# 'Wind Farms' Some Deep Ecology Considerations

By David Orton, with contributions from Billy MacDonald of Redtail Nature Awareness and Helga Hoffmann-Orton

"For every activity there is a certain appropriate scale." E.F. Schumacher, **Small is Beautiful: A Study Of Economics As If People Mattered**, p. 54

"I am satisfied following a review of the information provided by RM Senergy Ltd., and through the government and public consultation as part of the environmental assessment, that any adverse effects or significant environmental effects of the undertaking can be adequately mitigated through compliance with the attached terms and conditions." Letter from Mark Parent, then Nova Scotia conservative provincial Minister of Environment, dated September 2, 2008, giving the government's green light to go ahead with the "Dalhousie Mountain Wind Farm", which had registered its environmental assessment on August 5, 2008, less than a month before being granted approval by the Minister.

"On behalf of the Green Party of Canada Central Nova Electoral District Association, I have reviewed the Environmental Assessment and Registration Document for the Dalhousie Mountain Wind Farms as proposed by R M Senergy Ltd of Westville, Nova Scotia...The Green Party of Canada is pleased to support a local entrepreneur in the undertaking of this project. Its over-all environmental impact is unquestionably positive." Elizabeth May, Leader, August 19, 2008. (Endorsement posted on the R.M. Senergy web site.)

"A 'resource' is anything that can be put to human use...It is the concept of 'resource' that allows us to perceive nature as our subsidiary." John Livingston, Arctic Oil: The Destruction Of The North? p. 119

#### INTRODUCTION

This Green Web Bulletin is a criticism of large scale industrial wind turbine sites in rural areas, from a <u>deep ecology</u> perspective. This critique looks at a site near to where we live

in Pictou County, Nova Scotia – the <u>Dalhousie Mountain Wind Farm</u>. The project comprises 34 wind turbines and is supposed to provide 51 megawatts of power in the first phase. The proponent has mused that the site has the "potential" for 150 megawatts. (For comparative purposes, we include some critical comments about another site, the <u>Glen Dhu project</u>, located on the border of Pictou and Antigonish counties, which proposes building 30 wind turbines totalling 60 MW in its "first phase", with potential expansion to 230 MW.)

Those of us who try to follow climate change discussions know that in industrially developed societies like Canada, greenhouse gases need to be reduced by 80-90%. But this is not happening. The concentration of carbon dioxide, the main greenhouse gas, increases in the atmosphere every year. Presently, the only thing modifying this, is when the world economy goes into recession.

Here in Nova Scotia there are moves to expand coal mining. Fossil fuel exploration and extraction are pursued vigorously offshore on the Scotian Shelf. The exploitation of the Alberta tar sands symbolizes the undermining of any belief that climate change is taken seriously at a federal government level in Canada. There is no apparent major societal reduction in fossil fuel use to cut back on greenhouse gas production, just as there is no overall program to reduce energy consumption, by citizens living more frugally.

As we have used up easily accessible fossil fuels and minerals, more energy is required to maintain society's consumption level. Alternative energy paths are now being considered, yet there is no concern with reducing consumption or controlling human population growth. We need to see energy production and consumption in such a context, as we go on the quest for an appropriate renewable energy path.

If we are to embark on this path, Schumacher's comment in his book **Small is Beautiful:** A **Study Of Economics As If People Mattered** of "appropriate scale" has to be kept in mind. Industrializing the rural landscape with large wind turbine 'farms' is not an appropriate scale. We also need to appreciate that what is happening in Nova Scotia, and elsewhere, with the installation of industrial turbines – what Nova Scotia Power calls "Putting The Wind To Work" – is just a beginning. This Green Web bulletin on wind turbines is meant to assist a needed activist call to action.

# ENVIRONMENTAL IMPACT ASSESSMENT

"EIA (Environmental Impact Assessment) is a grandiloquent fraud, a hoax, and a con." John Livingston, **The Fallacy of Wildlife Conservation** (1981) p. 33

"The earth does not belong to humans." Arne Naess, **Deep Ecology For The 21**st **Century,** p. 74

In going through the environmental assessment documents available on the internet in support of the proposal to establish a large industrial complex of wind turbines on Dalhousie Mountain, one cannot but be impressed by the work of the proponent – a local

man – in putting together such a project. At the present time, this is the largest industrial wind turbine operation in Nova Scotia and an evident poster child for the New Democratic Party's energy from "renewable resources" strategy. Thus, the NDP used the Dalhousie Wind Farm site to announce on April 23, 2010 that Nova Scotia will generate 40% of its electricity from alternative sources by 2020.

Media reports have spoken of the Dalhousie Mountain project involving a 100 million dollar price tag. The proponent cruised through the formal environmental assessment process in under a month, without public hearings, to gain project approval. Many more turbines are apparently planned. We are told that this project has a lifetime of 30-40 years. (p. 128)

Whatever the entrepreneurial abilities of the proponent and the stated rationale for the project, i.e. "the project is needed to supply additional power to the local grid and offset a 5% annual increase in demand for Nova Scotians" (p. 129), what we essentially have is human-centered economic interest, deceptively wrapped in environmental documents claiming the moral high ground, such as responding to climate change, serving the community, etc. (The "renewable" electricity produced is not really used locally as claimed, but fed into a province-wide electrical grid, mainly fossil fuel-generated. Given the Maine electrical interests of Emera Inc., the parent company of Nova Scotia Power, could it presumably end up being exported, if the price is right?)

Looking critically at the environmental assessment documents has shown examples of exaggeration and misrepresentation; the playing down of negative aspects of the impacts of the wind turbines on human health, noise and landscape; dismissing or minimizing qualifying cautionary comments as in, for example, the commissioned bat, bird/raptor, and mainland moose studies; totally ignoring the impact of the turbines on the Gully Lake Wilderness Area, or on the work being done by the <a href="Redtail Nature Awareness">Redtail Society</a>; or the potential financial liabilities of the landowners who have leased wind turbine sites to the proponent.

The Glen Dhu environmental assessment documents, like those of the Dalhousie Mountain Wind Farm, share the same "explaining away" mentality of any problems or contradictions with humans or wildlife.

#### WILDLIFE EXCLUSION ZONE AND DISREGARDING OTHERS' INTERESTS

Nina Pierpont, the author of the 2009 book **Wind Turbine Syndrome**, studied ten families living close to wind turbines. Eight of the families had to get out of their homes because of a range of health symptoms, called Wind Turbine Syndrome by Dr. Pierpont. The noise, vibrations and pulsating rhythms from the industrial wind turbines seriously affected them, depending on wind speeds and direction, the direction the turbines were facing, blade spinning speed, etc. Would it not be a fair assumption to consider that wildlife at a wind turbine site and the surrounding area would be similarly affected? Yet

there is no serious examination of the impact of noise from the turbines on wildlife in the submitted environmental assessment documents.

Billy MacDonald, founder of Redtail Nature Awareness, who with a friend visited the wind turbines on Dalhousie Mountain when they were active, spoke of a pulsating noise from the turbines that would require earmuffs to make it bearable. He also noted the dark shadows over the land from the turbines. He strongly felt that animals which use their hearing as part of their existence would vacate the area. This would be in addition to the destruction associated with the placement of the 34 turbines, with the supporting infrastructure, roads, power lines, etc. All this, plus the documented bird and bat kills at industrial wind turbine sites from around the world, will have their reflection at the Dalhousie Mountain Wind Farm, and make it a wildlife exclusion zone.

There is disregard for the interests of non-humans and other humans. For example, about two kilometers to the west of the boundary of this industrial project, as shown on one of the project maps, is the eastern boundary of the recently created Gully Lake Wilderness Area (comprising 3,810 hectares). How about the interaction between this industrial project and the wilderness area? It seems that for the people pushing wind power in Nova Scotia, there is no contradiction between wilderness and industrializing the countryside. Amazingly, there was no consideration of Gully Lake in the environmental assessment of what are called "Valued Eco-system Components." (The foolish idea of "component" thinking is that the natural world can be broken down into isolated components, rather than the everything-is-interconnected "synergy" of ecosystem interaction, which the project company name R.M. Senergy cleverly suggests.)

A similar example is found in the Shear Wind Glen Dhu environmental assessment documents. They show a group-think mentality among wind turbine 'developers' towards wilderness areas – here Eigg Mountain and the James River Wilderness areas – which are close by, but outside of the current boundaries of this "first phase" wind farm. There are a number of references in the Glen Dhu documents to treating such wilderness areas as temporary 'hotels' for wildlife disturbed by various construction activities, as the wind turbines are put in place. Talking about fishers and moose, for example, we are told that "there is a protected wilderness area off to the north and east to act as a sanctuary until the construction is over." Thus the wilderness areas are not only unimportant in their own right, like with the Gully Lake situation, but these areas have a positive benefit to act as a home for displaced wildlife. A further erroneous assumption is that the wilderness habitat is not already fully utilized by the existing life forms that occupy it and newly displaced animals from the wind turbine site can just "pack in." The human-centered arrogance of looking at the natural world in this way is astounding. Its acceptance by the regulatory authorities shows well what John Livingston spoke of, by noting the "grandiloquent fraud" of the environmental assessment process.

There is also the lack of consideration of other people, such as the impact of the industrial wind turbines on the work of Redtail Nature Awareness, situated on the Mcbeth Road near Elmfield. The industrialization of Dalhousie Mountain, with its wind turbines and supporting infrastructure, is going to greatly impede the movement of wildlife to the

forested land base, which Redtail Nature Awareness, through the Friends of Redtail Society, has sought to secure through a fund-raising campaign involving hundreds of local people who support the work of Redtail. Also, given certain wind conditions, the noise from the turbines can now be heard at Redtail. This can negatively impact, for example, the quietude of "night sits" in the old growth hemlock forest, which are part of some Redtail programs. One of the key requirements for young people attending Redtail over the last twenty years (including our own daughter for several years), and for many not so young, who have sought solace at Redtail, has been "to maintain silence." This is required so that an individual's consciousness can expand to encompass the well-being of other species and nature itself. In this way, an Earth-consciousness, a basic insight from the deep ecology philosophy of Arne Naess, may be grasped. Also, many of the programs for older youth attending Redtail have involved using Dalhousie Mountain for hiking from the base camp. Why is it that those who want to industrialize Dalhousie Mountain, paid no attention to this work of Redtail Nature Awareness? Yet we are informed in the environmental assessment documents:

"The characteristics of the local community are well understood and appreciated by the proponent who is from the community." (p. 108)

A quite amazing document, in a good sense, filed with the Glen Dhu environmental assessment documents, is a position paper on "Wind Power" filed by the Federation of Nova Scotia Woodland Owners, which was adopted by the Board of Directors on January 25, 2007. There are no names on this document, which lists, with explanatory details, the following five main "drawbacks of wind turbines":

- "They are hideous."
- "They are notoriously expensive to purchase, maintain, and repair."
- "They are noisy."
- "The energy they generate may not be there when it is most needed."
- "They kill birds and bats."

The Wind Power paper then gives 8 negative considerations to be kept in mind before signing a turbine lease, for "how landowners might be affected by having wind turbines on their property."

# SOME QUESTIONS AND COMMENTS ON WIND TURBINES

"The strength of the deep ecology movement depends upon the willingness and ability of its supporters to force fact-dependent experts who underpin environmental decisions into discussions in terms of values and priorities." Arne Naess, **Ecology, community and lifestyle**, p. 72

Here are some additional considerations about wind turbines:

1. Sustainable power sources like wind, tidal, solar, geothermal or biomass cannot power this existing industrial society or its projected nine billion people. Ted Trainer's 2007 book **Renewable Energy Cannot Sustain a Consumer Society** clearly shows this. Trainer, an Australian academic, does not write from a deep ecology perspective. He is

human-centered and accepts growing human populations as inevitable but notes that we "have to give up fossil fuels altogether" and that we "have to live almost entirely on renewables." (p. 2) He says we have to move to a locally focused, much more simple community-based lifestyle.

- 2. Wind energy generation must not exacerbate problems for other species which share this planet with humans. Wind turbines need to be placed in the best ecocentric location, not the best location for human and corporate interests. What does it mean for the local ecology, to "harness" the wind for humans? Can wind energy just be removed without local environmental consequences? What might those consequences be?
- 3. Wind turbines must also not interfere with humans who live in the vicinity of turbines. Setbacks from turbines should be at least 2 km. Nina Pierpont says that in mountainous locations, the distance should be at least 3.2 km. As well as health concerns generated by turbines, the natural beauty of a visual landscape or viewscape is a legitimate concern.
- 4. Industrial wind turbines reduce land access and are another encroachment of the shared Commons.
- 5. Wind energy generation should be financed and used locally in a bioregion and not exported. Economic benefits should flow to the bioregion. Yet how can this "localism" be assured, if turbine-generated electricity enters the general electrical grid and wind turbines are financed by large corporations?
- 6. A population reduction strategy must be part of an energy strategy, if the Earth's ecosystems are to start on a recovery path.
- 7. Wind power advocates are overwhelmingly eco-capitalists. They have a theoretical inclination towards positively evaluating "soft" energy sources like wind power, because they cannot accept, or do not want to contemplate, that only a fundamental transformation of industrial capitalist society is a realistic option for the ecological and social crisis we face. They give the position that the existing society can be painlessly transformed into a sustainable society. Hence the stress by electoral Greens on incremental change such as putting up wind turbines, along with alleged "green collar" jobs and promoting the soft energy path. This position minimizes conflict with the existing industrial society and ruling corporate and political elites, while creating the false illusion that the path to ecological and social sustainability will be painless. Consequently humans would not have to live much more frugally, with a lower material standard of living, which is a basic message of a deeper ecology.
- 8. The private utility company promoting wind turbines here, Nova Scotia Power, has an institutional bias towards selling electricity and increasing demand, not reducing it.
- 9. Wind-generated electricity is very intermittent, and requires other energy sources to "fill the gap".

- 10. Wind turbine-generated electricity is heavily subsidized with federal and provincial tax breaks, in addition to what are called "feed-in tariffs", a premium above the going market rates, paid over a specified time period. This subsidization results in increased electrical bills for customers.
- 11. Corporations in Nova Scotia who in the past have shown no "green" credentials, like N.S. Power (with its fossil fuel use or herbicide spraying on electrical rights of way) or the pulp and paper companies (clear cutting and forest spraying, now wanting joint ventures with N.S. Power to use biomass fuel for allegedly green energy) have become magically transformed in their public image as "sustainability" advocates.

### DEEP ECOLOGY CONSIDERATIONS

For the "renewable" wind energy issue, there is a more substantive level of analysis, informed by deep ecology – the eco-philosophy that has guided the work of <u>Arne Naess</u> and <u>John Livingston</u> (also the philosophy guiding the work of Redtail Nature Awareness) – which is absent in the Dalhousie Mountain Wind Farm environmental assessment documents. (For two recent book reviews which are illustrative of this approach, see "<u>Wind Turbines: Some Deeper Questions</u>" and its Addendum "A Wind Turbine Scammer".)

Our species, the misnamed *homo sapiens*, (we humans as a species have shown that we are neither "wise" or "knowing") look at the Earth, and all the other species which share this planet with us, from a human-centered perspective – whereas Stan Rowe instructed us to conceptualize: "We are Earthlings first, humans second." (Earth Alive, p. 21) We do not follow this advice but assume proprietorship of nature. We think that humans and corporations can "own" land and other species, and this is conveyed when we speak of natural "resources", like trees, fish, other wildlife, or wind energy. Looking at Nature as a "resource" or "resourcism", allows humans to consider the natural world as our subsidiary. So, not only wind energy, but natural places where the wind blows strongest, like hilly elevations or the coastal areas, become "resources" which can be put to use. Once humankind conceives of something as a "resource" its demise is only a matter of time.

In his 1981 book **The Fallacy of Wildlife Conservation**, Livingston, perhaps Canada's deepest ecological thinker, pointed out that environmental assessments are fraudulent and self-serving. "Ecology", i.e. all the various field studies, become tools to facilitate the project and the consequent environmental destruction. The developers – who Fred Bender has called the "habitat annihilators" in his 2003 book **The Culture of Extinction: Toward A Philosophy of Deep Ecology** – usually are given the green light by the government regulatory authorities and only very infrequently are turned down. The underlying reason for this is the economic growth orientation of industrial capitalism, itself tied in with an ever-increasing consumerism which the developers feed into, like the Dalhousie Mountain Wind Farm Project. This underlying economic model sanctifies the destruction of the natural world in the name of growth and jobs.

In Ontario, which claims leadership in wind energy in Canada, the provincial government passed the Ontario Green Energy Act (Bill 150). This bill shows perhaps the shape of thing to come with wind turbines regulations, because it "strips local municipalities of any power to zone or require site plan approvals for any wind turbine project." (**On The Bay**, Summer 2009.) This is a total erosion of local democracy, as regards turbine sitting, and could be called fascist in intent.

What is particularly disturbing, when going through the environmental assessment documents for the Dalhousie Mountain Wind Farm and the Glen Dhu Wind Farm, is how criticisms or questioning of these two wind turbine projects from an ecological or humancentered viewpoint is denigrated or dismissed out of hand. Justified criticisms or questions that were raised, although admittedly much is still unknown about the impacts of industrial wind turbine sites, achieve only the most superficial hearing, if at all. Yet the 'developers' get away with outrageous statements – many of them untruths to put it in the most mild way, and no one is held personally accountable for what they say. There is also the obvious tilt of the governmental institutions and media towards promoting the wind turbine entrepreneurial activity. The promoters can hire various "experts" which are supposedly seen as conferring some higher wisdom to what the developer has to say, to come to the one needed conclusion, that the project can sail ahead: there will be "no significant impact" upon wildlife or humankind from the wind farm. Any verbal jousting which seems to go on in meetings or in environmental assessment document reporting, is not what it seems, because the outcome has been pre-determined. Some support for this position is also given by the Environmental Commissioner of Ontario report of October 21, 2008, where it was said:

"Ontario's Environmental Assessment process seems to lead inexorably towards approval of projects. Individual environmental assessments of major undertakings are very rarely refused outright by the Ministry of Environment. What's more, a No decision is not a possible outcome under the streamlined Class Environmental Assessment process used to approve thousands of activities."

When selling something in industrial capitalist society, the "developers" seek to control the language used in any public debates around their projects for which they are seeking to mobilize support. (Remember how the Department of Fisheries and Oceans in Canada renamed the "cod worm" as the "seal worm" in its anti-sealing literature, or how Monsanto called its forestry herbicide "Vision"?) Thus with the Dalhousie Mountain Wind Farm, the spin is not only with the turbines slowly turning, but also in the use of the name "farm" – as it is a large-scale industrial site, not some apparently bucolic farm.

Today, the language of environmentalism has become completely debased so that anyone – a person, corporation or business – can claim they are an "environmentalist" or a "green", that they are "eco-friendly", that they practice "forest stewardship" or "certified sustainable forestry" or provide "sustainable seafood", or that they are producing "green energy" from an industrial wind turbine site. To sell more consumer products today seems to require that some environmental claims have to be made. We continue to devour the Earth, but must claim that we are also saving it at the same time. We need a contemporary J.D. Salinger, of **Catcher in the Rye** fame, to dissect the phonies and

phoniness of those who use "environmentalism" to make their economic or political way in the contemporary world.

If the overall industrial capitalist society is itself ecologically and socially unsustainable (think global climate change, for example), how can claims about the alleged environmentally sustainable activities *within* the society have validity? Think here of groups like Ecology Action Centre in Nova Scotia, or federally, the David Suzuki Foundation, the Canadian Parks and Wilderness Society, or the Sierra Club of Canada, which all promote "wind farms." Think of the theoretical confusion of people like Elizabeth May, current leader of the federal Green Party, who has publicly endorsed the Dalhousie Mountain Wind Farm; or think of the well-known Nova Scotia wildlife biologist Bob Bancroft, who has allowed himself to be hired by the Glen Dhu wind farm as a wildlife spokesperson and hence is a public face for industrial wind turbines.

Nothing can be sustainable in an unsustainable society. We have to ask, what is the responsibility of the various environmental organizations, and of the electoral parties who call themselves "green", like the federal or provincial Green Parties, for this overall state of affairs and for the erroneous 'leadership' which they have provided? What is their responsibility for promoting a false societal consciousness, where conservation language is not what it seems and masks an accelerating environmental destruction, along with the promise of "green collar" jobs? Doesn't this flow from an ecopolitics of compromise and "partnerships" with the Earth destroyers, hoping to bring legitimacy to the environmental movement? They have betrayed the early radical promise and created the widespread confusion surrounding, for example, industrial wind turbines and their environmental and human health consequences. Contemporary ecopolitics has adopted what the Norwegian ecophilosopher Arne Naess called back in the early 1970s, the ecopolitics of "shallow" as opposed to "deep" ecology. What we have today is an environmentalism that has betrayed its public and wildlife constituency, and has become a willing partner to a fossil fuel-based, expansionary, industrial capitalist society.

Building on William Catton's **Overshoot** work, the "ecological footprint" analysis has shown – even though it is generally anthropocentric in focus – that we humans have already exceeded the long term sustainable carrying capacity of our Earth. We have to ask ourselves, what our "vital needs" are as a society, where vital must satisfy not only human needs, but also the needs of the planet and all its species of plant and animal life? How do we unplug vital needs from the promotion of an unending consumerism? The toxic consumer lifestyles of the developed world are being promoted as something to be emulated by those not in the consuming club. We have become what the Australian ecologist Tim Flannery has called "The Future Eaters." Climate change is serious, but there are other major ecological issues to resolve, for a truly sustainable society to come into being. Environmental tunes which only look at the potential for wind turbines to reduce greenhouse gases are not enough.

Environmental impact assessments turn out to be a sham endorsed by governments and wind turbine "developers". These assessments only serve those who seek to profit from habitat annihilation carried out under the banner of some supposed higher cause, like

providing "green energy." These assessments can also disregard the interests of humans living close to the projected wind turbine sites and can disregard the interests of the non-human life forms which inhabit or utilize the proposed wind turbine sites.

From a deep ecology viewpoint, our first allegiance is to the Earth. Human interests are important, but secondary to the overall health of the planet. As Arne Naess has said, "the earth does not belong to humans." Putting up industrial fields of wind turbines, given the existing human-centered cultural values of an expansionary industrial capitalist society, cannot but negatively impact other species and their habitats.

### **CONCLUSION**

The overall positive "no problems" view in the Dalhousie Mountain Wind Farm environmental assessment has to be rejected by those who identify with the well being of Dalhousie Mountain and the community of life that it has previously supported. We totally oppose the view that the new wind turbine viewscape is superior to a forested Dalhousie Mountain and something we should adjust to.

The wind turbine situation is set to greatly expand across the rural landscape of Nova Scotia. Existing turbine problems for people and wildlife will become of a whole new dimension, as the provincial NDP government has raised the "renewable resources" bar (wind energy, biomass and turbines in the Bay of Fundy) to 40% of electricity generated by the province for 2020. A South Korean company has been given 70 million dollars by the provincial and federal governments for a "joint venture" to build wind turbine towers and blades at a Trenton plant in Pictou County. The push for more and larger industrial wind installations can only intensify.

Can wildness and industrial wind turbines go hand in hand? Can it really be, that there will be "no significant effect", considering the detrimental impact of noise, vibration and turbine rotation on wildlife living in such areas, let alone the roads, power lines, electrical sub-stations, and general human intrusion which go hand in hand with wind turbine projects? We think not.

Alternative energy supplies should come from small-scale and local operations and serve local communities. A sustainable lifestyle means sharply reducing energy consumption, not expanding it. It means considering the well-being of all of Earth's creatures and trying to live accordingly.

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