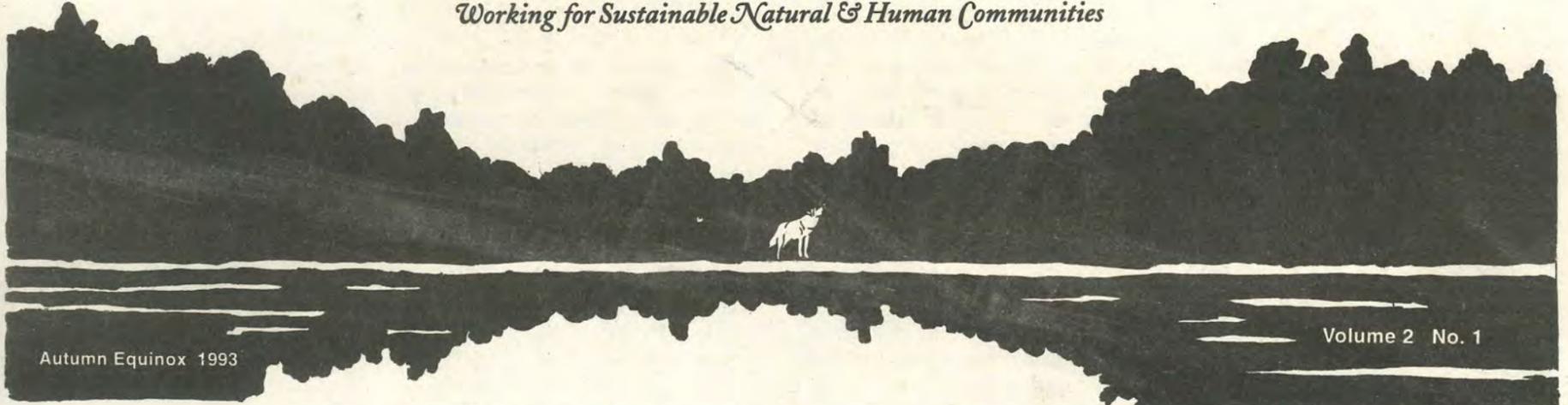


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The Northern Forest Forum

Working for Sustainable Natural & Human Communities



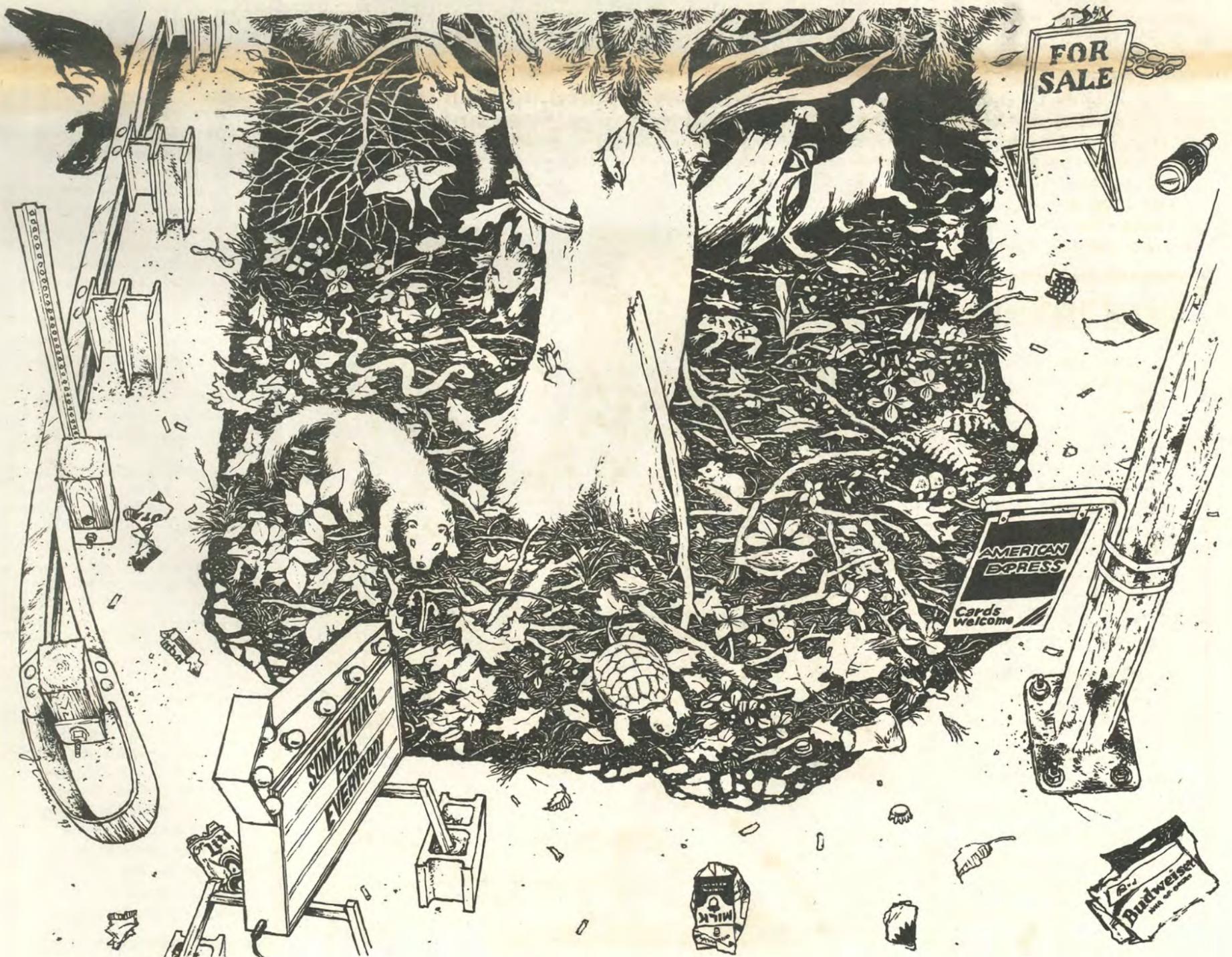
Autumn Equinox 1993

Volume 2 No. 1

RESTORING THE NORTHERN FORESTS

A Forum Critique of NFL Council's Disappointing Findings and Options

- ↳ Each Subcommittee Examined (pages 3 - 25)
- ↳ Editors Recommend Large Reserves (page 26)
- ↳ A Conversation with Roger Milliken, Jr., Chair, Maine Forest Products Council (pages 27 - 31)



OUR BEQUEST—A NEW DEMOCRACY

"What is needed for life to flourish is the ability to change."
—David Suzuki

Just as the Civil War was the inevitable resolution to the unfinished business of establishing an independent nation that countenanced slavery, there must be a reckoning to a society whose economic, social and political institutions are based upon ecological abuse.

We in the Northern Forests are now embarked on that journey which can lead only to resolution of this conflict—whether through peaceful or (politically or ecologically) violent means. There is no turning away, no turning back. The only question is: in an hour of crisis, can we summon the wisdom, the courage, and the character to address and resolve this problem *before* further irreversible ecological damage occurs?

We are asked to examine the "Findings & Options" (F&O) of the Northern Forest Lands Council. Rather than lament the missed opportunities these disappointing F&Os present us with, let us transcend petty, divisive "interests", claims and counter-claims of "rights" and "political reality." Let us begin the collaborative process that protects—not for a year, a decade, a generation merely, but protects *in perpetuity*—the biological diversity and the integrity of the ecological processes of this region we love. Let us develop a dynamic and sustainable social, economic and political system that evolves within, not opposed to, ecological reality.

We must engage in this work mindful of the failures of the past. Merely to view this past as a failed experiment, however, is unjust; we must correct our errors unflinchingly, but without rancor.

The document just released by the Northern Forest Lands Council—its "Findings & Options"—is not a foundation upon which to build. Rather, it stands as a monument to the errors of

the past—to a belief that economics take precedence over ecology; that we can mitigate the damage we inflict on natural systems; that a static status quo has served the region well and will continue to do so.

Nevertheless, within these F&Os are to be found the beginnings of the healing work we must dedicate ourselves to if we are to long survive. Rather than dwell upon our disappointment that these F&Os fail to provide the foundation upon which to begin restoring sustainable natural and human communities, let us view them as a stepping stone to the great work of our lifetime.

The work of the Council and its predecessor, the Northern Forest Lands Study, have already provided us with the keystone for that work: that the fate of the Northern Forest region is an issue of local, regional and national significance—indeed, of global significance. And, the public discussion these past five years over the work of the Study and Council has begun the necessary dialogue and collaboration among all parties who care enough about the fate of this region to put aside self-interest for the sake of community.

We must be honest. We must clearly identify our failures and wrongs. Those who deny the harm clearcuts do to forest ecosystems, that organochlorines such as dioxin do to river systems, that air pollution does to all breathing creatures must join the ranks of those who deny smoking causes cancer, who assert that slaves were grateful to their masters.

But we must not distract ourselves with recriminations. We must dedicate ourselves to healing our ways and means so that we do not sacrifice our human communities or forests, rivers, and the air to some new folly.

When Lincoln delivered the

Gettysburg Address, he challenged the living to dedicate themselves to the "unfinished work" of actualizing the intent of the founding fathers in 1776—that the experiment in self-government by free men (and women) who were *created* equal should survive and flourish.

Today, we are in the midst of another great war. There are no armies, no bloody battles between soldiers, no invading hordes. But it is a war for survival nonetheless. At stake is four billion years of evolving life. The great biologist E.O. Wilson writes that it took tens of millions of years for evolution to recover its original levels of biological diversity after each of the five major "extinction spasms" of the past. He warns: "...humanity has initiated the sixth great extinction spasm, rushing to eternity a large fraction of our fellow species in a single generation.... [E]very scrap of biological diversity is priceless, to be learned and cherished, and never to be surrendered without a struggle."

Just as Lincoln's generation was called upon to acknowledge the need for evolving new values and institutions to realize the work of the founding fathers, our generation is called to meet a new evolutionary challenge—a political and biological challenge. Nothing less than an evolution in values and institutions is required.

The paradox of freedom is that we—the heirs of Washington, Jefferson and Lincoln—possess the political freedom to make these needed changes peacefully, equitably, voluntarily. But we do not have the biological freedom to ignore or to cut a compromise with the ecological crisis—of our own making—that now grips us.

Goethe wrote:

That which thy fathers have bequeathed to thee

earn it anew if thou would possess it. The Declaration of Independence is a generous document—a gift and a challenge to succeeding generations down to our own and beyond. It is not a static, mean-spirited defense of the wealth of the privileged few. It was a bold and visionary—dare we say "radical" and "revolutionary"?—response to the crisis of the era. The founding fathers met the challenge boldly and uncompromisingly. They did not flinch; they did not compromise; they did not mitigate.

Lincoln's generation met the challenge too, but only after the 1820 Missouri Compromise and the Compromise of 1850 with its Fugitive Slave Act had condemned the nation to its bloodiest war.

The challenge facing our generation is to salvage democracy—not merely equal rights for all humans, but a democracy of all living beings. When we discover the grace to cherish and protect every "scrap" of biological diversity—human and non-human—we will have earned the right to possess what our forefathers have bequeathed to us.

—Jamie Sayen

Northern Forest Forum Statement of Purpose

The Purpose of the Northern Forest Forum is: To Promote Sustainable Natural and Human Communities in and beyond the Northern Forest Region.

The *Forum* will focus on:

*The Ecological Integrity of the region and strategies we need to adopt to restore and preserve it;

*The need for Economic Reform into an economy that is ecologically sustainable, equitable, and locally and regionally controlled;

*Community Empowerment;

*Monitoring the Northern Forest Lands Council.

The *Forum* is the only publication devoted to exploring the Northern Forest as an area of local, state, regional, national and global significance. It will seek to involve all citizens and groups concerned about the future of the Northern Forest.

We believe we can find the common ground that unites the diverse elements of the Northern Forest communities.

We hope to stimulate a healthy debate that will assist our search to find common ground, not more polarization. We hope the *Forum* will promote a sense of regional and cultural identity and celebrate the integrity, beauty and resiliency of the biotic community and the cultural diversity of the human communities of the region.

The *Forum* will seek to assure that political, economic, social and cultural strategies for the region's future be ecologically sustainable.

Articles published by the *Forum* will represent the views of the authors only, and will not necessarily represent the views of all supporting members of the *Forum* or its editorial staff.

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Forum Special Issue Critiques Council Findings & Options

by Jamie Sayen

This special issue of *The Northern Forest Forum* focuses on the "Findings & Options" (F&O) released by the Northern Forest Lands Council (NFLC) on September 16. We urge readers to acquire a copy of the F&Os from the Council (54 Portsmouth St., Concord, NH 03301; tel. 603 224-6590) and to submit comments to the Council **before midnight October 18**.

We hope this special issue will assist you in identifying the most important issues facing the region and that you will submit to the NFLC your thoughts on the most effective strategies to pursue to promote sustainable natural and human communities.

The NFLC will meet in early November in a session closed to the public to draw up its "Draft Recommendations" which are scheduled for release in mid-December. In January, February and March 1994 there will be numerous public hearings throughout New England and New York on the draft recommendations. In the spring, the Council will finalize its "Recommendations", which it will release in early June.

It is critical that the Council hear from people who place community health and welfare ahead of self-interest and extreme individual rights.

Kudos for the Council

***Regional Dialogue:** The Council deserves high praise for addressing the fate of the Northern Forests as a regional issue, as well as a local, state, national and global issue. The importance of this initiative cannot be overstated. And, while it has numerous shortcomings, the contribution to launching and sustaining a **regional dialogue** ensures a well-deserved place in Northern Forest history for the Council.

It is precisely because the Council represents such an important initiative that we at the *Forum* have expended so much time examining, praising and criticizing its work.

*The Council has begun the process (long overdue) of providing an opportunity for the myriad forces and interests of the region to come together to discuss, debate, disagree, agree and discover new ways to collaborate on the problems afflicting our region. The

Council deserves credit for helping to diffuse the tendency to polarize public discourse (such as has poisoned the atmosphere in the Pacific Northwest).

Council Shortcomings

Unfortunately, the Council has come up short too often. Most significant are:

*Its refusal to examine forest practices directly, or to assess the impact of two centuries of forestry on the ecological integrity of the region, or to assess the impact of unsustainable forest practices on the local economies.

*It has shown a preference for expensive "conservation easements" over "full-fee acquisition" as the primary land protection and acquisition strategy. We need to establish a network of large, connected ecological reserves. Full-fee acquisition is the only tool that will assure adequate protection of core reserves. While other strategies (existing use zoning, forest practice regulations, easements) can compliment fee

acquisition, no other strategy or aggregate of other strategies can adequately protect biological diversity.

*It fails to ask what is an ecologically sustainable regional economy.

*It fails to examine the regional and local forest economy to understand trends, why there is a lack of economic diversity, why so many raw logs are exported and why so few value-added opportunities exist within the region. It also failed to examine the Northern Forest Lands Study finding of poverty, unemployment and other social ills in the region.

*It has shown a propensity for offering tax breaks to land owners and industry as a "fix" for the problems the council has identified, even though it has failed to demonstrate the connection between land sales and tax policy or that such expensive "incentives" (many call them "subsidies") will achieve Council conservation goals.

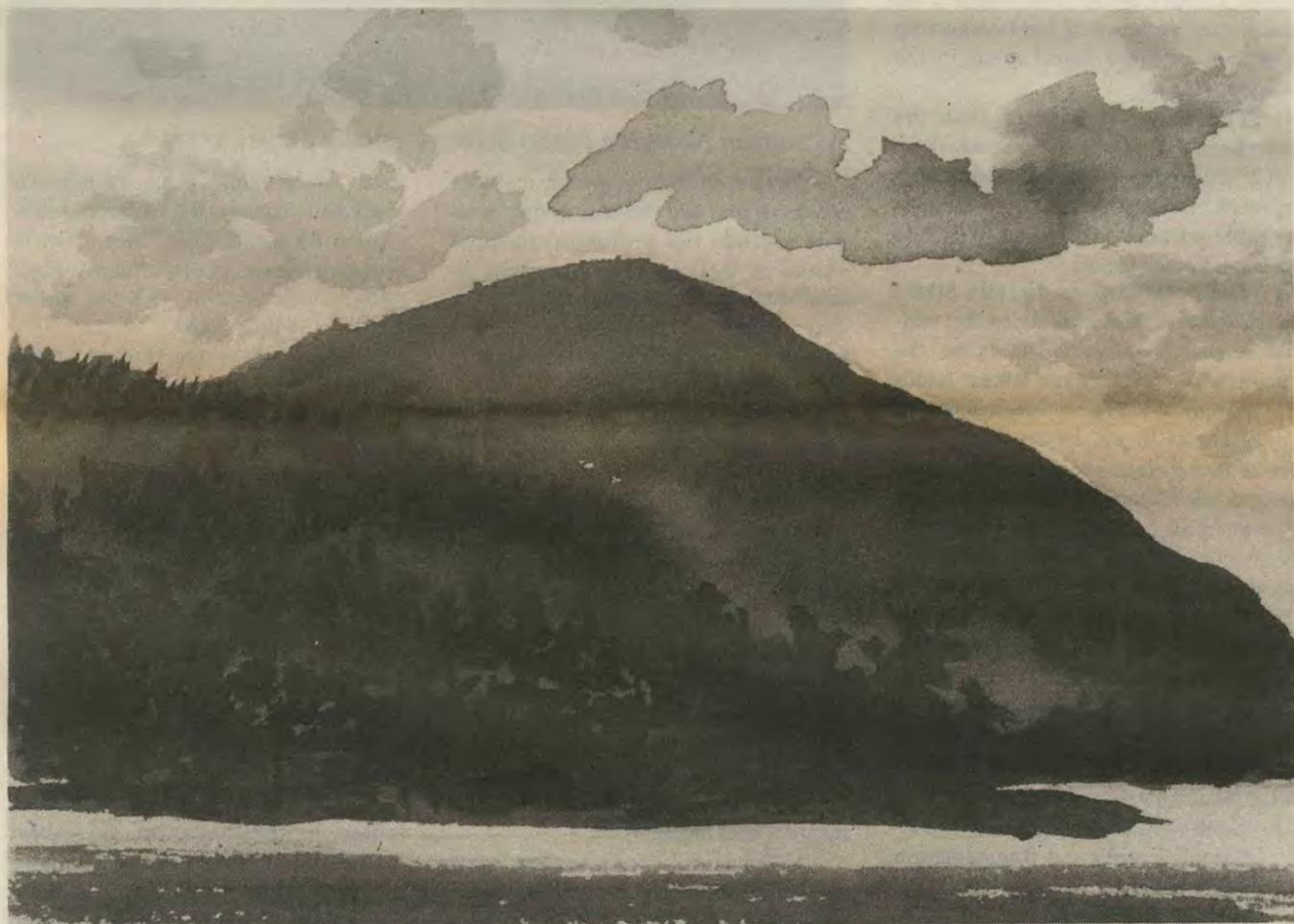
*It has failed to distinguish between the interests of absentee corporations and wealthy families and indi-

viduals who own most of the private land and the needs of the small landowners and citizens of the rural communities.

Contents of this Issue

Pages 3-26 of this issue of the *Forum* critique the Council Mission Statement and the "Findings & Options" of its seven subcommittees. We also offer a critique of the phantom "Forest Practices Subcommittee" that the Council never established. The Editors of the *Forum* conclude this special F&O section with their suggested "Recommendations" for the Council to make to Congress and the Governors.

Special Note: The articles in this issue only reflect the views of the author. They do not necessarily reflect the views of any other contributors to this issue, nor any of the organizations these individuals work for. The "Recommendations" on page 26 reflect the views only of Jamie Sayen & Andrew Whittaker.



Editorial Policy

The *Northern Forest Forum* is an independent journal covering issues of importance to the Northern Appalachians (including the Adirondacks and Tug Hill regions of New York). Signed articles reflect the views only of the writer, and do not necessarily reflect the views of the editors or any other groups or individuals associated with the *Forum*. The *Forum* will publish articles that stimulate the search for sustainable natural and human communities in the region.

If possible, please submit articles on Macintosh-compatible disc. Send articles to: *Forum*, POB 52, Groveton, NH 03582.

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Flawed 'Mission Statement' Mars Findings & Options

by Mitch Lansky

The Findings and Options of the subcommittees of the NFLC are a logical consequence of the Council's Mission. Unfortunately the Mission Statement is highly flawed. To the extent that the subcommittees based their Findings and Options on flawed premises, they reached flawed conclusions. Citizens have communicated their displeasure with the Mission Statement verbally, in written comments, and even in a book (see *Beyond the Beauty Strip* pages 17 and 18), but the flaws remain.

Council Logic

The logical foundation for the work of the Council is the statement by Senators Rudman and Leahy that, "The current land ownership and management patterns have served the people and forests of the region well." Based on this assumption, the Council states that, "The mission of the Northern Forest Lands Council is to reinforce the traditional patterns of land ownership and uses of large forest areas in the Northern Forest..."

The Council asserts that the Northern Forests are threatened by "ever-increasing pressures from development, division of land into unmanageable parcels, recreation use, land taxes and other factors."

The problems, as directly stated here, are therefore threats to the real-estate *status quo* (and in Maine, the majority of the Northern Forest Lands are owned by the paper industry) rather than threats to the forest itself or to local forest-dependent communities. Indeed, the Council makes the assumption that protecting that *status quo* is the equivalent of protecting the forest and local communities.

The large landownerships, however, have *not* always served the region well. The timber industry *status quo* is *not* always equivalent to the best interest of the forest or local forest communities. Problems connected with the large landownerships include:

- *forest degradation;
- *simplification and fragmentation of wildlife habitat;
- *worker exploitation;
- *industrial leverage over timber prices;
- *minimal contributions to the tax base;
- *domination of local economies deterring economic diversity; and
- *rural poverty (documented in the NFLS).

Council Language

To support its logic (where protecting the big landowners is equivalent to protecting the forest) the Council uses certain words, such as "traditional," "fragmentation," "conversion," and "conservation," in ambiguous ways that furthers this assumed equivalence:

*"Traditional forest land uses"—is an exceedingly vague term that the Council defines as, "those kinds of uses in the northern forest that have characterized the region in the past and present, including an integrated mix of timber and forest products harvesting..." (pg. 56)



A common Northern Forest Scene. Photo by Steve Gorman

Such a definition, which includes uses both past and present, would therefore include the problems outlined above as well as such practices as mechanized harvesting, whole-tree clearcutting, and herbicide spraying that have only been used on a large scale in the last decade and a half.

*"Fragmentation"—is used by the Council (pg. 54) to mean, "division of landownerships into smaller parcels." It is a real-estate definition. Conservation biologists, however, use the term to refer to the breaking up of wildlife habitat into isolated islands that support fewer species. The two uses are not equivalent. It is possible, for example for a consolidated ownership to biologically fragment the forest with large, dispersed clearcuts. It is possible also for a collection of smaller ownerships to maintain large contiguous areas of mature forest habitat.

*"Conversion"—is another word that has both biological and real-estate meanings. Biologically, it means a change of forest vegetation or habitat type. But the Council uses the word to mean, "activities which result in a change of traditional uses of the Northern Forest Lands to non-forest uses and diminish forest values." Decoded, this means subdivision and development of land, even when the actual loss of forest occurs on a fraction of the land parcel. "Forest management," according to the Land Conversion Subcommittee (pg. 57), "in and of itself, is not considered to be land conversion..."

*"Conservation"—is another vague word that the Council uses to, in part, support the *status quo*. It means, the Council writes (pg. 54), "The enhancement and maintenance of public and private values, including long term stewardship of the forest resource..." The word "stewardship," however, is not defined. Some Council subcommittees, apparently, equate "stewardship,"

with "ownership." Thus, for example, the Land Conversion Subcommittee, Option #3 would give "incentives for retaining long-term timberland owners," with no reference to what the owners are doing to their land.

Indeed, there are frequent references to "land conservation," that can be decoded to mean "retention of land by large landowners." This is especially true when the Council refers to "conservation easements" where the sale of land for development is restricted but landowners can cut as abusively as the law allows.

Holes

Throughout the Findings and Options document, there are almost no references to negative impacts of large landowners on the condition of the forest or of forest-based communities. Indeed, in its introduction, the Council asserts that it "believes that continued ownership and management of large forest areas of the region are necessary in order to strive toward the Mission of the Council." (pg. 9)

Even when the connection of forest practices of some of the large landowners to biological or social problems is obvious and inescapable, the Council's statements are made in an inoffensive manner. Thus the Biological Resources Subcommittee can make the astounding pronouncement (pg. 17) that "the impacts of forest management activities on biological diversity can either be positive or negative..." But, we are assured in the next Finding that "the forest products industry [...] can continue to be compatible with maintaining the diversity of the region's biological resources on managed lands..." (my emphasis), as if the current compatibility is a foregone conclusion.

The Council, in its introduction, admits to deliberately leaving out certain topics that some of the public felt important. Instead, it "has focused on

only those issues which it deemed are most significant from a regional, multi-state perspective." (pg. 5). This rules out, the introduction claims, such issues as, "forest practices, business regulation, effects of climate change, acid deposition, forest health, and labor costs." According to the introduction, "the states can and should address these issues individually." Oddly enough, however, the Council had extensive findings and options concerning property taxes even though the very first finding of the Property Taxes Subcommittee concluded that "property tax policy is a state policy issue."

The refusal to look directly at any blemishes of the *status quo*, including timber practices and market domination, has meant that the findings and options of some subcommittees became very limited, and, in some cases, unrealistic. The Local Forest-based Economy Subcommittee, for example, should have:

- *identified trends in forest quality and growth;
- *examined trends in prices (adjusted for inflation) for raw forest products;
- *identified trends in land ownership, including statistics on absentee ownership, vertical integration, and regional concentration of ownership;
- *identified trends in labor, looking at such factors as mechanization and foreign workers;
- *investigated how current policies, including workers' compensation, discourage increased employment;
- *examined why, if everyone agrees that adding value locally is a great idea, it is not being done much more (i.e., what are the barriers?);
- *done a thorough study of why so much sawlog timber is being exported;
- *looked at the costs existing forest-based industries are creating due to infrastructure needs, pollution and other environmental damage, government regulation, loss of wildlife habitat, and lost economic opportunities; and
- *looked at the impact of trends in labor, prices, and markets on local community stability—but it didn't. Indeed, one of the major documents relied on by the subcommittee, the NEFA (Northeastern Forest Alliance) report, smacked heavily of industry boosterism and gave no indication of trends, positive or negative.

Without acknowledging the barriers to change and developing strategies to overcome these barriers, the Council is condemned to hitting these barriers again and again.

Council subcommittees have worked hard and have come up with some excellent suggestions, but due to the problems outlined above, the effectiveness of these suggestions will be limited, because the focus of the analysis of problems is so limited. As I wrote to the Council over a year ago in reference to the Maine situation, "The relative poverty of the area, the decline in forest jobs, the high accident rates, the high percentage of exported raw logs, the threat to biodiversity, and even the degradation of forest beauty are not, primarily, due to land subdivision and development. They are more due to the status quo that the Council may end up protecting to prevent 'conversion.'"

The Key to Forest Health Was Unexamined by Council

by Mitch Lansky

The health, productivity, quality, and appearance of the forest is central to biodiversity, land conversion, local forest-based economy, conservation strategies, and recreation/tourism. It is also crucial that property tax and state and federal income tax strategies keep these factors in mind as goals. Merely increasing the profitability of land ownership by reducing taxes does not insure that the forest will benefit as well.

The NFLC, unfortunately did not have a forest practices subcommittee, even though forest practices are the most important influence on the health and quality of the forest. However, some of the subcommittees did have findings and options relating to forest practices:

Findings

1. "Human influence on the Northern Forest over the past several centuries has resulted in: fewer older forest stands, more roads, different disturbance patterns, and changes in species composition." (BR #8)

2. "The impacts of forest management activities on biological diversity can either be positive or negative depending upon the species and diversity goals, silvicultural practices, and landscape context." (BR #10)

3. "Information on forest management techniques to maintain biological diversity is difficult for landowners and land managers to obtain. Furthermore, there is no mechanism for several landowners to integrate and coordinate their management decisions on the landscape scale." (BR #12)

4. "Certain traditional woods jobs are unappealing to local residents and are being filled by imported labor. (Examples are timber stand improvements and timber harvesting.)" (LF-BE #2c)

5. "The export of raw logs from the region has increased in recent years. There is concern within the region that this will negatively impact the resource base and employment opportunities. To date there is no published data documenting negative impact, nor identifying the implications of increased exports." (LF-BE #7)

7. "Sustainable forestry is critical to the forest economy, as well as to other forest values, such as biodiversity. Consumers of forest products are showing a willingness to support sustainable forestry through their purchasing behavior." (LF-BE #15)

8. "Current use property tax programs have worked to maintain annual taxes at levels that permit long-term timber management in the Northern Forest. Although they are not able to ensure long term management and ownership, these programs are a safety net that allow such activity to continue in the region where landowners desire to manage land in productive natural resource uses." (PT #17)

9. One of the "benefits" of current use taxes in the Northern Forest states is "higher quality timber."

10. "Changes in federal tax laws under the 1986 tax reform act impacted the ability of many forest landowners in

the Northern Forest to manage, own and conserve their lands for the long term." (SFT #1)

Options

1. "Educate and encourage lending institutions to understand the limitations of return which conservation minded forest management can provide. This knowledge might allow for better financing design for pure forest land-based lending." (LC #5b2)

2. "Promoting research on the impact of forest management practices on biological diversity, leading to the identification of silvicultural practices that are economically viable, maintain site productivity, and contribute to the maintenance of regional biological diversity." (BR #1c).

3. Provide "incentives to landowners who keep their lands in open space and are willing to manage their lands to maintain and enhance biodiversity through such practices as longer rotations, enhancing structural diversity in the forest, limiting fragmentation by roads, and other practices." (BR #3b)

4. Use the complete landscape scale approach (Mac Hunter's "triad"). (BR #5)

5. Enact or revise "regulations to assure that public land management agencies, both federal and state, plan for biological diversity at the landscape scale." (BR #7a)

6. Initiate Green Certification "to inform consumers about environmentally-friendly harvesting and/or manufacturing processes used to bring the product to market." (LF-BE #4)

7. Create regional forest policies for the four states that "consider a whole range of issues, including state lands policy, federal lands policy, state operated resources, state regulations and their appropriate level, and forest management." (LF-BE #40c)

8. For current use tax programs, "include provisions for management plans or specified management requirements only if they

balance the added costs to landowners for compliance with demonstrated improvements in forest management and program benefits." (PT #1d)

9. "Set up Forest Districts (large blocks of important forest land) in which managed land would be eligible for preferential taxation and other benefits..." (PT #2h)

10. "Develop an overall approach under the federal tax code whereby certain lands 'qualify' for voluntary inclusion in a conservation tax program that allows for various federal tax incentives in exchange for adoption of management methods under a defined set of conservation objectives." (SFT #9)

Comments on Findings

These findings are trivial (1 and 2), general (7), indicative of a lack of information (3 and 5), or misleading (4,8,9, and 10). The Council's avoidance of directly confronting this essential issue is telling. The Council has released no findings that indicate the:

- *level of cut;
- *the percentage of types of cutting by landownership class;
- *changing trends in forest practices;
- *factors influencing these trends (i.e., road building, labor costs, foreign labor, method for paying labor [piece-rate or wage],

mechanization, local and export markets, vertical integration, oligopsony);

*sustainability of current rates of cutting by species;

*degree to which dominant cutting systems fit in with other goals for biodiversity, forest productivity, increased employment, or local quality of life; and

*economics of forest management based on actual case studies (rather than highly-flawed theoretical models). The Council could easily have gotten the detailed records from public lands for a start.

I call items 4,8,9 and 10 misleading for the following reasons:

4. Literally thousands of local woods

workers lost their jobs over the last decade. The percentage of Canadian workers, however, remained relatively the same [Ed. Note: see Mitch Lansky's *Beyond the Beauty Strip*, pg. 47]. With so many domestic workers without a job, why didn't the percentage of Canadians go down? Why did so many woodworkers decide that woodwork was "unappealing" in such a short time period? What are the factors that make the work unappealing? Could it be the pay, the conditions, the poor regard for safety, the commuting distance, or the lack of security?

8. All this finding says is that current use taxes are low enough so that forest management can be profitable. But there is no guarantee that landowners will do good forest management. It thus indicates a failure of the system. It means that the public is forgoing millions of dollars of community tax revenues with no guarantee of any public benefit.

9. The "high quality timber" is theoretical. One only has to fly over or drive through the industrial forest of northern Maine to realize that there are millions of acres where there will be no high quality timber in our lifetimes.

10. This finding is based on anecdotal and theoretical evidence. But there are also many landowners who seem to be running profitable operations and have even improved their cutting practices since the 1986 tax change. The finding suggests a need for tax cuts without demonstrating such a need.

Comments on Options

Many of the forest practices options initially sound good, but lack essential details that either justify such actions or show their practicality. For instance, options 3,9, and 10 call for "incentives" (and option 4 would probably require incentives for intensive management practices that are not economically viable). We do not know, however, if the current incentives (such as the Tree Growth Tax Law or other existing tax breaks) are already sufficient. We do not know where such incentives will apply (no one has had the guts to even draw a theoretical line). We do not know how much the enterprise will cost or where the money will come from.

It sounds nice to reward landowners for good behavior, but it is not clear how to bureaucratically determine when behavior qualifies as good. We are also left wondering if poor forest practices that are not subsidized are therefore acceptable and legal.

Option 2 is an excellent idea, but we can't base current policy on it now because results of research won't be available for years or decades. We must develop policy now based on what we know, and revise it as the results of research become available.

Option 5 is an excellent idea. Public lands should set the example for what government expects private landowners to do. To what extent is this happening or not happening?

Option 6 would be nice if we knew how to draw the line as to what is sustainable or "environmentally friendly." *Continued on Page 25*



Dorothy Whittaker, organic farmer and neighbor of industrial lands in Brunswick, Vt: "Let's not destroy the forest out of ignorance through overharvesting with big machines. The machine puts people out of work and devours the forest. I hate to see the big clearcuts. They take away from the beauty of the land... The Northern Forest land provides a place of spiritual refreshment, a source of reverence and peace for people of all incomes." Photo & interview by Stephen Gorman

We Must Establish a System of Ecological Reserves

Dr. Stephen C. Trombulak
Department of Biology
Middlebury College

Findings

The Findings and Options developed by the Biological Resources Subcommittee is a mixed bag of pleasant surprises and expected disappointments. Overall, I am generally impressed with how far the thinking of the NFLC has come on this subject. It was only a little over a year ago that the Council finally recognized that the issue of the biological diversity of the Northern Forest region was a topic that even merited exploration. The Findings demonstrate that this Subcommittee has not wasted the last year. Several of the Findings, developed from commissioned studies and opinions solicited from regional experts by the Council, go quite far to state in clear terms the importance and magnitude of the issue, and the potential for making real progress in developing recommendations that honestly address the challenges faced by the region.

Biodiversity Defined: The first finding is a clear and relatively complete definition of biodiversity. Although this may seem a trivial point, I commend the Subcommittee for making such a statement straight off, and having the definition be as all-encompassing as it is. Too many discussions in other arenas have been fatally mired in unnecessary wrangling over the "problem" of defining biodiversity, or of developing a definition that goes beyond simple counts of species. By adopting the definition developed by Mac Hunter at the University of Maine the Subcommittee demonstrates that a meaningful definition is possible and agreed upon by all.

Why Biodiversity is Important: Similarly, the Subcommittee clearly articulates why the issue of biological diversity is important. The second finding points to its importance to society and to the rest of nature independent of humans. As the finding states, biodiver-

sity sustains ecosystems and human populations. This should be a message to everyone involved in this debate that this is a subject that is important to all no matter what their priorities are, and that there is no reason why anyone should not work toward the protection of this diversity. The only addition I would make would be to distinguish between the economic values of biodiversity that come from sales of resources (e.g., timber, syrup, views of fall foliage) and that come from services that then do not need to be paid for by society through tax revenues (e.g., water treatment, erosion control, health care due to poor air quality). This would more strongly underscore the value of biodiversity to society, and not just those employed in a resource-based industry. But this is a refinement of the finding, rather than a critical flaw.

Landscape-Scale Protection: The Subcommittee also makes an important point by identifying the importance of the landscape scale in conservation. We cannot achieve long-term protection of biological diversity if conservation strategies focus exclusively or predominately on maximizing the number of species at individual sites. If only a few sites are targeted, then we lose important genetic diversity and ecosystem connections. If several sites are targeted, we run the risk of managing all land for the goal of maximizing species numbers through inappropriate and expensive "habitat management" plans, rather than letting what ought to be at a site simply exist. A focus on the landscape scale offers superior protection through its ability to protect unidentified or poorly understood species, genetic diversity, and ecosystem connections, as well as offer buffers to changes in environmental conditions (such as climate) and our incomplete understanding of nature.

Human Impacts on Biological Diversity: The Subcommittee also reports an important finding by acknowledging that human occupancy has had an impact on biological diversity in this region. Finding 8 is, perhaps appropriately, offered without value judgment. But the Finding clearly indicates that human occupancy has affected the structure (e.g., forest size and age

structure), function (e.g., patterns of disturbance), and composition (e.g., species presence and abundance) of the ecosystems in this region. This simple point has been debated in the past, but I think the truth is well articulated by the Subcommittee.

Disappointing Findings

Managed Lands: However, the Findings are not without some disappointments. These come not from incorrect statements, but rather from omissions that risk misinterpretation of the Findings. For example, Finding 11 states that the forest products industry can continue to be compatible with conservation on managed land. This may be true, but only if a system of unmanaged land is included in the overall conservation strategy for the region. The source for Finding 11 is the NFLC Biological Resources Diversity Forum from December 1992. (See Spring Equinox 1993 *Forum* for an extensive account of the proceedings of that forum.) The message that use of biological resources is not incompatible with conservation did in fact come out in that forum, but only as a companion statement to the larger picture of successful conservation strategies. All four invited speakers at the forum—Mac Hunter of the University of Maine, Sharon Haines of International Paper Company, Rainer Brock of SUNY Syracuse, and myself—clearly stated that a system of ecological reserves would be critical for achieving the goals of conservation and protection, which the Subcommittee, in Findings 1 through 8, states needs to be the goal of everyone.

Unmanaged Land: Therefore, it is a little disappointing that the role of managed land in conservation is reported out of the context of the factors necessary to allow managed land to play a positive role. *Of all the information provided to the Subcommittee, the critical importance of unmanaged land is the one statement of fact that no dissenting opinion was offered from the scientific community.* More scientists believe that unmanaged land is critical to the protection of biological diversity than almost any other concept. Yet mention of the potential role of ecologi-

cal reserves is limited to a brief inclusion of "ecological reserve initiatives" in Finding 14, where the Subcommittee ambiguously lists several concepts, "some of which are untried while others are ongoing." This seems a rather weak way to present a fundamentally critical finding on which there was no scientific dissent.

Protection on a Landscape Scale: What is lacking, then, is a simple statement of finding that puts the necessary strategies for the protection of biological diversity on a landscape scale in a clear light. The Subcommittee's research over the past year unambiguously demonstrated that the only strategies for land use management that will successfully protect the biological diversity of this region are strategies that incorporate a system of unmanaged land that allow for movements of animals with large ranges and connections among ecosystems.

I can understand the Subcommittee's reluctance to make such an explicit statement. The subject of ecological reserves is emotionally charged in this region; the strong sentiment expressed by people over the Hunter-Haines paper on the design of an ecological reserve system in the Northern Forest (coming from people who know little about conservation and did not attend the NFLC-sponsored forum on the subject) is evidence of that. But the purpose of the NFLC is to find the facts and make recommendations that address the needs identified by the facts. Omitting a clear finding because of dissent from those who have not taken the time the Subcommittee has to research the issue is, I think, ultimately self-defeating.

We know enough to implement successful protection strategies: Similarly, I am disappointed by Finding 13, which states that sufficient information exists to "suggest" conservation strategies, but forest ecosystems may not ever be "fully" understood. The problem here is, again, omission. The implication is that we can suggest strategies but we don't really understand what we are doing. I believe we can do more than suggest strategies. I believe we can suggest and implement successful strategies. Ospreys, bald eagles, and peregrine falcons have come back from the brink of extinction. Fisher, marten, turkeys, beaver, and white-tailed deer have all been re-introduced into areas where they had been extirpated. These conservation strategies have been successful. National parks and forests have been disappointing in realizing their complete potential for protection and conservation, but they have been more successful than the other land management systems currently practiced in this country. We need to remember that the National Forest System was implemented specifically because the nation's supply of timber was in jeopardy of being completely destroyed. This system was successfully implemented to deal with an issue of national interest. In short, to say that we can "suggest" strategies is only half of the finding; we can suggest and implement successful strategies.

Similarly, to state that we may



never fully understand forest ecosystems is to suggest that somehow we ought to expect this to be possible. We don't fully understand anything. We don't fully understand how the economy works, how to best provide for national security, how the human body works, how people learn, and what the essential elements are of a quality life. These "deficiencies" in our knowledge have not led us, however, to suggest that we not proceed to implement policies that address the economy, national defense, health, education, and personal needs. What is missing from this finding is that a full understanding is not necessary to act in the best interests of society. We must act on the best available information and continuously work to improve our knowledge, just as we do with all other areas of social concern.

We Need a System of Unmanaged Lands: So, given these findings, what can we say that we know about the biological diversity in the Northern Forest? Quite a lot. Biological diversity can be measured at several levels, including genetic, species, and ecosystem, each of which is important for maintaining the complete range of benefits and functions this diversity provides. Biological diversity is important to maintain for several reasons, not the least of which are that human society depends on it and nature itself depends on it. *In fact, there is not a single valid argument for why it is in society's best interest to promote traditions and policies that lead to a decline in biodiversity.* We know that human actions have had a wide range of effects on the biodiversity of this region, including species extirpation, reduction of genetic diversity, ecosystem loss, and structural and functional changes in forests. Finally, we know that no conservation strategy will be fully successful unless it also includes a system of unmanaged land.

In short, we know that we have had an effect, and that it is not in our best interests or the best interests of the rest of the planet to allow it to continue. Therefore, the recommendations made by the NFLC must address these issues and develop strategies to prevent the further erosion of biological diversity.

Options

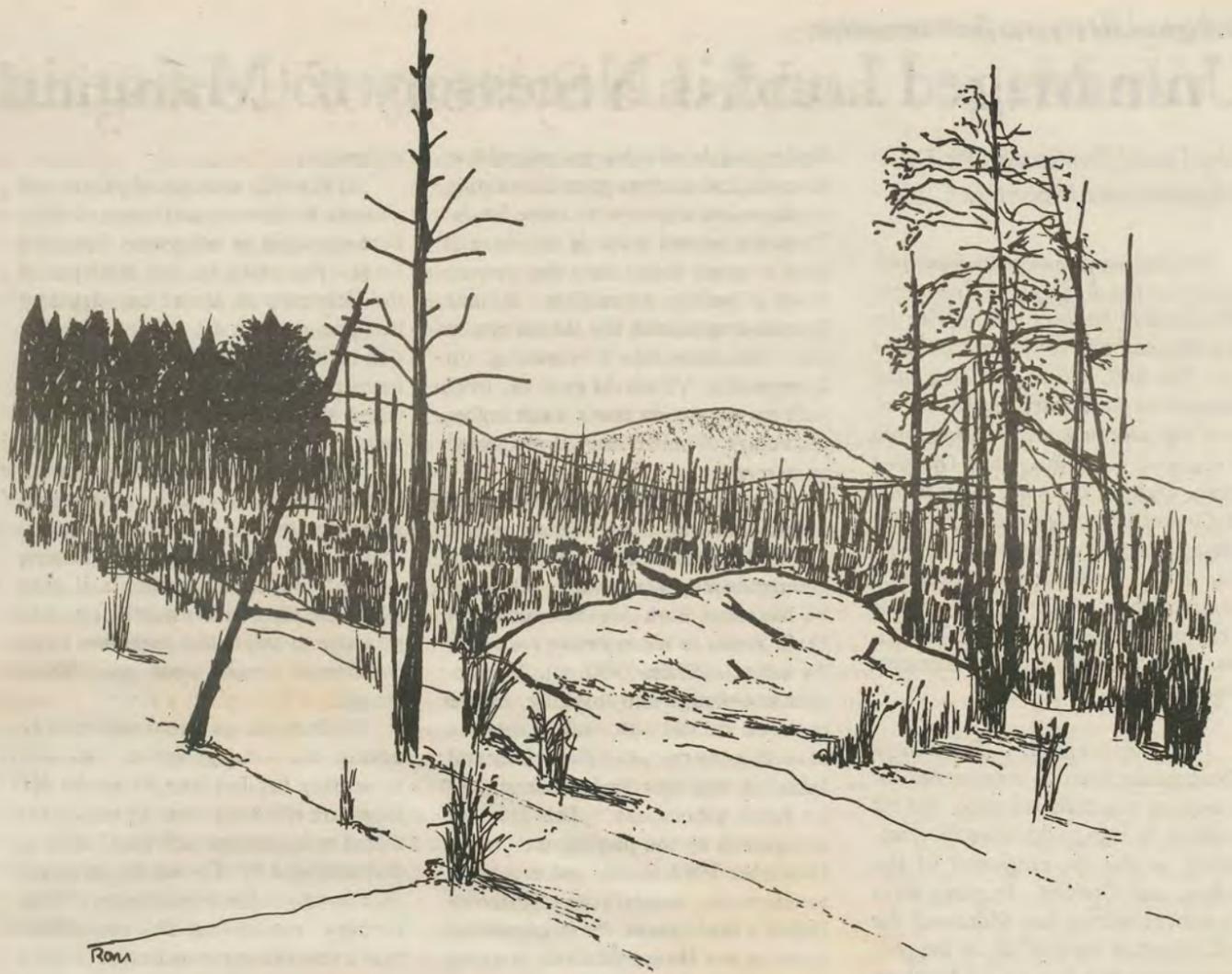
What options are offered by the Biological Resources Subcommittee?

1. **Do nothing.** Forget it. The findings alone tell us that this is not in anyone's best interest.

2. **Promote research.** This is an easy one to suggest and support. The essence of progress is education, especially of ourselves about how to do what we do better than we're currently doing it. The specific suggestions made by the Subcommittee for areas of research—inventories, monitoring programs, classification schemes, and management practices—are important, but should be expanded to include basic research on ecosystem structure and function, and conservation strategies.

3. **Develop incentives and education programs to encourage landowner co-operation.** Good idea. People generally won't do the intelligent thing unless they learn what the intelligent thing is.

4. **Modify regulations.** Potentially important, but potentially meaningless as well. Encouraging a



stable regulatory climate is all well-and-good, but the only way that can be achieved is to decree that no new laws or regulations can be passed, even in the face of new knowledge gained from the research we are promoting. Those who advocate on behalf of the environment will not refrain from promoting changes in regulations as long as those that exist are considered to be ineffective half-measures. Those who advocate on behalf of business will not refrain from promoting changes in regulations as long as those that exist are thought to be costing someone money. (Witness the current attacks on Vermont's Act 250 and the Endangered Species Act. Talk about creating an unstable regulatory climate...)

Ecological Reserves are Essential: However, none of these options by themselves will really provide meaningful strategies for the protection of biological diversity because none of them address the fundamental need for a system of unmanaged land. Therefore, critical to all of this discussion over options and recommendations are the two remaining options advanced by the Subcommittee concerning the establishment of an ecological reserve system and the adoption of a three-category ("triad") approach to managed and unmanaged lands.

The option for an ecological reserve system (option # 4) is the best of the two, and points out some of the important features that must be incorporated into a successful system—buffering and connectivity of reserves, for example. Yet in other regards it falls short because it never really takes a firm stand on what an appropriate reserve system should look like or be for. Should the reserves be large or small? Encompass a full range of community types or not? Be established or not? Protect only sensitive and fragile communities, or representative communities, or the entire native biota? These

are important questions, but the Subcommittee, based on its research, should have been able to provide answers. Let me say it again: biological diversity is important to all, is more than simply a count of species, and is more complex than we currently understand. *The only reserve system that will work is one that involves large reserves that protect the full spectrum of the native biota and its genetic diversity, that are well connected with each other, and that are buffered from disturbances that alter natural processes.*

This option also falls short because it implies that action should not be taken until more research on the status of biological diversity is carried out. We can always call for more research, but the findings clearly indicate that human influence in this region has resulted in species loss and altered ecosystem processes and structure. We don't need more research to know that what we are currently doing is insufficient.

This option needs to be re-written to state this need less ambiguously. We should establish a system of biologically-based ecological reserves on public, private, or a combination of public and private land. Creation of the reserve system should be compatible with existing public acquisition and management programs and private programs, yet may involve new strategies that create partnerships among local, state, regional, and federal governments. Design of the reserve system should promote the protection of the full range of native biota and its genetic diversity, and be designed following the best scientific principles and information currently available.

Reject the Triad: As an alternative to an ecological reserve system, the Subcommittee also offers the option (#5) of splitting forest land out into three categories: reserves, multiple use management, and intensive manage-

ment. The value of this option is hard to determine because it calls for a mix of these types across the landscape in some unspecified proportions. How are these proportions to be decided? What are the goals of this landscape approach? If it is to promote the protection of the full range of native biota and its genetic diversity while allowing local people to earn a living from the timber produced in the region, then the proportion would heavily favor reserves and may involve little, if any, intensive management. If it is to maintain the same monetary yield from the region's forests for landowners who maximize workforce reductions and export of raw logs, then the proportion would heavily favor intensive management and may provide too few reserves to adequately protect biological diversity. The description of this option indicates that the concept is "being debated." In fact, few people subscribe to it, in part because of its lack of clear criteria.

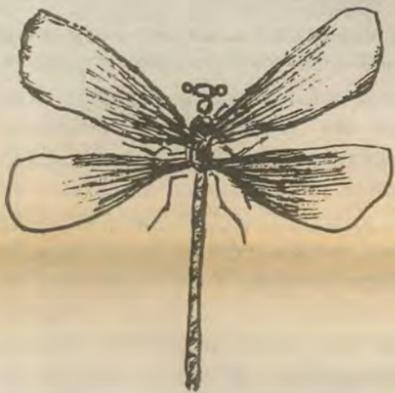
In sum, the Biological Resources Subcommittee did an admirable job in a short period of time with a complex and contentious subject. The findings are generally correct, erring only in its omissions. The options are also generally good, providing clear directions in the areas of research, education, citizen incentives, and regulatory improvement. The primary failing of the options, however, is their lack of clear criteria and characteristics for the development of a system of unmanaged land. [Ed. Note: This subject is addressed by David Publicover on page 8.] These can easily be derived from the information gathered by the Subcommittee over the past year on the importance of biological diversity in its broadest sense and the best available scientific information on what is necessary to protect it. I only hope that the next phase of this process, the development of recommendations, reaches further than indicated by the options.

Unmanaged Land is Necessary to Maintain Biodiversity

by David Publicover, Ph.D.,
Appalachian Mountain Club

The following comments focus primarily on the Biological Resources Subcommittee findings and options for an ecological reserve system (options 4 & 5). The AMC will be providing fuller comments to the Council on the remainder of this subcommittee's work, as well as the entire Finding and Options report. Overall, the AMC believes that the Council's recommendations must embrace and fully address the following three areas: protection of wildlands, conservation of well-managed private forest land, and promotion of sustainable, self-determined local and regional economies.

The Biological Resources Subcommittee is to be commended for its work on this complex topic, and for its efforts to engage the scientific community in the development of the Findings and Options. In many ways this subcommittee has addressed the most important topic of all, as the continued health and diversity of Northern



Forest ecosystems is the basic necessity for any long-term human uses of the area. It recognizes this in Finding #3, though we feel that the maintenance of biodiversity is not only important, but critical to social well-being.

The subcommittee report is correct in emphasizing that both public and private lands must contribute to the maintenance of regional biodiversity. However, three concepts that are not specifically stated in the Findings must be recognized.

First, the key distinction is not between public and private land, but between unmanaged land (i.e., reserve areas) and managed land (which is subject to some form of disruption of natural processes, however well-intentioned). The vast majority of private land is managed in some fashion, and it is unlikely that private landowners will ever maintain significant portions of their land in an unmanaged condition (nor is it reasonable for society as a whole to expect them to do so). However, much public land is also managed for timber and other commodities, and the mere fact of public ownership must not be confused with the existence of reserve land. The Maine ecological reserve study (McMahon 1993, pg. 22) stated that only 8% of the current public and private non-profit land (excluding

Baxter and Acadia) has the potential to be ecological reserves given the existing management regimes on these lands. Thus the current level of unmanaged land is much lower than the current level of public ownership. Rainer Brocke emphasized this distinction at the subcommittee's meeting in Lyndonville, VT on August 19, 1993 with his suggestion that a much higher percentage of public land be designated as reserves.

Second, the creation of a system of unmanaged land is not only an option, but a necessary component for the maintenance of biodiversity. As stated by National Park Service ecologist Craig Shafer in his extensive review of the subject, (Shafer 1990, xi), "By present knowledge and thinking, nature reserves are the best overall tool we have to preserve examples of natural landscape and their biotic communities for future generations." This fact was recognized by the participants in the December 1992 forum, and is a basic assumption underlying Malcolm Hunter's triad system, the recommendations in the Hunter/Haines briefing paper, and the Maine ecological reserve study. Although you did not include a Finding to this effect, as was recommended by Steve Trombulak in his letter to the subcommittee on August 20, 1993 we presume that the subcommittee recognizes the importance of a reserve system.

Third, extensive areas of managed private land not only can make a contribution to the maintenance of biodiversity, but must make such a contribution. In theory it would be possible to create a reserve system large enough to fully serve this function, allowing the remaining land to be managed solely for commodity production. However, this is not likely to happen in the foreseeable future given current social and economic constraints.

The following comments separately address the issue of ecological reserves. However, all strategies and recommendations must form an integrated package. Option #5 (the Complete Landscape Scale Approach) should not be a separate strategy, but rather the guiding theme under which all recommendations are considered. Dr. Hunter's triad system is but one example of a framework under which this integration could be structured.

Ecological Reserves

An ecological reserve system within the Northern Forest would serve the following critical functions.

1) Provide types of habitat that are absent or scarce on managed lands. These include extensive areas of unfragmented and unroaded forest, older age classes, large amounts of coarse woody debris, and mixed stands with significant proportions of economically undesirable tree species.

2) Provide baselines against which the effects of different types of management may be compared. These baselines include not only species responses and community composition but also the full range of ecosystem processes such as nutrient cycling and loss, soil formation and erosion, and hydrologic

cycles.

3) Provide sources of plants and animals for the recolonization of adjacent managed or otherwise disturbed lands. For example, Dan Harrison of the University of Maine has suggested that pine martens are able to exist outside of Baxter State Park in the face of trapping pressure only because of a protected source pool of reproducing animals within the park.

4) Provide areas where ecological and evolutionary properties and processes (such as ecosystem functions, community composition and dynamics, species' ranges and niches, and gene pools) are allowed to naturally adjust in response to short- and long-term environmental trends such as climate change.

5) Provide an insurance policy against our own ignorance. We still have only limited knowledge of the long-term effects of even our best-intentioned management activities. This is demonstrated by the current paradigm shift in silvicultural techniques; "New Forestry" evolved out of a recognition that even the most conscientiously applied traditional silvicultural practices were creating adverse ecological impacts. If in the future we reach perfect wisdom, perhaps the reserves could be opened to more intensive use, but in the face of imperfect knowledge the only prudent course is to err on the side of caution. What we have lost and will continue to lose through well-intentioned ignorance may never be regained.

A viable ecological reserve system must have the following characteristics:

1) It must include examples of all native communities and ecosystem types, not just the rare ones. This goal of full inclusion is recognized by all relevant current efforts, including the Maine ecological reserves study and the US F&WS Gap Analysis Project.

2) In order to fulfill the desired goals over the long term, it must include fully functional communities and ecosystems rather than simply examples. Thus it must include the full range of environmental gradients (climatic, topographic, etc.) across the landscape. It must also be dynamic rather than static and incorporate the natural disturbance regime. In order to provide for the oldest age classes of forests, it is necessary to protect not just the oldest existing stands but the full extent of landscape needed to continually re-create these stands in the face of on-going disturbance. This "patch dynamic" approach is an important component of reserve design (Pickett and Thompson 1978).

3) It must include viable populations of all native species. Though the definition of "viable population" is still under debate, the goal of allowing the long-term survival of all species is central to the purpose of establishing reserves. We recognize that the creation of a reserve system large enough to provide all habitat needs for some wide-ranging species is not likely to occur in the immediate future. In these cases the system should focus on providing habitat that is critical to the most sensitive

life history stages of these species (probably breeding); adjacent managed land may provide habitat for less sensitive needs (such as feeding).

In light of these stated functions and characteristics of a reserve system, we make the following comments regarding the subcommittee's Option #4:

Scope: The system must be fully inclusive of communities as articulated above.

Size and Number: "The desirability of large reserves, all else being equal, is one of the few almost universally accepted principles of conservation biology." (Noss 1992, pg. 18; Thomas et. al. 1990; Shafer 1990, McMahon 1993). The actual size and number of reserves must be governed by landscape considerations, given the desired characteristics listed above. Both the nature of the dynamic landscape mosaic (what Pickett and Thompson [1978] call the "minimum dynamic area") and the home ranges of critical animal species will help determine the size of individual reserves. The variability of commu-



nities and ecosystems across the region will help determine how many reserves are needed to encompass all community types.

Connectivity and buffers: Migration of organisms between large reserves must be possible. This is especially true in the case of large wide-ranging mammals; since no individual reserve will maintain viable populations in isolation, the reserves must function as an integrated unit. To the extent that forest management and other human activity between the reserves does not greatly hinder this movement, the need for specifically designated corridors (essentially long thin core areas) will be reduced. The same holds true for buffers; intelligent planning of development and ecologically sound forest management in the areas surrounding reserves will reduce the need for specifically designated buffers.

Management: Reserves must be considered off limits for commodity extraction, except where such actions serve clearly defined goals tied to the restoration of previously degraded lands. Non-consumptive human uses, such as dispersed recreation, should be allowed except where specific impacts on sensitive species or areas are a consideration. The recreational use of large reserves can in fact serve as an impor-

tant component in the diversification of the Northern Forest economy.

Ownership: Public or private non-profit ownership is likely to be the only feasible mechanism for the creation of a reserve system. These lands must—by definition—be managed with biological rather than economic considerations as the highest priority, and this condition will probably make ownership of reserves unattractive to most private landowners.

Establishment: The establishment of an adequate reserve system will require additional land. Studies in other areas (such as the Gap Analysis for the state of Idaho) have shown that meeting even the minimal criterion of all species and community types generally requires more land than is currently in public ownership in most areas of the Northern Forest. This may be less true for the Adirondacks [Ed. Note: because over two million acres are already "Forever Wild"] than it is for Maine. Including the criteria of viable populations and functional (not just representative) ecosystems will increase the amount of land needed.

Social and economic factors: These must be given full consideration, as the creation of a system of reserves will only be successful if it has the support of the local communities. Reserve areas can contribute to economic diversification through their use for dispersed low-impact recreation, as long as such use is allowed in the context of the primary purpose of biological conservation. However, the costs and benefits of such a system cannot be fully analyzed using purely economic criteria, since this involves balancing relatively short-term, quantifiable costs against relatively long-term, unquantifiable (but no less real) benefits.

Option 4

Regarding the three alternatives for

establishing an ecological reserve system:

Alternative 4a does not meet even the minimal standards of inclusiveness proposed by the relatively conservative Maine ecological reserves study and is not acceptable.

Alternative 4b is the level of protection proposed by the Maine study. We feel that this alternative is also unacceptable. While it satisfies characteristic #1 above (inclusiveness), it does not satisfy characteristic #2 (functionality), and is unlikely to satisfy characteristic #3 (viable populations). This approach would preserve examples of communities rather than functioning ecosystems and does not recognize the dynamic nature of the landscape. For

example, it would preserve old-growth stands rather than landscape mosaics of which old-growth is a constant (but spatially shifting) component.

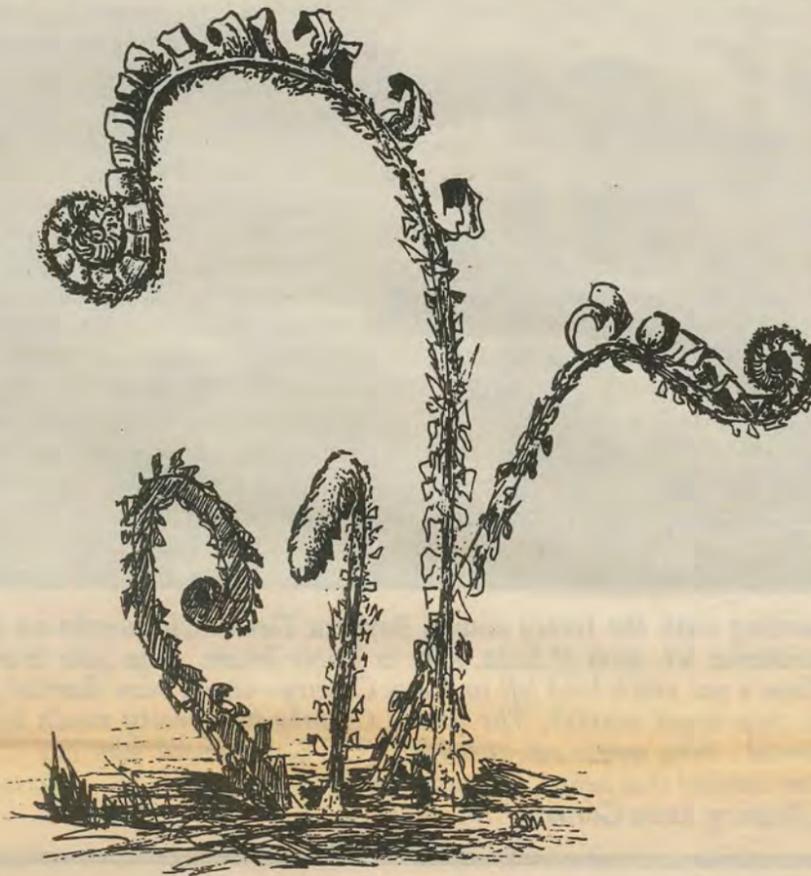
Alternative 4c is the only one that satisfies the three characteristics listed above and will allow for the continued presence of the full range of communities, successional stages, and species within the reserve system. Again, we recognize that creation of a reserve system large enough to fully contain viable populations of the most wide-ranging species may not be feasible in the near future. However, this should not be reason for limiting the long term goals of a reserve system. We feel that any proposal that does not aim to meet the three characteristics outlined above is insuffi-

cient.

The creation of a fully functional reserve system is a long-term goal that will require not only the protection of critical areas but the inclusion of larger areas of common forest types in order to meet the "minimum dynamic area" criteria, as well as to provide sufficient unmanaged habitat for wider-ranging species. The development of the system should be considered an on-going process in which knowledge and land protection will progress simultaneously. We should not let the fact that we cannot, given current knowledge, completely define the necessary extent and configuration of a reserve system prevent us from beginning the process. The goal at this point should be to reverse current trends toward increased roading, younger and less structurally diverse forests, and so forth.

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Council Promotes Wrong "Triad" System

We need to create a network of buffered ecological reserves and sustainably managed private forest lands. Unfortunately, the "triad" proposed by University of Maine Professors Malcolm Hunter and Robert Seymour ("New forestry in Eastern Spruce-fir Forests: Principles and Applications to Maine") fails for several reasons. First, they would probably assign only about 10% of the region to reserves. And second, they would permit "intensive management" (IM) on 30-40% of the region. IM is the polite term for current industrial practices that are ecologically unsustainable: large clearcuts followed by plantations of monocultures, "nurtured" by aerial spraying of herbicides to kill off competing hardwoods.

In the Winter Solstice 1992 issue of the *Forum* (Vol. 1 No. 2) Mitch Lansky offered an extensive critique of the Seymour-Hunter paper. Lansky emphasized that Seymour and Hunter have performed an important public service with their explicit and implicit critiques of industrial forestry. Unfortunately, Seymour and Hunter propose a solution that concedes industry the "right" to continue with the worst aspects of industrial forestry in nearly half the region. The following comments are based on Lansky's critique.

Plantations

*Are plantations sustainable? If they are not ecologically sustainable, we should stop talking about them, even if it is politically desirable from industry's point of view. Even industry must eventually bow to physical and ecological reality. Before we launch an expensive, long-term, toxic program, it behooves us to honestly assess its sustainability.

*Seymour and Hunter have not compared long-term yields from plantations with long-term yields from other management regimes (such as selection

on the same sites. We need such studies before endorsing this unproven theory.

*Short-rotation plantations are notorious for producing low-quality sawlogs and short-fiber for paper.

*Can it be shown that plantation forestry is cost-beneficial now or in the future without subsidies? If it requires subsidies, we must devise other more ecologically and socially acceptable programs and subsidize them instead.

Disturbance

*How do large clearcuts and irregular shelterwood cuts mimic the natural disturbance regimes of the Acadian forest? In the Mid-Summer 1993 issue of the *Forum* (Vol. 1 No. 6) Seymour describes the Acadian forest disturbance regime ("The Red Spruce-Balsam Fir Forest of Maine"). It is much less catastrophic than the huge industrial clearcuts of northern Maine, or that would be part of the plantation strategy. Inflicting hundred-year or millennial catastrophes on the forest on an annual basis (as has too often been the case in the past century of industrial forestry) is not mimicking normal disturbance regimes. The presettlement forest was "uneven-aged" not "two-aged" as would be the case with irregular shelterwood?

Transition

*From the perspective of those who believe we must create ecological reserves now, how do we remove land now from the fiber base and still maintain current industry virgin fiber demand levels? Do we have to wait 40 years before incorporating lands in reserves, and will those lands be clearcut 39 years hence?

*IM requires significant up-front investment, and there is a long delay before payback. Is this economically viable? Is the paper industry committed to

Maine for the next 40-80 years? Certainly its recent investment strategies (primarily in the southeast, rather than in Maine) do not inspire confidence.

Conclusion

The fatal flaw in the Seymour-Hunter argument is a *political* decision to allow industry to continue to extract current levels of virgin fiber from the Maine woods. Even if this were ecologically sustainable (and Seymour and Hunter's work suggests it isn't) is it desirable or even necessary? There are other sources of wood fiber, notably, recycled fiber. So, it is possible that the mills could continue to receive the same amount of fiber, while drastically reducing the demand for virgin fiber. This would dramatically reduce the pressure for us to permit IM and overharvesting (and increase the amount of land available for reserves immediately).

But, there is a second component to this issue: can society continue to produce all the garbage paper products it currently produces? 40% of all solid waste destined for landfills is wood and paper products. How much of that garbage should never have been manufactured in the first place? Junk mail, pampers, packaging, crates that are used once, etc...

The "triad model proposed by Professors Seymour and Hunter is a sincere effort to protect shreds of biological diversity without inconveniencing industry. One can easily see the political appeal to such an approach. Unfortunately, it will *not* adequately protect biological diversity, and it allows destructive forestry to continue in a large portion of the Northern Forests. It protects junk mail and pampers better than Wolves, Salmon and the Acadian Forest.

—Jamie Sayen

Full Fee Acquisition is the Most Effective Land Conservation Strategy

by Bob Perschel
The Wilderness Society

The findings and options report of the Conservation Strategies Subcommittee offers a wide range of strategies, but for only part of the problem. This committee, like the entire Northern Forest Lands Council, has failed to adequately define the problem and therefore has confined itself to offering only isolated parts of the comprehensive and integrated strategy that is needed.

The Council's insistence on ignoring forest health and forest practices in its study relegates this committee to dealing only with findings and options relating to land conversion. Although this committee purports to deal with critical public values including timber, wildlife and wildlife habitats the Council's narrow scope of mission forces it to explore these values only as they are affected by land conversion. "Conservation" was limited in meaning to the act of keeping land in forest cover.

Consequently, although some of the findings and options offer exciting strategies for land conversion protection, we are left with little understanding of the viability of current stewardship or any possible strategies for improving it. Strategies limited to stemming the flow of land conversion will not protect all the values of the Northern Forest. In time it would be clear that such a limited strategy would not even stop land conversion. We are dealing with a complicated ecosystem, of which people are a part, and we must deal with all the parts if we hope to have a workable solution.

For example, finding #21 reports on ways to merge or leverage property tax relief programs with land conservation strategies. It refers to a tax abatement program in Massachusetts, Chapter 121A that gives local government a right of first refusal in return for lower taxes. Overlooked is Massachusetts Chapter 61, a program that gives tax relief to forest landowners in return for better stewardship conducted under a written forest management plan. These are the types of programs that are missing in the strategy mix for the Northern Forest.

Findings

Although some of the findings and options are to the point, most lack the substance to lead to solid recommendations.

(Finding #1) We hear that elsewhere in the country there is a call for new institutions, partners and risk-taking but never are told if this is necessary in our own region.

(10,11) Apparently there are "numerous" conservation programs available and some are antiquated. However, only the expansion of the Stewardship Incentive Program is noted in the options section. Are we to assume we need no new programs nor adjustment to existing ones?

Finding #12 merely states that conservation easements and fee acquisition are existing tools; there is nothing pertaining to their usefulness, propriety or

scope in the Northern Forest.

#14 identifies the need for federal funding and correctly notes the need for state and local government involvement. However, in the quest to gain acceptance for federal involvement the subcommittee is neglecting the necessity of gaining the acceptance of federal legislators. It is difficult enough to gain federal funding for federal public land purchases in the northeastern states. The likelihood that substantial federal dollars will flow to Northern Forest states for state purchases is not promising. At the very least the funding would



Chatting with the Jersey cow is Barbara Tiewes, who works on the Maidstone, Vt. farm of Izola, John & Roger Irwin. Says John Irwin: "There's not much land left in Essex County—it's all been clearcut for the chip wood market. The whole County has pretty much been clearcut. Who wants cut over land? The Government may buy it. I never wanted that before, but now that's the only solution." Interview & Photo by Steve Gorman

have to be seen as part of a national or regional priority under a regional plan with federal oversight and perhaps improved stewardship commitments.

#15 appropriately features Forest Legacy as a potential "key" land conservation tool. However, full fee acquisition is an even more important tool and the subcommittee fails to highlight its importance. If the full range of values of the Northern Forest are to be protected it is essential that large core areas be purchased and protected not only from development, but from abusive forest practices as well. Furthermore, if

we are to protect the full range of biodiversity we must create a system of wilderness reserves and this can be accomplished only through full fee acquisition.

#2 and #13 indicate economic conditions continue to push many people to take advantage of federal and state acquisition programs. These findings set the stage for recommendations for expansive and innovative programs for both easement and full fee acquisition.

Options

Options #2 and #3 call for more funding and a new vision for the state share of the Land and Water Conservation Fund. This is a solid option and should be part of the final recommendations. However, the federal side of the LWCF should not be neglected as a means for land acquisition in this region.

Option #4, which suggests creating a dedicated development transfer tax to fund land conservation efforts, is an excellent proposal. Such a tax could put the burden of land conservation on the developers and speculators, the ones who are causing and profiting from much of the problem. Support this option!

#7 is an excellent option and should be supported, but isn't it interesting that it calls for an expansion of the existing Stewardship Incentive Program when the Council neither studied nor recognized the need to improve the manner in which these lands are cared for.

#12 asks for several kinds of input that should have been answered by the findings, but instead are being cast out for public wrangling. It is our feeling that a mix of conservation tools are necessary and full fee acquisition and conservation easements are both key mechanisms. *Full fee can afford the immediate protection of a full array of values that conservation easements, as they are normally constructed, do not.* When land with a heavy concentration of public values is for sale full fee should be considered. Full fee must be used to protect the core of any conservation area. Conservation easements modified to encompass stewardship requirements as well as development restrictions, may be appropriate for some or all of the remainder. Typical development easements can be used for parcels immediately threatened by conversion. Term easements should be used only as a last resort [Ed. Note: if ever]. They are expensive and do not ensure the long term protection that is required. They may play a minor role in the mix of strategies. There should definitely be an increase in federal fee and less than fee public acquisition dol-

Land Banking

A Tool for Fast Reaction to Land Sales

by Bob Perschel
The Wilderness Society

Landbanking is a popular conservation tool in Europe, but infrequently used in the United States. Like a traditional bank this method allows the stockpiling of resources of value while it provides a source of needed funds. The land bank is a public entity essentially in the real estate business. It aims to acquire a substantial portion of land in the region to control development and influence forest management. The land acquired is not committed to a designated use at the time of purchase. It can be held in reserve, leased, or resold. It may be directed to local, state or public ownership or return to the private sector with environmental restrictions on it that comply with a regional ecosystem plan.

The land bank uses the market, rather than regulations, to shape ownership and land use patterns. It can provide an ongoing forum for stakeholders to participate in the disposition of lands. It can react quickly to threats and, by acquiring rights of first refusal, it can provide large landowners with a "poison pill" to use in hostile takeover situations. By buying and selling land on the market the land bank can continually fund itself and capture some of the profit that drives the speculative land development market. As equity in the region's land base increases the land bank will capture and retain part of the growth in the region.

Land banking provides the flexibility that is needed in this region. It offers the opportunity to shape ownership and use patterns over time while it provides a means for fast reactions to serious threats to the land base. Land use decisions can remain fluid; we can change our minds. With assurances of better forest management and increased public access more land can be designated for the private sector. If conservation biology determines it necessary for greater levels of protection, or wilderness recreation demand increases, the land bank would emphasize public land disposition.

Carl Reidel and Jean Richardson of the University of Vermont have recently advocated the land banking concept for the Northern Forest in lectures and a paper entitled "A Public/Private Cooperative Paradigm".

BUY LAND THEY DON'T MAKE IT ANYMORE

*Millions of acres are for sale in the Northern Forest region, or considered "Non-strategic" by large landowners
*Land Acquisition is less expensive than granting tax breaks, & it is the most effective way to protect biodiversity

lars and more governmental involvement in this type of land protection.

Current Use Zoning

The subcommittee has neglected to report findings or options for the most available means of land conservation—current use zoning. Zoning is a practiced and proven land conservation tool and can be enacted through existing authorities such as LURC in Maine. [Ed. Note: See "North Woods Conservation Area" Proposal, pages 12-14 in *Mid-Summer 1993 Forum* (Vol. 1, No. 6)] It is possible to immediately zone much of the Northern Forest for its current use—forest management, thereby eliminating the need to purchase development rights. The time to zone is before land begins to reflect values far above those for its current use.

Recommendations

Define the Problem: The Northern Forest is beset not only by instability leading to land conversion, but also by poor forest practices and declining forest health. Until all the challenges to this region are recognized, a fully integrated and workable set of recommendations will not be possible.

Set the Goals: A major portion of the landscape, perhaps 50%, must be afforded varying levels of increased protection if we are to maintain and restore all the values of the forest and the way of life associated with it. Extensive full fee acquisition, existing use zoning, strategic use of conservation easements, enhanced forest stewardship at all levels of ownership and revitalized, diverse local economies are all necessary.

Develop the Strategy: New institutions and partnerships must be created to attempt innovative and sometimes risky conservation strategies. There are still many questions to be answered, but we must begin the work of protecting

the forest within a framework that allows the dialogue between stakeholders to continue. Following is an example of two new institutions that could work in concert with existing mechanisms such as zoning, forest practices regulation and ongoing land conservation programs:

*Establish a Northern Forest Institute to continue to study the region and gain input from all stakeholders;

*Establish a Land Bank to respond to major threats and opportunities for full fee, easement or options on future land acquisition opportunities. Fund the Land Bank through a variety of sources including increased LWCF state side funding, various taxes on recreation items, transfer taxes on land sales and other resource-based tax revenues.

Conservation Empowerment Areas: Expand the concept of Conservation Empowerment Areas to include land protection funding, stewardship incentive programs as well as economic and job training assistance. Identify CEA's within the Northern Forest to include those regions with the highest concentration of forest values and focus Land Bank activities within these areas. Initially seek to protect a large core area of public ownership within the empowerment areas through full fee acquisition. Use a combination of easements, regulation, zoning, education and stewardship incentives to protect the values on the remaining land. As more knowledge and insight is gained into what is working and what is needed, the Land Bank can adjust its policies accordingly, varying over time the proportion of public with private land and the mix, quantity and quality of easements. If industrial forest owners and other landowners can protect certain values through improved stewardship, there will be less of a need for public ownership and the Land Bank would allow the creation of the appropriate pattern of land ownership through the continued input of all stakeholders.



Lake Umbagog, looking north. The Magalloway River enters from left foreground. Will Easements adequately protect the Umbagog National Wildlife Refuge? Photo by John McKeith/National Audubon Society "Great Northern Forest Slide Show."

The Trouble With Easements

Easements are an expensive, ineffective tool to protect biological diversity and evolutionary processes. Only full fee acquisition of large core reserve areas can provide protection in perpetuity.

Easements do protect against undesirable development, but so does Existing Use Zoning, and EUZ is much cheaper and easier to implement.

*Each easement must be negotiated separately with each landowner. EUZ, on the other hand, can be implemented by a regulatory agency such as LURC in Maine over a vast region in one action.

*The cost of easements in areas threatened by development is often in the range of 75-95% of the full fee value of the land. When the easement is this expensive, it makes sense to purchase the tract outright. The 1990 *Northern Forest Lands Study* stated (p.47): "Development rights for land near an active land market comprise most of the land's value, whereas development rights further from a strong real estate market are a smaller fraction of the land value."

*Easements do not stop unsustainable forest practices. In the absence of meaningful forest practices regulations, easements permit (as Mitch Lansky writes in this issue), landowners to cut "as abusively as the law allows."

*Easements do not protect biological diversity. They cannot protect wilderness areas, ecological processes, or many shy, sensitive, rare, threatened, or endangered species and ecosystems. Only full fee acquisition of lands that will remain unmanaged can do this.

The Northern Forest Lands Study and Council have expressed a bias in favor of easements and against full fee acquisition. A much more ecologically responsible approach is: large-scale full fee acquisition complimented by Existing Use Zoning of private lands and ecologically responsible forest practices regulations. Easements should be a minor strategy to flesh out a reserve system, not the preferred "conservation" tool. If an easement is chosen when EUZ could have done the job for less cost to the public, it should be viewed as a subsidy, not a conservation tool.

—Jamie Sayen

Existing Use Zoning

The Cheapest Way to Control Development

Existing Use Zoning, not expensive "conservation easements", is the solution to most of the development problem in the industrial Northern Forest, especially northern Maine (see "North Woods Conservation Area" Proposal of Natural Resources Council of Maine in *Mid-Summer 1993 Forum*, pages 12-14).

EUZ is cheap, quick and constitutional. It does not require messy negotiations with each and every land owner, and it does not discriminate against responsible, caring stewards. If it works hardship on greedy speculators, so much the better.

EUZ must be accompanied by meaningful forest practice regulations to assure ecologically sustainable forestry is practiced.

The 1990 *Northern Forest Lands Study* had this to say about Existing Use Zoning (p. 42).

"Existing-use zoning is a simple form of zoning. As the name implies, it specifies that the legal uses of land are those that the parcel is already used for. The technique is meant for rural areas where the objective is to avoid continuous changes in land use. It works best in areas where people want uses of the land to remain what they have traditionally been, where existing land uses provide public benefits, and where the tendency is for that land to remain in its current use anyway.

"Unlike traditional zoning, existing-use zoning requires owners who want to modify use of their land to shoulder the burden of justification when petitioning for rezoning or variances. It protects the public interest in retaining the character and quality of rural land and allows communities to "...keep what they have—both the prevailing uses of private land and the character or its surrounding." Those who stand to profit by imposing changes in land use must petition for the opportunity.

"This form of zoning is based on the premise that current uses of the land are appropriate and that landowners are able to put the land to some economical use. Given this, existing-use zoning is not considered a taking and is within the limits of the United States Constitution. Although this form of zoning limits the right to develop the property, the Supreme Court has made it clear that this right is not one of the "fundamental attributes of ownership" for which landowners must receive compensation. The Supreme Court has also stated that land use regulations denying an owner economically viable use of the land do constitute a taking. As long as some economically viable use of the land remains, even if it is not the most profitable use, the regulation is not a taking."

—Jamie Sayen

Economy Subcommittee Failed to Ask Basic Questions

by Eric Palola

Resource Economist
National Wildlife Federation

This Subcommittee was charged perhaps with the most difficult group of issues among the NFLC working groups, however, they unduly complicated their work by failing to narrow their scope and define questions where answers are truly needed. The Subcommittee broadly defined its mission as seeking "... to stimulate the local forest-based economy within the region and to improve its competitiveness in the global economy." They generated an assortment of 22 Findings and 41 Options which, taken together as a package, are insufficient in either clarifying this mission or providing a solid basis for future recommendations.

Although the Findings and Options list many relevant issues, there is little information about their *magnitude* of certain issues, (such as the relative importance of restricting raw log exports to local economies compared, for example, to suggestions that the regulatory system should be "...easier to understand and use.") or to what degree existing rural development efforts already underway by a variety of public agencies and private development corporations satisfy the stated goals.. Most disturbingly, the proposed Options wander across a vast territory of opinion and analysis; they sacrifice clarity, insight, and direction for overly conceptual and frequently ambiguous proposals.

Questions and Information Overlooked or Undervalued

Discussed below are key questions and issues that were either partially addressed or bypassed altogether and which call for further explanation and definition. These questions indicate important gaps in the analyses that underpin the list of proposed Options. It is important to note, however, that several proposed Options deserve conceptual support (and are listed at the end) but these are largely drowned out by other fundamental concerns noted below.

1. What is a "local forest-based economy" in the context of the Northern Forest?

The term has been used freely in describing this Subcommittee's goal, however, there seems to be little understanding about what distinguishes a "stimulated local economy" versus "improved global competitiveness." At best it is a leap of faith to assume both aspects of this goal can be maximized simultaneously; at worst it is dangerous and oxymoronic to imply that a truly local forest-based economy necessarily complements the unbridled drive towards global competitiveness. Local economies are not just smaller versions of global economies. Local economies have qualitative and communal aspects that matter to the people who live and work in them. Treating certain forest and recreational businesses as distinct

from the overall health of rural communities is a cramped view of local economic development. Global economies, however, are described primarily by commodity prices, sector and multi-sector indices, and productivity measures that are indifferent to local communities.

There will always be (at least in our lifetime) other corners of the world that can "out produce" Northern New England using conventional measures of production costs or less restrictive tax and regulatory policies. Thus the NFLC needs to commit to rural community development that prioritizes several values above those which drive a more laissez-faire outlook towards the global economy. These include but are not limited to: an emphasis on local purchasing and investment, local inventorying of human and natural resources, and collaborative economic planning among a variety of community interests. This is not, as some would argue, a false dichotomy but rather a choice of values and of emphasis. The search for appropriate strategies for local forest based economic development in the Northern Forest begins with questions such as: What types of forest based industries tend to strengthen local economies? Do existing forest products industries in the Northern Forest region exhibit these characteristics? Or, what kinds of export or import markets strengthen both local economies and long term conservation goals?

For example, should the forest products industry organize itself primarily as fiber market for global consumption or a processed durable goods market that relies on manufactured products—given their differing effects on local economies? Can pulp and paper industries, as they are currently structured in the Northern Forest, expect to compete in the global market over the long term? If not, what changes are occurring or likely to occur and how

will these changes impact local economies? These kinds of questions and their answers are central to devising economic policy and programs that are responsive to actual needs of rural communities and businesses in the Northern Forest.

2. What existing organizations, agencies, and development corporations in the region work on, or currently provide the best examples of fostering local forest based economies?

If stimulating local economies is truly a goal, then the Options ought to recognize, and evaluate the serious (and expensive) work being done already by a variety of community based development corporations in the region. Several of these programs and entities purposefully integrate market, labor, environmental, and broader community goals. Despite the substantial testimony received by the Subcommittee at one public forum, there is no attempt to evaluate program effectiveness of the myriad activities already aimed at rural development. Examples which may already contribute to a sustainable, local forest-based economy include:

*The timber bridge and timber bin wall projects of the North Country RC&D in New Hampshire;

*The joint VT-NH forest products marketing program, or the "shared production kitchen" project which promotes specialty agricultural products—both overseen by the Economic Development Council of Northern Vermont;

*The Berlin, NH. program which expects to bring in at least three Canadian secondary wood products firms by next year, employing approximately 20 people each and using local wood;

*The Forest Resource and Development Council in New York and their effort to establish a "cooperative

research and development center" for forest products; or,

*The recently established community revitalization program that is giving housing, public facility, and development assistance to 26 rural Maine towns and targeting low and moderate income communities.

3. What specific forest-based industries and local forest products businesses are growing; what market niches are being created (or are likely) in wood products development that favor the Northern Forest?

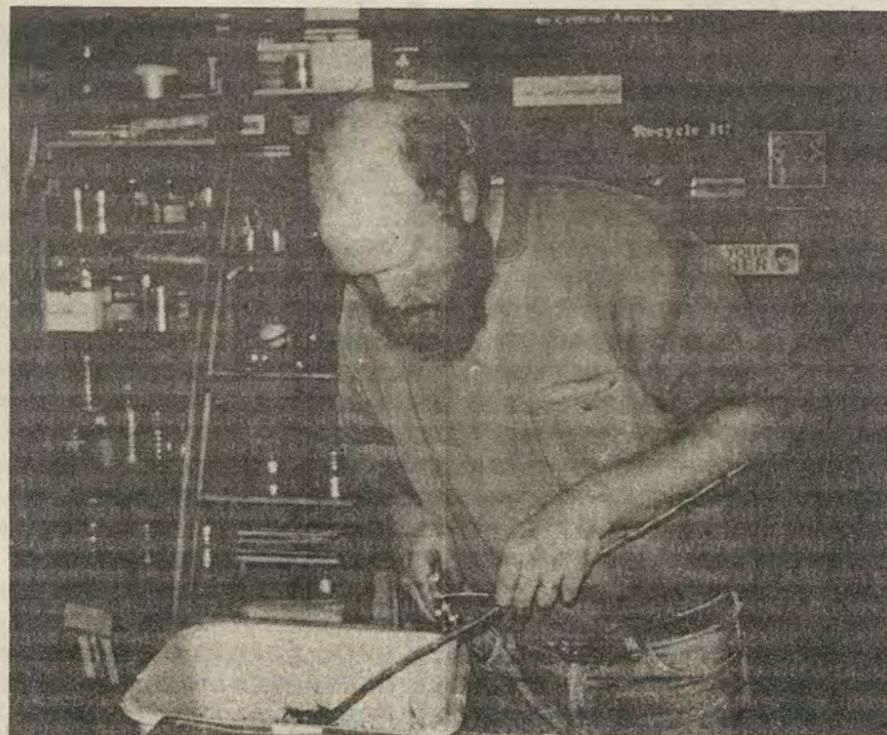
Despite industry trends in the Northern Forest regarding the loss of market share and jobs in "traditional" forest products sectors and presentations from wood jobs experts about emerging wood-using markets, the F&Os fail to identify several important trends such as: What kinds of markets hold the most promise for this region (or specific sub regions)? How the industry is currently adapting to global and domestic markets (e.g. wood and paper recycling, engineered wood products, green labeling standards...)? How can small businesses in the region prepare for likely market developments? For example, if we are losing manufacturing jobs relative to the recreational side of the total forest-based economy, or if we are losing market share to other areas of the country, what are the underlying causes?

For the purposes of the NFLC, it is incidental to report on the "importance" of the forest products economy by estimating its size (such as the Northeastern Forest Alliance [NEFA] study did) without evaluating underlying characteristics. No one disputes the importance of forest industries in this region; rather, conservationists, economic policy makers, and bankers need to know the specific types of jobs or markets being lost or created—and why—so that "global" forest-based products businesses and communities can work together.

4. How serious is the export of raw wood commodities in preventing the growth of value-added manufacturing opportunities or the development of local economies?

There is an obvious tension between export promotion and concern over loss of value-added opportunities and long term economic health of the forest. Although the proposed Options reference the need for trade barriers, investigations into alleged Canadian subsidies, and potential restrictions on raw log exports, the analytic foundation has not been laid to verify either the magnitude of the problem or argue which government interventions are appropriate or even available. Simply suggesting new trade barriers is a blunt and politically insensitive option, particularly in the current climate of liberalized trade policies.

This issue is confused further by the Subcommittee's emphatic statement in the Findings that exports have no negative effect on local economies, (despite the fact that Congress has already taken steps this year to curtail certain income tax loopholes related to



Michael Phillips, Northumberland, NH, a co-owner of the Lost Nation Cider Mill grafts an apple tree branch: "Corporate agribusiness is wasteful of energy, people, and the land. Long-term thinking is a prerequisite of good stewardship, but the corporate mentality is to think short-term... More public ownership in Northern Forest lands would be a good thing." Photo & interview by Stephen Gorman

log exports) while also suggesting in their Options that more value-added production, log export restrictions, and subsidies to offset foreign competition are desirable.

5. Given that the final set of recommendations are subject to Congressional action, what are existing or potential federal government actions that can be taken to improve local economies in the Northern Forest?

There are a variety of federal economic assistance and financing programs through USDA, HUD, and the Department of Commerce that are designed to promote rural economic development. Some are recently created such as the USDA rural assistance program or the Forest Products Conservation and Recycling Program of the U.S. Forest Service. Are Northern Forest communities taking advantage of these programs to the degree they could be? Have resources for these programs been adequately directed towards the Northern Forest region? Which programs are likely to build long term economic independence and community strength as opposed to one-shot infusions of spending?

6. What are the existing informational gaps that will assist local and state economic policy makers in improving local forest based economies?

F&Os based on perception, such as those relating to the influence of the Canadian timber industry, are not an adequate basis for proposing public policy options such as increased trade barriers. Identifying areas that are not fully understood regarding the interaction of local and global economies—and why—is as critical at this juncture as any recommendations that flow from the “facts.”

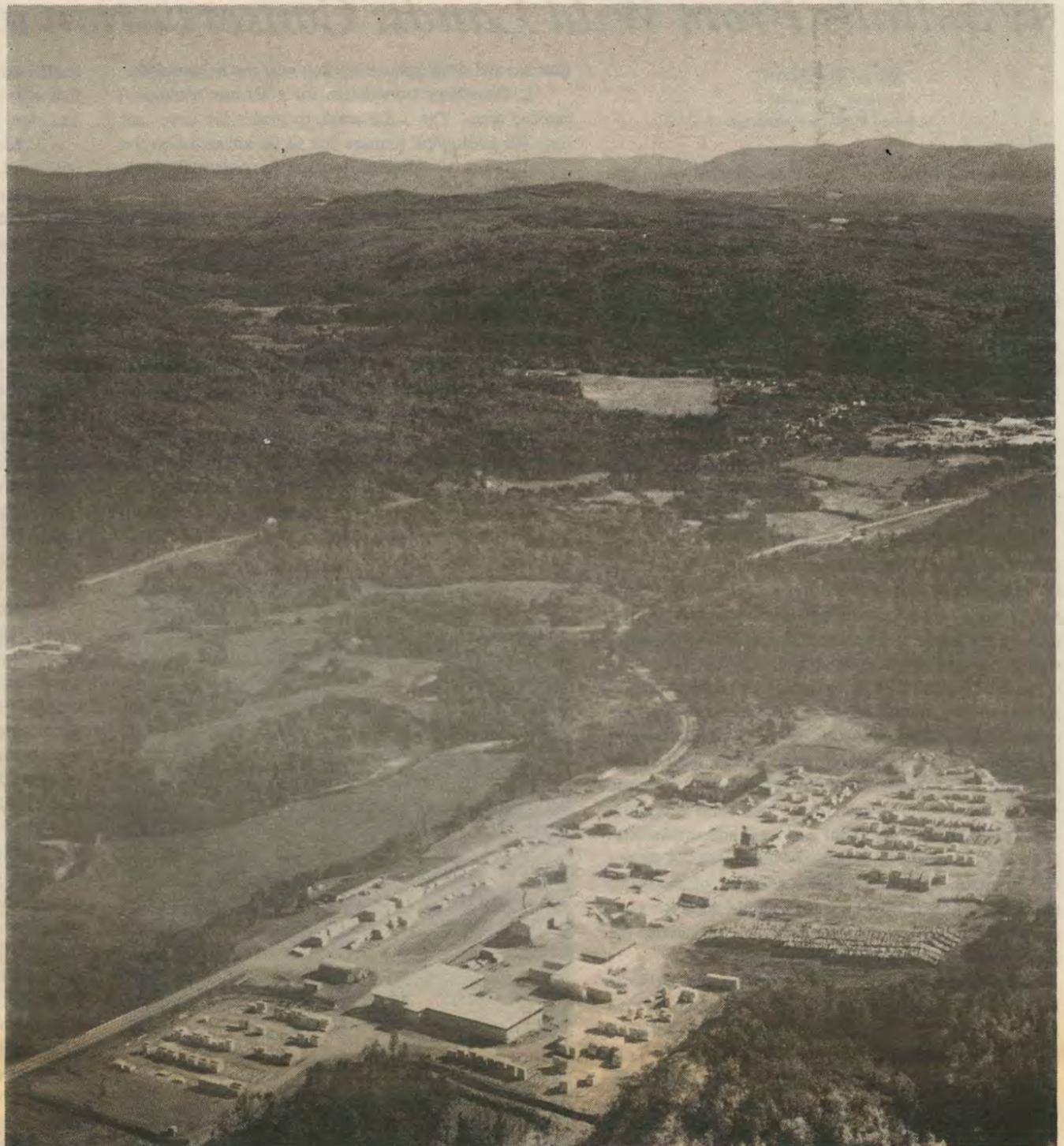
While the information in the C.T Donovan (CTD) and NEFA reports (the two reports commissioned by the Subcommittee) provide useful background information, both reports clearly point to key areas where critical information is missing or where weak spots in the methodologies are apparent. These include:

*Lack of consistent revenue and employment data from state to state and little information on the specific manufacturing and recreational characteristics of the Northern Forests. (All of the NEFA data is based on statewide figures, not just the Northern Forest portion of a given state.)

*The difficulty in estimating the recreational economy due to a variety of non-market values and site-specific variables. In other words, the numbers are soft and probably undervalue the amenities of protected forest land. Recognition of this issue is important since, according to the NEFA reports which the LFBE relies on, recreation accounts for 62% of jobs in the forest based economy among the four states.

*The need for further information about wood products import and exporting trends specific to the Northern Forest.

7. What Options for stimulating local forest based economies most likely complement other key aspects of the NFLC's mission statement, such as those regarding land conservation, bio-



A Quebec lumber mill just over the Vermont line. In 1989 Champion International, which owns over 300,000 acres in the Northeast Kingdom and northern Coos County told the Northern Forest Lands Council that 85% of its softwood sawlogs cut on these lands go to Quebec mills. They estimated that 75-80% of these logs returned to the United States as dimension lumber. Photo by Alex MacLean—Landslides

diversity, or community strength?

A stronger connection needs to be established between Options for strengthening the local forest based economy and other important values that have been identified by the Council. For example, the growing use and interest in green marketing and certification programs, or changing consumer demands for recreation provide opportunities to integrate other aspects of the forest-based economy. Recognizing the need to provide a final list of Options that are cohesive and fulfill conservation, community, and economic goals of the NFLC, every effort should be made to screen Options for local forest based economies against other important values for the forest.

Proposed Options Worth Further Exploration

Despite the misgivings and gaps noted in the discussion above, there are several proposed Options that conservationists, local officials, hunting and fishing enthusiasts, and forest products workers can respond to. Among the 41 Options, the ones listed for conceptual support are listed below. Conceptual is emphasized because most of the options

are conceptually worded. In order for the recommended Options to be truly useful, they require additional information specifying who should develop and administer the option, how much it costs and who should pay for it, how it should be administered and staffed, or whether any existing programs already satisfy the goal or are best positioned to implement it.

1. Create an easy-to-use information network which compiles and disseminates research and marketing opportunities to wood products businesses, or, information on types, values, and destination of log imports and exports (#2,#15).

2. Promote a consistent system and standards for green certification and labeling of wood products from the Northern Forest region (#4).

3. Establish landowner cooperatives to more effectively combine timber, recreation, and tourism interests, or, create mechanisms for landowners to sell “futures” in harvesting rights. (#8, #10).

4. Modify truck weight regulations among the four states to make them consistent and develop a consistent system of road classifications (#19).

5. Identify economic activities and

products that are supplied by non-local sources and nurture local entrepreneurs to provide these services and products through the local economy (#38).

6. Develop local apprentice programs to teach youth about practical skills using the forest resource. (#36)

Conclusion

It is apparent that the options presented here suffer from a range of informational gaps and ambiguous assumptions. It is necessary that the NFLC significantly edit and consolidate the number of options initially presented to offer more precision on issues and needs specific to local economies in the Northern Forest. In particular, the NFLC needs to determine: a) Whether local forest-based economies are different than merely the cumulative effect of global trends on certain forest industries; b) whether the current structure and market climate in wood products and recreation is conducive to long-range community health—and whether they have enough information to understand this; c) whether existing programs in rural development are effective; and d) whether suggestions for this section complement other conservation initiatives of the NFLC.

Windfalls From Wild Lands: Conservation as Infrastructure

by Eric Palola
Resource Economist
National Wildlife Federation

Imagine the promises of prosperity from the countless ribbon cutting ceremonies for new interstates and exit ramps, dams, or the extension of sewer and electric lines into rural areas. The largesse of several decades of public works projects, including trail and park maintenance by Roosevelt's old CCC is relied on today by thousands of small businesses, from farmers to realtors to recreational services. These public investments—typically undertaken in the name of rural development and public safety—have served to provide market stability, hike land values, and create jobs. However, the “windfalls” from these projects may be unexpected or unintended: land values soar, strip development and suburban sprawl accelerate, and key habitat and conservation values are lost or ignored.

Unlike the images of brick and concrete monoliths that come to mind when we mention infrastructure, it is apparent that among the enduring public works projects nationwide are investments in wilderness, park land, and recreational areas—especially those accessible to major urban areas. Yet the notion of parks or wild land as essential “infrastructure” is foreign in the minds of most development agencies even though such areas satisfy many of the criteria necessary for public investment. These include the provision of long-term (if not permanent) revenue streams from gate or user fees; new rural economic opportunities in recreational services; and market stability for a variety of adjacent businesses. Ask any restaurateurs or sports outfitter near any of the major national parks out west how they would do if the government pulled out, sold off lots, and privatized (as Sagebrush Rebellionists have suggested).

Needless to say, I'm not defending the National Park System, Forest Service or any other federal agency per se—they've made their share of mistakes in resource management and as business managers (e.g. should we really have sold Yosemite concessionaire rights to the Japanese?). In the northeastern states, the mere whisper of additional public land ownership sets off tirades around property rights and government intervention. Suspicions about distant and unresponsive federal bureaucrats administering local resources are entirely legitimate. However, lost in the shuffle of debates about zoning and taking are the very obvious economic opportunities—windfalls if you want—from public investment in land conservation and wild lands. But it has got to be done right. Here's one suggestion that I hope will go in the thinking caps of every state

tourism and development agency near the northwoods.

1. Determine boundaries for a serious biological reserve area. The scale needs to match the need, not only for ecological reasons but to be attractive to the 70 million or so urbanites looking for potential places to play.

2. Create an image of this place—find an attractive name—because it needs to be marketed. In exchange for restrictions on certain activities in certain areas to protect the biological sanctity of the place, motorized sports for example, a market for a unique experience is created.

3. “Pay to play” is essential. The alternative is to buy paper company leaseholds or jostle with the crowds in Baxter or the White Mountains.

If necessary, access may need to be controlled in order to maintain ecological and other habitat values and ensure the experience of solitude and quietness.

4. Gate fees go to local communities. No cream skimming by the government. In this way, all the well-

healed environmental elitists who come to camp and fish will contribute directly to local Northern Forest communities.

5. Management and maintenance of the park or wild land is overseen by a consortium of locals, such as a regional community development corporation. Better yet, we ought to offer first dibs to Native American groups in the region. (The White Mountain Apache tribe in New Mexico for example has demonstrated how to manage a large land and wildlife resource—although they permit more consumptive, and lucrative, uses.) Funding is provided to this corporation by state/federal government through a cost-sharing mechanism which has similarly been used in other public works projects.

Of course lots of details have to be worked out such as: whether local residents should pay the same fees, the granting of concession services, appropriate representation, reasonable land use controls at the edges of the park so that we don't create a West Yellowstone type of strip, and whether to buy out everyone or phase out inholdings over time.

The essential idea is that tangible long-term economic opportunities are available from prudent ecological investment. I am proposing a quid pro quo. There are downsides to encouraging or promising commercial development adjacent to protected areas. We need serious wild land protection in exchange. The management of both protected areas and adjacent areas by a local board should create accountability, ownership, and sensitivity—but it may not.

The opportunity for this kind of arrangement in the Northern Forest is heightened by the overuse and crowding of the few public spaces available, by several studies which demonstrate the taxbase benefits of green space to local communities, by the rising demand for quality outdoor recreational experiences, and the proximity of the Northern Forest to millions of people. This is an opportunity screaming for the attention of state tourism boards and development agencies in the northeastern states. But we need to get the monkeys of public land acquisition off our collective backs and be creative about management and marketing of this concept.

“We have belatedly begun to prize the value of our wild lands and park lands...” wrote Stewart Udall [*Ed. Note: Secretary of the Interior under Presidents Kennedy and Johnson*] thirty years ago. Although Udall emphasized the need for a system of “natural sanctuaries” for spiritual and ecological reasons, he would probably acknowledge that part of the “prize” today is the millions of dollars generated by activities connected to parks and wild lands.



Wilderness as Infrastructure: Canoeing on Holeb Pond, Moose River, Maine. Photo by Stephen Gorman

Unstable Regulatory Environment is a Myth

One of the most interesting findings of the land conversion subcommittee was that “current environmental and timber harvesting regulations were not singled out as a factor in land sales; however concerns about an unpredictable regulatory environment and the potential costs of regulations may be having an increasing influence on forest land owner decisions.”

The fact is: *none of the sellers of large holdings interviewed by Market Decisions (as part of the Sewall Study) listed environmental regulations as a cause for selling land.* However, as soon as the interviewer mentioned “regulations” most sellers went ballistic complaining about regulations.

While it should come as no surprise that people dislike regulations that apply to them, this finding punctures the myth that regulations are the cause of land sales or downturns in the economy. State governments should ignore the predictable blackmail threats of industry and “property rights” demagogues who oppose

efforts to protect ecosystem or public health. The paper industry threatened to leave Maine in the early 1970s if clean water legislation passed. Not only did it remain, it expanded mill capacity after the passage of the Clean Water Act.

Do we have an unstable regulatory climate, and if so, why? In some respects, the regulatory climate is very stable. New Hampshire and Vermont have no regulations limiting clearcutting and other unsustainable forestry practices. Maine's clearcutting legislation was designed not to inconvenience the large landowners (the paperwork does burden small, non-industrial owners without protecting ecological integrity).

In another sense, there is an “unstable regulatory climate” due to mounting pressure from the public to stop the abuses of industrial forestry—large clearcuts, herbicides, chlorine-bleaching of paper. Eventually the public will demand and receive regulations that address these issues. Industry will fight the public at every

turn, threaten blackmail, force ecologically inappropriate “compromises” and complain about the unstable climate and how that discourages investors. (Since the industry interpretation of the Council's mission is that the NFLC should protect existing owners, rather than recruit new owners, more weight should be given to the reasons owners actually sold land in the past decade, not to what potential investors allege.)

So, how can we achieve a “stable” regulatory environment? Simple. End industry blackmail threats and compromise solutions by environmental groups that are supposed to be “politically realistic” but fail to be ecologically realistic. In short: if we want stability, we must develop a comprehensive package of incentives and regulations that assure ecologically sustainable forestry and papermaking and a responsible market that pays a fair value for raw materials and value-added products manufactured in this region. Some industry leaders understand this (see interview with Hank Swan in Mid-Summer 1993 *Forum*,

Vol. 1 No. 6).

So long as we have no regulations or only watered-down regulations and a market economy that rewards ecologically abusive and economically unsustainable practices and punishes responsible practices, we'll have an “unstable regulatory climate.”

—Jamie Sayen



Economic Status Quo Failing Northern Forest Region

by Spencer R. Phillips

The following is the "Executive Summary" of *The Wilderness Society Report "The Northern Forest Strategies for Sustainability: Forest Products Manufacturing: Factors and Trends Affecting the Working Forest"* released in September. For copies of this report, send \$6 to: Spencer Phillips, The Wilderness Society, 900 Seventeenth St., Washington, DC 20006-2596.

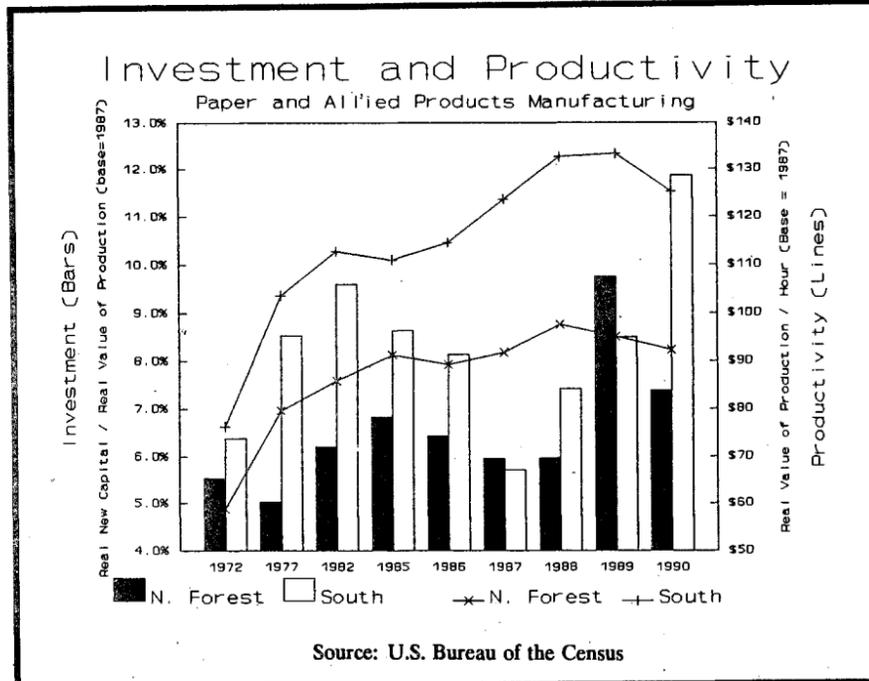
It has become the conventional wisdom.

The vast private lands of the great Northern Forest comprise a "working forest." Industrial use of these lands has traditionally produced fiber for the forest products industry, healthy local communities and important public benefits, including recreational opportunities, watershed and wildlife habitat protection and scenic beauty. Confronted with change, the conventional wisdom seeks to ensure the continued provision of private and public benefits by maintaining the status quo. Such efforts are embodied in the mission of the Northern Forest Lands Council "to reinforce the traditional patterns of land ownership and uses of large forest areas in the Northern Forest...."

But conventional wisdom and conventional policy responses may not be appropriate for a region and a resource undergoing radical change.

Global competition, concentration of land ownership among large national and multi-national corporations and a shift toward treating the forest less as a source of raw material for supplying a sustainable production operation and more as a fungible asset for boosting short-term earnings mean that the connection between the Northern Forest and its owners and industrial users is eroding.

At the same time, more and more people are seeking to re-establish a connection to the land by locating, vacationing, or retiring in or near the Northern Forest. Together, declining short-term financial value of long-term stewardship of the Northern Forest by its "traditional" owners and users and increasing value of the Northern Forest for conversion to other uses presents a challenge and an opportunity for the



region.

The challenge arises because as land is converted from industrial fiber production to residential or commercial use, public values may be lost. Smaller, possibly built-up holdings mean greater fragmentation of the forest, which can cause degraded wildlife habitat, loss of biodiversity and less accessibility for recreation.

The opportunity exists because greater awareness of, and demand for, the non-fiber values of the Northern Forest could spur a regional transformation that transcends the simple conversion of forest land from one unsustainable pattern of use to another. Converting the regional economy from one based on extensive fiber extraction to one based on using and conserving the full range of the forest's resources is one way in which sustainable development, that which "meets the needs of the future without compromising the ability of future generations to meet their own needs" might be achieved in the region (World Commission on Environment and Development 1987, p. 8).

As part of an ongoing effort to identify possible paths to a sustainable future for the Northern Forest and the local communities and regional economy it supports, The Wilderness Society

has examined the primary forest products industry in northern New England and New York. We have considered the structure of the industry, its conduct and its performance to better understand changes in the industry and the implications for land use in the Northern Forest.

Among our findings are:

*Concentration of timberland ownership. Ownership of timberland is highly concentrated among a relative handful of industrial and non-industrial owners. Little is owned by the public. This concentration leaves large portions of the Northern Forest vulnerable to the management decisions of a small number of private entities.

*Low growth in forest products manufacturing. As measured by contribution to gross state product, the Northern Forest's wood and paper industries grew about one half as fast as the overall economy in the region and about two thirds as fast as the wood and paper industry grew in the South.

*Job loss in forest products manufacturing. From 1970 to 1990, total employment in the forest products industry of the Northern Forest states fell by 13 percent (almost 17,000 jobs). At the same time, regional employment in all sectors grew by 23 percent and employment in forest products manu-

facturing in the South grew by 24 percent.

*Low investment and productivity in the paper and allied products industry. The paper industry has not focused capital spending on the Northern Forest region, with the predictable result that both physical and economic productivity lag behind other regions.

*Historically inadequate forest management and declining quality of the timber resource. Three centuries of high-grading and other practices have transformed the Northern Forest's timber from high-quality sawtimber, to high-quality pulpwood, to a resource for which the best use now is often fuel for generating electricity.

While none of these factors signals the imminent collapse of forest products manufacturing in northern New England and New York, they do suggest that the industry cannot be considered the primary guarantor of the long-term health of the region's economy or of a long-term supply of high-quality public values from the Northern Forest.

They also suggest that the conventional policy response—that is, to artificially support a failing pattern of land ownership and use—is not a viable strategy for improving the economic or ecological well-being of the Northern Forest. To commit public funds to defending the status quo for an indefinite period when promising alternatives are available will not serve the long-term interests of anyone in the region.

What will serve those interests, we believe, is a comprehensive strategy to foster sustainable development in the region. Elements of that strategy may include: making better use of the Northern Forest's existing fiber resource, while promoting better forest management to improve future fiber resources; restoring and protecting the non-fiber values in the Northern Forest; and ensuring that as much as possible of the forest's fiber and non-fiber values are retained in the local economy. By increasing the incentives and the ability of local communities to conserve those values, the Northern Forest can be converted from a "working forest" to a truly sustaining forest.

Log Exports Cost Local Jobs

by William Butler

Let me suggest that in promoting new jobs in value-added product manufacturing the subcommittee overlooks an existing job and economic loss that arguably exceeds anything that might be created through NFL action.

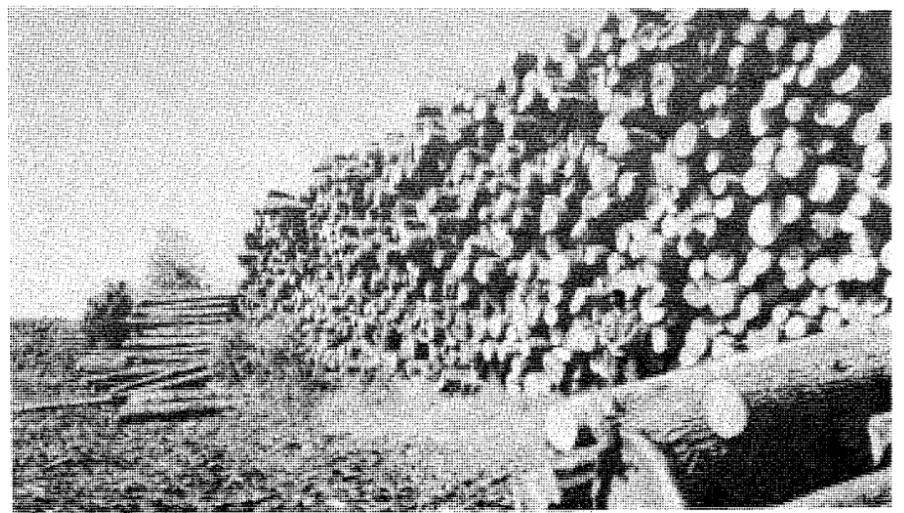
This job drain is occasioned by the export of round logs to Canadian sawmills by our large forest owners, particularly of spruce and fir which are made into dimension lumber sold in the eastern U.S. market. Some of this also happens in New Hampshire. In Maine, as much as 500 million board feet of logs go to Quebec mills from forest industry and large private owner lands. A 1981 Maine DOC study states that for the period 1969-1979, Seven Islands Land Co. was the major exporter of logs to Canada. The report states further that almost all the export-

ed logs were cut from their land or from that of a handful of major paper companies.

The 1981 study on Export of Maine Sawlogs to Quebec concludes that 40 Quebec mills employing directly 2147 mill workers, with a total of direct and indirect employment generated by the processing of Maine logs of about 30,000.

It is not stated whether the 30,000 total includes the Quebec woodsmen who commute to Maine to cut this wood, bringing their own machinery in many instances. This payroll is lost to the local economy. It has been estimated elsewhere that about half the wood cut in Maine in the '70s and '80s was cut by Canadians, even in Washington and Hancock counties (which have the lowest per capita incomes in the NFL study area).

We don't have numbers for today,



This 500 yard long mountain of hemlock and fir on Commercial Street on the Portland waterfront is bound for Shanghai.

but we do have currently a large number of token advertisements by contractors on industrial lands who intend to import alien workers.

A recommendation to the effect that tax shelters and subsidies be

denied landowners who engage in export of round logs or employment of commuting aliens, or both, is in order. These practices might also be roundly condemned as economically destructive.

Voices in the Forest

Steve Whyte—Bethel, ME (owner of Sunday River Inn and Ski Touring Center): "The only way a land owner around here can end up in Aruba is to liquidate his land. The writing is on the wall—tourism is replacing wood. Jobs are scarce in wood. I guess we are experiencing another Massachusetts invasion here in the Sunday River Valley. The people from Massachusetts don't try to find out about the area, how people live here."

Homer St. Francis—Missisquoi (Abenaki Chief): "They are vacuuming the forest. You can write how there used to be a forest. Now we are looking for the rest of it. They don't leave a God damned thing."

Dee Bright Star—Missisquoi (Abenaki leader): "The paper companies have raped the land. Maybe next time we'll tighten up our immigration laws. You can't just keep picking apart the earth or there won't be any earth left."

Marcia McKeague—Millinocket, ME (Bowater-Great Northern Paper Head of Forestry): "I wish the environmental groups would stop hyping this area. They are creating a need for increased public ownership... I don't want to see forestry become a business of lawyers. I don't want people unfamiliar with forestry making decisions... Our practices will change—they already have because of public pressure."

Jym St. Pierre—Readfield, ME: "There are still people alive today who knew the Maine woods when it was the 'Wildlands.' They know the devastation, and it breaks their hearts. I've lived here my whole life, and have seen the idea of the 'Maine Wildlands' taken over by the notion of the 'Working Forest'—domestic, drained of wildness, fragmented, bereft of native species. It has been a terrible loss."

Jamie Sayen—Stratford Hollow, NH: "There is a difference between ecological and political compromise. Tax rates, etc. can be haggled over. But ecological reality cannot be compromised. Take gravity. Is it an option? It's not an option. And how can you make a moral compromise? You can't. We can't compromise the impact of industry on the ecosystem."

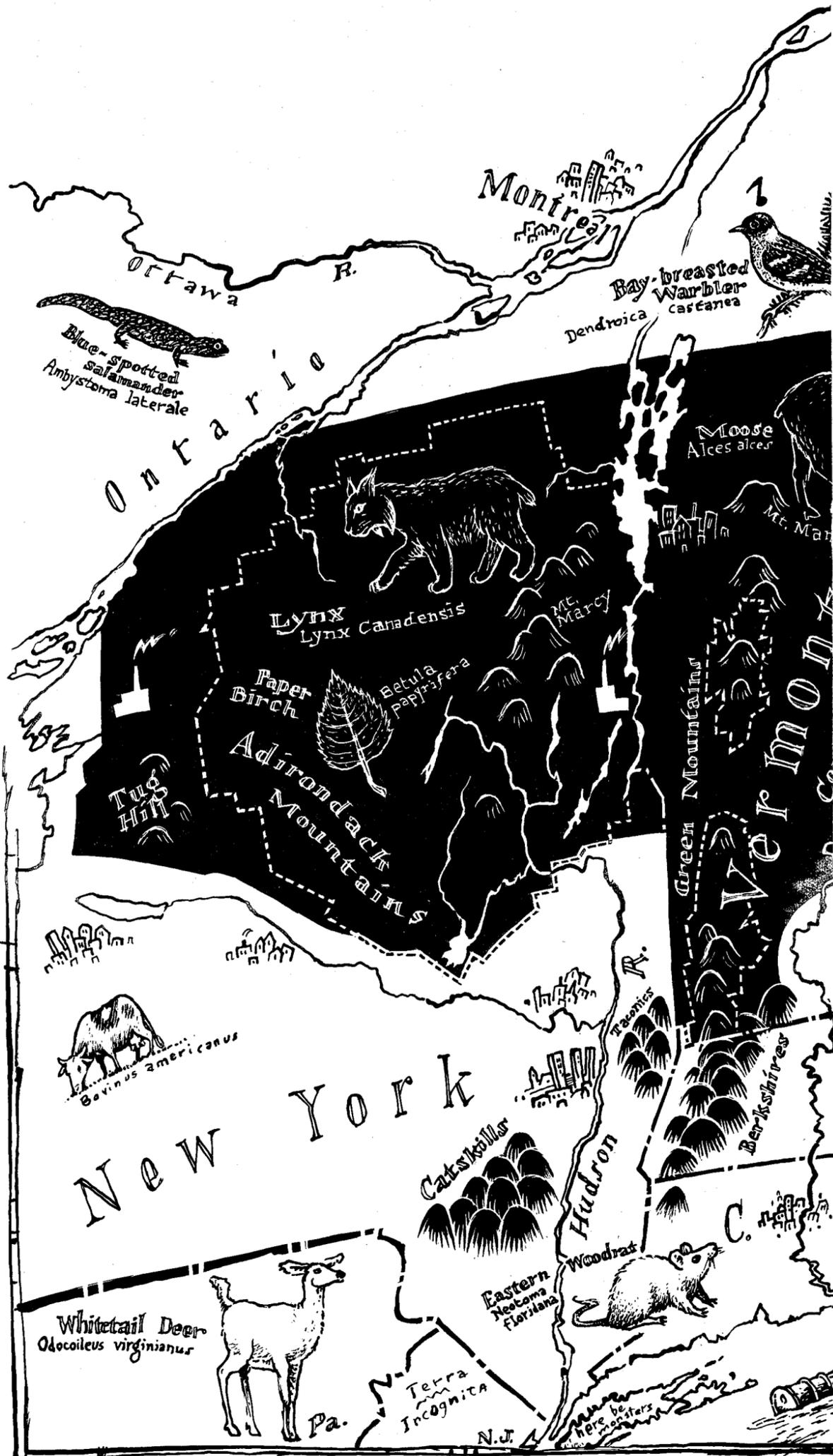
Mitch Lansky (author of *Beyond the Beauty Strip*): "The Beauty Strip is a compromise—an illusion—that hasn't worked. It hasn't worked for recreation, for wildlife, or for society. Going beyond the beauty strip is a symbol of failed policy. Whole townships are being stripped bare. Who's doing anything about it?"

Dick Beamish—Lake Clear, NY (National Audubon Society field representative): "We are down to the remnants. We must preserve what's left. When this recession ends, the development pressures on the backcountry will be greater than ever before. If we blow it in the 90s, we will have nothing to pass on to successive generations."

Robert Frank—Bradley, ME (USFS Penobscot Experimental Forest Director): "A 10,000 acre clearcut can be good forestry from a purely agricultural perspective. People don't mind seeing wheat fields growing to the horizon. But there is something that is very upsetting to the public about clearcuts that likely won't change."

Compiled by Stephen Gorman

Stephen Gorman is author of *AMC Guide to Winter Camping*, and frequent photographic contributor to the *Forum*. These comments are taken from research he is doing for a book on the Northern Forest.





New Brunswick

Quebec City

St. Lawrence R.

Furbish Lousewort
Pedicularis furbishiae

Small Round-leaved orchis
Orchis rotundifolia

Northern Bog Lemming
Synaptomys borealis

Spruce Grouse
Canachites canadensis

Northern White Cedar
Thuja occidentalis

Dogwoods
Canis lupus

Ring-necked Duck
Aythya collaris

Penobscot R.

Bog Butterfly
Incisalia lanorjaeensis

Maine

Atlantic salmon
Salmo salar

Hudson Bay



The Northern Forest

Appalachian Region

LUOMA 22

Public Land—The Key to New Options in Recreation & Tourism

by Andrew Whittaker

Based on the findings of the NFLC's subcommittee on Recreation and Tourism that indicate #1) the reliance of tourism in the Northern Forest region on the forest landscape and #2) the pressures on these lands that promise to reduce their ability to offer amenity values (parcelization, conversion and population as well as equally significant forestry practices not addressed), the Council should recognize that by purchasing public lands the Northern Forest Region can secure the infrastructure of a healthy tourist industry (option 19d).

Public land is at the core of supporting the many initiatives appropriate to private enterprise listed as options by the subcommittee (i.e., 24, 29a,b,c etc.). Without an adequate base of public land sufficient to ensure that the Northern Forest can function as a landscape ecologically complete, many of the options listed for furthering and promoting this area would amount to false advertising. The quality which inheres in the Northern Forest is to be found in its integrity as a landscape, and it is this which public land acquisition offers to



Small town publisher and NFL Council member John Harrigan relaxing in the back country: "My personal bias and phobia is roads. They screw everything up. 99.9% of the people are too lazy to walk. That helps keep people out. But people want roadless areas. My hunting friends want roadless areas. They read. They know what's going on. They want to leave something for their children." Photo & interview by Stephen Gorman

the region as a whole and cannot be otherwise secured.

In developing any recommendation for the purchase of public lands, the Council must also recommend that such lands be established not as recreational wonderlands to relieve pressure on existing and over-used public lands—but that forms of tourism be developed primarily on forest values.

Options that knit a regional identity and foster a tourism based on this are critical. The subcommittee has identified several options that are central to this task, would cost little, require little extra effort from government, and that would be made possible by acquiring public forest land.

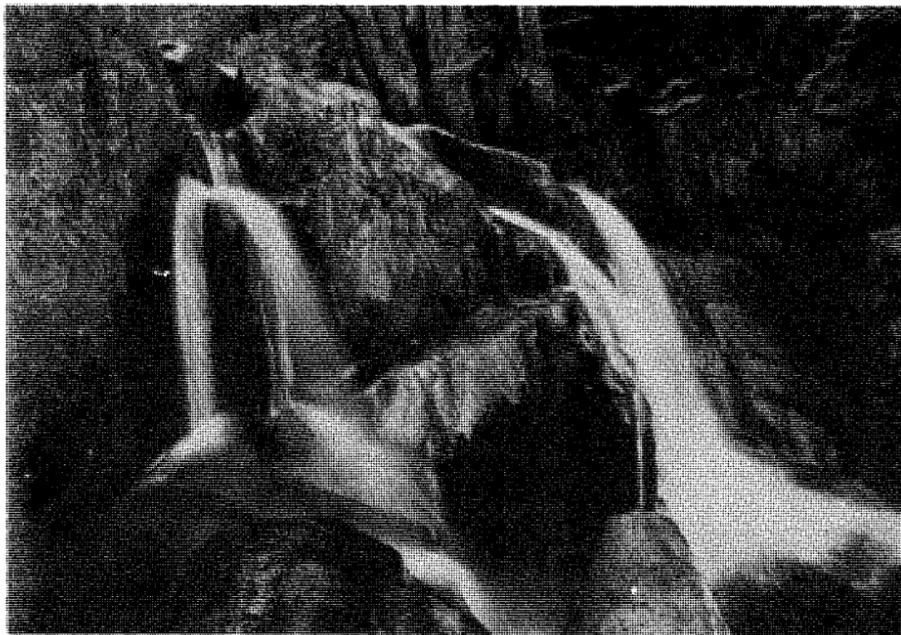
Trails

(Options 29d&e, 32). As the subcommittee found, demand for trail-based recreational opportunities is increasing and will be sustained by demographics; hiking, biking, canoeing and cross-country skiing are low impact ways to participate in the natural environment and require services of private enterprise that could create jobs in rural communities. What has made the region traditionally attractive is the back-country experience it offers; this, rather than intensive day use, is the best recreative strategy to pursue.

Option 18 refers to ISTEA monies which are being pursued separately by numerous entities across the region to create local bike and foot trails. A coordinated effort could create the infrastructure that would make the Northern Forest a major draw for the bicycling tourist. Current highway design is totally inadequate for the cyclist; a suitable network of safe and scenic bike routes established along existing rights of way and abandoned railroad beds would be unique in the nation and help support an activity that would draw on the amenity value of the surrounding forestscape without detracting from it.

Hubs

(Option 26). "Concentrated



Public land: Screw Auger Falls, Gulf Hags, Maine. Photo by Stephen Gorman

growth areas" where development resources and initiatives could be directed. The Council should recommend that the region identify towns that could become trail, biking and river hubs where in addition to services provided through private enterprise, such cultural initiatives as museums and historical interpretation (all of option 29, 33) could occur. These towns should be at the intersections of several modes of recreation and near large blocks of public land. In addition, ways of compensating private landowners in such areas whose land management practices support forest values and are receptive to low impact use of their land should be part of the hub effort (option 7).

The thrust of several options is that the region develop more as a destination than scenic pass-through. Key to this is an enhancement and development of localities in a way that will attract and hold tourists for a week rather than a day as well as promotion of slow paced alternatives to motor touring.

Option 23 suggests bringing urban youth to the region to do trail and facility improvements. While this specific idea should be promoted (and should

include local youth), to generalize from it, any public land and cultural promotion effort should seek ways to demonstrate that a healthy forest environment offers society a potent tool for avoiding social costs both in the region and elsewhere (the lack of skills training that has resulted in both urban and rural delinquency and underemployment being but one example).

Option 30 refers to re-establishing historical rail systems. Certainly the Council should recognize the re-birth of rail passenger networks in the country and region, although not to the exclusion of other public transport—bus and ferry. The extension of rail service to Portland could conceivably extend north, and the Montreal trains already run through New York and Vermont. Public transportation/trail interfaces should be planned for and promoted.

Option 38, to take no action to retain and enhance opportunities for forest-based recreation and tourism would be appropriate in the absence of any strategy to protect the forest which underlies the long term viability of tourism in the Northern Forest region.

Recreation & Tourism Subcommittee

More Public Lands Needed to Meet Tourism & Recreation Demands

by Jamie Sayen

The message from the Recreation and Tourism "Findings & Options" is clear: **we need to add millions of acres of land to public ownership.** Existing public lands, especially in northern New England, are inadequate to meet the current and projected recreation demands. Over-use leads to degradation which both compromises the quality of the recreational or tourist experience, and—more importantly—further degrades the ecological integrity of the region.

Private lands cannot adequately relieve the pressures because: (1) more and more private land is being withdrawn from public

access for a variety of reasons (exclusive leases, subdivision, posting, landowner liability) (finding #1), and (2) liquidation clearcuts on huge amounts of the larger tracts have made those lands unattractive to recreationists, tourists and many foresters. Apparently 1.5 million acres were clearcut in Maine in the past decade or so. This land is not going to support significant recreation opportunities in the near future.

To illustrate the dilemma: the 200,000 acre Baxter State Park is so overcrowded that a proposal to ban motor vehicles is gaining increasing attention. Meanwhile, the 3.5 million acre private North Woods Reserve, host to hundreds of thousands,

perhaps millions of acres of recent clearcuts, is far from over-utilized precisely because of the degraded condition of the industrial back-country.

Option 19d: "purchase additional lands for public use from willing sellers" is far and away the most important option offered.

Other options (esp. 22c, 29b,d,e,f, & 31) identify some important options for cultural restoration that would improve the quality of life for the human communities of the region as well as attract the more thoughtful sort of tourist and recreationist.

The options dealing with landowner liability and other landowner concerns

point up the problems with too many roads (most of the vandals and illegal dumpers gained access to the vandalized property with mechanized equipment), and the lack of public lands.

Although there are undoubtedly steps that could be taken to provide landowners incentives to keep their land open to the public, the reality is that the loss of access to private lands will continue. Accordingly, public land acquisition from willing sellers is the only realistic hope.

Remember: there are currently as much as 3-5 million acres for sale or considered non-strategic to long-term owner plans in the Northern Forest region.

More Land 'Converted' by Destructive Forestry Than by Development

by Mitch Lansky

The Northern Forest Lands Study was initiated because of major land transactions in the region during the 1980s. Now that the dust has settled, the Land Conversion Subcommittee has been able to gather data concerning what actually happened. The data from this subcommittee are important to explaining the motivations of large landowners for sales during that period and are thus important to the work of many of the other subcommittees.

Mission

The Council believes its key mission is to prevent "land conversion." The Council defines "conversion" to mean, "activities which result in a change of traditional uses of the Northern Forest Lands to non-forest uses and diminish forest values." (pg. 57). Among concerns of this subcommittee are:

- *sustainability of forest products;
- *abundant, diverse wildlife habitat;
- *public access; and
- *clean air and water. (pg. 57)

Based on these concerns, one might think that forest practices would be the primary focus of this subcommittee. In the state of Maine, landowners have converted thousands of acres of forest into roads, yarding areas, and powerline corridors. Forest practices have resulted in the conversion of, perhaps, millions of acres of mature forest to seedlings and hundreds of thousands of acres of spruce-fir to other types in the last decade. The volume of spruce-fir has also declined drastically. Such changes are clearly taking land out of forest, reducing important wildlife habitat, and diminishing the sustainable flow of certain wood products.

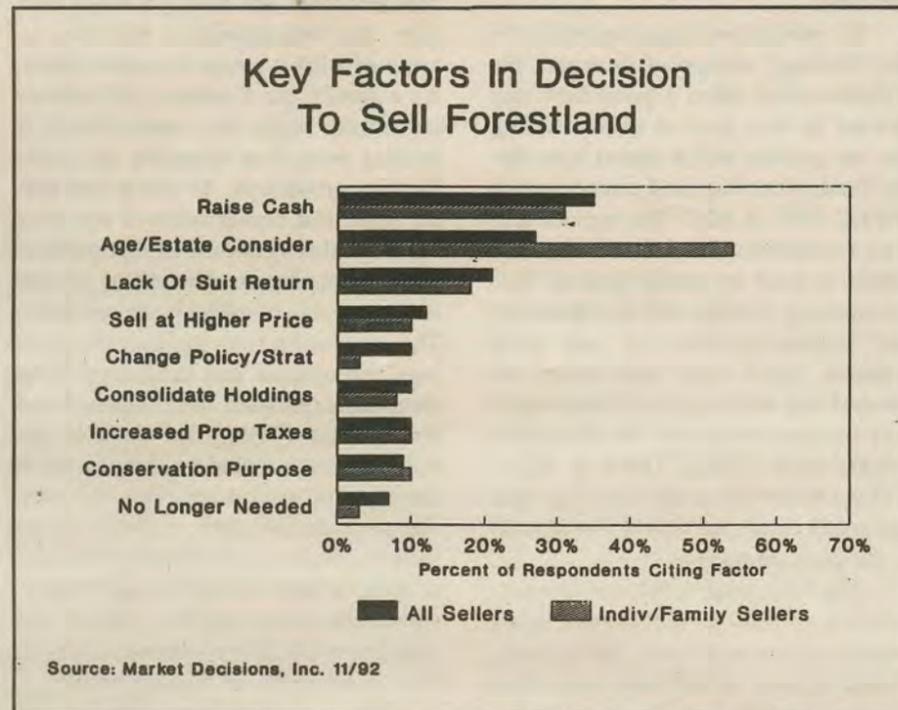
The subcommittee, however, chose to specifically exempt forest management from their scrutiny. "Forest management," they write on page 57, "in and of itself, is not considered to be land conversion as defined by the subcommittee."

This subcommittee instead was more concerned with subdivision and development of real estate. Ironically, even much of the land that the subcommittee considered to be "converted" actually is still in forest use. When developers create 40 acre lots, often only a small fraction, located near roads, is cleared for houselots—the rest may even still be left under the Tree Growth Tax. To stay under this tax, landowners must submit management plans.

Subdivision, and even the creation of houselots, in and of themselves, are not necessarily a threat to the forest, biodiversity, or the local forest-based economy—it all depends on where it occurs and how the land is treated. Likewise, consolidation of landholdings by an exploitive, destructive landowner could definitely harm important values that the Council would like to protect.

Findings

It is therefore inaccurate to conclude that an entire property has been "converted" to non-forest uses just because a small fraction has a houselot. It may be that the rest-of the 40 acres will end up with a more productive,



diverse forest than would be found on an equivalent acreage of some large landownerships. Indeed, the subcommittee (finding 9) concluded that the impact of "conversion" (as they defined it) on timber availability was not significant.

In finding 15, the subcommittee stated that "increasing property tax burden contributes to sale of land for development, high-grading, and overcutting of timber before sales to maximize returns to sellers." What the subcommittee did not say was that Maine has the lowest property tax in the region, yet had the largest share of these types of sales and activities. Merely lowering taxes will not prevent such unwanted activities.

If high-grading and "intensive timber harvesting" for "short-term returns" (finding 19) are a major concern, the subcommittee should have noticed that some landowners in Maine have been doing this on a large scale without the need to subdivide and sell. Indeed, low property taxes allow these landowners to hold many acres of low-productivity lands without major penalty.

In finding 23, the subcommittee announced that the forest products industry is "viable" and will continue to need a large forest base. In light of the declining base of spruce-fir, the first half of this finding is questionable. The subcommittee should have noted that much of the wood used by industry in Maine is not coming from industry land. The land is used by most industrial landowners to "stabilize" prices (i.e., prevent purchase prices for raw materials for the mill from going up too high). It is cheaper to purchase wood than to cut from industry land. Low property taxes allow the companies to maintain their lands for "stabilization" purposes as a timber warehouse.

In finding 17, the subcommittee admitted that environmental and timber harvesting regulations were not a major factor in land sales, but speculated that the "unpredictable regulatory environment" may influence landowner decisions. Only the first half of this finding (that regulations were not a major factor) can be considered a legitimate "finding." This same type of speculation is continued in finding 26, where the subcommittee posits that large

investors are deterred from buying timberland because of unstable tax and regulatory environment, despite little credible supportive evidence.

The usual reason why a company might invest in forest land is if there is a chance to make money. The most important factors are the quality of the timber base and the profitability of the markets. The first factor is directly tied to past and present forest practices. The second can be diminished by vertically-integrated industrial landowners that deliberately try to reduce their raw material costs by artificially depressing timber prices through sales from their own lands at appropriate times.

Degrading forest practices and timber market domination are two of the most important issues facing Maine's forest, yet the Northern Forest Lands Council avoided directly addressing both of these issues in its findings and options.

In finding 25, the subcommittee admits that if the markets for vacation/second home development are good, large landowners will sell peripheral holdings near population centers despite attempts to increase profitability of forest management. It seems clear, therefore, that the most effective means of addressing unwanted development in specific areas important for public access or wildlife habitat protection is to identify such properties and either;

- *purchase them,
- *put restrictive easements on them,
- *or, zone them.

Increasing profitability of forest management through reduction of taxes or "stabilizing" regulations alone will not work to prevent conversion of real estate, nor will it alone prevent conversion of forest land from abusive forest practices.

Options

1. The subcommittee rightly recognizes the need for better information. Beyond the listed recommendations, data collection should include: the percentage of land that retains tree cover and/or remains under current use; the consolidation of timberlands by large ownerships; and the increase (or decrease) in forestland as farmland and pasture revert back to trees.

- Of prime importance is to:
 - *identify what types of land are

most subject to development;

*determine which of these site types are most severely impacted by development; and

*establish the most cost-effective means to protect those specific types of sites.

Data collection should also be made of forest conversions due to roads, powerlines, rights-of-way, permanent timber yarding areas, and of cutting practices that lead to major conversion and fragmentation of vegetation type and/or wildlife habitat.

2. It is an excellent idea to review the effectiveness of existing land use regulations, and to determine if they are inconsistent with current conservation goals. Limiting change of existing regulations is not so excellent an idea—especially if existing regulations are ineffective and inconsistent with conservation goals. If the public demands frequent changes in the law, it probably indicates that the laws are not working and that a better solution should be found.

3. Incentives for landowners should be for how the land is treated, not so much for the size or length of ownership. If it pays to treat the land well, people will tend to hold the land longer. Goodness will be its own reward.

4. While a "quick-response mechanism" for land purchase could avoid the problems encountered in New Hampshire's Nash Stream watershed, there is also the possibility that knowledge of the existence of such a fund could lead to abuses. Landowners could ask for inflated prices from the government and threaten to sell to developers if the price is not given. Landowners, before selling to the government, could flatten their timber and escape paying taxes on non-productive land. Such problems are exacerbated if there is a conflict-of interest of the government officials who deal with the large landowners. This option needs safeguards written into it.

5. Ironically, the subcommittee suspects that federal law changes in 1989 may reduce the likelihood of the type of LBOs (such as Goldsmith's buyout of Diamond) that led to the Northern Forest Lands Study.

The positive effect of improving debt financing for "green" companies depends on how one defines "green." It also depends on forest practices that lead to productivity and quality and to good paying markets for high quality timber. If the Council does not address forest practices and barriers to market diversity, one cannot expect much substantial on this issue.

6. Taxes to penalize short-term land transactions should help to reduce short-term land transactions.

Other Options

Based on this discussion, the subcommittee should also have looked at options to reduce unwanted biological conversions of forest. Before this could be done, however, the subcommittee would have to analyze how this is occurring, to what extent, and why. Because of the lack of such analyses, this subcommittee is addressing conversion of the beauty strip (where the impact of development is greatest), but missing the conversion of the forest.

Council Fails to Show Link Between Taxes & Land Disposition

by Spencer Phillips
The Wilderness Society

General Comments

The State and Federal Taxes Subcommittee (the Subcommittee) of the Northern Forest Lands Council (NFLC) correctly recognizes that, beyond its purpose to raise revenue for public use, tax policy "is also designed to affect citizen decision making—in practically every sector of society and for myriad reasons (NFLC 1993, p. 48)." The decisions of interest to the NFLC are those relating to the disposition of timber and timberland in the Northern Forest Lands Study Area, and "conservation" of or in the Forest is the reason for that interest.

Given the national significance of the Northern Forest as a place where public and private fiber and non-fiber values traditionally have been abundant, it is appropriate to consider national fiscal policy as a means to ensure the conservation of those values. At the same time, as the Subcommittee suggests, the recommendation of such policies must be tempered by two important observations.

First, tax policy is a fairly blunt instrument (or "broad brush," in the Subcommittee's words) for influencing individual decisions. A particular tax may have the potential to affect certain decisions, but "many times [the tax] only affects a subset of the targeted population." It also may affect a large portion of the non-target population.

Second, the complexity of tax law and the many factors that influence individual decisions mean that for any particular tax policy, the "resulting actions are often not trackable, quantifiable or

provable."

By recognizing these limitations in the "findings" section of its report, the Subcommittee takes a good first step toward its first goal of understanding the "tax policies which impact upon forest landownership and conservation (NFLC 1993, p. 62)." The options section represents the Subcommittee's efforts to meet its second goal of "recommending policies and to encourage the implementation of tax code changes...which foster land tenure and stewardship and which will help stabilize landownership in the Northern Forest area (NFLC 1993, p. 62)." Before examining the findings and options in detail, we should first consider the goals themselves.

The first goal seeks only understanding of policies that impact forest landownership and forest land conservation. It does not ask how large those impacts are. Nor does it seek an understanding of the underlying public policy questions that give rise to those policies. As a result, the Subcommittee has not found, for example, any estimate of just how much the Tax Reform Act of 1986 (TRA '86) has cost timberland owners (or how much it saved the federal treasury). It has also not found that certain aspects of TRA '86 may have served valuable public policy objectives, such as correcting tax-induced misallocations of resources or promoting a more even distribution of wealth. By not seeking the answers to these and other questions, the Subcommittee has failed to collect a sufficient base of information from which to recommend many of the policy options it has identified.

A more fundamental concern with the first goal is that while impacts on

"conservation" are clearly a major concern, the Subcommittee provides no sense of what it means by conservation. As a result, the findings and options sometimes imply that conservation is nothing more than managing the forest for fiber production. At others, one gets the sense that conservation of non-fiber values is also a concern, or that preserving a particular distribution of private landownership constitutes conservation. This confusion runs through the findings and options and their supporting documents (Howard 1992; Dubroff and Hagenstein 1993). The work of the Subcommittee would have been much more useful if "conservation" had been clearly defined. Any analyses could have focused on establishing the connection between tax policy and conservation objectives, and the Findings and Options of the Subcommittee would be much more cohesive and defensible.

This concern carries over into the second goal, which intends to promote "tax code changes...which foster land tenure and stewardship and which will help stabilize landownership in the Northern Forest area (NFLC 1993, p. 62). Fostering conservation of any sort is not mentioned.

Moreover, the goal does not point to any particular land tenure arrangements or quality of stewardship. Is the Subcommittee interested in fostering a land tenure regime such as "primarily private ownership in fee simple, with some public ownership of land and conservation easements?" Similarly, does the Subcommittee intend to foster "good" or "long-term" stewardship?

Some additional detail would have provided more guidance to the Subcommittee's work.

Findings

1. The Subcommittee states that "The Land Conversion Subcommittee...found that the most important factor driving forest land sales in the region...is the lack of a suitable return on the investment in forest land [emphasis added]." This is false. The Land Conversion Subcommittee's findings state that lack of return on investment and the need to raise cash for non-forest purposes were the primary reasons for landowners selling land. That finding is closer to the results of the James W. Sewall Company's Land Conversion Study, on which the Land Conversion Subcommittee's finding is based. Sewall reports that the three most frequently cited reasons for land sales during the 1980-1991 period were: the need to raise cash for non-forest uses (more than 33% of survey respondents); estate considerations and/or the owner's age (more than 25%); and lack of suitable return on investment (more than 20%) (Sewall 1993, p. 41). Thus, a lack of suitable return was, in fact, the third most important reason for forest land sales in the region.

Given that the justification for several of the options is a presumed connection between federal taxes and the lack of suitable return on investment coupled with an incorrect observation that a lack of suitable return on investment is the primary reason for land sales and conversions, the options

A Northern Forest Boundary Makes Economic Sense

by David Miller
National Audubon Society

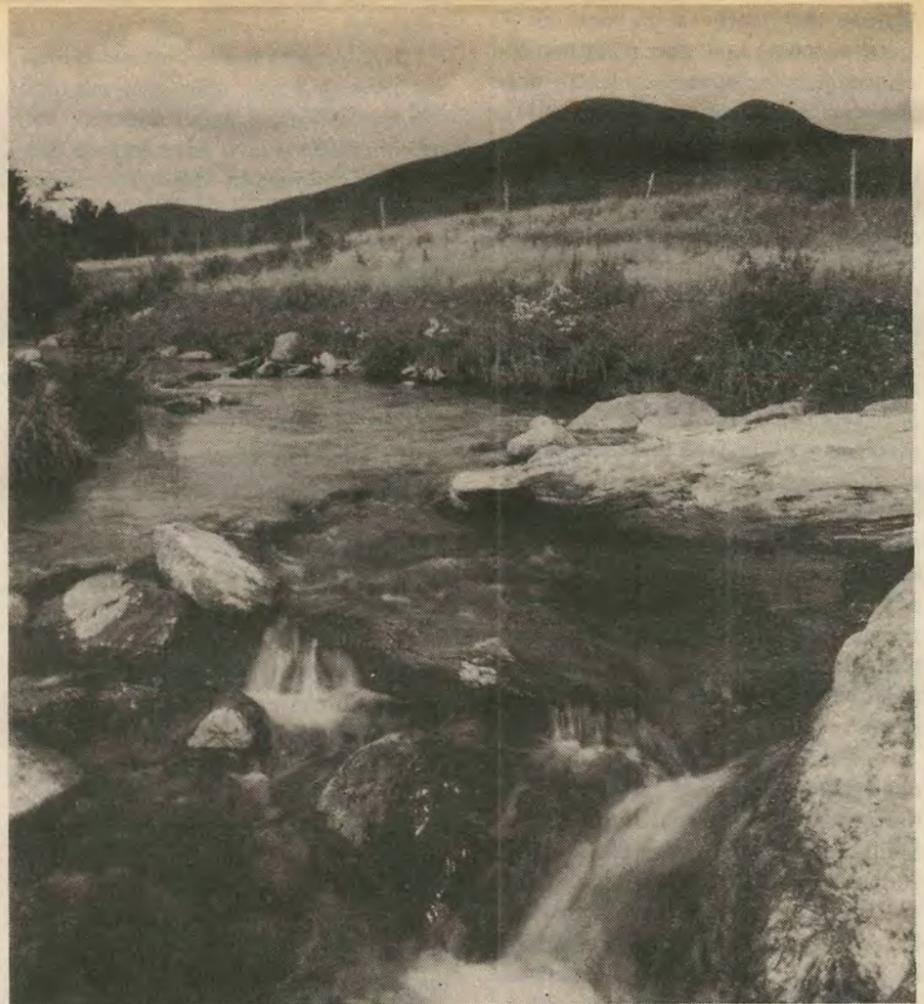
As the Northern Forest Lands Council is considering tax incentives for the forest products industry, there is a need to make them Northern Forest specific. Tax incentives need to give advantages to companies that are undertaking sustainable forestry within the Northern Forest region. The current Northern Forest study boundary outlines a 26 million acre area which should be designated for these forestry programs.

Thus, taking the 26 million acre study boundary and having Congress pass legislation which makes companies within the boundary eligible for tax incentive programs for activities within the boundary makes economic sense. Congress could designate the current Study boundary for other economic programs such as community development grants and local planning dollars. A permanent Congressional boundary for the Northern Forest study area could also be a vital way to attract federal dollars for conservation programs such as the Forest Legacy and the Land and Water Conservation Fund.

The Northern Forest Region needs to be permanently defined by Congress for economic, community and ecological reasons. The Northern Forest Lands Study boundary is our current mechanism to address these issues and the region should not let it disappear with the Northern Forest Lands Council next fall. If Congress does not re-designate the current Study boundary for the purposes of implementing programs agreed upon by the Northern Forest Lands Council, there will be no mechanism that sets this region apart from the needs of the rest of the country.

The people of the Northern Forest should not be afraid to highlight their region as a special place that deserves federal dollars for its communities, industries and natural communities.

See David Miller's "It is Time to Draw a Line: A Proposal for a 'Great Northern Forest Boundary Act of 1993'" in the Mid-Summer 1993 Forum, page 30.



Big Jay, Vermont in the background. This is one of the Jewels of the Northern Forest that should be acquired with public funds. Acquisitions of tracts such as Big Jay are a far more efficient use of taxpayers' money in protecting biodiversity than are tax breaks for industry. This photo by John McKeith is part of the new National Audubon Society slide show promoting the Great Northern Forest campaign. For more information, contact David Miller, NAS, 1789 Western Ave., Albany, NY 12203

aimed at boosting returns cannot be accepted without reservation.

2. The Subcommittee claims that its review of federal tax law has been "comprehensive." In my opinion, the review has been cursory, at best. It is true that the Dubroff and Hagenstein study does cover all of the likely tax code changes, and it does provide a sense of how the various provisions might affect behavior of a hypothetical landowner. However, their study provides no evidence that the changes proposed would be effective for conserving Northern Forest land, or that the changes would not be prohibitively costly or politically infeasible.

Theodore Howard's paper (1992), at least, does mention the possible limitations of using the tax code to affect forest landowners' returns in hopes of supporting "conservation." For example, he notes that "there is no empirical work on the joint production of timber and public goods in the Northern Forest Lands Region." In the end Howard concludes, in part, that restoring preferential capital gains treatment for timber income will stabilize forest land and provide conservation benefits to the region (p. 19).

In the week since I received a copy of Findings and Options, I have conducted my own necessarily brief examination of the issue of taxes, timberland owner behavior, timber supply and forest land use. This experience shows that with an effort that were truly comprehensive, the Subcommittee could have made much more informed policy recommendations. Some useful information includes the following:

*Without the Tax Reform Act of 1986, federal tax expenditures (that is, what the U.S. Treasury does not collect due to the presence of various tax breaks) for capital gains treatment of timber income would have been between \$800 million and \$900 million each year from 1986 through 1990 (Joint Committee on Taxation 1985). Just that portion of these expenditures accruing to individuals (\$200 million) is more than what the Federal Government spent on its entire state and private forest program in 1991 (USFS 1993).

For reinstatement of capital gains and any other proposed tax expenditure, the Subcommittee must provide some estimate of the fiscal impact, and suggestions for how resulting increases in the federal deficit would be offset by tax increases or spending cuts.

*The disposition of forest land may have little to do with timber income. As noted above, only about one-in-five landowners cited lack of suitable return on investment as a factor in his or her decision to sell Northern Forest lands. In two empirical studies focusing on the reasons for forest land conversion in the Southeastern U.S., Alig (1986) and Alig, White, and Murray (1988) found that macroeconomic and demographic variables (e.g. personal income and urban population) are the primary driving force behind forest land use change. Forestry-related returns were generally insignificant determinants of forest acreage. Alig, for example, found that higher wood-products income is not associated with a higher share of the land base devoted to forestry (1988, p.128).

*Many early estimates of the impact of TRA '86 on the timber industry may have been exaggerated. Several



Tax breaks for industry did not prevent this large clearcut in the industrial forest of Maine. It is illogical to presume that greater tax cuts for this landowner will lead to better forestry. Photo by Stephen Gorman

"partial equilibrium" analyses of TRA '86 predicted large increases in taxes for timber producers and large resulting declines in timber production (e.g., Green and Kluender 1988). By focusing on just the forest sector, however, those analyses ignored several factors that tend to dampen the effect of tax changes. Boyd and Newman (1991) took a "general equilibrium" approach which suggests that the impact of TRA '86 on the forest sector, while larger than its effect on other sectors, would really be much smaller than the impact predicted by partial equilibrium techniques. Moreover, the computed impact (1.4% less output and 1.8% higher taxes) is small relative to the overall size of the sector. The estimated increased tax burden of \$367 million per year (in 1984 dollars) is less than the federal tax expenditures for capital gains treatment of timber.

3. Given the Subcommittee's recognition that actions resulting from tax policy changes "are often not trackable, quantifiable or provable (NFLC 1993, p. 48)," it is astonishing that, less than one page later, its first finding is that "Changes in federal tax laws...impacted the ability of many forest landowners in the Northern Forest to manage, own and conserve their lands for the long term (NFLC 1993, p. 49)." No evidence that is "trackable, quantifiable or provable" is offered for the Subcommittee's newfound confidence that such a clear connection between tax policy and the individual actions it affects. Indeed, the available evidence suggests the opposite—that federal tax policy has not played a large role in forest land ownership.

As the Sewall study notes, only 3 percent of surveyed landowners included "federal income taxation policies" among their reasons for selling Northern Forest land (1993, p. 42). All findings and options based on the assertion that TRA '86 was a major factor in

recent sales and conversion of forest land in the Northeast are therefore suspect. In today's budgetary climate, and with the weight of existing evidence suggesting only a negligible effect, the NFLC will need to track, quantify and prove that an adverse effect on forest land conservation exists. Only then can any related tax code changes be seriously considered.

4. The Subcommittee's second finding is a prime example of the obfuscation of conservation with timber management. Current federal tax policy, especially with the new Alternative Minimum Tax provisions cited under Finding 4 and Option 3, does encourage the donation of land and/or easements to conservation or other qualified organizations. The same is true in the area of estate taxation in that lands bequeathed with a conservation easement are assigned a value that is lower than their highest and best use value.

Nevertheless, the Subcommittee declares that current policies discourage the ownership and investment in forest land in the Northern Forest States for "conservation purposes."

5. I fail to understand the basis on which the Subcommittee concludes that the use of a highest and best use approach to valuing property results in "excessive valuation (NFLC 1993, p.49)." From an economic standpoint, land bequeathed to an heir is worth exactly the price the land could fetch on the open market. The heir's decision to withhold land from that market or to employ the land in a use that the market does not value as highly does not affect the value that has been inherited. Whether or not one agrees that such estate taxation serves a legitimate public interest in redistributing wealth and encouraging the highest and best use of resources, there is no reason to assume that highest and best use calculations will systematically produce "excessive" valuations.

Options

1. Having just defended highest and best use valuation, I should perhaps start this section with the observation that the options relating to estate taxes are probably the strongest of all the options put forward. To the extent that the need to pay estate taxes results in rapid liquidation of timber stocks, further fragmentation of the forest or increased development pressure on wildlands, there does seem to be a legitimate and fairly concrete role for tax policy in promoting conservation of Northern Forest lands.

Option 2a, allowing heirs to decide, post mortem, to donate conservation easements on some or all of the inherited land seems to be the most direct means of protecting against the adverse effects of breaking up large tracts.

I should pause here to emphasize THE BIG CAVEAT: we need to be very clear about what is and what is not a conservation easement. If the study by Dubroff and Hagenstein is any indication, continued, unmodified timber management with a promise not to develop land until the end of the rotation might be considered a conservation easement. If the public is to forgo revenues from estate taxes (and the benefits such revenue would provide) then in return, it must get an easement that truly conserves what the public values in the Northern Forest lands. Easements must be long-term and conform with sustainable forestry practices.

Option 2d suggests allowing "for current use assessment for estate tax valuation purposes if there is a generation commitment (25 years) to no development (NFLC 1993, p. 51)." With strong enough recapture provisions, this option would be a useful adjunct to 2a.

Finally, Option 2e, increasing the time allowed for making estate tax pay-

Continued on Page 22

Land Disposition Continued from Page 21

ments would strengthen Options 2a and 2d. Heirs would have more time to make decisions on post mortem donations of land or easements or to refine management plans that may affect the current use value of inherited lands.

2. Not all the provisions related to estate taxes are quite so sound. Option 2c, which suggests excluding lands under conservation easements from estate tax assessment is not viable because land under easement is not devoid of all value. The heirs could still use such lands for both commercial and personal benefit. Thus it is appropriate that the estate tax be assessed on the reduced value of the land.

Option 2b does not seem to bear directly on the issues of land conservation in the wake of a landowner's death. Rather, this option seems only to be an attempt to perpetuate the uneven distribution of wealth that estate taxes address. There is no direct link in this option to conservation objectives, except that, for some small group of heirs, having an extra quarter of a million dollars may reduce the incentive to carve up landholdings to pay estate taxes. This connection may be very limited, however, so the Subcommittee should exclude it from its recommended options.

3. Regarding capital gains, I have already raised the issue of whether capital gains treatment has any appreciable effect on timber profits or ultimately, on land dispositions. Indexing of capital gains tends to favor only shorter term investments (less than 20 years). According to Klemperer and O'Neil (1987) the indexing has almost no effect on the present value of investments lasting 50 years or more. Thus indexing capital gains from timber sales would tend to encourage shorter rotation pulpwood production without conferring any particular benefit on high quality sawtimber production. If it is the latter that is more closely associated with high quality employment and recreational opportunities and greater public environmental values, then indexing

capital gains may actually inhibit conservation in the Northern Forest.

The sliding scale proposed in Option 4a, under which maximum capital gains exclusion would be attained in just 16 2/3 years (i.e., as soon as some pulpwood becomes merchantable), seems to be nothing but a clever way of ensuring universal capital gains treatment for Northern Forest timber. If the scale didn't start sliding until, say 30 years, then maybe the Subcommittee might be onto something. Such an arrangement would ensure that federal taxpayers would not simply be subsidizing the continuation of short-rotation timber management in the Northern Forest.

4. Any proposal to reinstate capital gains treatment (or any other form of subsidy) must be coupled with a proposal, such as in Option 9, that lands can qualify for the preferential tax treatment if and only if they are being managed in accordance with legitimate, scientifically-based conservation criteria. In its draft recommendations, the Subcommittee must be specific about what would qualify as good management and what would not. The Northern Forest States, the Congress, and the American people need to know what they are buying with their tax expenditures.

5. It is heartening to see at least some treatment of incentives for development in the Subcommittee's options. It is curious however, that the Subcommittee recommends only "further study" of the effect of the deductibility of second home mortgages on conservation, when it has been so quick to recommend large new tax breaks for timber harvest that may or may not have any impact on forest conservation. The Subcommittee should be at least as bold in discouraging real conversion of forest land through second home development as it is in encouraging speculative (at best) forest conservation through subsidies (tax expenditures) for timber management.

Deductibility of interest on owner-occupied housing (both first and subse-

quent homes) cost the U.S. taxpayer some \$42.3 billion in 1990. Based on Boyd and Newman's estimates, that is roughly 100 times greater than the impact of TRA '86 on the timber industry in the same year. It seems likely that removing the deduction of second home mortgage interest could more than offset the cost of any reinstatement of pre-1987 tax provisions favoring the timber industry.

Conclusions

There are three main problems with the Findings and Options of the Subcommittee on State and Federal taxes. First, the findings and options have no unifying direction. Conservation, land tenure, stewardship and other concepts all figure into the goals of the Subcommittee, but all are so loosely used that they provide no vision of what the Northern Forest could be were some set of tax code changes adopted.

Second, the linkage between most of the suggested Federal tax code changes and conservation (however defined) in the Northern Forest has not been established. The Subcommittee needs to test the hypothetical impacts of the tax code on landowner decision making and the impacts of landowner decision making on conservation before it can reasonably recommend costly changes to the code in hopes that somehow, at the end of the day, conservation will be enhanced.

Third, the Subcommittee has not considered the cost of any of the proposed tax code changes. Nor has it considered how or from whom increased tax expenditures for conservation (however defined) will be raised. Will other tax expenditures be reduced? Should other programs be cut? If so, which ones?

Each of these points suggest a need for the Subcommittee to answer some fundamental, but difficult questions concerning federal taxes. If those questions cannot be answered before the NFLC sunsets, then the best course would probably be to pass on tax code

changes for now. The possible exceptions are Options 2a, 2d, and 2e, relating to estate taxes.

Spencer Phillips is an economist working for The Wilderness Society. He is author of "The Northern Forest Strategies for Sustainability (Vol. 1): Forest Products Manufacturing: Factors and Trends Affecting the Working Forest." (See the "Executive Summary" on page 15 of this issue of the Forum.)

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Tax Breaks Don't Assure Conservation of Public Values

by Mitch Lansky

No one likes to pay taxes and everyone can usually come up with good reasons why his or her tax burden should be reduced. However, if we are to have government, we have to fund it somehow. Since both state and federal governments are going through financial crises, reducing taxes for everyone is not an option. Reducing taxes for one interest group, such as forest land owners, means that other taxpayers will have to make up for lost revenues.

If the Council is going to recommend tax reductions for a single interest group, it must first demonstrate clear public benefits—otherwise, those other taxpayers who will have to take up the slack will, rightfully, protest their increased burden.

We urge the subcommittee and Council to provide reliable data that proposed tax changes will achieve the goals of the Council; and that these proposed tax changes are the most cost effective way of achieving those goals. This will require reasonable estimates on how much government revenues will be foregone with each tax-change option, accompanied by a credible analysis of whether or not these goals can be better met with less cost using alternative approaches such as purchase, easements, zoning, regulations, etc. Without this information, it is impossible for citizens and policy-makers to make informed decisions on these diffi-

cult and controversial issues.

Unfortunately, neither the subcommittee nor its subcontractors have yet provided a rigorous case for the draft findings. After all these months, we still do not even know what the goals for the solutions are—except the very vague terms one encounters in the Council's "Mission Statement."

The implied goals (such as "conservation" or "protecting the traditional land ownership patterns and uses") mean different things to different people. For example, it is quite possible to "conserve a consolidated land ownership, but not to "conserve" the forest. The landowner might degrade the forest to the extent currently allowed by law. Subdivision of consolidated land ownerships is not necessarily bad for society. Indeed, in some instances, small, locally-owned holdings may be better tended than large, absentee-owned holdings.

The Council must specify how proposed tax changes will be implemented. Will they affect only the 26 million acre Northern Forest region? Or, will they apply to all 50 states? If the goal is to merely prevent the subdivision and development ("conversion") of HBU lands around rivers and lakes in the Northern Forest region, we run into a serious problem. The proposed federal tax changes would apply to all forest land across the entire nation just to prevent undesirable changes on a small fraction of forest lands in the Northern Forest region.

If the goal is to improve the profitability of forest management under the assumption that non-profitability is the cause of subdivisions or poor management, the Council will have to demonstrate that:

*Management—for all landowners affected by the tax—is currently not profitable;

*the unprofitable management is due to the tax in question rather than due to poor practices, poor yields, or poor markets; and

*landowners who get the tax reduction will not still subdivide or heavily cut their holdings and simply keep the increased profits.

We have been told many anecdotes of impoverished landowners who have been unable to manage their lands or have had to subdivide their lands due to excessive taxes. While these stories may be true, the Council should make sure that these stories are representative of the majority of the landholdings. Otherwise we run the risk of giving breaks to people or corporations who own the majority of the land (although they may not be the majority of the landholders) for the sake of those portrayed in the anecdotes. There may be more appropriate measures to help the owners of the minority of forestland without giving tax breaks to people or organizations that do not need them. The Council should avoid casting a huge net to catch very small fish. It should look for the most targeted approaches that have the best probability of actually solving the problems it is trying to address.

The Destiny of the Northern Forest: Large-Scale Landscape Conservation

by Jym St. Pierre

In the short-term it is disheartening to see the many forces degrading the Maine Woods and the rest of the Northern Forest. However, I have been thinking a great deal lately about our history. The lessons of the past can show us not only what has been lost, but what may be revived. They can inspire us not only to a vision, but to a passion that demands that we learn to live better here with nature. I powerfully sense an historic inevitability moving us toward large scale landscape conservation in this region.

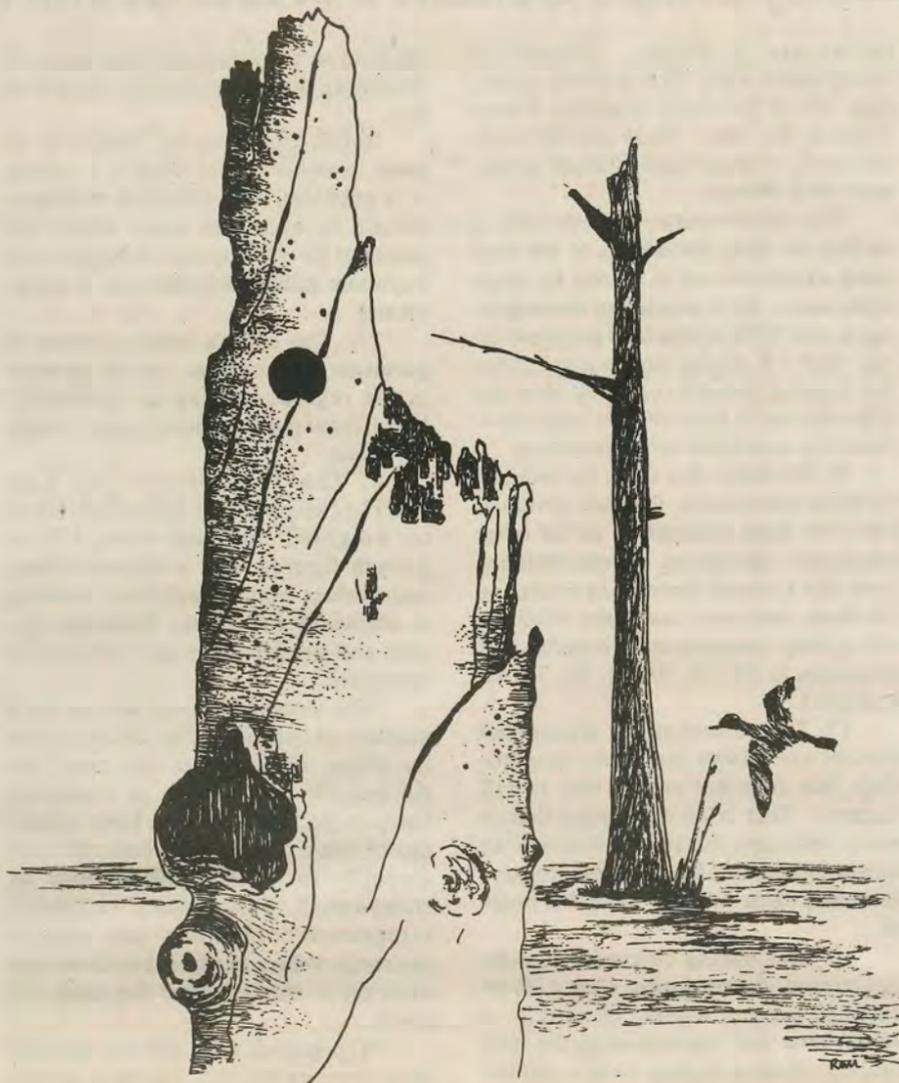
The early story of how we treated the land is, in retrospect, a great embarrassment. Serious European involvement began only six years after Columbus reached what he thought was India when John Cabot cruised through the Gulf of Maine, rediscovering continental North America in the process. A quarter century after Cabot, Giovanni da Verrazzano sailed along the New England coast observing the beautiful forests. A year later, in 1525, Estevan Gomez penetrated the Maine Woods to near head of tide on the Penobscot River, kidnapping five dozen natives from Maine and Nova Scotia on his way back to Spain. By the early 17th century European explorers and exploiters were regularly poking into the forbidding, yet inviting, wilderness along the shore and rivers of the Main. Soon a few settlements were planted on the coast and islands. As early as the 1620-30s outpost settlements were being established along navigable waterways inland in Maine.

The original Americans were, of course, often not well treated by the European conquerors and settlers. And as elsewhere in the Americas, disease was devastating. Three years before the Pilgrims established Plimouth Plantation the native population in New England was decimated by a smallpox epidemic. With the aboriginal inhabitants virtually eliminated in many areas appropriation of the lands was relatively swift.

From the colonial period into the 19th century the destiny of Maine's wildlands was considered by the new owners to be settlement and development. To encourage this it was public policy to expeditiously privatize the wildlands. During the middle years of the last century the sale of vast reaches of public lands to private landowners was substantially accomplished. Throughout Maine only a couple thousand acres of public lands remained by 1878.

Of course, some of the wildlands were settled, but much of the temperate forest ecosystem that makes up northern New England was better suited to growing trees than vegetables and livestock. The opening of the deep-soiled mid-West to farming and the excitement of the California and Alaska gold rushes drew attention away from the Wild, Wild East. As the big trees were hunted out of the Northeast, the vortex of lumbering activity swept westward. A few began to rethink how we had been treating the land.

In the 1840-50s Henry David Thoreau came to the Maine wilderness. Inspired by the magnificence of the



landscape and the destruction of the forests he witnessed he formulated some ideas about wildness and preservation. He later transformed his vague intuitions into a specific suggestion for the creation of "national preserves, where no villages need be destroyed, in which the bear and panther, and some even of the hunter race, may still exist, and not be 'civilized off the face of the Earth...'" However, Thoreau was decades ahead of his time. It was not until a century ago that conservation activities began in earnest here. In 1891, as the Congress was inventing the idea of putting some of the public estate into forest reserves, the Maine Legislature was establishing a new office of forest commissioner. Over the next half century there were many initiatives to preserve the wildlife and lands in Maine, particularly in the Katahdin region.

The congressional Weeks Act of 1911 led to the creation of the White Mountain National Forest in New Hampshire with a bit of spill-over into western Maine. Since then efforts to establish other national forests in Maine have been fended off repeatedly by the forest industry. On the Maine coast, in

the early twentieth century, Acadia was established as the first national park created entirely by private donations. Up north, by 1931 Percival Baxter had personally bought and donated to the people of Maine the first 5,960 acres of what was to become 202,000-acre Baxter State Park. Soon Baxter greatly expanded his vision for Maine's grandest wilderness park. During the New Deal the federal government acquired numerous areas for parks, refuges and conservation. In the mid-1950s the best of these areas were deeded to the state to become the heart of Maine's state park system.

By mid-century, Maine's remaining wildlands were under unprecedented attack by the lumber barons and their industrial offspring. The special areas that were permanently protected were still scant. Thereafter we did create the Allagash Wilderness Waterway, the Appalachian National Scenic Trail, and the Bigelow Preserve in the 1960-70s. We did recover and consolidate close to half a million acres of public reserved lands, and establish a wildlands zoning agency in the 1970-80s. We did legislatively put some rivers off limits to hydropower development and acquire

50,000 acres of spectacular lands through the Land for Maine's Future program in the 1980-90s.

Yet, the dream of achieving large scale landscape conservation in the Maine Woods remains unfulfilled. Today only five percent of the state of Maine is in state and federal conservation ownership. Of the nearly 20 million acres in the state a mere one percent is protected as state and federal Wilderness.

Many say it is naive to think we could redress the imbalance of protected lands compared to managed lands in Maine. Yet, almost inadvertently, there are hopeful signs. In 1989, for instance, The Wilderness Society boldly urged the creation of a 2.5 million-acre Maine Woods Reserve wrapped around Baxter State Park as a wildland core. A grand idea, widely scoffed at. But over the past four years, within the proposed reserve, the people of Maine have re-acquired 29,700 acres in the vicinity of Nahmakanta Lake; 500 acres around the Togue Ponds at the main gateway to Baxter Park; 8,000 acres in Days Academy Grant Township, 700 acres along the Roach River, 800 acres at Mount Kineo, and an additional 1,900 acres at Big Squaw Mountain in the Moosehead Lake region. The people of America have gained ownership of several thousand acres along the wildest parts of the 2,000-mile Appalachian Trail. The Nature Conservancy has added a 1,000-acre purchase to the Big Reed Reserve, the largest remaining old-growth forest in New England and has acquired 265 acres at Marble Fen, an exceptional ribbed wetland in the region. Parcel by parcel, without a plan, crucial pieces of a Maine Woods reserve have been put into place.

Over the past five centuries the world has changed much. We have been through the age of exploration and exploitation. The time has come for the age of restoration and sustainability.

Even over the past five years much has changed. The dream of creating not a single reserve, but a system of buffered, interconnected, protected wildland areas across the Northern Forest is-taking root in the imaginations of more and more people.

The list of environmental problems that could be solved simply with additional money or laws has diminished. We are down to tough choices that often challenge values. The pressure to reach consensus on conservation issues will swell, and perhaps no issue better symbolizes the struggle for a new consensus in the Northeast than the Northern Forest. As we engage that struggle I hope we recall the lessons of history, natural and human. Living with nature means giving some space to the wild. Living with ourselves can mean remembering that most of the greatest conservation successes, here in Maine and elsewhere, took years to achieve. However, with perseverance the momentum of history can help carry the cause to restore and preserve the ecological integrity and beauty of other special places as it did for Baxter Park. That is the destiny of the wildlands of Maine that we can make manifest. That, I believe, is the destiny of the Northern Forest toward which the momentum of history is surging.

October 18 Deadline

For Public Comments on Findings & Options

Please Send Comments
Before Midnight October 18 to :

The Northern Forest Lands Council
54 Portsmouth St
Concord, NH 03301
(603) 224-6590

Tax Breaks for Industry Don't Benefit Forests or Local Communities

by Mitch Lansky

Goals

The challenge of this subcommittee should have been to come up with recommendations for taxation systems that:

*raise adequate revenue for local governments;

*are not assessed at confiscatory levels;

*are reasonably "fair"—(i.e., they tax based on ability to pay, and do not give preference to one group by putting an undo burden on another);

*address, when possible, public concerns for open land, public access, timber productivity, and wildlife habitat; and

*represent the least-cost solution to achieve specific public goals.

The major concern of the subcommittee, however, seemed to be to find ways to reduce the property-tax burden for large forest landholdings, or to justify low rates of taxation already in existence. The findings on existing current-use programs were particularly weak. If we can not be frank about problems in existing programs, it is doubtful we will be able to avoid similar pitfalls in proposed programs.

Findings

While many of the findings of this subcommittee were factual and informative, some were not. Indeed, I, and others, pointed out the flaws in some of the following findings when they were in draft form.

9. This finding, that forestry is "unprofitable" if taxes are higher than \$1 or \$2 an acre, is contradicted by a model used by RSG (pg. 4.39). The RSG calculations (using a USFS model) suggested that a managed hardwood stand would have a 90 year Net Present Value (NPV) of \$345 at a 5% discount rate. The PV of annual taxes of \$3 for 90 years at a 5% discount rate is \$59, which seems to allow a considerable profit if "profit" means income above expenses (rather than a rate of return competitive with junk bonds).

I recently interviewed a forest landowner with over 300 acres in Maine (he also has holdings in Vermont and New York). He informed me that his average stand holds over 20 cords and yields over 0.5 cords per acre per year of harvestable wood (a 2.5% net growth rate).

He estimates his average stumpage rate to be around \$20. Although he tries to find best markets for his products, he is mostly "low grading" the stand to improve future quality. He suggests that he ought to be getting more for his pulpwood, but the paper mills, by various means (such as vertical integration and oligopsony), are artificially keeping their purchase prices low. Even so, his average acre is paying around \$10 per year in stumpage revenues—plus he is able to pay himself for cutting, skidding, and trucking the wood. The stumpage more than pays the taxes for his timberlands as well as for his farm and house. He is not on Tree Growth.

Improving timber management and finding higher paying markets would do more for forest landowners than reducing property taxes by one or two dollars—and it would help ensure adequate revenue for the towns.

15. The subcommittee claims that current-use programs are not subsidies, but its conclusion is based on theory, rather than fact. Ninety percent of the forest lands taxed at current use in the

region are in Maine. Around 20 landowners own 10.8 million acres, over 3/4 of the entire Northern Forest Lands in the state. There are 10.5 million acres of forest land assessed at current use in Maine.

The subcommittee did not have a finding on what percentage of the land taxed at current use is owned by large landowners, but it would not be surprising if over 90% of this land is owned by less than 1% of the landowners. Thus the biggest beneficiaries of this tax reduction are a very wealthy minority—including multinational corporations.

To the extent that taxes are reduced for these landowners, they are increased for other local landowners or for other taxpayers (assuming reimbursement from the General Fund). In exchange for these increased costs, the public is not getting commensurate benefits (see responses to 17, 18, 29, 30, 33, 35, for example).

17. The subcommittee argues that current use allows long-term stewardship, but does not ensure that it will happen. This is an admission that in many instances the tax reduction is an unwarranted subsidy. The public pays increased costs but may not get a benefit.

18. This finding claimed that without current use programs, over 12% of enrolled parcels would "be at risk of subdivision and conversion in the near future." Such a finding (over a million acres at risk) is hardly credible. Only 39,000 acres in the region were "developed" over a ten year period during a land boom. The figure given actually represents 9.8% (rather than 12%) of current use lands and 4.4% of the Northern Forest Lands area. While some of this may be at risk of subdivision, probably a very small percentage would actually be cleared for development.

The finding does not mention the location of most of this "at risk" land. It is quite probably not scattered uniformly through the region, but is instead concentrated in marginal areas, where development has already intruded. In finding 3, the subcommittee admits that most of

the land in the low-population areas of the unorganized territories are not at risk.

Rather than give tax breaks to all areas, whether or not there is a chance of a problem, cost-effective strategies should be aimed at areas where the potential for development is highest and important public amenities are at greatest risk.

27. This finding listed a number of problems with current use tax systems in the region, leading to instability. Unfortunately it missed some major problems:

a) The Tree Growth Tax Law (TGTL) (which values timberland based on weighted stumpage rates, USDA growth figures, and a discount rate) undervalues Maine timberland, leading to artificially low taxes. Stumpage figures and growth rates are particularly unrealistic.

*The stumpage values are low for a number of reasons: The NEFA report for Maine admitted that they could not get reliable information on stumpage because (pg. 3) "In Maine, large quantities of wood are sold on a contract basis directly to mills, rather than as stumpage..." Furthermore, vertically-integrated companies can impute stumpage values to wood sold from one division to the next that fits their tax needs.

*The growth rates are low because they were computed during a spruce budworm outbreak.

*The capitalization rate (8.5%) is high considering current returns on standard investments and actual risks.

The net present value of hardwoods under Tree Growth is assessed from \$36.70 per acre in Hancock County to \$65.60 per acre in Somerset. Yet, RSG's model computed a net present value for an acre of hardwood (admittedly using a different method) of \$290 per acre without management and \$345 per acre with.

b) The majority of benefits of Tree Growth, as pointed out earlier, go to a small minority of wealthy landowners.

c) During the land boom, the TGTL did not prevent the subdivi-

sion and development of high-value land.

d) Some of the most abusive forest management in the state occurs on land taxed for Tree Growth. Despite 20 years of this tax, the standing volume and quality of the forest has declined, especially for spruce and fir. Most of the spruce-fir type is owned by a few large landowners who are taxed under Tree Growth.

28. This finding laments that officials, assessors, and other property owners don't appreciate current-use programs enough. But if the previous criticism have any validity, perhaps the "lack of appreciation" is warranted.

29. The subcommittee confused theory with reality when it assumed that higher-quality timber, and conservation of soil, water, and wildlife resources were given benefits (some of which could be priced) of current-use programs.

While some small woodlots may very well benefit from a requirement for a management plan, by far the majority of current-use lands in Maine are industrial-scale. Ad Hoc Associates (in their May 15th report to the Council, pg. 7.5) wrote, "most people acknowledge that the requirements would not change industry practices."

One can readily determine from satellite photos and ground truthing that in some townships industry practices have resulted in the removal of nearly all mature forests. This does not lead to high-quality timber (in our lifetimes), nor does it improve conservation of soil, water, or wildlife dependent on mature forests.

30. The subcommittee used RSG's calculation of the present net benefit over 90 years of the theoretical benefit of a management plan to demonstrate the priced benefit of current use. But it gave no evidence that because there was adoption of a management plan that management actually did improve to the extent assumed by the model. The plan requirements in Maine are not all that strict. Nor are the forest practices laws.

The reader gets to compare the \$46 million dollar benefit (of having a management plan) with a \$12.5 million dollar cost of tax shifts. But the (theoretical) benefits are a net present value for 90 years, while the costs are for one year. This is not an honest comparison.

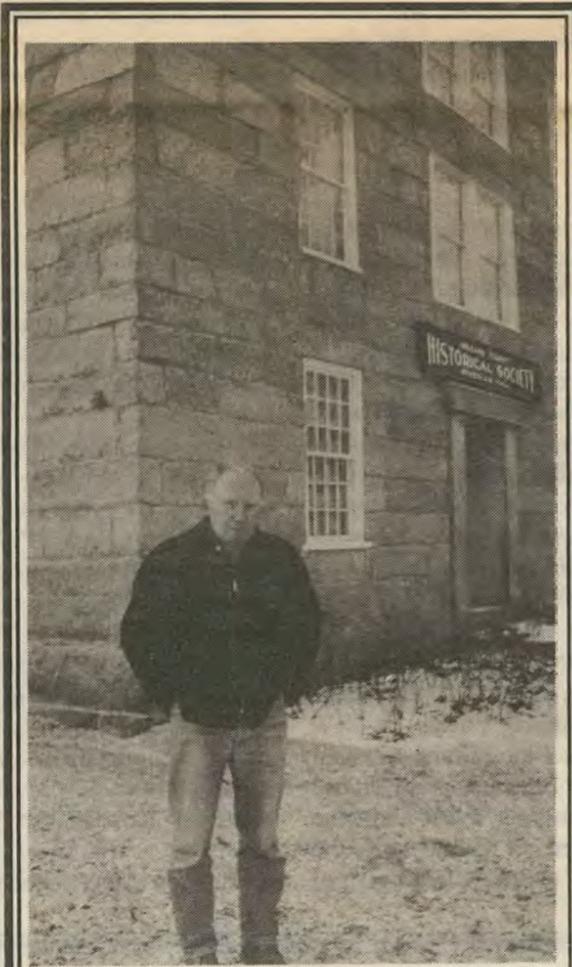
35. This finding, that taxation may "encourage" "conserving" (i.e., not developing) forest land but that it cannot prevent conversion, is significant. It means that if there is a specific area (such as near a lake or river) that has high public values, one cannot rely on tax programs to protect it.

Indeed, one also cannot rely on full- or partial-fee purchase on a voluntary basis, if there are landowners determined to sell for development.

36. Current use taxes connected to zoning can, apparently, prevent unwanted development. However, according to this finding, "the zoning requirements (rather than the tax program) are mostly responsible." The implication here, is that if there are important areas that communities want to protect, they will have to draw a line. Giving federal tax breaks to all forest landowners in the country, or giving property tax benefits to all forest landowners in the state will not necessarily protect the high-value lands that most concern the Council.

Options

Some of the options presented by this subcommittee are quite interesting



Howard Moser, Irasburg, Vt. Author of *Disappearances, Where the Rivers Flow North*: "All these fields were going farms in 1964. Then costs went up, but the price of milk did not... It's a good thing I came here when I did. Those people I write about aren't here anymore. They're gone... Vermont has good laws that will keep wild areas from being eaten alive, but development has changed the character of the people, and logging roads have ruined the hunting and fishing. Photo & interview by Stephen Gorman



High altitude photo of a two-township-sized clearcut in West Middlesex Canal Grant and Big W Township on the northwest corner of Moosehead Lake in Maine. This is paper industry land (Scott Paper), taxed under Tree Growth Tax, and subjected to a management

plan. The Council assumes that if industrial land holdings remain consolidated rather than get developed, the land is conserved and the communities and forests are benefitted.

and should be pursued further. Unfortunately some other good suggestions mentioned in studies commissioned by the subcommittee got left out. The following are a handful of options that, I feel, should be further pursued by the states.

***Funding for Education:** Option #2a recommends shifting funding for education away from local property tax. Residents would pay more through income and sales, but non-residents (such as paper companies) would still pay largely through property taxes. Maine used to have a uniform property tax that helped to even out the disparities of community wealth. This type of system should be re-examined.

***Prevent Development:** Finding #36 (see above) made it clear that the best way to assure that special areas are not developed is to tie current-use zoning with current-use taxation. This, for some reason, was not made into an option. Zoning should certainly be an available tool, especially where communities need to, and are willing to "draw the line."

***Promote Productivity:** Current-use programs can't just demand any management plans—the plans have to be designed to improve stand quality and to promote greater standing volume

and growth (similar to #1d), without harming other goals, such as protecting biodiversity. The program could have a requirement of maintaining a minimum growth of volume per acre per year. If this is not maintained (due to excessive cutting), the land would no longer be assessed as commercial forestland and would be assessed by other means.

***Public Access:** The most successful system mentioned by the subcommittee's contractor, Ad Hoc (7.6-7.7), was Wisconsin's, where those taxed at current use must assure public access, with an 80 acre exclusion allowed around residential areas. This

Forest Practices *Continued from Page 5*

There is no organization in Maine of which I am aware that has determined this, and I would feel uncomfortable leaving such a judgment to the Maine Forest Service based on its past performance.

Option 7 reminds us that Maine has lacked a cohesive forest policy, except, perhaps, by default. This

option was not listed by the subcommittee.

***Raise Revenues:** To the extent that landowners can misrepresent their stumpage and volume levels, a tax system, such as Tree Growth or a Yield Tax, will be ineffective at assessing accurately for current use. The Council should acknowledge that there is a problem and devise means to get more accurate data. This can be a problem, especially if those doing the research include representatives of those causing the problem.

If it could be fairly administered, a Yield Tax (plus a bare land tax—#2c)

extremely important idea should have had substantial research to back it up. Just as the Council hired contractors to review state and international property tax policy, the Council should have reviewed forest policy—including regulations and incentives—to see what has been effective at encouraging practices that are ecologically sound, socially responsible, and economical-

ly viable.

Particularly lacking in the Council's sidewise approach to forest practices is any admission that large landowners are doing any undesirable cutting—except when they "intensively cut" land for "short-term profit" before subdividing it (Land Conversion Finding #19).

There are also no admissions that there are any barriers towards improving forest

might be preferable, because the landowner pays when the money is most available (when the timber is cut). These revenues would have to be pooled regionally or statewide and given back to towns by formula.

An even more effective means of generating revenue is a value added tax (VAT). This option has been mentioned by citizens at Maine Citizen Advisory Committee meetings, but was not mentioned in the Council's latest document. Even a small VAT (1%) could bring substantial revenues to the states, recapturing some of the wealth generated locally.

practices that may emanate from the very *status quo* that the Council is trying to protect. Yet many people whom I have interviewed, from woods workers to woodlot owners, have identified industrial domination of the landbase and industrial domination of timber markets as major factors inhibiting progress towards better forest practices and a healthier forest economy.

THE FORUM RECOMMENDS

Preamble: The sustainability of both natural and human communities in the Northern Forest requires, first and foremost, a healthy ecosystem. In order for this to occur, a significant portion of forested land in the region—perhaps 50% of the land base—must be acquired by the public. The primary objective of a Northern Forest Wildlands network is to ensure the survival and restoration of the native ecosystem—for the first time to place biological considerations ahead of short-term economic gain. Beyond this, and in recognition that sustainable human economies can only build from what is sustainable ecologically, public lands must offer, and private lands be encouraged to offer, models of a forestry contributing to biodiversity while generating optimal economic activity. Logging practices should add and not detract from the forest. Timber should be managed for highest non-commodity values; Harvests should be geared to the needs of local communities, and not global markets.

Purpose Boundary

We therefore recommend: The establishment of a Northern Forest Purpose Boundary comprising the area now under study to reflect the regional interests at stake and provide an avenue for federal funds to:

- *purchase from willing sellers large blocks of land deemed non-strategic by the timber industry; and
- *provide incentives and assistance for regional economic and cultural reforms.

Defining the Northern Forest region with a purpose boundary is a prerequisite for implementing a long-term strategy to acquire land for ecological reserves and to re-direct the regional economy to truly meet the needs of the local communities in an ecologically sustainable manner.

Establish Ecological Reserves

Within this line, a series of buffered and connected core ecological reserves, created from willing seller purchases, will form a regional system of unmanaged land adequate to protect biodiversity and otherwise conform to the needs of the ecosystem. The lands which comprise this Wildlands network would be overseen by a regional body composed of biologists and representatives from all four states, local communities, the private sector, and the Federal government.

Any management undertaken on designated public land would be in the tradition of town or school forests and geared to local, non-commodity markets in conjunction with vocational programs or other small-scale operators seeking to develop new models of sustainable forestry practices. These would thus function as "economic reserves" or incubators for diversity of local production.

Public lands would make payments-in-lieu of taxes to towns in which land purchases were made and behave like any other taxpayer (except they would offer no development threat).

Conservation Districts

In addition to Reserves, and in conjunction with the Wildlands network, states would be enabled to nominate, within the Northern Forest Purpose Boundary, Conservation Districts in which the role of private managed forest land in protecting biodiversity and promoting economic well-being would be recognized through innovations in investment, taxation and rewarding of superior forestry practices. Conservation Districts should have at their disposal regional conservation tools, but would be administered by local development and conservation advisors in conjunction with local government. (This model of administration should serve as an experimental prototype for future watershed councils proposed by various sources for genuine community control of forest lands. Such local councils could ultimately form a federation for future guidance of the Wildlands network.)

Conservation Districts should also serve as prototypes for the re-building of local economies. A key goal would be to promote local economic activity based on forest resources and insure the continuance of a land-based economy by buffering the impacts of development and maintaining the affordability of land for those who wish to farm or homestead.

But in recognizing the dangers inherent in selling to commodity markets—and that this faulty tradition has impoverished the region—Conservation Districts would additionally, through such tools as Revolving Loan Funds and marketing research, seek to invest in local businesses that add value, promote economic diversity, and manufacture finished products from local resources, both forest and agricultural. While outside, top dollar markets should be sought, internal needs, such as improving energy efficiency and creating affordable housing, should also be met by encouraging local solutions to local problems with local resources. "An industry for every cottage" should be the economic development credo of Conservation Districts.

Conservation Districts should also serve as targets for both private and public monies aimed at deepening historic and cultural ties to the sustaining landscape. Many of these would offer tourist amenities, such as small museums, educational tours and interactive programs in restoration and natural history, while these and others would address current gaps in public and higher education.

Existing Use Zoning

Across the region as a whole, the adoption and encouragement of Existing Use Zoning by the individual states or entities, such as the APA in New York or LURC in Maine, within their respective states, should be recommended to further the goal of insulating the privately managed lands from development pressures so as to preserve the viability of such lands in maintaining both forest economy and ecology. Current Use tax relief could and should be linked to town-level adoption of Existing Use Zoning in those states that lack regional planning bodies: the ultimate objective of current use is an investment in forests and other open land; states are within their rights to secure the investment by linking current use payments to Existing Use zoning.

Private lands must contribute to the maintenance of biodiversity. Existing Use will advance this goal. In recognition that the traditional land-based economy was threatened by speculation and over-development in addition to other macro-economic factors during the last land boom, existing use zoning must be designed with the object of preserving an economic as well as ecological land base.

A Network of Ecological Reserves will form the backbone of a sustainable regional economy and improved quality of life for Northern Forest residents.

Recommendations to Congress

- *Establish a Purpose Boundary around the Northern Forest Region
- *Establish a network of connected, buffered, large Ecological Reserves
- *Appropriate Adequate Funds to purchase lands from "willing sellers" for these reserves
- *Appropriate Adequate Funds to assist state and local governments develop sustainable economies in Conservation Districts

Recommendations to States

- *Support the recommendations to Congress
- *Institute Existing Use Zoning & Ecologically Sustainable Forest Practices as part of the Current Use Tax Program
- *Shift funding for education away from local property tax. The burden should be borne by income and sales tax

Bad Ideas

- *Tax breaks to industry (f.i. capital gains, estate tax, reduced property tax) that are not tied to strict incentives (a quid pro quo) that: thwart development, assure ecologically sustainable forest practices, promote healthy human communities and promote biodiversity
- *Continued avoidance of the issue of forest practices
- *Continued assumption that the status quo has served the region well

A Conversation with Baskahegan's Roger Milliken, Jr.

Roger Milliken, Jr. is President of the Baskahegan Company, a family company that owns and manages 100,000 acres in northern Washington County, Maine. He is currently Chair of the Maine Forest Products Council and sits on the Board of the Natural Resources Council of Maine (NRCM). In 1983 he published a book *The Forest for the Trees* a history of the lands owned by the Baskahegan Company.

Our conversation was held on the last day of September on a beautiful autumn foliage afternoon. The reader will note numerous instances in which we sharply disagreed. What the reader cannot hear is friendly tone in our voices. For this interviewer, it was gratifying to be able to discuss so many contentious and sensitive issues in such a forthright manner. The reward of such discussions is discovering surprising areas of agreement.

Jamie Sayen: Tell me about the history of Baskahegan.

Roger Milliken, Jr.: It was land that my grandfather bought in 1920. The brief history was that he put the money up to buy it with the intention of cutting it hard to make the money back—the classic story that's been repeated through Maine everywhere. People either cutting the land and then selling it or buying it and cutting it hard. There wasn't as much wood on the land as advertised when he bought it and that, combined with the onset of the Depression in the 30s, really shut the operations down, and there was a long period where, as far as the family knew, the land was being left to regrow.

The terms of the original cutting contract were that the Lincoln Pulp and Paper Company who had the contract couldn't leave more than two cords per acre standing of the trees they were interested in. They were basically commercial clearcutting to the standard of the day. They ran out of wood. So it had been cut really, really hard and was left to grow back. What I found out was that there were continued small cutting operations where wood was being cut and money was being made and the family knew nothing about it during the 40s and 50s.

I first visited Baskahegan in the late 70s, and I was immediately intrigued because as a liberal arts graduate I'd always assumed that business and the environment were going to be at cross-purposes with one another. But because the family was taking a long-term view of the ownership, their basic approach was to build value, and that translated itself into a stewardship ethic and a way of harvesting where the focus was on restoring the health of the forests trying to recover from past history of—you would call it abuse—or single-minded pursuit of forest products, whether it was pine logs in the early 1800s or hemlock bark in the latter part of the 19th century. There was a real intention to build the productive value of the property. I was stunned to see a business resulting in a kind of environmental ethic that I felt very positive about.



Roger Milliken, Jr. and daughter Tara

After writing the history, I agitated within the family to get involved in Baskahegan. Part of it was: the clear lesson of the history was the pitfalls of absentee management and absentee ownership. At least in those early days it was really clear to me that representatives of the family needed to be there saying "Yes, we're really serious about this, and if it means the bottom line isn't as fat this year as it could be, but as a result things will look better in 10 or 20 years out, that's really what we want to do." We needed that kind of presence to reinforce that message. Because I found for myself, when I got involved—even as a manager who knew the family was taking a long-term approach, who had the concerns about the environment that I had—there's always the temptation to look at the bottom line as the ultimate scorecard. It's a short-term scorecard.

JS: I'm intrigued by the issue of getting off of the unsustainable management regime and getting on to a more long-term sustainable flow of fiber and also hopefully forests that provide other values. We have a 15 million acre area in northern Maine, a large portion of which suffers from the same kind of syndrome that you encountered before you became involved. Part of it is absentee ownership and part of it is this bottom line approach and part of it is just feeling that there aren't any alternatives. How do we break that cycle?

RM: If we had a luxury at Baskahegan it was the firm commitment of the family to look at the long-term view. Because of the history of forestry in Maine, Baskahegan's history is no different from the rest of the state where people have gone in and cut what's of value and left the rest. The definitions of what's valuable have changed—and diminished—over time. But in essence, the family said that our interest owning this land is in a steady flow of value and dollars. How do we grow the most value we can? So, unlike a paper mill ownership where the interest is in having fiber to feed the mill, non-industrial owners are all oriented around trying to produce as much value as we can. As Hank [Swan] was saying in his interview with you, most people look at that and conclude the value is not in growing pulpwood, it's in growing trees that can be used for bigger timber. Sawlogs

are going to make you more money than stud wood does. Furniture parts are going to make more money than hardwood chips and so on. With non-industrial ownership, there is a bias toward growing trees on longer rotations, growing bigger trees. There is a reluctance, if not an impossibility, of doing what's been called intensive forestry with investments in herbicides and plantation forestry because the cash-flow really doesn't support that. So non-industrial forestry tends to work with what nature provides, and in our case, and in most people's cases, there's a desire to work with that natural diversity and grow trees into their remunerative form. If there's something special about Baskahegan, it has been their willingness to look at building value toward the future. Turning away from high-grading or subtle high-grading. So when we do a partial cut operation, we're taking away the smaller trees, the ones that are being out competed for sunlight and nutrients and leaving the larger trees as a residual stand to cast shade and provide seed, figuring that's where the value is. So, once the shift is taken to look long-term, it's not an either-or, it's the obvious thing to do.

JS: On the industrial lands, how do we come to grips with the need for fiber on the one hand and the need for ecological protection on the other because the two right now are in conflict and there seems to be no resolution except allowing the large clearcuts, some plantations and herbicides, or establishing the set-asides? Is there some way that industrial papermaking can co-exist with a society that is committed to landscape-scale protection of ecological integrity?

RM: My sense is that in Maine the answer is yes because of the way the forests grow. The regeneration in Maine's forests is so extraordinary. The steady rainfall and the thickets to which the forest grow. If you look at an ideal final crop of trees being something like 200 trees per acre, and you see that in a well-regenerated acre you can have anywhere between 30-40,000 stems growing up initially, it gives you a sense of the bounty of Maine...

The budworm salvage period was a really scary period for Maine landowners. Forest owners, particularly in the northern parts of the state where there is

a very high fir component, which is the preferred food of the budworm, were looking at extraordinary losses. So there was a move towards salvage and pre-salvage. And then in my perspective a seduction happened in that the large clearcuts were such an efficient form of logging that this momentum kept going. But I think there are other ways to do it. Part of it involves—what Hank said in his interview with you—encouraging companies to look at the land on their books as a different kind of resource and not look for the 15% return because that's an unsustainable return. Part of that gets around to accounting standards. I think in terms of how we rank investments—when you look at investments in land, you've got to look at it differently from an investment in a paper machine and not put that pressure on the land to produce something it can't in a sustainable way.

JS: It sounds as if you are essentially saying we've got to acknowledge the limits of physical and biological reality and design economic, market, social and political systems that exist within those limits rather than disregard them in the name of the bottom line or the quarterly report or unfair competitive advantage or global markets. That's a pretty overwhelming task.

RM: It is. I agree. I think that is the task. I view our relationship with the forest in terms of eras. The first era was the era of exploitation—when Thoreau was in the Maine woods, or the early history of Baskahegan land where they went after the white pine and when it was gone, industry adjusted and they went after the spruce until it was gone and so on down to a lower and lower common denominator. My sense is that we've moved from that era of exploitation to what I would call an era of compromise where landowners—particularly in Maine where it has been cut over many times—are recognizing this is potentially a renewable resource, and if we want sustained yield of fiber, or in our case, income, it requires some sacrifice in the present so trees will be there in the future. Paying attention to the regeneration—what's coming back. This is what we want and this is what the forest needs to produce that sustained yield. Therefore we'll take less now in order to have an assured supply. I think that compromise has been extended beyond fiber or timber yield to include, largely through regulation, but not totally, things like deer wintering areas or bald eagle nests or other kinds of habitat. Where we need to move as a society and were we're beginning to move with a focus on biodiversity is towards what I'd call an era of partnership where we're really looking at what the forest needs to thrive, and looking at what we as a species need. And I think part of that is really separating true needs from desires. And trying to see if we can get what we truly need and interact with the forest in a way that it can thrive and not just limp along. Our lifetime is on the cusp between those two eras.

JS: When I look at the paper industry, I

don't just look at the cutting and the pulping and the paper manufacturing. I also look at where it ends up—40% of our landfills are paper products—packaging, junk mail, bleached white toilet paper. Are these as necessary as clean air, clean water, quality of life? If not when are we going to recognize we've reached the point of incompatibility and that one or the other has to go?

RM: That's a great question.

JS: This is the problem I encounter in policy debates. For example, I think the Northern Forest Lands Council (NFLC) is trapped into this short-term thinking—the kind of things you and Hank are talking about—because of the political pressures, so they're trapped into tinkering and perpetuating a system that has reached the point of unworkability. I can live without bleached toilet paper, cereal boxes and junk mail. We don't need to manufacture as many paper products, and much of the fiber we do manufacture from should be reused fiber. That is one way of freeing up a tremendous amount of space in Maine, in particular, for reserves or for making the kind of transition that Baskahegan made to growing for the longer term. How do we get this into the policy arena if our Senate Majority Leader represents us and the paper industry by thwarting the conversion to chlorine-free paper?

RM: Right. I don't have any easy answers to that but my sense is we just need to keep pushing on those fronts. It involves a lot of rethinking. I like to say the free market system is a great system if your focus is taming a wilderness. It's the perfect system for it. It doesn't know how to look long-term or prevent shortages or make those trade-offs unless you can put a dollar value on it which leads to some of those absurd exercises of putting a dollar value on the recreational values of a day's worth of hiking in the White Mountain National Forest. It's nuts. As part of this shift there needs to be major rethinking of basic premises and a shift to true sustainability. It makes it an interesting time to be alive.

JS: Can you make a go of it at Baskahegan with this philosophy? Are you showing a profit, and are you a viable business?

RM: Yes we are.

JS: So the claims we hear about the need for tax reform to keep you as an owner or to keep you in business don't necessarily apply to you?

RM: It gets into this rational economic man realm. If our family did not own this land by historical accident, we would not be investing in Baskahegan because the return is very low. It's a steady return. There's very little fluctuation. It keeps pace with inflation nicely. But it's barely a respectable money-maker. The larger question is: we're competing on a playing field where the kind of returns people look at as the norm or the desirable return is in the 10% range, and Baskahegan can't do that. There's two different elements to the conversation. I say it's working for us, but I can also say that it wouldn't attract us if we weren't already

involved.

JS: What this tells me is that our economic value system says: A healthy environment is not a worthwhile investment.

RM: Our system doesn't monetize the value of a healthy environment.

JS: What makes it economically attractive for you to clearcut and high-grade and what are the incentives that we can develop as a society to encourage you into another activity, and can we couple that with regulations so that if you go too far in the other direction you get hit over the head and it hurts? We do need the regulations. What's been lacking in the past has been some kind of understanding of the root causes.

RM: There are a lot of people who say "clearcutting is just anathema to me and it's the wrong thing to do." We clearcut in certain conditions at Baskahegan, and the result of clearcutting is to increase and restore some of the diversity that was on that site before decades of high-grading had reduced it. For example, in hardwood stands if we continue to partial cut and partial cut we build up a forest of shade-tolerant species—lots of beech, and the white birch and yellow birch fall out and won't be coming back in. If we go in as we've done over substantial parts of the acreage in the late



Illustration from Springer's *Forest Life and Forest Trees* (1851) showing two oxen loading a full length pine trunk onto a sled. All six oxen will haul it to the stream. From *The Forest For the Trees*.

70s and clearcut, we get a rush of regeneration that includes white and yellow birch and has the ash right up there with the beech and sugar maple. So the response is a much fuller range of the natural diversity of the forest. So a regulation that says "Thou shalt not clearcut" is short-sighted.

JS: From an ecological point of view, if you did nothing, in time the land would express itself as it had before we began cutting down the forest. I find the argument that clearcutting in order to hasten a regeneration process ignores the problem that some other damages aren't being accounted for: the need for older forests, unfragmented forests, habitat for interior-dwelling species that don't do well when invaded by weedy species, and the need for relatively undisturbed (by human activity) tracts that are fairly large so that wide-ranging critters can inhabit them and so that natural processes which operate over a

landscape level can work their way out without being truncated. A clearcut is not the same thing as a big blowdown. I'm one of those people who will be hard to convince that a clearcut is justified from an ecological point of view.

RM: Part of my aim in having this conversation is not necessarily to convince you (laughs), but assuming there are other people enjoying this conversation, part of what I hear you saying has to do with fundamental assumptions or paradigms about our relationship to nature. We humans have seen ourselves as separate from nature for a long time, and that's been one of the root causes of a lot of the problems that's led to this dominator approach to the natural world. I see the same paradigm with the flip side coming up in the premise that we need to leave vast acreages untouched by human activity. It's coming from the same place that we're separate. We're either separate and therefore should dominate, or we're separate and therefore we pollute and we shouldn't be involved. Part of what's involved is this attitude that nature is this fragile old lady who needs to be protected. My experience at Baskahegan is that's far from the case. She's like this dynamic, boisterous dynamo dancing across the landscape with endless strategies for survival and perpetuating herself. I believe strongly there's a need for nature to have places

for herself where natural processes can go on unimpeded. But I also think there's room for us to dance respectfully with nature over most of the landscape. My task as a landowner and as a steward of the land is to try to define what that respectful dancing is, what that interaction looks like.

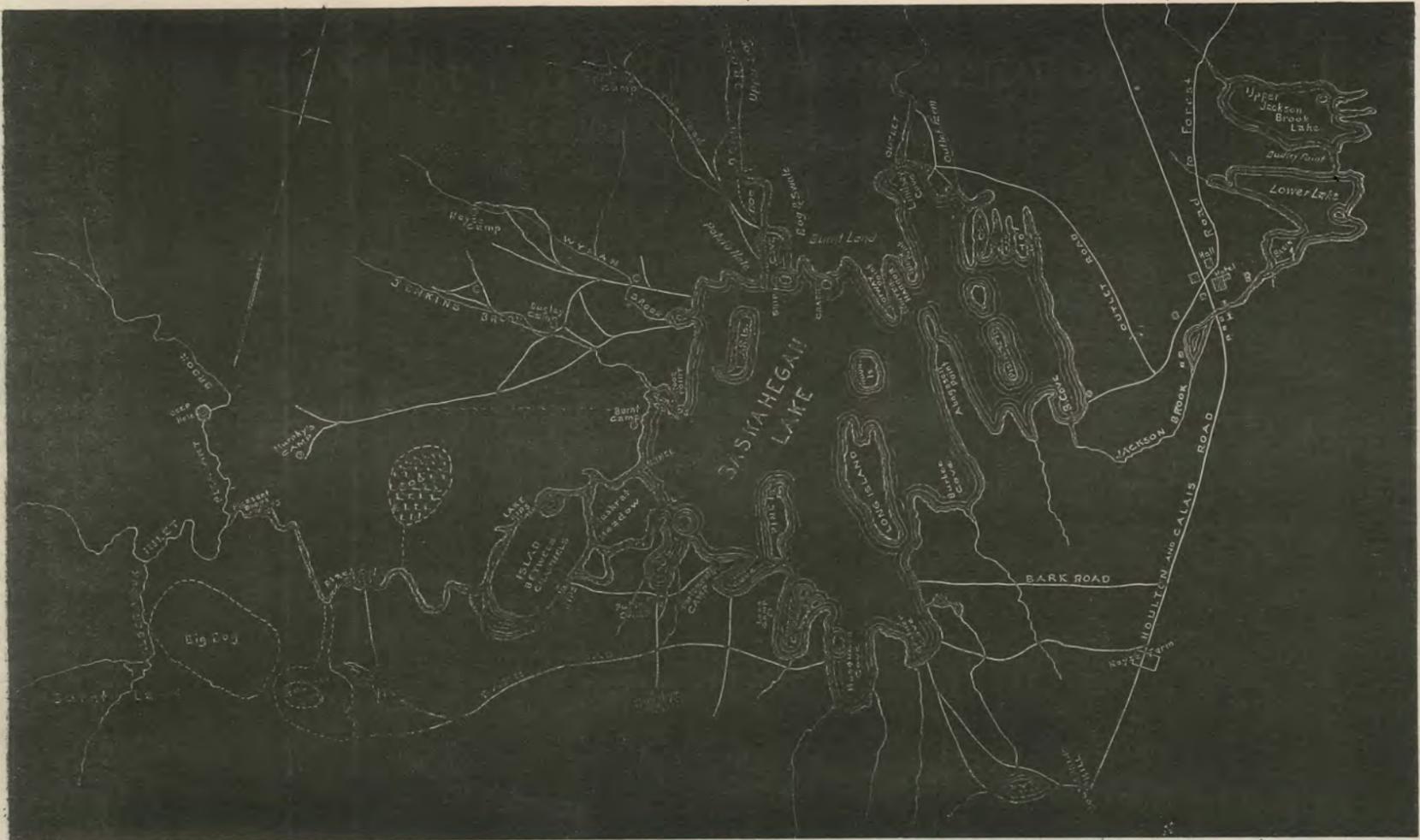
One thing I'll admit to right away is that any kind of forestry is manipulating the forest towards human ends. Most of Baskahegan's operations may look a lot prettier than a clearcut township somewhere else in the state, but we are relentlessly manipulating the forest in favor of species that we want to have there. We'll tinker with the amount of shade and light so that we get spruce trees back instead of raspberries, or fir trees instead of pin cherry. There's some intuition that's called for on how much manipulation is respectful and when do you cross the line into wholesale dismissal or ignoring of the natural

systems as we understand them. Clearly what we're doing at Baskahegan is speeding things up. We speed up the regeneration. Clearly it's not in the industry's interest to create old growth. There are all these models of when a tree is economically mature, and so those kinds of set-asides where natural processes can go on as unimpeded as they possibly can by human interaction is really important. Since we've destroyed most of the old growth, having areas that are going to go into old growth, of which there are a significant number in Maine when you look at Big Reed presumably continuing, when you look at Baxter State Park, Acadia, Caribou-Speckled, Nahmakanta—these are all regions that have been set aside, free from harvesting, that over time, will become old growth reserves, and I think that's really important. But what I'm most interested in is the matrix in which those reserves are currently being set and trying to define what that respectful interaction is with nature.

JS: I'm not saying either humans have the right to dominate nature or they have to get out. What I'm saying is that I'm presented with an economic system that manipulates nature, and it seems the only way we can protect functioning stands of future old growth, communities, processes, and habitat for wide-ranging critters like the wolf that was shot in western Maine in August is by having areas where that sort of manipulation doesn't occur. I would like to think we can get away from the idea of humans either in or out of nature, but I think that during this "transition period" there is going to have to be some hands-off wilderness. The size of the wilderness will be determined by a couple of factors: (1) certain ecological needs, the size and scale of the needs of the natural processes and the species and communities and evolution itself, and (2) the degree to which we learn in the managed and inhabited areas to behave *with* rather than *against* nature. The more we drag our feet, the larger the reserves must be. You mention Baxter, Big Reed, Acadia. I agree, these are real gems. They are also being loved to death. There are not enough of them; they are far too small, and they aren't connected. Given the projections for increased recreation and tourism (whether we like it or not), it's clear from a recreational perspective we need more set-asides if we want to protect Baxter, because if we are now at the point of debating whether or not to exclude autos, clearly we have a crisis on those 200,000 acres. We seem to be agreeing that we've got to find a way to do a better job of managing humans.

RM: To me it's really paying attention to our relationship with the natural world. It's defining what's respectful. One of the problems with this discussion, at least in terms of the way policy discussions usually go on, is that it quickly gets into the area of values. It's a value discussion. It's a religious discussion. Our society likes to pretend that values aren't part of the discussion, and so it makes it difficult.

JS: I do think there is an overriding reality—certain basic planetary limitations. There's only so much we can do in terms of air or water pollution before we start killing off cities and countries.



To get humans to behave in a way that will be more respectful and more ecologically and economically sustainable is essentially a value issue. But I think there are some objective realities that we can't wish away—like gravity.

RM: When I think about environmental values in the North Woods, particularly since erosion of whole mountainsides isn't an issue in Maine the way it is in the Northwest, I really question how close we are to the edge. Obviously, there's been gross manipulation going on when you look at townships being clearcut at a time, but I remain to be convinced that there's been some destruction of natural processes. It's a scale that's larger than I'm comfortable with, but again, I see those stands in that forest rebounding back. I see the plantations of some of my neighbors just getting overrun by the trees the land wants to put there. I don't feel we're teetering at the brink so much as you apparently do.

JS: One of the problems you and I are not going to resolve is: we don't have any baseline data. Nobody in 1600 took some measurements. I agree this region is probably more resilient than the Mojave Desert and the Pacific Northwest. I don't think that offers us any moral excuse to abuse it more.

RM: I agree.

JS: But it does give us more room for error, and I think more room for quick hope in terms of restoration. I'm concerned about our real ignorance of soils and that's probably my single greatest objection to clearcuts. Thoreau's description of the Maine Woods as all mossy and moosey—cool, damp soils are probably not well adapted to the dry, warm soil that results from clearcutting. The question then is: how resilient are we the third or fourth time we do this?

RM: I embrace that as a legitimate question. The flip side for me is if you

look at an older stand, there's no raspberries anywhere, no pin cherries. The white birch dropped out a long time ago. You go in and you cut it and that stuff comes roaring back. Do those organisms that like the mossy-moosey environment also come back as the trees grow up and the shade is established and the little eco-niche is created where there's more moisture on site? I was talking to Barbara Vickery of The Nature Conservancy the other day. There are all these lichens that have been discovered at Big Reed. How hard have we looked for those lichens elsewhere in the forest? As some of these other stands come back into more of an old growth condition, are those lichens going to appear there, or have we lost them?

JS: One of the concerns that's been in the news recently is these piles of logs on the wharf in Portland. Some of us have been concerned for a long time about the logs that have been going across the Maine-Quebec border and the shipments out of Eastport. We feel this gets to one of the root problems we have with our regional economy, which is a lack of diversification and a lack of real value-added opportunities here. So the landowners are put in a position of saying "I can get my best price abroad," and the community is left in the position of something like a Third World kind of relationship to the global market. I'd like to see the incentive for these exports removed. What thoughts do you have as someone who is looking to get top dollar on your wood?

RM: Some of our best markets for spruce and ash logs are in New Brunswick. I would regret that those jobs aren't happening on the Maine side of the border. But the existence of those mills and our ability to get top dollar for the wood we grow is what allows us to stay in the business and achieve the marginal returns on investment we receive. This gets quickly into much larger national policies—restraint of

trade. As I understand it, Maine can't act unilaterally to stop the export of logs. One of my greatest disappointments with the NFLC Findings and Options is the Local Forest Based Economy Subcommittee part; it was such a lightweight effort. There's a lot of platitudes there, but nobody really looked at what are the incentives. Nobody looked at communities that appear to be healthy and thriving like I think Bethel is, or at communities that are struggling and timber-based industry is leaving. Why is that, and what can be done?

There's this religious belief in American culture that we shouldn't be helping business. It's certainly current in a lot of political discourse—that business is the enemy somehow. Unlike Canada which looks at the economics and says "It's going to be cheaper for us to subsidize this sawmill in this community on the Quebec border than it is to pay unemployment and welfare to the people here. Let's put the money into the mill. Because of our religious belief in the free market system, we don't do that in the United States. According to sawmill operators in Maine, it's very hard for them to compete with the Canadian health care system, with different regulations, with subsidies that are available on the Canadian side. They watch truckloads of logs go past their door. As a landowner, I want to be able to send my logs to Canada because that's where the value is, but I would love to have sawmills on the American side be able to compete with the Canadians.

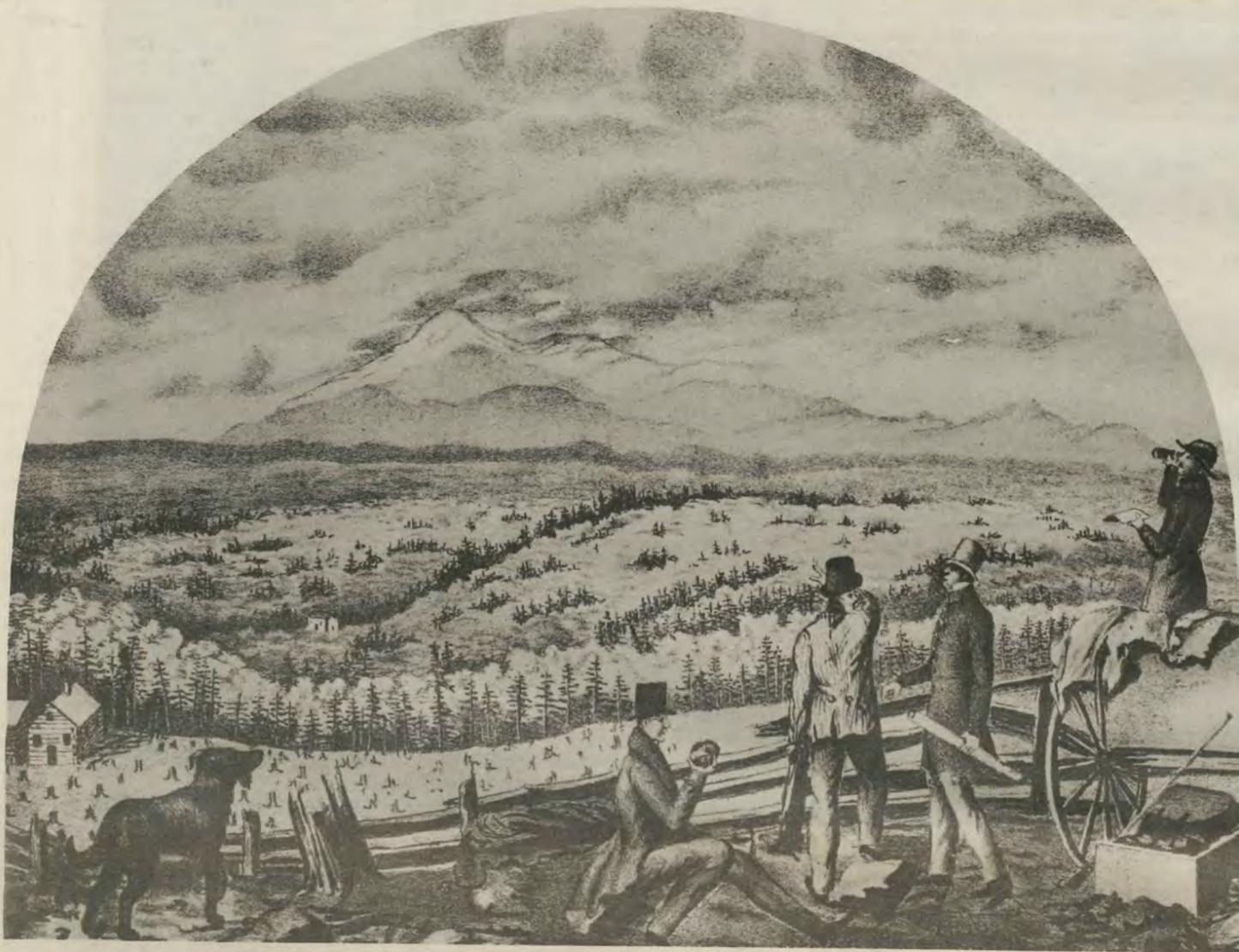
JS: We are subsidizing business, but we're subsidizing them in all the wrong ways, and perhaps if we subsidize them in some of the right ways, we could address this. An example of the wrong ways are that we are allowing them to pollute the rivers. If they had to pay the true costs, not just the economic costs, but the cultural costs, health costs, and all the rest, they wouldn't be dumping that stuff in the river because it

wouldn't pay for them to do it. That is a far greater subsidy than some kind of favorable tax break on siting a mill here rather than there. I probably wouldn't object to that kind of constructive incentive if it weren't in the context of letting them get away with this kind of pollution or other kind of externality they don't have to pay for.

RM: I'd be less willing than you to resist the subsidy in a positive direction because of the existence of a subsidy in a negative direction. I'd be willing to try to build the positive even though the negative still exists. Most of the mills I'm talking about are not going to be discharging chemicals into the river. It's the smaller sawmills and the secondary processors. I'd like to see Maine, the region, the nation, really look at how do we build that source of employment and pride and sustainability in local communities.

JS: For those who feel the clearcutting regulations are not effective, that the dioxins and organochlorines in the rivers are not adequately regulated, we see a lack of effective regulations. How does industry stay in business without compromising the integrity of the ecosystem? In the past it seems industry has gotten its way.

RM: I share the concern about dioxin. But I think it's important to try to inhabit the mind of people who are making industrial decisions about "are we going to invest here or in the south?" I grew up in South Carolina. Environmental regulations in the south, with the exception of what's been federally-mandated, are at least ten years behind what happens in Maine. If you're truly interested in industry making continuing investments in Maine, they're going to look at where their costs are greatest. A lot of industry people say they don't have concerns about the standards and regulations. It's much more the tone of the contact with the regulatory agency, and the amount of time it takes.



JS: I understand that sort of grievance. My problem is that we don't feel protected by the State. If the argument is: because South Carolina or some other competing region or county has lax environmental standards, we have to have lax standards in order to remain competitive, then I see a fundamental breakdown of our society. What it's saying is that in order to have a modern economy we have to sacrifice human and non-human health. How do we find some way of protecting ecological integrity, human health, quality of life and have an economy that meets the needs of the people living in the region?

RM: I have no argument with that desire. I don't say we need lax environmental standards. But, how do you look at moving forward the discussion on environmental standards in a way that also addresses not getting things really out of sync? I don't think our society is well equipped to look at issues beyond the pure economics of "where's the cheapest place to do business?" A failing I see that happens a lot is that just as industry doesn't voluntarily look at what the impacts are on a larger environment, I see environmentalists focusing in on one particular issue and not looking at the larger impacts on the overall economics.

JS: I'm specifically referring to hearings last November over the dioxin standards. To boil down the industry argument: (1) the dioxin levels are "safe"—which certainly didn't convince those of us who have been listening to many of the scientists working for the EPA, and (2) this competitive issue. They put us in a difficult position of saying: "OK, compromise an ecosystem for your profits." What other option do we have? It looks like environmental blackmail to me.

RM: I think industry is describing the situation that they're in. That's a situation that all parties to the discussion have to cop to and deal with. I don't see it as blackmail; I see it as saying this is the environment in which we operate. This is what the effects will be.

JS: They were arguing against stronger protection because of this. I and others did suggest that industry should take this as an opportunity to begin the conversion to chlorine-free paper to get a headstart on a niche market that's going to be an almost guaranteed growth niche in the coming decades. That would help to reverse some of the uncompetitiveness with the southern mills that can do in four hours what it takes six or seven for our Maine mills. Instead, when Clinton proposed the chlorine-free paper initiative, Senator Mitchell went to bat for the paper industry. Even though he may have done their bidding in the short-term, in the long-term he performed a disservice to them. If he'd said, "No. The time has come to swallow some bitter medicine; it's going to hurt now, but in the long run, the Maine mills are going to be much more competitive if they do get this jump."

RM: I would agree with you on that. And to me, the potential that was there in what Clinton was considering in terms of creating a market—pulling with economic incentives a change through this system is the way I think things ought to go. I agree with your response to that.

JS: It seems like the economy is really designed for the benefit of these larger, non community-based operations like paper companies at the expense of the smaller community based operations.

RM: I put it a different way. I think the

whole bias in the political discourse and the economy in the United States is toward the consumer. How can we get whatever the produce is—whether it's toilet paper or whatever—to the consumer at the cheapest cost? Therefore we should have the Free Trade Agreement with Mexico. People aren't looking at the fact that in order to consume, the consumer needs to have a job, and they need to be able to earn some money. So we just focus is on producing commodities as cheaply as possible. That's the flaw. The loop is not being closed to see that where the consumer gets the money is through some sort of gainful employment.

JS: And also that we've substituted this illusion of material well-being for a quality of life that's based more on community health and well-being. If you live in a healthy community, your material needs are probably far less than in an unhealthy community. If we put the emphasis into real community again, I think we'd break the consumerism cycle you're talking about.

RM: That's another one of those big value snarls. (Laughs)

JS: With a few exceptions, I have seen a tendency for industry to close ranks when criticized. I would find it reassuring if there were some evidence of genuine industry self-policing, rather than cosmetic self-policing.

RM: I share your perception of people closing ranks. I see it as a human problem. I see the same thing happening on the environmental side. I serve on the board of NRCM as well as on the Forest Products Council. I've been in conversations on the industrial side where if somebody starts taking a hard-line in the room, the game quickly becomes "who's got the hardest ass in the room?"

It's very hard for me or anybody else to speak up and say, "No, I think we ought to take a more cooperative tack here. Sure these people are criticizing us harshly, but let's look at the substance." It's a very hard thing to do. I've noticed on the environmental side that in discussions about the direction NRCM could take in relation to a particular issue, when someone comes in and wants to take a really hard line, and they say, "We've been putting up with this for a long time, and it's time to sue the bastards." It's really hard for someone to speak up and say, "No, I think we should go back in good faith one more time." Whatever it is, there's a kind of machismo, a fear of appearing soft. I see that bunker mentality happen on both sides, and it's distressing because it really gets in the way.

JS: I see what you are saying, but on the other hand, when we all agree to be genteel, I found when I first got involved in these issues that the real hard issues simply weren't being addressed, because one of the ways to avoid this sort of confrontation was not to deal with some of these intractable issues that weren't pretty and had no easy compromise solution. I think you do have to stand up and be quite clear in what you're saying. I try to avoid getting your defenses up by conveying a willingness to listen to what you're saying, but not a willingness to back down to avoid a confrontation. I've been as frustrated by the "let's get along" as by the "let's just polarize it" attitudes.

RM: It's just like any interpersonal issue—how do you confront the people and the issues in a loving way, in a way where you're not dismissing the other but are really trying to understand and see where you can move. It takes a real mental discipline. It takes a real emotional discipline and is clearly what's needed—and is in very short supply....

I think that step was taken by industry with the NFLC and their decision to support the NFL Act and choose to be involved in ongoing discussions with a diversity of interests. People may take that for granted now, but the kind of debate that was swirling within the industry before the forest practices act about "should we even talk to these guys?" was intense. From my perspective, there's been a significant stepping out of the bunker on the landowners' side.

JS: What's your general sense of the Council's "Findings and Options"? Are they useful? Do they begin us moving in the direction to resolve some of the things we've been talking about?

RM: I think they're useful. Having been close to the process since the beginning, it's hard to have any fresh perspective on it. The two tax subcommittees, the Biological Resources subcommittee and the Land Conversion subcommittee are where the most substantive work has occurred, particularly in terms of the findings. Another thing that's easy to forget is how strong the concern was in 1988 about conversion

in the North Woods, and the work that was done to really focus on what actually happened and what the threat was in the land conversion study. I think the Biological Resources subcommittee did a remarkable job considering how late a start they got, and how little time they had. I thought the forum in New Hampshire (December 1992, see *Forum*, vol. 1 #3) was an excellent beginning. I feel the options that have been laid out are a good beginning. I think the strongest work was in the tax committees in laying out how the tax system really works. There was really solid work done. As a basis for discussion, I think something significant has been accomplished here.

In terms of softer benefits, there's the fact that the process has been going on in the way that it has, with the communication that's happened among interest groups, either on the Citizens Advisory Committees or the Council itself. I expect—and certainly hope—that that's going to pay dividends over the years to come in terms of looking at a broader community of concerns.

JS: One of my frustrations with the Study and the Council was the unwillingness to examine forest practices. Now that the Findings and Options are out, they're paying a price because aspects of forest practices have found their way in through the back door. But, because we didn't look at it in a forthright and timely manner, we've got a bit of an embarrassing problem.

RM: What's the embarrassing problem?

JS: When we talk about protecting biological diversity, we're pretty much left with talking about development, and not really addressing what sort of options there are for regulating or incentives for promoting better forest practices that would be more compatible with biological diversity. When we look at Maine, where the northern two-thirds is largely dominated by forest management rather than potentially developable land, you simply can't talk about protecting biodiversity and avoid talking about forest

practices. In terms of developing trust, they would have been well advised to look into that issue, and I hope that future collaborative efforts won't avoid an issue as sensitive as forest practices.

RM: The flip side for me to what you say is the real concern that got this rolling was the Diamond sale and the fear about conversion. Patten Corporation was out doing what they were doing. The 40-acre loophole wasn't closed in Maine. There were rolling developments happening—buying land up, clearcutting it, and carving it up, at least in Maine. So that was the focus of the Study, and the Study folded into the NFLC with that focus on the now immortal words of Leahy and Rudman about preserving the pattern of ownership and use. You may have been concerned about biodiversity back when all this started, but most people weren't. Given the limited focus which was there from the beginning—as you may recall, the first response of the then-Commissioner of Conservation [Robert LaBonta] was: "We're not going to participate." Industry played a role in saying: "Yes we ought to participate." Then the parameters for the discussion were limited and industry is just as paranoid as the environmental side is about being snookered. Once the train had left the station, in my view, in terms of building trust and allowing the dialogue to continue, the Council had to stick to the terms and topics for discussion that had been the focus. And the fact that Biological Resources became one of the seven subcommittees and the work that was done speaks to the flexibility and something I feel very positive about as a shift away from what was a much more restrictive focus to begin with.

JS: I'm not satisfied. Two months before the Leahy-Rudman letter, the *Congressional Record-House* charged the study with, among other things, looking at biodiversity. So it was in the initial charge. Many of us did raise that issue right from the beginning of the public hearings, and they simply refused to address it. Now, I understand

the political reality of Maine, but this is where the distrust comes in from our side. If the former Commissioner can exercise veto-power over something in which he has a conflict of interest, having worked for Scott and having engaged in some of the practices we don't like, and those became the terms for Maine's participation, there's a certain kind of unfairness that sticks in our craw. And if there is going to be that sort of cooperation between the environmental community and the timber industry, that sort of thing has to stop. I understand the political reality where they had the power to get away with it, but there is another power—physical reality—that won't go away.

RM: I take exception to the conflict of interest characterization. I like to believe that as somebody moves to another position, they look at things from their new position. I look at the issues you were raising years ago, and I see you being ahead of the time in terms of raising those issues. The public discussion is now catching up. But the fact that the political will isn't there to support what you see and are convinced of as a legitimate concern, to my mind doesn't make those who bow to the political reality wrong or somehow evil or compromised. The issue wasn't ripe when this thing began. It's getting to be very ripe now, and the work of the Biological Resources Subcommittee is part of that ripeness. I expect it will continue to ripen and conversations will certainly go on about biodiversity into the future. We know so little about biodiversity. From the reading I've done, I see how little we understand about how to apply that concept to Maine. Clearly reserves are part of an answer to biodiversity. But the questions of how does management benefit or compromise biodiversity are issues that there's lifetimes of work involved in understanding the complexity of natural systems. So I'm a little more patient about it, seeing it as this huge awakening that's happening with lots for all of us to learn, all the nuances, what makes an ecological system healthy, and how do we know, and how much can we push?

JS: I suppose I should feel optimistic that the discussion is moving more in the direction I was agitating for years ago, but in fact, I'm feeling as impatient as ever. I am glad the discussion is moving, but I feel like we are running

out of time, and also I am concerned that we not substitute the call for more research for the need to take action now. We will never know all there is to know about how a forest works any more than we'll ever know all there is to know about how the human body works. But that shouldn't stop us from trying to stop the bleeding.

RM: On the other hand we should try to distinguish if this is bleeding or a rash on the skin. It gets into the questions of costs and benefits and how much are we willing to risk on a treatment that may not affect the disease. As a landowner, the costs are largely going to be borne by landowners, and it falls to us to ask the question: "If we change, how much will it cost? How will it affect the other aspects of us being able to do what we do?" I invite you, as part of your commitment to the issue to do your best to understand what it looks like on the landowners' side so we aren't forced into the predictable pattern of just looking at costs. If we have a sense that somebody else is really looking at costs in the larger social-economic system, it makes it easier for us to look at the vision as well, but if we're the only ones being left to deal with that, it tends to make us inflexible and obsessed with cost and science.

JS: I think that's a really important point that regardless of whose fault it is that we got into this mess, society has a problem, and rather than dump it all on you or me or the salmon and wolves, let's find a way of getting out of this mess and breaking the bad patterns.

RM: I really believe that, and I hope we are moving into this era of partnership. Part of it is partnership between humans and the natural world. For us to successfully do that, it involves partnership between you and me and people who pay attention to different parts of the whole, talking with each other in the context of the whole, because otherwise this infernal adversarial stuff just goes back and forth and back and forth.

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Illustration from Harper's (March 1865) showing new technology: sawing logs into shorter lengths for easier handling. From *The Forest for the Trees*

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