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THE MAINE WOODS

A Publication of the Forest Ecology Network

“In wildness is the preservation of the world.” Henry David Thoreau

Volume Eight Number One • Early Spring 2005

Free



The Kennebago River as it flows into the north end of Little Kennebago Lake in Stetsontown Township, Franklin County. *Photo © Paul Donahue*

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“Only after the last tree has been cut down. Only after the last river has been poisoned. Only after the last fish has been caught. Only then you will find that money cannot be eaten.”

Cree Indian Proverb

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A Voice in the Wilderness by Jonathan Carter

REWILDING MAINE

ReWilding Maine is the focus of FEN's long term vision. The capital W in ReWilding stands for wilderness. Most of the Maine Woods have been under assault from industrial forestry for more than a half a century. In the last twenty-five years at least 25,000 miles of logging roads have cut into the heart of the woods - so much so that within the industrial forest there is no longer any place where one can stand and not be within a half mile of a logging or skid road.

Gone are the epic canoe trips on wilderness rivers and the footpaths to distant, untouched, glacial valleys and mountain peaks where stands of old growth forests abound and pristine streams boil with native trout.

In spite of this assault, wild nature hangs on - by a thread sometimes. Wild nature is resilient and has the patience and foresight to understand time is on its side and that the assault can be turned back. Those of us on the cutting edge of wilderness restoration are resistance fighters. We also understand that this battle for ReWilding is a long term struggle which will not be completely accomplished within our lifetimes.

Recently, I saw a night photograph of the eastern seaboard. There were only two large areas where blackness prevailed - the tip of Florida in Everglades National Park and the vast area we call the Maine North Woods. The fight for ReWilding is about keeping the lights off and, through restoration, healing the wounds of the past ecological degradations.

We have our work cut out for us. Plum Creek's recent proposal to commercialize and develop 400,000 acres around Moosehead Lake is a full frontal attack. It is easy to blame them for these plans, but in reality they are only doing what they have done in Montana and what was obvious they would do here in Maine when they purchased the 900,000 acres six years ago. As a corporation, their bottom line is to maximize return on investment - and I am convinced that Plum Creek believes that their proposal is ecologically sound and economically beneficial for them, the state, and surrounding local communities..

We in the environmental community in Maine have failed to stand together and forcefully propose an alternative vision. The Maine Woods National Park Proposal stands alone as the only vision in the last decade which advocates for the protection of the North Woods on a scale that establishes the goals of ReWilding. And yet, many land conservation oriented groups including the Nature Conservancy, Maine Audubon, Appalachian Mountain Club and the Natural Resource Council of Maine, have not signed on to the Park proposal. For sure these groups have done a lot of good work independently - advocating for and saving from development through easements and purchases hundreds of thousands

of acres. Certainly we should applaud the successes - such as the Debsones, 100 Mile Wilderness, Kennebec Highlands, Tumbledown, West Branch Project etc. Perhaps the scope of Plum Creek's development plan will be the catalyst which will send a wake-up call to the impending potential for sprawl in the Maine Woods. It is time for political and philosophical differences to be put aside and to focus collective energies on creating a large

contiguous area of restorable wilderness on the scale of the 3.2 million acres encompassed by the Maine Woods National Park.

Recently, a group of Harvard Forest researchers sent out an alarm calling for the protection of 50% of the remaining forest land in Massachusetts, with at least 5% designated as wilderness. The study determined that this was the minimum requirement to conserve biodiversity

and maintain any semblance of ecological integrity. Maine needs to do better than Massachusetts. Maine represents the last great opportunity in the east for truly large scale wilderness restoration. It is not an opportunity we can afford to miss.

Roxanne Quimby's effort to restore wilderness through her Keep ME Beautiful Foundation is a bright light on the horizon. And while, I am sure Roxanne would purchase it all if she could, it is not realistically possible for her to do it alone. Her efforts to ReWild Maine should not only be a beacon of hope, but a model for what needs to be accomplished..

Like Percival Baxter, Roxanne Quimby has got it right. Outright purchasing of land for the purpose of ReWilding is ultimately the only solution. While easements provide a measure of protection, they are not and will never be the path to true restoration. Easements buy time and may represent a stopgap from rampant development, but they are not the tool for ReWilding Maine. Easements may create an illusion of wilderness, but true wilderness must be free to function under the control of the laws of nature and be forever wild. It is somewhat ironic that while wilderness requires the absence of human manipulation, its survival and restoration in the 21st century is dependent on human intervention. We must muster the will and resources. We must articulate and educate what Thoreau realized over a 150 years ago - "In wildness is the preservation of the world".



FEN director Jonathan Carter in a Plum Creek clearcut north of Flagstaff Lake.

photo by Janet LeClair



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THE MAINE WOODS

is printed on 100% recycled, 90% post-consumer, non-bleached waste paper (newsprint). The cover stock is 20% recycled paper.



"A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise."

Aldo Leopold

Citizens' Call for Ecological Forest Restoration: Forest Restoration Principles and Criteria

From the beech woods blanketing Vermont's Green Mountains to the towering Redwoods in California, forests are among the most precious and beloved places on our continent. Forests provide pure air; clean, abundant water; climate control; and countless other ecosystem services that are vital to the survival and quality of human life as well as the fish and wildlife with whom we share the planet. Forests are critical to both our physical well-being and our spiritual renewal.

Regrettably, centuries of intensive resource extraction, development and short-sighted "management" activities, and invading exotic species have fundamentally altered most of America's forests. The results are loss of fish and wildlife habitat, reduced water quality, increased floods, the conversion of biologically rich old-growth and native forests to sterile tree plantations, failing ecosystems, and economic and social harm to the communities and workers who depend on forest resources.

There is an urgent need to reverse these declines by preserving the remaining wild forests and repairing the damage from past mismanagement. We share a vision of ecological restoration that encompasses all natural ecological processes and native fish, wildlife and plant species while enhancing the human connection to the natural world. This restoration must be done carefully and with humility, recognizing that ecosystems are complex and our understanding of them is limited.

Human communities depend on the natural environment. Preserving wild forests and investing in degraded landscapes through thoughtful, science-based restoration is necessary to ensure that the benefits of forests are available to both present and future generations. A new focus on forest protection and restoration will foster a just, conservation-based economy creating and sustaining family-wage jobs within the capacity and resiliency of healthy forest ecosystems.

Executive Summary

Forests are among the most precious and beloved places on our continent, providing pure air, clean water, climate control and other ecosystem services that are vital to our quality of life and the survival of fish and wildlife. Regrettably, centuries of resource extraction and development have fundamentally altered most of America's forests, resulting in loss of habitat, water quality and old-growth forests, as well as economic and social harm to communities and workers.

Ecological forest restoration can help reverse these declines, but only if it is based on science and recognizes that ecosystems are complex and our understanding is limited. Preserving wild forests and investing in degraded landscapes through thoughtful, science-based restoration will foster a just, conservation-based economy that can create and sustain family wage jobs within the capacity of healthy forest ecosystems. The Citizens' Call for Ecological Forest Restoration is a national policy statement to guide sound ecological restoration. It clearly defines principles and criteria to serve as a yardstick for evaluating proposed forest restoration policies and projects. By including social and economic criteria, it also helps bridge the gap between what's good for the land and what's good for communities and workers. The Restoration Principles were developed by a diverse group of forest activists and ecologists, with input from forest practitioners and community forestry groups since 2001. Successful ecosystem restoration must address ecological, economic

and social needs including community development and the well-being of the restoration workforce. While emphasizing that the primary goal of restoration is to enhance ecological integrity, the document encompasses two additional core principles that address the value of natural capital and socio-economic issues that set the context and criteria for restoration.

Core Restoration Principles

1. Ecological Forest Restoration. The primary goal of forest restoration is to enhance ecological integrity by restoring natural processes and resiliency. Effective forest restoration should reestablish fully functioning ecosystems. Ecological integrity can be thought of as the ability of an ecosystem to support and maintain a balanced, adaptive community of organisms having a species composition, diversity and functional organization comparable to that of natural habitats within a region (Karr and Dudley 1981). A restoration approach based on ecological integrity incorporates the advantages of historical models while recognizing that ecosystems are dynamic and change over time. Ecological sub-principles and criteria indicate that

TEN COMMANDMENTS OF FOREST RESTORATION by Jonathan Carter

1. Restoration is essential for the planet's survival
2. Restoration means all current ecosystems exhibiting ecological integrity must be immediately protected
3. Restoration requires that all actions degrading ecological integrity must stop and healing begin
4. Restoration recognizes that fire, disease, and other natural disturbances are central to maintaining ecological integrity
5. Restoration is about the interdependence of all living organisms and must be approached on a local, regional, continental, and global scale.
6. Restoration requires reducing, reusing, and recycling, as well as the development of alternatives
7. Restoration is a reinvestment in natural capital
8. Restoration is essential for a sustainable economy
9. Restoration is needed to avert catastrophic climate change
10. Restoration represents physical, biologic, and spiritual renewal

restoration planning should be based on restoration assessments at multiple scales, and that projects need clear goals and benchmarks for use in monitoring and evaluation, leading to a process of adaptive management. Restoration budgets should include adequate funding for planning, monitoring and adaptive management. Restoration must uphold all local, state and federal laws and regulations. In the interest of cost-efficiency and effectiveness, restoration programs should place priority on the least intrusive and intensive methods needed to enhance ecological integrity, including protection of high integrity areas (core refugia) and passive restoration (i.e. ceasing harmful activities). Active restoration — such as road removal and prescribed burning — may be necessary in cases of clear need, and where there is broad stakeholder and scientific support. The Principles also distinguish between protecting the Community Protection Zone (a small area immediately surrounding homes in the forest), and the broader goal of landscape restoration.

2. Ecological Economics. Intact forest ecosystems provide essential ecological services, including clean air and water, upon which all life and all human economies depend. Restoration of these natural systems is an investment in natural capital diminished by decades of logging, road building, mining, grazing, fire suppression, and invasion by exotic species. An economic and institutional framework that fully accounts for non-market ecological services should be established to recognize the value of intact ecological systems and to guide restoration efforts. Ecological Economics sub-principles and criteria stress the need to develop positive incentives to encourage ecological restoration, and to eliminate commercial and other incentives that drive activities, that harm ecosystems, communities and workers. For example, the current timber sale program is not appropriate for restoring forests. Rather, government should appropriate multi-year funding for all aspects of restoration, and reform contracting mechanisms to award contracts on the basis of best value criteria rather than lowest-bid. This includes preference for contracting with local crews, small rural businesses, underserved communities and multicultural mobile workers. Market values should be seen as a secondary by-product of restoration for ecological integrity.

3. Communities and Workforce. Restoration must foster a sustainable human relationship to the land that promotes ecological integrity, social and economic justice for workers and communities, and a culture of preservation and restoration. In turn, effective restoration depends upon strong, healthy and diverse communities and a skilled committed workforce. Communities and Workforce sub-principles and criteria emphasize the need for collaborative efforts to build community and worker capacity to perform ecological restoration and create quality jobs. This should emphasize a high-road approach that provides family wages and benefits, professional training and career development, equal access to work and training, and the right to organize and bargain collectively. Furthermore, restoration and sustainable community development should involve an open, inclusive and transparent democratic process that eliminates undue influence by any group on public-land management decision-making. Sound forest restoration requires an integrated multi-disciplinary approach rooted in conservation biology and principles that include preserving and protecting intact landscapes, allowing the land to heal itself, and where necessary, helping it to do so through active restoration. Through thoughtful strategies employed over time, we can reestablish sustainable human connections to the land creating quality restoration jobs and encouraging conservation-based economies. During a period of significant change in forest policies at the federal, state and local level, the Forest Restoration Principles and Criteria establish a vision for restoring natural ecosystems and a sustainable human relationship with the land. They reject the false claims of regulatory streamlining and healthy forests initiatives that use pseudoscience and failed economic theories, and purport to serve the public interest. The Principles and Criteria provide an essential tool for stakeholders and decision-makers at all levels to evaluate, critique, improve, support or reject a proposed project or policy. All interested parties are invited to endorse and utilize this document.

This report is the result of a collaborative effort of over 120 Forest NGO's, with FEN among the signatories. American Lands Alliance spearheaded the effort and the full document can be viewed at their website: www.americanlands.org

Reinventing Conservation Easements - A Critical Examination and Ideas for Reform

by Jeff Pidot

“The goods of nature and fortune... are only lent. We think ourselves masters, when we are only stewards, and forget that to each of us it will one day be said, ‘Give an account of thy stewardship.’” Joseph Horne, as quoted in Richard Brewer, Conservancy, p.77. Hanover: University Press of New England (2003).

Certainly, no recent happening in land conservation rivals the deployment from coast to coast of conservation easements. Beyond tax and other public subsidies, which in certain states continues to increase, one of the driving forces favoring this growth is that conservation easements are perceived as a win-win strategy in land protection, by which willing landowners work with private land trusts or government agencies to provide lasting protection of portions of the American landscape. In short, conservation easements often accomplish something that comes easily and makes people feel good, which is certainly no vice but which, together with their tax and other public subsidies, helps explain their extraordinarily rising popularity. The question, is whether they may also present something of a time bomb, and what can be done to minimize that effect.

The Policy Context

“Finally, as the land trust movement and use of easements matures, we are faced with questions born of our success....” Jean Hocker, former president of the Land Trust Alliance.

A quarter of a century ago, when the vast majority of us had never even heard of a conservation easement, Daniel Halperin, then Deputy Assistant Secretary at the U.S. Department of the Treasury, and today a Professor at Harvard Law School, testified before Congress to express his concerns about pending legislation that would make permanent what were then temporary laws that experimentally granted income tax deductions for the donation by landowners of conservation easements. In his testimony, the concerns raised by Professor Halperin about the future were nothing less than prescient.

He spoke about the difficulty of determining whether there would be a public benefit of donated but privately held conservation easements commensurate with the public subsidy conferred by their income tax deductibility and other tax benefits. He spoke about the difficulty of appraising the value of donated conservation easements for tax purposes, and the parallel difficulty for the IRS in evaluating whether these appraisals were fair. He spoke about the uncertainty of whether conservation easement holders would have the resolve and resources to forever monitor and enforce the easements held by them, in the absence of which the public would receive no meaningful or lasting benefit at all. He spoke about the vagueness of the concept of a conservation easement and its conservation purposes, as then expressed in the law, which is essentially unchanged to this day. He advocated for at least some public involvement in conservation easement creation, so that the public would have a say in what otherwise would be exclusively a private, albeit publicly underwritten, transaction. He spoke about the risk of conservation easements that would conserve nothing of public value at all, as well as those that would protect nothing that was at risk in the first place. He spoke about the potential abuse by taxpayers who would donate conservation easements

that would benefit themselves more than the public subsidizing the easement. In short, he spoke about whether conservation

easements, as then and still now devised under the law, would ultimately deliver the promise of permanent and meaningful land conservation of publicly valuable landscapes, as the public believed and hoped that they represented.

A quarter of a century later, we can now see, if we are willing, that Professor Halperin foretold of many important issues presented by conservation easements, although he could not have predicted their forthcoming numbers and complexity.

What is a Conservation Easement?

A conservation easement (in some states referred to as a conservation restriction or similar term) is a set of



photo © Paul Donahue

permanently enforceable rights in real property, held by a private non-profit corporation (usually a land trust) or a government agency authorized to hold interests in real estate. These rights typically impose a negative servitude (in other words, a set of promises not to do certain things) upon the encumbered land, with these promises permanently enforceable by the easement holder.

In this, a conservation easement is something of a misnomer, because, in legal parlance, an easement is generally considered to be a possessory interest in land that enables the easement holder to have rights of access or other active use of another person's property (think of a utility or road easement). By contrast, a conservation easement is designed to prevent uses of the encumbered land that are inconsistent with the terms of the easement. Although some conservation easements provide for public access to the property, most provide only the holder with access to monitor easement compliance.

When a conservation easement is held by a private land trust or government entity, the underlying fee ownership remains in the landowner, and may be bequeathed, sold or otherwise conveyed just as with any other interest in real estate, subject always to the restrictions on future use of the property as stated in the easement.

The scale and meaningfulness of conservation easements can vary dramatically. At one end of the spectrum, there are conservation easements that do little more than “conserve” a landowner's residential backyard. At the other end of the spectrum, some conservation easements significantly protect pristine lands having natural and/or recreational resources of

extremely high public value. Where such a conservation easement also provides significant rights of public access, there may be little practical difference between it and a grant to the easement holder of fee simple (or outright title) to the property; although with a conservation easement the landowner continues to own the land and can dispose of it at will, subject to the continuing terms of the easement.

Although similar on paper, a different kind of conservation easement is often referred to as a “working landscape” easement. This type of easement allows continuation of certain beneficial uses of the property for forestry, ranching or farming, but eliminates development uses that are considered by the easement's parties to be incompatible with such objectives. These conservation easements may be motivated by an interest in keeping the land in timber or agricultural production in order to attempt to maintain a local economic base or community way of life.

Although likewise similar on paper, still another kind of conservation easement is one that is negotiated or extracted by a local, state or federal regulatory authority as a quid-pro-quo in mitigation for a development permit. Some interviewed for this Report stated the view that these types of conservation easements shouldn't be distinguished from other types of permit conditions imposed by regulatory authorities, but the reality is that a conservation easement, unlike a standard regulatory permit condition, is a stand-alone interest in real estate, is legally permanent and places upon the easement holder (which is often not the permitting agency) an ongoing responsibility to monitor and enforce the easement.

While many conservation easements have been charitably donated by conservation-minded landowners, who also receive tax benefits from doing so, in recent years there has been an increasing trend toward purchasing conservation easements, sometimes for their full appraised value. In the case of a substantial property, this may cost many millions of federal, state, local and/or private charitable dollars.

Why Does the Public Have a Stake in Conservation Easements?

Why should the public, and therefore its government at all levels, care about how conservation easements are created and managed? After all, like most other easements, conservation easements are usually private transactions, so why should this be a public concern unless the government is directly involved as the easement holder? One important answer is that, with virtually every conservation easement, there is a significant public subsidy. The public should care about how its money is being spent, whether it is being spent for something of long-term public benefit, and whether it is being spent efficiently; that is, the public should be interested in whether it is getting a public bang for its buck.

What is the basis for the assertion that virtually all conservation easements are publicly subsidized? First, increasingly, these easements are being purchased with public money, the most obvious form of public subsidy, and sometimes on a grand scale involving many millions of dollars. But even while most conservation easements are still donated by private landowners to private land trusts, they almost always result in an income tax deduction to the donor, as well as, in many cases, reduced real estate and estate taxes for the landowner in the future and, in some cases, other substantial public subsidies as well.

Even where a private land trust purchases for fair market value a conservation easement from a private landowner, as is true for the largest conservation easement acquisition in history (a 760,000-acre easement, that forbids most forms of development on working forests in Maine, purchased by a private land trust for its appraised value of \$28 million), nonetheless the public's money is at work, since virtually every dollar paid for such an easement was donated to the cause, resulting in charitable income tax deductions for the donor, while many conservation easements also result in reduced estate and real estate taxes for the landowner in the future.

A fair question is why should there be any greater public interest in donated conservation easements than in the donation of money or other financially valuable assets to a charity? The answer to this question lies in the fact that conservation easements are about promises made and to be kept in the future. Conservation easements provide nothing of value to the public, nor even to the charity that accepts them, if they are not well-crafted, permanently encumbering land that has publicly-valuable conservation values, and held by an enterprise that has the capacity and resolve to permanently monitor, enforce and defend them perpetually. To put it differently, would Congress have provided significant tax incentives for the donation of conservation easements, if the understanding was that the promises made by these new inventions of real estate law might not be kept?

Beyond the public's financial investment, there is also a public interest in conservation easements, as a form of charitable trust, the premise of which is that the public has an interest that transcends that of the private parties to the transaction. Further, some conservation easements guarantee public access to the property, such as for hiking or scenic enjoyment, giving the public an added stake in the long-term security of the easement. And further still, in the case of conservation easements granted by developers as a quid-pro-quo for regulatory permits, these easements also comprise a public investment because they are part of the consideration given to the public in exchange for the right to proceed with a project that may cause environmental harm. Finally and not least importantly, the public has a valid and abiding interest in the orderly future of legal understandings and stability of interests in real estate. There is no less of a public interest in the long term, legal meaning and durability of conservation easements than there is in that of fee simple deeds to property.

For these reasons, it is the premise that there is an important public interest in conservation easements. However, even those in the private land trust community who would contend otherwise should still be concerned about the long term capacity and resolve of their organizations, as well as of the underlying legal institutions that enable conservation easements to exist, which are necessary to assure that these modern inventions of real estate law can live up to the responsibilities entrusted to land trusts by their donors.

In sum, when a conservation easement is created, there is a legitimate and broad-based interest and concern that the terms of the easement will be honored and that the easement holder (or some entity) will be able to monitor, enforce and defend the restrictions of the easement forever, as virtually all conservation easements promise. Indeed, the very purpose of state and federal laws that support and subsidize the creation of conservation easements is that the public interest is intended to permanently benefit from them.

Jeff Pidot is a Visiting Fellow at the Lincoln Institute of Land Policy in Cambridge, Massachusetts.

FEN'S Legislative Agenda for 122nd Session

FEN has introduced numerous bills dealing with wildlife, water, and citizen initiative reform. FEN will be working with Maine Friends of Animals and The Wildlife Alliance of Maine on animal bills. In addition FEN will be working with the H2O For ME Campaign on a bill which will codify the public's ownership of groundwater. Due to the active "illegal" involvement of the DIF&W in the bear referendum and the disruption of the water campaign's signature collection drive by Nestle "goons" on election day, FEN is supporting two bills which will make these gross intrusions illegal. FEN thanks Rep. John Eder for his support in getting all these bills introduced.

1. An Act to prohibit hunting or pursuing bear with dog; hounding: Using dogs to hunt or pursue bears would be illegal except for the protection of livestock, domestic animals, threatened or endangered wildlife, public or private property, public safety, commercial timberlands, and for scientific or research purposes.

2. An Act to prohibit the hunting of bear with a trap: Hunting or capturing a bear with a trap would be illegal except for the protection of livestock, domestic animals, threatened or endangered wildlife, public or private property, public safety, commercial timberlands, and for scientific or research purposes.

3. An Act to prohibit state agencies from direct involvement in and spending state tax dollars in support of or opposition to citizen initiative and referenda: State agencies would be prohibited from meeting with or colluding with supporters or opponents of any citizen initiative or referendum. In addition, tax dollars could not be spent by any state agency in support of or in opposition to a citizen initiative or referendum.

4. An Act to Promote Public Safety: This would make it illegal to intentionally feed bears in the wild. Justification: IFW and others support bear baiting as a wildlife management tool and claim that without baiting, Maine's bear population will grow out of control. The bear baiting program amounts to a bear feeding program that feeds thousands of bears each fall at thousands of bait sites. Making feeding bears illegal will restore natural reproductive rates, natural behavior including foraging, and natural population levels.

5. An Act to Prohibit the Use of Neck Snares: This would shut down the coyote snaring program statutorily. IFW has already said the program will remain shut down until the USFWS issues it an incidental take permit to allow it to kill federally protected animals such as eagles, lynx, cougar and wolf. Justification: Outdoors extremists argued that wildlife decisions should be made based on biology, not emotion. There is no biological justification for the coyote snaring program. There is no scientific evidence that coyote snaring will increase Maine's deer population or that coyotes are negatively impacting it. Support for coyote snaring is based solely on emotion - not on science.

6. An Act to Promote Fairness and Democracy in Maine Government and Wildlife Management: This would remove the current statutory requirement that, "Any candidate for the office of (IFW) commissioner must have a record of demonstrated support for, and an understanding of, the basics of modern wildlife and fisheries management and have experience in hunting, fishing or trapping." It would also remove the requirement that anyone appointed to serve as IFW Deputy Commission-

er, "...be qualified by training and experience in fisheries and wildlife management or conservation law enforcement." Justification: There are no pre-requisites for consideration as commissioner or deputy-commissioner in any of the other natural resource agencies (DEP, DOC, DMR). These pre-requisites eliminate the majority of Maine citizens for consideration for these positions. The majority of Mainers neither hunt, fish, nor trap. The intent of the current statutes is to promote consumptive use and to benefit consumptive users, at the expense of non-game wildlife and wildlife watchers who, incidentally, outnumber Maine hunters by four to one.

7. An Act to Promote Non-consumptive Use of Maine's Fish and Wildlife Resources: This bill would require that half of the members of the Inland Fisheries and Wildlife Advisory Council represent non-consumptive users, e.g. bird watchers, herpetologists, wildlife watchers, naturalists, etc. Justification: Although the current statute does not require that the Advisory Council members be hunters, fishermen, or trappers, the council is made up of solely consumptive users/advocates and is effectively nothing but a rubber stamp for IFW. There is currently no provision in statute to require that non-consumptive users be represented in IFW and in the Maine's wildlife management process. There are many issues of concern to non-consumptive users with regard to management of Maine's game and non-game species. There needs to be at least equal representation on this Council.

8. An Act to protect the citizen initiative signature collection process at polling places: It will be unlawful for potential opponents to a citizen initiative signature collection drive to be present at polling places where signature collectors are attempting to gather signatures.

9. An Act to establish Maine's ownership of groundwater. This bill would codify the public's ownership of all groundwater. As a public resource its extraction and use would be regulated.



Keep ME Beautiful by Rebecca Rundquist

Roxanne Quimby is the founder of both Elliotsville Plantation Inc., doing business as Keep ME Beautiful and the Quimby Family Foundation. Keep Me Beautiful is a private operating foundation which holds approximately 50,000 acres in fee for land conservation purposes. The Quimby Family Foundation is a private not-for-profit organization founded as a long-term philanthropic program. The Foundation has been established with broad charitable purposes so that its grant making policies reflect the diverse interests of the Quimby Family. This article is focused on explaining the conservation and land management goals of Keep ME Beautiful.

Land in Maine is confronted with rapid development and ongoing unsustainable forestry practices which are eliminating many types of critical ecosystems. Ms. Quimby, aided by ecologist, Bart DeWolf and project manager, Rebecca Rundquist are working to retain and in some instances recreate the rich mosaic of scenic and historical forested, agricultural, and coastal lands, streams, and ponds.

The mission of Keep ME Beautiful is to acquire significant natural, agricultural, and scenic areas in Maine to allow diverse ecosystems to return to natural patterns of diversity at the genetic, species, ecosystem, and landscape levels. The Foundation is creating stewardship plans for the more than 50,000 acres it has acquired thus far. Stewardship plans are geared towards protecting and managing the lands to preserve natural conditions serving recreational, scenic, conservation, historical, and commemorative purposes.

Ecologist and Foundation Science Director, Bart DeWolf, in commenting on the properties said that "although most of these properties have been logged in the not too distant past, there remain many natural areas including excellent examples of older northern hardwood and coniferous forests and wetlands, an abundance of wildlife, and important wildlife habitat. There are also



A view of the Little Greenwood Pond purchase. *Photo by Mimi McConnell.*

spectacular stretches of rivers and streams with waterfalls and rapids, pond and lake shorelines, and small mountains and hills." DeWolf has found a number of rare or unusual natural communities in his explorations on the properties, as well as instances of rare plants and animals. "Atlantic salmon are found in the Penobscot East Branch, eagles fly overhead, and we're still hoping to find sign of lynx in the nearby forest," DeWolf said. The logged areas are rapidly returning to a more natural condition, and many of the now-unused logging roads are slowly fading from the landscape.

Keep ME Beautiful's management strategies also aim to limit roads, motorized equipment, motorboats and

aircraft landings in the protected areas except as necessary to meet requirements for the administration of the area. We work with State and Federal agencies in order to allow adequate access for fire and disease prevention and fisheries management.

Future plans include the development of educational internships and research projects that include both hands on land management and research opportunities.

Roxanne Quimby, Keep ME Beautiful's founder and President, also serves as board member of Acadia Partners for Science and Learning, a non-profit group that is partnering with Acadia National Park to launch and manage the Schoodic Education and Research Center. To date, many of her foundation's land acquisitions have been in the area of Maine's North Woods. More recently, her conservation efforts have moved towards Maine's coast where she has received more public support for her philanthropic environmental work.

Update on H₂O For ME Campaign by Jonathan Carter

Last November several hundred FEN volunteers collected signatures at the polls on election day on the citizen initiative "An Act to Preserve Maine's Drinking Water Supply". While the collection process was marred by Nestle Corporation "goons" interfering at the polls, in some cases physically intimidating collectors, the collection effort was a great success. The H₂O For ME Campaign has decided to place the issue before the voters in 2006 rather than 2005. This was a strategic decision based on 2006 being a higher voter turnout year as well providing the campaign with more time to fund raise and hold educational outreach meetings around the state.

Maine's groundwater supply is under assault by large multinational corporations who see Maine's "blue gold" as easily exploitable. Currently, Maine law does not regulate groundwater extraction. FEN does have a bill before the legislature which will codify the public's ownership and the right of the state to regulate extraction.

"An Act to Preserve Maine's Drinking Water Supply" is a national, precedent setting effort to establish public control and ownership, ensure sustainability, and to provide compensation in the form of a publicly owned trust which will be invested in Maine small businesses and available for state land acquisition. Jim Wilfong, director of the H₂O For ME Campaign, states, "For nearly 35 years, Maine people have invested billions of dollars, privately and publicly, in the stewardship of our groundwater resources - making sure it is as plentiful and pristine as the glaciers left it ten thousand years ago. In this century, water is to Maine in importance, as oil has been to Saudi Arabia in the last one. For years, companies have been making significant margins bottling free water for consumption around the world. It is time for Maine people to receive a dividend from their equity in Maine's groundwater".

FEN is taking a leading role in this campaign. FEN members and friends are encouraged to get involved. We need to continue to collect signatures and to host meetings around the state. Please call the office at 628-6404 or e-mail at fen@prexar.com if you are willing to help out.

Keep ME Beautiful's Land Acquisitions

Property Name	Acres	Project
Big Wilson Sanctuary	2,407	Appalachian Trail Buffer
Bluffer Sanctuary	5,800	Nature Conservancy Buffer
Little Greenwood Pond Sanctuary	285	Audubon Wildlife Sanctuary Buffer
Mt. Kineo Sanctuary	77	Maine Public Reserve Land Buffer
Peppermint Brook Sanctuary	202	Appalachian Trail Buffer
Seven Ponds Sanctuary	5,700	Appalachian Trail Buffer
Bodfish Farm Rd. #1	41	Appalachian Trail Buffer
Bodfish Farm Rd. #2	41	Appalachian Trail Buffer
Szabo Property	97	Appalachian Trail Buffer
Big Greenwood Pond	142	Audubon Wildlife Sanctuary Viewshed
Greenwood Mountain	85	Audubon Wildlife Sanctuary Viewshed
Doughty Hill	60	Appalachian Trail Buffer
Wakeman Gate	451	Appalachian Trail Buffer
Big Benson Pond	507	Audubon Wildlife Sanctuary Viewshed
Fairstead Farm	24	Protected Farm and Farm House
East Branch Ecological Sanctuary	24,083	East Branch of Penobscot River and Surrounding Forest Land
Three Rivers Sanctuary	9,896	Confluence of East Branch and Sebois rivers, and portions of the Wassataquoik Stream

State of the Union's Environment - 2005

by John Demos

"We're not granting special privileges to anybody. We're giving priority to logging over recreational uses or any other use." - Montana District Ranger Jimmy DeHerrera - Valentine's Day 2005.

By the time you are reading this, the Roadless Policy that would have protected up to 60 million acres of roadless public forests will likely exist in name only. The National Forest Management Act will also have been radically overhauled to remove wildlife protections and limit public involvement in the development of forest plans.

Welcome to the second term of George W. Bush and the continuation of his ideologically-driven crusade to undo thirty-years of environmental protection.

In his first term the President managed a startling number of rollbacks, including passage of the misnamed "Healthy Forest Restoration Act", the undermining of the Environmental Protection Agency's regulatory authority, and opening up millions of acres of public land to oil, gas and mineral exploitation. But it's a big job destroying decades of environmental law and they still have a lot of work ahead of them.

The fate of the Clean Air Act, the Clean Water Act, the Arctic National Wildlife Refuge and the Endangered Species Act are but a few tidbits left on his agenda. But Bush's attempts to gut these highly popular laws - much like his project to privatize Social Security - may be a big bag of pretzels he's likely to choke on.

Recent polling has shown that 86% of registered voters nationwide support the Endangered Species Act. 90% of voters responded to the view that we need to make sure we act as good stewards of the land to avoid the extinction of species. Bush may take down the remaining old growth forests, but they will grow back. Not for a hundred or a thousand years - not within my or my child's lifetime, but they will come back. An endangered species, on the other hand, when driven to extinction it is gone forever. Dusty museums are full of poor critters that we humans have had a hand in exterminating.

Several bills are expected in Congress later this year that will seriously undermine the ESA. Two examples are House of Representatives bill 1662 (the "Endangered Species Data Quality Act") and Senate bill 2009 (the "Sound Science for Endangered Species Planning Act"). Both bills will undermine sound scientific data collection by allowing political appointees with little or no scientific qualifications to determine whether a species is endangered. Also, industries pushing projects that may threaten species will be given special access to the Secretary of the Interior, while citizens and communities that wish to protect species will face a far more burdensome process than now exists.

The Endangered Species Act has provided sensible checks and balances on development of lands critical to a species' survival. The Act has been estimated to have provided protection for 172 species, between 1973 and 1998, that may have gone extinct. The Bald Eagle, the Black-footed Ferret, the American Alligator, the Whooping Crane and the California Condor have all seen a rebound in their populations because of their listing under the Act. At the same time, the protection of endangered species under the Act has resulted in few cancellations or modifications of development projects.

The Nature Conservancy has estimated that up to a third of native species in the United States are at risk of extinction. Help make sure the Endangered Species Act doesn't become another stuffed bird, like the dodo - just another footnote in the history books. Talk to your Senators and Representatives. For more information on the Endangered Species Act, go to: www.stopextinction.org

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Preventing Maine from Becoming the Frankentree State

Scientists are rapidly developing the ability to use biotechnology in another way with even more potential for widespread ecological damage: genetic modification of trees. Genetically engineered trees are still in their early stage of development, and are mostly confined to corporate and university research plots. However, the U.S. Department of Agriculture, which reviews and permits genetically modified organisms, is expected to see more applications to test and then grow modified trees in coming years. Paper and lumber companies, biotechnology firms and universities here in Maine, and across the globe are currently conducting research and planting test plots of GE trees, and they plan to commercialize these crops in the near future.

The development GE trees could have severe impacts on forests and forest dependent communities across the globe, including the state of Maine. The notion behind the genetic engineering of trees is similar to that of food: to create a more profitable product. The development GE trees could have severe impacts on forests and forest dependent communities across the globe, including the state of Maine. The notion behind the genetic engineering of trees is similar to that of food: to create a more profitable product, with little or no regard to its effects on the earth and natural ecosystems, as well as the communities where they are grown.

The development of genetically modified tree plantations represents a severe threat to the biodiversity of our forests. Trees are long-living beings which can disperse pollen year after year, over hundreds of miles. If genetically modified genes spread to native trees in neighboring forests, GE trees could take over and turn diverse natural forests into GE monocultures.

What impact will GE Trees have on the biodiversity of Maine's forests? What will the economic impact be on Maine loggers? Who's at fault if a GE Tree falls and injures someone? We feel the state needs to study and answer these and other questions before it considers allowing GE Trees to be tested in the open air or grown commercially in the state!

What characteristics are being engineered? Current studies are focusing on genetically engineering four main traits into trees: 1) tolerance to Monsanto's Roundup herbicide; 2) pesticide production with the bacterium *Bacillus thuringiensis* (Bt) (which is inserted and present in every cell); 3) decreased lignin content (a polymer found in plant stems that gives tree trunks much of their structural strength and ability to resist insects and diseases), and 4) sterility. Trees are also being bred to grow faster, to be more uniform in their characteristics and to be able to grow in unfavorable soil conditions.

For additional information, please visit the GE Free Campaign website at: <http://www.stopgetrees.org>. There you will find their GE Trees Fact Sheet and more information on how to take action.



Plum Creek's Big Plan

by Phyllis Austin

When Plum Creek Timber Company bought 900,000 acres – 1,400 square miles – of Maine woods in 1998, it bought more than trees. It bought mountains along the Appalachian Trail, tens of wild trout ponds, miles of land flanking the Kennebec and Moose rivers and over 60 miles of shoreline along Moosehead Lake.

The acquisition made conservationists nervous. On its lands in the Pacific Northwest and Rockies, the Seattle-based company had earned a reputation for spinning



photo © Frantisek Staud

In mid-December of 2004 Plum Creek announced its plans for the largest subdivision in Maine's history – approximately 1,000 house lots, two resorts and other enterprises -- on an array of high quality lakes and ponds.

off parcels of land to the highest bidder and subdividing timberlands. But Plum Creek denied intentions to subdivide the newly acquired Maine lands, saying it was only interested in doing sustainable forestry in the Pine Tree state.

In 2002, however, Plum Creek created an 89-lot development on relatively remote First Roach Pond (see Phyllis Austin story) north of Greenville. The lots sold quickly, but a Plum Creek spokesman said no more development was on the horizon.

In mid-December of 2004 Plum Creek announced its plans for the largest subdivision in Maine's history – approximately 1,000 house lots, two resorts and other enterprises -- on an array of high quality lakes and ponds. All of the proposed development would be sited in the Moosehead Lake area, a gateway to Maine's vast northwestern backcountry.

Not only does the sale further fragment the Maine woods – the country's largest expanse of undeveloped woodlands east of the Mississippi – it also promises to stress the capacity of the Land Use Regulation Commission (LURC), the planning and zoning agency for Maine's 10.5-million acre unorganized territory, where there is no local zoning. LURC has never considered a proposal even a quarter the size of this one.

Details Emerge Slowly

Plum Creek expects to submit its permit application to LURC by March. The agency is already bracing for the review. "It's big, huge, unprecedented, the biggest project we've seen since Big A [dam plan], the largest development proposal in our history," says LURC's director Catherine Carroll.

Until Plum Creek submits the application, there are few official details of the project. Plum Creek Communications Director Kathy Budinick says the plan was only recently hatched, and the specifics are still being worked out.

The company will seek approval of its proposal under the "lake concept" zoning option, which allows a faster pace of development than usual in exchange for conservation. The key hurdle for a landowner is to offer enough publicly beneficial conservation to "balance" the impact of development. Lake concept zoning was designed to encourage landowners to do long-range planning as an

alternative to haphazard, incremental development.

What is known about Plum Creek's proposal is this basic outline:

Of the 415,000 acres included in the plan, about half the Maine land it owns, Plum Creek would develop 14,000 acres, leaving 95 percent of that tract in commercial timberland management. Six thousand acres would go to about 1,000 camp lots – half on the shoreline of various waters with existing development and half on back lots (with one exception, all of the lakes already

have some development). Another 6,000 acres would go to resort development. One thousand acres in Greenville would be allocated to a business park and another 1,000 acres to low-income housing. To balance the development, Plum Creek is willing to place in permanent conservation a 500-foot buffer around the shoreline of 50 undeveloped ponds.

Plum Creek is also proposing other conservation initiatives, although they are outside the lake concept plan. The company has offered to create permanent easements for 43 miles of new hiking and cross-country ski trails and 75 miles of existing snowmobile trails. It is willing to sell to the state 37,000 acres bordering the Appalachian Trail's Hundred Mile Wilderness. Included in that deal would be No. 5 Bog near Attean Pond and land around Second and Third Roach ponds – tracts the Bureau of Parks and Lands has been wanting for some time.

It seems the company's large Maine holdings include a carrot to dangle before every interested nose. But this should be no surprise; Plum Creek's shrewd business deals have made it a very profitable real estate company. While Plum Creek likes to characterize itself as a timber company, it has been organized as a Real Estate Investment Trust for several years. Buying, logging, subdividing and then selling woodlands has been a lucrative practice for Plum Creek.

Promises Made and Broken

The first lands Plum Creek acquired in New England were the 905,000 acres it bought from SAPPI Fine Paper. SAPPI had owned the land only four years, after purchasing it from S. D. Warren, part of the old Scott Paper domain. The acquisition was part of a recent cascade of timberland deals. In the last six years, seven million

acres of Maine's commercial forestland have been sold, much of it to short-term financial investors and wealthy individuals.

When news got out that SAPPI was selling, a spokesman reassured the public that the company had no intention of selling the land to a developer but soon inked the deal with Plum Creek, whose meteoric rise was based on cutting its timberlands hard, then subdividing them. Rod Chandler, a Republican congressman from Washington, once characterized Plum Creek as a "Darth Vader" of the forest industry because of its rapacious forest practices.

But Plum Creek officials professed to be interested only in timber management on its new Maine lands. Rick Holley, Plum Creek's president and CEO, told the Portland Press Herald on Oct. 7, 1998, that the company had no plans to sell land for vacation homes, camps or other types of development. In the Maine Sunday Telegram four days later, Bill Brown, Plum Creek's vice president of business development, reiterated that Plum Creek wasn't really in the development business. The Western shorefront lots listed on its website for sale had "no other use" than for vacation retreats, he explained.

Bruce Farling, executive director of Montana Trout Unlimited and a longtime Plum Creek observer, says Brown was brought into the Plum Creek operation from Texas to use his real estate experience to further the company's fortunes. With Brown on board, Plum Creek became "far more savvy" about development than timberland management, according to Farling, and greatly expanded the real estate side of the business in Montana and elsewhere. Before putting up parcels for sale, Farling says, Plum Creek does a lot of homework determining what neighbors' reactions will be and what the value of the land is to the public.

Plum Creek's first development undertaking in Maine turned out to be plenty valuable to the company, as lots went like hotcakes. The quick success of the 89-lot subdivision on First Roach Pond in Kokadjo, a logging and fishing outpost 18 miles north of Greenville, stirred up latent fears about Plum Creek's real game plan for Maine. "They're doing exactly what we feared – slicing and dicing the best of Maine's North Woods into second home development," commented Cathy Johnson of the Natural Resources Council of Maine.

First Roach was the largest development ever to go before LURC. Plum Creek's director of land management, Mike yea Yeager, stated there were no more First Roaches on the horizon, despite the fact there were more than 100 lakes and ponds and sizeable rivers in the company's ownership. Yet the Wall Street Journal reported that Plum Creek intended to accelerate its subdivision pace.

In 2003, Plum Creek representatives began meeting with LURC staff to talk about a comprehensive development/conservation project. The company hired planner Brian Kent of Gardiner to come up with a design. (He did the First Roach plan.) Also joining the Plum Creek team were consultant Elizabeth Swain, a former LURC chairperson and once on the staff of Maine Audubon and realtor Luke Muzzy, who had handled the lot sales on First Roach Pond.

Despite Plum Creek's contradictory statements about developing its Maine lands, company spokeswoman Budinick says Maine conservationists should feel confident that the company will do the right thing.

"People in Maine should trust Plum Creek because we have carefully considered them in our plans," says Budinick. "The company is developing a comprehensive plan that takes into account the important community values and needs of the area. "Our plan – which ensures that 95 percent of the land the company owns in the plan area will be retained a a working forest – will help maintain the economic viability of the forest products industry, preserve lands with significant conservation values,

promote permanent recreation access to key trails, and stimulate job creation and economic development.”

Overwhelming the Overseers

As Plum Creek’s application looms, there’s a real question about LURC’s ability to handle a project of this size. In recent years, the agency has been downsized so much that director Catherine Carroll doesn’t know at this point how the staff will handle such an enormous proposal. She is weighing how to allocate her agency’s skimpy staff and budget resources to the deal with Plum Creek, as well as the agency’s routine work.

“We’ve got to pull back our ears, pull up our bootstraps and do what we can,” Carroll says. It will take months to review the application and hold a series of public hearings. Carroll plans to assign one of her senior planning staffers to the project fulltime and go to outside help for an economic analysis of Plum Creek’s application. Plum Creek has offered to provide the money needed for LURC to “keep on top of this,” Carroll says, but she doesn’t yet know what a “fair and reasonable fee for our services” would be.

LURC never anticipated that the lake concept plan would be used to rezone so much of the unorganized territory, especially in such short a time as is being proposed. The option sat unused for several years, after it was created in 1990. Large paper companies still owned most of LURC jurisdiction, and they weren’t interested in large-scale subdivision.

When landowners finally began to take advantage of the option, it was for no more than a few ponds at a time. Lowell & Company Timber Associates, a Boston investment group, was the first to propose a concept plan, three years after purchasing 17,000 acres of forestland on Attean and Holeb ponds from the Coburn Lands Trust. William Gardner proposed a lake concept plan for Snake and Carpenter lakes north of Baxter State Park, but it was rejected by LURC. Both subdivision proposals were smaller than Plum Creek’s First Roach Pond project.

John Willard designed a 50-lot lake concept plan for Brassua Lake, and there was little fanfare when LURC approved it in 2004. Linkletter & Sons Inc. recently proposed a concept plan for Whetstone, Foss and Hilton ponds near Abbott. Others may be in the works, and some environmentalists think it’s time for LURC to re-evaluate the impact of concept plans, especially given the scale of Plum Creek’s.

The Plum Creek proposal is so enormous that it will further delay LURC from attending to its big picture planning responsibilities. Carroll agrees that work updating LURC’s comprehensive land use plan inevitably will be slowed down. The plan is required by law to be updated every 10 years, and the deadline is 2007. Carroll still aims to have it completed in 2006, but only time will tell if that’s possible.

LURC’s capability to move forward with prospective zoning will be zero. Prospective zoning, which involves intense community participation, is designed to reinforce the special character of a region for the long-term, including commercial and natural resources. It’s also designed to control new development based on historic growth. The first such plan was approved for the Rangeley Lakes area in late 2001, and either Greenville or Carrabassett Valley was scheduled to be next.

Whether Plum Creek’s proposal could be allowed under a prospective zoning plan is unclear, accord-

ing to Carroll. If LURC were to delay processing the development application until the comprehensive plan and prospective zoning for Greenville are in place, the agency would be in a proactive, not a reactive, position to respond to Plum Creek. But that would take years, and nobody is suggesting such a delay.

Drumming Up Support

Groups such as NRCM and RESTORE want permanent conservation of significant lands. They point out that Plum Creek’s conservation commitment would extend only 30 years, the life of the special lake concept zoning under which the company will apply. After that time period, Plum Creek would be free to propose more development. Environmentalists also point out that Plum Creek is being tight-lipped about plans for the other half of its ownership, south of Greenville. They are concerned that the company may have big development plans there, too, especially since Plum Creek is talking



photo © Dominic Jonak

Plum Creek has mentioned a marina as part of the resort plan for Moosehead Lake’s Lily Bay, the location of one of Maine’s most attractive state parks.

about completing the subdivision of their northern tract in 10 to 15 years, not 30 years.

After two meetings with Plum Creek representatives, Cathy Johnson says the major issues for NRCM are the amount and location of development and the kind of conservation. The number of lots being proposed is five to 10 times more than the largest subdivision ever reviewed by the agency, she says. To put the scale of development in perspective, Johnson points out that the town of Greenville has a total of 700 residences. Based on the average rate of development of new homes in the unorganized territory, “we would expect to see about 250 new homes in an area of this size over the next 30 years, Johnson says.

Fred Todd, LURC’s division manager of planning and administration, has done some figuring himself. His preliminary calculation is that Plum Creek, by jumping through the proper hoops, could develop 900 to 1,000 lots over the next 30 years without using the lake concept plan option. That’s about the number Plum Creek is proposing. However, by using the lake concept alternative, Plum Creek can achieve development predictability on half of its ownership and avoid the unknowns of piecemeal subdivision.

Cathy Johnson notes that Plum Creek’s lots north of Greenville will be far from municipal services, such as

police and fire protection, schools, hospitals and mail delivery. As with sprawl elsewhere in New England, diffuse development often ends up having a high price tag in terms of municipal, state and federal dollars.

In its last briefing with NRCM, Plum Creek named the ponds it has targeted for development, in addition to Brassua and Moosehead lakes: Long, Luther, Knight, Fish, Center, Burnham, Indian, Prong, Upper Wilson, and Ellis ponds; also Moose River. If the proposed sale of Second and Third Roach ponds aren’t sold to the state, Plum Creek will subdivide those, as well as Penobscot. Most of the ponds are rated as Class 7 by LURC. Brassua, Long and Indian are Class 3 (potentially suitable for development) and Upper Wilson is in Class 4 (high-value, developer). Burnham, in Class 7, is the only pond on the list with no development. When LURC devised its rating system many years ago, Moosehead was deemed approaching heavily developed status, or Class 5. Besides LURC’s limited staff, the statutory deadlines for filings worry NRCM. They may not provide enough time

for evaluating such a huge project and allowing adequate public involvement, Johnson says. “It is important that LURC should not feel pressured to rush through the permitting process.”

“Ideally the state would have a comprehensive plan for areas of this size, developed with public input,” Johnson says. “Such a plan would designate those areas that are priorities for conservation and those areas suitable for development, and the amount and location of orderly development before being faced with development of this magnitude.”

Jym St. Pierre, Maine director of RESTORE, has been by his own admission the “most consistent critic of the lake concept plans done to date. I have argued that none of the lake plans presented so far – including Attean Lake, Snake and Carpenter ponds, First Roach and Brassua -- met the conservation/development balance test,” says St. Pierre, a former LURC staffer.

“While some of the projects have had good conservation aspects, I

believe none has met the legal test to merit approval,” he says. The new Plum Creek project pushes the question of whether the concept plan “has failed as an experiment,” in St. Pierre’s opinion.

RESTORE has been promoting a Maine Woods National Park proposal for over a decade. The Plum Creek subdivision is in stark contrast to St. Pierre’s vision for the area.

“If these lands were part of a national park and preserve, they would be protected for their natural features and made available forever for appropriate public use,” he says. “There would be no subdivision of lakeshores into hundreds of second home lots. There would be no resorts sited in high visibility areas to capitalize on the views. Rather people would be able to enjoy the wild character of the region in traditional ways.”

The above is an edited version of the article first published on the Maine Environmental News website. For the full article go to:

<http://www.meepi.org/files05/pa021005.htm>

FEN Summer and Fall Field Trips



photo © Paul Donahue

A view up the west shore of Whaleboat Island.

Last year, due to FEN's involvement in the Bear Referendum, we were not able to offer our usual field trip schedule. This year we plan to get back on track.

Number 5 Bog - Saturday, July 16th

This outing will explore one of the largest bogs in Maine. Number 5 Bog is just south of Attean Pond near Jackman. A canoe will be required in order to cross Attean Pond for the trek into the bog.

Quoddy Head State Park and the South Lubec flats - Saturday, August 27th

This field trip will explore the spruce-fir woods, bogs and rocky headlands of Quoddy Head State Park as well as the nearby South Lubec tidal flats. This is close to the peak of fall shorebird migration along the Maine coast and with luck we should see a good variety of shorebirds as well as many other bird species.

Leaders: Paul Donahue and Teresa Wood

Whaleboat Island, South Harpswell - Saturday, September 10th

This will be a kayak trip to explore Whaleboat Island, recently purchased by the Maine Coast Heritage Trust. This beautiful island, only a short kayak trip from Harpswell Neck, is a good place for migrating birds at this season. Unfortunately, this island is just downwind from the Cousins Island generating plant, so we'll also have a look at some of the worst acid rain damage on the Maine coast.

Leaders: Paul Donahue and Teresa Wood

Katahdin Lake Old Growth - Saturday, October 1st and Sunday, October 2nd

The largest section of old growth left in the state surrounds Katahdin Lake. Part of it has already succumbed to the axe, but there are efforts underway to protect this remarkable area. This outing will require an overnight, probably at Katahdin Lake Camps.

Anyone interested in any of these field trips should call or email the FEN office -

Telephone - 207-628-6404

Email - fen@prexar.com

Additional details on times and meeting places will follow later in the spring.

The MeadWestvaco mill in Rumford is being sold, again. Cerberus Capital Management of New York, another mysterious investment firm, is the buyer. According to the dictionary, "Cerberus is the watchdog of Hell. He is often pictured with Hades, his master. He can be found on the banks of the river Styx, where he had the task of eating any mortals who attempted to enter, and any spirits who attempted to escape." The buyer from hell has arrived in Maine.

The "American Paper Century" in Maine Is History by Jym St. Pierre

On New Year's Eve champagne must have flowed at the International Paper Company headquarters in New York. IP celebrated the sale of 1.1 million acres in Maine to an investment firm. The company gets paid \$250 million, while maintaining a continued fiber supply to its mills and transferring all risks associated with fire, ice, wind, and insects. Such a deal!

This sale continues the disintegration of Maine's century-old old forest products industry structure. International Paper was there at the start. It was formed in 1898, when Hugh Chisholm merged his Maine paper mills with others in the Northeast. Chisholm was the most powerful individual in America's paper industry and he drove IP to become the biggest paper company in the world.

In 2005, IP remains the largest paper corporation on the planet. But now, like other paper companies that dominated our economy and politics for generations, it has shed its Maine lands. IP is the last of the "seven sisters" to go. Great Northern, Diamond International, Champion International, Georgia-Pacific, Scott, and MeadWestvaco have all sold off their vast Maine timberlands. Most have also sold their mills or have been swallowed up or gone bankrupt. IP, too, may amortize its investments and sell its Maine mills before long.

International Paper is the last big U.S.-based paper company to exit Maine as a major landowner. The dominant industrial forest owners are now all Canadian: Irving, Brascan, Nexfor/Fraser, Domtar. Ironically, although the Canadians lost most of northern Maine by treaty in 1842, they have bought much of it back in the marketplace.

The impacts of the IP sale on the public are uncertain. Until a few years ago, Maine had the largest concentration of industrial forest ownership in the country. But as the big, publicly-traded companies have left Maine, anonymous ownerships have exploded. We do not know who owns vast stretches of Maine today because most of the "institutional" owners are able to hide. Wagner Forest Management, for example, controls more Maine land than anyone else, but they refuse to disclose most of the actual owners they represent.

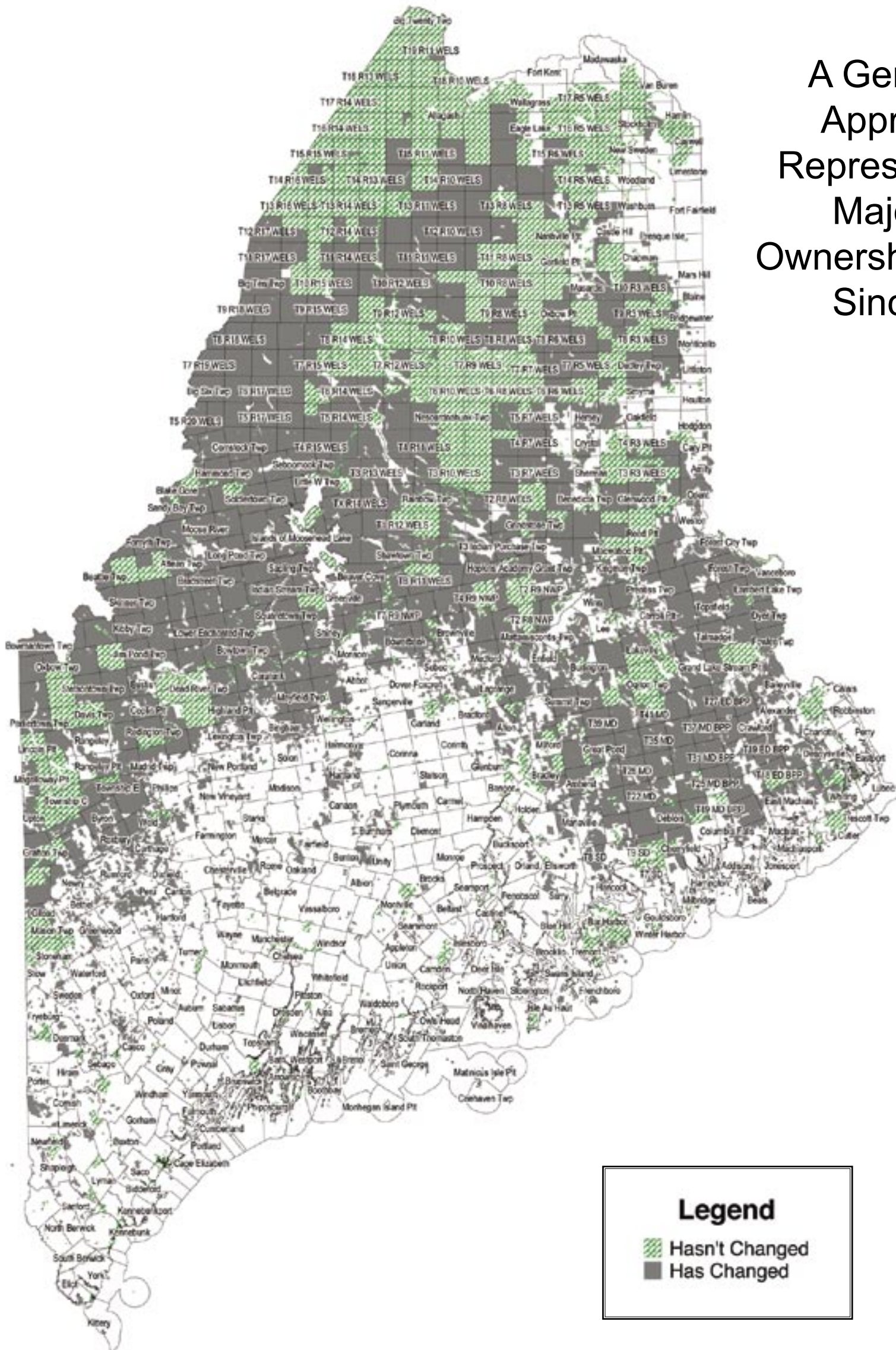
If anything, the northern forest "MaineOpoly" game is getting more worrisome. MeadWestvaco just announced the sale of its Rumford mill to a capital management group. Fraser is selling land in New Brunswick and may unload its properties in Maine. Irving, our largest landowner, is selling substantial acreage also. And Plum Creek Timber Company is proposing the biggest real estate development in the history of Maine's wildlands, including two large resorts and hundreds of subdivision lots for second homes on remote lakeshores.

More than seven million acres of forestland - one-third of Maine's entire land area - have been sold in just six years. The state initially tried to map all the transactions, but in the end had to resort to showing the few lands not sold.

These changes underscore the urgent need to bring more land back into public ownership to safeguard Maine's heritage of public trust in our wildlands. Protecting wild

continued on page 15

A Generalized Approximate Representation of Major Land Ownership Changes Since 1998



Sustaining the Northern Forest

by Mitch Lansky

There is a hierarchy of values, and thus a hierarchy of goals, if one wants to sustain the Northern Forest and the society that depends on it. Since the forest ecosystem is the foundation upon which the social system and economy are dependent, the first priority should be to ensure the integrity and sustainability of the forest ecosystem. Unfortunately, our society has reversed this hierarchy and has put the economy first. Ecosystems, such as forests, are seen as "resources" of the global economic system. We can, from this perspective, afford to mine local resources in non-sustainable ways because there are other resources elsewhere once local ones are depleted.

Our industrial society's current goal is to encourage ecological or social values only insofar as they do not interfere with economic goals. Our economic system is based on the belief that for the economy to be "healthy," it needs to perpetually grow. For the economy to grow, consumption needs to grow. This belief system dooms our society to eventual collapse because the systems upon which our economy depends are limited, not unlimited, and therefore can not perpetually sustain such a growth of consumption. A more realistic goal is to recognize that the world has limits, and develop strategies to live within those limits so that future generations are not forced to suffer diminished lives due to the over-consumption of this generation.

Easement Issues

When it comes to mega-easements (involving tens of thousands or even hundreds of thousands of acres) designed to protect the "working forest landscape," the public benefits become questionable. Although the words "preserve," "protect," and "conserve" are used with these easements, the major feature being protected is not forest ecosystems, but, rather, industrial forestry, including the right to clearcut, spray herbicides, or plant monocultures. The public is, therefore, paying public money to subsidize what is primarily a private benefit. Public benefits such as clean water, old growth, or rare wildlife habitat, if anything, are diminished, not enhanced, by industrial forestry.

Although the public is paying for easements over the entire property, only a small fraction of the property, mostly near larger water bodies, is actually a target for "development." Since these large holdings are mostly accessible on private roads where there are no utilities, schools, stores, or town services, the major development "threat" is from seasonal camps. Any threat from housing developments or WalMarts would be in the very far future, and any appraisal would have to reflect this by severely discounting the future development value.

Some of these easements, such as the one for the West Branch of the Penobscot, would allow development that is compatible with timber management (roads, bridges, garages, logging camps, power plants, power lines, septic disposal...) or recreation (camp sites, landings, parking areas, housing facilities for workers...), but not remote seasonal camps. From the perspective of wildlife,

a logging camp or a publicly-owned recreational building with septic system can't be so much better than privately-owned seasonal camps as to warrant the public expenditure of millions of dollars. Industry representatives have argued that "development" is taking land out of production. Few people from industry are mourning the loss to productivity from roads, rights-of-way, yards, trails, and damage to soils and trees. More land has been taken out of production in Maine's Unorganized Territories by logging roads alone than all the development over the past few decades.



Northern hardwoods old-growth forest.

Although the public is paying for easements over the entire parcel to prevent unwanted development, often large parts of the parcel already have protection. In Maine, LURC restricts development around class 1 lakes and ponds, some of the rivers already have easements, and riparian areas and deer yards are already zoned. The public is thus paying landowners not to harm these resources, which the landowner does not have the right to harm in the first place. If current zoning and regulations are so inadequate that these natural resources are inadequately protected, the remedy is not to pay every landowner in the region to not damage eagle nests, deer yards, or riparian zones, but, rather, to improve the regulations so they actually achieve their stated goals. It is possible that in the future, regulations and/or zoning may be so improved. In that case, we would have easements on the book, paid for by the public, allowing less restrictive practices than allowed under the law. In Maine, all the land in easements is already under the Tree Growth Tax Law, which prohibits development or conversion from forestry unless the landowner pays a

penalty. Neither the easement seller nor buyer, however, are paying the state the penalty that goes with opening up the land to development. Yet the landowner is selling this "right" that does not exist - unless the landowner leaves.

Ecological Reserves Issues

To protect all native species over the long run requires that all the habitats for these species, including old growth, be represented somewhere on the landscape at all times. This representation is best achieved with some proportion of the landscape being in ecological reserves. Few foresters are managing stands for old growth, and even if they did, they might not be fully successful. We don't fully understand all aspects of forest ecosystems. Indeed, when it comes to fungi, insects, or microlife in the soil, our ignorance is profound. The strategy for maintaining biodiversity must account for change. There must be replacement stands for current, older forests, and these stands must be located so that recolonization of the full range of species is assured. For species movement, it is better if forest habitats are connected or adjacent, rather than separated or isolated. If biodiversity is to be protected over time, reserves must be large enough so that the largest expected catastrophic (stand replacing) disturbances still leave enough older forests and replacement stands to ensure that these habitats, and the species that prefer them, can persist.

The reserves must also be large enough to support viable populations of all native species--including those that range through various vegetation types over their life cycles. It is not adequate to protect small plant groups if these will not support viable populations of associated animals. To some extent, wider-ranging species can use managed forests. But some of these species, including large predators such as lynx, wolves, or cougar, are rather shy of too much human activity and thrive better in areas with less roads and mechanized activities. Also, while it is true that these wide ranging species don't need wilderness to survive, wilderness needs these species to be complete. The object should not just be to protect individual species, but whole ecosystems and landscapes with the fullest range of natural diversity possible.

If forest management is to be "scientific," there must be controls to the current experiments of forest manipulation. Since there are many different kinds of forests with different disturbance regimes, we need multiple examples of all these forest types if the "experiment" is to be valid. The Precautionary Principle suggests the wisdom of emulating the natural processes and structures of unmanaged forests to ensure that species (which are adapted to these processes and structures) are not lost. To the extent that managers intensify management in a way that simplifies, fragments, or converts the forest, the need for ecological reserves increases - if protecting biodiversity is a priority.

While nearly half of the six million acre Adirondack Park is in some sort of wilderness designation, very little of Vermont, New Hampshire, or Maine have serious protection against cutting, roads, or hunting and trapping. Despite the sale of six million acres of land in the Northern Forest region in the last ten years, only a tiny fraction of that land has been bought by

photo courtesy of Manomet Center for Conservation Sciences

governments to be put into reserves. These land sales have been an incredible missed opportunity. While states have had processes to discuss biodiversity, the results have been more talk than productive action. The biggest such process was in Maine, with the Maine Forest Biodiversity Project (MFBP). The MFBP involved over 100 people from government, industry, academia, and NGOs over a five year period. One of the products of this process was an inventory of biodiversity in Maine. Here are some of the conclusions:

From the limited extent of the undisturbed forest statewide we can infer that species requiring undisturbed (or less disturbed) forest habitats have become less abundant.

Eight of the 25 forest community types in Maine are rare; of the types that are not rare, good natural examples are rare. Natural forest diversity, in common as well as rare types, is not adequately represented or protected within the lands that are currently in public ownership or private conservation ownership.

Older forests of all types are becoming uncommon in Maine. Older forests support some plant and animal habitat specialists, and presumably support other undocumented specialists. The ecosystem dynamics of old forests differ from those of young forests. Structural complexity, which typically increases as a forest ages, appears to be key for some mammal, invertebrate, and lichen species.

Is there a problem with biological diversity in Maine? YES, THERE IS A PROBLEM. Even the incomplete data show loss or reduction of certain plants and animals, and an apparent lack of unmanaged, representative ecosystems expressing Maine's natural biological diversity.

While the obvious conclusion would be to purchase private lands to complete the reserve system, the MFBP disbanded before such a conclusion could even be discussed. Because the MFBP was run by consensus, large landowners were able to block inventories on private lands and even block discussion on dealing with potential reserves on public lands that were incomplete unless abutting private lands were purchased. These landowners also blocked serious consideration of large reserves as an option, even though the science favoring large reserves is overwhelming.

After the MFBP disbanded, some former members worked out a "compromise" bill to create an ecological reserve system on existing public lands. Some groups (and the latest Northern Forest Lands Council document) have heralded this bill, LD 477, as a propitious beginning. But the bill has some odd features that might indicate a set back rather than a leap forward. The bill, for example, limits the Maine Bureau of Parks and Lands to use no more than 15% of its lands in an ecological reserve system over the next 15 years. Hunting, fishing, trapping, or snowmobiling would not be restricted, unless there was compelling evidence for a need for restrictions. The bill declares that the Bureau cannot reduce its level of timber harvest as a result of taking land out for a reserve system. The bill further specifies that the Bureau cannot cut less each year than the average cut from the preceding last ten years. This, in effect, forces the Bureau to cut more.

In response to this legislation, the Bureau of Lands and Parks announced this year the creation of thirteen new ecological reserves on its land. These reserves add up to nearly 70,000 acres (around 5,300 acres average per

unit). This new reserve system will have little impact on the Bureau's annual allowable cut. Most of the reserved area was not intended to be used as commercial forest land and would not have been cut whether it was called reserved or not. There was thus little change in the status quo.

The Bureau can exceed the 15% figure if new lands are purchased for a reserve system. But buying timberlands (rather than bogs, beauty strips, or mountains) for a reserve system may not be that easy. The Land for Maine's Future (LMF) Board has the following provision written in to its mandate: "LMF is prohibited by statute to acquire land for which the primary use value has been or will be commercially harvested or harvestable forest land. This does not prohibit the acquisition of conservation easements on working forest lands which allow for timber production while securing public access and the conservation of other natural resource values." The federal Forest Legacy program has a similar bias towards easements. Land for Maine's Future has run out of money, so for the short term, the prospect for expanded reserves in Maine is not sanguine.

The current policies for ecological reserves and for purchasing public lands, even at their best, could not, over the long run, protect biodiversity - unless landowners spontaneously decided to act like Percival Baxter and set up their own large reserves and model forests. Given the current mix of landowners, this seems unlikely in the short run. What is needed is government will to set up complete reserve systems in the region, including large reserves. In Maine, the government has been so negative on the issue of large reserves that a serious discussion on the topic has been blocked, let alone any plans to actually purchase land for such reserves.

The Maine Woods National Park is a plan for a three million acre reserve that has broad public support, but discussion has been polarized by a succession of Maine leaders. We need to reverse the current legislation that actually restricts the amount of public land that can be put in reserves so that options for a functional system are not closed off. Reserves alone are not sufficient to protect biodiversity if management veers too far from natural structures in the matrix that surrounds reserves and if society continues its growth in consumption. We need governments and NGOs capable of honestly communicating this (obvious) reality so that our legislatures can have more backbone in taking needed actions.

Low-impact Forestry Issues

The odds of irreversible damage to forest ecosystems increase to the extent that management creates conditions that vary significantly from those under which wildlife and forest processes were originally adapted. Based on this obvious insight, an Independent Multidisciplinary Science Team in Oregon stated that, "the goal of management and policy should be to emulate (not duplicate) natural processes within their historic range."

The biggest difference, besides roads and development, from pre-settlement conditions and today's is the degree to which the forest is now dominated by immature stands. There is a paucity of late-successional and a rarity of old-growth stands. Today in Maine, 2/3 of all forest acreage is classified as either seedling/sapling or pole-sized stands. In the pre-settlement forest, 84% percent of the acreage of pre-settlement northeastern Maine was in stands that had gone more than 75 years

from the last catastrophic disturbance. Fifty-nine percent of stands had gone more than 150 years from the last stand-replacing disturbance. Old growth was the most common condition, not a rarity, as it is today.

Late successional and old-growth stands have structures and compositions that are not only important for a wide range of wildlife, but also for the health and stability of the forest. The large live and dead trees, the multiple canopies, and the large dead, downed trees create habitats for a diversity of predator/prey complexes, including cavity-nesting species, that can help control potential "pests." Large, rotting trees are a substrate for mycorrhizal fungi, which play important roles in increasing water and nutrient intake to trees and protecting trees from disease. Fungi diversity increases with age of stands.

Forest practices that simplify, fragment, or convert stands from structures and processes within the natural historic range can hardly be considered "sustainable," even if some third party company certifies the company that does such practices. Short rotations, whole-tree harvesting, and reliance on herbicides can hardly be considered "green," if the term is to have any credibility. Such practices contribute to the trends of a younger landscape, dominated more and more with disturbance-adapted species.

Low-impact forestry (LIF) strives to maintain, enhance, or restore important biological legacies associated with older stands, but LIF is not a substitute for reserved, unmanaged forests that can act as controls/models for forestry. LIF, however, is an excellent complement to reserves, because it expands, rather than isolates, the habitats found within reserves.

LIF should not be seen as a sacrifice to productivity; rather, LIF is crucial for increasing productivity for the long term. With LIF, the risk to blowdowns, insect, or disease goes down compared to standard management which creates simplified stand structures. Leaving behind more trees that do not get cut is a form of insurance that can help buffer the stand against unexpected surprises. Low-impact forestry keeps options open for both the present and future. It leaves an aesthetically-pleasing forest with higher community values for both recreation and wildlife. It also avoids costs associated with environmental damage. The economic benefits of LIF can be increased when landowners pool resources and when growers add value before selling products.



The Party's Over

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prices will continue to rise, and there is a likelihood of gas shortages this summer. The "Nation's Newspaper" also reports that the loss of 2.1 million jobs in the USA during the last three years appears to be permanent. Both of these developments fit neatly into the predictions of "Peak Oil." One thing is certain: we live in interesting times. Anyone who wants to learn just how interesting these times are is well advised to read and ponder "The Party's Over." We've been warned. Will we act?

The Next War for Oil

by Paul Donahue

Oil is the life blood of modern empire. - author Larry Everest in his book *Oil, Power & Empire: Iraq and the U.S. Global Agenda*

As the Bush Oilygarchy's rhetoric against Iran grows more bellicose almost by the day, recycling the very same lies used in the buildup to the illegal war against Iraq, has anyone heard a peep from the mainstream media about the presence of oil in Iran? I know I haven't.

When the Bush Oilygarchy violated half a dozen international treaties and invaded Iraq in March 2003, Iraq had the second largest proven reserves of oil in the world, trailing only Saudi Arabia. However, in the intervening months, as US troops slaughtered a hundred thousand Iraqis, mostly innocent women and children, and tortured prisoners in places like Abu Ghraib, major new oil discoveries were made in Iran, in the Kushk and Hosseineih oilfields in the southwestern province of Khuzestan.

Shouldering aside Iraq, this new oil find has elevated Iran from third place to second place in proven oil reserves...132 billion barrels versus Iraq's 112 billion barrels. WE INVADED THE WRONG COUNTRY! But not to worry, the Bush Oilygarchy is busy at work to rectify that mistake.

Plotting and wrangling for control of Iran's oil riches is nothing new. However, given the historical amnesia of the US corporate media, and their disinclination to place events in context, one could be forgiven for thinking that a US invasion would be the first battle over Iran's oil.

Oil is quite possibly the greatest blessing and the greatest curse that human civilization has known. Iran began to suffer the curse almost as soon as the usefulness of oil was discovered. The following is a brief summary of the struggle over the last century to control Iran's oil riches...

British Beginnings

- On 28 May 1901 Mozafar'od - Din Shah of Qajar granted the British subject William K. D'Arcy a 60-year oil concession on all areas of Iran except the five northern provinces bordering Russia. The concession provided its holder the exclusive privilege to explore for, exploit and export petroleum.
- Oil was discovered in Iran in May 1908 at Masjid-e-Solaiman. In April 1909, Lord Strathcona, a British financier, established the Anglo-Persian Oil Company (APOC). This intensified the struggle between Great Britain and Russia for control of the region. An Anglo-Russian agreement had been reached in 1907, dividing Iran into spheres of influence, but the agreement was annulled after World War I ended in 1919.
- On 20 May 1914, an agreement was signed between the British government and the APOC by which the Brit-

ish government became the major shareholder of APOC, owning 51% of the shares. The agreement gave the British government the right to appoint two directors to the Board who would have the power of veto on any questions relating to British national interests. Also on the same day, a contract was signed between APOC and the British Admiralty by which APOC guaranteed the supply of oil to the Admiralty for 30 years at fixed prices. The arrangement was approved by Britain's House of Commons on 17 June 1914, the eve of World War I.

- The Pahlavi dynasty replaced the Qajar dynasty in late 1925. In 1928 Reza Shah Pahlavi's government initiated negotiations over the British oil concessions. Intense negotiations continued until November 1932, when the Shah cancelled the D'Arcy concession. After the Pahlavi

• At the Tehran Conference in 1943 the Tehran Declaration, signed by the United States, Great Britain, and the USSR, guaranteed the independence and territorial integrity of Iran. However, the USSR, dissatisfied with the refusal of the Iranian government to grant it oil concessions, fomented a revolt in the north which led to the establishment in December 1945 of the People's Republic of Azerbaijan and the Kurdish People's Republic, headed by Soviet-controlled leaders. When Soviet troops remained in Iran following the expiration in January 1946 of a wartime treaty that also allowed the presence of American and British troops, Iran protested to the United Nations. The Soviets finally withdrew in May 1946 after receiving a promise of oil concessions from Iran subject to approval by the parliament. The Soviet-established governments in the north, lacking popular support, were deposed by Iranian troops late in 1946, and the parliament subsequently rejected the oil concessions.

Oil Nationalization and the CIA coup

- In 1951, the National Front movement, headed by Premier Mosaddeq, a militant nationalist, forced the parliament to nationalize the oil industry and form the National Iranian Oil Company (NIOC). Although a British and US blockade led to the virtual collapse of the oil industry and serious internal economic troubles, Mosaddeq continued his nationalization policy. Openly opposed by Mohammed Reza Pahlavi, Shah of Iran, Mosaddeq resigned in the summer of 1952, but three days of pro-Mosaddeq rioting forced the Shah to reappoint Mosaddeq to head the government. The Shah then fled Iran.
- In June 1953, the Eisenhower administration approved a British proposal for a joint Anglo-American operation, code-named Operation Ajax, to overthrow Mosaddeq. Kermit Roosevelt of the United States Central Intelligence Agency (CIA) traveled secretly to Iran to coordinate plans with the Shah and the Iranian military. The Shah returned to rule the country when the CIA-instigated coup forced Mosaddeq from office in August 1953.



A map of the Middle Eastern-Central Asian oil corridor.

government refused to withdraw the cancellation announcement, the British government first took the matter to the Permanent Court of International Justice, then to the League of Nations. In April 1933, in return for many compromises on the part of the British, an agreement was reached for a new 60-year concession.

- Mohammed Reza Pahlavi, Shah of Iran, began his reign in 1941, succeeding his father, Reza Shah Pahlavi (Reza Khan), to the throne.
- In August 1941, two months after the German invasion of the USSR, British and Soviet forces occupied Iran. American troops later entered Iran to handle the delivery of war supplies to the USSR.

• With the Shah in power, the National Iranian Oil Company was effectively un-nationalized. In 1954, Iran allowed an international consortium of British, American, French, and Dutch oil companies to operate its oil facilities, with profits shared equally between Iran and the consortium. U.S. firms received 40 percent of the formerly 100 percent British-owned company. This was, in the view of the New York Times, an "object lesson in the heavy cost that must be paid" when an oil-rich Third World nation "goes berserk with fanatical nationalism."

The Iranian Revolution

- In the Iranian Revolution of early 1979, the pro-US Shah of Iran, was toppled and forced to flee the country yet again, and Ayatollah Khomeini returned from exile.

On April 1st, after a landslide victory in a national referendum, Ayatollah Khomeini declared an Islamic republic with a new constitution reflecting his ideals of Islamic government.

- On 4 November 1979 Iranian Islamic students stormed the US embassy in Tehran, taking 66 people, the majority Americans, as hostages. This event, as with the Iranian Revolution, was, in large measure, a reaction to 25+ years of U.S. interventions in the region. Nowhere was the U.S. more deeply involved in imposing and maintaining a dictatorial regime than in Iran, and nowhere was it more hated. The seizure of the embassy was, in particular, motivated by fears of an attempted repeat of the CIA's 1953 coup.
- A failed mission to rescue the hostages was undertaken on 24 April 1980. The US military buildup prior to its April raid raised Soviet fears of a US invasion of Iran. Moscow responded by moving half its 100,000 troops in Afghanistan to the Iranian border.

The US and the Iran-Iraq War

- Between April and August 1980, while Jimmy Carter was president and Zbigniew Brzezinski was his National Security Advisor, numerous US government memos and meetings between Brzezinski, Hussein and other Middle Eastern leaders signaled the US support for an Iraqi invasion of Iran. In particular, a meeting was held in Kuwait between Brzezinski, King Fahd of Saudi Arabia, Emir al-Sabah of Kuwait and Saddam Hussein in which Saddam Hussein was instructed to invade Iran and to detach the oil-producing, southwestern province of Khuzestan. If Iraq had succeeded in capturing Khuzestan, the heart of Iran's oil industry, Iraqi oil production capacity would have been boosted from 4 to 11 million barrels a day. This would have put Baghdad in control of about 20 percent of world oil production. Iraq would have also controlled deep water ports and offshore oil terminals which it had been long denied by the legacy of its British-drawn borders, reducing its dependence on oil pipelines running through other, sometimes hostile, neighbors.
- On 16 August 1980, columnist Jack Anderson published an article reporting that, "A startling, top-secret plan to invade Iran with powerful military forces has been prepared for President Carter. The ostensible purpose is to rescue the hostages, but the operation also would exact military retribution." Anderson reported that the assault, tentatively scheduled for October, called for seizing and holding Kharg Island, through which 90 percent of Iran's oil flowed, and possibly other oil fields in southern Iran. The Soviets seem to have responded to Anderson's expose by placing their forces near Iran in a higher state of readiness.
- On 22 September 1980 Iraq launched a massive invasion of Iran. Over a million lives were lost in the ensuing war, one of the longest and bloodiest conventional wars of the 20th century. Millions more people were turned into refugees.
- Starting in 1982 the CIA provided \$100,000 a month to a group in Paris called the Front for the Liberation of Iran, headed by Ali Amini, who had presided over the reversion of Iranian oil to foreign control after the CIA-backed coup in 1953.
- In the mid 1980's, in what became known as the Iran Contra scandal, the US illegally supplied arms to Iran through Israel. With the US arming Saddam Hussein in Iraq, and simultaneously aiding Ayatollah Khomeini



in Iran, Henry Kissinger made the remark, "Let's bleed them both white."

- The Iran-Iraq war lasted eight years, until August 1988. The resources wasted on the war exceeded what the entire Third World spent on public health in a decade. The direct and indirect cost of the war for both countries has been estimated at 1.2 trillion dollars! The US, Great Britain, Soviet Union, West Germany, and France supported Iraq, providing military support, and even components of Iraq's weapons of mass destruction. The full extent of US military involvement in the Iran-Iraq slaughter is still emerging, but it is clear that the US and its European allies were directly complicit in many of Iraq's worst wartime atrocities, including its use of chemical weapons.
- Despite a trade sanction in place since 1980 outlawing US citizens and companies from doing business in Iran, US oil services companies, such as Halliburton (Dick Cheney's former employer), Weatherford, Smith International, and Baker Hughes have exploited a loophole in the law and continue to operate in Iran to this day. Meanwhile, Exxon Mobil and other oil companies have been pressuring Congress and the Bush Oilygarchy to give them access to Iran. The controversial energy task force that was headed by Vice President Cheney broached the possibility of lifting some of the economic sanctions against the country.

As much as I am opposed to the policies of the Bush Oilygarchy, it must be made clear that every US administration back to at least the early 1950's, Republican and Democratic alike, has played a significant role in the struggle to control Iran's oil. However, as the world approaches peak oil (the rapidly approaching point at which world oil production will reach a peak and then begin to decline), and with 132 billion barrels of oil at stake, Iran is clearly set to play an even bigger role in US oil politics.

With the invasions of Afghanistan and Iraq, and the threatened invasions of Iran and Syria, the Bush Oilygarchy's response to peak oil is clear. What is not clear is how the American public will respond. Will Americans once again believe the lies about weapons of mass

destruction? Will we go along for the ride, dragged into one oil war after another by successive US administrations? Or will we see through the lies and steer a course away from dependence on the hydrocarbon molecule and towards a sustainable energy future? Most importantly, are we willing to accept the ruination of other cultures, and the environment, to maintain our profligate lifestyle? The maxim *when the people lead, the leaders will follow* is clearly at play here. It is up to us to show the way out of the billowing clouds of oil smoke obscuring the vision of our so-called leaders.

Much of the above historical information comes from:

- *Imperial Alibis*, by Stephen Shalom, published by South End Press in 1993
- *Oil, Power & Empire: Iraq and the U.S. Global Agenda*, by Larry Everest, published by Common Courage Press in 2004
- http://www.iranchamber.com/history/articles/oil_iran_between_world_wars.php
- http://www.iranchamber.com/history/oil_nationalization/oil_nationalization.php
- http://www.nioc.com/brief_history/
- http://www.encyclopedia.com/html/section/iran_history.asp

The "American Paper Century" in Maine Is History

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areas is a smart public investment. A new study shows that, nationally, 125 million people participate in scenic touring, 94 million engage in wildlife viewing, and 70 million visit wild areas. Those activities generate billions of dollars a year and support tens of thousands of jobs in rural communities.

The Nature Conservancy, Appalachian Mountain Club, and Chewonki Foundation are collaborating on initiatives in the Greenville-Millinocket region, to sustain the tradition of shared forestland use and tap the burgeoning ecotourism market. The state is studying nature-based tourism as a key component of rural development strategy. And some remarkable tracts and conservation easements have been acquired by public agencies and by private and non-profit conservation interests.

These initiatives are impressive, but we need to do a lot more. The conservation areas acquired to date represent just a small fraction of the land being furiously sold. Moreover, very little of the newly acquired land is for wilderness. The viability of rural communities long over-dependent on the forest industry hangs in the balance. Over the past four years, Maine lost a higher percentage of manufacturing jobs than any other state, most in the forestry sector.

The International Paper sale is hugely symbolic of the end of an era. Although a few U.S. paper companies still own mills in Maine, the American Paper Century is over. The long-term public interest is not served by tying up Maine's wildlands in worked over working forests, trophy second homes, and misplaced resorts. A rural economic strategy based on sustainable development principles would catalyze the creative economy and preserve more lands for high value, low impact uses, such as public parks.

Jym St. Pierre is Maine Director of RESTORE: The North Woods.

High Stakes Negotiations Over Fate of Katahdin Lake Tract

by Phyllis Austin

Tortuous acquisition negotiations to protect the valuable East Branch lands in Township 3 Range 8 are not over yet, but landowner W. T. Gardner & Sons has stopped cutting old-growth forest around Katahdin Lake, at least temporarily. If the state is unable to pay the price that Gardner wants, the last of Maine's unsaved old-growth will fall, and the opportunity to expand Baxter State Park will be lost for now.

A deal among several parties hinges on a property appraisal. Sewall & Co. of Bangor expects to have a figure on the value by early April. If the number doesn't support what Gardner thinks the property is worth, the company plans to resume harvesting operations around Katahdin Lake. Also, without a deal, Gardner will apply to the Land Use Regulation Commission (LURC) for a permit to bridge Wassataquoik Stream to access its land on the north side of the waterway. The stream is known as the state's wildest flowing water, its headwaters emanating from the slopes of mile-high Katahdin and the remote Klondike in Baxter Park.

Failure of a conservation success will almost assure that Gardner will develop the land or sell to another party who will. The Lincoln-based contracting company is well-experienced in converting its cut-over parcels into house lots. The company tried to subdivide the shorefront of several backcountry ponds north of Baxter Park in 1996, but LURC rejected the application. Developing pristine Katahdin Lake would almost certainly be of interest to Gardner because of the high prices lots would bring.

Already, Gardner's harvesting crews have fragmented much of the T3R8 forest with roads and heavy logging. Haul roads have been extended east and north of the lake and east along the south shore of the Wassataquoik. A substantial number of old growth hardwoods and softwoods (120 years old-plus) have been cut, according to the conservation parties, undermining the land's wild character and its potential for wilderness recreation.

While holding off cutting for the next several weeks in the 6,098-acre area referred to by negotiators as the "Katahdin Lake tract," Gardner's crews are again working again over the "valley" between the east side of the lake and west of Barnard Mountain. They harvested the area once, taking old growth and other mature trees just short of that status (120 years). But enough marketable timber was left to warrant a second harvesting sweep.

"I'm upset," says Charles Fitzgerald, owner of Katahdin Lake Wilderness Camps and a party in the negotiations. "Something special is being destroyed," he says. "It's unnecessary and unfortunate. I'm furious at the state for having a forest policy that allows this to go on." The area

had a potential to be "a wilderness Eden", if left intact and managed to minimize human intrusions, Fitzgerald says.

Conservation philanthropist Roxanne Quimby, the other individual involved, says, "the unfortunate loss of another grand old forest in Maine should not be a surprise to anyone, given our collective indifference to the wholesale destruction of the environment everywhere on this planet." Ms. Quimby is the co-founder of the personal care products company Burt's Bees Inc.

Ralph Knoll, deputy director of the Department of Conservation (DOC), regrets that a purchase agreement



The East Branch lands include four townships located between Baxter Park's eastern border and the western side of the East Branch of the Penobscot River.

couldn't be worked out earlier and the old growth trees spared. The timber cruise being done now as part of the appraisal will tell the tale of how much old growth Gardner actually has cut so far. But Knoll says he is more focused on what's left on the stump and how to insure that the remaining old growth stands will be protected. No one from Gardner has been unwilling to comment.

Conservation leaders outside the negotiations have been holding their breath for more than a year, as news about the on-again, off-again talks leaked out. An agreement by Gardner with the state, Fitzgerald and Quimby almost reached success earlier, only to fall apart. Gardner's price kept increasing, even as loggers took more and more timber off the land. Also, the conservation parties had difficulties coming to terms among themselves on how their own deal would be structured for each to satisfy their different goals.

Fitzgerald and Quimby are dedicated wilderness advocates, and they wanted to save the whole township and insisted that the land be managed as a wilderness area. While wanting to protect it all, the state's priority was the 6,098-acre Katahdin Lake tract because of its extraordinary resource values and the desire to add it to Baxter Park, the state's largest wilderness preserve.

T3R8 is considered to be the "crown jewel" of the lands along the East Branch of the Penobscot River. The 717-acre Katahdin Lake is a Class 1 water body, accessible only by foot or seaplane and is rated by LURC as having outstanding and or significant fisheries, scenic, shoreland, cultural and physical resources. Besides the old growth trees west of the lake, the log camps on the lake's south shore are one-of-a-kind.

Katahdin Lake camps date back to around 1896. Explorers, scientists, politicians, sportsmen and loggers frequented the facilities over the years, but the place became important more for the famous artists it hosted – Frederick Church, Marsden Hartley, Carl Sprinchorn and James Fitzgerald (no kin to Charles Fitzgerald).

Park donor Percival P. Baxter planned to purchase T3R8 but died in 1969 before he could accomplish his goal. Most of the township, like others he had bought to create the park, had been harvested. But with no cutting in many years, it had healed. Ecologist Bart DeWolfe, hired by Fitzgerald to inspect the area in 2004, found old growth red spruce from 133 to 304 years old and yellow birch and sugar maples from 134 to 243 years – and he took core samples from only a handful of trees.

Gardner's strategy up to this point has been to take as much wood off T3R8 as quickly as possible but leave enough old growth to keep the conservation parties interested. The state let Gardner know from the beginning that it wouldn't pay more than the appraised value. The Land for Maine's Future Program, which likely would participate in the acquisition

financing, has never been willing to pay landowners above-appraisal prices.

Jym St. Pierre, Maine director of RESTORE: the North Woods, views the Katahdin Lake forest as "the most important unprotected [tract] remaining in Maine." It's not primeval, he acknowledges, but the ecosystem has healed since timber harvesting and fires a century ago. The recovered woods is one of the largest, perhaps the largest, block of mature forest in the state, he says. "The tremendous significance of the natural and human history there places [it] at the top of the list of urgent Maine land conservation priorities."

"Conservation-minded citizens shouldn't rely on miracles to save the Gardner tract," St. Pierre urges, "we need to write to the governor to stress how important it is to rescue this magnificent [land]."

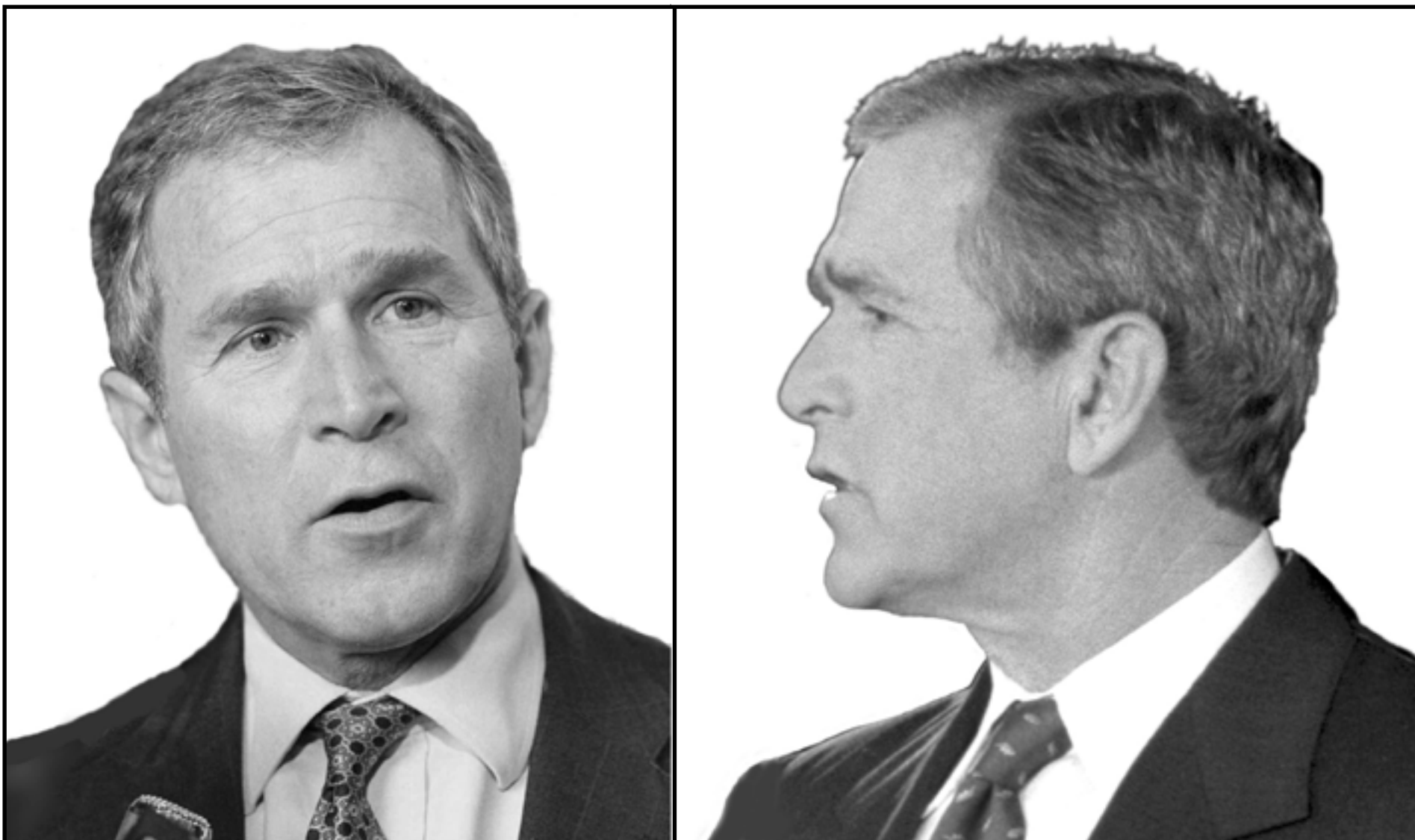
The above is an edited version of the article first published on the Maine Environmental News website. For the full article go to:
<http://www.meepi.org/files05/pa030105.htm>

photo by David Metsky

WANTED

FOR CRIMES AGAINST THE PLANET

George W. Bush



DESCRIPTION

Age: 57
Height: 6' 00"
Weight: 190 lbs.
Build: Medium
Hair: Brown

Eyes: Shifty
Complexion: Oily
Race: Aryan
Nationality: Texan
Known Aliases: Dubya, Dumbya, Shrub, Bush II, GW, Baby Bush, King George II

CAUTION

Bush is being sought in connection with an ongoing assault on the ecosystems of Planet Earth. In collaboration with co-conspirators in the logging, mining, ranching, energy, chemical, and power generation industries, Bush has led an unprecedented attack on the life support systems of the planet, threatening human life as well as the survival of hundreds, if not thousands, of species of animals and plants. Bush is known to be heavily armed and should be considered to be extremely dangerous. He will do whatever is necessary to achieve his goals and will harm anyone who gets in his way.

REWARD: There is a \$100,000 reward for information leading to the arrest and conviction of George W. Bush.

If you have information concerning this person, please contact your local FBI office.

Measuring the Immeasurable: A Biodiversity Scorecard for Sustainable Forestry

by John M. Hagan

The two leading sustainable forestry programs The two leading sustainable forestry programs used by large forest landowners, FCS and SFI, are clear in stating that maintaining biodiversity is a requirement of sustainability. This is a profound commitment by any forest landowner that wishes to pursue sustainable forestry certification. In fact, it is a commitment that can never

gain indirect information on the condition of many other components that are too expensive or time consuming to measure directly. Ideally, the relationship between what is measured, and all the other components that are not measured, has been well established in the scientific literature. But that is rarely the case. Sometimes indicators don't indicate the welfare of anything other than

sional forest). Rather, these programs rely on what are called policy response indicators. A policy response indicator might be "presence of management plan for snags," or "a management plan that balances the age-class distribution of the forest." Auditors must evaluate whether the plan is a good one. But wouldn't it be instructive to know the actual density of snags, rather than assuming that the existence of a management plan for snags means there are enough snags? It could be that there are so many snags you don't need a management plan. Or, maybe there are too few snags, and your management plan is not producing enough snags. Maybe.... maybe it would be a good idea to have an indicator that is well, the density of snags in the forest.

To this end, with the support of the forest products industry in Maine, we are developing quantitative biodiversity indicators for large forest landowners (a Biodiversity Scorecard). We envision a limited set of 10 or 12 relatively easily-measured indicators that can be used to assess and track the condition (or amount of) particular biodiversity values. Rather than relying only on the existence of management plans as indicators, we propose to measure the stuff we actually care about. If the numbers get too low, or too high, management plans can be adjusted to produce more, or less of the desired quality.

There are many reasons real numbers would be instructive in forest decision making. But with biodiversity, one good reason is that more of one component (or species) often means less of another component (or species). For example, the Canada Lynx, a furry, fierce, and arguably high-value species to much of the public, likes to eat Snowshoe Hares. Snowshoe Hares like young clearcuts with dense softwood regeneration. More clearcuts, more hare, more lynx. But, too many clearcuts and too much young forest will result in problems for other species that prefer old forest. The only way to make sure we are protecting both young forest values and old forest values is to have indicators of both. And, these are not the only two biodiversity values (e.g., clear cold streams and a healthy coldwater fishery, including all the bugs fish eat; unfragmented forest tracts needed by the American Marten; game species). Is there a way to measure and track these different values in a way that gives us sufficient (or at least more) confidence that our biodiversity values are being maintained?

We think there is. Manomet Center for Conservation Sciences, with the financial support of both the forest industry and environmental foundations, is in the process of developing a set of measurable indicators that Maine forest landowners can use to track the most important biodiversity values. The first indicator we have developed is a measure of late-successional forest (i.e., roughly 100-200 year-old forest) because this is a forest age class that is rapidly disappearing in Maine, and one that may be critical to the persistence of many, albeit uncharismatic, mosses, lichens, and fungi. Other indicators will be forthcoming so that we have a relatively comprehensive set that quantitatively tracks many biodiversity values. Indicators can be added over time, but real numbers, even simple ones, will help all of us get a better grip on the immeasurable.

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photo by John Hagan

Andy Whitman, a forest ecologist with Manomet, inspects a 150-year-old Sugar Maple covered with epiphytes that appear to be good indicators of late-successional forest. The presence of this old tree alone may be a sufficient indicator of late-successional forest, thus greatly simplifying the problem of assessing epiphyte biodiversity.

be verified, even by the very best third-party independent auditors, or even by the most talented ecologist. Who is prepared to say with certainty that all of the roughly 12,000-15,000 species of plants and animals that occur in Maine's forests are being maintained for future generations? Even if we just stood and stared at the forest, never mind cut down a tree, we would have a hard time convincing ourselves that all forest species could be maintained for future generations. Quite simply, there are too many species to measure. And what's worse is that the technical definition of biodiversity includes all the possible interactions among these 15,000 species. Oh, and their genetic diversity too.

So, practically speaking, we are never going to be certain that all native species are being maintained. We don't even know all the species that occur in Maine's forest for sure. Even if we did, our society is not willing, or able, to amass the sum of money it would take to undertake such a monitoring endeavor. We have no choice but to use, and rely on, indicators of biodiversity.

A biodiversity indicator is a measure of one element of biodiversity that is supposedly tightly linked to many other elements. By measuring the one component, we

what is being directly measured (and as such, technically speaking, are not indicators). Sometimes indicators measure things that no one really cares about, or at best, it is not clear whether the indicator indicates something that anyone cares about.

Some indicators seem intuitively related to other things. We know many bird species rely on dead snags for nesting. No snags, no woodpeckers. So instead of counting birds directly, which often is only possible during a brief breeding season, we count snags. Snags generously submit to being counted at any time of year. Better yet, recognizing a big dead tree is a lot easier than distinguishing between a Hairy and a Downy Woodpecker, by sound, at 50 meters. Counting dead trees is easier, and so we happily swallow the assumption that 'X' number of snags will mean 'X' number of woodpeckers. Even if that relationship is unknown (which is usually the case), we feel pretty confident that ZERO snags is not a good sign.

If you carefully inspect biodiversity indicators of SFI and FSC, you will be hard-pressed to find any indicators with actual units of measure (e.g., snags per acre, large trees per acre, or, percent of landscape in late-succes-

The Forest Ecology Network Bookshelf

The End of Oil: On the Edge of a Perilous New World

by Paul Roberts

Hardcover - 400 pages

2004

Houghton Mifflin,

Boston, Massachusetts

ISBN: 0618239774



The End of Oil is a “geologic cautionary tale for a complacent world accustomed to reliable infusions of cheap energy.” The book centers around one irrefutable fact: the global supply of oil is being depleted at an alarming rate. Precisely how much accessible (not to mention theoretical) oil remains is debatable, but even conservative estimates mark the peak of production in decades rather than centuries. Which energy sources will replace oil, who will control them, and how disruptive to the current world order the transition from one system to the next will be are just a few of the big questions that Paul Roberts attempts to answer in this timely book.

Petroleum is now so deeply entrenched in our economy, our politics, and our personal expectations that even modest efforts to phase it out are fought tooth and nail by the most powerful forces in the world: companies and governments that depend on oil revenues; the developing nations that see oil as the only means to industrial success; and a Western middle class that refuses to modify its energy-dependent lifestyle.

As Roberts makes abundantly clear, the major oil players in the world wield their enormous economic and political power in order to maintain the status quo. Of course, they get plenty of help from the tens of millions of consumers, particularly in the U.S. and Europe, who guzzle oil as if there is an unlimited supply. And this demand shows no sign of abating--nearly half of the world's population lives without the benefits of fossil fuels and they desperately want to be among the haves. In countries such as China and India, where energy systems are already breaking down, Roberts discusses how they are looking to oil to fuel their race for development, in many cases ignoring environmental considerations altogether.

But within thirty years, by even conservative estimates, we will have burned our way through most of the oil that is easily accessible. And well before then, the side effects of an oil-based society -- economic volatility, geopolitical conflict, and the climate-changing impact of hydrocarbon pollution -- will render fossil fuels an all but unacceptable solution.

How will we break our addiction to oil? And what will we use in its place to maintain a global economy and political system that are entirely reliant on cheap, readily available energy?

Brilliantly reported from around the globe, The End of Oil brings the world situation into fresh and dramatic focus for business and general readers alike. Roberts talks to both oil optimists and oil pessimists, delves deep into the economics and politics of oil, considers the promises and pitfalls of alternatives, and shows that, although

the world energy system has begun its epoch-defining transition, disruption and violent dislocation are almost assured if we do not take a more proactive stance.

Though there is much to be pessimistic about, Roberts does uncover some positive developments, such as the race for alternative energy sources, notably hydrogen fuel cells, which could help to ease us off of our oil dependence before a full-blown energy crisis occurs. No one book could cover every aspect of what Roberts calls “arguably the most serious crisis ever to face industrial society,” but The End of Oil is a remarkably informative and balanced introduction to this pressing subject. With the topicality and readability of Fast Food Nation and the scope and trenchant analysis of Guns, Germs, and Steel, this is a vitally important book for the new century.

The Party's Over: Oil, War and the Fate of Industrial Societies

by Richard Heinberg

Paperback - 288 pages

April 2003

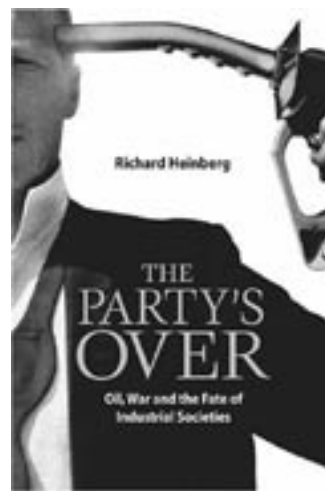
New Society Publishers

Gabriola Island,

British Columbia,

Canada

ISBN:0865714827



Proponents of the “Peak Oil” theory argue that global oil production will “peak” (meaning that one half of all known reserves will have been recovered) at some point between 2000 and 2010, and afterwards production will irrevocably decline, never to rise again. However, the demand for oil will continue to rise and the spread between falling supply and rising demand will rapidly grow, as no adequate alternative energy source will be available to cover the shortfall. Doomsday will then be at hand. The price of petroleum, and petroleum-related products (i.e., just about everything) will skyrocket; transportation, communications, agriculture, indeed, every major industry in the world, will sputter to a standstill; the world economy will stagger and collapse; civil authority will dissolve; and the noisy, messy experiment that was industrial civilization will expire in a world-wide bloodbath, or “die-off,” that will reduce the human population by 90 percent, or more, and will leave the planet devastated, ruined, and, quite possibly, dead.

It would be easy to dismiss this apocalyptic vision as alarmist nonsense if only the “Peak Oil” proponents weren't so bloody convincing. By and large, they are a sensible, reasonable-sounding group of Cassandras, who dispense their grim forecasts as soberly as the subject allows. Virtually all of them rely upon the pioneering work M. King Hubbert, a research geophysicist who, in the mid-1950s, created a model to estimate the productive life of energy reserves. In 1956 Hubbert used his model to predict that oil production in the continental United States would peak sometime between 1966 and 1972. U.S. oil production did, in fact, peak in 1970 (and has declined by 50 percent since), and Hubbert and his

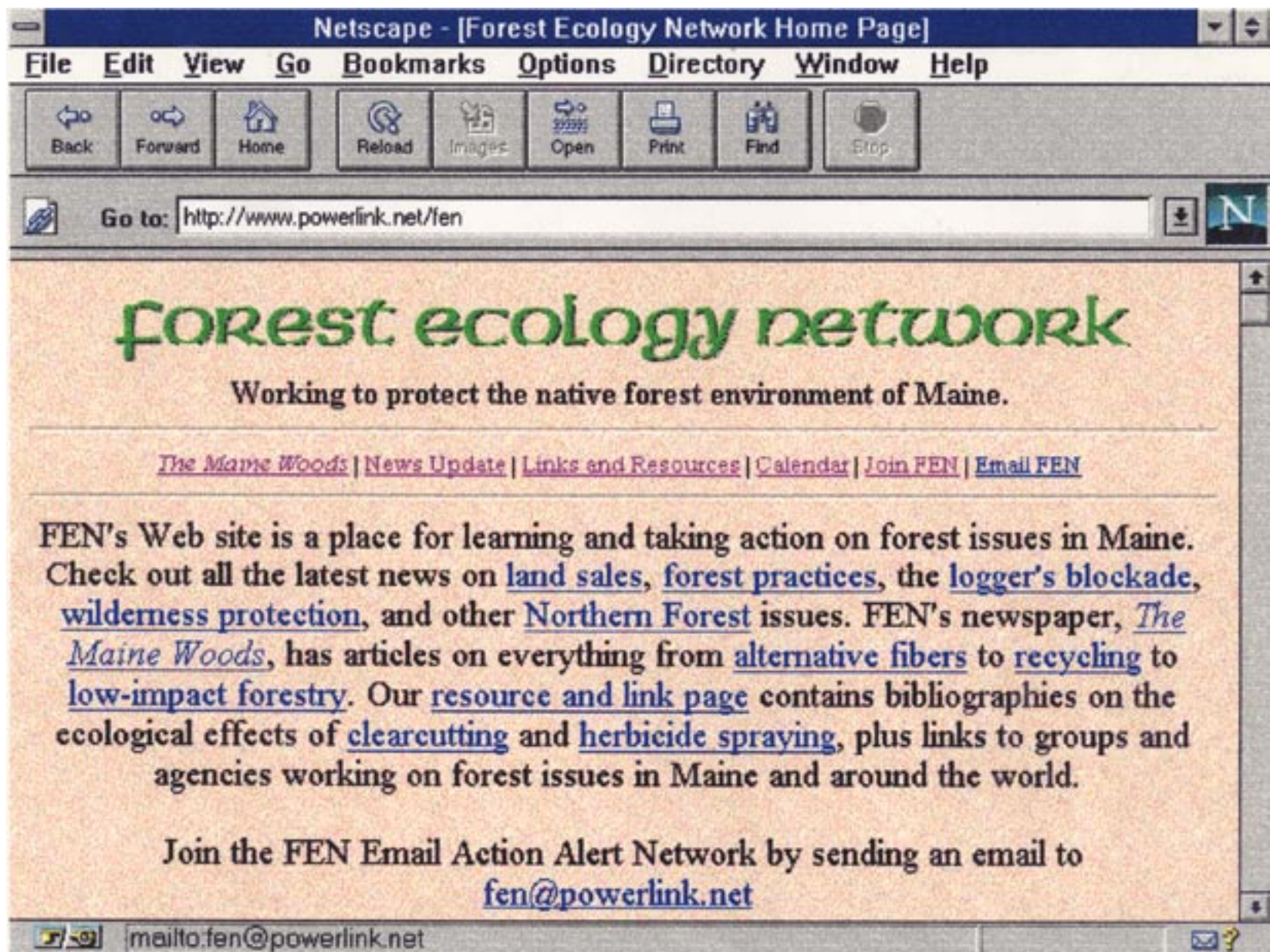
forecasting model, dubbed “Hubbert's Peak,” passed into the arcane lore of petroleum geologists. Other petroleum scientists have refined Hubbert's model and have applied it to global petroleum reserves. Although results differ depending upon the variables used by different researchers, the consensus is that the “Hubbert Peak” of worldwide oil reserves will occur sometime between 2004 and 2007. In other words, as I sit at my keyboard writing this review the high noon of petroleum-based industrial civilization may have come and gone, and the whole human enterprise may be inexorably descending into twilight and darkness. Sic transit gloria mundi - with a bullet.

If the Cassandras are right, and the end of the world is imminent, it has received remarkably little coverage in the conventional media, although the internet hosts many excellent websites that the curious or concerned citizen may consult to learn as much as he or she would like about the post-petroleum world to come. Recently this state of affairs has started to change, and several good books have been published on “Peak Oil” and its consequences. First among these, is Richard Heinberg's “The Party's Over,” a sober, detailed contribution to the literature, which clearly and fluently describes the fossil fuel bender the industrial world has been on for the past 100 years, and what we can expect to follow from it. Although Heinberg does his best not to induce white-knuckled panic in his reader, the picture that emerges from his book is absolutely frightening, particularly the notion that, at this late date, we can do nothing to prevent the catastrophe from occurring. At best - that is, if the entire human race sets aside all its disputes and immediately mobilizes its combined efforts to solve this one problem - the scale of the catastrophe might be reduced. At worst, in 50 to 100 years time, the greatest disaster in human history will have taken place, and the relatively few survivors of this disaster will dwell in a stateless, Hobbesian world that will make present-day Liberia look like Shangri-La.


Or so the argument runs. Perhaps Heinberg and the other “Peak Oil” prophets are wrong. Perhaps Hubbert's model is defective and world oil production will not peak tomorrow, or next week, or next year. Perhaps the USGS's estimate of world oil reserves is correct and the peak of production will not occur until 2020. Perhaps a previously overlooked, gigantic new field, the equivalent of three or four Saudi Arabias, will be discovered and delay the peak until the early years of the 22nd century. Perhaps. But the point is, Heinberg et al. will inevitably be right someday. Someday, worldwide production of cheap, high-grade crude oil will peak, and the longer that peak is delayed, the more horrific the following decline will be, unless the nations of the world take immediate action to prevent the disaster. This preventive action will entail much more than just developing an adequate replacement for cheap petroleum; although, as Heinberg makes clear, no alternative currently on the drawing board appears to be sufficient. Rather, if we are to avoid the catastrophic consequences of “Peak Oil” we will have to drastically rearrange our affairs - politically, economically, socially. Or, to be blunt, capitalism, certainly as it is currently practiced, will simply have to go. Unfortunately, it is difficult to conceive of a socio-economic system less capable of dealing with the coming crisis than neo-liberal capitalism. But there it is.

Of course, if Heinberg and the other proponents of Peak Oil are right, time has already run out for Petroleum Man, and there is little that can be done to avert doomsday. We shall see. This morning (March 5, 2004) the front page of USA Today warns that record gasoline

continued on page 13



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The purpose of the Forest Ecology Network is to protect the native forest environment of Maine through public awareness, grassroots citizen activism, and education. Your contributions and involvement are essential to the success of our efforts. Membership benefits include a subscription to our newspaper, *The Maine Woods* and educational field trips and workshops. Contributions to FEN (a 501 [c] [3] non-profit organization) are tax-deductible.

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