic growth, as measured by an increasing Gross Domestic Product, but a rising GDP actually intensifies our problems. We view consumption as a badge of success, not as a symptom of social irresponsibility. We shun physical activity, and die of preventable diseases.

But GPI points out that we have shown ourselves capable of dramatic improvements. We reduced our solid waste footprint by 50 per cent in a decade, making Nova Scotia a world leader in recycling. Bear River has implemented award-winning sewage treatment facilities. Citizen effort is restoring our salmon streams. The Western Valley Development Authority is exploring wind-powered electrical generation.

The Nova Scotia Ecological Footprint is a provocative portrayal of our very own contributions to the global crisis. What we do with the information is up to us. But we can no longer say we didn't know.

Award-winning author Silver Donald Cameron lives in D'Escousse. [See Part 1 of this series, <u>Ecological Footprints</u>.]

Copyright © 2001 The Halifax Herald Limited All Rights Reserved

SPECIAL BONUS OFFER

Give a gift to a friend that will create genuine benefit and contribute to genuine progress. To give a membership in GPI Atlantic, which includes a subscription to *GPI News* and a 25% discount on all GPI publications, please visit the GPI Atlantic web site at www.gpiatlantic.org. For a limited time



only, all new GPI Atlantic members will receive *The Nova Scotia Ecological Footprint* (100 pages; value \$35+HST) for free.

Ottawa, May 25, 2001

DEVELOPMENT OF ENVIRONMENTAL INDICATORS A PRIORITY, SAYS FINANCE MINISTER

Reprinted below is a press release and full text of a speech delivered by federal Finance Minister, Paul Martin, on Friday, May 25th to the National Round Table on the Environment and the Economy. GPI Atlantic is on the Environment and Sustainable Development Indicators Steering Committee of the National Round Table that has the mandate to come up with the national indicators to which Paul Martin refers below.

Our GPI materials are also being used in that process, and the National Round Table has provided funding assistance to GPI Atlantic to complete its renewable natural resource accounts (Forests, Soils and Agriculture, Marine Resources/Fisheries) for that purpose.

In a May 25 speech in Toronto, Finance Minister Paul Martin emphasized that new environmental indicators must be developed to promote sustainable policy decisions in the future.

Speaking at a breakfast meeting hosted by the National Round Table on the Environment and the Economy, Minister Martin expressed support for the environmental indicators initiative – a co-ordinated effort to advance the science of measuring progress towards a more environmentally sustainable economy. This initiative received funding in Budget 2000.

"Environmental indicators will provide us with the hard, quantitative data to ensure a sound basis for both environmental and economic policy in the future," said Minister Martin. "In effect, these indicators can serve as a continuous call to arms – an ongoing protection against environmental complacency."

Minister Martin praised the Round Table, Environment Canada and Statistics Canada for their work on the indicators initiative and urged business leaders and academics to be supportive as well. In particular, the Minister highlighted that environmental indicators – similar to existing gross domestic product, unemployment and consumer price index data – hold the potential to focus attention and forge consensus in favour of more environmentally sustainable policy choices.



"It is incumbent upon us to show all Canadians not only that we are meeting our bottomline financial targets, but that we are clearly focused on preserving and enhancing our natural heritage," said Minister Martin.

The environmental indicators initiative received \$9 million in funding in the 2000 budget. It was part of a \$1.4-billion package of measures aimed at promoting environmental technologies and practices over the next five years.

Full Text of Speech by the Honourable Paul Martin, Minister of Finance, to the National Round Table on the Environment and the Economy, Toronto, Ontario, 25 May, 2001

Introduction

Let me begin by saying what a pleasure it is to be here this morning.

I would like to thank all of you for making time so early in your day and, in particular, I would like to thank David McGuinty and all those at the National Round Table for organizing this breakfast gathering, and for inviting Karen Redman and myself to participate.

We should also take a moment to thank Dr. Stuart Smith for his outstanding work as chair. Under his watch, the Round Table has made major strides and successfully developed proposals that are now an integral part of government policy. For evidence of this, one need look no further than the 2000 budget and last October's budget update.

Together, these provided \$1.4 billion over five years for individual measures aimed at improving the environment. All of these initiatives attest to how effective and, indeed, how persuasive Stuart Smith can be. We owe a great deal to his experience, leadership and – above all – his vision for a stronger, healthier Canada.

Indeed, I would like to devote my remarks today to one of the initiatives arising out of the budget with which David, Stuart and the Round Table are very much identified, an initiative that, in terms of cost, is one of the most modest but, in terms of long-term impact, is poised to surely be one of the most significant. I am speaking about the environmental indicators initiative – an initiative that seeks to advance the science of measuring progress towards a more sustainable economy, a coordinated effort led by the Round Table, Environment Canada and Statistics Canada.



Before I go any further, however, I would like to pause to address a debate that has been taking place with respect to the development of the indicators.

Some have argued that the indicators initiative should reflect not only economic and environmental considerations, but also social concerns. I agree. As a long-term goal, developing a broader set of social indicators is an objective that we should certainly work toward. And there are several groups across Canada that are taking on this challenge.

But I also know how difficult it is to achieve a consensus on what those social indicators should be. My hope is that it will be easier to arrive at an agreement on the required environmental indicators. And therefore, we should not risk losing momentum at a point when there is a clear opportunity for timely action. The work being done on environmental indicators is both necessary in itself and as a model for the broader social indicators debate now underway. I regard it as a necessary first stage, and I believe we should get the first stage completed without too much deviation.

Why is it so important to have universally accepted environmental indicators? The answer is for the same reason it is so important to live in a community that offers clean air, good water, open parks and green spaces.

Protecting the Environment – A Fundamental Value

All of us owe it to ourselves and our children to give future generations air, water and habitats that are healthier and cleaner than those we inherited. Our resolve to do so, unfortunately, is too often only galvanized when we confront a North Battleford or a Walkerton. Or when we seek solutions to the growing incidence of asthma and wonder why it seems to be so much more prevalent today than ever before. In short, I regard these indicators as a continuous call to arms – an ongoing protection against environmental complacency.

But of course you all know the environmental arguments for action better than I. So let me retreat back into the confines of the Department of Finance to give you the economic arguments for environmental indicators.

Integrating Environmental Considerations Into Economic Decisions

Quite simply, I believe, as do you, that the state of our environment is inextricably linked to our country's economic performance. Indeed, the concept that environmental protection and economic growth are complementary as opposed to isolated objectives is at the very heart of the Round Table's perspective.

My own thinking in this area has been strongly influenced by the work of Dr. Amory Lovins – someone well known to this crowd, I am certain. Lovins argues that we simply must expand the definition of capital.



Everyone is familiar with produced capital – such as buildings and machinery. This is relatively easy to identify and put a value on, and its role in the economy is tangible. We are also aware of the importance of human capital – the brainpower and innovation of people. And in recent years there has been progress – albeit perhaps not as much as we would like – in valuing it and factoring it into decision making.

But what is even less well appreciated is the third kind of capital – natural capital. This includes natural resources with commercial value such as forests and fish. However, it also encompasses ecological systems such as watersheds and wetlands, as well as life-supporting ecological functions such as the carbon cycle – not the kind of things to which we are used to applying a price or any other kind of measurement.

But the fact is, understanding how ecological functions contribute to economic activity is an essential part of managing responsibly for future generations. Indeed, experience has shown that the failure to properly account for the use of natural capital results more often than not in its being depleted in ways that threaten the sustainability of future growth.

As Lovins notes, no one would run a business without accounting for capital outlays. Yet all too often we overlook these costs as they relate to natural capital, for which there are no known substitutes at any price and which are essential for human survival. Not accounting for these costs has led to waste on a huge scale.

Often the costs of depleting our ecosystems become apparent only when they begin to break down – with poor air quality or unclean water. It is pretty hard to talk about sustainability either environmentally or economically in these circumstances.

Environmental Indicators

If this is so clear, the case so compelling, the question emerges: Why hasn't there been greater progress? The answer, I would suggest to you, owes much to the difficulty of quantifying the relationship between the environment and the economy. In short, because we lack the right measuring tools, we too often fail to take full account of natural capital in the decisions and choices we make. That is why environmental indicators are so important.

This work is not simply of interest to academics and environmental activists. On the contrary. Measuring progress is about giving governments, companies – and indeed all Canadians – the information they need to ensure that the economic growth we enjoy is sustainable.

How important can indicators be? Allow me to answer by way of analogy. Consider the role played by some of our better known economic indicators.

• Gross domestic product (GDP) figures allow us to track the pace of economic growth. These figures are instrumental to governments in estimating, for example, how much revenue they will have available to them.



- Employment data give us a monthly snapshot of the number of jobs that are being created or lost a key signal of the direction of the economy and the overall well-being of individuals and families.
- Changes in consumer prices are measured every month with the power to move markets in a moment

As finance minister, I use economic indicators every day. The ability to isolate and record data and the ability to measure and track them over time is indispensable.

What is even more important is that they force decision making. They will act as a caution against inertia. That is – fundamentally – why indicators are so important.

First, they will show us if we are using our natural resources properly, if our demand for renewable resources such as timber and fish is outstripping the environment's capacity to replenish them.

Second, indicators can tell us about the health of our ecosystems. In particular, indicators of pollution and wastes, together with indicators of air and water quality, biodiversity and soil productivity, can measure the link between our activities and the sustainability of our ecosystems. This is critical to our economic activity and, even more importantly, our quality of life because ecosystems support the most fundamental aspects of our day-to-day lives. They clean our air and water and assimilate our wastes.

Third, they can tell us what our demand for resources means for future levels of economic activity and for the prosperity of our children and grandchildren.

Fourth, and most significantly, indicators allow us to track how key environmental factors are changing over time. This is important, for it is only by observing trends that one can acquire information that is truly meaningful.

In short, what these new tools will give us is the hard, quantitative data that will give us a sound basis for environmental and economic policy in the future.

There is another reason as well why indicators of any kind are so important.

Indicators receive an enormous amount of media attention, and thus play a crucial role in enabling public opinion to focus on the important areas of national debate. The starting point for mobilizing our national will has got to be solid information and broad understanding of the issues. Establishing national goals further mobilizes national will.

And to sustain those goals, you need objective indicators measuring progress or the lack thereof.

Let me give you an example of what I mean. The Government's fiscal situation is not the kind of subject that inspires people to poetic heights. However, in the 1990s, the



Government was able to marshal the forces of public opinion towards eliminating our \$42-billion annual deficit. How? We began by setting measurable, step-by-step targets for reducing the deficit – giving ourselves two years to get it down from 6 per cent of GDP to 3 per cent. This helped to solidify a broad national consensus that made necessary action possible. Having attained our interim targets and those that followed thereafter, by 1998 we were able to announce that we had eradicated the deficit from the national fiscal landscape. In fact, we were the first G-7 country to do so.

This didn't just happen by accident. Rather, it was the consequence of a national consensus, a focused and determined effort on the part of a nation to strengthen a once ailing economy and better prepare itself for today's global reality. A consensus that did not end with the cleanup of our national balance sheet, but rather began with a revolution in the structure of our economy and in the mindset of our people.

The ability to measure and account for progress using economic indicators was essential to this change in mindset. That is the kind of discipline that we must apply to our environmental challenges. Indicators will help us measure our progress in a way that engages the constituency that matters most – the public at large.

Obviously, indicators will not allow us to travel back in time and change the course of history. But they can help us to chart a better course for the future. The advent of such indicators will permit, in turn, the development of tangible new targets for progress.

Indeed, there are already signs of a growing public desire for hard data on environmental sustainability. As many in this room are well aware, there is a trend on the part of consumers and shareholders to demand that companies report on their environmental performance.

Well, government has a similar obligation. As David Anderson has said so well, it is incumbent upon us to show all Canadians not only that we are meeting our bottom-line financial targets, but that we are clearly focused on preserving and enhancing our natural heritage.

Conclusion

In closing, allow me to make a final point. For Canadians of all ages, protecting the environment is not an option – it is something that we simply must do. It is a fundamental value – beyond debate, beyond discussion.

The unequivocal fact is that the entire spectrum of environmental issues will provide challenges but, as importantly, it presents many more opportunities. Given the importance of natural resources to our country and because of the severity of our climate, leadership in this area of our economy is not a matter of choice for Canada. Quite simply, we must apply the same innovative thinking, the same spirit of enterprise, the same technological ingenuity, to protecting and enhancing our environment, as we have to



becoming world leaders in the fields of telecommunications, transportation and so many others.

We are at the early stages of one of the most significant economic transformations of our time. The information revolution was its preface, but the larger story has many more chapters to be written. I believe that Canada has the capacity to write those chapters. To lead the world. To set the pace. And to build from this revolution's promise an even greater prosperity. That is why – in the end – environmental indicators are so crucial.

A country is not a balance sheet. Citizens are not just shareholders in a giant corporation called Canada. They must also share in a sense of belonging, a sense of participation in the decisions that affect them. They need to know that we are prepared to turn conventional wisdom on its head; to try new ideas and test old assumptions.

To do so, however, we need to make sure that we are debating the real issues – that the questions we ask are keeping up with the challenges we face. In other words, that we bring to this debate the mindset of the future, not simply the perspective of the past.

That's what a set of publicly understood environmental indicators will provide. And that's why I am so glad to be here with the Round Table, because there is no better group to bring the future to the present. Thank you.

Paul Martin comments on Reality Check

Finance Minister, Paul Martin, also reviewed a prototype of the new quarterly, *Reality Check: The Canadian Review of Wellbeing*, which will be jointly published by GPI Atlantic and the Atkinson Charitable Foundation. (See next page for news report). Mr. Martin provided the following comment and encouragement:

"Thank you for the copy of **Reality Check.** I was interested to learn of the many projects underway at the national, provincial, and community levels to develop new, and potentially, more balanced measures of sustainability and well being in Canada. I would encourage you to proceed with this publication which I feel would provide a useful service to individuals, organizations, and governments all across the country."

Also, Hazel Henderson, the U.S. alternative index pioneer, and co-author of the 400-page *Calvert-Henderson Quality of Life Indicators*, has agreed to join the editorial advisory committee for *Reality Check*. Further design and formatting work will take place this summer and the first issue of *Reality Check* is expected in September of this year. GPI Atlantic members will receive it for free.

The following column by David Swick appeared in the Wednesday, May 2, 2001 issue of The Halifax Daily News (http://www.hfxnews.southam.ca/)

WELL-BEING GETS REALITY CHECK

By David Swick

GPI Atlantic, the folks giving all our heads a shake by creating a Genuine Progress Index for Nova Scotia, may soon have a new way to get its message across.

GPI Atlantic has joined forces with one of Toronto's best-known non-profits, the Atkinson Charitable Foundation, to create a prototype publication: Reality Check: The Canadian Review of Well-being.

Ron Colman of GPI Atlantic edited the first edition of Reality Check, which has been mailed to 2,000 Canadian opinion leaders: members of Parliament and legislatures, public policy experts, leaders of organizations and journalists.

Atkinson is now seeking comments for possible improvements. Reality Check's unabashed intent is to influence the way Canadians measure well-being. The conventional way uses only materialist indicators, i.e. economic growth rates. This is a wacky way to measure. Anything we spend money on counts as a good thing, including crime, accidents and sickness.

Many positives, meantime, are ignored: the time kids and parents spend together, for example, or volunteering. "Canadians are volunteering a lot less than they used to, indicating a possible loss of community strength," Colman says in the premiere issue of Reality Check.

"Because it is not counted, it is doubtful whether policy makers in Ottawa are even aware of this 8.7 per cent decline in voluntary work."

For more information, visit GPI's Web site: www.gpiatlantic.org.

Email: dswick@hfxnews.southam.ca

Copyright © 2001, The Daily News All Rights Reserved



Closing Note to Friends of GPI: You Can Support What You Value

The way we measure progress can significantly shift the policy agenda from its present purely economic focus to a broader view of well-being and quality of life that reflects our shared aspirations as human beings. If we are to shift course from some of the destructive patterns we currently embrace and to plan a better future for our children, we can begin by counting and valuing what really matters.

As a non-profit group, GPI Atlantic depends on donations and funding support. Most of the GPI research, data collection and analysis, and community development work is provided on a voluntary basis. Your financial support will enable our staff to devote more time and effort to their GPI work.

Donations to GPI Atlantic (Box 489, RR#1, Tantallon, N.S. B0J 3J0, Canada) will be gratefully acknowledged. Please share this issue of *GPI News* with your friends and associates, and encourage subscriptions and memberships (\$95 individual and non-profit, \$190 corporate and government, \$45 student, plus applicable taxes).

Members receive future issues of *GPI News*, a 25% discount on all GPI reports and publications, four issues of *Reality Check: The Canadian Review of Wellbeing* (to be published later this year), and a free copy of GPI Atlantic's *Ecological Footprint* analysis (100 pages).

Thank you for your support and your interest.

Ronald Colman, Ph.D Director, GPI Atlantic

Visit our Web Site

Please visit our web site at www.gpiatlantic.org and stay in touch with our work. The web site provides:

- free on-line articles, press releases and media clippings on the GPI work;
- a summary of current activities and presentations;
- publication abstracts and ordering information;
- an update of progress on the community GPI;
- a list of our board of directors and researchers;
- membership information.

Please note that GPI Atlantic has a new phone number: 902-489-7007, and a new office at 126 Portland Street, Dartmouth. Mailing address remains the same: Box 489, RR#1, Tantallon, NS B0J 3J0.