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Toxic Vacationland Politics Poison Maine's Waters

Inside

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Notes from a Season of Drought

Two winters ago, this part of the world enjoyed a snowy winter; a wet summer followed. This past winter was not merely open, but, one memorable morning near Christmas, actually hot—and dry overall. A dry summer has followed.

Our region sits on the 45th parallel, at a climatic crossroads of air masses that create each year the potential for wetness, coolness, warmth and dryness in differing proportion. Whereas last year neighboring farmers hurried all season to harvest rank growth of grass, this year fields have been turning brown since the first cut. No rain. With floods in the Midwest impacting grain production, and forage production crimped here, the situation is ripe for accelerated hard times for New England's farms.

Drought, disease and disaster, in general, invite superstition and what we term the irrational. Many of us have talked about rain dances and reverted to what the anthropologists term prophylactic magic: leaving fertilizer in the back of trucks and other such invitations to the "calamity" of a shower. This is only after a month of rainlessness.

Should we therefore be suspicious when our minds drift to a consideration of human impacts on the hydrologic cycle? Rationalizers of human behavior may suggest so. However, we have often felt that there are two classes of people: one grew up aware of their water supply. The other waters grass, brushes teeth and flushes the toilet with perfect faith and probable ignorance. The one sometimes carries its regard for water to religious heights, regarding every drop of water as sacred. Blind faith with regard to water seems the less tenable of these "irrational" states of mind.

Vermont spent the past winter discussing water, vis-a-vis the ski industry's desire to "spend" public water to make snow. Policymakers and legislators have largely deferred to the economic benefits of the ski industry. What has failed to emerge from the debate is the recognition that we lack watershed accounting. Water withdrawal, water quality degradation and logging impacts on the water budget are compartmentalized subjects. Neither the legislature nor the Dean administration have indicated a desire to bridge these related subjects.

Ultimately, Nature disposes. That is the lesson of a season of drought. We have grown forgetful in years of indulgent rainfall. Floods in the Mid-West have been exacerbated by poor soil management and outright wetland destruction. Continentally and globally, we have assumed that logging off woodlands will have no impact on hydrology. Society has rather casually accepted the notion of rainfall adulterated not merely by chemical but nuclear pollutants.

Here in New England, part of local anecdote is that rivers formerly ran deeper and colder. Many of us wonder if extensive clearcutting has interrupted secondary evaporation and subsequent convective precipitation. What are the cumulative impacts of high elevation clearcutting and widespread forest soil degradation?

Whatever climatic trends we face, whatever their causes, isn't it only reasonable we show greater reverence for water and begin to manage it in ways that reflect the full complexity and interconnectedness of the hydrologic cycle?

—Andrew Whittaker

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Lessons in Sustainability from the Collapse of Fisheries

Long time followers of fishery conditions and developments are not surprised by the recent wave of closures and fish wars which are not merely a phenomenon of our own Atlantic Coast. British Columbia, Iceland, Scandinavia, Britain, Spain, France, coastal Africa, the California Coast—the list of trouble spots, which has brought several nations into rancorous conflict over fish protein, could go on and on. In this country, observers have known for several decades that fishing off the coast of New England was headed for trouble. Most frustrating has been the awareness that until certain fisheries began to collapse, the destructive situation would not change. What lessons in sustainable use of natural resources might we draw from the lesson of the fishery?

Who Controls the Resource?

Biology has played a secondary role in setting limits on catches since the institution of fisheries management. Industry representatives on the New England Fishery Management Council have traditionally had more to say about the setting of quotas than biologists. However, we learn from Canada that this story is not without subtlety. For instance, a minority of fishermen, concerned with the long term viability of fishing, disagreed at times with government quotas and intuitively felt they were too generous, based on overly optimistic assumptions.

Conclusion: Biology must be balanced and have equal power in resource decisions. Further, minority views within industry must be heard.

Level of Capitalization

Since World War Two, when major declines began to characterize the Atlantic fishery, fishing has become more technologically and capital intensive. Just as agriculture witnesses the decline of the small farmer and forestry the decline of the part-time, lightly capitalized harvester, fishing has raised its financial barriers of entry. Costs and scarcity overly impact the small operators while larger operators turn their attention to whatever species they can economically harvest—until that species runs out.

Conclusion: Appropriate levels of technology and capital must enter into management decisions. Government should not encourage indebtedness of natural resource operators and should recognize the benefits of appropriate scale on a natural resource base.

Boom & Bust

The American faith in boomtime riches stems from the natural abundance we used to experience with greater frequency. Changing tastes and increasing scarcity of traditional commodities often create mini-booms. Halibut, which became popular after WW ll, is one example. Maine's coast frequently sees the opening—and exploiting—of yet another resource as new, primarily Asian markets, are discovered. Often there is no exploration or accounting for why a species is abundant—as in the sea urchin, which has increased with the decline of groundfish. An analogy in the woods product industry is the sudden "discovery" of a species like ash or red maple—often reflecting the economic extinction of more favored species.

The absence of holistic resource management is also reflected in the absence of ties between estuaries, inland, and off-shore fishing grounds—while these are related biologically, competing governmental agencies, conflicting public uses and outright ignorance create a splintered management. For instance, bay scallops have ceased to exist in harvestable numbers from Long Island Sound to Buzzards Bay; pesticide use on cranberry bogs and blueberry barrens is not evaluated for its impact on ocean biology; organochlorines in river systems are condoned by government inaction at state and federal level.

Conclusion: Resource management must promote an approach to resource harvest based on natural surplus. Natural benchmarks of relative abundance of related species must play a role in setting harvest limits where the relation of species has a definitive role in ecosystem dynamics. Government must adopt integrated, holistic approaches to the overall resource.

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The Destruction of the Northern Forests ~ An Abenaki Perspective

by Tomas Obomsawin

I was asked to write a series of articles for **The Northern Forest Forum** about the situation in the Northern Forests from an Abenaki perspective. Because much of the lands upon which the Northern Forests are situated are in the homeland of my people, the Abenaki, and the continued destruction of our magnificent forests are of great concern to myself and many Abenaki people, I have agreed to do this.

First let me introduce myself to you. I am a descendant of the Abenaki people: my genealogy traces an unbroken chain of Abenaki ancestors. Unlike many of my blood relatives, I still carry on the family name of Obomsawin. This name traces back to the early 1700's. I have been very active in Abenaki Tribal affairs and care a great deal about the future of my people. I have been studying the documented history of my people for many years. Most of this documentation, however, is not found in the history that was taught to all of us in school.

Our documented history begins in the 1500's through to the present day. The few bits and pieces of *our* history that do find their way into today's common knowledge of history show us as being "the enemy". The time has come for a better understanding of the history of this land from the viewpoint of the people who have inhabited it for thousands of years.

In this first article I will try and give you some explanation as to who the Abenaki people are and why the great northern forests are so important to us.

The Abenaki people are part of a group of indigenous nations, we call ourselves Wôbanakiak. This word better describes the region that we inhabit. The Abenaki word "wôban", which in this context means the direction of the first light of day. "Aki" means land or earth, and the "ak" on the end of the word signifies plural or "'all' of the land where the sun rises". This group includes the from, east to west, the Micmac, Maliseet, Passamaquoddy, Penobscot and the Abenaki.

The traditional territory of the *Abenaki* people extends from the Kennebec river watershed to the Lake Champlain watershed, including all the rivers that flow to the south shore of the St. Lawrence (Quebec) River starting with the Richelieu (Bitawbagok) River, which flows north to the St. Lawrence (Quebec) River from Bitawbagok (Lake Champlain), the Yamaska River, the St. Francis (Alsiguntacook) River, the Chaudier River and continuing along the south shore of the St. Lawrence (Quebec) River until it borders the territory of the Micmacs. The name "Abenaquis" was used by the French to describe the indigenous people inhabiting this area. In English "Abenaki".

Our territory was traditionally divided by its many river watersheds. Groups of families were associated with each particular watershed. For example, the families that lived along the Kennebec river watershed were known as the Kennebec, those along the Amerscoggin (Androscoggin) were known as the Amerscoggin (Androscoggin), those who lived at the northern watershed of the Kwannitekw (Connecticut) were known as the Koasaks. This name comes from the great pine trees that once covered this area; the Abenaki word for the great pine tree is koas, sometimes spelled coös, cowas, or cohos. The people living along the Coaticook River were known as the Coaticooks. Those along the Alsigunticook (St. Francis River) were known as the Alsigunticooks (St. Francis Indians). Those who inhabited the Missisquoi River were known as the Missisquois and so on.

After the European invasion of our territory, a nearly total destruction of this system occurred. My people were either massacred or died from diseases brought by the Europeans and/or were forced into exile. The surviving descendants of these people are now known as the Abenakis. Many of us, like myself, still inhabit this area and are keenly aware of the past and present destruction of our northern forest lands.

I have read a number of issues of the **Forum**, and I am relieved that people are beginning to be concerned about the wanton destruction of our forests for profit. It is too bad that this idea so late in coming.

The northern forests are the life blood of the existence of our people and Nations. We would gladly return to the subsistence lifestyle of our ancestors but have found that the logging companies have almost completely destroyed our forests. Fortunately for all of us our great forests are still alive—barely, and can grow back, just as the Abenakis are still alive and are becoming strong and healthy once again. The problem is that the economy of the "dominant culture" in the northern forests has become dependent on the exploitation of our forests. When will they stop cutting down our forests? When it is too late? In Belgium and other European countries, laws have been passed forbidding the cutting of trees, but only after the European forests are all but extinct.

The answers to these questions are indeed complex, especially when this economy provides the jobs that this society depends on. The solutions are available, but a better understanding of the history that led up to this predicament might well lend some insight as to what to do from here.

Future articles will trace history of the invasion from an Abenaki viewpoint, and expose the effects it has had upon our people and our forest land.

In closing I would like to thank **The Northern Forest Forum**, for inviting me to speak to you as an Abenaki person, and the readers and writers of this paper who show a sincere desire to help protect what is left of the Great Northern Forests of the Abenaki people.

Fisheries Collapse

Continued from page 2

Substitutes for Natural Regimes

Fish farming is usually regarded as a substitute for collapsed stocks; biological impacts are assessed in human terms. When **The New York Times** looked into the impact of increased harvest restrictions on New Bedford Mass. last year, it compared job losses in the fishery to IBM layoffs in the region and asked rhetorically if the economic impact was all that devastating. To those who grew up eating off the ocean in the Depression and are culturally accustomed to the abundance of the sea, such a comparison is as odious as it is reflective of our economy's inability to recognize the value of natural resources and place them on the same plane as the human-made micro-chip, automobile or other inventions.

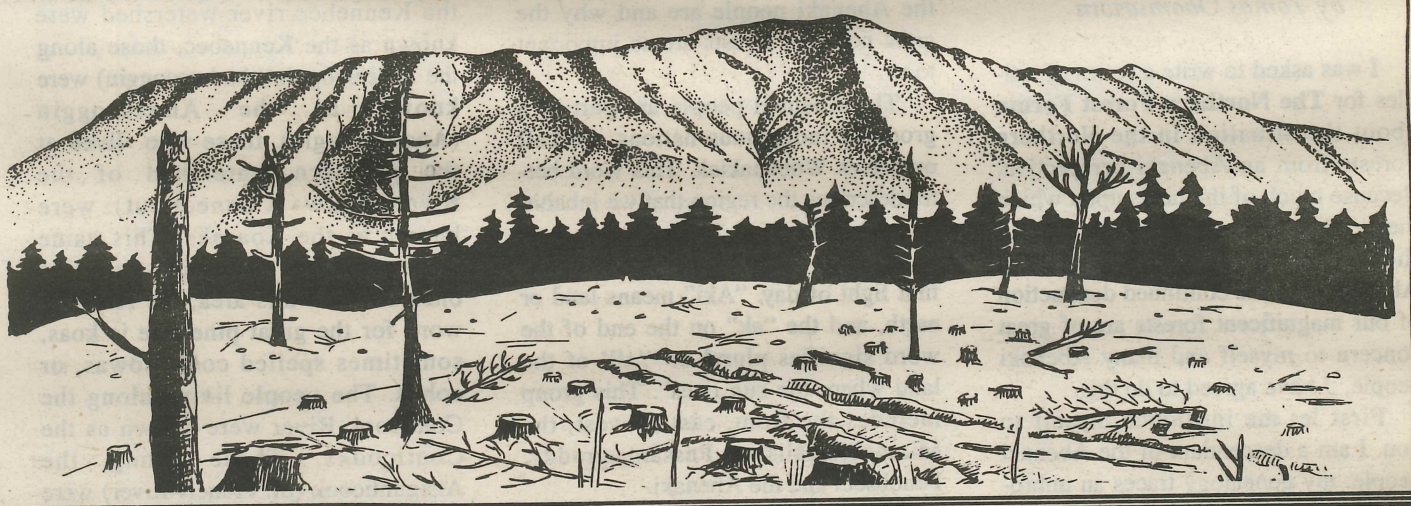
Further, just as the plantation is not forest, the fish farm is distorted biology. The food source of farmed fish are the species of native fish left in greater relative and often absolute abundance after more desired species are gone. Often these "trash" species are subjected to the "vacuuming" operations mentioned above. Biology has not had time to assess the fishery's dynamics: are these species abundant because of human disruption? Can traditional stocks rebound at all? And, further, what about the documented potential of farmed fish to impact ecology directly and negatively? Escapees can contaminate wild stocks; sites appropriate to farming are rare and often occupy public waters. While there is a place for farmed species, should they be feeding off the decline of native stocks and viewed as substitute for these?

Conclusion: Native ecosystems, whether forest or ocean, can be restored—or at least we should act on that faith. Plantations and fish farms should not be viewed as substitutes for destroyed native regimes. Europe has learned, in the long run, that simplifying ecosystems impacts productivity. Our economy should seek to base itself on right relationship to natural ecosystems.

—Andrew Whittaker

Maine Woods Watch

by Jym St. Pierre



You can fool some of the people all of the time and all of the people some of the time. Sadly, Maine has a history of trying to fool all the people on forest and conservation issues too much of the time. And the cycle never seems to stop. Consider some of the foolishness going on lately.

• In March, the Commission to Study the Future of Maine's Paper Industry presented its report to the Legislature. *(See **Forum**, vol. 3 #4, pages 8-9 for articles by Mitch Lansky and William Butler on this report.)* It was an upside-down, inside-out, through-the-looking-glass experience. The report documented that the industry is in decline in Maine thanks to lack of investment by the big paper companies. Yet the report went on blame that decline on everyone other than the industry itself, and concluded the solution was for the people of Maine to prop up the industry even more by subsidizing the industry's energy cost, giving it more tax breaks, and rolling back environmental standards One of the commission's recommendations was to eliminate the personal property tax on manufacturing machinery. Governor Angus King made this a keystone of his legislative program and the Legislature did create an exemption for new business equipment. The $5 million price tag for the next couple of years is projected to hit at least $60 million within 12 years.

• In April, the Maine Forest Service submitted to the Legislature its report on effectiveness of the Maine Forest Practices Act. *(See **Forum**, vol. 3 #4, page 4 for article by Mitch Lansky on this report.)* The evaluation confirmed what critics had been saying for five years, that the clearcut rules do not meet the mandate of the law to "provide a healthy and sustainable forest," and "address adverse effects on wildlife." Despite this, in June, the Legislature overwhelmingly rejected a proposal to modestly improve the Forest Practices Act by replacing its arbitrary residual stocking standard with scientifically based standards. *(See page 21 in this issue.)*

• In mid June, the leadership of the Maine Land Use Regulation Commission took a sharp right turn suddenly. Commission member Jim Sherburne and staff permitting supervisor Dave Allender resigned due to interference from Department of Conservation Commissioner Ron Lovaglio in the controversial Kenetech Windpower application. *(See pages 15-18 for articles on the Kenetech proposal.)* Then, in a surprise coup, conservative Chuck O'Brien defeated centrist Steve Wight in his bid to continue to chair the Commission. The same day, June 15, John Williams, was endorsed as new staff director. Since most of Williams' experience has been dismantling state agencies, some LURC watchers are wondering whether the agency will fly apart from political dissension or be taken apart under the guise of environmental streamlining. Revision of the state's wildlands comprehensive plan could suffer heavy collateral damage either way.

• On June 19, the Maine Forest Products Council and the Paper Industry Information Office fed legislators lunch, then fed them baloney about the forest industry's "public education program...designed to communicate the significant impact the forest products industry has on the Maine economy" with emphasis on "recycling, sustainable forestry and regeneration of Maine's Forest." Another part of the forest industry's effort to soften (and feminize) its public face and brighten its public smile, this program will use video and interactive TV to broadcast the message.

• On June 19, a report was released on the third conference of the Maine Forest Biodiversity Project held in May. Many participants did not recognize the sanitized report of the meeting which was virtually co-opted by forest industry interests. At the meeting it was admitted by Dr. Malcolm Hunter, an international authority on biodiversity, that the current activities of the project, even if fully implemented, would not achieve the stated goal of protecting biodiversity in the forests of Maine. Yet this was overlooked in the conference report. Meanwhile hundreds of thousands of dollars are being spent on the Maine Forest Biodiversity Project.

• Maybe some of that money ought to be spent on recovery of imperiled species. In late June, state wildlife officials admitted that a big cat spotted last spring in Cape Elizabeth was a mountain lion. Lab tests of hair from the site proved a cougar had been on the prowl. Hundreds of sightings have been reported in recent years, but the Maine Fish & Wildlife Department insists they are either fantasies or feral pets. Maine has more wildlands than any state in the eastern U.S., but we don't have wild mountain lions. Right.

• On June 20, a report was released calling for establishment of a new land trust for Maine's North Woods. Fine, except the report revealed that "at least half of the board would be forest landowners or individuals representing forestry organizations." This built-in conflict of interest would ensure that the new North Woods Land Trust would be stacked by forest industry interests who will control the organization.

• Last fall, the American Forest & Paper Association board approved a new Sustainable Forestry Initiative. The culmination of 18 months of focus groups, telephone surveys and other public opinion research, the SFI represents "an ambitious campaign to improve the forest industry's credibility," according to a straight-faced account in the *Journal of Forestry*. Unfortunately, the SFI is long on PR and short on substantive benchmarks that will lead to meaningful forestry reform. Across the country the forest industry wants to reform its image, not its practices. Now, in Maine, one of the greatest relict bastions of the forest industry, "sustainable forestry" is becoming a major subject. Of action? No, of conversation. For instance...

• In late June, the Maine Department of Conservation announced the make-up of a new Maine Council on Sustainable Forest Management. The Council, established in April by executive order, is supposed to "develop practical, credible benchmarks of sustainability against which forest landowners can assess their forest management practices" by October 1996. Sounds great, except the public membership of the council is heavily tilted toward forest industry people. And the new Commissioner of Conservation, a former long-time industry employee, chairs the council while the new director of the state Forest Service, a former private forestland manager, has a reserved seat. Not a single representative of an environmental advocacy group is on the council. Once again, a laudable idea (sustainability) is being taken hostage by the forest industrial-academic-governmental complex. *(See page 27 for more on this.)*

• By July, when lawmakers finally went on summer vacation, Maine had had a belly full of bad legislative ideas this year. Included were the obligatory "regulatory takings" bills along with a variety of proposals to gut many of the landmark programs that a generation ago made the state a national environmental leader. One of the highest visibility issues addressed by the Maine Legislature was a bill to wrench responsibility for designating state-listed endangered species from the experts. The Legislature decided to micro-manage by itself deciding which species will get on the list, based, of course, more on politics than sound science. The old system worked fine for years, but, in this, the year of the drive-by assault on the environment, that subtly was lost on most legislators. Even some of the most conservative newspapers in the state editorialized against the bill as a non-solution to a non-problem.

• On July 11, the Baxter State Park Authority voted 2 to 1 to allow a small mammal research trapping project within the wildlife sanctuary portion of the wilderness park. One problem: the project appeared to break the Authority's own rules, the deeds of trust granting the land to the people of Maine, and state law. It was also approved over the strong objection of park staff and the Authority's own advisory committee. In addition, Authority chair, Bucky Owen should have abstained from voting because his affiliations with both agencies proposing the trapping (University of Maine and Maine Fish & Wildlife Department) posed probable conflicts of interest. Immediately after RESTORE: The North Woods pointed out the irregularities and hinted at a legal challenge the trapping was canceled.

• Forestry company of the month is Boise Cascade. Idaho-based Boise has distinguished itself by going beneath and beyond on a variety of fronts recently. For instance, Boise has taken the lead to surreptitiously support a make-believe grassroots group called the Pulp & Paperworkers Resource Council. From its facilities in Rumford, Maine, Boise is reportedly funding a full-time staffer to organize paperworkers in Maine and the rest of the Northeast against environmental initiatives, such as the proposed Maine Woods National Park (even though Boise has only a tiny fraction of land in the proposed park area). Boise is also subsidizing membership for its employees in the Sportsman's Alliance of Maine. In exchange the sporting group has been aggressively hostile to the Maine Woods National Park idea and several endangered species issues. Finally, at the national level, Boise lobbyists have been working to disable the federal Endangered Species Act.

Do you see any trend here? Nah, can't be.

There is some encouraging news from Maine on land protection. The Maine Department of Inland Fisheries & Wildlife acquired 144 acres with frontage on East Grand Lake as well as Lee's Island in the lower Kennebec River. Boise Cascade sold 2,058 acres of land and water along the Maine-New Hampshire border at Lake Umbagog National Wildlife Refuge for just under

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Agencies to Propose Salmon Protection for Seven Maine Rivers

by David Carle

After more than two years of work by RESTORE, the federal government is on the verge of proposing protection of Atlantic salmon in seven Maine rivers under the Endangered Species Act (ESA). On March 14, 1995, the U. S. Fish and Wildlife Service (FWS) and the National Marine Fisheries Service (NMFS) announced that salmon populations in what are known as the Downeast rivers—the Dennys, Machias, East Machias, Narraguagus, Pleasant, Ducktrap, and Sheepscot—will be proposed for ESA protection. Populations in Maine's Kennebec, Penobscot, and St. Croix rivers and Tunk Stream will be studied further for possible future protection.

The action comes in response to a petition filed by RESTORE, the Biodiversity Legal Foundation, and Jeffrey Elliott in October 1993. A decision on the petition was due by October 1994. The two agencies released their ruling only after RESTORE filed a lawsuit to force the long-overdue action.

The decision comes none too soon. Fewer than 2,000 salmon returned to the United States in 1994, a more than 50 percent drop from almost 5,000 in 1993. Moreover, Maine's state salmon restoration program has been gutted by budget cuts and reorganization. Without federal protection, wild Atlantic salmon could soon be extinct in the U.S.

After an initial reluctance, most Atlantic salmon angling groups are now supporting ESA protection for the species. This includes the New England Salmon Association, Maine Chapter of Trout Unlimited, and a number of salmon clubs. In its Summer 1995 newsletter—**Atlantic Salmon Journal**—, the Atlantic Salmon Federation "applauded" the action of the agencies. The magazine **Wild Steelhead and Atlantic Salmon** plans to make Atlantic salmon protection and restoration the focus of its summer issue.

RESTORE sees the ruling as a step forward, but there is still a long way to go. The original petition called for the Atlantic salmon to be protected throughout its historic range—from the Canadian border to Connecticut. The ruling, however, claims that wild salmon populations in the rivers south of the Kennebec River are extinct. Any salmon presently in those rivers, which include the Merrimack and Connecticut, are considered to be descendants of reintroduced, captive-bred fish. The ruling maintains that these reintroduced salmon do not qualify for protection under the ESA.

This claim is inconsistent with existing programs for several other species. For example, the bald eagle, peregrine falcon, and Florida panther have all been reintroduced to much of their range, including captive-bred individuals. Yet the FWS has protected all of these species under the ESA. Neither the FWS nor NMFS has been able to explain the strange logic that says reintroduced, captive-bred peregrine falcons qualify for ESA protection but reintroduced, captive-bred Atlantic salmon do not.

Despite the shortcomings of the recent ruling, there is reason for optimism. The fact that the Atlantic salmon will receive even partial protection during this time of political turmoil is a tremendous victory for the salmon and the Endangered Species Act. The act was originally passed to save species from extinction. Perhaps it is not too late to save the Atlantic salmon.

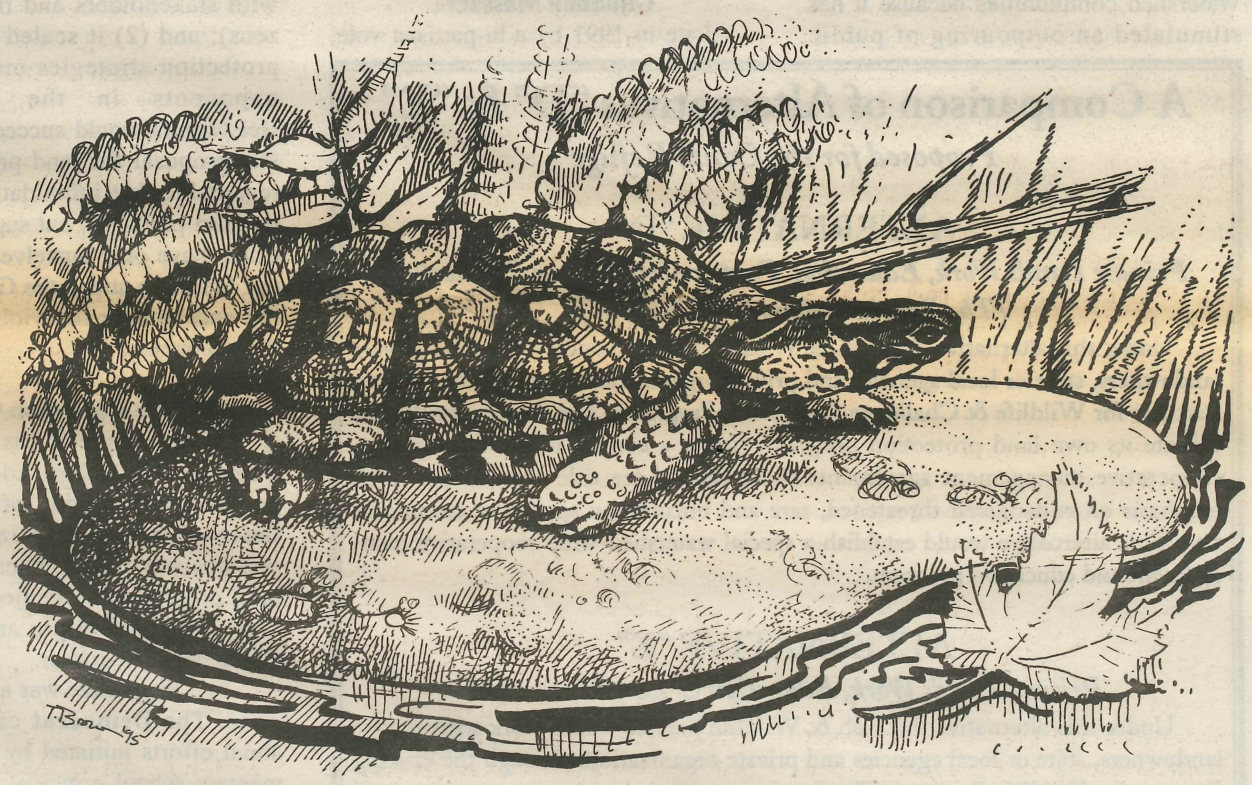
What You Can Do: As of this writing, the FWS and NMFS have not issued their final recommendation to protect the Atlantic salmon. The two agencies need to know that the public wants prompt action to save this imperiled species. Please contact the following officials, who oversee the U.S. Fish and Wildlife Service (Bruce Babbitt) and the National Marine Fisheries Service (Ron Brown):

Bruce Babbitt, Jr.
Secretary of the Interior
Department of the Interior
Interior Building
1849 C Street, N.W.
Washington, DC 20240

Ron Brown
Secretary of Commerce
Herbert Hoover Building
14th Street and E Street, N.W.
Washington, DC 20230

Wood Turtle Denied Protection ~ Federal Agency Ignores Facts, Experts, Law

by David Carle



On May 26, 1995 the U.S. Fish and Wildlife Service (FWS) announced that it will not consider the North American wood turtle for protection under the Endangered Species Act (ESA). The decision came in response to a 42-page petition submitted in December 1994 by RESTORE, the Biodiversity Legal Foundation, and six leading wood turtle experts. According to the FWS, the petition lacked scientific "merit." As a result, the agency refuses to proceed with a badly needed review of the status of the species.

The wood turtle petition documented major threats to the species, including predation of nests by raccoons and skunks, habitat destruction, road kills, water pollution, and collection for the commercial pet trade. Because individual turtles can live for 50 to 60 years, populations may appear to remain stable long after they are no longer reproducing. Experts are concerned that at the present rates of nest predation and commercial collection, there will not be enough young wood turtles to maintain viable populations. The petition contends that this could mean eventual extinction of the species unless protective action is taken now.

Based on these significant threats, the petition called on the FWS to designate the wood turtle as "threatened" throughout its present range from Maine to Virginia and west to Minnesota. Such a designation under the ESA would require the preparation of the first comprehensive recovery plan for the wood turtle, curtail collection of the species in the wild, lead to increased funding for turtle programs, stimulate greater public education efforts, and benefit other endangered species requiring similar habitats.

Wood turtle experts from across the nation endorsed the petition. Among the letters of support sent to the FWS were those of Dr. John Kaufman of the University of Florida; Dr. Bill Willers of the University of Wisconsin; David Carroll, New Hampshire author of the *Year of the Turtle,* the entire herpetology department of the University of Kansas Museum; and the Northern Forest Alliance, a coalition of more than 20 conservation groups.

There was little opposition to the petition. It was largely limited to the Maine Forest Products Council, a lobbying organization for Maine's timber and paper industries. The organization offered no facts to refute the data and conclusions in the petition.

A number of environmentalists and biologists believe that the decision by the FWS to deny the wood turtle petition was not based on a fair and objective analysis of the facts. Instead, it is consistent with the failure of the agency to adequately protect other imperiled turtles, including the bog and Blandings. The petitioners are presently reviewing a possible legal challenge to the FWS decision.

What You Can Do: Speak out for the wood turtle! Urge the FWS to conduct a comprehensive status review of this imperiled species. Contact:

Mollie H. Beattie
Director
U.S. Fish & Wildlife Service
Interior Building
1849 C Street, N.W.

Factoids

• The Associated Press reports that the price of one new B-2 Stealth bomber will be between $570 million and $2 billion—more than the projected cost of one new 3.2 million acre Maine Woods National Park.

• In 1990, the Bowater/Great Northern Paper mill complex in Millinocket, Maine was valued for property taxes at $292 million. In 1992, the stock of Bowater, Inc. was trading at $18 per share. In 1995, the company's Millinocket holdings have been devalued to $110 million. Meanwhile, the value of Bowater stock has jumped to about $53 per share.

• Bowater Inc. and International Paper Company (IP) have announced that they plan to eliminate a total of 57 salaried positions in Maine. IP plans to lay off 17 managers at its Jay mill while Bowater plans to cut 40 salaried positions from its Great Northern Paper division, based in Millinocket.

Maine Wood Turtles Found in Virginia

The U.S. Fish and Wildlife Service has intercepted 54 wood turtles in Virginia that were apparently collected illegally in Maine. The agency was unwilling to release any information because of possible pending arrests, but what is known is that under the federal Lacy Act, it is illegal to transport wildlife across state lines for commercial profit without a permit. If the value of the wildlife is more than $300, the offense is a felony.

This is the first interstate criminal case involving wood turtles and Maine wildlife in general. It shows why the wood turtle needs the strongest possible protection.

Conte National Wildlife Refuge Wins Strong Support Throughout Connecticut River Watershed

by Jamie Sayen

At a packed hearing in Lancaster, NH on June 29 on the proposed Silvio O. Conte National Wildlife Refuge for the Connecticut River Watershed, nearly three-quarters of the 52 citizens who testified strongly supported the establishment of the Conte. Hearings in Connecticut, Massachusetts and southern Vermont/New Hampshire earlier in June also elicited enthusiastic public support for the Conte. Following the conclusion of the formal comment period on July 31, 1995, the US Fish & Wildlife Service will produce a "Final Action Plan and Environmental Impact Statement" on the project.

Although there is broad support throughout the 7.2 million acre Connecticut River Watershed, there are powerful opponents who can be counted upon to continue to oppose the creation of the Conte. Some opponents have raised thoughtful concerns, many others have been frightened by a well-orchestrated disinformation campaign by "property rights" extremists and some local elected officials.

Even before its establishment, the Conte has begun to have a profoundly positive impact on Connecticut River Watershed communities because it has stimulated an outpouring of public debate and dialogue—at formal and informal Conte hearings in June, and in letters to the editor of local newspapers.

Some of the testimony and letters have been designed to frighten and misinform. A couple of weeks before the Lancaster hearing one letter-writer ranted against the Endangered Species Act and "big brother." "Will you take someone's land by eminent domain when you find that a '3-eyed, 3-eared nincombob' lives on that property?" he asked.

But, each week a new batch of letters appears on Lancaster's weekly, **The Coos County Democrat**, and the tenor of some the opposition is growing more and more constructive. One writer who railed against unnamed abuses by the US F&WS in the West, ended his letter with the excellent suggestion for the Conte Education Center that will be opened in Lancaster if the Refuge is established: "Why not a River Heritage Center that would give our children and visitors a true understanding of the continuing interrelationships of the people with the land and river. Beginning with the Abenakis it may go on to early hunters/trappers and settlers, leading on to our current recreation, logging and increasing farm industries."

Guildhall Massacre

Late in 1991 by a bi-partisan vote, Congress passed an act to study the feasibility of establishing a National Wildlife Refuge for the Connecticut River Watershed. Republican President George Bush signed the bill into law. The Refuge was named in honor of long-time Republican Congressman Silvio O. Conte of Massachusetts, author of the bill, who died shortly before the vote.

Early on, the US Fish & Wildlife Service discovered that if it tried to design a traditional National Wildlife Refuge for the Connecticut River Watershed, it would run into a buzz-saw of local opposition. A public information hearing in Guildhall in 1993 turned very ugly when hysterical landowners, fearing that the USF&WS planned to confiscate their land by eminent domain, took over the meeting and did about everything but tar and feather the stunned representatives of USF&WS. Unfortunately, supporters of the Conte either failed to attend the Guildhall meeting, or were intimidated into silence.

Because of the Guildhall Massacre, USF&WS did two things: (1) it launched a public outreach effort that may well be unprecedented in its scope (over 200 public and private meetings with stakeholders and interested citizens); and (2) it scaled back its land protection strategies out of fear that opponents in the Watershed's Headwaters would succeed in scuttling any proposal for land protection. It is regrettable that intimidation succeeded (at least partially), but supporters of the Conte have only ourselves to blame for our failure to attend the Guildhall meeting and counter the violent attacks of the opponents.

Conte Education Center

As word spread this spring of the Conte hearings scheduled for June, supporters—ever mindful of the Guildhall fiasco—began to organize information sessions and to alert other supporters of land protection strategies of the hearings. Letters both pro and con on the Conte began to appear.

And then, there was a welcome surprise. The **Democrat** carried a story about efforts initiated by the local elementary school principal Don LaPlante to develop a Connecticut River Education Center that would meet local needs and would collaborate with the local school system. LaPlante had assembled a working group that represented a broad cross-section of the community. By June 29, support for the Education Center was so broad that the Lancaster Chamber of Commerce endorsed the idea.

Lancaster Hearing

At the Lancaster hearing, Conte supporters spoke of their love for the River and the Watershed. In supporting the F&WS' preferred alternative, "Alternative D," they enthusiastically endorsed the proposed education center, and they saluted the Service for the effort it has made to design a new kind of National Wildlife Refuge, one that relies much more heavily on partnerships with landowners and other collaborative efforts, instead of the more traditional centralized bureaucratic approach. Several Conte supporters also defended the federal government from the hate rhetoric of a few Conte opponents.

I testified that self-appointed defenders of my property rights were intent on denying me and many other landowners our right to sell our land (or enter into other contractual agreements) with anyone we wished, including the US Fish & Wildlife Service. If these opponents of the Conte wish to have nothing to do with the Conte, they can exercise their right not to participate in voluntary arrangements with the Service. But, if they succeed in killing the Conte, they deny others their property rights.

Mary Stinehour, a riverfront landowner who supports the Conte, testified that she feared the consequences of taking no action: "The only plan I've ever seen is 'Alternative A' [the 'no action' alternative] over the years I have lived on the river. I don't think Alternative A works very well. Alternative A, which has no change, will bring the most change."

At least one opponent, Leo Rideout, Jr., sounded a militia-style alarm: "The federal government is not to be trusted. They will take land by dirty tricks, eminent domain or murder if that's what it takes."

Stronger Land Protection Needed

A third of the Conte proponents at Lancaster cautioned that Alternative D is inadequate in one critical respect—land protection. "D" proposes only to acquire 6,530 acres in fee title and 19,150 acres in easements and cooperative management agreements. In contrast, "Alternative E" (which offers the most ambitious land protection strategy, but without the partnerships offered by "D") proposes to acquire 41,375 acres in fee and 89,045 in easements and cooperative management agreements. While "D" proposes to protect only about 26,000 acres, "E" proposes to protect about 130,000 acres. To put that in perspective, "D" proposes to protect less than 0.4 percent of the entire watershed; "E" would protect about 1.8 percent.

There are two reasons why the Conte proposals for land protection are inadequate: (1) the intimidation of the opponents probably discouraged USF&WS from more ambitious proposals, and (2) F&WS scientists developed a protection strategy for endangered plants animals and rare natural communities; they did not assess what it would take to protect ecosystem integrity.

The **Forum** believes that as scientific research provides us with greater understanding of the ecology of the Connecticut River Watershed, and as public support for the Conte grows, there will be both ecological and political support for a far more ambitious land protection strategy. We have urged F&WS to broaden its assessment of land protection before completing the Final Action Plan.

Regional Citizens' Advisory Committees

Part of the Conte enabling legislation established a "Citizens' Advisory Committee." Governors of each of the four states in the watershed appointed three members: a representative from state government, a representative of a state conservation group and a landown-

A Comparison of Alternatives "D" & "E"

Proposed for the Conte Refuge

ALTERNATIVE "D"

Private Lands Work, Education, Partnerships & Land Protection (The Proposed Action by USF&WS)

Under this alternative the Fish & Wildlife Service would work with private landowners, state or local agencies and private organizations through the existing Partners for Wildlife & Challenge Cost Share Programs. The Service would also initiate its own land protection program—using a combination of easements, cooperative management agreements (CMAs) and fee title acquisition—with emphasis on endangered threatened, rare and uncommon species or communities. This alternative would establish a special watershed-wide cooperative management and education program.

ALTERNATIVE "E"

Private Lands Work, Education & Land Protection

Under this alternative the Fish & Wildlife Service would work with private landowners, state or local agencies and private organizations through the existing Partners for Wildlife Program. The Service would also initiate an extensive land protection effort through the year 2010, using a combination of easements, cooperative management agreements, and fee title acquisition. Educational efforts would focus on developing new programs and facilities on Service lands. This alternative would establish a more traditional fish & wildlife refuge in the watershed.

Alternative	"D"	"E"
Land Acquisition (Total):	25,680	130,420
Fee Title	6,530	41,375
Easements	850	5,910
CMAs	18,300	83,135
Land Protection (in acres)		
Wetlands Restored	3,300	3,300
Uplands Restored	900	900
Riparian Habitat Restored	1,455	2,545
Wetlands Protected	41,470	41,565
Uplands Protected	43,820	97,960
Riparian Habitat Protected	3,110	6,150
Unfragmented Habitat Protected	54,925	106,025
Aquatic Barriers Removed	3 barriers	None
Fish Passage Projects Initiated	15 projects	None
New Environmental Education Centers	2 New Centers	4 New Centers
Total Cost (per year)	$9 Million	$13.7 million

Source: The Silvio O. Conte National Fish and Wildlife Refuge Draft Action Plan and Environmental Impact Statement, May 1995.

er. While we support this idea as far as it goes, we believe it is inadequate to promote the sort of citizen participation and citizen access to the Conte managers that can dispel fears and build support for the Conte.

Accordingly, many supporters of the Conte are calling for the creation of several regional Citizens Advisory Committees (CAC) that represent a broad range of interests. I am confident that if such regional committees are established and representation is fair, both the Conte and the communities will benefit. Opponents have succeeded in sowing the seeds of distrust which will not disappear overnight. A grassroots, community-based CAC can become the sounding board for concerns, and for raising and debating a wide range of issues pertaining to the Conte and the Connecticut River Watershed. They can become vehicles for building trust between the communities and the F&WS, and they can help build trust within our fractured communities.

One reason there is so much distrust and anger over proposals such as the Conte is that there are so few democratic vehicles that promote ongoing debate and dialogue within our communities. This makes it easier for demagogues to polarize the situation. We need mechanisms to assure free and open dialogue among differing constituencies. Conte CACs would be invaluable tools for promoting and sustaining local democracy.

Opposition

Eminent Domain: Opponents to the Conte focused mainly on the hypothetical threat that the F&WS would employ eminent domain to seize local landowners' land. Understandably, landowners were frightened by this scare tactic. The truth of the matter is that F&WS has the power of eminent domain, but it has not used it in the Northeastern states in the past eight years; it promises only to work with "willing sellers", and it probably already has more offers from landowners willing and eager to sell to USF&WS than it can accommodate.

The threat of eminent domain is a "property rights" red-herring that exposes these zealots for what they really are: anti-environmentalists. If they were so dedicated to protecting property rights by thwarting eminent domain, they would long ago have gone to war against state and federal departments of transportation. The interstate highway system, not northeastern National Wildlife Refuges, has been the real abuser of eminent domain. But, to property rights zealots, eminent domain only poses a threat when it might possibly be used to protect the environment.

Federal Regulations: Opponents also feared that the Conte Refuge would impose a whole new layer of regulations on landowners. Some were satisfied with F&WS's response that the Service has no regulatory powers; others ignored F&WS's answer and continued to repeat this non-threat. To clarify the issue of regulations: if the Conte passes, there will be no new federal regulations because the Service does not have the power to impose them. If the Conte is killed, states can continue to develop new regulations that will affect the Connecticut River Watershed..

Farmers' Fears: Farmers were misinformed by Conte opponents that the Conte would take their land away from them, or at least take their land out of production. The claim that the Conte would take ag land out of production was a gross distortion of the plan. Alternative D calls for developing agreements with willing landowners to protect about 3,000 acres of farmland. In some cases this might mean taking the land out of production, or altering current management strategies, but only with a willing landowner. In return, the farmer would receive payment for this arrangement; and this payment might be the difference between survival or going out of business.

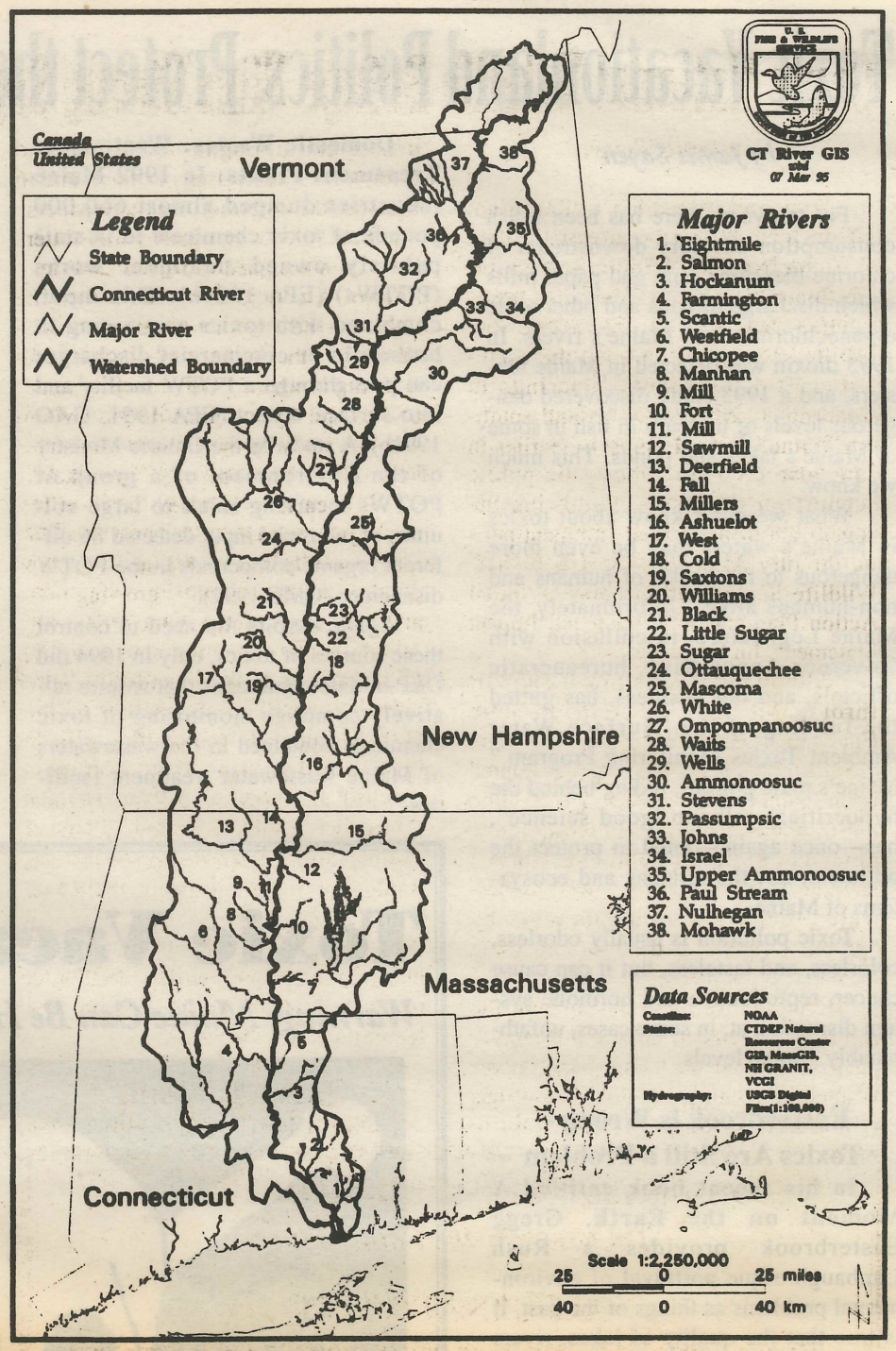
Today, local agriculture is declining at an alarming rate. The Conte "Action Plan" states on page 4-56: "Between 1964 and 1992, the watershed lost 65% of its agricultural land. At an average expected rate of decline ... about 187,000 acres of farmland would be lost to agriculture over the next 15 years, with no additional Service involvement in the watershed." While the USFWS cannot save all the farms likely to go under, it certainly can play a decisive role in helping many farms remain viable.

As the discussion about the Conte unfolded, the more thoughtful members of the agricultural community realized it's foolish to reject such a valuable tool for protecting Connecticut River agriculture

Buy the Land Yourself: Cheryl Johnson, the brains of the NH Landowners' Alliance often attacks advocates of public land acquisition by asking why they don't simply buy the land. Cheryl knows that individuals and small groups cannot afford to acquire sizeable chunks of land for the protection of public values such as clean air and water, wildlife habitat and the protection of ecosystem health. That's why she advises us to buy it ourselves. I'd be more impressed with her argument if she adopted that attitude toward the interstate highway system and nuclear weapons. But, again, her opposition to public acquisition is not from some principled, consistent philosophical aversion to big, centralized government. Rather, it is a selective outrage motivated by hostility to efforts to protect our life support system.

Ongoing Dialogue

As I observed earlier, the Conte is already paying great dividends to the communities of the Headwaters of the Connecticut River Watershed. It has sparked intense debate and discussion of a whole raft of new ideas. The earlier nastiness of the opposition, while still occasionally heard, is increasingly being supplanted by much more thoughtful concerns. If we can keep the discussion going in a manner that respects all perspectives, I'm confident that we'll make a very important contribution to the Conte itself, but, more importantly, our communities will benefit from a new era of collaboration, cooperation, respect and trust—not to mention land protection.



The Connecticut River Watershed. Map by US Fish & Wildlife Service in the Draft Action Plan and Environmental Impact Statement for the Silvio O. Conte National Fish & Wildlife Refuge, May 1995.

SHAD

First showy blossom
of the spring woods,
petals droop
against grey stems.
Blooming when the shad run
to spawn in Atlantic drainages-
once so plentiful
no hook or net was needed
to take all you want,
multitudes / now gone.
From the flower lighting
leafless woods comes
a red button of berry
about the time of strawberries
not often seen or
well known as they are
so favored by birds.

—Stephen Lewandowski

3,603 Acres Added to Lake Umbagog National Wildlife Refuge

At the end of June, the US Fish & Wildlife Service completed transactions with the James River Corporation and the Oxford Paper Company, a subsidiary of Boise-Cascade that added 3,603 acres to the Lake Umbagog National Wildlife Refuge that straddles the border of New Hampshire and Maine.

Boise-Cascade sold 2,058 acres for $975,000. The land lies in Magalloway Plantation and Upton in Maine and Errol and Wentworth Location in New Hampshire. It includes acreage along the Magalloway, Androscoggin and Dead Cambridge Rivers and Sturtevant Pond frontage, Route 16 frontage and adjacent wetlands and uplands forest. Also included is a 260 acre floating bog that is a designated National Natural Landmark. This land is important habitat for waterfowl and large mammals.

James River sold 1,545 acres for $1.9 million which includes eight miles of waterfrontage along Lake Umbagog and the Magalloway River. It contains New Hampshire's only bald eagle nest, osprey nests, some of the largest freshwater marshes in New Hampshire and forested wetlands that are habitat for black duck, goldeneye, ringnecks and hooded mergansers.

Prior to these transactions, the Lake Umbagog NWR owned only 303 acres. The US Fish & Wildlife Service still hopes to protect an additional 6,000-7,000 acres when funding permits.

The money for the acquisition came from the Land and Water Conservation Fund, not from general tax revenues.

In 1992 the State of New Hampshire purchased 446 acres of Umbagog wetlands from James River. The State also acquired a conservation easement for 2,258 acres from James River. That same year, Boise sold New Hampshire 603 acres in three parcels of land in Errol. Thus, more than 7,500 acres of land in the Lake Umbagog area enjoy some degree of protection.

—JS

Toxic Vacationland Politics: Protect the Polluters, Not Maine's Water Quality

by Jamie Sayen

For ten years there has been a fish consumption advisory downstream of chlorine-bleaching pulp and paper mills which discharge dioxins and other toxic organochlorines into Maine's rivers. In 1993 dioxin was detected in Maine lobsters, and a 1993 study discovered dangerous levels of mercury in fish in some of Maine's lakes and ponds. This much we know.

What we don't know about toxics in Maine's waters may be even more dangerous to the health of humans and non-humans alike. Unfortunately, the Maine Legislature, in collusion with Governor Angus King, bureaucratic officials, and big business, has gutted the funding of the "Surface Water Ambient Toxics Monitoring Program." Maine's toxic politics, hiding behind the hypocritical call for "good science", has—once again—opted to protect the polluters, not the citizens and ecosystems of Maine.

Toxic pollution is usually odorless, colorless, and tasteless, but it can cause cancer, reproductive and hormone system disruption at, in some cases, unfathomably minute levels.

Easterbrook is Wrong - Toxics Are Still a Problem

In his recent book entitled **A Moment on the Earth**, Gregg Easterbrook provides a Rush Limbaugh-esque portrayal of environmental problems as things of the past. It is true that the quality of lakes, rivers and coastal waters in Maine and nationally has improved in important respects over the last few decades. However, scientists continue to point to toxic chemicals—especially those that are persistent and accumulate in the tissues of fish—as a major problem confronting the health of our waters (GAO 1991a). In a 1992 report to Congress, the U.S. Environmental Protection Agency (EPA) found that roughly 40% of U.S. rivers, lakes, and estuaries still don't support fishing or swimming (EPA 1994a). Further, a national survey of toxic contamination of fish found that of the 60 toxic chemicals tested, 22 were present in the tissues of fish at more than half of the 388 sites monitored (EPA 1992). In 13 Maine sites included in this survey, 18 of the 60 chemicals (including dioxin, mercury, PCBs, and DDT) were present in fish at one or more of the sites (DEP 1993).

There are several sources of toxic pollution in Maine.

Industries: In 1992 Maine-based industries, including pulp and paper mills, textile and woolen mills, and chemical, plastics and metal product manufacturers, dumped almost 600,000 pounds of toxic pollutants directly into surface waters and 660,000 pounds to publicly owned treatment works (EPA 1994b).

Despite the obvious and long-standing need to closely regulate industrial sources of toxics, the Maine Department of Environmental Protection (DEP) only implemented regulations requiring relatively complete monitoring of toxic chemicals contained in the wastewaters of Maine industry in 1994.

Domestic Wastes: Wastewater Treatment Plants: In 1992 Maine industries dumped almost 660,000 pounds of toxic chemicals to in-state publicly owned treatment works (POTWs) (EPA 1994b). This input, combined with toxics originating in household or commercial discharges can pass through a POTW facility and into surface waters (EPA 1991; GAO 1991b). A study by the Ontario Ministry of the Environment of a group of POTWs receiving small to large volumes of industrial input detected 86 different organic compounds in the POTW discharges (OME 1991).

Again, despite the need to control these sources of toxics, only in 1994 did DEP initiate regulations that require relatively complete monitoring of toxic chemicals contained in the wastewaters of Maine wastewater treatment facilities.

Nonpoint Sources: Roughly 40% of the nation's rivers, lakes, and estuaries do not support fishing or swimming; the most commonly identified problems in these waters were associated with "nonpoint source" discharges such as runoff and siltation arising from farming, forestry, urbanization, mining, etc. (EPA 1994a).

In 1989 DEP estimated that 1017 miles of Maine's rivers and streams, and 35 lakes and ponds (totaling over 37,000 acres) failed to support their designated uses due to nonpoint source pollution (DEP 1989). DEP reports that pollutant discharges related to urban runoff/storm sewers alone have a "major impact" and a "moderate or minor impact" on non-attainmant of water quality standards in 35,105 and 102,663 acres of Maine lakes and ponds, respectively (DEP 1994). Collectively, agricultural and silvicultural pollutants are associated with "moderate or minor impact" on non-attainment in over 115,000 acres of lakes and ponds (DEP 1994).

Because nobody's monitoring for toxics from "nonpoint" and other sources—we cannot determine the degree to which toxic chemicals contribute to non-attainment of water quality standards. However, the potential for toxic contamination is clearly established.

Atmospheric Deposition: Atmospheric deposition of toxic chemicals, although not specifically monitored in Maine, also contributes to contamination of water. It may account for as much as 50% of the annual input of a number of toxic chemicals into the Great Lakes (EPA 1994c).

Unfortunately, specific studies have not been conducted in Maine. However the results of fish contamination monitoring conducted by EPA and Maine DEP in the state suggest the important role that atmospheric deposition plays in toxic contamination (e.g., mercury, chlordane, PCBs, DDT).

Welcome to Toxic Vacationland

Clearly there are plenty of "good science" reasons to suspect that the image of Maine's lakes, rivers, and coastal waters are not as pristine as presented in the infamous Angus King's inaugural video or in Maine's tourism promotions. Maine is currently "celebrating" its ten-year anniversary of fish consumption advisories downstream of chlorine-bleaching pulp and paper mills. Today, 236 miles of Maine rivers are under advisories that instruct women of childbearing age to eat no fish from these waters and the general public to eat no more than a few fish meals per year (DEP 1994).

In the spring of 1994, similar health advisories (i.e., no consumption by women of childbearing age) were issued for the consumption of lobster hepatopancreas ("tomalley") along the entire Maine coast after monitoring revealed dioxin contamination. As a result of a 1993 DEP study of mercury contamination of fish in 127 of Maine's approximately 1,800 lakes and ponds, the Bureau of Health recommended that women of childbearing age and children under the age of eight should eat no fish from any of Maine's lakes or ponds. The general public is advised to eat no more than 6 to 22 fish per year from these waters. Welcome to Toxic Vacationland.

However, even with these serious known toxic contamination problems, there is a general absence of "good science" (i.e., scientific data) on the contamination of most of Maine's surface waters. As of 1994, the Maine DEP indicated that only 4% of lake and pond acreage[1], 3% of river miles, and 0.6% of the square coastal mileage had been monitored for toxic chemicals in any medium (water, sediment, or biota) (DEP 1994). For that year, DEP also reported that one percent of lake and pond acreage, 28% of the river miles, and 100% of the square coastal miles that have been monitored for toxics have indicated elevated levels (DEP 1994).

A Response for Jim Longley, Jr.

Crows brought the message:
in the empty spaces there is beauty
in the desert there is beauty
in the wide ocean there is beauty
in the high tundra there is beauty
in the far sky there is beauty

there is no beauty
in the emptiness of hearts
in the bleakness of those
who are not connected to the earth
their words speak against them
their words betray them
their emptiness seeks to destroy
the beauty of a vast world

—Gary Lawless (inspired by Representative Longley's attack on Sierra Club activists who he called "environmental thugs)

Bad Science Equals Bad Policy & Vice Versa

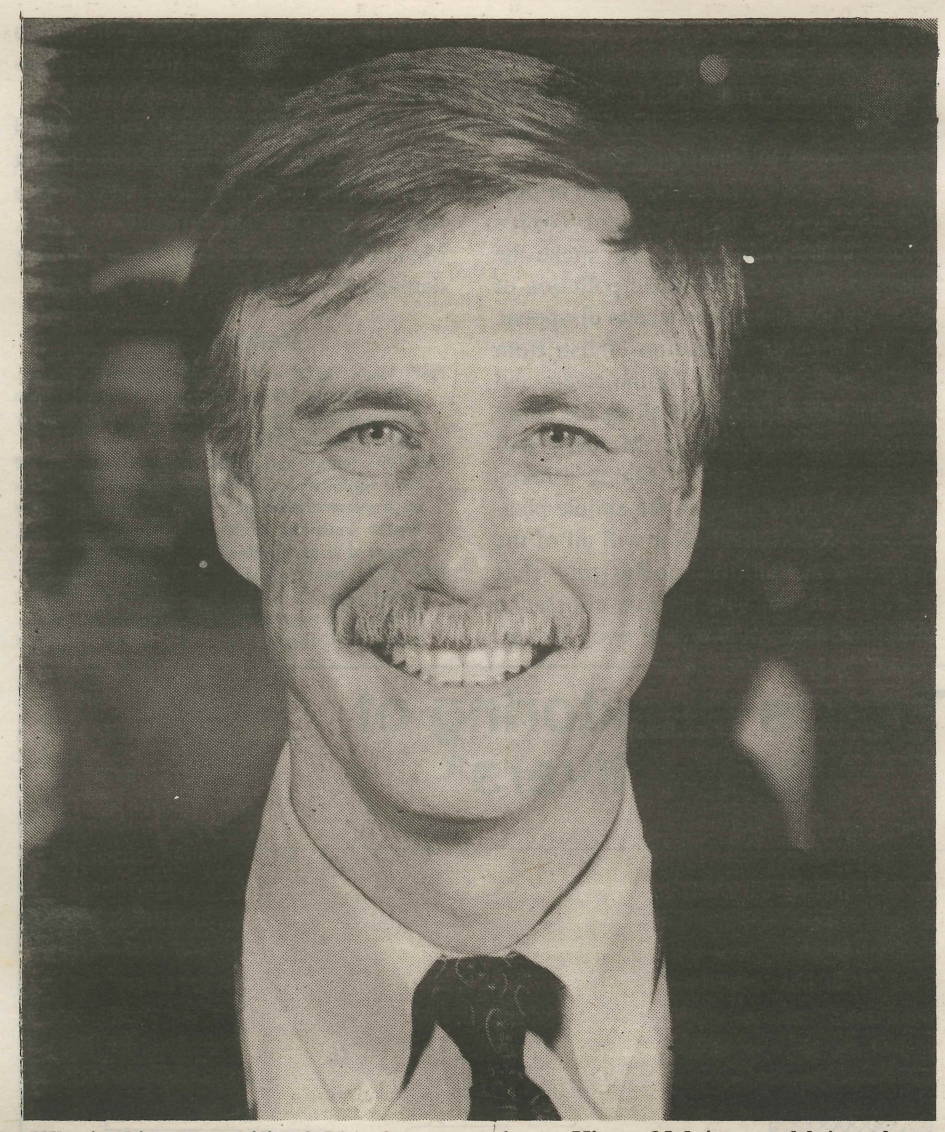
In the Beginning: In 1992, a bill written by the Natural Resources Council of Maine and sponsored by Senator Bonnie Titcomb (D-Cumberland) was introduced to fund—through increased wastewater discharge fees—the monitoring of toxic pollutants in Maine's waters. Although the bill was ultimately rejected by the Energy and Natural Resources Committee[2], the Legislature instead directed the DEP Commissioner to assess past and current data on toxic pollutants in the ambient environment of all surface waters of the state, and to recommend the necessary steps to implement an ambient water toxics monitoring program if this assessment indicated that such a program was warranted. The commissioner's final report, issued in 1993, found what was already obvious: Maine didn't have a "comprehensive" water toxics monitoring program. It stated that:

- *"the present ambient toxics monitoring is sparse and insufficient to assess threats to human health or ecological health"; and*
- *"the present monitoring analyzes for few of the potential contaminants that could be of concern to human health or ecological health" (DEP 1993).*

The report also recommended a five-year, $500,000 annual "ambient toxics" monitoring program as a "modest" means of filling these important data gaps.

1994—Legislature Fails to Assure Funding of New Toxics Monitoring Program: Although DEP (probably bowing to the continued opposition to the program by the paper industry) failed to follow the recommendations of the study and introduce legislation to establish toxic monitoring the next year (1994), NRCM once again introduced a bill (sponsored by Rep. Reed Coles, D-Harpswell) designed to establish the water toxics monitoring program. The bill included several reasonable funding options to ensure the full $500,000 for the five-year duration.

Despite objections of the paper industry and other members of Maine's business community, and perhaps even in response to the outpouring of public support demonstrated by environmentalists, anglers, Native Americans, shellfish harvesters, public health representatives, etc. attending the public hearing, the Legislature eventually adopted the "Surface Water Ambient Toxics Monitoring Program." The law includes all the "good science" language, specifically identifying such monitoring as an essential part of the State's effort to protect human and ecological health, and to provide a scientifically-sound basis for risk assessment, environmental priority-setting, and general environmental decision-making.



Why is this man smiling? He's Governor Angus King of Maine, and he's welcoming you to Toxic Vacationland, the home of "good science" and toxic waters.

While the "conceptual" basis for toxic monitoring was covered by the new law, the Legislature failed to address one small detail—that for the program to be comprehensive and scientifically-valid, it required an investment of at least $500,000 annually. During the debate, the paper industry and the business community successfully opposed efforts to secure a dependable mechanism for continuing full funding. Instead, $400,000 of funding was cobbled together for only the first year—$200,000 from DEP and an allocation of $200,000 from the Research and Development fund of the Surface Waters Oil Cleanup Fund; a fund derived from small fees on oil conveyed in the state. Essentially, the Legislature felt strongly enough about "good science" to get the program off the ground, but didn't seem to want to be bothered with ensuring that it would remain flying.

1995—Toxics Monitoring Funding Slashed: Although the data from the first year of the "ambient program" have yet to be released, its inaugural year constituted an important first step in collecting comprehensive "good science" on toxics contamination in Maine Waters. Unfortunately, earlier this year, as the time came to kick off the program's second year, the failure of the previous Legislature to provide for continued, full funding came home to roost. DEP compounded this when, in requesting funding for its 1995-96 biennial budget, the Department only requested $200,000 for the ambient program in its "continuing project" budget (the "Part I Budget"). The remaining $300,000 was requested in its "expanded project" budget ("Part II"). The thinking behind this is incomprehensible, since it was already clear that under the King administration's prescription for putting "Maine on the Move," "expanded budget" requests were D.O.A., regardless of their merit.

Once again, NRCM wrote legislation (sponsored by David Etnier, D-Harpswell) to fill the $300,000 funding shortfall, this time through one of the options offered in 1994: a one cent per barrel increase in the oil conveyance fee.[3] At the public hearing clammers, oyster growers, fishermen, Native Americans, environmentalists, etc. spoke forcefully in support of the program and the need for full funding.

Although claiming that they "supported" the program, the paper industry[4], Maine Chamber of Commerce and Industry, Maine Alliance, Maine Oil Dealers Association (MODA), and Portland Pipeline all opposed this funding approach. DEP also opposed it stating that when monies were taken from the Surface Waters Oil Cleanup Fund the previous year, they had (privately) "promised" the Pipeline and MODA they would not use oil-fee based funding mechanisms in the future to fund the program (more likely, the DEP knuckled under to the Governor's fiat of no new fees). Opponents called for General Funding of the funding shortfall, and eventually, the Natural Resources Committee unanimously supported a revised version of the bill asking for General Funding of the shortfall.

In another world, where government sanity reigns, and where environmental protection is important, it would make sense for general State operating funds to support efforts to monitor the health of Maine's waters and ensure that public health and the environment are protected from toxic chemicals. However, in the real world of Maine politics—where fundamental State services are being cut, not funded—calling for General Funding was the same as opposing additional funding.

Good Science? or A Scam for Protecting Polluters?

Because of the importance that the public places on clean water, as well as the economies that high quality water supports, the failure of the State of Maine to provide adequate funding for a basic monitoring program is as ridiculous as it is frustrating. A popular sport these days—in the halls of the State House, the Blaine House, and with Maine's Captains of Industry—is to bash environmental protection for not being based on "good science." It is implied that if there were better science, the crazy environmentalists would know that polluters—such as the paper industry—were really environmental good guys, despite their responsibility for a decade of dioxin-related prohibitions of fish eating by women of childbearing age with no end of this outrageous situation in sight. If "good science" were used, the argument goes, we'd find that gobs of precious industry investment dollars were being wasted on complying with meaningless environmental standards.

Yet, when presented with the opportunity to support the development of "good science", the Legislators, the Governor, and Maine's business community balk.

This behavior may provide insight into what the "good science" mantra is really all about. It's not about protecting the environment at all, it's a cynical scam to protect polluters and other environmental despoilers. Talking about "good science" attempts to raise the bar of scientific certainty required to a level that is extremely difficult—if not impossible in most cases—to surmount prior to taking any action to protect humans, wildlife, or ecosystems. The effect of this "burden of proof" scam is that environmental protections are next to impossible to implement.

These cynics know that unless people are literally dying in the street (e.g., Union Carbide's cyanide release in Bophal) a definitive cause-effect relationship will be extremely difficult, if not impossible, to establish. By defining "good science" as absolute certainty, they seek to create a "test" for environmental protection that can rarely be met.

Either we must reverse the "burden of proof" to require that developers demonstrate their proposed project benefits the environment, or we must insist that the test of "absolute certainty" be applied to every human endeavor, not just to environmental protection. Think of the impact on logging, paper making, highway construction, etc. if the standards of "good science" were applied as ruthlessly as the proponents of "good science" wish to apply them to environmental protection!

Even if any science could live up to the "good science" definition, failure to adequately provide for the development of such science—as the Maine Legislature and Governor King have done with the Surface Water Ambient Toxics Monitoring Program—makes certain that necessary data will not be available.

The prevailing polluter-friendly politics will continue to promote the concept of "good science" as the way to ensure that environmental protection is shackled. In this climate, it will be increasingly important for the public to recognize that in many ways "good science" is code for delaying—or even rolling back existing—protections afforded to the public and environment. And the public must be ready and willing to make those in power know that we will hold them accountable.

—JS

True to form, the General Fund request fell on deaf ears in the Appropriations Committee, and no additional money was allocated by the Legislature for the program. Despite their ostensible "support" of the program, and despite the "good science" rhetoric, none of these business groups involved—or the governor—lifted a finger to pressure the Appropriations Committee to allocate the $300,000.

A Crippled Monitoring Program: Without additional funding, all planned and future monitoring—including expanded mercury testing—of Maine's 5,785 lakes will be scrapped. Testing of the 31,672 miles of rivers, streams and brooks will be reduced to ten sites per year. Testing of the 1633 square miles of coastal waters will be limited to seven sites.

The intent of the law—to provide a comprehensive picture of the health of Maine's surface waters—has been subverted by toxic Maine politics.

But, while toxic politics can cripple the Surface Water Ambient Toxics Monitoring Program, it can't make the dangers posed by the toxic pollution of Vacationland's surface waters disappear. The dioxin contamination of fish from hundreds of miles of Maine rivers and the tomalley of lobsters along the entire coastline will continue. Mercury will continue to put all of Maine's lakes essentially off-limits to the simple pleasure of eating a fish. Nor will all of the other toxic water pollution—that Maine's Power Elite have chosen to remain totally ignorant of even though it may currently be effecting the health of our state's people and wildlife—magically evaporate.

At some point, it will be recognized that it is sheer lunacy to fail to protect one of Maine's greatest assets—the lakes, rivers and coastal waters. Meanwhile, we can only hope that the damage of neglect won't be too great.

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EPA 1994b. **EPA Issues 1992 Data on Toxic Chemicals: Little Change in Chemical Releases from Last Year** (press release and supporting information). Office of External Programs, EPA Region I. Boston, MA.

EPA 1994c. **Deposition of Air Pollutants to the Great Waters: First Report to Congress**. EPA 453/R-93-055. Office of Air Quality Planning and Standards. Research Triangle Park, NC.

GAO (U.S. General Accounting Office). 1991a. **Water Pollution: Stronger Efforts Needed by EPA to Control Toxic Water Pollution**. GAO/RCED-91-154. Resources, Community, and Economic Development Division. Washington, DC.

GAO 1991b. **Water Pollution: Nonindustrial Wastewater Pollution Can Be Better Managed**. GAO/RCED-92-40. Resources, Community, and Economic Development Division. Washington, DC.

OME (Ontario Ministry of the Environment). 1991. **Thirty-Seven Municipal Water Pollution Control Plants. Pilot Monitoring Study. Volume I. Interim Report. and Volume II. Appendix "A". (Individual Plant Reports).** Water Resources Branch. Toronto, Ontario.

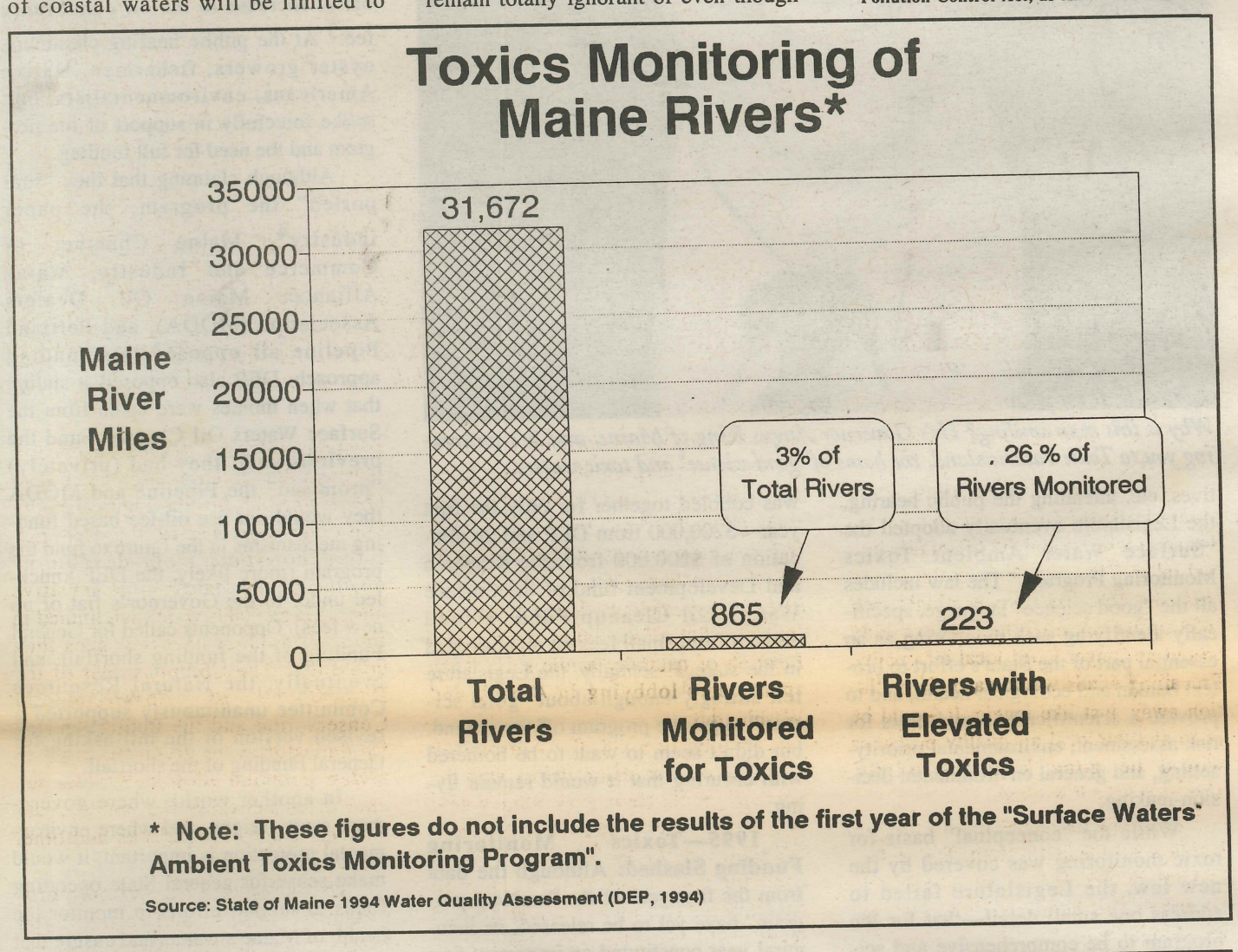
Footnotes

1 This figure does not include the results of the 1993 "Environmental Monitoring and Assessment Program" (EMAP) monitoring of Maine lakes or the results of the first year of the Surface Water Ambient Toxics Monitoring Program. The EMAP findings of elevated mercury levels in fish collected from a number of Maine lakes resulted in the issuance of consumption advisories for all lakes in the state. Results of organic toxics monitoring are expected in 1995.

2 The paper industry was a major opponent, characterizing the program as "an excuse for a bunch of people to go fishing." The paper industry traditionally contributes generously to the election campaigns of this committee. See the **Forum**, Mud Season 1995, page 7 for an accounting such contributions for the 1994 election.

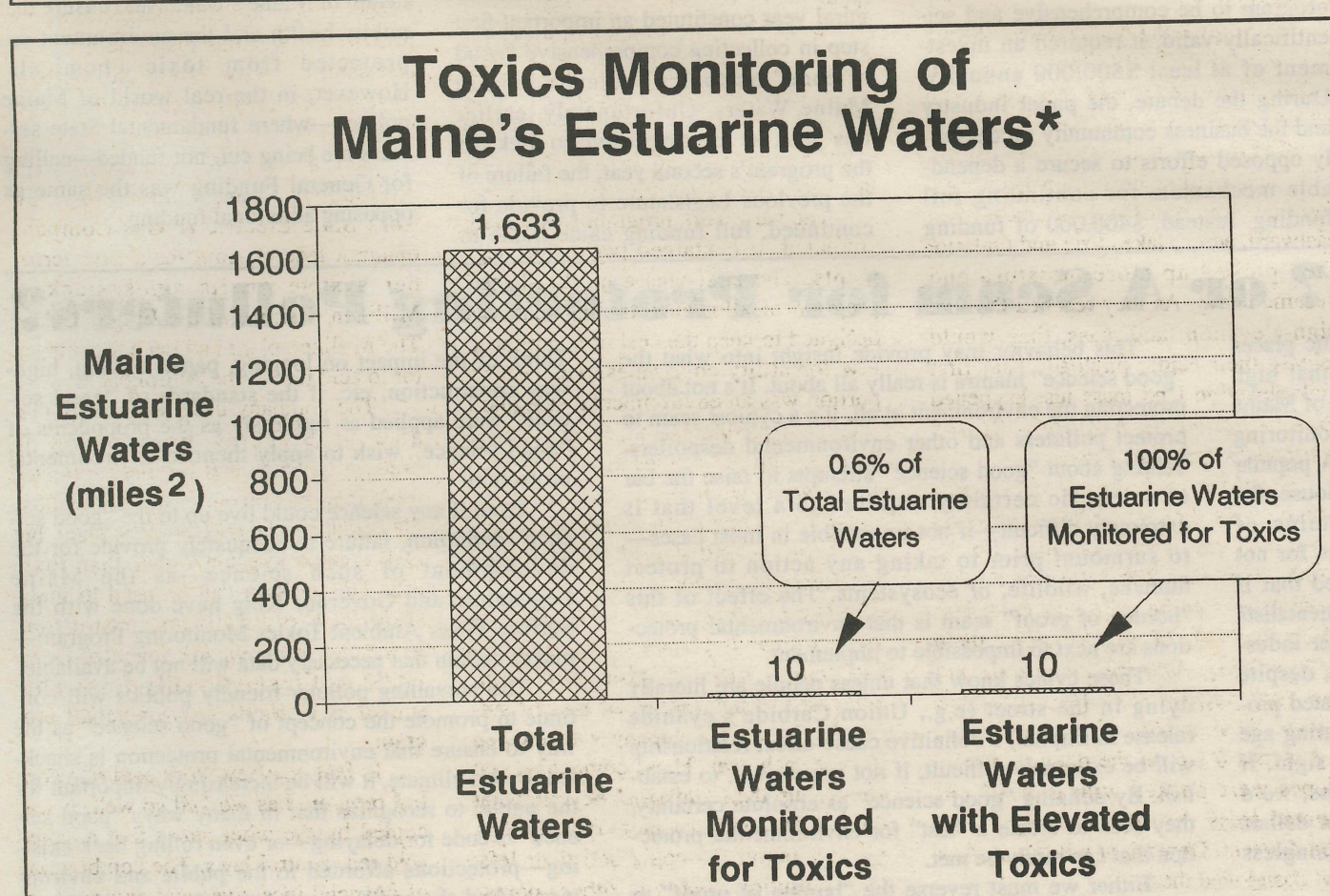
3 The logic behind this fee was that the fee increase would be "passed on" to consumers, including the public—through heating oil and gasoline purchases, industry using fuel oil (including paper companies), and Canadians—through increases in the price of oil moved through the Portland Pipeline. For the average consumer, the fee would have meant eight cents yearly at the gas pump and 14 cents per year for heating oil.

4 Actually, stating that the paper industry "supported" the program is an overstatement. While they maintained that they think monitoring is valuable, they did their best to portray the DEP as inept and unable to administer such a program.



* Note: These figures do not include the results of the first year of the "Surface Waters Ambient Toxics Monitoring Program".

Source: State of Maine 1994 Water Quality Assessment (DEP, 1994)



* Note: These figures do not include results of the first year of the "Surface Waters Ambient Toxics Monitoring Program".

Source: State of Maine 1994 Water Quality Assessment (DEP, 1994).

What You Can Do

Call or write the Governor Angus King, the Maine Legislature, and Maine's U.S. Senators and Representatives.

Gov. Angus King: Office of the Governor, State House Station #1, Augusta, ME 04333

Maine Senate: State House Station #3, Augusta, ME 04333; 1-800-423-6900;

Maine House: State House Station #3, Augusta, ME 04333; 1-800-423-2900;

Senator William S. Cohen, 322 Hart Senate Office Building, Washington, DC. 20510-1901; 202-224-2523.

Senator Olympia J. Snowe, 495 Russell Office Building, Washington, DC 20510-1902; 202-224-5344.

Representative John E. Baldacci, 1740 Longworth House Office Building, Washington, DC 20515-1901; 202-225-6306.

Representative James B. Longley, Jr., 226 Cannon House Office Building, Washington, DC 20515-; 202-225-6116.

Contact Groups That Work on Maine Water Quality Issues:

Natural Resources Council of Maine, 271 State St., Augusta, ME 04330; 207-622-3101;

Conservation Law Foundation, 119 Tillson Ave., Rockland, ME 04563; 207-594-8107;

RESTORE: The North Woods, 7 N. Chestnut St., Augusta, ME 04330; 207-626-5635.

Acid Rain Problem Won't Go Away in Adirondacks

by John Sheehan

Adirondack Lakes such as Windover Lake continue to be vulnerable to acid rain. Unless the EPA sets stringent regional pollution limits, the problem will worsen. Photo© Alan Cederstrom

Those who thought the acid rain problem facing New York's Adirondack Park ended with the revision of the Clean Air Act in 1990 should think again.

A recent U.S. Environmental Protection Agency study shows that the Adirondack Park will never recover under the current federal acid rain control program. In fact, the nation's first Park devoted to forest conservation will lose nearly half of its 2,800 lakes and ponds to airborne acidity within 40 years if the program is not corrected.

The EPA knows and understands this, and says it has the power to correct the problem. But EPA also says it won't act without a clear message from Congress and that Congress has not said how much of the Adirondacks should be protected or allowed to die.

Twenty years ago, acid rain was still not well understood. For some reason, trees were dying and lakes and streams were losing fish populations. A test of the waters in western Adirondack lakes and ponds showed an alarming result. The waters were acidic—far more acidic—than anyone expected. When the watersheds from which the water in the ponds drained were tested, they too showed signs of high acidity.

Many people saw this correlation but/and stopped thinking. They presumed the acidity in the water must be coming from the soil around the lakes. They presumed it had always been that way. They stopped looking for answers.

But some people, including the Adirondack Lakes Survey Corporation, went a little further in their investigation. If acidity was killing fish, then why was it happening now, in places where the fish populations had been robust just a decade or two before? For example, people had been taking thirty-pound lake trout and landlocked salmon from Big Moose Lake in Herkimer County.

By the 1970s, such species reached less than half that size. And other aquatic life was on the decline as well. The Adirondack ecosystem had been relatively stable since the last ice age—about 13,000 years ago. The acidity had been around just a few decades. More investigation was needed.

Local scientists began to measure the pH of rainfall, snow, sleet, fog and other forms of precipitation hitting the Adirondack region. They found that the rainfall in the Adirondacks could be 400 to 500 times as acidic as rainfall in other parts of the country.

They looked at the prevailing wind and weather patterns and saw that the weather systems carrying the tainted rain were coming from the Midwest. For the old-timers in the crowd, some things began to make sense.

They remembered that back in the 1940s and 1950s, cities throughout the midwest were plagued with terrible air pollution from burning the high-sulfur coal that was so easily mined in the Ohio Valley region. For the financial interests dependent upon cheap electricity, the coal was too convenient an energy source to discard—but increases in respiratory diseases and generally filthy ambient air forced Midwestern industrial concerns to do something. They hit upon what would be the perfect solution for the region.

The owners of the dirtiest power plants built brand new smokestacks. These stacks would be 200 feet high and taller. They would push the smoke from the coal-fired power plants well into upper air currents, where they would no longer harm local air quality. Prevailing winds would carry the pollution away, just like magic. It would be gone and the local air quality problems would be gone with the winds. Unfortunately, it worked.

Roughly three decades later, we would learn the awful truth. The smoke had not disappeared. It had not dissipated and drifted harmlessly into the sky, never to return.

The prevailing winds were carrying the smoke directly over the Great Lakes. There, the smoke combined with water vapor above the lakes. The sulfur isotopes in the clouds would turn to sulfuric acid with a little help from sunlight. As the acidified clouds moved eastward, across lakes Erie and Ontario, they picked up more moisture and became heavy. As they reached the first high-elevation land mass, they would release their acidic payload. That first high-elevation land mass just happened to be the western slopes of the Adirondack mountain range.

Big Moose Lake, in Herkimer County, was directly under that natural flight path. But it was not alone. By the 1980s, more than 200 Adirondack lakes were known to be critically acidified. More than half of all life within them had perished. And the lakes were not the only natural features suffering. Above them, stands of high-elevation red spruce were on the decline. Entire slopes were pocked with gnarled and stunted trees. Needles were sparse or non-existent. Dependent wildlife had all but abandoned them.

In the 1970s and early 1980s, the Adirondack Council, Natural Resources Defense Council and a variety of other organizations began working with local scientists to bring attention to the growing acid rain problem. The organizations put staff people on the road, talking with civic groups and policy makers about the damage acid rain was doing. They sent speakers to debate those who insisted that acidic lakes were just a function of naturally acidic soils. They spent years lobbying in Albany and Washington.

Finally, in 1984, the Adirondack Park saw its first major victory with the passage of the New York State's acid rain control law—the first in the nation. We knew that if New York was going to convince other areas of the country to cut back on acid rain, it would have to set an example for the other states.

New York would have to make the first sacrifice and show that an acid rain program could make a difference. After New York, Minnesota, Vermont and several other states followed suit—the last being Maryland in 1989.

The New York program was widely emulated. It contained two major segments. The first was a market-based program of allowance trading that was designed to keep the cost of compliance low for utility companies. The second portion was an environmental safeguard called a deposition standard, or regional pollution limit. Utilities upwind of sensitive areas such as the Adirondacks, Catskills, Hudson Highlands and eastern Long Island would be protected regardless of market forces.

The market-based trading program was unique. It presented each utility company with a pollution cap, expressed in the number of tons of sulfur dioxide each company was allowed to emit each year. Those companies that cleaned up their emissions beyond what the law required—or more quickly than the law required—could sell their left-over pollution credits to other companies that wanted to avoid or delay cleanup.

Of course, it would only take one company refusing to clean up near a sensitive area to cause prolonged damage downwind. So, the regional pollution limits were enacted to prevent pollution hot-spots from developing upwind of the state's most sensitive areas. Those plants were then limited in the total number of allowances they could use. The Commissioner of the Department of Environmental Conservation and the Public Service Commission were given the right to review pollution allowance trades and alter or cancel those that could cause damage in the Adirondacks and other designated sensitive areas.

That safeguard has not only protected the Catskills and eastern Long Island from continued damage since the mid-1980s, but has also caused some companies upwind of the Adirondacks to reach for creative solutions, rather than excuses.

In a recent example, the Adirondack Council helped the New York State Electric & Gas Company obtain a federal grant for a new scrubber system on its smokestack at Milliken Station, in the Finger Lakes. The Milliken plant had been a contributor to acid rain in the Adirondacks.

The company used technology created at Stebbins Engineering in Watertown, N.Y. that not only removed more than 95 percent of the sulfur dioxide created at the coal-burning plant, but also creates gypsum rather than toxic ash. The gypsum can be used to make sheet rock (dry wall) for construction. In the end, the company benefited financially and reputationally from what started as a strictly environmental program.

In fact, the New York acid rain control program has worked so well, it was copied by the other states that adopted acid rain control laws. The combination of financial incentives and environmental safeguards helped stem a quickly rising tide of sulfuric air pollution.

However—and this is a big howev-

er—the EPA only copied half of the New York program after the Clean Air Act was amended in 1990. When EPA unveiled its program in 1992, EPA officials boasted that it would end acidity in Adirondack lakes and streams. That was not true.

The program adopted by EPA in response to Congress' actions was a grave disappointment. As one might guess, EPA adopted the financial incentive program, but not the environmental safeguard of a regional pollution limit.

As a result, the Adirondack Park and its 2,800 lakes and ponds and 2.4 million acres of public forest preserve are granted no better protection under the program than Newark, New Jersey, or downtown Los Angeles.

With undeniable handwriting already on the wall, the Adirondack Council wrote to EPA and noted that a regional pollution limit was not only needed, but EPA had been required by Congress to investigate establishing a deposition standard as part of the Clean Air Act amendments.

In March 1993, the Adirondack Council and NRDC sued EPA in U.S. District Court, Washington, D.C.

The Council and NRDC argued that EPA had provided utilities with too many pollution allowances. In 1994, the court agreed with the environmental organizations and removed more than 800,000 allowances per year (for five years) from the market, each representing the right to emit one ton of sulfur dioxide pollution. Overnight, roughly 4 million tons of sulfur dioxide was off-limits to polluters.

But it was not enough.

The Council, the NYS Dept. of Environmental Conservation and NRDC also argued that EPA had not done what Congress required when it told EPA to investigate and report back on the need for a regional pollution limit to protect the Adirondack Park and other sensitive areas.

They enlisted the help of Watertown Congressman John M. McHugh, a first-term Republican, who wrote a letter in 1993 demanding an explanation from EPA regarding its inability to produce the information Congress had required. EPA also received letters from several other members of the New York Congressional delegation.

Following the letters, EPA agreed to complete the study by January of 1995 and report back to Congress.

In late February of this year, a draft of the study was finally ready for review. Out of nearly 400 pages of financial arguments against protecting places such as the Adirondacks, several salient ideas were expressed. It took a very fine toothed comb to find them.

Essentially, EPA now grudgingly agrees with the Adirondack Council's and NRDC's assessment that the Adirondacks will continue to lose lakes to acid rain under the current program. Of the 350-plus lakes and ponds now known to be critically acidified, not one is expected to get better.

In fact, if the current federal program is not altered, roughly 1,200 lakes or more could be virtually lifeless within 40 years, according to EPA's own estimate.

The EPA report explains: because there are so many other states polluting the Adirondacks, it is now expected to receive only a 39 percent reduction in sulfur-dioxide pollution as a result of the EPA program. The rest of the country is expecting a 50 percent reduction, which should be enough to prevent further damage and allow many places to recover.

EPA estimates that it would taken an additional 40 to 50 percent reduction (a total of 79 to 89 percent) from electric utility companies in Michigan, Indiana, Ohio, Illinois, Kentucky, Virginia, West Virginia and North Carolina—just to keep any more lakes from dying.

Even under that scenario, the Adirondacks still would not get any better.

It will take similar reductions from all industry in the Ohio Valley area—not just utilities—for the Adirondack Park to see any improvement.

Ironically, EPA notes in the report that it already has the power to require all of the pollution reductions needed to protect the Adirondacks from further harm. Today, or tomorrow, it could require the pollution reductions needed to halt the destruction.

But EPA has refused to exercise its authority without further guidance from Congress. Meanwhile, it is unclear what Congress intends to do about the continuing problem in the Adirondacks. Will Midwestern representatives risk their artificially low electric rates to help the Adirondack Park?

However, the acid rain issue has ignited a maelstrom of angst from even the most conservative of New York's lawmakers. The continued damage to the Adirondack environment and economy has been a topic of heated discussion for the past several months.

Earlier this year, both the Republican-controlled NYS Senate and Democrat-controlled Assembly passed resolutions calling on Congress and the EPA to better protect the Adirondacks through a regional pollution limit. Some went even further, with Sen. William Sears, R-Forestport, calling for an end to all pollution allowance trading. He noted that the low price of the allowances was causing the Midwest to buy them, not sell them, as EPA had predicted. If used, they would continue the barrage of pollution in the Adirondacks, he said.

Assembly EnCon Committee Chairman Richard Brodsky, D-Scarsdale, sponsored a bill that would give New York environmental officials the right to alter or block out-of-state trades by New York's utilities to regions that cause acid rain in the Adirondacks since those trades could cause more pollution here.

In July, U.S. Rep. Gerald Solomon, R-Glens Falls, Chairman of the House Rules Committee, spearheaded a letter from 32 of 33 members of the New York Congressional delegation calling on EPA to take action to protect the Adirondacks. Solomon does not embrace many environmental causes. And, no one could remember another instance of the delegation writing a nearly unanimous letter on an environmental issue. Only Republican Bill Paxon of Williamsville refused to sign.

Between now and November, when EPA is expected to issue its final report to Congress, much must be done to convince policy-makers in Washington to take responsibility for the acid rain problem in the Adirondack Park.

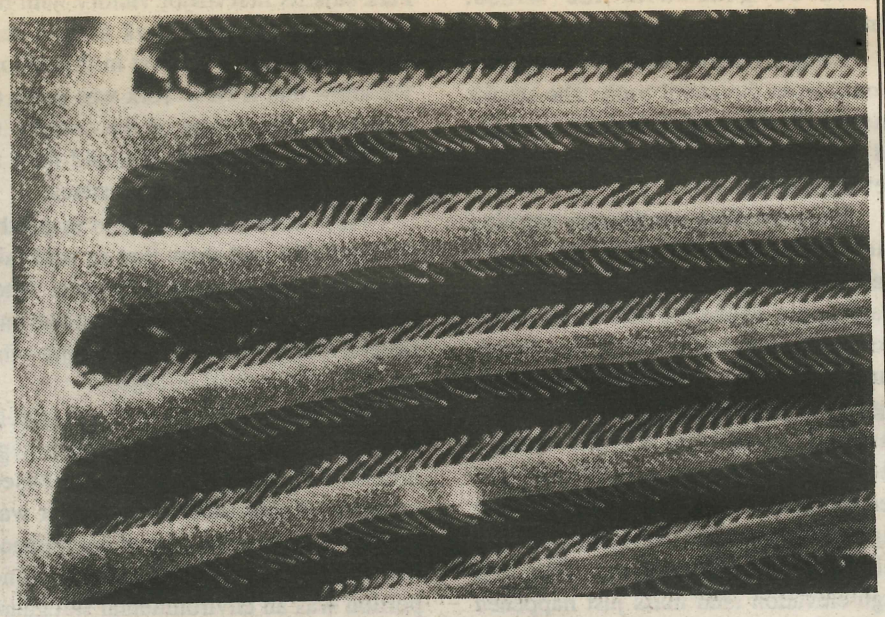
Environmentalists from all points of the political spectrum must show them that acid rain presents an economic hardship as well as an environmental one. The hotels and resorts that once beckoned fishing enthusiasts to Big Moose Lake are struggling for survival now. So are countless others around the Park. Acid rain hurts tourism, depletes farm fields of nutrients, scars public

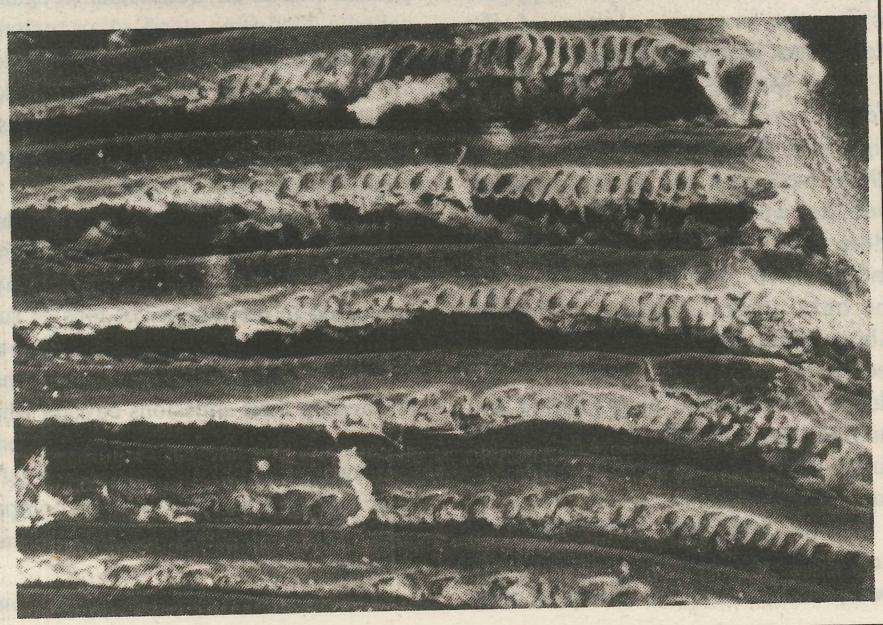
Continued on next page

5 Adk Lakes Given Fish Advisories for Mercury

As a result of constant acidification of certain watersheds in the Adirondack Park from acid precipitation, heavy metals have been leaching into the water of lakes and ponds from naturally occurring places in soil, rock and plant matter.

When aluminum breaks free, it can attach itself to the gills of fish and other water-breathers, slowly suffocating its victims. The upper left photo shows normal fish gills; the lower left shows fish gills damaged by acid waters. (Photos by Dr. Carl Schofield)





In the case of mercury, the New York State Health Department has taken action to warn people about the hazards of poisoning as well. Five Adirondack lakes were added to the NYS Fishing Regulations health advisory this year. In each case, mercury has become so prevalent in certain species (usually the yellow perch that are the only fish hearty enough to withstand the acidity) that no more than one meal per month is recommended for healthy adults. Children and women of child-bearing age are asked to avoid eating fish from those lakes altogether.

The lakes include Big Moose Lake, Moshier Reservoir and Sunday Lake in Herkimer County; and Francis Lake and Halfmoon Lake in Lewis County.

—John Sheehan

6th Grade Students Fight Acid Rain

Adversity sometimes brings out the best in people, and children are no exception.

At the Glens Falls Middle School, just south of the Adirondack Park, sixth-grade students became alarmed when they measured the pH of rainfall in their town and found it was highly acidic. As part of a class project on acid rain, they decided to help in the effort to curb pollution.

Through their teachers, the students learned that there is a federal program that allows utility companies to buy and sell the rights to sulfur-dioxide pollution, which is the primary cause of acid rain. Because the price was so low, they decided to try to buy up some of the allowances and keep them off the market, so they could never be used.

The class of 11- and 12-year-olds raised more than $3,100 and sent a representative to the U.S. Environmental Protection Agency auction at the Chicago board of Trade in March. There, the students purchased the rights to 21 tons of sulfur dioxide.

Their purchase ranked twelfth among all 25 bidders at the auction, placing them ahead of one utility and a coal supplier, as well as several colleges and law schools that had the same idea as the middle school.

—John Sheehan

Governor Pataki Appoints Three New Commissioners to Park Agency

by John Sheehan

Gov. George Pataki's influence on the Adirondack Park Agency has been a series of mixed signals so far, with some good and some bad trends for the environment.

His treatment of the APA's budget was at first brutal, then conciliatory. His appointment to the chairmanship of the land-use Agency's board of commissioners has no clear environmental record, but did disavow a previous relationship with a radical, right-wing organization.

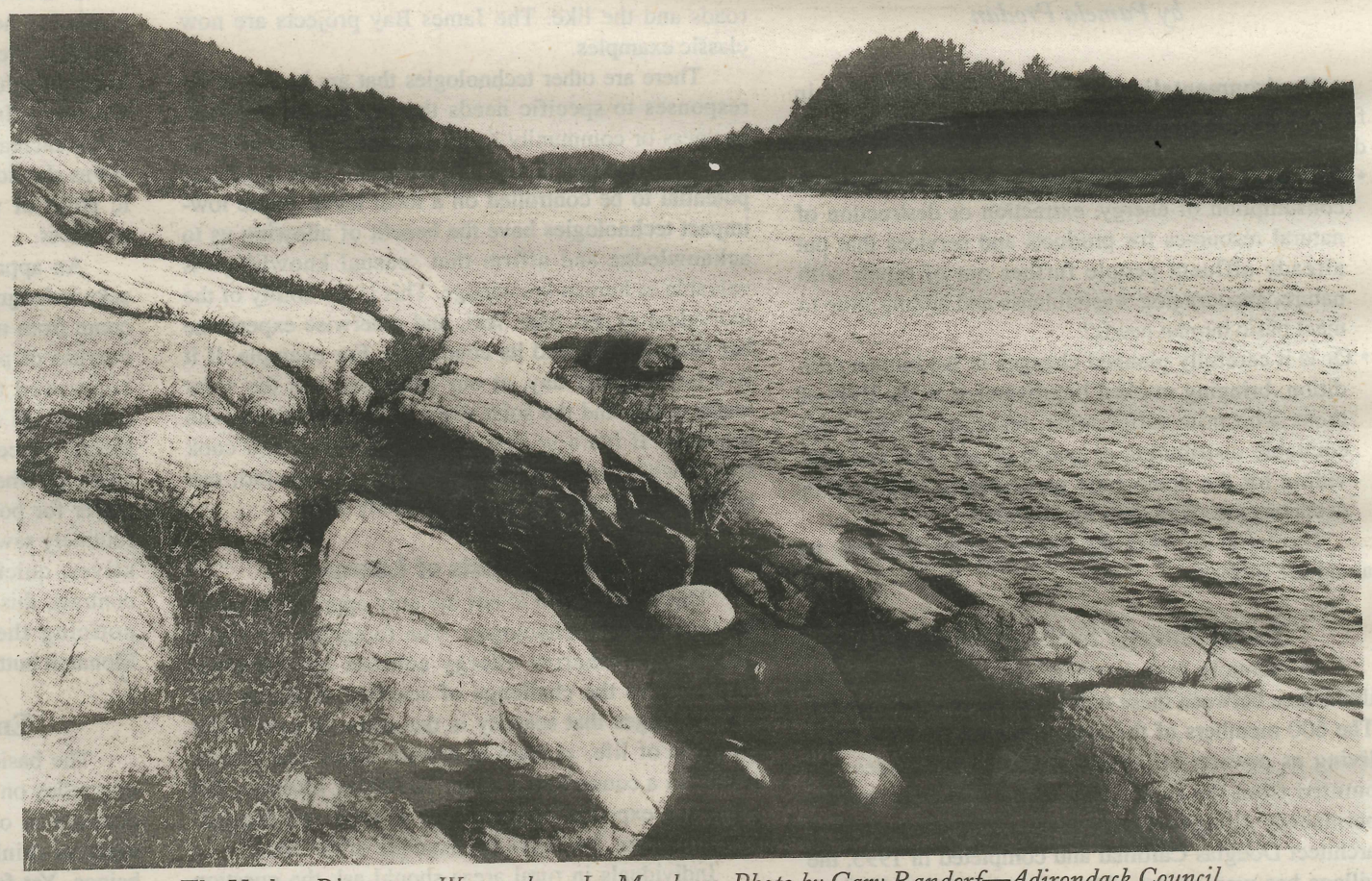
At the beginning of the 1995 Legislative session in January, the Governor said he planned to support the Adirondack Park Agency and its goals, despite worries that he would try to loosen the APA regulatory grip on private development in the six-million-acre, part-public, part-private Adirondack Park.

However, his initial budget proposal contained budget cuts sufficient to eliminate 11 of the 64 jobs at the APA—a massive cut far beyond what other agencies had experienced. Deep cuts were also proposed for the Dept. of Environmental Conservation.

During the following month, environmental and hunting/fishing organizations pooled their influence and convinced the Pataki Administration to scale back the cuts considerably. The cuts at DEC were in large part restored, and the Park Agency's expected job losses fell to two (with one vacant position also eliminated from the 1995-96 budget.)

In late June, Pataki chose Clinton County Republican Chairman Gregory Campbell, an investment broker with an office in Plattsburgh and his home just inside the Adirondack Park boundary in Keesville, to serve as chairman of the APA. Campbell told the **Daily Gazette** of Schenectady that he was proud to have helped prevent the creation of new regulations to protect the Lake Champlain basin as part of the New York/Vermont Lake Champlain Management Conference. In fact, he expressed a preference for "voluntary regulation."

He had also been a member of the Adirondack Conservation Council, a hunting/fishing group that had called on the NYS Legislature to eliminate all APA funding while Campbell was still on the Board of Directors. It also called for the Dept. of Environmental Conservation to be folded into the Dept. of Economic Development and asked that all lawyers at the DEC be fired.



The Hudson River near Warrensburg Ice Meadows. Photo by Gary Randorf—Adirondack Council

At his Senate committee confirmation hearings, Campbell distanced himself from the group and its policies, saying those proposals were the reason he had resigned from the Adirondack Conservation Council earlier this year. He also produced letters for the Residents Committee to Protect the Adirondacks showing he had formally complained that such radical proposals were destroying the Conservation Council's reputation in the Legislature and elsewhere.

Also appointed to the board were:

- Eleanor Brown of Schenectady, a long-time member of the Adirondack Mountain Club and author of a book on the Adirondack Forest Preserve.
- Katherine O. Roberts, of Pataki's hometown of Garrison. She is Executive Director of the Open Space Institute, a land-protection organization that has worked in conjunction with the Nature Conservancy to protect thousands of acres in the Adirondacks.

Replaced on the Board of Commissioners were:

- Peter S. Paine, Jr., Manhattan, a banker and attorney who had been a commissioner since the APA was created in 1971 and had been a member of Gov. Nelson Rockefeller's Study Commission on the Future of the Adirondacks, which recommended the creation of the APA to the Legislature.
- Chairman John R. Collins, Jr., of Blue Mountain Lake, a fifth-generation Adirondacker who led the local planning effort in his own hometown before joining the APA. He spearheaded a recent effort to reform the APA's public image and helped make its more efficient and responsive to applicants.
- Elizabeth Thorndike, of Rochester, who started the Public Issues Forum that helped to diffuse much of the anger and frustration felt by competing factions in the debate over the future of the Park's natural resources by giving everyone a chance to air their point of view before the commissioners each month.

All three were consistent voices of reason and environmental protection on the APA board. Together, they represent more than 50 years of Adirondack land-use policy and planning experience.

Acid Rain

Continued from preceding page

buildings and monuments and worsens respiratory problems in every animal that uses lungs or gills to breathe.

Otherwise—no matter how well New Yorkers care for the Adirondacks—the largest park outside Alaska will continue to be polluted from afar.

What You Can Do: Those who wish to join the effort to convince Congress and the EPA to better protect the Adirondacks can join the Adirondack Council and become part of the Council's growing Activist Network. Membership is $25 per year. Network Coordinator Lisa Genier of the Adirondack Council's Albany office can keep you up to date on the issues through Action Alerts and provide the information you need to help convince policymakers to protect the Park. For more information, call the Council at 1-800-842-PARK.

Wolves Return to Maine

Well, at least one wolf will be visiting Maine this fall. Koani, a 100-pound black wolf with piercing yellow eyes, will be making the rounds in Maine accompanied by her friends, Pat Tucker, a wildlife biologist, Bruce Weide, a storyteller/writer, and Indy, "the cutest dog in the world." The Wild Sentry team will present their northern Rockies Ambassador Wolf Program in a number of communities. The program combines wildlife biology, stories, and slides to explore cultural attitudes toward the wolf and its natural history and behavior.

Wild Sentry will offer programs:

September 17	State Theater, Portland
September 18-19	National Association of Environmental Educators Conference, Portland
September 22-23	Common Ground Country Fair, Windsor
September 27	Rangeley Lakes Regional School, Rangeley
October 12	American Museum of Natural History, New York City
October 22	Peabody Museum, Yale University, New Haven, CT

Other programs will probably be offered in Maine in Freeport, Bar Harbor, East Millinocket, and Augusta, as well as other East Coast states and the Adirondack Park area. For details, contact: Jym St. Pierre, RESTORE: The North Woods, (207) 626-5635, or Adirondack Wolf Project, 1-800-310-WILD.

The Wild Sentry events in Maine are sponsored by Patagonia, Inc., and co-sponsored by RESTORE: The North Woods, Maine Wolf Coalition, and Sierra Club Maine Chapter.

Maine Woods Watch

Continued from page 4

a cool million dollars to the U.S. Fish & Wildlife Service. With a lot of help from several land trusts, the Fish & Wildlife Service also added 348 acres worth of coastal islands and salt marsh to the Petit Manan NWR. Federal Fish & Wildlife officials are appraising more than a dozen tracts for acquisition with Migratory Bird Funds at Rachel Carson NWR. After years of protest by Maine Greens and Earth First!ers, Timberlands, Inc. has agreed to forego its remaining cutting rights in Mt. Blue State Park. Most of the necessary $300,000 has been raised to buy a two-mile undeveloped corridor along Grand Lake Stream, a legendary landlocked salmon run. Georgia-Pacific wanted to subdivide the area, but now is willing to sell. The Maine Legislature restructured funding from loon license plate sales to funnel more money to state parks and wildlife. The Legislature also enacted the Outdoor Heritage Fund lottery game which will tap petty gamblers for new conservation cash. Finally, Governor King issued an executive order setting up a new committee charged with establishing statewide public land acquisition priorities by next June.

Jym St. Pierre, RESTORE: The North Woods, 7 North Chestnut Street, Augusta, ME 04330, (207) 626-5635.

Appropriate Development and Technology & the Energy Consumer's Role

by Pamela Prodan

Environmentalists are accused of not being in favor of development. But it just depends on how development is defined.

- Is it profit-motivated activity relying on increased consumption of energy, extraction or destruction of natural resources for products and services that put already affluent people further out of touch with nature, encouraging wastefulness and adding little to meet basic human needs?
- Or is it carefully planned changes in the human condition, bringing marked improvement in the lives of those who now suffer most, resulting in the more equitable distribution of goods or services and providing for the democratic participation of people in decisions affecting their own future?

The latter is what the world needs. It needs to avoid the former.

Local Energy Self-Sufficiency

An example from northern Quebec illustrates the difference between these two concepts of development. The 600 members of the Ouje-Bougoumou Cree tribe, living as poverty-stricken squatters for decades and omitted from the James Bay agreement, now have a permanent village of their own. Designed by native architect Douglas Cardinal and completed in 1993, the village has won an award by a special United Nations committee that selected 50 communities around the world as best exemplifying United Nations objectives.

A key feature of the Cree village is its centralized district heating system. The Ouje-Bougoumou wanted nothing to do with electricity produced by Hydro-Quebec's massive hydroelectric project that flooded vast areas of their homeland and they wanted to control the energy source themselves. They decided to build a state-of-the-art automated wood-fired boiler fueled by abundant waste sawdust from nearby mills.

Underground pipes distribute hot water to radiators in the homes, a school, a church, the town hall, a clinic and several commercial buildings. Temperature is controlled by thermostats on the radiators. The system also provides hot water for washing and bathing.

The end result is lower overall energy consumption than would have resulted from the installment of electric baseboard and individual water heaters. The community has the ability to control cost increases, and dollars stay in the community. More smaller community-based plants like this would help change the focus away from massive centrally controlled power sources to local energy self-sufficiency. They should be encouraged.[1]

Low-Impact Technologies

Notwithstanding the Ouje-Bougoumou model, why is it that people who discern that a higher level of consumption is not the way to improve the general quality of human life are accused of standing in the way of development? Why don't we discuss more positive alternatives to negative, wasteful and unsustainable practices? The answer is, because we live in a materialist, consumer culture in which is embedded the premise that not consuming as much as usual is seen as self-righteous, or worse, a sign of deprivation. However, energy production and use have environmental impacts greater than any other development in the history of civilization and we have to deal with that.

Questions of need, scale, democracy, and domination of nature all arise in the debate about energy development and consumption. What can environmentalists be in favor of? One of the most important steps is to differentiate between technologies.

Some technologies have the potential for large-scale impacts or unknown impacts. They represent an approach that assumes there are no limits to human knowledge, and that we can know and control the impacts of any project. Since limited studies rarely show harm, these technologies may be scientifically justified in cost-benefit analyses. Driven by economic growth, or more typically, profit for corporations, mega-projects using these technologies rely on increasing amounts of resource extraction for machinery, roads and the like. The James Bay projects are now classic examples.

There are other technologies that are human-scale responses to specific needs that a household, small business or community can implement. Some of these technologies have lower impacts and have a greater potential to be controlled on a local level. These low-impact technologies have the benefit of allowing us to acknowledge and affirm that sensual knowledge is valuable as human knowledge. This is the ability of the individual to see, hear, feel, and otherwise experience her surroundings and its conditions. For example, if it is a hot summer day, at our house we use the solar water heater and the solar oven for the energy the sun provides. If it's a winter day, we use the wood cook stove, which also heats the house. Year-round, our solar battery charger is set up on sunny days.

Energy Costs of Lawns

The Third World is not the only appropriate place for low-impact technologies. The foregoing examples of using alternative energy sources are personal responses to the challenge of scarcity. A vision that acknowledges that scarcity is the norm, in practically all areas of life, at least in certain times and places, results in a conservation ethic. To further illustrate this point and expound on the issues of need and domination for nature, I will use the example of the lawn.

Individuals in rural areas should ask the question whether it is necessary to have a large, well-mowed lawn? The invention of the power mower and then the riding lawnmower has made this energy consumptive practice possible on a widespread scale. As farms were lost, and the countryside became suburbanized the large lawn crept in.

Although a lawnmower is an example of technology in the hands of the individual, its overuse illustrates the problem of failing to recognize scarcity and confusing needs with desires. While the lawn is supposed to create the image of pleasure and enjoyment around the house and garden, it does not create the perfect home. In inappropriate places such as where it will cause increased phosphorus runoff into a water body, lawns should be eliminated. Likewise, from an aesthetic point of view, blank, vast expanses of lawns are pointless.

An appreciation of earthly surroundings and an acknowledgment that emotional fulfillment should not come from machines would also help to deal with the overuse of power mowers. Most people have become convinced that weeds are bad. Constant mowing destroys all the blooming flowers from dandelions to asters. Since I started beekeeping, I am much more aware of when flowers bloom and which ones the bees prefer for pollen and honey. With regret, this spring I routinely saw flower-filled lawns, quite lovely in themselves, quickly reduced to dull green expanses. By contrast, this summer, in our field, within an hour of noticing the milkweed in bloom, I saw the first Monarch butterfly of the season.

Energy Consumers' Choices

The basic learning process I have just described, that relies on direct observation of nature, rather than domination of nature, is fundamental to our development as thinking, caring and understanding human beings. Yet for the most part, it has been relegated to children of pre-school age and specialists. Many people would need to reorder their thinking and apply new standards for progress to have a framework for thought that values sensual and emotional knowledge and that prefers the diversity of a meadow over an expanse of monotonous lawn.

Obviously, choices in the way we live have an impact on energy consumption. If we really are going to head into an era of government deregulation, individual and community consumption choices will play a large part in how much and what type of development takes place. Consumers will also need to look beyond labels like "renewable" and "least-cost" because, by themselves, these labels say little about scarcity and need. The question is whether consumers are really up for this?

Small things do add up. Without giving up electric appliances altogether, it is possible to routinely conserve electric energy. For example, for three months' worth of household power, we just paid the local utility only $44.80 total, or less than 50 cents a day. We chose to selectively use available technology to reduce our consumption by buying the most efficient freezer we could find and switching nearly all of our lights to compact fluorescents a few years ago. Also, we simply do not have consumptive appliances like electric stove, clothes dryer or water heater.

We garden extensively, although it consumes much time and forces us to forego some other activities during the growing season. We produce virtually all the vegetables, dry beans and dairy products we consume, and also sell some of these products. The ecological benefits, aside from our own improved health and peace of mind in knowing where our food comes from and what is in it, include soil improvement and energy savings in processing, refrigeration and transportation. In terms of overall energy use, I am convinced that this approach lowers consumption.

Are other people willing to make similar significant changes in their lives to reduce their energy consumption? I don't have the answer. For all people to reconnect personally with the sources of waste and consumption, their whole hierarchy of values would seem to have to change. Knowing that the world has changed immensely to get to where we are today and that it will change again, but not knowing how it will change, makes me somewhat uneasy.

[1] Information taken from Renewables Are Ready, by Nancy Cole and P.J. Skerrett (Chelsea Green Publishing Co. 1995); and, "Quebec Cree community wins award from United Nations." **The Globe and Mail**, June 20, 1995, p. A1.

Pamela Prodan is a lawyer living in Wilton, Maine. She works on sustainable energy issues and is founder of Friends of the Boundary Mountains.

NIGHT AND DAY

—for Antler

The grouse gives me
less than a glimpse
as it explodes
from the tangle of
low hemlock branches.
Tiny dry cones whisper
in the silence
sifting to the ground.

The drumming is continual,
sounding through the bones
and bedrock of the woods,
seeping through walls and foundations.

Horned owl breaks
the winter night
with a cry that
slips deep into
my dreams.
After the sound
a vast silence
hangs above the woods,
floating and listening.

Waking up, I feel
my life which has gone out
into the night
returns and
settles back
to drum again.

—Stephen Lewandowski

Kenetech Windpower Project Can Produce Overall Environmental Benefits

By Daniel L. Sosland

The process used at LURC to review the New England Wind Energy Station ("NEWES") application by Kenetech Windpower, Inc. hasn't been perfect and is subject to deserved criticism. But the appearance of interference by the King Administration with LURC does not detract from the merits of the project, and it upon the merits that this project, or any other, should be judged.

Maine's Environment Will Benefit From the Project

A dramatic change is needed in New England's energy mix, from one dominated by coal and other non-renewable sources, to one in which clean, renewable energy and conservation programs constitute a large portion of our power mix. The range of air pollutants emitted and transported in Maine from fossil fuel plants includes CO2, SO2, NOx, toxics and metals such as mercury, lead and cadmium and other damaging pollutants. These pollutants are affecting Maine air quality and terrestrial life; for example, the Maine Departments of Human Services and Environmental Protection have issued a health advisory warning pregnant women, nursing mothers and children under the age of eight not to eat fish in Maine lakes due to mercury contamination. The likely source of mercury contamination is atmospheric deposition from fossil fuel power plant emissions in southern New England and New York.

In addition to human health concerns, there is cause for concern about the impacts of detrimental air emissions on the health of the Northern Forest. These concerns include: impacts of nitrogen deposition, trace metals, forest growth impacts, reduced cation deposition, and climate change. High mountain areas are particularly at risk from these air depositions.

Maine will benefit from the project, even in the current climate of surplus electric power and even though there no specific fossil fuel plant that will be completely closed as a result of the NEWES. With the exception of Maine Public Service Company, Maine's electric utilities are connected to the New England Power Pool ("NEPOOL"), a centralized power pool that decides which power plants in the region will operate on a given day or hour. Because NEPOOL aggregates demand from six New England states, the location where demand arises, and the location of the power source, generally does not dictate dispatch decisions. Because Maine is part of NEPOOL, Maine sends power to and receives power from out of state every day.

It is therefore not true to say that the power from the project will benefit southern New England at Maine's expense. Power produced by the NEWES will likely be used in Maine. When and if it is not, it will still benefit Maine by reducing fossil fuel emissions from plants downwind of Maine—a benefit the debate over car testing would indicate is very much in Maine's interest.

Some believe that need for the project cannot exist in the context of surplus electrical generating capacity in the region. This view ignores the current need to displace current fossil fuel generation, which arises even in the context of surplus electrical generation, and also ignores the fact that new power sources will be built. Current projections demonstrate that NEPOOL will need new power sources around 1998.

Typically, it takes five years to plan, site and construct a new power plant. This is occurring now. Massachusetts recently approved a new coal plant. Central Maine Power Company has stated that it will need new power supply sources by 2000. In fact, much current capacity could be retired early, and such unscheduled retirements will likely be more important than growth in electrical demand in determining when new supply sources are needed.

As CLF (Conservation Law Foundation) pointed out in testimony before LURC over a year ago, several of New England's nuclear power plants may face early retirement as these plants may become uneconomic to run. The shutdown of Maine Yankee this year is an example of what New England is facing. If New England's older nuclear power plants are retired ten years early, the need to replace 3600 megawatts of capacity would arise between 1997 and 2002. Fossil fuel plants may also face early retirement to meet ozone smog attainment requirements in the federal Clean Air Act. A large portion of New England's older coal plants may close by 2005.

The fragility of the region's nuclear and coal plants could create the need for new supply to replace as much as 25% of NEPOOL's current installed capacity. Conservation cannot replace plants taken off line. Due to the advocacy of CLF and others, New England has become a world leader in the percent of utility spending devoted to conservation. Conservation spending can and should increase, but there is simply no technical way for conservation to provide sufficient power to meet demand in New England. Utility planners will fill that need with additional fossil fuel plants, causing New England's electricity system to become even less sustainable and likely more environmentally damaging than it is today.

The Environmental Intervenor Settlement Agreement

Notwithstanding their acknowledgment of the benefits of windpower, CLF, Appalachian Mountain Club, Maine Audubon and Natural Resources Council of Maine engaged in a thorough and detailed assessment of all issues raised by the Kenetech application before agreeing to support the project. We wanted to ensure that good science and adequate data were available or would be developed if not available. CLF alone spent several hundred hours of staff time reviewing environmental issues associated with the proposal.

Our review included potential impacts to raptors and passerines; soil stability and erosion control; optimal road surface materials; access and gating; minimizing construction impacts; visual impacts; and assessment of natural resource and recreation characteristics. We spoke with experts from around the country on the technical viability of Kenetech's wind turbines, receiving only positive information. We reviewed road and turbine maintenance plans; we obtained financial information on Kenetech Corporation. We poured through piles of documents and supporting reports. We held extensive discussions with various state agency experts involved in the application, particularly LURC staff, to ascertain issues of concern to staff. We spent nearly a year discussing issues of concern with the applicant. When needed, we brought in outside experts, such as some of the country's leading ornithologists.

As a result, we determined that properly conditioned and monitored, the project raised no undue adverse impacts. The agreement focused on those major issues that had been raised as a result of our review, including issues that appeared to go beyond the scope of state regulatory authority.

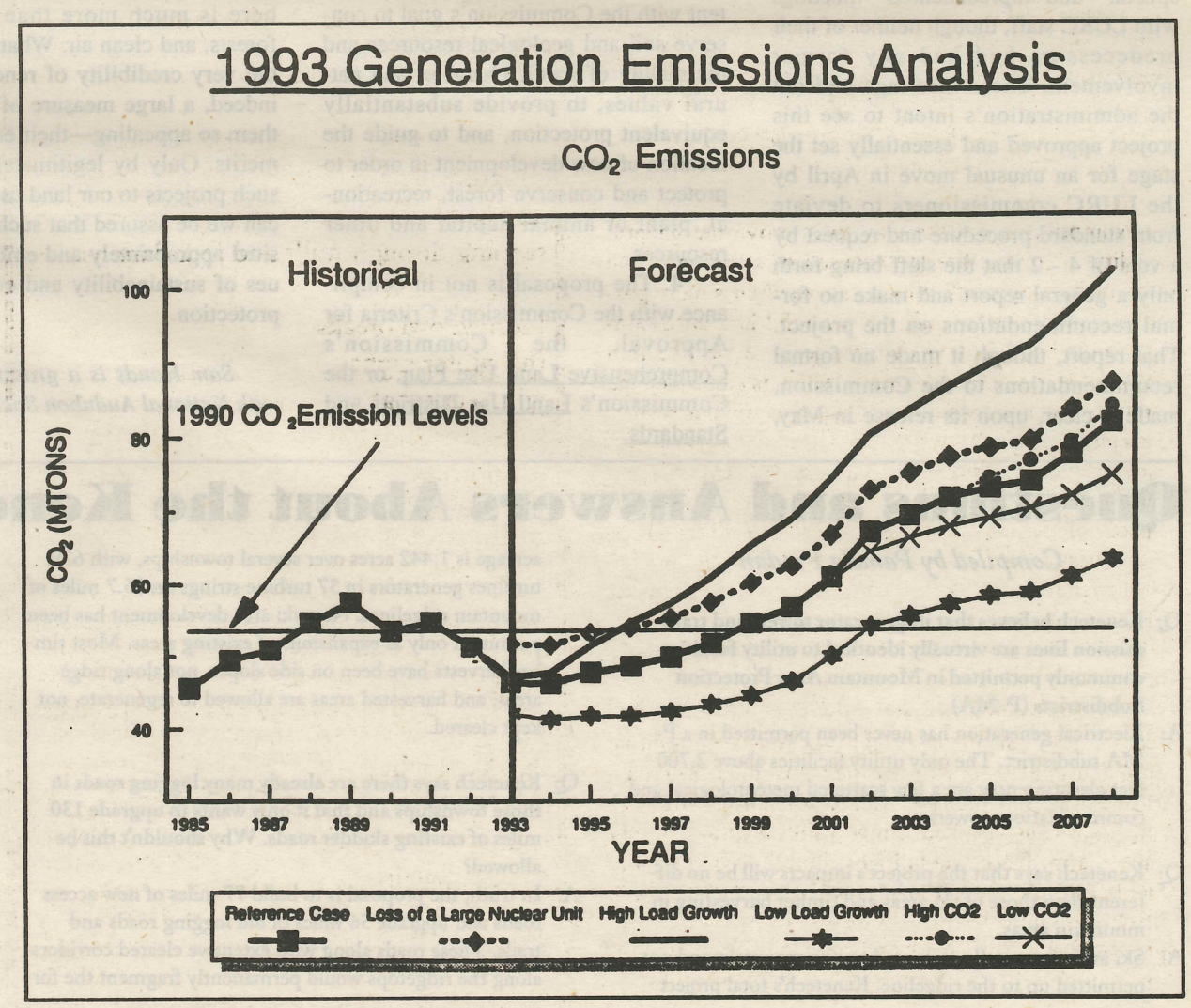
The agreement stipulates that Kenetech provide $50,000 a year for a three year golden eagle study negotiated by the Department of Inland Fisheries and Wildlife; conduct pre-construction studies of bird migration and post-construction studies of bird mortality; implement all necessary measures to limit or avoid avian mortality; provide $50,000 for a study of appropriate windpower sites in Maine; establish a $300,000 land acquisition fund; and remove all above ground structures if the project is abandoned. Careful, post-construction monitoring will be performed by our groups. If any evidence of undue environmental impacts develops, such as from studies required by our agreement, then the groups certainly will be the first to raise the issue. No such evidence exists to date.

Not all of the issues we reviewed were included in the agreement, but it is an outright distortion for anyone to assert that we did not review all environmental impacts. The reason we did not include soils studies and erosion control in the agreement is that, in discussing the issue with LURC staff and reviewing the testimony of state experts, no major impact was identified. Rather, the view was that appropriate permit conditions would avoid soils impacts.

Moreover, it is important to note that the LURC process has two phases: the application for preliminary approval, which is pending before LURC, and a second phase for final approval if preliminary permits are issued. Because no significant impact to soils was identified, because the state soils agency is expert in soils and construction design, and because detailed soils control and road construction plans are not required to be filed until **after** a preliminary development permit is issued, we went on record as urging LURC staff to pay close attention to these issues and impose the most rigorous standards in any permit and design phases. We retain the ability to review all of the final design plans.

Some assert that the applicant did not provide all requested studies. Our understanding is that Kenetech provided all information requested or required by LURC. There is one exception—a medium intensity soils map, which was not included in the pending preliminary permit application because LURC, DEP and

Continued on page 18



King Administration Meddles in Windpower Project

by Sam Hands

The wind blowing from the Land Use Regulation Commission these days smells so heavily of political badgering that to those of us following the proposal by Kenetech Windpower to install 639 wind turbines on 26 miles of mountain peaks and ridges of the Boundary Mountains in western Maine, it appears that good science and sound policy are of less consequence to this proposal than who knows who.

Since the closing of the hearing record last July, the LURC staff has been reviewing the application, which among other things, calls for the rezoning of 1100 acres of fragile sub-alpine mountain areas for development and the construction of 132 miles of roads. Because of the project's massive scale and its severe impact on fragile soils, raptors, and other wildlife, it was expected that Kenetech would provide information to address those concerns last November when it informed LURC that it was considering requesting that the record be reopened. What came as a surprise just two weeks later was Kenetech's request that LURC instead suspend processing its application altogether.

Kenetech itself stalled the process through the winter, saying it was evaluating its options. But in March it became obvious that its intentions had more to do with waiting until its allies in the King administration could bring political pressure to bear than with evaluating options, a likely indicator that Kenetech recognized that its proposal did not satisfy the criteria for LURC approval.

It was at that time that newly-appointed State Planning Office Director Evan Richert, who just last year was a paid consultant for Kenetech who testified on behalf of the project, joined Department of Conservation Commissioner Ron Lovaglio in two special—and unprecedented—meetings with LURC staff, though neither of their predecessors had had any former involvement. These meetings laid out the administration's intent to see this project approved and essentially set the stage for an unusual move in April by the LURC commissioners to deviate from standard procedure and request by a vote of 4 - 2 that the staff bring forth only a general report and make no formal recommendations on the project. That report, though it made no formal recommendations to the Commission, made it clear, upon its release in May, that the LURC staff had found that based upon the existing record, the project fell far short of meeting the Commission's own criteria for approval.

Specifically, the staff's assessment led them to conclude the following:

1. Though there is a preference for renewable energy, the projected power requirements of the State of Maine do not suggest a need for additional energy generating facilities at this time or within the next five to ten years.

2. All parties, including Kenetech, intervenors, and LURC staff agree that the proposal would result in adverse effects on soil, geology, vegetation, wildlife, wilderness values, remote values, scenic values, and other uses and resources. Based on the existing record, it would be difficult to determine that the adverse impacts would not be "undue", particularly with regard to soils, rare and endangered birds, and scenic values.

There would be three levels of impact:

- the "footprint", or immediate project area, which is estimated at 1100 acres and would be most affected by habitat fragmentation, avian mortality, and soil erosion;
- the second level of impact would be on those areas in the Mountain Area Protection Subdistricts which would be fragmented by the proposal and includes lower elevations adjacent to the development which would be fragmented, an area estimated at between 10,600 and 21,000 acres and subject to habitat fragmentation, off-site impacts from soil erosion, sedimentation of waterbodies, and reduced wilderness and scenic values;
- the third level measures somewhere between 35 and 85 square miles, includes affected watersheds and the viewshed of the project, and might also be impacted by sedimentation and reduced wilderness, remote, and scenic values.

3. The proposal may not be consistent with the Commission's goal to conserve soil and geological resources and the quality of scenic character and natural values, to provide substantially equivalent protection, and to guide the location of new development in order to protect and conserve forest, recreational, plant or animal habitat and other resources.

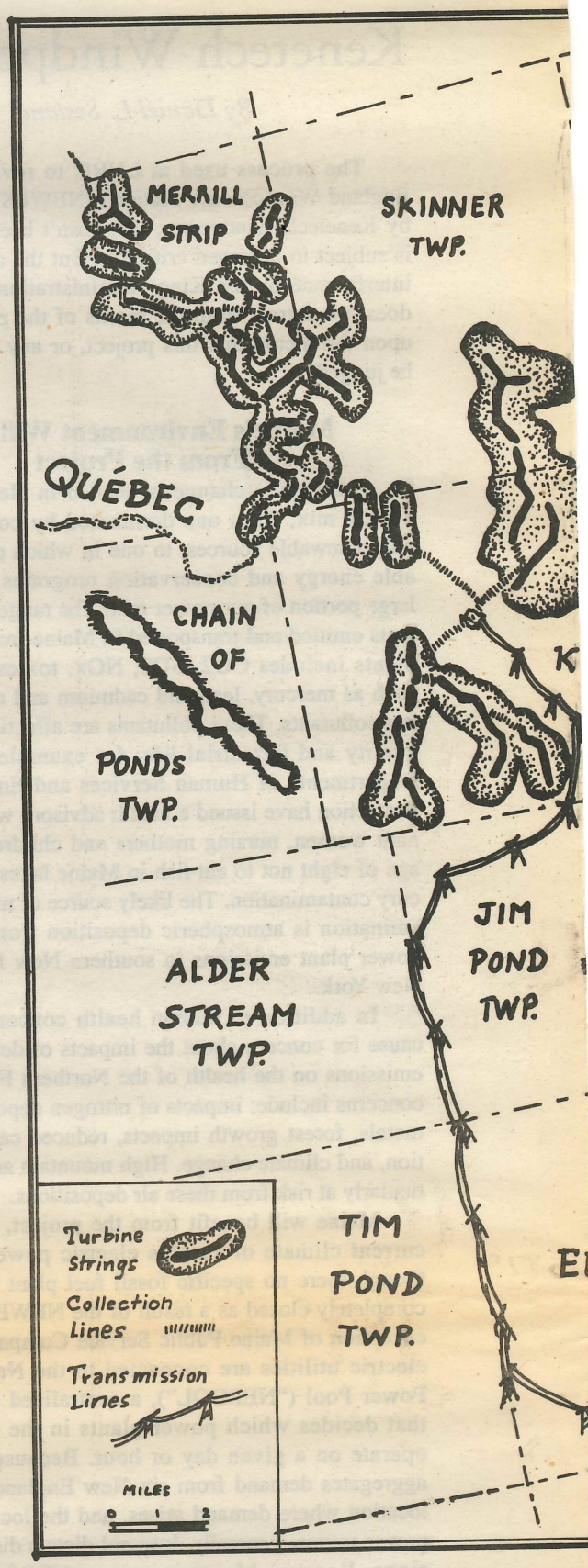
4. The proposal is not in compliance with the Commission's Criteria for Approval, the Commission's Comprehensive Land Use Plan, or the Commission's Land Use Districts and Standards.

Kenetech has close ties to the King administration. Chip Ahrens, Kenetech's attorney, served on King's transition team and formerly directed the natural resources section of the Attorney General's office. Interestingly enough, Attorney General's office legal counsel, Jeff Pidot, took what appeared to be a less than neutral position on the project in June when he attempted to diffuse LURC Commissioner Carolyn Pryor's vocal concerns over inappropriate handling of the Kenetech application. That handling had recently prompted the resignation of staff member Dave Allender as well as LURC Commissioner Jim Sherburne. King himself recently acknowledged his long-standing relationship with Kenetech Project Development Director Chris Herter. Both King and his chief operating officer, Charles Hewett, worked with Herter at Swift River, an energy development firm in Portland.

For Kenetech, close ties to government means a lot of money. Last year the California Public Utilities Commission forced three utilities to buy Kenetech's electricity, a cost of more than $16 billion to one utility over the life of its contract. And here in Maine, the project owners stand to make good on a generous federal tax break if this project is approved, even though much of the power is planned to be sold out of state. That tax break may ultimately help Kenetech finance its projects in West Virginia, Minnesota, Spain, the Netherlands, and elsewhere, and comes at a time when wind's strongest competitor, natural gas, is poised to provide cheap electricity and is soon expected to be piped in from Nova Scotia. In Rhode Island, the Public Utilities Commission vetoed a Kenetech project that was to have utilized the same 33M-VS turbines proposed for Maine due to costs.

Those of us who support renewables as a promising new source of electricity but are opposed to this particular project, recognize that what is at stake here is much more than mountains, forests, and clean air. What is at stake is the very credibility of renewables, and indeed, a large measure of what makes them so appealing—their environmental merits. Only by legitimately subjecting such projects to our land use regulations can we be assured that such projects are sited appropriately and embody the values of sustainability and environmental protection.

Sam Hands is a grassroots activist with National Audubon Society.



LURC Set to Approve Wind

At their July 20 monthly meeting LURC commissioners discussed the Kenetech application, and a majority of the commissioners instructed the staff to come back next month with a conditional approval.

Commissioners agreed that in rezoning from P-MA to D-PD (planned development subdistrict), the requirement of substantially equivalent protection of the resources must not be met off-site, but must occur on-site. Although environmental intervenors have stated that such protection cannot be met on-site and

Questions and Answers About the Kenetech Wind Project

Compiled by Pamela Prodan

Q: Kenetech believes that its generator towers and transmission lines are virtually identical to utility facilities commonly permitted in Mountain Area Protection Subdistricts (P-MA).

A: Electrical generation has never been permitted in a P-MA subdistrict. The only utility facilities above 2,700 feet elevation now are a few scattered meteorological and communications towers.

Q: Kenetech says that the project's impacts will be no different than those of ski areas and timber harvesting in mountain areas.

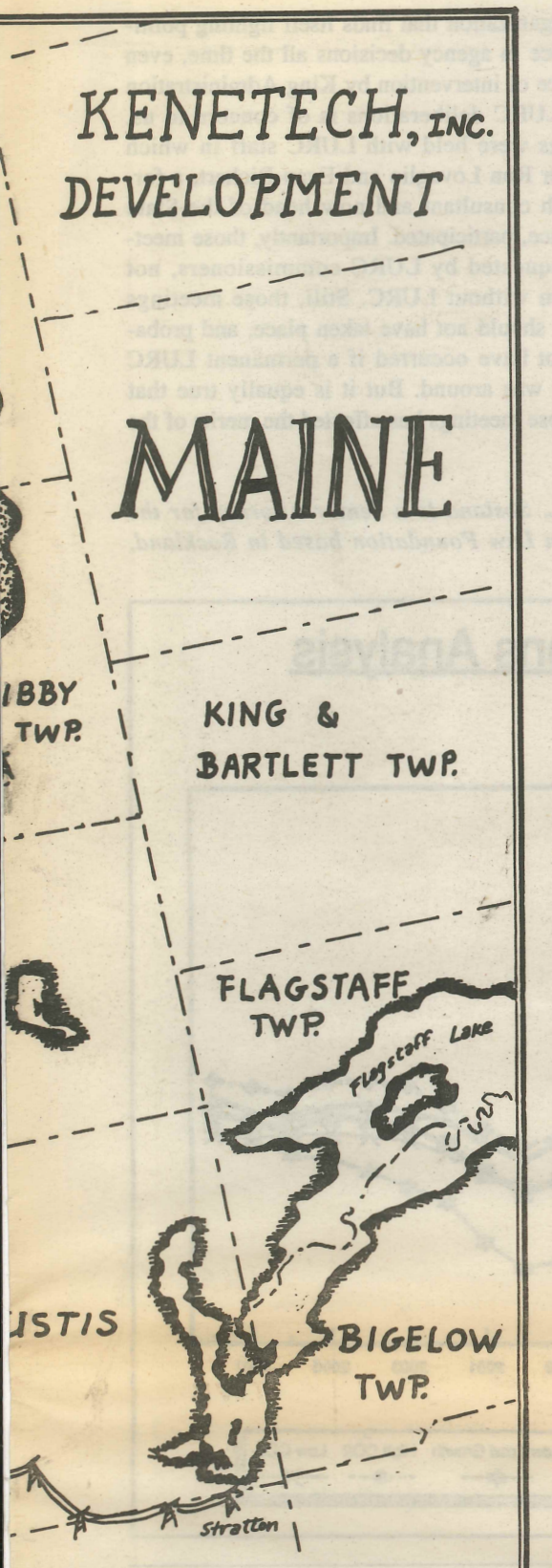
A: Ski areas are usually restricted to one mountain and not permitted up to the ridgeline. Kenetech's total project acreage is 1,442 acres over several townships, with 639 turbines generators in 37 turbine strings on 25.7 miles of mountain ridgelines. New ski area development has been permitted only as expansions of existing areas. Most timber harvests have been on side slopes, not along ridge areas, and harvested areas are allowed to regenerate, not kept cleared.

Q: Kenetech says there are already many logging roads in those townships and that it only wants to upgrade 130 miles of existing skidder roads. Why shouldn't this be allowed?

A: In truth, the proposal is to build 77 miles of new access roads and upgrade 56 miles of old logging roads and trails. These roads along with extensive cleared corridors along the ridgetops would permanently fragment the forest and high mountain ecosystems. Until now, harvesting operations have avoided these sensitive areas because of lower density tree growth and poor regeneration. The state soils scientists recommended that LURC not approve the planned roads.

Q: Kenetech says that its roads will be of a low impact nature and designed primarily for pick-ups, so what is the concern?

A: Given the fragile soils, steep slopes and high elevations, Kenetech has not been able to show that the roads it proposes can be constructed without the threat of accelerated soil erosion. Unlike California, where Kenetech already has large wind plants, our mountains soils are not suitable for roadbuilding because of the soil types, which are shallow and cold. We also have intense rainfalls that



power Project in August

requires off-site mitigation, the majority of commissioners said it is met on-site.

Commissioners placed several conditions on the approval, including requirements that Kenetech supply avian studies and provide data for soils.

Opponents of the project assert that the information isn't yet in the official record to support Kenetech's contention that there will be no adverse environmental impacts to the Boundary Mountains.

—Jamie Sayen

LURC Staff Report Fails to Find Merit in Windpower Proposal

Selected Quotes from 68-Page LURC Staff Report, May 12, 1995, RE: Zoning Petition ZP 536 & Preliminary Development Plan

Demand Area

• "Kenetech states that the area to be considered when demonstrating need should include the market area of New York and New England."

• "...if not limited to the western mountains region of northern Franklin County, the area for which need must be demonstrated would most appropriately be limited to an area no larger than the State of Maine."

Demand

• "John Rowe, President and Chief Executive of New England Electric System was quoted as saying 'New England is awash in electricity.'"

• "Existing, new and proposed electrical generating facilities using both renewable and nonrenewable power sources throughout New England are having their electrical production cut-back, are being closed, not brought on-line, or have been canceled before construction."

• "Staff believes the absence of contracts with electric utilities for the power to be generated and the existence of substantially underutilized additional generating capacity reflects a lack of public demand."

Alternatives and Costs

• "The Demand-Side Management Quarterly Report from Central Maine Power Company for December of 1991 reported that its residential and commercial lighting efficiency programs, designed to conserve energy through the use of energy efficient lighting, cost the company between three cents and five cents per kilowatt hour of electricity conserved."

• "...use of energy efficient lighting where profitable would reduce the amount of electricity required for lighting by 50 percent and the aggregate national electrical demand would be reduced by ten percent."

• "...the newly developed 'Super-Fridge' uses 75 percent less energy than the average 1972 refrigerator and barely over half the energy used by the average 1990 refrigerator."

• "...debt service alone on just the 60 percent of Kenetech's construction costs would equate to at least 3.68 cents per kwh. As such, ... Kenetech would need to sell electricity at 4.7 cents to 5.5 cents per kwh in order to provide the necessary return on investment."

Urgency of Application

• "...the projected power requirements of the State of Maine do not support a finding that there is a need for an additional electrical generation facility of this magnitude at this time or within the next five to ten years."

• "Testimony in the record suggests that the petitioner's proposed schedule to complete construction by July 1, 1999 may be more closely related to the schedule of federal tax credits than to an anticipated shortage of electrical energy."

Adverse Impacts

• "...the combination of steep slopes, intense rain events, high precipitation, cool temperatures and shallow soils in the high mountain areas within the project area make for a fragile and unique environment....cryic soil conditions have been found at elevations as low as 2,200 feet msl to 2,300 feet msl. This would be well below the 2,700 foot level established by the Commission..."

• "The Commission has historically determined that soils with severe limitations are adversely impacted by development and are, therefore, not suitable for development."

• "Duluth Wing, a retired State Forest Ranger, commented that he had spent 38 years in the area. He spent many of those years in a lookout tower watching goshawks, ravens, various hawks and bald eagles above the mountains. He testified that, in his opinion, the construction of the proposed towers with wind turbines would have a catastrophic effect on the birds which frequent the mountain tops."

• "The Appalachian Mountain Club testified that the boundary mountain region selected is one of the most remote regions of the state."

• "The Conservation Law Foundation ... [testified] that the project would permanently and unalterably change the fundamental characteristic of the high resource value, remote Mountain Area Protection Subdistrict's high mountain landscape and act to fragment the currently uninterrupted nature of the Boundary Mountain area."

• "Staff analysis find the soil resources, rare and endangered birds, wilderness and remote values, and scenic values of the area to be uses and resources of the area which would likely be adversely affected by the proposed rezoning and subsequent development. Further, the Staff finds that the evidence in the public hearing record suggests that the proposed development would likely have an undue adverse impact upon these resources and/or values."

Mitigation

• "The very nature and scale of the ridge top clearing called for in Kenetech's wind energy station proposal makes it very difficult or impossible to buffer the development from those other uses and resources within the subdistrict, with which it is incompatible."

• "...the petitioner has not demonstrated that the project could be accomplished without having an undue adverse impact upon fragile soils, rare and endangered birds, wilderness values, remote values, and scenic values of the area. Therefore, Kenetech has not demonstrated that the proposed Planned Development Subdistrict would provide a level of environmental and resource protection substantially equivalent to that which is currently afforded..."

Off-site Mitigation

• "...the protection of an off-site location has no bearing on the effects or protection afforded by this proposal on the areas where this proposal would be located. In addition neither Kenetech nor the intervenors specified how any parcel located outside of the project area, and already zoned (P-MA) Mountain Area Protection Subdistrict would be afforded greater protection than that which exists under the present zoning."

Alternative Use of Area

• "*The Northern Forest: A Legacy for the Next Generation*, a paper promulgated by more than 20 conservation organizations, including all members of the consolidated intervenors, identified the project area as being part of one of five areas within the state with high concentrations of ecological, recreational and scenic values. This paper recommends that development be diverted from the area so that it could be permanently conserved and protected for future generations."

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can wash out a steep road in a matter of minutes. LURC has permitted no new permanent roads in a P-MA zone since 1985.

Q. It is claimed that Kenetech can meet the criteria of providing substantially equivalent protection for natural resources currently within the protected subdistrict through off-site mitigation. What is off-site mitigation?

A. The off-site mitigation Kenetech is proposing sacrifices a large amount of mountainous area in western Maine for the project in exchange for "protecting" a mountain somewhere else. Arguably, that other mountain area shouldn't need such protection because it is likely to be in a Mountain Area Protection Subdistrict already and Kenetech doesn't have any plans for developing it for wind power.

Q: Isn't off-site mitigation a good way to protect natural resources in exchange for accommodating new development?

A: Off-site mitigation in exchange for degradation of natural resources in a Mountain Area Protection Subdistrict is a concept without legal basis. There is not even a hint in Maine statute or regulations that off-site mitigation might be an acceptable substitute for protecting natural resources in a protected mountain area. Instead, Maine law recognizes that mountains have unique and important environmental values that warrant protection in themselves. The proposal is simply in the wrong place.

Q: Does Kenetech's agreement to do research on the project's impact on birds meet the criteria for protection of that resource?

A: No. The agreement claims there will be no undue adverse impact because Kenetech will get the information on impacts later. Given significant bird mortalities at other wind power sites and the habitat fragmentation that this project would create, Kenetech has not met the legal requirement to demonstrate that the project will have no undue adverse avian impact.

Q: Kenetech says the power is needed and will displace more polluting forms of energy.

A: Maine utilities now are buying out contracts for indigenous electrical power because of a glut of cheap power in New England. We do need clean renewable electrical energy sources, but Kenetech has not been able contractually to tie sales of wind power to retirement of more polluting power plants. Kenetech is relying on state and federal mandates to sell its power and federal tax credits to attract investors. If utilities forego conservation efforts and electrical demand increases, wind power will supplement, not replace, fossil fuels.

Windpower Benefits

Continued from page 15

the state soils experts agreed in 1992 that this information would be more usefully deferred as part of the detailed information provided in the final development permit, when road and turbine sites are specifically mapped.

Our agreement and our testimony have been misinterpreted in other ways. There is no LURC standard which speaks about balancing impacts and benefits, but the intervenors looked both within and beyond LURC requirements in reviewing the project in its entirety. Part of the settlement agreement was the establishment of a $300,000 fund (to be matched by a foundation, for a total fund of $600,000) to acquire high value mountain areas in western Maine. We determined the amount of the fund by estimating what it would take to protect a multiple of the acreage that would be rezoned in the P-MA district. The total amount of the fund should be sufficient to protect approximately twice as much acreage as that affected, depending on final per acreage costs.

Although the site to be protected should include P-MA zones, the criteria we set forth to LURC includes such factors as the threat of development at the site and the ecological values at stake. A site could be selected that had more or fewer acres of P-MA zone; the sites are intended to be ranked based on the highest biodiversity values. Moreover, P-MA regulations allow for a number of uses incompatible with the concept of ecological "protection" including: mineral exploration, timber harvesting, road construction, and application of septage and sludge. In addition, the P-MA zone allows for special exceptions for utility facilities and downhill skiing. Our goal is for the site protected under the fund to be immune from these activities, affording greater protection than a P-MA designation.

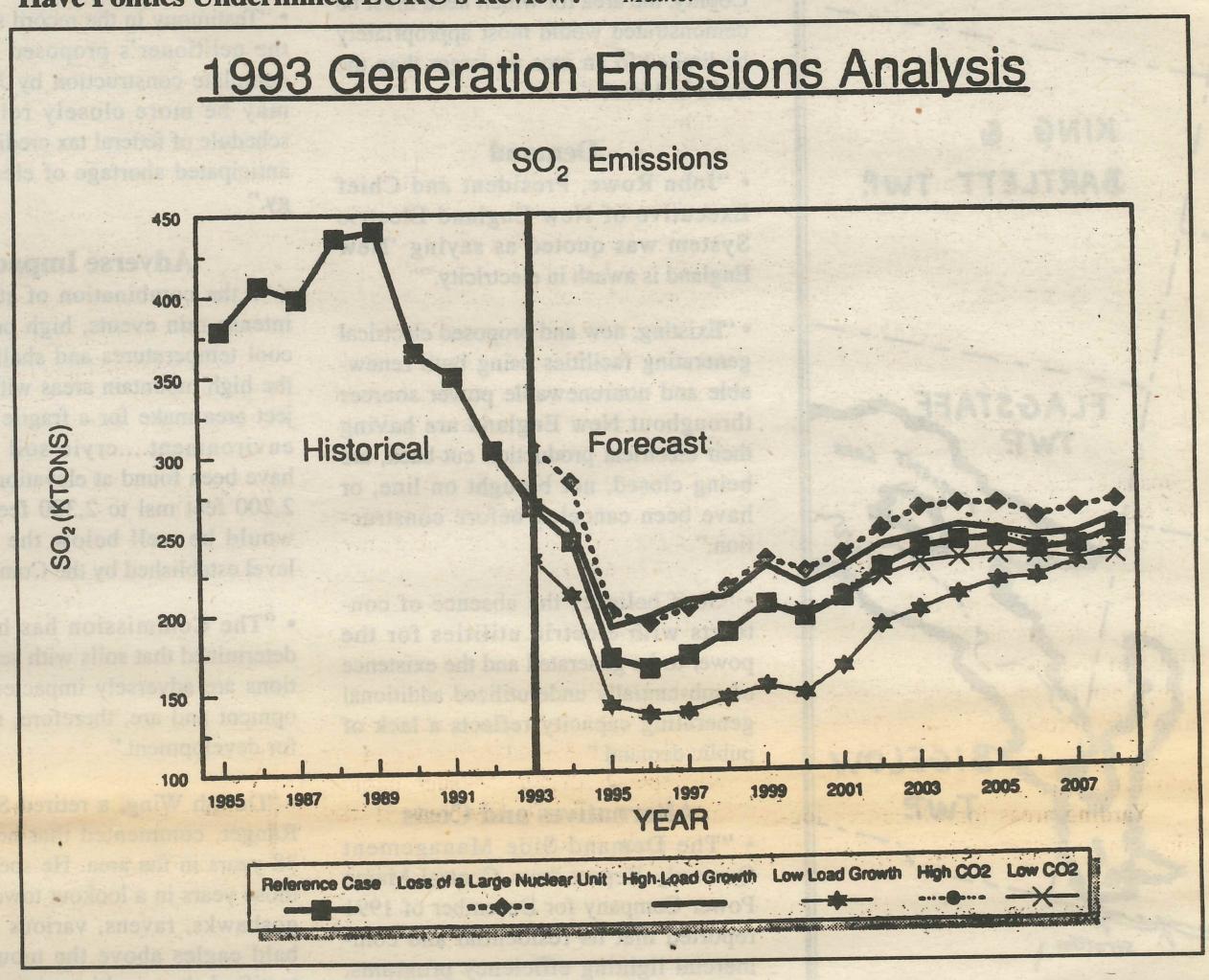
Off-site mitigation should not be used as a means of avoiding attention to on-site impacts, nor is it being used that way in this case. We followed two steps to mitigation. First, we sought to ensure that all on-site impacts were identified, avoided or minimized. Our agreement requires this of avian impacts; LURC can condition construction and maintenance activities to minimize and avoid soils impacts. Second, in our view the presence of the turbine strings, even if not tied to any specific known impact, is an intrusion on the landscape which is unavoidable and must be mitigated, even if LURC would impose no off-site mitigation requirement. This issue is specific to wind projects; other developments, including ski areas, can be designed to avoid the P-MA ridgeline.

In addition, concern over a precedent for future wind projects is largely answered by our view that no other wind projects will be sited until a study of appropriate and inappropriate sites is completed—the partial funding of which is part of our agreement.

Have Politics Undermined LURC's Review?

As an organization that finds itself fighting political interference in agency decisions all the time, even the appearance of intervention by King Administration officials in LURC deliberations is of concern to us. Two meetings were held with LURC staff in which Commissioner Ron Lovaglio and Evan Richert, a former Kenetech consultant and now head of the State Planning Office, participated. Importantly, those meetings were requested by LURC commissioners, not imposed from without LURC. Still, those meetings were clumsy, should not have taken place, and probably would not have occurred if a permanent LURC staff director was around. But it is equally true that nothing in those meetings has affected the merits of the project.

Daniel L. Sosland is a Senior Attorney for the Conservation Law Foundation based in Rockland, Maine.



About the Paper We Use

The heavy, white paper on the cover and center section of the Forum are "Totally Chlorine-Free". Neither elemental chlorine nor chlorine dioxide were used in the bleaching process. The regular "newsprint", used for the rest of this issue is 20% recycled fiber.

Friends of the Boundary Mountains Formed

Friends of the Boundary Mountains is a non-profit organization made up of Maine citizens and others concerned about the Kenetech, Inc. Boundary Mountains wind power proposal and its associated effects and concerned about the economic, environmental and ecological well-being of the state. We want to insure sensible use, generation and transmission of energy in the state of Maine, with due regard for the preservation of the Maine environment and its natural and historic beauty, the orderly development of Maine and its resources and the reasonable requirements of the citizens of Maine for generation and transmission of energy. One of the purposes of Friends of the Boundary Mountains is to promote full and open discussion of the Kenetech project and its effects on Maine.

Friends of the Boundary Mountains, P.O. Box 910, Wilton, Maine 04294

STATEMENT OF PURPOSE

The purposes of Friends of the Boundary Mountains shall include, but not be limited to:

1) To support the dissemination of accurate and complete information about the social, environmental and economic consequences of development in the Boundary Mountains, particularly the Kenetech-Boundary Mountains wind project;
2) To expose and oppose any attempts to circumvent the statutory and regulatory permitting framework protecting the Boundary Mountains region from inappropriate development;
3) To raise awareness about the inherently valuable remote and wilderness resources of the Boundary Mountains;
4) To support the preservation of the Boundary Mountains area for its ecologic and scenic values and remote recreational opportunities;
5) To oppose the construction of large-scale energy generation and transmission facilities and other inappropriate development in the Boundary Mountains;
6) To educate the general public in regard to alternatives to large centralized electrical generating and transmission projects; and to promote efficiency and conservation in energy use and small-scale, decentralized production of energy;
7) To carry out and provide for research and study in the field of Friends of the Boundary Mountain's purposes; to disseminate to its members and to all interested persons the results thereof; and to communicate other information relating to the group's purposes and their implementation;
8) To coordinate the activities and interests of Friends of the Boundary Mountains and other persons in the implementation of its purposes;
9) To solicit funds for the carrying on of its activities and to disburse the same in furtherance of the above purposes.

Dear Friends of the Boundary Mountains,

I, to, would like to register my concern by becoming a member. Enclosed is my contribution for telephone calls, postage and other expenses that will make Friends a visible presence:

$15_____ $35_____ $50_____ $100_____ other $_____

I would like to help by:

__Attending LURC meetings __writing letters __doing research

__telephoning __fundraising __ other (please specify)

I don't want to become a member at this time, but would still like to contribute $_____.

Name_____

Address_____

Town_____ State_____ Zip____

Telephone (optional, for telephone tree) _____

Mail forms and contributions to Friends of the Boundary Mountains, P.O. Box 910, Wilton, Maine 04294.

Low Impact Forestry: Managing as if the Future Mattered

by Mitch Lansky

Low-impact forestry is a way of managing the forest as if the future of both the forest and society mattered. It is a method of getting a modest income from the forest now, while still allowing it to continue to grow in volume, height, and complexity. With low-impact forestry, the forest managers and loggers make an effort to reduce known undesirable impacts so that, after the cutting is done, there is still a recognizable, and functional forest.

High Impacts

Trends in logging techniques and technology in the last few decades have mostly been oriented toward "productivity"—not productivity of the forest, but productivity of timber removal. Some of these changes have led to high impacts to the soil, watersheds, forest structure and composition, wildlife, and local communities.

Logging has become more mechanized. In Maine, much of the cutting is with whole-tree mechanical harvesters. Whole-tree logging removes a significantly higher proportion of nutrients as well as biomass than bole-only harvesting. It can also lead, in partial cuts, to damage of the residual stand as protruding branches scrape against the bark on tree trunks. Trails for the harvesters are often every 35-45 feet, which means that heavy equipment can disturb the soil over the roots of more than one-third of the larger trees. The trails, which can be 14—or more—feet wide, also take forestland out of production and can make some types of stands less windfirm.

Yarding areas for whole-tree logging are sometimes acres in size. They have to be large enough to accommodate huge piles of trees with tops and branches included. They also have to be large enough to accommodate machinery, including delimbers, to move and process the wood. Yarding areas plus large roads can take land out of production, lead to more windthrow, lead to siltation of streams and other waterbodies, and fragment habitat for sensitive wildlife species.

Most of the cutting in Maine is heavy. Although the majority of cuts in recent years are considered partial cuts rather than clearcuts by Maine regulatory standards, more than 80% of these partial cuts, according to a recent Maine Forest Service survey, did not leave behind desirable stocking levels for optimal growth on existing trees. As cutting gets heavier, more light goes to the soil and understory. This can lead to a flush of dense understory growth. This trend is degrading the Acadian forest, which stretches from the Maritimes through northern New England and the Adirondacks. Regeneration is shifting from the longer-lived, more tolerant species (such as red spruce, sugar maple, yellow birch, or hemlock) to shorter-lived, disturbance-adapted species such as balsam fir, red maple, or poplar.

The heavy rate of cutting in recent years has also led to a declining inventory. This has had serious impacts on wildlife habitat. Forest structure and composition has been simplified. Large extents of old-growth forest are almost non-existent. Large, unfragmented mature softwood forests with multiple canopies and dead-standing wood are rare. Species that prefer such habitat, from pine martens to bay-breasted warblers, are in decline.

These changes represent social and economic, as well as biological, problems. Increased mechanization has led to decreased employment in an area with little alternative job opportunities. It means that much of the money spent on cutting wood goes to out-of-region banks and equipment manufacturers. Declining quality means fewer opportunities for local value-added manufacturing. Declining volumes mean that to sustain current fiber-based manufacturing, companies are, on balance, importing from out of Maine. Such trends are a threat to rural community stability.

Low-impact Mission

The goals of low-impact forest management are thus silvicultural, biological, and social. The mission of practitioners is to:

- maintain a long-term (centuries) perspective;
- view the forest as an ecosystem, rather than just a crop;
- plan on a site and landscape basis;
- allow forests to develop in volume, height, and complexity while encouraging trees to improve in quality;
- practice logging that is harmonious with other forest values;
- restore essential, but missing, elements of the Acadian forest when possible;
- minimize destructive impacts in logging (i.e., excessive removal, damage to residual trees; damage to riparian areas, and excessive roads, trails, or yarding areas);
- develop techniques and technologies that achieve the above;
- make the technologies affordable and reliable;
- market logs for high-value products (so one can cut less and earn more);
- favor local labor and markets (rather than invest in expensive machinery and sell wood to export markets); and
- ensure that landowners, loggers, and foresters have economically viable operations.

Working Examples

Low-impact forestry is not really new—it is just conservative forestry. Three low-impact practitioners, Sam Brown, Ron Locke, and Mel Ames—all from the Dover-Foxcroft area of Maine—have come up with practical solutions to many of the problems presented by more conventional, industrial logging. The three together have more

Selected Species Changes from Partial Cuts

as observed by the Maine Forest Service in its
Evaluation of the Effects of the Forest Practices Act

Percent Representation in Forest

Species	Pre-harvest	Post-harvest	Regeneration	trend
spruce	23%	18%	12.2%	decline
hemlock	11%	14%	5.1%	decline
yellow birch	5%	6%	3.2%	decline
sugar maple	7%	8%	3.8%	decline
beech	7%	8%	11.5%	increase
aspen	3%	2%	6.4%	increase
fir	6%	3%	45.5%	increase

than a century of woods experience.

With low-impact forestry, forest management is not designed so much around logging technology as the logging technology is chosen to fit the management objectives. These three, so far, have been modifying older equipment to meet their needs. The needs are to do minimal damage to both the forest and the worker, and to be affordable. Lower-cost equipment (including horses) means that more money from wood cutting stays locally. Lower-cost does not have to mean less elegant, efficient, or safe, however. As Low-impact forestry becomes a more widely-accepted approach, more technological innovators will develop equipment to better meet the needs of the cutting methods and workers.

Sam Brown, of Cambridge, Maine, is such an innovator. He is working on a degree in Resource Engineering Technology at the University of Maine. He has developed a shortwood logging system that does far less damage than whole-tree or tree-length systems. He uses a six-foot-wide, tracked Dion forwarder that can maneuver on fairly narrow trails. The trailer (with an hydraulic loader) is tracked as well, and is self propelled, rather than dragged. To get wood to the trailer, he uses a radio-controlled winch attached to the forwarder. He can winch around trees or obstructions, doing minimal residual damage, by using self-releasing snatch blocks attached to tree trunks. With his winching system, he only needs forwarding trails 150 feet apart (as opposed to 40 feet apart for feller bunchers). Because he limbs the trees in the woods and cuts them to desired lengths at his trails (where he loads them on to his forwarder), he does not require wide yarding areas.

A freshwater wetland in central Maine: the dead trees suggest that the area has been markedly altered by beavers damming a stream and flooding the land. Photo © Alex S. MacLean—Landslides

Ron Locke, a forester from Sebec, Maine, has kept records of his own forestry operation since 1968. When he bought his woodlot (most of it had been cleared in the 19th century), it averaged less than 18 cords per acre. By 1988, the average volume per acre was up to nearly 28 cords. Since 1988, he has averaged cutting nearly 0.6 cords per acre per year—which is substantially above the average industrial forest growth rate. He was able to achieve this because he focused much of his cutting on trees that were poor-quality, low-growth, or even no-growth (killed by insects, disease, or wind). His average growth per acre per year now is around 0.8 cords. By doing conservative cutting, he is allowing the forest to develop. As his forest volume increases, his growth per acre per year increases, and the average size and quality of the trees increases.

Mel Ames of Atkinson, Maine has been working in the woods for half a century. As a young student at Foxcroft Academy in the 1940s, he was influenced by the sustained-yield philosophy of Austin Cary, Maine's renowned forester. Mel has 700 acres (down from over 1000) from which he was able to make a good enough living to sustain eight children.

His woods roads (sometimes as narrow as 12 feet wide) are wide enough for a logging truck without taking much forest land out of production. Where needed, he uses ditches, bumps, and diversions to avoid erosion problems. In contrast, some companies have roads, plus rights-of-way (used for yarding whole trees) that are wider than 100 feet.

Mel's woods trails are just wide enough (6 or 7 feet) to give clearance for his small, tracked, International skidder. Sometimes, as I walk through areas of his forests that were cut a few years previously, I find it difficult to locate the skid trials because they are so unobtrusive. Because most of Mel's cutting is light (20-30%), the forest canopy is not opened drastically; regeneration is more manageable. The forest still has the feeling of a forest.

As with Ron, many of Mel's stands are still young; recovering from earlier heavy cutting. He works with what is there, and strives to ensure that the forest is well stocked, and well spaced with good quality trees, no matter what the species. While many of his stands have between 20-30 cords, some have been allowed to develop 35-50 cords, and some have even more than 70 cords per acre (the state average is less than 15 cords per acre). Mel has cut this latter stand, to my amazement, four times. In the higher volume stands, growth is more than a cord per acre per year. The value of wood in these larger stands, some of which contain veneer-quality oak, is impressive.

As the volume and quality of Sam, Ron, and Mel's woodlots go up, so does the value of their land and the value of their annual cut. This is especially true now, when high quality wood is getting scarce in some parts of Maine. The economics of such light logging obviously improve as cutting moves from initially low-value wood to, over time, higher-quality wood. While with clearcutting, landowners might have investments in planting, spraying, or thinning that do not pay back for half a century, with low-impact management, the "investment" cuts might break even, while later cuts of high-quality wood may pay quite well. It thus becomes possible to cut less wood, but make more income.

Biodiversity

"Biodiversity" and "conservation biology" are relatively new concerns in forestry circles (although elements of these concepts—such as protection of wildlife habitat, soils, and water quality—have been concerns for a long time). Low-impact forest management, therefore, is at a pioneering stage of development towards meeting what are evolving goals. The conservative logging of Sam Brown, Ron Locke, and Mel Ames, however, offers many possibilities for managing for biodiversity. It can allow younger stands to develop age and stand complexity. It can maintain large areas of mature, interior forest. It can ensure the presence of large, dead-standing or hollow trees for wildlife habitat. Through group selection or small patch cuts, it can create forest gaps. Indeed, when there is a high-volume forest with many age classes, there are numerous options for management. After a clearcut, there are few options for decades to come.

Low-impact forestry is not a substitute for reserves or wilderness. The managed forest, even with low-impact methods, still has roads and logging trials. It also lacks the quantity of dead

Guidelines of Low Impact Forestry

(Note: these are guidelines, not hard rules. Because forests are highly variable, there are circumstances where these guidelines would not apply)

Array of Logging Impacts

	Higher-impact	Lower-impact
Road+right-of-way	30+ feet	12-22 feet
Skidder/forwarder trail size	14+ feet	6-10 feet
Trail distribution	30-40 feet	100+ feet
Trails+roads on terrain	up slopes	on contour
Yarding system	whole-tree	short wood
Yarding area	more than 1/2 acre	less than 1200 sq. ft.
Harvest percentage	more than 40%	less than 30%
% of annual growth	more than 80%	less than 65%
Harvest target	high-grade	low-grade
	fast growth	slow/no growth
Tree retention	small/young	young/old/dead
Basal-area retention	below C-line	well above B-line
Stand structure	simplified	maintained/enhanced
Natural succession	truncates	allows
Landscape impact	fragments	maintains interior
Machinery	brutish/expensive	low-impact/affordable
Production goals	quantity	quality
Long-term community impact	degrades	enhances

An Invitation to Participate in Work of the Low Impact Forestry Group

This article was, in part, the result of a series of meetings and field trips by an informal group of foresters, loggers, woodlot and owners. We would like to see low-impact forestry grow in knowledge and practice. We know there are many others who agree in part or in whole with our mission and who have either experience (especially if this is documented) or land to contribute. We feel it is time to set up a network that can connect loggers, foresters, and landowners who want to learn and practice more.

We especially welcome landowners who wish to try low-impact forestry on their land. As mentioned in the article, this is not a get-rich-quick scheme. This is an approach for those concerned with benefits for many generations, not just this one. If your land is poorly-stocked with poor-quality wood, you will obviously have to either invest or wait. If you have a well-stocked stand, however, there are many options.

The examples mentioned in this article are available for demonstration tours. Seeing is believing.

Contact: Mitch Lansky, HC 60, Box 86, Wytopitlock, ME 04497.

Maine Legislature Rejects New Forest Practices Regulations

by Mitch Lansky

In May of this year, the Natural Resources Council of Maine (NRCM) introduced forestry legislation, LD 1347, that would have slowed some of the clearcutting and heavy cutting so rampant in this state. The regulations, crafted by former USDA forester, Gordon Mott, would have set the lower limit for partial cuts at what foresters call the "C line," which is defined as "the minimum amount of acceptable growing stock for a manageable stand." The C line varies by species mix and by average diameter. Below this level, the overstory has so little stocking of trees that it cannot reach full crown closure (and thus full use of growing space). The stand is thus understocked.

The current standard for partial cuts in Maine is 30 square feet of basal area (the area of the cross section of tree trunks at 4.5 feet high) per acre. Since a well-stocked softwood stand might have 175 or more square feet of basal area per acre, the Maine Forest Service standard allows landowners to cut more than 82% of the standing volume without having created a clearcut. Such a standard does little to protect forest productivity.

Gordon Mott used round numbers (45 for hardwoods, 65 for mixedwoods, and 80 for softwoods) rather than the full range of figures to make the regulation more simple to apply. He also chose figures at the lower end of the range of the C line. These figures were thus quite lenient, especially considering that the C line itself leaves stands temporarily understocked. Foresters who want adequate growth response from a partial cut normally cut no lower than the B line (see graph).

LD 1347 would allow landowners to cut below this figure if, the legislation claimed, it was "silviculturally necessary" or "scientifically necessary." These were unfortunate terms, as these loopholes were not always silviculturally or scientifically justified in all cases. For example, one could, with this legislation, cut below the C line if there is adequate advanced regeneration, even if the overstory is quite capable of persisting and growing well. One could cut below the C line if one replants, even if the overstory is manageable and even if the stand is converted to a monoculture. One could cut below the C line if certain "short-lived and shade intolerant" species (such as poplar, white birch, red maple, balsam fir, and white spruce) are present, even if they are in no danger of imminent collapse and could be managed for decades more.

Despite the leniency of this legislation, industry and state officials were quick to denounce it as "extreme" and "unnecessary." The legislation was introduced shortly after the State's release of *An Evaluation of the Effects of the Forest Practices Act* which concluded that "84% of all harvest acres reported to MFS as Partial Harvests have residual stands that are moderately to well stocked with well-formed trees of desirable species."

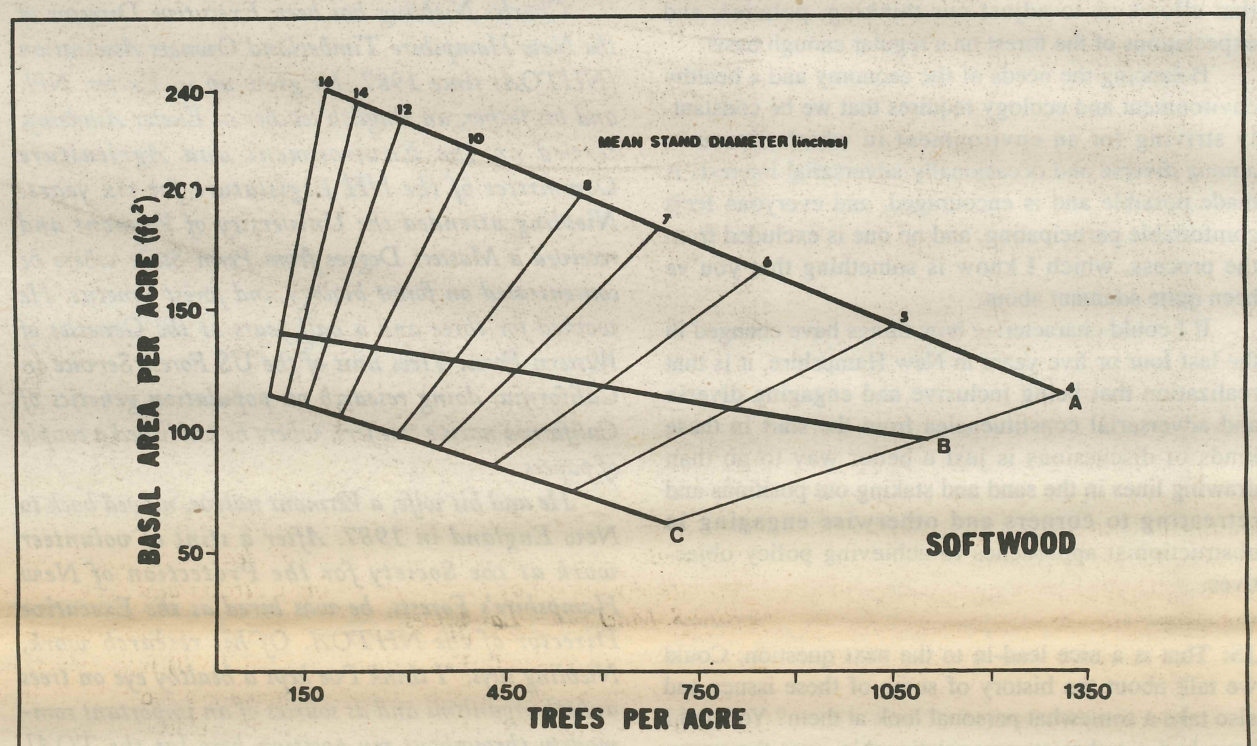
State and industry officials argued that there really, therefore, is no problem—and anyway, whatever problems we have will be fixed by the Governor's new Maine Council on Sustainable Forest Management (see article on page 26). Finally, some State and industry officials went so far as to claim that the C line does not apply to partial cutting in Maine (even though it was derived by the US Forest Service from studies of plots all over the state).

What the State called "moderately stocked" (40 square feet of basal area per acre) and "well stocked" (70 square feet of basal area) would, for softwoods, be both understocked under LD 1347 standards. Indeed, according to Gordon Mott, 45% of the partial cuts examined by the Maine Forest Service were actually understocked and/or had poor-quality residuals. More than 80% of the partial cuts fell below a simplified version of the B line. Thus a more silviculturally honest interpretation of the data shows that much of the forest in Maine is being too heavily cut.

The stance of both state and industry foresters raises questions of competence and ethics. Most logging in Maine is on land subject to the Tree Growth Tax Law. This requires a management plan approved by a registered professional forester. Despite such supervision, most cuts are resulting in poorly-stocked or understocked stands. This does not speak well for the foresters.

Canon 4 of the Code of Ethics of the Society of American Foresters states that "a member will base public comment on forestry matters on accurate knowledge and will not distort or withhold pertinent information to substantiate a point of view." Calling an understocked stand "well stocked" does seem to distort pertinent information to substantiate the view that the forest is well managed, when it really isn't.

LD 1347 barely made it out of committee. It lost badly in a vote of the legislature. But this legislation was not offered in vain. It has some good ideas (to base regulations on some silvicultural basis, rather than arbitrary numbers.) It also demonstrated the ethical vacuum that resides in both the state and industry.



Stocking chart for spruce-fir stands is based on trees in the main crown canopy. The A line is average maximum stocking. The B line is recommended minimum stocking for adequate growth response per acre. The C line defines the minimum amount of acceptable growing stock for a manageable stand. Note: the State of Maine's "adequately stocked" category (40 square feet of basal area per acre) falls well below the C line. Its "well-stocked" category (70 square feet of basal area per acre) also falls well below most of the C line. Remember, the C line represents a "minimum" standard, yet most of Maine's industrial forest falls below that line. The solution the Maine Forest Service has found—to redefine "well-stocked" and "adequately-stocked"—may be ingenious, but it's hardly ethical. Source of chart: ***Fiber Handbook: A Growth Model for Spruce-Fir and Northern Hardwood Forest Types****, by Dale Solomon, Richard Hosmer, and Homer Hayslett, Jr., USDA Forest Service NE Forest Experiment Station, NE-RP-602.*

wood that would be found in uncut forests. But it can serve as a buffer between reserves and more populated regions. It can also, in some circumstances, be appropriate management in wildlife corridors between reserves for wide-ranging species. Well-managed forests have an aesthetic appeal, and the woods roads can be used by local sportsmen, hikers, birdwatchers, or skiers. And it can also lead to high-yield forests. Low-impact forestry is true multiple-value forestry.

Continuity

A single low-impact cut does not immediately transform a woodlands into a high-volume, high-quality forest. It does, however, leave the possibility open for future cuts that will continue in that direction. Unfortunately, in our current economic/political context, this possibility has been small. We lack the long-term cultural stability needed to ensure long-term forest management. Even long-term stewardship by an individual affects but a fraction of the life of a forest. As an old friend of mine once told me, "One lifetime is not enough!"

I will not soon forget the fate of the woodlot of Blair Yeomans of Drew Plantation. Blair, a farmer and logger, managed his lot for 50 years and had impressive growth, including big spruce. When he and his wife Ruth became ill and needed to move closer to a hospital, they sold their land to a "nice young couple" that happened to be family members of a large contractor who flattened the lot as soon as the ink of the deed was dry. This contractor, H.C. Haynes, did not even wait a few days for Ruth and Blair to move before he brought his heavy machinery on the land and started cutting.

The current economic climate favors those who want quick returns through heavy cutting. Such cutting is, unfortunately, quite legal. Although low-impact forestry has great advantages in the long run, in the long run, goes the saying, we will be dead. Our economic activities rarely take consideration for the needs of future generations.

Low-impact forestry can be viable now, as Mel Ames has demonstrated. If it is to thrive, however, we will have to create a more favorable climate for it. We need more research, demonstrations, education, and outreach. We also need changes in labor laws to favor workers over machines, and to make it legal to leave snags (OSHA does not like dead-standing trees). We need to develop more local value-added manufacturing opportunities. Good markets are essential to supply adequate returns on management.

Part of improving the climate for low-impact forestry is making the climate for heavy-handed cutting less favorable. This means imposing regulatory restrictions and ending tax breaks for forest liquidation for land speculation.

To ensure greater management continuity, it helps to have more social continuity. There are steps that can be taken in that direction now. Landowners, foresters, and loggers can enter into longer-term, "stewardship contracts" that reward those who manage for benefits beyond one cut. Contracts are already being written, for example, that give foresters or loggers first refusal rights for subsequent cuttings. Landowners can put their woodlands into forest land trusts that ensure that their forests will be well tended for more than a generation.

None of these strategies will succeed, however, unless our society learns to live within the limits of our biological wealth. Coupled with conservative logging needs to be conservative consumption. Low-impact forestry is thus just one element in a larger strategy of living as if the future mattered.

A Conversation with Charles Niebling of the NH Timberland Owners Association

Jamie Sayen: What do you think are the most important forest issues facing us in New Hampshire and in the Northern Forest region?

Charles Niebling: Probably the most important issue is ensuring that the supply of timber that is available is sufficient to satisfy the needs of the industry, and that the needs of the industry don't exceed the capacity of the resource to supply it, but in a way that doesn't compromise other values which we're all familiar with and which have become the basis of all these various discussions about what is sustainability over the last three to four years, if not longer.

JS: Are there other related issues that you see as essential to address in order to resolve these issues in a reasonable manner?

CN: Sure. We don't have a good sense of what's happening in the woods; we never have; we probably never will be completely satisfied that we have satisfactory means of inventorying forest resources—that is, timber and other forest resources—on a frequency that allows us to adjust our thinking, policies, and expectations of the forest on a regular enough basis.

Balancing the needs of the economy and a healthy environment and ecology requires that we be constantly striving for an environment in which discourse among diverse and occasionally adversarial interests is made possible and is encouraged, and everyone feels comfortable participating, and no one is excluded from the process, which I know is something that you've been quite adamant about.

If I could characterize how things have changed in the last four or five years in New Hampshire, it is that realization that being inclusive and engaging diverse and adversarial constituencies from the start in these kinds of discussions is just a better way to go than drawing lines in the sand and staking out positions and retreating to corners and otherwise engaging in obstructionist approaches to achieving policy objectives.

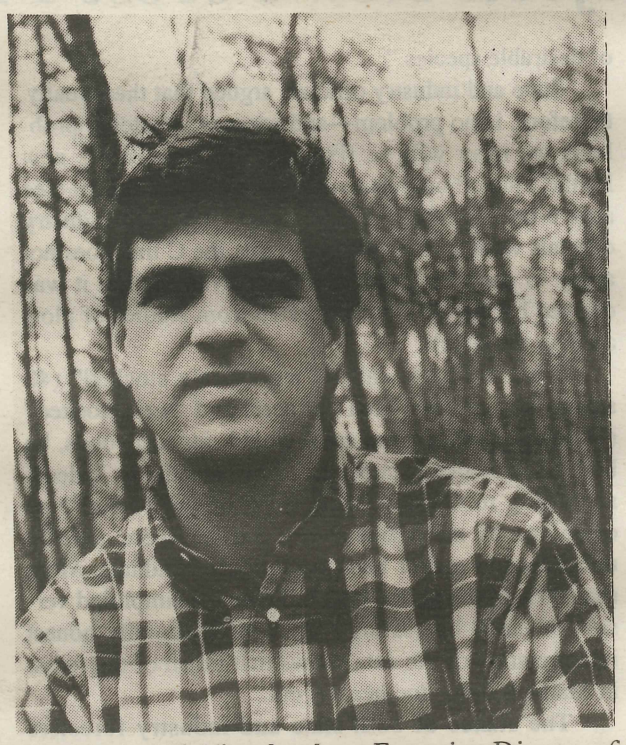
JS: That is a nice lead-in to the next question. Could we talk about the history of some of these issues and also take a somewhat personal look at them? You and I have had a rather stormy relationship over the years, and I've been heartened in the last few years over the manner in which we've begun to be first civil and then productively engaging each other in an adversarial sense.

My first recollection of you was as the new director of the New Hampshire Timberland Owners Association (TOA) in one of the fairly early stages of the Northern Forest Lands Study (NFLS). At the time, I was, as you say, very unhappy with the exclusivity that I saw going on, the refusal to address issues I thought were core issues, or the inability, or the unwillingness to address them in a way that I thought was responsible and ultimately going to lead us to a solution. In the early NFLS—and more in the Nash Stream Advisory Committee which lasted throughout 1990—you and I really came to blows on a number of occasions.

CN: One I can remember in particular. . .

JS: Well, I can remember a few. We needn't dredge them all up. The point is that instead of a collaborative, adversarial relationship, we had a fairly destructive one, certainly not a pleasant one, and not a particularly productive one. What was going on then, and what's changed in the last five to six years?

CN: A couple of things. From my own perspective, 1988-1989 thereabouts, I had previously had no experience running a non-profit, being a representative of an association of interests, and in that capacity representing those interests in various public processes. So I was inexperienced, and it took me really four or five years before I began to realize, from experience, and from trial and error, and from making some big mistakes, that there are far more productive and effective approaches for achieving objectives for an association of interests than drawing lines in the sand and being antagonistic in a very unproductive way toward people and interests with whom you disagree. OK, so it was personal inexperience, and I think that you would probably share that to some degree.



Charles Niebling has been Executive Director of the New Hampshire Timberland Owners Association (NHTOA) since 1987. He grew up in Exeter, NH, and his father, an English teacher at Exeter Academy, served on the Environment and Agriculture Committee of the NH Legislature for six years. Niebling attended the University of Vermont and received a Masters Degree from Penn State where he concentrated on forest biology and forest genetics. He worked for three and a half years at the Genetics of Western Forest Trees unit of the US Forest Service in California, doing research on population genetics of California native conifers, where he published a couple of papers.

He and his wife, a Vermont native, moved back to New England in 1987. After a stint of volunteer work at the Society for the Protection of New Hampshire's Forests, he was hired as the Executive Director of the NHTOA. Of his research work, Niebling says: "I think I've kept a healthy eye on trees as both organisms and as sources of an important commodity throughout my position here [at the TOA]. That interest in tree physiology and forest biology and ecology has really stayed with me. To some extent I find ways to apply it in this job."

This conversation occurred in late May, 1995.
—Jamie Sayen

JS: I certainly learned from my experiences.

CN: Right. And it's nothing you learn out of a textbook; you learn it by making mistakes and learning from your mistakes. Secondly, it is my impression that New Hampshire really had had, prior to that, very little experience with outspoken environmental advocates who then might have been viewed as quote "radical environmental advocates." Up until then environmental and natural resource policy in New Hampshire was, for the most part, not very divisive and not as complex as it has become. For the most part people were able to reach agreement operating within a very traditional circle of advocates. A few organizations in particular dominated the policy arena in which natural resource issues were debated and resolved.

A lot of the tense and unproductive early reaction was a response to something new. It's a very human reaction to things which are new and which you perhaps don't know how to respond to, that you've had little experience with. The experience and the impressions were really derived from circumstances in other regions of the country where a more aggressive environmental advocacy had been around for a number of years. There was a perception in New Hampshire that we did things differently, that we were able to find solutions to problems that did not involve a great deal of influence from extreme ideologies. I'm using those terms not in any kind of denigrating way; I'm just using them to define a phenomenon.

It took a few years for me and others to realize that, where views and opinions are expressed in a responsible way, every view is a legitimate view, and every individual who expresses every view has the right and an expectation to be listened to. I emphasize expressing your views in a responsible way—with tact and diplomacy. I think that some of the early dialogue—or lack of dialogue—on both sides was probably characterized by inattention to approach and protocol. Is that fair?

JS: I think that's fair.

CN: So I think it was first of all inexperience on the part of a number of people, including myself. Secondly, it was a kind of a new phenomenon. Recently that same kind of phenomenon in extreme ideology and difficulty in dealing with it has manifested itself in the Extreme Right, i.e., in the body of the property rights movement. Many people have had, and continue to have, much difficulty in coming to grips with that ideological view on things too.

JS: Is it the content of the ideology or is it the nature of the way ideological interests tend to behave?

CN: I think it's more the nature and less the content. My point is if the nature by which you make your views known and interject yourself into a process is respectful of other views, and respectful of a protocol, people will respect your views; they may not agree with them. And I think what we have learned in New Hampshire since the more difficult period of the early Northern Forest Lands Council (NFLC) and the Nash Stream[1] process, is that there's much to be gained by respectful participation in public dialogue. I'm convinced that ultimately everyone will be listened to in this state.

I think we've evolved in New Hampshire to a degree that perhaps other states have not in terms of this opportunity for constructive discourse among adversarial interests. That kind of environment is really only possible in a smaller state where it is difficult to hide, and it's tough to throw stones and just open an office in downtown Concord and meddle in the Legislature and get your way that way. You have to be a participant.

Another point that I've learned is people really have a distaste for antagonistic behavior. People like to find ways to agree. It's very difficult to hold on and be disagreeable for very long before you start feeling miserable. There's a human tendency to want to work toward agreement with other people. It's a rare individual who thrives on confrontation, and I think those of us who may have engaged in confrontation as a way of gaining a policy advantage quickly grew tired of that.

JS: I agree with you. And yet, how do you explain the politics of anger of today? It seems the successful politicians exploit people's anger and divisiveness and meanness, rather than doing as you say.

CN: That is the million dollar question. . . Well, I think it has a lot to do with the fact that the electorate is impatient and is looking for quick solutions and finds strong ideological positions that are tangible and clear to be very compelling. The electorate isn't willing to work hard. The electorate does not appreciate the complexity of many of the issues that we're struggling with in this country and around the globe—particularly in the area of natural resource policy.

To some extent, we have to assume the best and hope that this kind of "politics of paranoia" will play itself out and that ultimately, in order to achieve

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[1] In 1990 the Nash Stream Advisory Committee developed a management plan for the 40,000-acre Nash Stream State Forest acquired by the State of New Hampshire in 1988 as part of the Diamond land sale. Charles Niebling served on the Committee. Jamie Sayen participated as an interested citizen. Early sessions were often contentious, but by the end of the year, a very progressive management plan emerged.

solutions to problems, you have to really hunker down in the middle and work with people with whom you disagree. It's hard; it takes a lot of work; and it's not glamorous.

There are more one-issue voters out there today than perhaps ever before, and it's very easy to rally around one issue and build an organization around an issue than it is to be the guy who's working in the middle, trying to find that elusive balance between competing interests. It's very difficult to rally people around that because it's just not sexy enough; it's not compelling enough; it doesn't excite and incite the media. I'm afraid politics today has become preoccupied with the superficial because it's how you attract and generate support.

The reality of life on this planet is such that those kinds of extreme staking of positions and feeding off of people's fears and paranoia can only work so long. Eventually, to find real solutions, you're forced to the middle. And you are forced to come to terms with your adversaries. And nowhere is this going to be more true than in living within the capacity of this planet to sustain us. Nothing is going to test the resolve and the creative capacity of the human species than that very issue since it is at the heart of everything else. Eventually we're going to be forced to find the middle ground on issues that are rooted in questions of environmental sustainability because it's the ultimate reality.

JS: But isn't that a paradox that, as you say, we're going to have to find some political common ground, but often the issues are—from a physical or biological point of view—non-negotiable? You cannot exceed the limit that the physical world imposes on us—period. So, ultimately, there has to be some sort of a political consensus or decision to respect those limits, but there's no negotiating these limits. How do you reconcile that ecological-political paradox?

CN: Well, I think it is possible to negotiate those limits, but history tells us that you only come to negotiate after you're contending with some crisis that has come about because of your inability or reluctance to come to terms with those limits. History is full of examples where civilizations exhausted their timber resource and were forced to move on. They didn't come to terms with the inexhaustibility of the resource until it was too late. I suppose you could say they had the luxury to move on. Well, we're getting to the point on this planet where we don't have this luxury any more.

I tend to disagree that we're not coming to terms with those limits, and we're incapable of negotiating before it's too late. I'm seeing a lot of examples and evidence that we are beginning to realize that there are limits, and that we have to begin defining our ability to exist in the context of those limits.

I think we're doing it on the ground here in New Hampshire. I think there's been a tremendous amount of progress in cultivating a more objective view toward our forests, for example. Your tendency is always to concentrate on what's going wrong, but there's a lot that's going right, too, and we're still a far way off from identifying and defining and living at that elusive, fulcrum point. We've got a ways to go, but as much progress is being made from this side as is being made from that side.

I suspect that you and I have very similar philosophies, when you get down to it. Your tendency is to really force the issue and to pressure resolution of the issue from the standpoint of identifying and drawing attention to what's going wrong. The way I've tried to get this organization to operate is to concentrate on what's going right and make it better—largely in response to legitimate issues that are being raised by other people, including yourself. Frankly, Jamie, you need to take a lot of credit for the climate of constructive dialogue and open-mindedness and recognition of legitimate issues that you have contributed to raising in New Hampshire. I really believe that. I don't think that would be possible if some people in New Hampshire and the region had continued to use the obstructionist approach.

JS: The very first meeting on Northern Forest issues I came to was the one Senator Gordon Humphrey convened at the Society for the Protection of New Hampshire Forests [in March 1988 regarding the Diamond lands sale]. Afterwards, I was told, "If you'd gotten a haircut and had worn a tie, they might have received you better." And, that's exactly what I had done. The problem was my message. I was polite and respectful, but I was saying things that were so alien or upsetting that I found doors slammed in my face immediately afterwards. And from all parties.

A Thinned white pine stand. Photo courtesy of Charles Niebling

That really got me angry. I felt this state talks about fairness, but it doesn't practice it, and dammit, if they aren't going to listen to me when I come respectfully, then there are going to be some problems. I never really enjoyed playing the role of the obstructer. Sure, I had some fun. There were some funny things that happened, and I don't really regret them, but I regret that the situation required some zany activity.

CN: Zany activity and zany approaches are a time-tested strategy to raising awareness.

JS: And that's the key—raising awareness and establishing that issues such as forest practices, protection of biodiversity, and land acquisition must be taken seriously. Now, if five years later I was still doing the same things, people would have a legitimate grievance with my deportment. What I was insisting then was: you're gonna pay attention—not to me, but to the ideas I'm talking about that you don't seem to want to talk about. Once I started getting some respectful response to that—and I credit the Nash Stream Advisory Committee process of 1990—that whole year as the pivotal event for me. My attitude was—"OK, you're willing to talk now. So we can turn the volume down and get to business."

What would you say started changing your attitude towards adversaries and the way we had been doing business? It should be said for the record that we didn't speak for about two and a half years. We had a pretty serious blowout.

CN: I know. That was unfortunate. Well, I think for all the criticisms you and others have leveled toward it, the NFLC process really did work to create an environment in which adversarial and antagonistic interests could come and talk to one another and share ideas and thoughts and reach agreement. I really believe that. I've said this so many times people are probably sick of this, but the fruit of that process was not the report; it wasn't the product; it was the process itself. What did our $4.5 million in taxpayer money buy? It didn't buy a report with 37 recommendations in it—although that's important. I think there's some good stuff in there. But it bought four years of time and created over a four year period an environment in which a tremendous amount of progress—most very intangible—was made in coming to achieve some consensus on forest policy, issues in northern New England. I really believe that.

JS: Do you think that the absence since September 1994 of a regional body such as the Council, has been a problem, or do you think the Council did its work well enough that we're ready for the next phase that does not apparently include an ongoing regional dialogue.

CN: I wouldn't say it's been a problem, but maybe it's too early to tell. It was only nine months ago that the Council disbanded. There is a tremendous amount of activity in each of these four states now picking up various pieces of the Council's recommendations and implementing them to varying degrees and with varying enthusiasm. There is a fair amount of communication between the states, perhaps not to the extent to which it was facilitated by the Council, but other channels of communication were opened up that there is now recognition of the importance of maintaining.

There's communication between the state natural resource departments that probably was not as strong and effective as it was prior to the Council. A lot of communication and a lot of relationships were developed within the forestry community that didn't exist and would not have happened had it not been for this great thing to rally around. I think those relationships have continued.

In New Hampshire, maybe the reason I and others perhaps don't view [the absence of a regional group] as being really important at this time is that what we've tried to make a commitment to address all of the issues the Council raised, including those that are most controversial—public acquisition, protection of biodiversity, establishment of ecological reserves, forest practices. We've striven to create a process in New Hampshire where we can make some real progress on your issues and demonstrate that it is possible working within a state boundary in a quirky, idiosyncratic state like New Hampshire, with no money, to make some progress in these areas.

I sense that a lot of the desire toward a more regional approach is to create in the minds of people around the country and the region, that we've got a real regional issue here, and perhaps we do. But there's a real apprehension among people in the forestry community that when "The Great Northern Forest" concept catches on in DC, if it ever does, we'll lose control—

that our views and our interests and our concerns won't bring as much influence to bear on the solutions as they might otherwise.

JS: This really frustrates me because you and I have both been trying to build trust without sacrificing our core values and beliefs. And yet, essentially what I think you just said is: we're afraid of losing control over issues that we don't want to lose control over. Well, building trust means, to a certain extent, trusting the group rather than saying, "No, I reserve the right to exclusive control over this issue." And, if the group is to be trusted—I'm talking about the greater forestry community—what it means is that we're going to address the issues I'm concerned about—ecological sustainability, reserves, land acquisition—and we're also going to address the issues a landowner is concerned about which are: the right to cut wood on your land, the right to decent stumpage price, the right to an economy that is viable. I think it's as much in my interest that we answer these as it is in the interest of a member of your association. I may have different answers, but that's part of the beauty of the political system—that we find a way of accommodating those different approaches rather than suppressing one in favor of the other. When I hear someone say, "I'm afraid our group will lose control," I hear: "We're going to get our way"—end of negotiations.

CN: What our members express concern about is a congressman in Indiana becoming a spokesman in the House of Representative for "The Great Northern Forest Act" of 1998. That act perhaps is not entirely born out of consensus within the region that is being proposed for some kind of solution. That's certainly the way the people in the Pacific Northwest felt about Congressman [Jim] Jontz [ed. note: the Indiana Congressman was defeated for reelection in 1992, in no small measure due to large timber industry contributions to his opponent].

We are one country and it is the proper role to do what's right for the entire country, and there is legitimacy in the concept that protecting the ecology and economy of the Northern Forest is in the national interest. And therefore, there is some legitimacy in Congress being engaged in the debate. But that doesn't mitigate the concerns that people have based on their perceptions of other resource debates elsewhere in the country and what happened and once that happens the outcome may not be something they're entirely supportive of.

I think, Jamie, that before a grand regional strategy can ever take hold, you've got to work within a simpler political framework, i.e., within your state; to build from the ground up the recognition of these broader ideals that both you and I subscribe to. You've got to start at the bottom, and if there is any criticism or suggestion to be leveled toward the larger environmental community, it is their inattention to that fundamental fact to building consensus on environmental issues. You've got to start in the coffee shop where all the loggers gather first thing in the morning and work your way up. Not hunker down in DC with the big litigation fund and try to fight it that way.

JS: I'm not going to argue with you on that. And I agree that—whether by design or by default—New Hampshire is making the kind of progress that I hope will be a model for the rest of the region. I nevertheless feel that we had very important regional momentum It hadn't built the trust, but it was building trust.

CN: I'm not so sure that the regional approach will be any more effective in ultimately achieving our goals—your goals, my goals—than making something work within the state and then periodically sharing successes and failures with our colleagues in the other states.

JS: I'm not saying throw one or the other away. What I'm saying is that ultimately New Hampshire is in a regional economy, and even if we do an A+ job in New Hampshire of addressing the forest-based economy, we're still limited by some fairly arbitrary political boundaries. Maybe we in New Hampshire have to have our act together to know what we want as part of a region, but ultimately, if Maine and New York and Vermont and Massachusetts choose to go in the opposite direction, the success of our plan is seriously under question.

CN: The reality of that is that our regional economy is to a large extent influenced by economic phenomenon that are far greater than our region, our country, and over which we cannot expect to have a great deal of influence.

JS: But an elephant is going to get less blown around by the wind than a gnat.

CN: That's true. And if there's an elephant in the Northeast that is walking in the same direction as an elephant in the South, as an elephant in the North-Central states, and as an elephant in the Pacific Northwest, well, then you've got a herd. . . to carry that analogy a bit further.

You're impatient with the pace of change; I'm realistic about the pace of change, and I try to influence the pace of change by concentrating on areas where progress is being made, and trying to push them a little bit harder than they might otherwise. The same thing is happening now in the North-Central states, and in every forested region in the country, people are hunkering down and really beginning to come to terms with the hard issues.

JS: I think it's very funny that the likes of you and I spend most of our lives trying to invent the wheel *(CN groans in agreement)*, and simultaneously, our counterparts in ten other sections of the country are doing essentially the same thing. It's in the air. And that definitely is one of the more hopeful things to me. If we don't look at just the short-term, and just the setbacks, but look at the long-term trend, I do see more constructive discussions and collaboration going on.

I also see a lot of very negative stuff. I alluded to Maine. Last week [May 16-17], the Maine Biodiversity Group met, and I essentially said the same things at that meeting that I've been saying here in New Hampshire on the Forest Resource Plan process, and in some of the other post-Council exercises. And many of the people in the Maine Biodiversity Group felt that I was intentionally trying to destroy the process. It was such an unhealthy. . .

CN: Politically charged?

JS: Yes. Certain things just simply weren't on the table. They were non-negotiable. I felt I was the victim of "coerced consensus," and one of the things that I have to say about New Hampshire in the last year or two—particularly with NH FRP—is that there hasn't been this coerced consensus. I'm not 100 percent in love with every word FRP has produced, but I have great admiration for the collective work that we—all of us—have thus far produced, and the momentum and direction that we're traveling in. We're not going to solve all problems for all times, but I think that the state is going to be a lot better off for this exercise. . .

CN: I think so too. It's very easy to become weary by these kinds of processes, and to wonder "What's the product going to look like?" and just what is the likelihood that a lot of the stuff we're talking about is going to be implemented. And occasionally question your commitment of time. I'm not in any way criticizing this process, but then you have to remind yourself—it's not the product; it's the process.

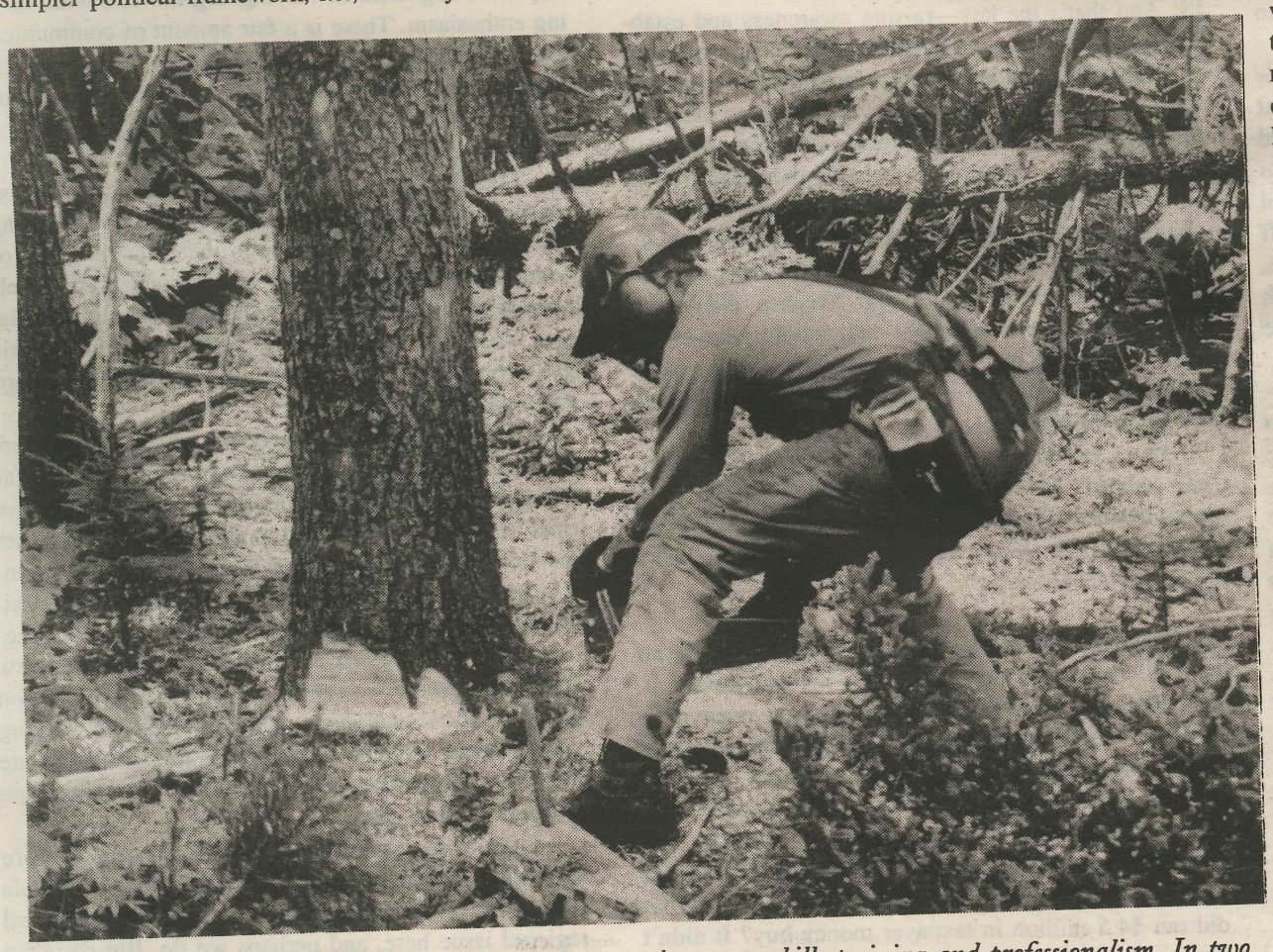
What is the Forest Resource Plan process? It's an umbrella under which the dialogue and the evolution of thinking can proceed in an orderly fashion—it and a number of other processes that are underway in New Hampshire right now, including the attempt to define forest sustainability. They provide the vehicle by which diverse and adversarial interests co-evolve in their thinking. You have to look at them that way. It's really easy for people to become disenchanted and question their commitment of time. That's how you have to look at it, especially if it's very difficult to identify some really tangible result.

JS: Here's where I may or may not agree with you. I am not a fan of "process." What I want is results. However, the experience of the last decade has taught me that there has to be a mechanism that facilitates an honest search for those results. So I look at what you've just described as process as actually a product.

CN: Yes.

JS: We have something tangible. It happens to be a process, but it was a goal to develop a mechanism where in a civil, responsible manner we could address issues that people have been locking horns on. I also think that if we had sat down and said "Let's find a process" we'd still be at square one, if that. But instead we said, "We've got a job to do, we've got to come up with a State Forest Plan" or "We've got to follow up on the Council recommendations; how do we do this?" To me, process has gotten in the way of product, and if you focus on product first—"What are the needs? What are the problems? What are the hoped-for solutions?"—this will identify the process that's necessary to take us where we need to go.

CN: I don't disagree at all.



New Hampshire loggers are making an enormous commitment to skills training and professionalism. In two years over 600 loggers have participated in training workshops under the NH Professional Loggers Program, a voluntary certification program initiated by the NHTOA. Photo courtesy of Charles Niebling

JS: I'd like to look at some of the players in this: the environmental community, the timber industry-landowners (I realize that's really two communities, rather than one, but let's talk about them as one), and then the political element of this—elected officials, and fourth, the general public. I'm interested in your take on what the strengths and weaknesses are of these various elements.

CN: Let me start with the "general public": 95% of the general public doesn't give a #*%!. They are completely detached from the land and that which sustains them. You can try till you're blue in the face to raise that level of awareness, but to the vast majority of people out there, there's little connection, and that's a very difficult undertaking.

Ultimately, it's as consumers that people's actions and behaviors are influenced most directly, so I really believe that Joe Blow on so-and-so street in Manchester is going to wake up and pay attention to what's happening in the woods when a 2X4 costs eight bucks, or when a steel stud costs nine bucks, or when a plastic stud costs ten bucks. That's when people will begin realizing there's an interconnection.

Energy, food and fiber are woefully under-priced in this country—artificially under-priced. Only until the general public starts paying for stuff that grows in the soil—for what it's truly worth and what its value truly represents, and what its costs truly represent—will they begin to wake up and pay a little more attention.

JS: Elected officials and the political process?

CN: On the surface, especially if you're new to New Hampshire, it's very easy to be critical of the political system in our state. It might strike you as not particularly progressive, incapable of coming to terms with how to pay for basic responsibilities of government, like education, etc. But no political system or structure—local, state, federal—is perfect. And there are some real positive aspects of New Hampshire's Legislature. It's accessible; anyone can bring influence to bear on it. Anyone. I've been down there [the State House] enough to know that if you're willing to make the commitment, you can really bring influence to bear on things. You can build one-on-one relationships with very influential people down there.

JS: Are you talking now as the Executive Director of a powerful interest in the state? Or are you talking as an ordinary citizen who doesn't have that kind of clout?

CN: I'm talking as an Executive Director of a not particularly powerful special interest in the state, at least in comparison to many of the other special interests down there that devote an awful lot more time and money to advocating their views than we do. I think it is a legislature that is very close to its constituency and pretty responsive and democratic, if you use the word in the truest sense—that there is representation of and by the people. The influence of money and unethical activities down there is much less than in virtually any other state. So, I think it is possible to bring good ideas to the forefront of the New Hampshire Legislature, and in a small state build a coalition of support for a good idea, get it on the map. Especially if you can find a way to pay for it. Our legislature is usually pretty open-minded to it; that's been my experience.

The timber-industry-landowner community: I would certainly like to think of them as one, though historically, they are very different constituencies. My organization has worked hard to get the industry and the landowners to move in a common direction with recognition of their mutual interdependence. In most other states that have forest economies, you have a landowner organization and you have a timber industry organization, like Maine, Vermont, and to some extent, New York.

The strengths and weaknesses: I would say that there is probably a healthier recognition of that mutual interdependence in New Hampshire than in most states. I like to believe that, in part, is the result of our work.

I get questions from landowners all the time wondering "Why are you putting all this energy into loggers?" Well, it's simple, if you think about it. Good forestry is a three-legged stool. It's an enlightened landowner making good decisions with an eye toward a long-term land ethic. It's a forester who brings professional expertise to bear in the management of the land, and it's a skilled professional operator who can implement that direction in a way that satisfies the objectives of the landowner. You can't downplay the priority of any one of those legs. And then, it's a healthy market place that provides the economic underpinning for that whole triad. There's such a complex interrelationship of interest there that you really have to work to try to get everyone to come to understand that and work in a common direction.

Jeff Putnam of Walpole, NH is New Hampshire's 1995 Outstanding Logger, an award sponsored annually by the NHTOA. Photo courtesy of Charles Niebling

The weaknesses: I think that still the forest industry in New Hampshire is too given to "willful misconstruction". It lapses too easily into assuming the motivations and the interests of its adversaries. I can honestly say that there's nothing that threatens me in the environmental community right now in New Hampshire. I see nothing that I would consider to be a threat in any way or I ought to be justifiably fearful of. But that attitude is not necessarily held by many of our members.

But I think my coming to terms with that is a function of the constructive environment for dialogue in New Hampshire we have right now. Willful misconstruction is born out of lack of communication. If you don't know what the other guy is thinking, you're left to theorize, and that's where people tend to allow their worst fears to predominate.

Now, having said there's nothing that I feel threatened by or fearful of, there are certainly concepts and ideas that I'm cautious about. But, it's my job to be cautious and to proceed carefully into new directions, new ideas that may be untested or that simply have yet to be universally accepted by my membership. My job is a very careful balancing act between listening to my constituency and then synthesizing the views of my constituency and advocating them versus: "What are my own thoughts? What is my own philosophy?" At times I have real conflicts.

JS: When you were talking about the Legislature, I think you went awfully easy on them, because you've just said to me that you see your role as both representation of your constituency, but also leadership in terms of dealing with a changing world. When you described the legislature, you spoke almost exclusively of representation of local interests. They are perhaps reflecting many of the values that they hear at the coffee shop back home. But are they leading some of the more destructive or less productive discussions in a more productive direction? I don't see a lot of that.

CN: I'll tell you something. I think New Hampshire prides itself on a minimalist government that is not given to risk-taking to any great degree. To some extent, I think that's by design, because it has helped to cultivate a very strong and engaged private sector. A lot of what would be considered the legitimate functions of government in other states are assumed by the private sector in New Hampshire.

What I have found is that this Legislature is very open-minded when coalitions of private interests come forward after having met and debated and assumed the leadership on something, particularly if they can figure out how to pay for it without new sources of revenue. It tends to be a Legislature which is very responsive, and that's what I meant about it being a very democratic institution. It's not isolated and separated from its constituency. It's very responsive to good ideas that are born out of the private sector. I think some of the reluctance to engage in real leadership down there is a reflection of a desire to maintain that very healthy private-public kind of approach. See what I'm saying?

JS: I do. I think you've said it in a very informative way.

CN: The environmental community? I have to say, from my own standpoint, that I feel like this organization [TOA] and commercial forestry interests, have cultivated a very constructive relationship with the environmental community in New Hampshire. There's a real sense of mutual recognition that we can all work together, that we do not have to lapse into our roles that tend to define relationships between the timber community and the environmental community in other states.

I'm constantly amazed when I go to talk to national meetings—a couple a year—at how adversarial that is. You want to talk to people and impress upon them how unproductive that is, but you know better. . . I certainly wouldn't want to second guess the timber community in Maine or the timber community in Vermont, for that matter. How they operate is their business. But, in New Hampshire we've managed to build a very healthy respect among these different interests.

I think right now the environmental community is too preoccupied with the Wise Use movement and focused on extreme conservative ideologies. I've been critical of them because when you do that, you tend to validate the existence of those extreme points of view. When you make an issue out of them, you validate them, and you have the effect of reinforcing their very existence. What I've striven to do is not throw stones at anyone, but hunker down and focus on the middle and focus on the positive or try to make the positive better. I just think that being consumed by and preoccupied with those with whom you disagree the most is

counterproductive and an inefficient use of time and creative energy.

JS: I'm inclined to agree with you. But, when we see some of the bills before Congress right now—if they weren't written by the Wise Use movement, they certainly could have been—I think you do have to take some of that seriously. . . The Dirty Water Act, things like that. I agree about not validating certain groups, however, right now they've struck a chord. . .

I think they've been more successful politically than the environmental community, which I find highly bizarre, because, ultimately, in very simplistic terms, the environmental community is, or should be, talking about sustaining our life support system, which is not a trivial thing. Whereas the Wise Use movement is really enshrining personal selfishness as its highest value. A somewhat healthy society shouldn't have a lot of trouble distinguishing between the two.

CN: My comments really referred to the situation in New Hampshire. For example, we've gone on record opposed to "Takings" legislation. Probably the only forestry association in the country to do that. We opposed the takings provisions of the Clean Water Act reauthorization in the House. Not all of the provisions of that act, but those specifically, and a number of others. I was really referring more to the situation we have in New Hampshire, where, frankly, the extreme property rights advocates have little to hang their hats on. They are far more concentrated on what's going on in DC right now than anything in NH.

JS: More than that, when given an opportunity to participate as an equal player on initiatives such as the Forest Resources Plan, the New Hampshire Landowners Alliance has chosen not to attend meetings.

CN: That's really been frustrating.

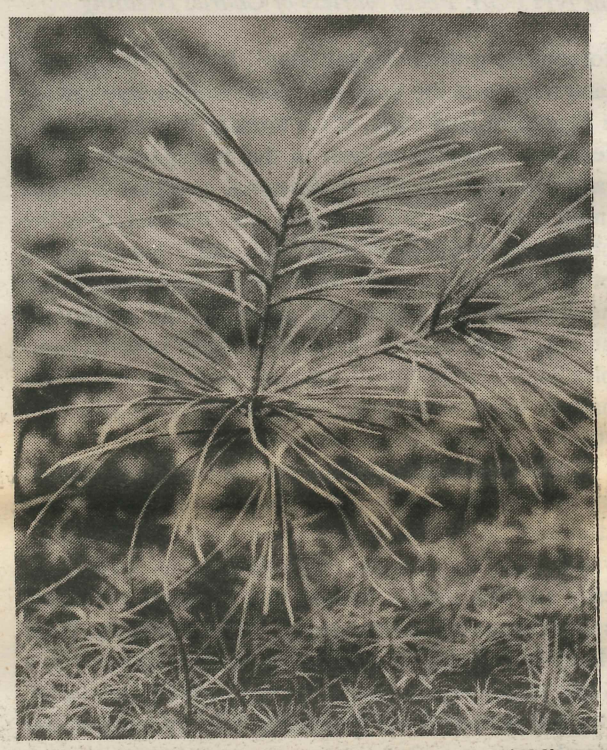
JS: It's certainly not the fault of the process that has offered them the opportunity. It was their decision, and I think that tells you a good deal more about what they're up to than any of their claims.

CN: But I think that mentality can only survive so long. Congress does respond to the changing landscape of thought in this country. There was widespread feeling of discontent among the electorate that environmentalism had gone too far. What we're seeing is a reaction to that. But, just as the pendulum has swung to the right, it is going to swing back to the left again. It's too bad the arc of the swing can't be a little narrower, because I think it's probably gone too far back in the opposite direction, but our political system in DC has a way of correcting things like that.

One of the manifestations of this current pendulum swing is that it tends to re-empower and re-energize the environmental community and forces them to re-think how they go about doing their business and advocating their views. That will have the effect of making them a more potent influence on policy in years to come. No matter what anyone else says about the environmental community in Washington being dead, boy, you're sadly mistaken if you think that.

JS: I don't think it's dead. I think that it has very much lost its way, though. It's going to be a while before it gets a clear sense of what it can do, and what it needs to do.

I want to ask you about the whole issue of regulations. Certainly we're seeing the backlash. I have my own theory about the problems with regulations, namely that we often aren't talking about the real issues. We end up with something that neither addresses the problem, nor is workable, so that the regulated are angry, and those who had sought the relief aren't getting it. When I hear the rhetoric of the wise users against regulations, I'm often in agreement with their line that the regulations aren't working. Their solution of course is just to compound the problem, not resolve it. I'm very frustrated by the way most regulations end up basically being political compromises to physical and biological problems.



Pine seedling. Photo courtesy of Charles Niebling

CN: I think the politicians respond to jobs and the economy. Ultimately, that's the bottom line. The environmental community has perhaps not been as effective as it can be or should be in painting its issues in terms of jobs and economy. That means starting absolutely local and convincing people whose jobs and economy depend on natural resources that working toward sustainability of that resource in the long-term will sustain their jobs and their economy.

But, you can't develop and cultivate that kind of understanding by just saying it's so in Washington. It's got to be built from the ground up. When people in Berlin or Colebrook or landowners in Cheshire County start singing that song, so will the politicians in Washington and Concord. And they will be on stronger political footing, showing real leadership in these areas.

There's a whole other issue here, and that is this question of personal freedom and personal rights. That clearly is a major cornerstone of the current Congress right now.—restoration of a commitment to personal freedom and personal rights. You can't dismiss those feelings. They're very real in people, and they're very real in landowners. This whole concept that this is my land, yes I have responsibilities as a landowner, but I want the public and the government to respect my rights too.

I think right now there's a preoccupation with seeking to restore government's commitment to the protection of personal rights and freedoms. The problem is, you can't have 250 million people in this country running around exercising their absolute personal rights. You don't have a society when you do that, and just as environmental and ecological reality will dictate the greater recognition of the relationship between jobs—economy—and a healthy environment, so too will ecological reality dictate that we have to strike a balance between personal freedoms and responsibilities to society as a whole. It's the ultimate ecological imperative, right?

JS: I appreciate the way you're saying it, because what you're doing is framing real questions instead of creating straw dogs that you can knock down.

I've got one question relating to forest policy issues, since we've been talking about them a lot. One of the things that you and I have discussed in the FRP is the idea of the difference between the economic and ecological maturity of a tree or a stand of trees. In general, economic maturity seems to occur a lot sooner than ecological maturity, and my question is: How can we make these two much more one so that a lot of the ecological problems I see in cutting down trees or in cutting down so many trees is resolved?

Maine Council on Sustainable Forestry Dominated by Industry

Maine governor, Angus King, has established a ten-member "Council on Sustainable Forest Management" whose task it is to develop benchmarks of sustainability based on the Principles of Sustainability outlined by the Northern Forest Lands Council. The Council will (by July, 1996): recommend criteria and goals to ensure a sustainably-managed forest; recommend methodology for the Department of Conservation to monitor forest landowners' progress toward achievement of the goals; and review existing regulations for their adequacy in achieving the Principles and recommend changes if necessary (by October, 1996).

The ten members are:

Charles Gadzik (*ex officio*)	Maine Forest Service*
Ron Lovaglio	Department of Conservation*
Gary Cobb	camp owner
Malcolm Hunter	wildlife biology professor, U Maine
Isabel McKay	consulting forester
Janet McMahon	The Nature Conservancy
Richard Schneider	Comstock Woodlands Co./H.O. Bouchard
Robert Seymour	forestry professor, U Maine
Peter Triandafillou	James River
Tom Hartranft	Champion International (Tom has been transferred, and is off the Council)

*Gadzik formerly was a forester for Baskahegan Lands, and Lovaglio was a forester for International Paper.

The Council will be holding its meetings in public and is requesting public input. It wants, specifically, a definition of "sustainable forest management" in practical terms feasible for implementation by landowners. They also want criteria that can be used to determine if Maine's forests are being managed on a sustainable basis. If you have answers to these questions or have any other comments, send them to: Donald Mansius, Department of Conservation, Maine Council on Sustainable Forest Management, Station #22, Augusta, ME 04333.

I am, frankly, skeptical of this process. Council membership leans very heavily towards those with an industrial point of view. I would be surprised if the industrially-oriented members will allow the Council to come up with recommendations that would put their companies in a bad light.

To reach some meaningful standards, this council will have to ask some very basic questions. What is a forest? Is a plantation a forest? Is township that has been mostly clearcut a forest? How large is a forest? Are we trying to sustain a stand, a township, an ownership, or the whole state? Are we trying to sustain current or projected future mill capacity (plus international markets) and thus willing to force the forest to meet these needs? For how long? The projected life of the mills?

The word "sustainable" is extremely fuzzy—it means different things to different people. Some uses of the word (i.e., sustainable growth or sustainable orgasms) are either oxymorons or absurd. Do we want to sustain the rate of decline of forest quality, inventory, or jobs? Do we want to sustain the current degraded condition of the forests? Are we willing, as two council members (Seymour and Hunter) have recommended, to "sustain" the forest by managing some parts of it through whole-tree clearcuts, plantations, and herbicides on a short rotation so that other areas can be less heavily cut or not cut at all? Are the "intensively managed" segments of this "triad" sustainable for three, four, or five rotations? Should a government council be recommending sacrifice zones for the sake of "sustaining" temporary industrial mill capacity?

The Northern Forest Forum has spent considerable space on discussion of such issues. We urge readers to contribute their thoughts to the process (as they did with the Northern Forest Lands Council) despite the obvious bias of this council's members. If the Council does not respond to legitimate public concerns, it will be on the record.

—ML

Niebling Conversation

CN: That's another million dollar question. In Scandinavia, I believegrading of certain species or certain products is a function of the density of growth rings. The greater the density of growth rings, the tighter the growth rings, the greater the ratio of late wood to early wood, in softwood, for example, hence the stronger the wood, the higher the value. So there's a built-in economic incentive to grow trees to later in their biological life-cycle so that you get those tight growth rings. I'm not aware of that concept being effective in the marketplace in this country right now, but it may be somewhere out there.

I think a lot of the issues of the Northern Forest, for example, would tend to resolve themselves if the landowners could be induced through incentives or market forces to keep some percentage of their woodlands in longer rotations.

JS: Or even out.

CN: Or even out. The easy solution that has been offered for that is simply for the public to buy the land. There is some acceptance of that as a legitimate and proper thing for the government to do. And there are public values there that can only be protected by public ownership, but we've got to find ways to create economic incentives for landowners to do that, to accomplish those goals in ways that make sense for them economically. This is a vexing problem.

JS: You raised an issue early on that I think is something we haven't done a good job of addressing adequately. Natural resources such as wood are under priced. If we paid the real cost and gave the landowner fair return for wood cut on his or her land, we'd be paying two-three-five times as much, maybe more, than we currently are. That might have a dampening effect on the amount we consume, and it would also have a dampening effect on our wasteful approach to wood fiber. I'm wondering if there is some way, short of an excise tax, of convincing the market to pay the real cost, not just the lowest price.

CN: That's the whole concept of green certification. It is building consumer awareness and consumer willingness to pay more that is the result of a responsible management process. I think free market/free enterprise solutions ultimately are more effective than regulatory solutions. If there are opportunities in the coming years to harness the market place to create that distinction, that could be extremely powerful in helping to bring about better quality management and more conservative management, and better utilization and reduction of use among consumers. There is greater optimism about the willingness of the American consumer to make this distinction than I think is realistic at this time. It's going to take a while for it to result in providing meaningful incentives to landowners who want to do the right thing, which may include leaving some percentage of their land base in long rotation or no management. That might conceivably be one criteria for defining sustainability.

FRAC & the Future of Vermont

Benchmarks of Sustaining Local Resource-Based Economies

by Andrew Whittaker

I recently had breakfast with three real estate developers. While I perused news of the latest Bosnian atrocities, they discussed prospects for a land boom here in Vermont's Northeast Kingdom.

Three points emerged from the overheard conversation. First, regulations work. As these gentlemen went over plans for a new subdivision, and how they had modified it to conform to statutory guidelines, it became clear that regulations had in this case made for a better development and protected public values inherent in the landscape.

And what of public values: do they have precedence over private property rights? According to what these men had to say, the perceived value of a building lot is in fact created by factors beyond the boundary posts: views and access (proximity to market). Considering what the target customer of prime hillside property in Vermont associates with those views—a landscape vital in both human and ecologic dimension—it is clear the real estate industry deals with public values as much as it brokers the rights that come with property ownership.

The conversation afforded a larger lesson of a more social nature, and, considering the future of Vermont, a lesson as saddening as the news from Bosnia is horrifying. One of my fellow breakfasters noted that "between the towns of ———— and ————" there is vast acreage simply sitting, awaiting subdivision and sale. The towns he named essentially define the northeasterly and southwesterly extremes of the Northeast Kingdom. What made this developer so sure the plum is ripe?

Well, he made a social observation many of us unfortunately recognize: that there is a sort of fatigue among many landholding families who have farmed and logged and handed land on from generation to generation. He mentioned the acrimony over schools and other subjects that has soured the mood of town politics; he may as well have mentioned low milk prices and the general failure of landholding economics, or divorces and other family squabbles. The result of these factors is that, in this developer's estimation, many families are ready to sell and sell at whatever price they can get. The preferred customer, of course, is a person who likes those views and what they represent and has more money to pay for them than was ever earned cutting wood or milking cows.

Some would say that Vermont was really at this crossroads twenty years ago, and history is now just playing out in its remoter corners. Act 250 and other regulations are in place to mitigate the worst aspects of subdivision and here we go. The trouble with this point of view is that it posits no vision for a future natural resource economy here. Political leadership quietly stakes its all on what essentially amount to a giant Bedroom Economy attracting outside money yet incapable of keeping it here.

We could use the story of Cabot Creamery as a quick example. Lately politicians have heaped abuse on Food and Water, a group drawing attention to this Agrimark subsidiary's plan (now modified) to sell products using milk produced from cows treated with synthetic bovine growth hormone. The governor called on real Vermonters to continue to exercise their loyalty to Cabot in the face of what he termed "(anti?) corporate terrorism."

The roots of that loyalty extend beyond just the Cabot name, however. It used to be that when I purchased Cabot products, I was patronizing neighboring farmers and local production. When this co-op faced crisis several years ago, however, our political establishment saw no need to provide the funds and capital that might have kept this co-op producing locally and providing local agriculture a tool for added profit. This was the glamorous eighties, after all. Subsequently, with market forces dictating, we have seen Agri-mark shift production out of Cabot, out of Vermont, and the Kingdom's jersey herders no longer have their co-op.

Vermont's resource economy and landholding patterns face analogous crisis, after years of nibbling drain. Few of our political leaders really seem to believe farm and forestry can survive economic rationalization, let alone lead the state forward. Their fix? Outside dollars and growth areas such as Chittenden County are expected—indeed relied on—to percolate benefit to the entire state. Yet, with our Bedroom Economy, it doesn't matter how much money we attract here: chronically low multiplier, indicative of decayed local economy, translates into dollars departing the state only to be brought back here in ways that themselves transform our own landscape.

Vermont now has a Forest Resource Advisory Council studying benchmarks of sustainability, rural economic development and assessment of the forest resource. We cannot leave it to chance whether this Council shoulders the burden and role of articulating the true challenges, the real choices, Vermont now faces.

As the Northern Forest Lands Council noted, until we face the gap between what the economy demands and what natural resources can actually provide, we operate unsustainably. Yet the administration of Governor Dean, his Agency of Natural Resources, and Department of Forests and Parks are proving to be remarkably timid of challenging current economic patterns.

If anything is true of Vermont's social landscape, it is that an enormous public appetite exists for implementing concrete approaches to economic and ecologic preservation of a land and its traditions. In few other places are so many vitally interested in and committed to local production, strong community and protected ecosystems.

It is up to us to convince this Council of the seriousness of its task. FRAC needs to hear from those of local perspective who want a future Vermont that preserves economic traditions and expands on protection of the ecologic heritage underpinning them.

FRAC in turn must be imaginative enough to identify and call attention to those areas where lawmakers and administrators can make definitive choices to guide Vermont to that future.

Beaver dam in Codding Hollow in Northwest Vermont. Photo© by John McKeith

> Someday, if we are very, very lucky, we will know the oral epics of the barren ground caribou, the humpback whale, the monarch butterfly. We will learn the languages of a world to which most of us have turned a deaf ear. Until then, we rely upon the intuitive translations of the hunter-gatherers, the dreamers, the singers, the dancers, the poets.
>
> *—Gary Lawless, from the "afterward" of Poems for the Wild Earth, (to be published Summer 1995)*

Certifying Forests Sustainable and Green

by Mitch Lansky

It's just getting started. Environmentalists like it. The forest industry likes it. The Northern Forest Lands Council endorsed it. It is already here in Maine on nearly a million acres. What is it? Forest certification.

The Theory

Certification promoters assert that, given a choice, consumers will prefer to purchase wood that has been sustainably grown rather than wood that has been mined in an exploitive manner. Indeed, they might even pay premium prices. To get that market advantage, forest landowners will strive to do a better job at forest management. Good management, therefore, will come from market incentives, rather than governmental edicts.

The benefits of timber certification, however, are contingent on the quality of the certification system. Just what is being certified? How well can this be measured? How meaningful is the certification? The Northern Forest Lands Council in its **Draft Recommendations** admitted that certification programs, "have potential, if not done well, to harm markets." I would contend that Scientific Certification Systems (SCS, the "Green Cross") certification of the 970,000 acres of the Pingree lands in Maine, managed by Seven Islands Land Company, may have the latter effect.

The Practice

SCS is a for-profit, private, certification company. SCS has certified other large landowners in the United States, such as Collins Pine, in California, and The Menominee Indian lands in Wisconsin. Seven Islands officials wrote in the **Journal of Forestry** (May, 1995), that they were attracted to SCS because, "theirs was a market approach, rather than a strict environmental one." Another attraction of the SCS approach is that, except for an executive summary, the certification evaluation is strictly confidential. Concerned consumers just have to trust the process, because more detailed information can be off limits. The certification is valid for five years. SCS does not have to do frequent monitoring for compliance, though it will do an annual audit of Seven Islands management.

SCS certified the Pingree lands as "well managed," based on three categories: timber resource sustainability, forest ecosystem maintenance, and socio-economic benefits. To "pass," a landowner has to score at least 60 out of 100 possible points in each category. The Pingree lands scored 72, 75, and 88 respectively. Seven Islands officials plan to ensure that their wood will be treated separately in seven of the saw mills that they supply so that the consumer of the wood can identify its source as being certified.

Seven Islands is proud to point out that the Pingree heirs (descendants of a 19th century timber baron) have owned their forest land for 150 years, and yet the land is still producing ample wood. In 1993, by Maine Forest Service standards, Seven Islands only clearcut 288 out of the 25,000 acres it cut on the Pingree lands. SCS was impressed by Seven Island's use, on some cuts, of "state-of-the-art" mechanical harvesters that do less damage to residual trees and to the soil. SCS gave its high socio-economic grade to Seven Islands because of the company's long-term relationships with contractors and purchasers, "thereby enhancing the Company's contribution to the stability of local communities and the regional economy."

The Problem

For certification of an entire landholding to be meaningful to consumers, it is not sufficient to point out that a landowner is doing good things on some acres in some years. With organic produce, for example, only the crops that are grown without chemical fertilizers or chemical pesticides can get certified. A farmer who grows organic vegetables on five acres, but uses chemicals in her ten acre apple orchard cannot have her apple orchard certified as "organic," even though it is on the same property.

Likewise, organic certification usually requires an element of time. If this same farmer heavily sprayed her crops one year, she cannot have the produce from that site certified as organic the next year. There has to be a transition. SCS, in its "*Executive Summary*," admitted that past and even present forest practices have not always been high quality on Pingree lands. For example:

• "Historical harvesting practices, poor markets for low-value products, and the need to salvage extensive spruce-budworm-caused mortality have resulted in widespread conversion of valuable softwood types to less valuable and unnatural communities dominated by low-value hardwoods and balsam fir."

• "...the harvest still exceeds calculated allowable harvests. In addition, high-valued spruce has been harvested disproportionately relative to its representation in the inventory..."

• "Seven Islands' timber regulation strategy appears to be vulnerable to future spruce budworm outbreaks..."

• "...the extent of prescriptions driven by expedience or convenience (such as diameter limit harvests) needs to be reduced..."

• "Decreased biological diversity resulting from an emphasis on capturing mortality during and following the epidemic remains an issue..."

• "...there is no formal wildlife plan incorporated into the management document."

• "...many logging operations extended closer to stream sides than the team considers optimal from the standpoint of sediment filtering and canopy shading."

In the **Journal of Forestry** (May, 1995), SCS evaluators wrote that "diameter-limit cuts, [...] and product-driven harvest prescriptions [...], are a few obvious examples of inadequate commitment to the staffing necessary to practice sustainable forestry." Yet SCS certified a company that, according to the *Executive Summary*, was doing such practices.

There are also some issues that the certifiers did not mention, but which consumers might also find of concern:

• The state (at company request) sprayed chemical insecticides over much of Pingree's spruce-fir forests during the spruce budworm outbreak of the late 1970s and early 1980s.

• Seven Islands does not directly hire woodsworkers (and thus is not responsible for worker training, insurance, or benefits). Instead it hires "independent contractors." Many of the workers are Canadian citizens. A substantial amount of wage earnings from wood cutting on Pingree lands leaves the state.

• Seven Islands is a major exporter of raw sawlogs to sawmills in Quebec. Maine is losing substantial jobs and income from lost value-added processing.

• Seven Islands and the Pingrees have used their political influence in ways that sometimes seem to promote their interest (and the interests of the paper industry) at the expense of the public interest.

—A Seven Islands employee was on the Land Use Regulation Commission where she helped make regulatory decisions that affected her company.

—The former commissioner of the Department of Conservation, Ed Meadows, had previously been a Seven Islands official. He actively lobbied for recommendations for the Northern Forest Lands Council (of which he was a member) that would financially benefit (through inheritance tax breaks, for example) his former employer.

—The former head of the Maine Forest Service is currently the president of Seven Islands. There was no transition time between the change of jobs, yet he has been actively lobbying the government (his former agency) on a variety of issues.

—Seven Islands officials were also officials with The Nature Conservancy even as a very expensive land transaction went on between the two organizations.

—A Pingree official was on the Board of Trustees of Maine Audubon Society when that organization helped lobby for weak, ineffective forest practices regulations.

—A Pingree representative is a leading official of the Maine Forest Products Council, an industry lobby group. He has clearly not broken ranks with the forest industry. As a spokesman for the Forest Products Council, he has defending mismanagement from regulation, and promoted tax breaks with no public-benefit strings attached.

In the **Journal of Forestry**, the evaluators wrote that a company should be a "good neighbor," and should "take steps to enhance the benefits derived by other parties from forest land..." Apparently, "other parties" can be from other countries rather than more local communities. The certifiers gave Seven Islands its highest grades for "socio-economic benefits."

The Certifiers

Certification committees have plenty of trouble trying to objectively define "organic." There are, surprisingly, many gray areas about what fertilizers and pesticides are acceptable, even though the perception of the public—that there be no chemicals—seems simple

enough. Local, regional, national, and international certification committees frequently debate where to draw the line in these gray areas.

With forestry, there currently does not exist the local equivalent of a MOFGA (Maine Organic Farmers and Growers Association) that has demonstrated a long-term concern over sustainability and can sit down as a community and come up with standard definitions. Indeed, the forestry certification debates going on now are less over the fine details than over the major direction and structure of a certification system.

Words such as "sustainable" or "well-managed" are extremely subjective, even more so than "organic." SCS's certifiers do not need to be certified or specially trained. To certify Seven Islands, SCS hired three consultants, two of whom were from a list supplied by Seven Islands. Seven Islands had veto power over any SCS selections to the "team." Because this was the first significant forest certification in this region, the team had to develop their own specific criteria and weightings. Thus these criteria depended, to a large degree, on the inclinations of the certifiers.

One of these consultants, Dr. Robert Seymour, is a forestry professor at the University of Maine's College of Forest Resources. Dr. Seymour has been associated with (and is currently a "cooperating professor" for) the Cooperative Forest Research Unit (CFRU). The CFRU is located at the University and funded, mostly, by the paper and chemical industries. Seymour has championed putting increased forest acreage into biological preserves, but he advocates balancing these reserves with "intensively-grown" monoculture plantations sprayed with herbicides to maintain current levels of cut. Indeed, he has suggested in his writing that not spraying herbicides on most softwood clearcuts is "withholding management."

On the issue of pesticides, the evaluators (which included Seymour) wrote in the **Journal of Forestry** that, "SCS criteria reward managers who use pesticides skillfully and only where necessary to correct ecological imbalances resulting from past human activity, while employing forest practices that reduce future dependence on pesticide use." The *Executive Summary* made no mention of the spruce budworm sprayings of the past. It also did not mention that some of the evaluators suggested that Seven Islands ought to use herbicides, in some cases, to correct regeneration problems caused by past heavy salvage cutting.

Meaningful Certification?

While all of Seven Islands's management may not be exemplary compared to some of the better woodlots I've seen, the company has clearcut and sprayed far less than some of its industrial neighbors. I have been told by some of the evaluation team that the certification experience and subsequent peer review are having a positive impact on the company's management plans and practices. But should certification be based on comparison to companies that clearcut by the square mile or on promises to do better? Should a whole ownership be certified if only some of its management is "well managed," while some, admittedly, is not?

Should a company be certified for five years with little direct supervision of cutting operations?

Richard Miller, of the Forest Partnership, in Burlington, Vermont, urged all retailers and wood buyers, during a speech at the Northeast Regional Certification Conference, March, 1994, "to refuse to represent products originating under this program as having been obtained from a well-managed forest. I cannot see how this is anything but a misrepresentation."

So many companies are becoming interested in certification based on so many different standards that there is a risk that consumer confidence in the process may, until things get sorted out, wane. When either for-profit companies, or governments influenced by industry get into certifying, the standards may get lax enough to exclude only the absolute worst, rather than inspire the very best. When industrial landowners, such as J.D. Irving, a company that has clearcut and sprayed on a large scale, are attempting to get certified, one cannot help but wonder how meaningful certification is.

There are non-profit organizations, such as the Institute for Sustainable Forestry, the Rogue Institute, and the Ecoforestry Institute, that have established much stricter ecologically- and socially-based standards. These West-coast organizations represent a coalition of environmentalists and forest products companies. An international organization, the Forest Stewardship Council (FSC), is trying to bring some order to the chaos. FSC seeks to set standards for certifiers. FSC also has environmentalists involved in the setting of standards. FSC is trying to avoid conflicts of interest and to ensure that ecological, social, as well as economic criteria are meaningful.

Voluntary Sustainability Standards

Some industry groups, however, have denounced "self-appointed" regulators or certifiers—especially ones that have a strong environmental constituency. They would just as soon regulate and promote themselves—as they have all along.

The American Forest and Paper Association, seeing the writing on the wall, has developed "Sustainable Forestry Principles and Implementation Guidelines" to which many of its members have signed on. As with certification, these standards are being used for public relations and market advantage. The goal of these standards is to "practice sustainable forestry to meet the needs of the present without compromising the ability of future generations to meet their own needs by practicing a land stewardship ethic which integrates the reforestation, managing, growing, nurturing, and harvesting of trees for useful products with the conservation of soil, air and water quality, wildlife and fish habitat, and aesthetics." Whew!

The standards, however, are remarkably vague and are left mostly up to the individual landowners to interpret. Indeed, some landowners are interpreting the standards to mean that whatever they happen to be doing now is leading to diversity and sustainability. Where the standards are spelled out, they are not particularly reassuring.

For example, to help to minimize visual impacts, "Where the average size of clearcut harvest areas exceeds 120 acres, AF&PA member companies will reduce the average size to no more than 120 acres, except when necessary to respond to forest health emergencies or other natural catastrophes." When it comes to forest chemicals, "AF&PA members will meet or exceed all applicable label requirements, laws, and regulations concerning the use of fertilizers, herbicides, and other forest chemicals needed to protect forest health and increase growth." I had no idea that not meeting regulations was an option.

Governments are also starting to set sustainability guidelines. This is a process ongoing in both Canada and the United States. Canadians are particularly concerned over their poor international image due to controversies stemming from brutal cutting in British Columbia. Canadian government officials are hoping that their sustainability initiatives will assure consumers in Europe that Canadian wood is really "green."

In the United States, the AF&PA has, as a goal, that its members, "will work with Congress and public agencies to appropriately define and implement active ecosystem management on all National Forest System and Bureau of Land Management lands." "Appropriate" for the paper industry may not be the same as for the public.

The Northern Forest Lands Council recommended "Principles of Sustainability" that some states are now trying to refine (see sidebar). These government standards are the result of processes involving "multiple stakeholders." This usually can be translated to mean that the forest industry is well represented and has veto power over any result.

Conclusion

Years ago, the food industry discovered that the public wanted "natural foods." Now we have cereals that are labeled "100% natural" but they are loaded with refined sugar. Industry strategists know that perception is more important than reality. If the public wants sustainable forests, the industry strategists will call whatever their companies happen to be doing now sustainable. If you don't believe it, ask them. Or ask the for-profit company that they are paying to say their forests are sustainable. Or ask the government council that the companies have stacked with their own members. If the public is confused, that's all right too. As long as people do not understand what it means to truly sustain forests and communities, they will not be outraged by practices that violate such principles.

THROUGH

Everything falls silent
but the brook chatters on
entertaining the shade.
Some hot weeks it dies away
to a whisper through shale.
After heavy rains, runoff
rages in the bed for days.
Though he is five years
distant from the shack
by the brook, he still hears
the stream run on
through him, through
noise and into silence.

—Stephen Lewandowski

Book Review

THE NORTHERN FOREST

by David Dobbs & Richard Ober; Chelsea Green Publishing Company, White River Junction, Vermont; 1995; 356pp.

Reviewed by John Davis

Some of the same adjectives as fit the region fit the book: complex, indefinite, troubling, beguiling, yet overall good and redolent with potential. That is, I believe Dobbs & Ober have made an impressive, yet problematic, effort to portray an impressive, yet problematic, region.

Their first and most fundamental error, in my view, is their assertion (p.XXV) that managing the Northern Forest for wood will remain an economic and moral imperative. Their claim (on the same page) that we cannot in good conscience set this forest aside and satisfy our appetite in other parts of the planet is a hackneyed and fallacious argument, which Mitch Lansky and others have effectively debunked (see **The Northern Forest Forum**, volume 3 #3, pages 17-18).

As intimated in their own analysis (still p.XXV), we should work to reduce human population and consumption—not limit protection of natural areas in our own region. Their depiction of resource extraction in the Northern Forest and those who live by it is in places unrealistically favorable. Ecological reserves are desperately needed in this region for the very reason that the timber industry by and large has proven itself incompatible with the natural world.

Though ostensibly siding with both *land and people*, the authors offer no sustained critique of the industries and types of exploitation that are diminishing our natural heritage. Troublesome for those readers active in defense of distant places will be the book's persistent skepticism toward—if not recurring bias against—any but the most autochthonous environmentalists. Repeatedly, the reader is left with the impression that loggers, farmers, fishing guides and other resource-dependent workers of the woods are wise and virtuous, whereas environmentalists are naive and meddlesome.

This impression is left in part for good reasons: Dobbs & Ober write well; they engage the reader. Also, most of the subjects they chose as exemplars probably really are that—truly decent people working the land as benignly as they can. Ennobling loggers and the like in lucid prose, however, may be doing a disservice to the land and ultimately to the people, too. Many conventions in the woods of New England and New York—such as large-scale clearcutting and feller-bunchers—should simply be abandoned forthwith; others—including almost all types of large-scale commercial resource extraction, including logging, dairy farming, sugaring, and Christmas tree production—should be deeply questioned. Down-sizing of all these industries is needed—for land and people.

Undoubtedly, Dobbs & Ober undertook this timely task with an agenda—as do almost all writers, including this reviewer. Their agenda, if I read them aright, involves trying to convince the public to support improvement and maintenance of the working forest, as opposed to the subdivided forest. This is not altogether bad, as are the agendas of many developers and corporate leaders, I would argue; but it's not a prescription for healthy natural and human communities. It upholds the status quo while favoring minor reforms where problems (e.g., clearcutting) are glaring. That is, the authors seem content to keep the Northern Forest relatively intact (relative to erstwhile or ersatz forests in many others parts of the world) yet ecologically impoverished.

For as Steve Trombulak and Christopher McGrory-Klyza show in the other—and in my opinion the more helpful—new book on the Northern Forests (**The Future of the Northern Forests,** Trombulak & Klyza, eds., 1994, University Press of New England), our region is not healthy. A shocking proportion of the plants now living here are exotics; we've lost several top carnivores, including Gray Wolf and Wolverine; many other species are imperiled here; and we've truncated ecological cycles and processes.

A good agenda would give central place to publicly owned and protected ecological reserves. Conservation biologists and ecologists generally agree that if we are to allow space for all native species, we must protect a regional network of vast wild core areas connected by wide habitat corridors and surrounded by buffer zones open to ecologically benign resource uses, to be linked with similar reserve networks in other regions.

Dobbs & Ober and several of the people they profile acknowledge the need for reserves, but they hasten to add that protected areas should only be seen as partial and limited solutions. Moreover, whereas they look at several loggers and farmers up close and personal, they profile no wildlands proponents. If the authors meant what they wrote, the role they see for reserves is utilitarian: more significant than preserves' provision of habitat for wildlife, the authors suggest, is their role as benchmarks against which working forests could be compared (p.132). Any self-respecting ecologist would counter that though such benchmarks are indeed desperately needed, this is not the primary reason to save natural areas.

Notwithstanding that Dobbs & Ober's book will disappoint some readers looking for guidance toward truly sustainable natural and human communities, it will edify and enlighten them. Indeed, I feel **The Northern Forest** offers more to readers who disagree with some of its premises and favor large-scale wilderness recovery than to readers unaware of the need for economic conversion and establishment of a vast ecological reserve network. The former (wildlands proponents) need to learn to understand and communicate with local people of all sorts, even men who operate feller-bunchers. The latter (the silent majority) could be reinforced by this book in their view that perpetuating the status quo is desirable, that we can best protect our environment and our economy by keeping the forest "working."

The strongest section of **The Northern Forest** is "The Adirondacks." Here the authors use conservation controversies in the Adirondack Park to draw lessons for the larger region. Thoughtfully heeded, the lessons could enable environmentalists to regain and increase the public support and political clout they enjoyed in the 1970s.

Near the end of this section, Dobbs & Ober start to sketch a plan for keeping the Northern Forest forest. Here, finally, they begin to give ecological reserves their due, though they envision reserves on the order of only 100,000 acres or so, with perhaps one or two larger. Giving a friendly nod to The Wildlands Project's long-term, grassroots approach to wildlands recovery, the authors argue convincingly that environmentalists must regain the middle ground (not necessarily the same as the middle of the road), that we have lost the public's support and right-wing ideologues have won it because we have too often favored centralized, top-down approaches to conservation and have failed to work with local people to develop broad constituencies for endangered species and spaces. Again, I think the authors cast too dim a light on wildlife advocates (their treatment of RESTORE: The North Woods is particularly unfair), but their criticisms and prescriptions for improvement of the environmental community deserve a careful reading by all friends of the forest.

In conclusion, I believe Dobbs & Ober have written a book of real value for wildland proponents. Their book helps us see how our putative adversaries think; how fine is the line philosophically, yet how wide socially, that often separates environmentalists from loggers and farmers; where is our common ground; and other lessons essential to furthering the greater good in northern New England and New York.

For the majority committed to neither wildlands recovery nor its polar opposite, property rights extremism, Dobbs & Ober should consider a second book. They should describe wildland protection and recovery plans (e.g., Oswegatchie Great Wilderness proposed by Adirondack Council, Maine Woods National Park proposed by RESTORE: The North Woods, HEADWATERS Wilderness Reserve System proposed by **The Northern Forest Forum**, future, more ambitious, proposals from the Greater Laurentian Region Wildlands Project) and profile ecosystem recovery proponents as skillfully as they did existing economic enterprises and advocates. Having portrayed the present picture pellucidly, they should now sketch a future where humans truly are living with, rather than against, Nature. They should profile today's heroes of tomorrow, people like Tim Barnett, Nancy Bell, Bill Howland, Lori Fisher, Michael Kellett, Susan Morse, Gary Randorf, Steve Trombulak, Robin Ulmer ...

John Davis is Editor of Wild Earth (POB 455, Richmond, VT 05477), the most important journal of the new conservation movement. He also serves on the Board of The Wildlands Project.

David Dobbs interviewing Jim Moffatt of Craftsbury, Vermont. Moffatt, a third generation Tree Farmer, is a central figure in The Northern Forest by Dobbs and Richard Ober. Photo by Richard Ober.

Next Issue

We'll Run An Excerpt from

Northern Forest

by David Dobbs & Richard Ober

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P. 4—Sue Szwed

Court Considers Only Forest Service Testimony in Lamb Brook Lawsuit

Press Release from
Green Mountain Forest Watch

In a ruling issued July 12, Judge Franklin Billings of the Federal District Court in Vermont granted a request by the Forest Service to consider only testimony from expert witnesses provided by the Forest Service, and to bar from court all testimony from expert witnesses provided by conservation groups in the Lamb Brook lawsuit.

Testimony barred from the court includes:

• Testimony on the effects of the Forest Service proposal on songbird habitat by Dr. Kenneth Rosenberg of the Cornell Lab of Ornithology, and Sally Laughlin, author of the Breeding Bird Atlas of Vermont and former director of the Vermont Institute of Natural Science. The testimony states that Lamb Brook's remote forests are important breeding ground for many species of Neotropical migratory songbirds who then populate the rest of the state. According to Dr. Rosenberg, "The Forest Service cannot ensure the health of these bird species' populations, given the proposed level of forest fragmentation."

• Testimony on the effects of the Forest Service proposal on Black Bears by Dr. Michael Pelton, one of the world's foremost authorities on black bears, and Dr. Albert Manville, president of the Adirondack Mountain Club, and former science policy director for Defenders of Wildlife, and photographs of bear markings on trees in the Lamb Brook Area. According to the testimony of Drs. Pelton and Manville, the Forest Service's proposal would destroy some of North America's finest black bear habitat, and could extirpate black bears from the 17,000 acre black bear subunit which contains Lamb Brook.

Judge Billings also granted a Forest Service request to bar from court testimony by a former Forest Service employee who stated in her affidavit that high level officials had instructed her and her co-workers to violate the law in the preparation of environmental analysis for the Lamb Brook project, and testimony from the lead author of the forest plan from the Green Mountain National Forest, who stated in his affidavit that the Lamb Brook proposal is in violation of that plan. Judge Billings had previously granted a Forest Service request to bar from court the testimony of all of the individual plaintiffs.

In his ruling, Judge Billings admitted into court the testimony of ten expert witnesses provided by the Forest Service, and allowed the presentation of evidence on illegal ORV use by the plaintiffs.

"We are all quite confused by this ruling," said Mathew Jacobson, Executive Director of Green Mountain Forest Watch. "How can we expect justice to be done if the court will only consider one side of the case? We have submitted testimony from some of the nation's top biologists demonstrating conclusively that these projects will irreparably damage Vermont's Black Bear and Songbird populations, but the Judge has decided not to consider these. Instead he will consider only the testimony from an agency which claims that building a two-lane graveled logging highway into the heart of critical black bear habitat, and logging that habitat will have no negative effects. I have never heard of anything like this. I am saddened and stunned."

At issue is a Forest Service decision to construct or reconstruct three miles of roads and log approximately two square miles of one of southern Vermont's most remote wild forests, Lamb Brook. The area is located on the Green Mountain National Forest, southwest of Wilmington, VT. Plaintiffs in the case include, Green Mountain Forest Watch, National Audubon Society, Sierra Club, The Wilderness Society, Vermont Audubon Council, RESTORE: The North Woods, Preserve Appalachian Wilderness, Conservation Law Foundation, James Northup, Ellen Kingsbury Viereck, Tyler Resch and Mathew Jacobson.

The Forest Service proposal has been criticized by both of Vermont's senators, the State's wildlife biologist, the town of Readsboro Planning Commission, and the town of Wilmington Planning Commission.

Excerpts from the Testimony on Bad Faith by the Agency that Were Barred from Court

According to the affidavit by Shelley Hight, a former Forest Service employee who worked on the preparation of the environmental analyses for the project:

- Forest Service staffers from the Regional Office held training sessions for the Vermont staff on Lamb Brook, the purpose of which was to show the staff "how to get around the National Environmental Policy Act requirements" (p.2)
- The Regional office instructed the Vermont staff to "ensure that their work refrain from revealing potentially significant environmental impacts which might upset the result desired by the Forest Service..." (p.3)
- Regional NEPA coordinator Dain Mattox told his Vermont subordinates that they should claim that the Forest Service's reason for logging Lamb Brook was "habitat creation", a "euphemistic and misleading" attempt "designed to mute public opposition". (p.3)
- Information that Lamb Brook was a "bear nursery" was not included in the Lamb Brook Environmental Assessment. (p.4)
- The Forest Service "deliberately circumvented NEPA requirements" on Lamb Brook. (p.5)

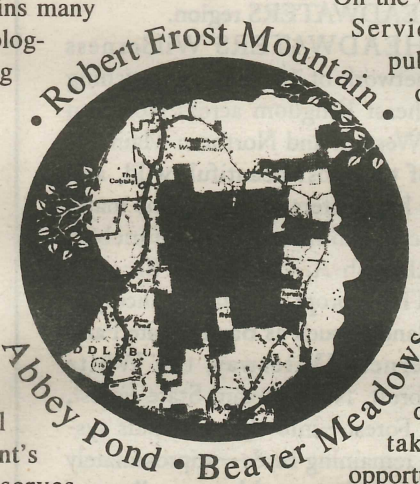
Robert Frost Mountain Locally Developed Ecosystem Restoration Project

by Mathew Jacobson
Green Mountain Forest Watch

The US Forest Service has announced plans to conduct a series of "Management Activities" in the 8,000+ acre Robert Frost Mountain Area of the Green Mountain National Forest. These activities may, depending on the level and quality of public input, range anywhere from ecological protection and restoration to road construction and intensive logging. Citizen mobilization is essential to seize this opportunity.

Robert Frost Mountain Area

The Robert Frost Mountain Area is located just northeast of Middlebury, VT on the Green Mountain National Forest. The area contains many rare and significant ecological features including Abbey Pond, the Beaver Meadows, critical bear habitat, rare plant species, peat bogs, deer wintering areas, oak groves, and the Forest's only heron rookery. The area also lies adjacent to Battell Woods, one of Vermont's only Old Growth Reserves, owned by Middlebury College, and filters approximately ten percent of Middlebury's water supply.



The Frost Mountain Area provides us with a great opportunity to protect and restore a keystone area for healthy ecosystem processes and native biological diversity in Vermont. Unfortunately if past experience with the Forest Service in areas like Lamb Brook are any indication, merely maintaining the status quo will be a battle.

Public Input

A public meeting about the Robert Frost Mountain/Abbey Pond/Beaver Meadows area held by the Forest Service at the Ilsley public library in Middlebury drew over two dozen attendees. Local citizens including many Green Mountain Forest Watch members made a near unanimous call for the protection and restoration of the area, rather than increased logging. Specifically mentioned were calls for road removals, Old-Growth recovery, and hands-off wildlife management.

While the Forest Service speaks of emphasizing the protection of special places and wildlife habitats, only 475 acres are being considered for special protection, and *over 3,000 acres are being considered for intensive even aged-logging (clearcutting and its variants)*

On the other hand, the Forest Service is presenting the public with an unprecedented opportunity to get involved in the decision-making process from the ground level. If we want to see this special area protected and restored instead of exploited and degraded, we need to take advantage of that opportunity.

What You Can Do: Green Mountain Forest Watch will be working together with Sue Morse of Keeping Track, inc. (See vol. 3 #4, pages 24-25 for an article about Keeping Track) to lead a series of on-the ground training workshops to teach local residents in the Middlebury area to survey for wildlife track and sign. This knowledge will be used to inventory and map the area for significant habitats.

If you're interested in helping out, or getting involved in our tracking training sessions, please contact Mathew Jacobson at Green Mountain Forest Watch 48 Elliot St. Brattleboro, VT 05301 (802) 257-4878 grnmt@sover.net

A Second Chance for the Northern Forests

8-Million Acre HEADWATERS Wilderness Reserve System
Proposed for Northern Maine, New Hampshire & Vermont

In **The Northern Forest Forum** (volume 3 #5) we proposed the establishment of an 8-million acre network of HEADWATERS Wilderness Reserves in the uninhabited region known as the "Industrial Forest" of northern Maine, New Hampshire, and Vermont.

Calling for "A Second Chance for the Northern Forests," the *Forum*'s proposal offers a blueprint for a 75-year transition strategy to sustainable natural and human communities of the Northern Forests.

The proposal also outlines a strategy for economic revitalization that builds a sustainable, locally-controlled economy within the context of protected wildlands to replace the unsustainably exploited "Industrial Forest." The "Second Chance" proposal also outlines strategies for cultural and political restoration for the communities of the HEADWATERS region.

The proposed HEADWATERS Wilderness Reserve System is a network of 16 reserves stretching from Vermont's Northeast Kingdom across Northern New Hampshire and Western and Northern Maine. It encompasses much of the most beautiful, wild, and remote sections of the headwaters of the region's major rivers: the Connecticut, Androscoggin, Kennebec, Penobscot, St. John-Allagash-Aroostook, and Saco.

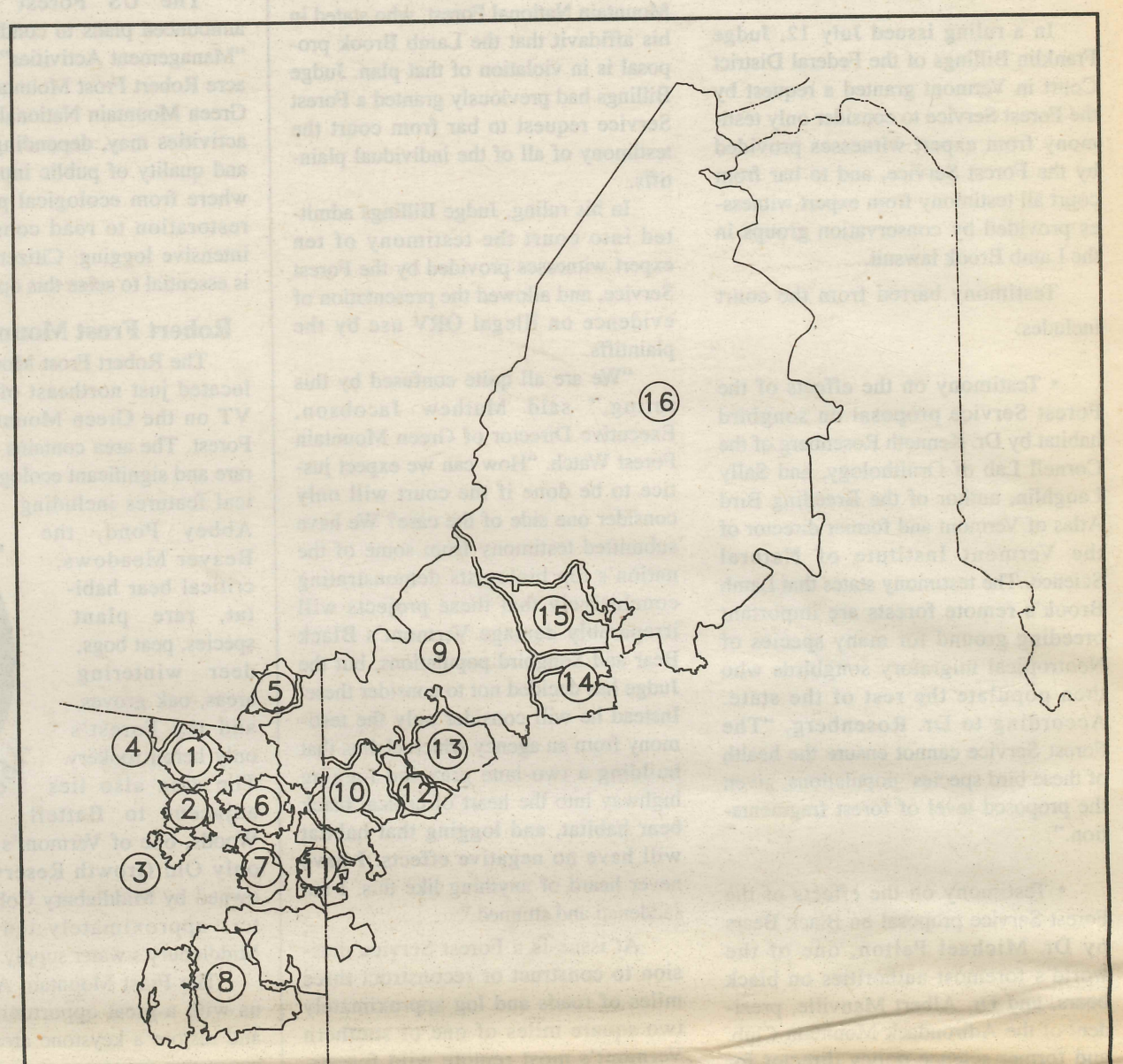
The HEADWATERS proposal calls for incorporating existing public lands—such as Baxter State Park, the Allagash Wilderness Waterway, the White Mountain National Forest, Nash Stream State Forest, & Victory Bog State Forest—into the wildlands system. Almost all of the remaining lands—approximately 7 million acres—are currently owned by a small number of multinational paper corporations, heirs of 19th century timber barons, pension funds, or real estate speculators.

There are no year-round residents on the lands proposed for the HEADWATERS Wilderness Reserve System. No one will be thrown off his or her land by the implementation of this proposal.

The lands of small woodlot owners who live on their property are not included in the HEADWATERS proposal. The property rights of local residents are not only respected, but actually enhanced by the possibility of a stronger, more sustainable, locally-controlled, regional economy. Full implementation of the HEADWATERS proposal will promote greater local political control over decision-making.

For two decades, ownership patterns have been volatile in this region. More than half of the land in the proposed HEADWATERS Wilderness Reserve System have been sold since 1980.

The cost of acquiring 7-million acres for publicly-owned wilderness reserves is surprisingly low—approximately $2 billion, or about $100 million a year for 20 years. This is a capital investment in our environmental infrastructure. To put this into perspective, recall that the Pentagon admitted in May that it had "misplaced" more than $14 billion. Right now Congress is trying to spend money on the B-2 (Stealth) Bomber (which cost more than $750 million each), despite statements from military leaders that we do not need the B-2. Clearly, there is money available, even in these tight budgetary times. What is lacking is the political leadership to spend it on our life-support system (the environment) and on behalf of future generations.



The 16 Proposed Northern Forest Headwaters Wilderness Reserves

1—Nulhegan Reserve (100,000 acres)
Major Watersheds: Nulhegan River, Connecticut River

2—Paul Stream Reserve (70,000 acres)
Major Watersheds: Paul Stream, Connecticut River

3—Victory Bog (25,000 acres)
Major Watershed: Moose River

4— Hurricane Brook Reserve (25,000 acres)
Major Watershed: Coaticook River

5—Indian Stream Reserve (100,000 acres)
Major Watersheds: Hall Stream, Indian Stream, Perry Stream, Connecticut River

6—Nash Stream Reserve (110,000 acres)
Major Watersheds: Upper Ammonoosuc, Connecticut River, Androscoggin River

7—Kilkenny Mountains Reserve (65,000 acres)
Major Watersheds: Upper Ammonoosuc, Connecticut, Androscoggin

8—White Mountain National Forest (600,000 acres)
Major Watersheds: Pemigewasset River, Saco River, Swift River, Gale River, Androscoggin River, Baker River

9—Boundary Mountains Reserve (1,200,000 acres)
Major Watersheds: Connecticut, Magalloway, Dead River, Moose River, Upper Kennebec

10—Umbagog, Richardson, Mooselookmeguntic Lakes Reserve (220,000 acres)
Major Watersheds: Androscoggin

11—Mahoosuc Reserve (110,000 acres)
Major Watersheds: Androscoggin

12—Tumbledown Mtn. Reserve (80,000 acres)
Major Watersheds: Androscoggin, Kennebec

13—Sugarloaf/ Mt. Abraham Reserve (170,000 acres)
Major Watersheds: Kennebec, Androscoggin

14—Moxie Pond Reserve (160,000 acres)
Major Watersheds: Kennebec, W. Branch Pisquatiquis

15—Kennebec Headwaters-Misery Ridge Reserve
Major Watersheds: Kennebec, W. Branch Pisquatiquis

16—Thoreau Reserve (4,900,000 acres)
Major Watersheds: Upper Kennebec, Moose River , West Branch Pleasant River , Allagash, Upper Aroostook, St. John, West Branch Penobscot, East Branch Penobscot

Help Establish HEADWATERS Wilderness Reserves

For a copy of the HEADWATERS proposal, write the Northern Appalachian Restoration Project, POB 6, Lancaster, NH 03584.

Please consider making a donation to the Forum and the Northern Appalachian Restoration Project. Contributions are tax deductible. Checks should be made payable to Earth Island Institute and sent to: NARP, POB 6, Lancaster, NH 03584.