BIOREGIONALISM

...a project co-ordinated by Trent University, focused on Haliburton County to help us discover where we came from, where we are now, and if the direction in which we are heading is the right one

by Andrew Milne

Just south of Ox Narrows, where Kushog Lake shoulders its way through a narrow passage in a glacial cleft, down a narrow, dusty cottage road off Highway 35, is a property called Windy Pine.

On the property — beneath the tall white pine that gives this place its name — are two modest cottages.

Inside one cottage, surrounded by reports and maps, bathed in the glow of computer screens, are two students — Anna Gibson and Geordan Harvey — serving their terms on a ten year mission.

Gibson and Harvey are this year's keepers of the flame for Trent University's now three-year old Bioregionalism Project. The project is an ambitious and rather innovative effort, by two of the school's professors, to make their institution relevant to this rather far flung region of the area it serves, applying the concepts of bioregionalism — a philosophy either very old or very new, depending on how one looks at it — as a basis for research into the Highlands' history, ecology, and economic development.

The project isn't entirely unfamiliar to Highland residents. Articles in the local newspapers, occasional information sessions, and the steady contact between students and the local population they describe as 'partners' in the project, all seem to have created an awareness, albeit a hazy one, that the project is around.

What, exactly, is being done, and what is the point of the exercise, is a larger, more difficult question to answer. The basics are these: the Bioregionalism program is, at its beginning, a combination of two things: (1) a course of study at Trent University, available primarily to graduate students, and (2) a research project, studying the Haliburton Highlands from a bioregional perspective, along research lines that tend toward history, ecology, and community economic development. Students who take the course must perform, as part of their course requirement, some of the research, and must generate a paper prior to graduating.

The program has been running since 1989, taught by a Biology and History professor at Trent. Since three years ago, it has spun off a second project, though one integrally connected to the course of study — a Bioregional Atlas Project, intended to map the Highlands as thoroughly and as exhaustively as possible, again, from a bioregional perspective. The atlas will be composed entirely in the very powerful and flexible GIS (Georgraphical Information Systsems) format. The digitized information can then be connected to any number of databases. This is Harvey's specialty. It will take ten years to complete, and may include plates on any number of subjects (the final number and content is still being worked out), though it can be expected those subjects will again cluster around topics of interest to bioregional studies.

Bioregionalism described

Readers can be forgiven if, so far, this means little to them. Understanding the point of this project means understanding, as much as possible, bioregionalism. And bioregionalism is not a concept (yet) that is part

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Geordan Harvey and Anna Gibson, at work at Windy Pine

BIOREGIONALISM

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of most people's working vocabulary.

Correcting that situation isn't easy, either. Defining bioregionalism precisely is no small challenge. To begin with, it's a complex concept, incorporating theories from a range of disciplines. Secondly, it's a diffuse concept, profoundly and proudly post-modern (to use yet another delightfully hard-to-define term), adapting itself readily and intentionally to different communities and different circumstances. Likewise, with a thoroughly post-modern resistance to closure, it studiously avoids hard and fast rules, and simple, final solutions.

Finally, some of those whose brainchild it is, explain it as an intentionally elusive concept, designed to avoid being pinned down. Some of those would argue defining it is impossible. Some would suggest attempting to define it too precisely is to profane or weaken the idea, the movement, the ethos that is bioregionalism.

Describing it, however, is a little easier. So, for a starting point; bioregionalism is a philosophy. Loosely, it's the concept that there are better ways to live on this planet and that people living in a particular place should invest the time to think very carefully about how they can do so.

Bioregionalism is the idea that smart communities make a point of living in harmony with their natural environment, even thinking in terms of becoming an integral part of their environment. It encourages people to think in terms of doing so sustainably, so that the relationship — or the complex of relationships — between the natural place and the natural human community can be maintained easily.

Alert — even not so alert — readers might readily suggest this idea is hardly anything new. Throughout the latter half of the twentieth century, thinkers in the western world have been suggesting a reassessment of *Homo sapiens*' position with respect to its natural environment might be good, even crucial, at this point in history. Certainly as the human race has watched its natural environment change radically, apparently in response to human activities, a myriad of ideas and movements have sprung up in response. These groups have reacted to various 'discoveries' such as the fact the forests are indeed not a limitless source of timber, that the oceans are not bottomless toilet bowls.

Where and how such assumptions came to prominence is well beyond the scope of this article. How the competing ideas of the various ecological movements have arisen, and what force they have in governing human activities, is closer to the point. And bioregionalism does have one clear claim to being unique in this respect, and one clear answer to critics suggesting it is nothing new: though the idea that something has to be done with respect to rethinking human activities is indeed a few decades old, bioregionalism has a very clear and very promising — if very complex — prescription about what might be done.

It has everything to do with place. Bioregionalism, Gibson explains, demands that people find very specific and practical approaches to living, that are uniquely suited to their own situations. There are no widely applicable prescriptive formulae that detail acceptable ways of living, after the fashion of certain religions' shoulds and should nots. There is rather the simple and almost self-evident requirement that people think in terms of what will work, especially in the long term, for their community.

Toward that end, the people of a community must know a few things. They need to study local history, particularly as it pertains to the impact on their own environment, and the environment's effects on their community. They need to think about community economic development in the wider context of its effect on, the environment, and to think about the impact on their lives and those of their neighbours.

Finally, bioregionalism attempts also to make use of natural, emotional ties to the land, and from that, it hopes to draw strength.

Says Gibson, "Bioregionalism talks about people's connection to their land, home and place. That's a very emotional connection. You see all over the place, when someone's backyards, kids and families are threatened, people get up in arms very quickly and things get accomplished. I think bioregionalism is extending that concept of my property, my family, my home to not be just your actual property boundaries, but the community, the Haliburton Highlands."

The name 'bioregionalism', then, comes from one of the philosophy's few assumptions — that

people are better off thinking about all of these things after they have defined, after in some way, what does constitute their natural environment. That environment, in concert with the network of human communities that have grown within it, constitutes the basic unit of the exercise — the bioregion.

In the case of the Trent project, the Bioregion is the entire Trent watershed — comprising roughly the counties of Haliburton, Northumberland, Peterborough, Victoria, and parts of Hastings. The reason for studying that area, says Wadland, is that he and Whillans felt, when planning the course, since bioregionalism is all about community self-interest, and about taking care of one's own backyard, Trent should start with its own backyard. The watershed was Trent's natural bioregion.

The professors felt, however, they'd rather start the program with a smaller part of that overall bioregion, and pick a more manageable area within it. Haliburton County was their choice. The county lent itself to the study because it was at the top of the watershed and Trent is nominally this region's university. The study would help establish a presence for the university in the area; a presence that some feel has been lacking.

"Tom and I both felt that Trent has not done a terribly good job at being in this community," Wadland says. "We wanted to be sure that we remedied that. We wanted to start with a place where we are not as well known as we should be, as we thought we should be, and also where we could make up for a long dry spell."

WADLAND, AT WINDY PINE: Trying to give a promising idea some academic dimensions

Keep it simple — keep it small; bioregionalism versus globalization

Another distinctive aspect of bioregionalism is that it assumes, with qualifications, that, generally, communities are more responsible for their own sustainability and the natural environment of which they are a part — and usually better off in the long run, in terms of the quality of peoples' lives — if the community is to a degree self-supporting, even self-sufficient. The philosophy borrows a page from theories of community economic development that suggest the best and kindest economies, are diverse, complex, self-supporting, and tied to a place or region.

Says Wadland "The idea is to get people to live in their place without becoming dependant on other places — that is to try to develop a self-sufficiency within the society — try to keep those dollars in the community — try to keep them moving around within the community."

This aspect of the philosophy — perhaps the most relevant in terms of external politics — has the most potential for controversy. Arguably, it is also this aspect of the philosophy which holds the most hope for communities which aren't doing so well against the forces unleashed in an increasingly deregulated world

economy, and increasingly deregulated national and local economies. Bioregional approaches often lead to recommendations and suggestions which butt up, head-first, against those of the increasingly powerful apologists and agitators for the free market and for — to use the buzzword of the age — globalization.

The conflict, considering the respective underpinnings of bioregionalism and of globalization, is obvious, and probably inevitable. Where apologists for globalization often suggest that an economy's ultimate goal should be to become something called 'competitive' on the world market, bioregionalism suggests that an economy should look after its own first, and work towards doing so in a sustainable way — external trade just isn't a priority. Where 'globalizing' economic plans, aimed towards making those economies more competitive, often exerts pressures for the removal of regulations designed to protect the environment, in a bid to acquire "a level playing field", bioregionalism insists that protection of the environment should be an integral goal from the beginning. And where globalization has traditionally pushed economies to trade over vast distances and to specialize, encouraging, in its purest form, 'cash crop' monocultural development in which, for example, one economy might produce coffee, and trade it to a partner for manufactured goods and even basic necessities not produced locally, bioregionalism suggests that as much as possible, the local economy be kept highly diverse, and as much as possible provide, in a direct material way, for the needs of the community.

And all and all, say its defenders, bioregionalism's direction and its view of what the world should look like has a great deal to recommend it over that of globalization — if for no other reason than the diversity it encourages.

Says Harvey, "Everyone is talking about globalization. But it's making everything the same. You're mashing everything into this tasteless paste, and you don't have any flavour left. Keep things local; keep things small; keep things beautiful."

"Bioregionalism is about exactly that," adds Gibson, "preserving the small and the diverse and celebrating that. I think the whole bent towards globalization is even more reason to be working harder on establishing local communities."

Finally, says Wadland, there's every reason to suggest that working on the small and manageable, really does make for a better world, and there is little to suggest that the prescriptions of globalization reall yield anything that's of value to most people in th societies to which they're applied.

Says Wadland, "Globalization is dispossessing whole lot of people. And the question for all the peopl who are dispossessed by globalization is, 'what do w do, sit back and say well, I've been dispossessed... an that's too bad. They said this would happen to som people, and I guess I'm one of those?' That's the wa the people who feed on globalization talk.

"What small communities have to do is think, 'd we have to just sit here and take this, or do we look afte ourselves? Can we take control of our own destiny?' S essentially what we're trying to do is to come up wit some ideas about how communities can become prou of their place, and to maintain their dignity as places in the face of these global pressures. Many of which in my view, have not been thought through carefully. I'm no fan of globalization. The more I read about i the more terrifying it becomes to me."

For all that bioregionalism celebrates the smal and encourages regions to trade within themselves an to be self-sufficient, it's not exactly about isolation ism.

For one thing, in the case of the Highlands located on the agriculturally marginal (and that' putting it nicely) Canadian shield, it's hardly practica to attempt to raise the entire food supply locally. Bu that, says Gibson, is hardly an obstacle, provided th region does what it can to encourage its own economi diversity, and trades with neighbouring regions — those, for example, to the south in its own watershed In that case, the ecological interests are largely share anyway.

Says Gibson, "Haliburton cannot be its ow agricultural support. There just isn't the land resourc for that... The bioregional community in the Highland has to be connected to another bioregional commu nity, and that's a good thing. The Highlands is th headwaters for many different bioregions."

Apart from the role the world has played in th affairs of the Highlands, Wadland is fascinated by th role the the area has played in world affairs. Contrar to expectations, he says, it has most definitely playe one. He cites the Bicroft/Dyno mines, which supplie uranium for the American cold war effort as example He points to the Donald Standard Chemical plan which manufactured acetone for explosives used in th world wars.

In addition to working with those more obvious implications, he likes to study the relative impacts of those operations in the local economy and in the world economy. All of those approaches, he says, are just chock full of lessons for the curious and the thoughtful. He imagines using what remains of those operations for just that — sites for field trips, objects in object lessons. He even pictures this as a potential site for development — a teaching museum at Donald.

Says Wadland, "[The Donald plant] is absolutely amazing. There's something about that building that really grabs you. So you take kids in there and you show them what is left of the structure. You show them photographs of what it was like when it was standing. Then you start talking to them about the immigrants who came there to work; the Finns, the Italians, whatever, and probably their families who are still living here, and the ways in which their cultures adapted to this country.

"Then you can start to talk about the chemical processes that went into the making of acetone, wood alcohol, and how it was used as antifreeze. You can talk about how it was bypassed by the petrochemical industry. It's a chemistry lesson. It's a history lesson. It's an economics lesson.

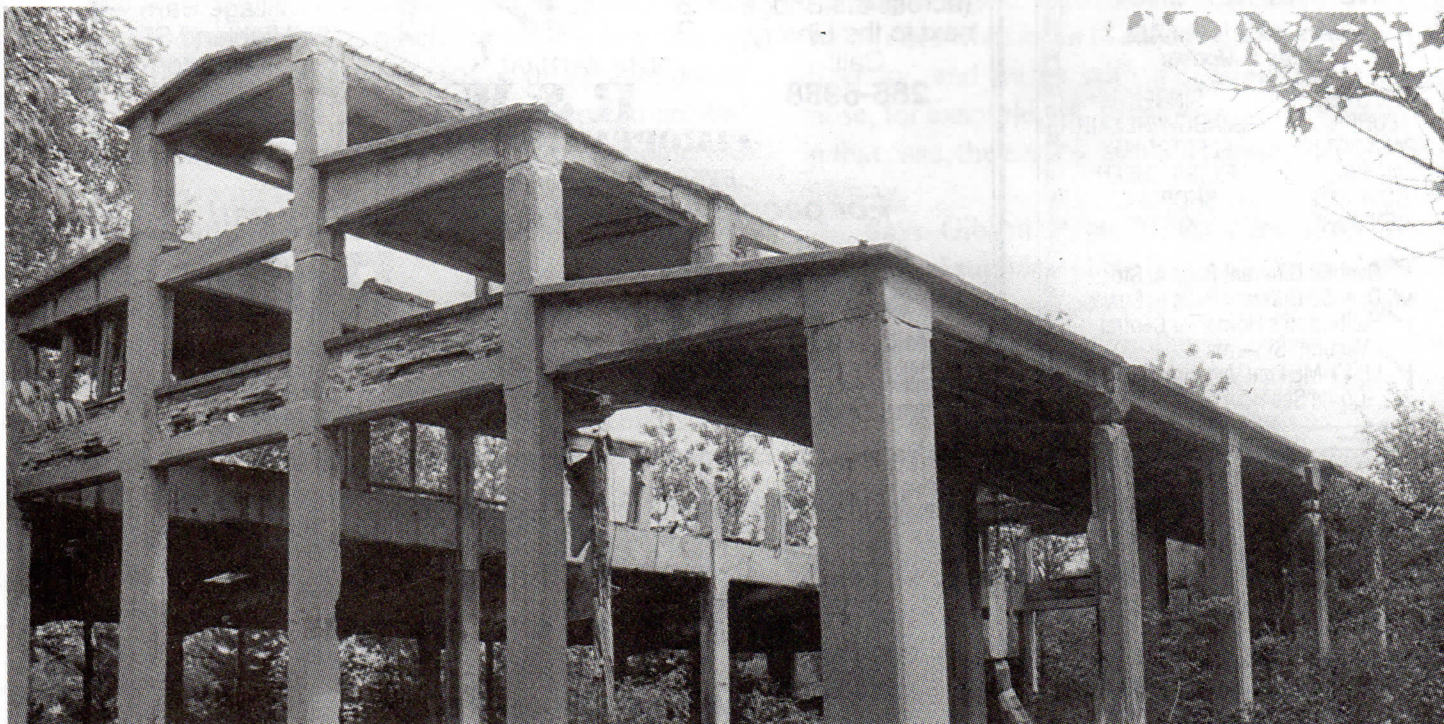
"It's a great way of talking about how your community was involved in the world... For kids who grow up here it can make it real for them — how th participated in the world. They're not just a backwat They're not just a little parochial hole in the wood

"The final owner of the Donald chemical pla was E.P. Taylor... E.P. Taylor we applaud as one of t great, wealthy men of our history... We praise a applaud E.P. Taylor, but you know E.P. Taylor ma his money on the backs of a lot of very poor peop immigrants and Haliburton. And when he was f ished, he just washed his hands of this place, a walked away from it, and that was that."

Those lessons, he says, have implications everyone, and are a starting point leading to one bioregionalism's more valuable lessons: to particip meaningfully in your world, participate meaningfu in your own local place.

Says Wadland, "Understand that everything t goes on in your own backyard is simply writ larger some other place. I'm tired of people talking abo where they live as being parochial and out of the wa It isn't. It is a living, breathing part of the big pictu You don't need to travel all over the world to und stand poverty, and dispossession and politi marginalization, and all of that. You can find that rig here."

The Dyno and Bicroft mines, he says, particula fascinate him.



The skeleton of the Donald Chemical plant: Professor Wadland suggests these ghostly remains can provide a lesson in chemistry, a history lesson and a lesson in economics.

"Those mines supplied uranium to the American cold war effort. Uranium from this community was going into warheads in American missiles... So to say, like a lot of people in Haliburton do, 'oh I like to live in this quiet little out of the way place', and not be bugged by the big world, well, its impossible. This is the side of globalization in which I am really interested. You cannot be removed. You can't wash your hands of your involvement."

The atlas project

Lest the reader get the wrong impression, however, the philosophy is hardly characterized by its answers to such big questions. Bioregionalism, as Gibson describes it, tends to find such answers by first addressing the small, in a rather direct application of the maxim 'think globally, act locally'. Therefore the program can be counted on to address issues more common to local Highlands' politics. Papers written by bioregionalism students hit close to home, touching on such perennial hot buttons as shoreline development, forest management, official plans and local government structure. That, really, is where the rubber hits the roads for both the students and their partners in the community: what is good for the Highlands in the long run? What message do we get from the past about how to get there? And, ultimately, how do we get there fro[m] here?

> ***Maps currently commissioned for the bioregionalism atlas:***
>
> - **Tom Ballantyne — Archaeological potential and explorer's canoe routes**
> - **Peter Brogden — Maple Lake as a miniature bioregion**
> - **Eric Lillius — the historical forest**
> - **Rob Luke — communications networks**
> - **John MacDonald — settlement patterns and transportation systems development**
> - **Gord Smith — wetland areas and aggregates**

All of this preamble perhaps helps explain wh[y] bioregionalism students are traipsing the roads an[d] trails of this region, doing whatever it is they are doin[g]. They are studying what appears, from the outside, to b[e] a strangely nebulous and ill-defined synthesis of eco[l]ogy, history, and community economic developmen[t]. They are writing papers on such unpredictable sub[j]ects as shoreline road allowances, the Donald chem[i]cal plant, even contemporary artists in the area.

The method behind this seeming madness come[s] straight from the underpinnings of bioregionalism[:] apart from suggesting new ways of relating to th[e] environment, there is a bioregional framework i[n] which one can study what those relationships hav[e] been like in the past. Would-be social engineers ar[e] well advised to take a close look at the historic[al] framework before suggesting directions for the futur[e].

More to the point, all bioregions can be expecte[d] to be distinct and unique, and it is very important t[o] respect and understand a bioregion's unique chara[c]teristics prior to presuming to suggest anything wha[t]soever.

Research here has taken the two forms mentione[d] above — the atlas project, and the students' researc[h] papers. The maps topics are suggested by the commu[ni]nity, on the premise that they are for the communit[y] and the community should know to an extent what [it] wants and needs to know. Subjects for papers a[re] proposed in similar spirit: with the advice of membe[rs] of the community.

Says Wadland, "The idea of the paper is that it [is] solicited by the community. We didn't come up to t[he] community and say here's what we're going to do to f[or] your community. We're here to take advice from t[he] community. That's really important here. We want [to] be working as partners with the community."

That's also a nod to the idea that bioregion[al] solutions are not usually something imposed fro[m] without. They are at best something implemented [by] the community, for the greater good of the communit[y].

Says Gibson, "Empowering local communitie[s]. That's what we're trying to do — not from any t[op] down 'we are the university we know', but from t[he] grassroots. Here we are. We are a resource. We try [to] collect the information because Haliburton County [is] so lacking the information. We want to provide it [to] you in a means you can use, to try and develop yo[ur]

vision for the future."

Willingness to include the community or not, there have been glitches, and there have been difficulties. A troupe of poorly funded, often impoverished students, with limited resources, and limited access to transportation, naturally often has its hands full doing research in so far flung and fundamentally rural a community as the Highlands. And winning the trust of the sometimes suspicious and sometimes insular Highlands residents who might actually know things worth recording isn't always easy. Nor are perceived 'outsiders' with complex new theories with polysyllabic names welcome at all doors in any case. But Wadland is enthusiastic about the papers the project has produced. The quality is up and down, he says. But they're getting better.

He envisions the atlas as the *pièce de résistance*, and the project's legacy for the future. Atlases and bioregionalism have gone hand in hand from the beginning, and Haliburton, with a limited collected knowledge base, he expects will do particularly well from the exercise.

Gibson concurs. It hasn't been easy, but that makes it so much more worth doing. "Information you can find readily in southern Ontario, you can't find here. Which just gives us a lot of frustrations and more conviction to continue what we're doing," she says

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From the United nations to Windy Pine

Bioregionalism on the world stage and in the Highlands

How all of this started — and the history of the Windy Pine property where the project now bases its research — is something of a local and global history lesson in itself.

The idea for the project, says Wadland, came in the wake of the 1987 Brundtland Commission's report to the United Nations. The Commission, chaired by Norway Prime Minister Gro Harlem Brundtland, produced the report *Our Common Future*, which, like bioregionalism, tied together environmental conditions, living conditions and economic development. That report was for Wadland, as for many in the world, a turning point.

"We hit on the idea of bioregionalism" he says, "as a way of dealing with some of the suggestions that had been made in the Brundtland report... You know that maxim about thinking globally and acting locally. We really believed that we could focus our energies on a specific project in a specific place and try to deal with some of the practical questions that had been raised by the Brundtland report."

From there, he says, looking into the value of bioregionalism as a philosophy was just natural. His angle for the study of history happens to be something called environmental history, a relatively new approach which concentrates on how the environment shapes human communities and vice versa. For example, he's fascinated by Haliburton as an environment significantly shaped by human forces — a theme that's part and parcel of bioregionalism the way he interprets it. He cites the diverting and damming of rivers and lakes to create a reservoir for the Trent Canal system as only one such influence. This place, he suggests, probably wouldn't look anything like it does, without the influence of human settlement, and that's kind of interesting, considering the region's image as unspoiled and pristine. "We don't even know," he says, "if all these lovely colours we come to look at in the fall would even be here if the area hadn't been clearcut in the 19th century... That's what people from Toronto value about Haliburton — that beautiful colour in the fall. Well, maybe the hand of humans has been directly responsible for creating that."

Bioregionalism, therefore, asks many of the same questions he does, and just happened to be coming to prominence in the years immediately before and after Brundtland. But bioregionalism as an idea actually goes back well before Brundtland. Some even argue, its roots go back well before the existence of urban civilizations, to the autonomous villages that were

once the norm of human existence, or to the Native civilizations that preceded European settlement in North America, but this is something of a separate issue, and one hardly settled.

A starting point for the growth of the philosophy across the continent was a unique 'intentional community' created in 1978 in southern Missouri and northern Arkansas. Organized by a group of residents of the area, the project, called New Life, started as a kind of demonstration farm using alternative energy systems, including such environmentally-friendly innovations as biomass methane digesters, which produced electricity from wasted gas, solar space and water heaters, and solar greenhouses.

New Life branched out after that, concentrating on community education, and by 1980 it held its first bioregional 'congress' — the Ozark Community Congress — a gathering of thinkers to discuss and disseminate the ideals and philosophy of the movement.

Since then, the philosophy has inspired projects all over the continent and all over the world, ranging from the academic to the quasi-spiritual/mystical. Fields informed by the philosophy are equally wide-ranging; bioregional thought even informs a new architecture, which attempts to construct the physical aspects of community — brick by brick — in keeping with bioregional principles. The congresses popularized by the Ozark movement are themselves often model — if temporary — intentional bioregional communities, in which, as one document puts it, "the group as a whole takes care of food preparation, child care, education, celebration, recycling, cleanup, shelter building, creating a newsletter, cultural presentations, and many more of the functions of a community."

Bioregionally based 'intentional community' projects are now in various stages of planning or execution across the continent, including both coasts of Canada — at an unused cement plant in BC, and in Summerside, PEI, to use two widely different examples.

The Trent program is one of a few efforts now attempting to give academic dimensions to an idea that has been until now the province of a diverse and loosely affiliated group of thinkers and dreamers. The Trent group is cautious — almost apologetic about doing so, and stresses it has no intention of taming it too much, or rendering it entirely to the province of academics. For one thing, says Wadland, they could hardly pretend to do so. There is already a much broader community interested in the idea, including a flourishing family of discussions and arguments on the internet, and the Trent project is hardly positioned to appropriate the concept or define it entirely for itself.

Says Wadland, "Bioregionalism as an idea did not begin as an academic idea. We're essentially trying to keep it pristine, in its non-academic form, but also

Atlas project coordinator Anna Gibson and GIS specialist Geordan Harvey, under the tree that gives the Windy Pine research station its name, itself a part of local history.

to give it some academic dimensions."

Further, adds Gibson, if there's one thing they don't want, it is that the idea not be intimidating. She says, "It's more of a feeling than an actual academic concept... The thing I find distressing is I don't want people to think it's an academic term, that it's an inaccessible term. Because it isn't. There are no definitions for bioregionalism that you find in a dictionary. It's the whole sense of all the things we're talking about."

Once Whillans and Wadland had decided they were going after a bioregionally-based study of the Highlands, they needed a base of operations. Wadland, fortunately already had one in mind — Windy Pine.

Windy Pine, appropriately enough, is itself a colourful little piece of local history, albeit a poorly known one. The property, a campus of three groups of buildings along the west shore of Lake Kushog near Ox Narrows, was once owned and run by Mary Northway — heiress to the fortune of Toronto retail magnate John Northway, of John Northway and Sons.

Northway was not interested in running the chain of stores when it was left to her, and, rather than doing so, opted to sell, rolling a sizeable portion of the fortune into a charitable foundation — the Neathern Trust, which provided money to a range of charities, and supported university students in need. One of her projects, jointly run with Flora M. Wilson, was Windy Pine. It was constructed in 1941 as a type of wilderness centre and base for canoe trips for parties of women interested in exploring the outdoors.

In later years, the camp became a meeting place for Northway, Wilson, and their friends; a group of women Wadland describes as "remarkable": Arla Saare, an editor at the National Film Board; Helen James, a charter member of the CRTC; Margot Thompson, who ran for the NDP in Kingston-and-the-Islands; Dorothy Millichamp, who ran the nursery at the Institute for Child Study at the University of Toronto and who was the early teacher of the Dionne Quintuplets. Northway, who had a a PhD in psychology, was a co-founder of the Institute. Wilson also worked at the Institute.

Northway happened to know former Canadian Studies chair Alan Wilson, and, over time, PhD students began using the property as a hideaway at which to work on their theses. Wadland did his — on Ernest Thomas Seton — in the cabin where Gibson and Harvey now work. When Morrison died in 1982, Northway gave the property to Trent University. So when Wadland and Whillans went looking for a research station in the Highlands, Windy Pine was a natural.

Now, in 1996, the station is still a center for teaching, study, and research. Gibson and Harvey are here full-time, on a modest provincial EYC (Environmental Youth Corps) grant, answering phone calls from curious community residents, and doing their best to explain their rather innovative project to the world.

They're happy to have the grant, though it's only for ten weeks this year, rather than last year's 15. There are ironies here for them too. Bioregionalism, a philosophy that fosters investment in the community and responsible utilization of the environment, now inspires a program whose sponsoring body, the Ministry of Natural Resources is drastically cutting funding for conservation agencies across the province and rapidly deregulating a body of environmental regulations that have taken decades to produce.

Gibson has no difficulty voicing her opinion, sponsoring body or not. "I think it's a step backwards," she says.

Then laughs. "Or a leap... It's just a nightmare."

Harvey, who has worked for the Upper Thames Conservation Authority in the London area, has similar misgivings. "At the Upper Thames alone," he says, "we're seeing faces disappearing — left, right and centre. Every time I come into the office someone else is gone. It's kind of frightening."

All of that aside, they're happy with how things are going. The project is moving along, and though they're looking for more, they've got six maps already commissioned (see sidebar), and others being negotiated. They feel the use of the new mapping system GIS (Geographical Information Systems) holds incredible promise for the work they do. With the cuts, they've just had to become a little more creative about building partnerships with potential sponsors, people with any skills of value. And the times, they say, only make the research they're doing that much more important.

"There are still," says Gibson, "lots of exciting possibilities."

The project is still looking for map designers — anyone with an interest in working on a map, or even with an idea for information worth collecting and mapping, is encouraged to call. Gibson and Harvey can be reached at the Windy Pines research station, at 489-1099.