

An Adirondack Expression of How Small Events Have Larger World Significance

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The Adirondack Research Consortium springs naturally from the land of John Brown. Certainly the landscape has some special angle of the sun or some vortex or intersection of ancient songlines that spawns curiously courageous organizations that attempt impossible experiments. The Consortium's plan is to go boldly where few academics have gone before by bringing together scholars, researchers, practitioners and interested dabblers from all kinds of institutions—big or small, public or private, academic or activist, local or distant.

It is to "seek common ground among a multitude of viewpoints." This means stirring together poets and foresters, ecologists and miners, lawyers and priests, wildlifers and social scientists along with a whole gaggle of biophysical sciences. Further, this rich intellectual stew is to serve not just academic purposes but to serve the fiercely independent, diverse, fragmented and very often quarlesome communities, institutions, interest groups and persons in the Adirondack region.

John Brown, of course, had the radical notion that the moral welfare of the commonwealth was a higher order of concern than the private property rights of slave owners. In Brown's mind such a taking without compensation was

necessary to save America from moral damnation. Our ultimate goal will be as difficult as was that of Brown. We will have our own Harper's Ferry failures and mercifully may our equivalent gallows speech be as short. Though some of the academics among us may find this the hardest part of our task.

Our challenge is to think outside of our comfortable intellectual and ideological boxes. To not think of the region as some pristine wilderness awaiting the correct environmental regulations and regulating police to get it there and to keep it there. To not think of the region as some frontier awaiting the civilizing of pulp mills, toxic waste disposal sites, prisons, suburban-style camps, condos and strip development. To not think of the region as some mix of Las Vegas and Atlantic City—a fresh wilderness waiting to be filled with Neon and a landscape with a near dead community waiting to awaken to the romance, style and taste of Donald Trump. Rather to think ecologically, to see the region as a place of ruins (Jackson, 1980) where hundreds of thousands of small starts have been made by plants and animals and people—most of which have been absorbed back into the landscape leaving us reminders that the hopes and dreams of others have been here and then passed on to fertilize our own promises. The landscape is thickly populated with all of these geologic and

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botanic starts and stops, losses and continuities. The landscape is thickly populated with the ruins of many get rich hopes, of many sacred visions, multitudes of smaller struggles and larger venal aspirations by our own species. There are messages here that we all ignore to our peril. They are small passing events with large implications for the world.

Of course, like Brown's crazy desire to end property rights as they were known in the 1860's our desire to think ecological is a perversion of all the preferred thoughtways of our civilization. To consider patterns of relations rather than mechanistic connections, to have units of analysis that are wholes rather than individualistic actions is almost unAmerican, and more so each day with the rising faith that market mechanisms can free us from all difficult moral choices. The Adirondack region as a system of weather and rock, plants and animals, dreamers and schemers interacting within some environment of human hope and institutional arrangement force us into ever looping webs of process and ever expanding realms of doubt. And at the center there remains the still awareness that there is much, so much that we are unlikely to ever understand in traditional rationalistic ways.

Just a few of these questions have been touched on in this meeting. How do we gain sustainable resource systems in ways that protect individual

eccentricity and still ensure responsibility to the endurance of our communities? What are the thresholds where our desire for economic and material expansion pushes the envelope of life quality toward decline? How do we encourage the redistribution of wealth from the richer regions of the south to poorer regions up here but without tourists in our backyards or crowding into our favorite streams, ponds, trails and bars? We think that serving a few of the very, very rich had a different impact upon us and the ecosystem than serving very, very many of the middle and less rich...but we can only make ambiguous approaches towards such seemingly clear comparisons.

My first experience of the Adirondack region was 25 years ago on a bright, October weekend. My family and I had arrived in Syracuse after our summer of working high up in the Mt. Hood National Forest and a good bye backpack hike into the Three Sisters Wilderness of Central Oregon. The Sisters area is a series of austere jagged volcanic peaks, retreating snowfields and glaciers, lakes, streams, virgin forests and wildlife. The wilderness is trailed, protected and pretty much kept as it had always been by the federal government. And then we were at the SUNY College of Forestry and the fine city of Syracuse. Happily a colleague rescued my son and myself by suggesting a trip to the

Adirondacks. Needless to say we approached these “little eastern” mountains with the usual western chauvinism and the biggest shock to us was the magnificence of these mountains. As we sat on one of the peaks with all the reds and yellows and oranges and greens rolling to the blue horizon, my 14 year old son said, “These mountains are so...so alive...so friendly.” The final surprise was that the whole mosaic was trailed and protected not by the feds but by a single state, by volunteers and by local communities.

Then and now I am surprised by the fickleness of the Adirondacks. Just when one is certain you understand, you are given prime evidence that you have no understanding whatsoever. Answers given yesterday do not fit today. Within a matter of seconds the wind blows from the south and then the north and then the west and then the east and sometimes from all directions at once. The biology runs this way and then it stops and starts something else. You are in suburban Lake Placid and then around the bend and over the beaver dam and you are in a loudly silent marsh wilderness that seems to run forever. Anthropogenic fingerprints are upon the shape of the land everywhere, but then so are the fingerprints of non-human nature. Indeed, this environment of ever escalating sets of questions seems most ideal for those in the intellectual trades.

We in the intellectual trades spin our pictures of the empirical world with a complex filigree of questions and answers. For some of us—researchers, scholars and scientists—it is the questioning that really matters. For others of us—professionals—it is the confident answer that really matters. Researchers give us a good deal of ‘on the other hand’ kinds of response just when we thought they were going to give us the one and final answer. They never saw a question they did not like and never see an answer as anything other than a special excuse for asking another question. They are the Dagwoods of the intellectual trades always opening too many overfull closets and letting the piles of objective neutrality spill into political life and thereby emotionally confound it. Professionals, on the other hand, must sustain serene confidence for effective bedside, courtroom or hearing room confidence. They like rolling questions that extend the drama of their answers. Without believing that for every problem there is an answer the professional could not function no matter their awareness as to how flimsy is the information. They are the Sherlocks and sometimes the Shylocks of the intellectual trades—for them cause and solution are always elementary.

Often, the general public assumes that the objectively neutral and the supremely confident are a fact of joined reality. Seldom do we trim that veil of mystique. Seldom do we remind the public that science has a certain stake in the ignorance it seeks to overcome and that professionals have a certain stake in the ill health, crime rates,

degrading environments and other problems they seek to solve. Seldom do we remind the public that all of the research disciplines and all of the professions have a tendency to dwell within certain boxes of specialized information, that produce certain “trained incapacities” such that this vision and this alone is seen as the only correct one. In short, our tendency toward bias is not unlike that of the laity. Except that ours is more highly refined and trained.

The lessons for the world from the Adirondack experience will be spun from our ability to transcend the intellectual tendency toward the ‘trained incapacities’ of researcher and professional, discipline and organizational culture. Our incapacities are trained when we know so much about one phenomenon, one set of questions, one methodology for answers that we force all issues into this one frame. We are so tightly trained that we are incapacitated from considering alternative approaches and can offer only invidious comparison. We no longer are humbled by the complexity of our data.

A consortium such as ours provides a rich opportunity to produce and to share transdisciplinary/applied knowledge about the human/natural resource dimensions of the North Country Region. How well we do on the small steps toward linking the social and the biophysical research domains of the ecosystem and, in turn, linking their findings and cautions to the domains of policy, planning and action will tell how much we have to say to the wider world and all the biosphere mimics of the Adirondack experience. And from this comes lots more ques-

tions, of course. What is so special about the Adirondacks? How likely is such a system to persist? How well is this consortium contributing to the larger information picture? Is the passion for maps and mapping also a caution for the researchers? How could Bernard Fernow serve as a wise use caution for our professionals?

Let us begin with what makes the Adirondack experience so special. This system is the only biosphere reserve in the world that actually responds to the resident human population in the way that all the Man and Biosphere (MAB) rhetoric says a biosphere should so do. One will look in vain through large volumes of MAB literature and find hardly a glimpse that possibly the original heritage and idea for biosphere reserves came from the Adirondacks. I have not read large praise by MAB or Park people on the early vision demonstrated by the 1884 New York State Legislature in creating the Forest Preserve. Nor is the wisdom of the 1892 legislature recognized in its ability to create a park of multiple uses and ownerships, with core zones, buffer zones, resident villages and working populations and most of the other aspects so favored by present day biosphere guardians. If you have dealt with the managers of such reserves and visited their landscapes you may get some idea as to why the Adirondacks are not given place of centrality as a useful model.

The Adirondacks are the only such area where the resident population has in place political institutions to resist, to sandbag or to redirect the grand aspirations of the scientists and planners and managers of this particular

biosphere reserve. Nearly all other such reserves are the private property of biophysical scientists, international conservation organizations and their local spin-offs, and well placed elites in the given nation's capitol. And because of that disparity in power between the experts and the residents in all other such reserves, those areas will have particularly short half lives. Because it has the adaptability of democratic institutions the Adirondack experience will prevail, though many of the changes upon the landscape may not be the heart's desire for many of us, the larger vision will prevail.

There is one other institutional dimension that will contribute to the persistence of the system. The Adirondacks are the only biosphere reserve with their own independent, resident institutions of higher learning, cultural archiving and locally sustained centers of historical awareness and pride of place. We are blessed with an incredible and wide ranging array of institutions from SUNY units to the Sagamore Institute. When Paul Smith's College completes its expansion to a College of the Adirondacks, it will give the region a resident private, degree granting institution dedicated to understanding and serving the region's land and people. This institution will be able to conduct, to collect, to translate and to distribute the abstractions of science in such a way that they serve the needs of people's daily lives. Nearly all other biosphere reserves are the private play pens of outside scientists, experts, conservation-

ists and tourists.

One cannot overemphasize the significance to long term sustainability of the reserve values in having real functioning political institutions for transmitting public concern and power and real functioning institutions dedicated to a region's self learning processes. The knowledge and information can provide the basis for empowerment and the political institutions the mechanisms for directing concern about what has been learned. These are the necessary feedback elements for a sustained ecosystem. That is, the very institutions that give fits to all the sides engaged in debate about the future because of their delay, their rancor, their conflicts, their confounding data and endless meetings are the very ones that

tains, and their temporary and permanent human residents? To get at some indicators of our performance I looked at the distribution of paper topics and the institutional affiliation of the listed presenters. The method is crude but it does scan our public image. I had the advantage of listening to all of the papers so I had something of a check upon any systematic disparity between the paper titles and what was actually said. I, also, attempted to estimate the number of presentations that were directed primarily to the interests of other future research (17) and those that primarily served applied issues such as action strategies, planning or stewardship practices (6).

Table One
As Table One indicates,

Questions/Broad Themes of Forum Papers		
	Number	Percent
Development/Land Use	6	26.0
Water Issues	4	17.3
Recreation/Tourism	4	17.3
Public Participation	3	13.0
Forestry	2	8.6
Geology	2	8.6
Interpretation	1	4.3
Cultural Values	1	4.3
Total	23	99.4

will keep the Adirondack system in tune with itself and will keep it going long after the other grander visions in other locales have been converted to some other notion of the moment. In short, it is the working of the institutions of a free people that are most critical in the long term survival of conservation strategies.

How well are we in this consortium contributing to an integrated ecosystem management strategy for these moun-

the bulk of the papers clustered around three topics—development/landuse; water issues and recreation/tourism issues—which accounted for 60.6 percent of the papers. As Table Two indicates, our presenters and session chairs were overwhelmingly (67.5 percent) from academic institutions. Neither the topics or the institutional representation should be surprising given the forum's goal of dealing with research needs, aspects and

funding sources. However, our interest in information/data dissemination throughout the region and the goal of reaching a wide spectrum of data generators and users may not be as well served. This published image of ourselves does suggest a certain trained incapacity. Certainly, the wider Adirondack population does not seem part of the forum either by being participants or selecting the topics of research and analysis.

Table Two

Types of Institutions of Presenters at the Forum

	Number	Percent
Academic	27	67.5
Research Institute	2	5.0
Private Non-Profit	3	7.5
Private Profit	4	10.0
Government:	4	10.0
Federal	[1]	
State	[3]	
Local	[0]	
Total	40	100.0

Further, if we consider that such a high density of the papers in their data description and analysis revolved around maps, mapping and geographic information systems we need to ask how user-friendly is our information? I am your favorably disposed, general educated listener who has dabbled with ArcInfo and compelled my PhD students to get on line with GIS. Yet, I was struck by how enthusiastic speaker after enthusiastic speaker praised the wonders of GIS yet, not one seemed to realize the exercise of power their maps gave them. Maps and mapping are about CONTROL of knowledge, landscape, behavior and, therefore,

wealth. Maps say what is, where it is and who gets it or does not get it. They are human artifacts and consequently are subject to all of the distortions found in other dimensions of life. Yet, maps seem and we treat them as if they were true and objective representations of the empirical world. This technical power and its legalistic consequences combined with the tendency toward the distortion of reality mean that the mapping experts and their keepers have the potential to exert tremendous power over

others and particularly those without access to the map creation and its technology.

Consider how we apply word sets to our mapped spatial re-presentations. Similar objects, but the variable meaning of terminology sets induce conflict and alter the nature of the class structure.

As Table Three illustrates, we in the intellectual trades concentrate upon the mapping of ecological 'reality.' We are certain that our scientific concepts are objectively neutral. We are just mapping the space. However, there are other maps of the same space. And those maps have subtle shifts in terminology

such that meanings are greatly different, particularly as we shift down from the grand scale of our maps, to the personal maps in people's heads and daily life.

Our faith in the computer and our theoretical concepts lull us into thinking that what we have is objective when it is actually loaded with hidden values, interests, perceptions and hopes. In a very real sense the distortions and power function of maps can stand for all sorts of scientific data when it leaves the realm of academia and enters the realm of policy and political struggle.

Van Diver (1994) tells us that the Adirondacks are new mountains carved from very old ones. They are rising at 3 millimeters per year and within a million years they will be three kilometers higher. Though the 1892 legislature may have been unaware they had rising mountains, they did get the blue line right in terms of a whole biophysical system. The entire uplift is within the boundary. Few biosphere reserves do that.

However, the equally natural human ecosystem patterns and process do not necessarily follow the lines of geology or biological ecology. The blue line contains all or part of 14 counties. Nearly all have square or angular rather than the flowing and rolling shape we expect in biological systems. Within these counties there are 105 towns and villages and most of these are the angular shapes of the surveyor. Certainly with 14 counties and 105 towns and villages the 130,000 permanent residents have an ample density of political divisions compared to other

Table Three. Some categories for mapping the landscape.

ECOLOGICAL	NORMATIVE	PERSONAL
territory	turf (where we belong)	property (use rights and responsibilities)
habitat	place (feeling/sentiment)	home
border (domain/biome)	division (us/them)	boundary (mine/yours)
edge	buffer	line
zone	function (what it does)	utility (how used)
We think these terms are scientific and therefore are politically neutral.	Communities and households have similar categories but different meanings.	At the personal scale we have similar categories but the intent is to use space for regulating appropriate & inappropriate behavior.

regions.

However, it does not stop there. Hamilton County with 1,724 square miles and 5,279 resident people has nine townships and 14 zip codes. This does not include--fire districts, health districts, public works districts, DEC districts and sub-districts, wildlife management zone districts, school districts, special tax districts and whatever other geo-political divisions that have been created, with few of them having isomorphic boundaries. That is, these deeply meaningful spatial boundaries don't map well in the usual cartographic sense of inclusion. They certainly are not conforming to any rational biological or social ecology. They are crevice. They simply emerged at some necessary point in time and have continued long after their origins have been forgotten.

This natural human ecology mapping process is spinning along, dividing and subdividing, consolidating and disintegrating in its merry way. Along comes the scientifically based, rationally ordered maps of the Adirondack Park Agency with their pinks and greens and yel-

lows and purples that are to overlay, at a fairly abstract scale, the biophysical and social ecology of the region. There are six private land classifications—hamlet, rural use, private use, low-intensity use, resource management and industrial. For public land there are 9 categories—wilderness, canoe, primitive, wild forest, intensive use, state administrative, historic, scenic vista and, my favorite, pending classification. Of course, we must assume these nine zones still must be held to the constitutional 'forever wild' status.

However, even this premier, high tech, ecofriendly mapping seems more squares, angles and sharp edges than do the boundaries of natural/human ecosystems exhibit in the empirical world. Not much here of the intricacy of watersheds and sub-watersheds, natural cycles, births and deaths, comings and goings of loved ones, gaps and stochastic events from pest, disease and fire outbreaks, droughts, floods and industrial busts and booms, rise and fall of tourist fads and fashions. There is much concern about the recovery of stressed forests, waters, fishes,

bears and ecosystems. There seems much less recognition that the human communities have

been under perpetual stress from changes in logging, tannery, mining, upper class tourism, working class tourism, Canadian tourism, condomania and Olympic tourism. All these peaks of high promise and all those rapid declines and the production of new ruins. Though Bill McKibben (1994) suggests that the biological systems are recovering there seems to be less evidence that the

recovery is restoring the stressed human ecologies.

To map is to control as much as it is to enlighten. Are we prepared to download our high tech maps to the best levels of human diversity and perversity? Can we establish respect for and make fully functional the mapped landscapes that are held in the minds and lives of ordinary people who live, perceive, order and experience their part of the region? Can we give equivalency and shared power for their maps and our maps--or must we always be dominant? How necessary is it for us to have an unshakeable faith that the reality, validity and reliability of our data is always superior to that of non-experts?

Denis Wood (1992) in his book, *The Power of Maps*, demonstrates why maps are not transparent windows on the world, but social constructions of a particular reality of interest to particular persons and organizations. The consequences of such a reality check are critical for natural resource issues. We need the tools and their wonderful possibility. But we, also, need to be aware of their limitations and

honestly share that with the general population as we need to ensure the incorporation and legitimacy of their maps into our system. As Wood (1992:18-19) notes:

If a map, "were not a reality, why then it would be just an *opinion*, somebody's *idea* of where your property began and ended, a good *guess* at where the border was, a *notion* of the location of the hundred-year flood line, but not the flood line itself. What elided in this way is precisely the social construction of the property line, the social construction of the border, the social construction of the hundred year flood line, which like everything else we map—is not the line you can *see*, not a high water mark drawn in mud on a wall or in debris along a bank, but no more than a more-or-less careful extrapolation from a statistical storm to a whorl of contour lines. As long as the map is accepted as a window on the world these lines must be accepted as representing things in it with the ontological status of streams and hills. But no sooner are maps acknowledged as social constructions than their contingent, their conditional, their...*arbitrary* character is unveiled. Suddenly the things represented by these lines are opened to discussion and debate, the *interest* in them of owner, state, insurance company is made apparent."

Later, Wood (1992:192) responds to a fellow geographer who is worried that ordinary citizens with access to GIS will not be aware of distortions in map size differences. Wood's ironic response is, "Better to trust your expert cartographer—with his 'best available' data, his

diminished Africa and his exaggerated Russia, his cloudless skies, his maps of potential...*iron mines*—than hazard an...unintentional self-deception. What is this? It is the heart of darkness of our times, the assurance (and arrogance) of the...expert...that he knows...*better than you.*"

Wood permits us to see that if we strip the veil of mystique created by experts, if we let the public have the means to do their own mapping, their own science for their own needs they can be more effective participants and ensure closer goodness of fit between their empirical reality and that of the experts. Indeed, the experts cannot possibly have all of the nuances and historical data directed to their place and time. For most of our basic planning needs we can be our own mapmakers, our own researchers, our own self educators. In this daily awareness and exploration, the expert becomes a guide, a resource, a facilitator rather than a dictator of information and thereby master of the ways we can and do organize our lives.

People's maps and research data do not replace but complement, supplement, monitor and correct our high tech maps and data. Our function should be to help establish the legitimacy of these equally necessary data as part of the critical stake and information chips brought to the resource decision-making process by ordinary people. Indeed, most of our information gathering, analysis and participation processes may be more smoke and mirrors until we bring in people as equals in the production of information rather than simply consumers of

information.

Yes, it can be done. In our ecosystem management project in Baltimore, our colleagues in Save Our Streams (SOS) have been organizing and empowering ordinary inner city folk to map, to monitor and to evaluate their own physical and social ecologies. And these folk have demonstrated skills of sufficient weight to take polluters to court.

Finally, let us confront one other model of hubris, by travelling to the nature trail near Wawbeek Corners built by students at Paul Smith's College. Here is a memory of Bernard Fernow, first Chief Division of Forestry with the Department of Agriculture in 1881. He was replaced by Gifford Pinchot in 1898 and became Director of the first US forestry school at Cornell University. Fernow was born and schooled in Prussia and had a certain trained incapacity in regard to the forestry needed in his newly adopted land. He believed firmly in the need to have demonstrations of 'proper' forestry on public land as a means of educating and reforming the forestry practices on private land. So on land north of Tupper Lake he set out to demonstrate the ways of 'scientific forestry' and his view, "We must repeat again that forestry is a technical art, wholly utilitarian and not, except incidentally, concerned in aesthetic aspects of the woods." (Graham, 1986:151-153).

Fernow found that the Forestry School lands assigned him by the state were 'poorly stocked' with hardwoods that had little value for the markets at that time. So he set about removing these and bringing in native and

exotic conifers that would have higher values. After removing these 'weedy' hardwoods for the thrifty exotic softwoods Fernow had his workers burn the slash. Unhappily for Fernow the fires escaped and spread to the estate of Adolph Lewisohn. When Lewisohn rushed over to protest he was brushed off as a citizen who did not understand the finer points of scientific forestry. It was obvious that Lewisohn was more influenced by the aesthetics of the woods than more "utilitarian" principles.

The result was that Lewisohn aroused other well-to-do landowners in the area to have Cornell fire Fernow and later to have the state terminate the Forestry School itself in 1902. Forestry in New York State has long had to operate under the shadow of Fernow's arrogance. (It is interesting to note that Frank Graham's political history places a great deal more emphasis upon the role of arrogance in Fernow's downfall than does the trail brochure prepared by Paul Smith's students which gives him more of the air of a beleaguered professional surrounded by the unwashed. It is a nice walk through a plantation.) And the Yale School of Forestry and Environmental Studies started by Pinchot has been able to claim that it is the oldest continuous School of Forestry in the country. Whatever, the trivial conceits of academics the story of Fernow is a necessary caution to realize that science is often necessary but seldom sufficient in guiding public policy about natural resources. Our best means for guarding against the failures of hubris is to ensure the inclusion of our clients at all

phases along the information gradient from production to analysis to monitoring and evaluation.

We will need to believe that mapping, education and planning are too important to be left to the experts alone. Sustainable and workable answers must come from the affected population and be included in the systematic analyses. We need to accept the reality that science and professionalism though necessary are not sufficient for understanding all dimensions of resource systems. If we approach nature only with rationality, only with the sense of progress, we may avoid the risk of failure but we will never fully understand the ecosystem in this manner. We must risk approaching nature as a poet...as a lover. To try to express the essence of an object, an event a moment; to expose oneself to the risks of love is to risk all, to have, in David Riesman's phrase, "the nerve of failure."

Only with such a nerve of failure can our science expose the full meaning of our questions and answers about people, forests, wildlife, waters and the moving mountains. All are part of our community of learning. And that is a true message about how small steps in the Adirondack country have larger meaning on the world stage. It is a message that John Brown would understand.

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