

Ecological Lifestyles and Preventive Medicine

For those that have been reviewing the signs posts of the health of the planet over the past few decades, problems seem to be showing up in increasing frequency. In 1962 we were told of problems by Rachel Carson's in *Silent Spring*. In 1972, Paul Ehrlich talked of the Population Bomb. In 1992, it was the Rio Convention and the International Panel on Climate Change telling us that we need to change. More recently and on Canada's east coast, it was the collapse of the cod fisheries. In the Pacific, it is the disappearance of the whales or the temperate rain forest. In the prairies, it is the Burrowing Owl's decline and disappearance in the next ten years. In the 21st century, could it be the disappearance of the tropical rainforests, the melting of the polar ice caps or the increasing news of floods, fires, droughts or the snowstorms in Florida?

With all of the signs, one could become easily paralyzed with fear and dread. What is a person to do? What can one person do to change the direction of the societal juggernaut?

Just as one looks at this one is brought to a very familiar quote from Margaret Mead which states,

“Never mind that a small group of thoughtful citizens can change the world. Indeed, it is the only thing that has.”

“There also is a growing understanding that broader determinants of health such as lifestyle factors, adequate housing, a clean environment and good nutrition have an important impact on the health of individuals and communities, and also hold tremendous potential for improving health and preventing illness.”¹

Two initiatives that may be taken to respond to the need for improving human health, preventing illness and maintaining the earth in all its glory are the following:

- 1) [ecological lifestyles auditing or planning](#)
- 2) [preventative or preventive medicine](#)

1. Ecological Lifestyle Auditing or Planning

Ecological lifestyle auditing or planning includes two parts, the first being the audit and the second is the response to that audit or the plan for action. By extension, this could move out as far as one can conceivably see such as the United Nations. No change is too small. But don't keep your changes to yourself. Tell your friends. Tell your co-workers. Write a little article for the local newspaper or magazine. The butterfly effect, as seen in a recent movie, says that even the flutter of a single butterfly on the planet changes everything. The movement of the air around the flutter travels out from ground zero to change and moves everything to some level. So your simple act of recycling one newspaper page will make the world better. Your act of walking to work will change everything.

In order to assess what needs to be changed, you must begin through an examination or audit of current practices. Part of the premise of an audit is to get a snapshot picture of a point in time in your life. So start writing down how much you spend on a variety of goods and services, where and when do you have income or revenue that you can trade for products and services. Write down over a sample week or month where and how much time you spend on various tasks like traveling to work or to the grocery store. How much time do you spend walking in the park on a warm night? How much time do you spend working for other people with less resources than yourself?

This recording process does not have to be comprehensive or complete before you begin to reflect on your actions and your place in the web of your society. It is likely that you haven't done this for a while so it

¹ Romanow, Hon. Roy. Building on Values: The Future of Health Care in Canada – Final Report, 2002, p. 128.

might be a real eye opener. Sometimes by just writing it down you will begin to realize how much time you spend in your vehicle.

Every item, action or service in your life has an ecological footprint. So what is an ecological footprint?

This phrase was developed by Dr. William Rees of the University of British Columbia in Vancouver. His definition tells us that an ecological footprint is an accounting tool that enables us to estimate the resource consumption and waste assimilation requirements of a defined human population or economy in terms of a corresponding productive land area, in other words, what amount of land would be required to provide all of the resources and assimilate all of the waste of an individual, a community or a country.²

Not everything has been converted into a footprint but many categories of food and service have been set. For example, chicken or turkey has a footprint of 616 square meters while beef has a footprint of 2,171 square meters per kilogram of meat.³ Beans, as an alternate source of protein, has a footprint of 464. Similarly the housing components of your life have footprints as well. Your electricity has a footprint.

Your transportation needs create footprints. One person in a vehicle produces 113 square meters per liter of gasoline, while a bus only needs 9 square meters. Other categories of your life are goods and services, stocks (durable goods) and waste.

When you add all of these up using some averaging, you should be able to determine what your yearly ecological footprint is. The average ecological footprint for a person on this planet is 2.3 hectares or 23,000,000 square meters. There is only 1.9 hectares per person of biologically productive space on the planet. The average American uses 9.6 hectares. Germans only use 4.7 hectares, half of the American consumer. Canada is about half way in the middle at 6.9. A very rudimentary ecological footprint can be found through a calculator in the Redefining Progress website -

<http://www.lead.org/leadnet/footprint/intro.htm> . Another separate option is to assess how earth-friendly your lifestyle is by going to the Simple Living website - <http://www.simpleliving.net/ymoyl/fom-hefay-pdf.asp?mexp=related> (This one is about 6 pages long. It comes in a pdf format. If you are considering this as a family, you will likely need to spend some part of an afternoon discussing the answers and calculating the results of your personal audit.)

A good assessment tool for community sustainability has been developed by the Global Ecovillage Network. It is being used across the globe. If you want to get a copy of this, [click here](http://www.simpleliving.net/ymoyl/fom-hefay-pdf.asp?mexp=related). <http://www.simpleliving.net/ymoyl/fom-hefay-pdf.asp?mexp=related> (It is about 41 pages long. To get some reasonable results, you will need to determine who the knowledgeable people are in your community and bring them together for a period of time. In addition, you will likely need to do some community research. so as find out other needed resources or answers as directed by the audit.)

This ecological footprint auditing can be done for any level of activity including a household, a business, a town, city or province. As identified before, each action or task can be done in a number of ways, requiring choices. There has been a push over the past decade to use recycled paper, low-flow showerheads and xeriscaping. Just with any audit, there are easy and simple ways to reduce your footprint. These are likely the best changes or actions to take first. Many of the same mantras can be used, reduce, reuse and recycle. Purchase locally made goods. Use repairable appliances. Ride the bus or walk. Paying a little more locally will likely reduce the impacts of that product or service as you can eliminate the transportation costs associated with bringing it in from another country or province.

But, in some cases, strategic changes are perhaps more drastic but could eliminate part of the problem and move you along to your goal. This is likely more appropriate after doing a full audit. Take for instance, selling your car and riding your bicycle to work. Going vegetarian and not purchasing any meat products.

² Wackernagel, Mathis and William Rees. Our Ecological Footprint: Reducing Human Impact on the Earth. New Society Publishers, Gabriola Island, B.C. 1996.

³ Merkel, Jim. Radical Simplicity. New Society Publishers, Gabriola Island, B.C. 2003.

Other results from your changes might be secondary in that it results from another decision. Eating better and exercising more might reduce the occurrences of sick days and increase productivity. One very expensive goods and service is medicine. On a per kilogram basis, medicines create 2440 square meters of impact.

With any audit of an operations, you must also look at the other side of the ledger, income. One of the best manner to assess the household is to do a “Your Money or Your Life”⁴ audit reviewing your relationship to work and money. YMOYL asks you to keep track of every penny you spend and then figure your monthly totals for food, housing, transportation, etc. Additionally, you are asked to inventory every item you own and assign a monetary value to it. You are then shown how to determine how much of your time – or life energy – you spend to obtain everything you consume that month. A self-evaluation process follows, in which you ask yourself if the trade of life energy for stuff was worth it, and if the purchases were in alignment with your values. You go through nine steps:

- 1) Making Peace with the Past
- 2) Being in the Present – Tracking Your Life Energy
- 3) Where Is It All Going?
- 4) Three Questions That Will Transform Your Life
- 5) Making Life Energy Visible
- 6) Valuing Your Life Energy – Maintaining Spending
- 7) Valuing Your Life Energy – Maximizing Income
- 8) Capital and the Crossover Points
- 9) Maintaining Your Finances

The third tool that Merkel requires you to integrate into your life is Learning from Nature.⁵ For many of those that are working for environmental groups or are very active park walkers, mountain visitors or canoeists, there might not be a requirement to change but to increase your actions in this area. His sense for the use of nature is different than what most think so it might be something else to consider.

One suggestion for being in nature is that you find a “secret spot” to begin learning. You are then expected to return for an hour each day for a year. What are you to do? You can sit quietly and observe what’s going on. Try taking ten minutes to focus on each sense: sounds, sights, smells, touch and intuition. How do you feel in relation to this place? Maybe you want to let go of thoughts, plans and worries and remain present to each passing moment. You can keep a journal, write poems and stories or make detailed observations. Draw a map of 20’ by 20’ area and learn every plant and animal there.

Another suggestion is to do a slow walk preferably in bare feet. Open your peripheral vision as wide as possible. Before you shift your weight, feel the ground with your forward foot to make sure you transfer your weight there. Keep your posture very straight and knees flexible and slightly bent. Open your senses widely as you go. Stop if you can’t take it all in. Occasionally stop and look over your shoulder, then continue. Try to become invisible to the forest. This type of walking has gotten the author home many nights in the forest when his flashlight batteries went dead.

Doing in Nature includes day walks, tracking, overnights, human-powered activity and vegetable gardening. Studying Nature includes things like recording the changes in the local watershed, being part of Christmas Bird Counts or gathering information and knowledge around the relationships within your secret spot.

Some of what was included in the previous paragraphs is changing your activities in your day. Just as auditing your life, the next step is doing something with it. This may, as mentioned before, reduce or change parts of your life. Part of the YMOYL may create more significant changes such as changing your job or where you spend your holidays. Like before, you might come to the conclusion that you want to get rid of your car or move closer to a park.

⁴ Rodriguez, Joe and Vicki Robin. Your Money or Your Life, Penguin Books, Toronto. 1999.

⁵ Merkel, Jim. Radical Simplicity. New Society Publishers, Gabriola Island, B.C. 2003.

The voluntary simplicity movement, coming out of the Northwest U.S., is replacing more complex lifestyles with those that are simpler and less demanding. Those in the movement are suggesting changes in this area are likely not going to cost any more than what you are doing now and still provide you with a high quality of life. Many of the quality of life components don't cost anything. Others may be, as the commercial says, "priceless". Another statement coming from Carl Sagan which says that if you have two solutions to a problem, pick the one that is the simplest. It is likely to be more enduring and easier to maintain.

Another method of assessing our well being is to develop another index that is a better representation of our well being. One developed in Atlantic Canada is the genuine progress index (<http://www.gpiatlantic.org/>). It is to be used as an ongoing measure of human progress that doesn't purely and totally rely on how many widgets we are creating like the Gross Domestic Product or GDP attempts. There is more to life than creating widgets and consuming them.

[Audit Follow-up](#)

Part of the group that has presented you with this site is to help others and to gather ways to change our lives into ones that are more sustainable or ecological supportive for ourselves, our organization or our community. We would like to spread the information around the CEN. Ideally, what we want as part of this exercise is to have you report back to us as to how you are doing. In that feedback, we would like you to answer the following questions?

1. Did you do an audit of yourself, your organization or your community?
2. What were your results?
3. Are you going to do anything as a result of the audit and what are those actions?
4. What have you learned as a result of the audit?
5. Did you find some problems or other resources that would help others?

Please send your results chantal@cen-rce.org We will keep this information confidential unless you allow us to make your ideas, actions, results or your resources available to other members of the Canadian Environmental Network.

[Taking Action](#)

Taking action, finding alternatives or reducing your impact is the next step. A strategy or transition plan will allow for easy and efficient movement from one level of sustainability to another. You may only want to do an audit of one part of your lifestyle or organization's activities. The audits above have some indications for change. Sometimes it is as simple as putting in compact fluorescent bulbs when your current incandescent bulbs burn out. More significant changes may require more funds and budgeting. There will be some short term investment with long term returns. At the organization or community level, a comprehensive strategy or work plan may be required to minimize impacts as well as plan for the needed resources to move you forward. You may want to work together with other organizations and friends.

For other examples or suggestions to make changes in lifestyle that will help reduce your impact on the environment and increase your health, please consider some of the resources listed further down. It is not comprehensive but just a beginning. You may have others that give you examples of actions. Let us know. [Click here](#).

[2. Preventative or Preventive Medicine](#)

Most actions taken towards the reduction of illness or improving the various determinants of health will be preventive in nature. It is well documented that providing healthy housing reduces health problems whether direct or indirect. A person or family with less stress is less prone to cardiovascular disease. Better nutrition and diet will reduce the likelihood of diabetes and its associated problems. Exercise extends your life.

Much of this work is to reduce or eliminate the need for primary health care intervention. If you don't have health problems, then you will be a more productive person either personally, at your business or in your community. This will also reduce the need to continue increasing health care budgets. Keeping fit will reduce associated problems in your later life like back problems, heart bypasses, hip replacements or the need to be placed into supported housing. The idea is to prevent the need for expensive primary health care. This will allow for limited resources to be placed where they are best utilized.

Some examples of preventive occupations within the health prevention are people like dieticians, nutritionists, occupational therapists, homeopathic physicians and midwives.

Box 1. Definition of the Prevention and Precautionary Principle⁶

Prevention Principle –

This principle allows action to be taken to protect the environment at an early stage. It is now not only a question of repairing damages after they have occurred, but to prevent those damages to occur at all. This principle is not as far-reaching as the precautionary principle. It means in short terms it is better to prevent than repair.

Precautionary Principle –

Principle adopted by the UN Conference on Environment and Development (1992) that in order to protect the environment, a precautionary approach should be widely applied, meaning that where there are threats of serious or irreversible damage to the environment, lack of full scientific certainty should not be used as a reason for postponing cost-effective measures to prevent environmental degradation.

The precautionary principle permits a lower level of proof of harm to be used in policy-making whenever the consequences of waiting for higher levels of proof may be very costly and/or irreversible.

⁶ From the European Environment Agency glossary, at <http://glossary.eea.eu.int/EEAGlossary>

3. Ecological Lifestyle Toolkit

Below is a list of some resources, books or websites that will help you understand what you might do or how what you do now is impacting the planet and your health.

Books

- Anderson, Bruce and Malcolm Wells. Passive Solar Energy – The Homeowner’s Guide to Natural Heating and Cooling. Brick House Publishing Company, Amherst, New Hampshire. 1994.
- Canadian Mortgage & Housing Canada. Healthy Housing Renovation Planner. Government of Canada. Ottawa. 1999.
- Canadian Mortgage & Housing Canada. Tapping the Sun – Passive Solar Techniques and Home Designs. 2001.
- Caplan, Ruth. Our Earth, Ourselves. Bantam Books. New York. 1990.
- Carson, Rachel. Silent Spring. Dover Books. 1962.
- Cole, Nancy and P.J. Skerrett. Renewables are Ready – People Creating Renewable Energy Solutions. Chelsea Green Publishing Co. Post Mills, Vermont. 1995.
- Coop America. Co-op America’s National Green Pages – A Directory of Products and Services for People and the Planet. Co-op America. Washington, D.C. 1997.
- Daly, Herman E. Steady State Economics – The Economics of Biophysical Equilibrium and Moral Growth. W. H. Freeman and Company, San Francisco. 1977.
- Daly, Herman E. and John B. Cobb Jr. For the Common Good – Redirecting the Economy Toward Community, the Environment and a Sustainable Future Beacon Press, Boston. 1989.
- Dominguez, Joe and Vicki Robin. Your Money or Your Life. Zebra Bouquet. 1999.
- Elgin, Duane. Voluntary Simplicity: Toward a Life that is Outwardly Simple, Inwardly Rich. William & Morrow Co. Inc. 1993.
- Ehrlich, Paul. The Population Bomb. Buccaneer Books. 1997.
- Freund, Peter and George Martin. The Ecology of the Automobile. Black Rose Books. Montreal. 1993.
- Gordon, David, ed. Green Cities – Ecologically Sound Approaches to Urban Space. Black Rose Books. Montreal. 1990.
- Hawken, Paul. The Ecology of Commerce – a Declaration of Sustainability. Harper Business. 1993.
- Hawken, Paul, Amory Lovins and L. Hunter Lovins. Natural Capitalism. Black Bay Books. Boston. 1999.
- Harland, Edward. Eco-Renovation. Chelsea Green Publishing Co. Post Mills, Vermont. 1993.
- Harmony Foundation. Workplace Guide: Practical Action for the Environment. Harmony Foundation. Ottawa. 1991.
- Long, Charles. How to Survive without a Salary – Learning how to live The Conserver Lifestyle. Warwick Publishing. Toronto. 1996.
- Merkel, Jim. Radical Simplicity – Small footprints on a finite Earth. New Society Publishers, Gabriola Island, B.C. 2003.
- McRobie, George. Small is Possible. Abacus. 1985.
- Morgan, John P., Douglas R. Collicutt and Jacqueline D. Thompson. Restoring Canada’s Native Prairies. Prairie Habitats. Argyle, Manitoba. 1995.
- Pollution Probe Foundation. The Canadian Green Consumer Guide. McClelland & Stewart. Toronto. 1982.
- Roberts, Wayne and Susan Brandum. Get a Life! How to make a good buck, dance around the dinosaurs and save the world while you’re at it. Get a Life Publishing House, Toronto. 1995.
- Rodale, Maria. Organic Gardening. Rodale Press. Emmaus, Pennsylvania. 1998.
- Roseland, Mark. Toward Sustainable Communities. National Round Table on the Environment and the Economy. Toronto. 1992.
- Rubin, Carol. How to get your Lawn off Grass. Harbour Publishing, Madeira Park, BC. 2002.
- St. James, Elaine. Simplify Your Life: 100 Ways to Make Family Life Easier & More Fun. Andrew & McMeel. 1997.
- Sewell, John. The Shape of the City – Toronto Struggles with Modern Planning. University of Toronto Press. 1993.

Steen, Athena, Bill Steen and David Bainbridge. The Straw Bale House. Chelsea Green Co. Post Mills, Vermont. 1994.

Stein, Sara. Noah's Garden – Restoring the Ecology of our Backyards. Houghton Mifflin. 1993.

Vick, Roger. Gardening on the Prairies – A Guide to Canadian Home Gardening. Greystone Books. Vancouver. 1987.

Wackernagel, Mathis and William Rees. Our Ecological Footprint – Reducing Human Impact on the Earth. New Society Publishers, Gabriola Island, B.C. 1996.

Wann, David. BioLogic – Environmental Protection by Design. Johnson Books. Colorado. 1990.

Magazines

Like all of these categories, there are many more than the ones listed below. We encourage you to explore your magazine store for the resources that you feel will be of value to you and your area. There are likely regional materials that are not know to all of us.

Back Home
Birds and Blooms
Canadian Gardening
Communities
E Magazine
Mother Earth News
Mother Jones
Nature Canada
Organic Gardening
Permaculture

Videos

National Film Board. Who's Counting? Marilyn Waring on Sex, Lies & Global Economics. 1995.

Ibid. Affluenza. 2003

Ibid. Escape from Affluenza. 2003

Ibid. Crapshoot. 2003.

(note: the National Film Board films and a variety of films on a number of topics can be found in your public libraries or from the NFB on their website – www.nfb.ca .)

Websites

These are but a few of the options found on the Internet to gather information. Unfortunately, many of these are not based in Canada so you will have to convert and modify accordingly. Similarly, these are but examples of a variety of specific product websites that are out there. You may have others. These websites may generate others and have links to others.

Battery Recycling www.rbrc.org
Building Green <http://www.buildinggreen.com/>
Calculate Your Ecological Footprint <http://www.lead.org/leadnet/footprint/intro.htm>
Carsharing Network <http://www.carsharing.net/>
David Suzuki Foundation www.davidsuzuki.org/WOL/Challenge
Eco-Choices www.EcoChoices.com
Eco-Mall <http://www.ecomall.com/>
Enature.com
<http://shop.enature.com/category.asp?catalog%5Fname=enature%2Dv&category%5Fname=Kids+Activity+Books%28eNature%29&Page=10>
Fiscal Green www.fiscallygreen.ca

Genuine Progress Index – Atlantic <http://www.gpiatlantic.org/>
Global Ecovillage Network <http://www.gaia.org/>
Living Lightly in Breadth and Depth <http://www.scn.org/earth/lightly/vslinks.htm>
Native Plant Society of Saskatchewan <http://www.npss.sk.ca/>
Natural Building Resources <http://www.strawbalecentral.com/>
Natural Home Magazine www.naturalhomemagazine.com
Natural Lawn in America <http://www.nl-amer.com/>
Real Goods www.realgoods.com
Seventh Generation <http://www.seventhgen.com/>
Simple Living <http://www.simpleliving.com/>
Simplicity <http://www.gallagherpress.com/pierce/>
The Natural Step Canada <http://www.naturalstep.ca/>