

DRAFT DRAFT DRAFT

# Maine's Forest Industry, 1960-2010: Effect on Maine Communities and People

Lloyd C. Irland  
The Irland Group

## Introduction

This lecture must cover a lot of ground. I plan to discuss how the forest industry has changed in a very general way, and to suggest some ways these changes have affected Maine people and communities. To address this topic requires brief comment on the ownership and condition of the forest resource itself, but I will refer you elsewhere for more details. Considering the industry's impact on the overall state economy and its political life will have to be done at another time. Forest policy and the state's civic culture are noted briefly.

## Vignettes

1640's Maine is not just a raw material exporter – it is already exporting value added wood products, houseframes, and barrel staves to the Sugar Islands.

1869. The 1869 survey of Maine's water power, reports that Gardiner's "waterpowers" along Cobbossee Stream employed 410 hands, mostly year around. There were 13 sawmills and wood plants and two small paper mills among a number of metalworking shops. This did not count a small sawmill at West Gardiner

1920's South Paris is called "Toy Town" by many, as it contains the nation's largest concentration of producers of toys in the US, including wooden sleds and many other items. (Charles Francis, 2003)

1950's. Great Northern produces 1/3 of US newsprint output, owned and managed an empire of some 2 million acres across the Maine woods and was one the state's leading private employers, with some \_\_\_\_\_ employees.

Early 70's. Great Northern builds the "Golden Road" to connect Millinocket with the Quebec border. Horses are still widely used for logging in the Maine woods.

Late 70's The four lane interstate highway arrives in Houlton.

Fall 2002 Strong , Maine loses its wood products plant, Forster Manufacturing, which invented the toothpick

Jan. 2003. Great Northern, already shrunken by sales and resales and asset disposals, declares bankruptcy after its modernization efforts fail in weak markets.

**Where We Were Then**

In 1960, Maine was a quiet, backwater place. It shared with other rural regions of the country a slow growing economy, and a growing desperation over whether there would be a future for young people growing up here. At that time, the footwear business was at the peak of its employment in Maine. The Turnpike reached Augusta only in 1955, and the 4-lane to Houlton was but a dream. Trains still carried passengers, and a lot of pulpwood. The Allagash, a stream of wildness and myth, had more than a century of legend behind it, but its public ownership remained in the future. Maine’s forests were growing back from the budworm outbreak of the World War One era. The woods were spreading slowly over southern Maine’s landscape. From more and more of the low hills upcountry, the view was being engulfed by growing woods.

The Maine woods were busiest during logging season, except for established locations like Greenville. Only a few intrepid canoeists dared the rips and rapids of the Penobscot and Allagash. All-weather road access was very limited. (Even by the late 70s, entire towns lacked haul road access, which greatly hindered rapid response to the budworm epidemic). Much of the Northwood’s pulpwood harvest moved by water. Skidders remained in the future. From the stump to the landing, horses hauled much of the wood up North, and plenty of it in southern Maine, as well.

Sawmills and wood products plants were numerous and small. The postwar period had unleashed nationwide economic growth, and a considerable outbreak of entrepreneurialism. New plants were opened everywhere. Of 1829 plants noted in the 1954 federal Census of Maine Manufactures, only 27 had more than 100 employees; 83% had less than 10. (Peck, 1957, p. 27) In 1960, it was really true that Maine was a manufacturing state, with 38% of nonfarm employment in manufacturing. The decline in that percentage since then has been truly dazzling (Table 1)

Table 1. Maine nonfarm employment, 1940-2000 by industry.

Year	Nonfarm employment, Maine		Pct of Mfg	
	Total	Manuf.	SIC 24	SIC 26
1940	100%	45%	0%	0%
1950	100%	43%	18%	16%
1960	100%	38%	16%	17%
1970	100%	33%	13%	16%
1980	100%	27%	12%	16%
1990	100%	19%	11%	17%
2000	100%	14%	13%	15%

Source: US BLS website.

The geography of the industry was different then, as well. In 1955 (Peck report, p. 115), Aroostook was the leading lumber county, but produced only 50 million feet, less than one large mill can saw today. In second and third place, and very close behind, were Oxford and Cumberland counties. In 1960, King Spruce was basically a memory, but the lumber industry was everywhere, with its hundreds of small mills, often run seasonally. The entire solid wood products industry, however, was dominated by Penobscot County with almost 25% of total value of production. Penobscot, Somerset, and Oxford together accounted for 54% of the state's total.

In 1960, footwear (termed "leather" in the official statistics) led in Maine manufacturing employment. The average annual wage for all manufacturing workers was \$4,023. Paperworkers did better at \$5,647. Workers in lumber and wood did less well at \$3,326, but far better than leather or apparel at \$2,917 and \$1,415 respectively. My wife's grandmother worked all her working life in a Lewiston "shoe shop", walking to work each day. She and many of her generation told their grandchildren never to enter them.

Maine's days as a national lumber leader were in the distant past. Technology had not arrived to bump up the production, and improve quality; most of the product was sold green. Everybody knew fir wouldn't make good lumber, and you couldn't sell hardwood pulpwood. The Maine paper companies were *paper* companies... no sawmills for them. Not only were they paper companies, they were the reigning leaders of a national industry. Spoken of as "the Northern, The Diamond, or the I-P", they had clout in town, in Augusta, and in the nation.

Mechanization and improved techniques meant that a worker could produce a lot more over the years. From 1952 to 1979, jobs per million feet of logs in solid wood sector went from 32.8 to 13.3, and continued falling after that. In pulpwood, jobs per million cords went from 7,900 in '52 to 5700 in '79. (Irland, 1984) In these plants-- some still there in the late 70's when I could visit them -- *managers were the owners*. They knew how to use a wrench and drive a forklift. Skilled millwrights built their own machines -- there were not enough clothespin plants nationally for the suppliers to do it for them. Leading families were into a diversity of local businesses and played important roles in these communities.

It looked like a level of stability all could count on for the future; but times were changing. A new impetus came for environmental improvement, and rising uses of wood began to clash with new needs and new political forces. But, instead of stability, what we saw was anything but...(Table 2)

Table 2. Maine forest industry Dimensions, 1960 and 2000

	1960	2000	Note
Timber Cut			
Sawlog Harvest (5 key spp) MM ft	470	1237	(1)
Pulpwood harvest MM cd	2.1	3.0	(2)
Lumber Production MM ft	303	1,225	(3)
Paper Production M ton	1,756	4,061	(4)
Employment (paper & lumber) thousands	35	24	(5)
Wage & Salary Income (\$ MM current)			
FPI Total (6)	179	1,182	
Percent of all Mfg.	39.8%	34.3%	

Notes:

(1) S-fir rose from 124 to 725 MMbf

(2) Peaks of 3.5 MM in 1985, 1995

(3) Peaked in '95 at 1.3 MM ft

(4) 2000 was all time high

(5) See table 1.

(6) FPI = Lum & Wood, Furn & Fixt, and Paper & allied

Sources: MFS, 2003 (WP rpt Oct 10) Irland, unpub compilations of Census data; AF&PA.

**A Changing Forest**

During the 70's and early 80's, increasing timber inventories, growing demand for quality printing papers, and stricter environmental regulations provided incentives and impetus to modernize. The mills, for the most part, did; those that didn't, closed. Technology came along to make a 2X4 out of an astonishingly small log, and sawmills began to get a lot larger. The paper companies bought themselves some. Maine and nearby areas began to become more prominent in the Northeastern lumber business, as a result. When the western National Forests were essentially shut down in the early 1990's, at a time of booming demand, lumber prices boomed and so did stumpage prices. For this first time in postwar days, Maine stumpage rose relative to inflation.

At the opening of this period, Maine's forest was underutilized and, hence, growing in inventory volume. What we think of today as active forest management barely existed; and

what did exist was largely on small individual lots and on progressive family lumber company tracts. By the mid 70's, the inventory reached unsustainable levels due to its large level of short-lived spruce-fir, all nearing harvest level at once. Then the spruce budworm, a native pest, caught up with it, along with rising lumber demand. The result was that for the first time since about 1910, Maine's wood using industry had to contend with timber supply limits that were coming fast. The spruce-fir inventory actually declined substantially for two and a half decades, thought it now appears to have stabilized. The story of the changes in timber supply and the roles of budworm, intensive management, spraying, and landowner policies can be followed in a series of state reports and related papers ( Citizens' forestry advisory council., 1988; Gadzik, Blanck and Caldwell, 1998; and Maine DOC, 2001; Laustsen, Griffith, and Steinman, 2003; Sendak, Abt and Turner, 2003)

In the late 1980s Diamond International was acquired by an overseas financier, Sir James Goldsmith, and later broken up. The sales of its regional landbase, including more than 600,000 acres of lands in New York, New Hampshire, and Maine, created a major regional stir in 1986. In 1990, Great Northern Paper was acquired by Georgia Pacific. Subsequent land sales raised concern about the stability of ownership in the region. In the years after 1990, major corporate holdings were restructured and longtime corporate names literally vanished from the landownership roster (background can be found in Irland Group., 1999). Two federal studies (Northern Forest Lands Study, Northern Forest Lands Council) were federally funded to look into the issue. Land acquisition efforts by the states were increased, especially with the Land for Maine's Future Board created in 1987. Federal programs were tapped more vigorously. The most dramatic development was the rise of private conservation funding focused on large-scale conservation easements and targeted, outright purchases.

A dramatic announcement in early 1999 told the world that the Heirs of David Pingree, owners of a holding dating back to pre-Civil War days, planned to sell a major conservation easement to the little-known New England Forestry Foundation. This represented not only a huge increase in scale of efforts to address development pressures, but also triggered an increase in foundation and land conservation activity without precedent in the entire country. In short order, The Nature Conservancy purchased 175,000 acres of IP timberland along the St. John, and allocated 40,000 acres to a wilderness status. A bewildering array of cooperative projects emerged. In late 2003, Roxanne Quimby, a successful entrepreneur, acquired a town near Baxter Park, declaring that she planned to use it and other smaller tracts as a nucleus for a new National Park. What was striking about virtually all of these efforts, was the declared purpose in nearly every instance of maintaining a "working forest". Of course, how to define a working forest entailed considerable debate among specialists, interest groups, and their funders.

### **Where we are Now...**

By the year 2000, a great deal of water had gone over the dam; in fact, one of the dams, itself, was about to be gone! Output was strikingly higher, as Table 1 above shows. The number of people engaged had shrunk, but not in its proportion to total manufacturing in the state. The industry's importance to the manufacturing sector had not diminished. In 1997, a paper worker made an average wage of \$47,585, compared to the manufacturing average of \$31,721. Workers

in lumber and wood, due to the many labor intensive secondary plants, made \$24,448. The number of plants had fallen dramatically. Many small towns and crossroads had ceased to be milltowns. Some substantial communities like Winslow lost their paper mills and sizable portions of their tax base. Striking changes in these forty years included the loss of as many as a *thousand* small woodworking plants and sawmills, and the construction of a series of new large modern mills. As a result, lumber production grew almost threefold from 1960 to 2000. Paper production increased dramatically.

After the mid-70's recession, Maine's economy slowly began to shift away from its heavy reliance on natural resources and manufacturing, to take on the characteristics of the rest of the country – relying more on trade and services. We may now see that the employment in lumber and wood products hit its peak in the mid-fifties, relying then on labor intensive techniques and a growing national market largely untouched by foreign competition. Changing technologies, maturing North American markets, unfavorable exchange rates, and international investment flows placed Maine mills increasingly at a disadvantage. Few industry experts can even remember the last “greenfield” paper mill built in the US. (I think it was in Michigan, or was it Mississippi) The trade papers tell of billion dollar pulp projects in South America and China. The cost of just one of these could likely buy the entire Maine paper industry during a spell of weak markets.

By the mid 1980's., it was clear that employment had been sustained by a rising log harvest, and that this could not continue indefinitely. The state's production statistics show the peaking of log harvests, and the employment numbers after 1990 show the effect on jobs. The forest resource is not growing in total area to any extent, and is being whittled away at the edges. Active subdividers are giving homeowners what they say they want across southern Maine. Efforts to shift the incentives away from sprawl and toward more rational land use seem to be failing. To the north and on the semi-rural fringes of the wildlands, the liquidators happily chop up parts of entire townships to sell to speculators and visitors coming up the four-lane from the “flatland”.

And, most disturbingly to some, some paper companies declare that they have no need to own the woods anymore. One of the biggest, Georgia Pacific, sold all its lands and then took out ads in the Wall Street Journal satirizing those who kept their lands – “money does not grow on trees”, they said. At this point, four of the state's largest paper mills own no land at all, and buy on the open market or through longterm supply contracts.

We are buying cabinet doors of radiata pine, cut from plantations across the world, and sold at prices our pine mills here could not imagine meeting. The furniture store increasingly carries top end furniture made in China. Nationally, we are in a true crisis of change in rural areas as small plants close. Maine is part of this, and the wood sector is not immune. Our extensive forest cannot shelter us from the chill winds of international competition.

### **The Wood Products Towns**

In the 19th century, virtually every Maine town had a mill, often a combined saw and

grist mill. Many of these ran seasonally on spring high water and met limited local needs. Until steam power and higher volume methods arose by mid-century, there were few sawmill towns. The principal exceptions were the mill complexes at locations like Bangor, Ft. Kent, and Calais, where river drives brought logs in huge volumes on the spring flood. A good deal of the woodworking was in tiny shops, many in urban areas. Carpenters dressed much of their lumber on the jobsite, working up timber framing from logs delivered there by teamsters, and profiling millwork on site. By the late 19th century, however, woodworking mills had clustered in centers like the Norway-South Paris- West Paris area and nearby. They built upon the labor surplus released by shrinking farming and supplied by immigration, on the expanding forest, and on proximity to urban and small town markets.

In a detailed wood industry survey in 1912 (Nellis 1912) , it was found that woodworking plants consumed 84 million feet of white pine, the premier wood for packing as well as for high quality worked items. Virtually all was grown in Maine. In that year 59 million feet went into boxes and crates. Eighteen different categories of industry used white pine, some in tiny amounts to be sure. When the boxboard market vanished, wiped out by the cardboard box made from southern pine, the farmers and industry foresters could no longer thin their pine stands.

A specialty peculiar to Maine was the diversified industry built on white birch, which used 38 million feet in 1912. Seven categories of industry used more than a million feet each, the largest being shuttles, spools, and bobbins, which took almost half of the total. Mill owners believed that Maine's birch was superior to that grown elsewhere. Perhaps so; but perhaps it was superior craft, millwrights, and marketing, instead, that kept this industry going. The Maine Forest Service reported in the 1970's that some 1400 different items were being made of wood in the state.

About 1800 or more small wood products plants spread across the state in the mid-fifties (Table 3, Fig 1). Some were too small, or too seasonal, to have a noticeable influence compared to the shoe plant, the cannery, or the metalworking shop in town. A few of these grew over the generations into larger businesses, but most simply left a circle saw, an old skidder, and other gear rusting in a sideyard. Nearly 200 plants in 1954 employed more than 10 workers. Even the smallest of these could play a role in a small crossroads village, and contribute something to the tax base. Such a plant would employ perhaps twice as many workers around the county in getting in and hauling the wood.

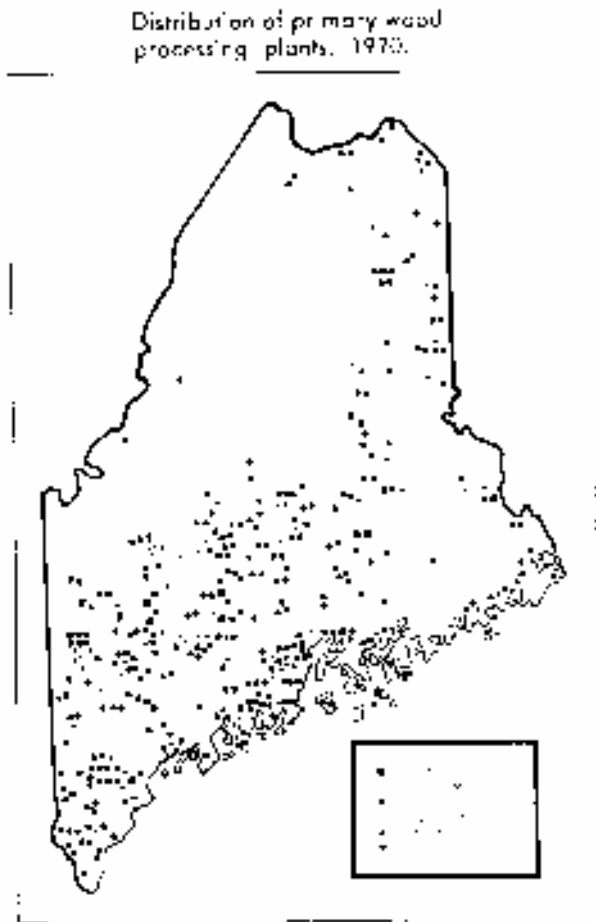
Table 3.  
 Number of Plants, Lumber and Wood Products Industry, 1949 -- 1997.

1949	399	State Mfg Census
1955	1,829	Peck, p. based on federal)
1960	1,006	State Mfg census
1992	812	“
1997	779	“
2000	784	DOC – County Bus. Patterns

Note: sources differ. 1949 probably an undercount. These numbers include "logging camps and contractors" which are grossly undercounted in this statistical source.

The steady growth of spruce-fir production, following a rebounding forest resource, shifted the lumber business northward. New and expanded mills at places like Passadumkeag, Nashville Plantation, St. John Plantation, and Woodland brought a new round of wood products employment to towns that had seen little of it for two generations. Most of this growth is a product of the 1970's housing boom, the re-growth of the forest, the budworm salvage period, and the new technology for making 2X4s out of small logs that once went for pulp or stayed in the woods.

Figure 1. Distribution of Primary Wood Processing Plants, 1970.



Source: Ferguson and Kingsley, 1972, p. 18.

*(lousy scan – will replace with better one)*

In 1960, Maine was known as a center for toothpicks, dowels, clothespins, and a host of turnery and related items. This industry had grown up around the growing white birch resource, a tree favored by gone-back farms, small timber cuts on small lots, and occasional fires. At one time the white birch of good grade was our most valuable wood. A bustling industry kept tiny towns from Bryant Pond to Old Town and across southern Maine busy cutting up the birch bolts for products sent far away. After the 1972 Forest Service inventory was done, it was thought desirable to have a special analysis of the wood availability for just this industry (*Wharton,, Nevel, and Powell, 1977*)

These plants were labor intensive, as was the preparation of the bolts in the woods. They were built on the ingenuity of proprietors, often of several generations, who were handy with metal and machines. They had to be – nobody sold clothespin machines. In town after town, small birch plants provided employment and supported town services. In the late 40s some of

the biggest plants ran three shifts. Things were changing by 1960, but only slowly. This was a period when manufacturing and retailing and distribution were of small scale. The materials of the 19th century had not been replaced by modern chemicals and plastics. And the wood products sector of the tropics was still doing little but exporting mahogany logs.

More and more homes would have washing machines and electric dryers in the 1960s; clothespins came to be seen only at Granma’s house. Later, plastics came to dominate the bulk markets for golf tees, toy wheels, and much else. Still later again, offshore woods came to be used for many of these items. Ironically, it was not a matter of price competition as far as the consumer was concerned. Tongue depressors and coffee stirrers go out for free. How many golfers know the price of a golf tee? The costs were felt by the huge distributor who bought in massive quantities. For a savings of a few percent on an order of clothespins, the order goes to Asia now.

As these jobs have dwindled, population structure has shifted. The number of young people has declined, even as the populations in retired age brackets increase. (Table 4). There is much more to this period than one table can show, and many local factors affect these trends (see, for more, Mageean, AvRuskin, and Sherwood, 2000).

Table 4. Changing age structure, selected communities and age groups  
Ratio of year 2000 to 1960 population in age class

	Age Class				All
	0-5	15-34	65+		
Millinocket	0.17	0.44	2.15	0.7	
Phillips	0.51	1.29	0.91	0.97	
Strong	0.82	1.61	1.53	1.29	
W. Paris	1.01	1.77	2.92	1.71	
Old Town	0.38	0.97	1.45	0.94	
Bethel	0.54	1.06	1.26	0.99	
Portland	0.46	1.56	0.88	0.89	

Source: US Census of Population.

Today, there are small companies succeeding in the wood business in Maine, though they seem rarely to make the newspapers. They often pick up distressed assets of failing firms and make a go of the viable pieces. So there remains ample scope for entrepreneurship in the Maine woods and wood-based industries.

Small town life in many parts of Maine will never be the same, however. Wood products jobs were among the last to leave, after the food processing moved to Delmarva and the corn shops closed. After textiles went to North Carolina and then the shoe plants went to Malaysia,

the small wood plants were still there. There was a relation to land, however imperfectly glimpsed at times. Out for a drive to town, you drove past your raw material.

Tiny towns had something for the high school graduate, the kid home from the Navy. The wages weren't much, but for people who wanted to stay near family it was possible. A modest house could be dreamed of, though it would take some years of saving. Lots were cheap. Thrifty people could make the old Ford run a long while. For those who preferred not to go down to Hartford, it offered a choice. Let's not romanticize it. There were backs crushed from heavy lifting in the woods and on the loading dock. There were missing fingers and worse. There were few trips to Florida. Firewood was not used for heat because it was "green" or stylish; these families never gave it up in the first place. For retirement, there was only social security.

It is easy to see a story of exploitation here. Certainly profits were made, and indifference to workers was not uncommon. Many of these workers knew well what "being poor in Maine" (Pohlmann, 2003) is like. Especially in logging, working conditions, wages, and the absence of fringes were standard. Unions were virtually absent. At one time OSHA identified logging and wood products manufacturing as "target industries", though I recall few people noticing OSHA doing much about it. Probably it is useful to ask, if there was exploitation, what permitted it? I think there are many answers, but chronic labor surpluses in the rural regions, especially nearby Quebec, go a long way. And what caused the labor surpluses? Well, that's a very long story.

I sense that Maine is the worse off for the passing of small-scale, independent industries like this one, that used local raw materials and met a need for jobs. The owners lived nearby, and had relatives on the plant floor, driving trucks, and out in the woods running the skidders. A community was a place where something was produced and not just a place where people come home from the office in a distant city to have dinner.

Looking at this, warts and all, what will replace it? What kind of a society will it be? Before thinking of implications, let's look at another social phenomenon of Maine, the paper mill town.

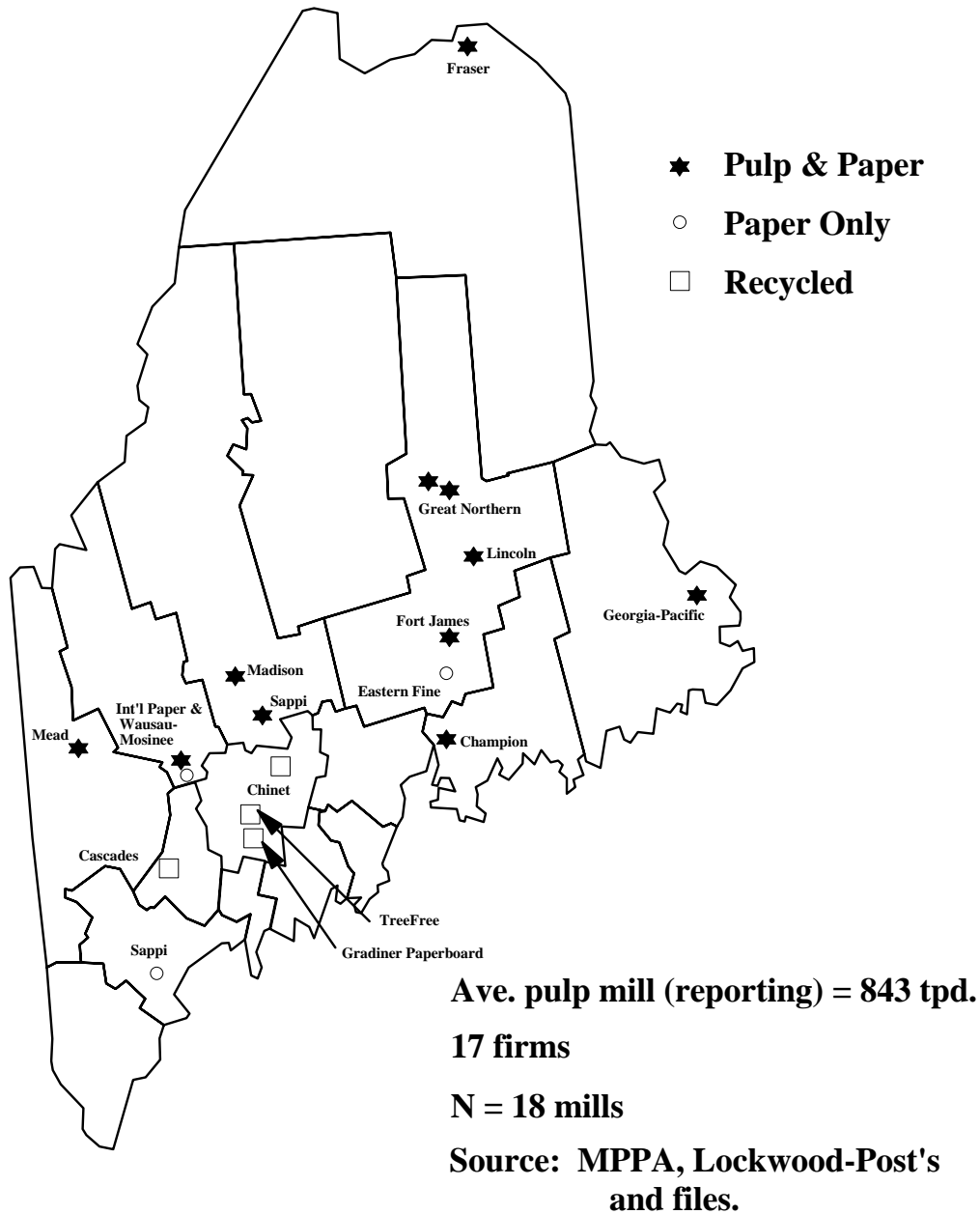
### **The Paper Mill Towns**

A Papermill town, as I use the term here, is a small community whose economy is dominated by a primary paper or pulp mill. (There are a few towns similarly dominated by "converting" plants, but I will not consider those here, as they typically rely on "brown" papers from Georgia or other specialties, and not on Maine-produced wood.) In 1906, near the peak of mill-building, there were about 51 mills in Maine, counting about a dozen then a-building. These were owned by 27 companies. After the newsprint tariff came off during World War One, only a few new mills were built in Maine, major examples being Seaboard at Bucksport in the early 30's, and the IP Van Buren mill, closed by the mid fifties. The Somerset mill built by Scott about 1980 is the last "greenfield" mill. So there are a number of former paper mill towns already. There are several whose mills have endured since the early 20th century, and have

employed several generations in some families.

There are a number of paper mills at the edge of very large cities, which do not have milltown traits because of their more diverse economies. Westbrook, Winslow pre-1999, and Brewer are examples. Old Town, in ready commuting range of Bangor and adjacent to a large University town, is an intermediate case.

# Maine Paper Industry, 1999



Paper milltowns offered secure employment for several generations of Mainers, at rising living standards that were the envy of other workers. Increased investment and production kept

job counts rising at many mills until the 1960's and 70s. At about that time, populations of the true milltowns hit their peaks, for the same reason. Since the 70's, increased mechanization has caused labor productivity to rise. The stringent limits on timber supply, as well as competitive factors, have prevented capacity increases. The result is declining headcounts at mill after mill. Reflecting these changes, many milltowns peaked in population by 1960, and a few have declined dramatically since their peaks (Table 5). Not only milltowns lose population, though; Portland's population is below its 1920 level, partly for the same reasons: the direct and indirect effects of losing its industrial base.

Table 5. Population trends, selected papermill towns, with Portland for comparison

Town	1900	1920	1940	1960	1980	2000
Bucksport	2,339	1,906	2,927	3,466	4,345	4,908
Millinocket and E. Millin.	n.a.	5,920	7,886	9,845	9,939	7,031
Jay	2,758	3,152	2,858	3,274	5,080	4,985
Lincoln	1,731	2,452	3,653	4,541	5,066	5,221
Madawaska	1,698	1,933	4,477	5,507	5,282	4,534
Madison	2,467	3,700	3,836	3,935	4,367	4,523
Rumford	3,770	8,576	10,230	10,005	8,540	6,472
Woodland	1,096	1,120	1,298	1,372	1,369	1,403
Portland	50,415	69,272	73,643	72,566	61,572	64,249

Source: US Census and Maine SPO.

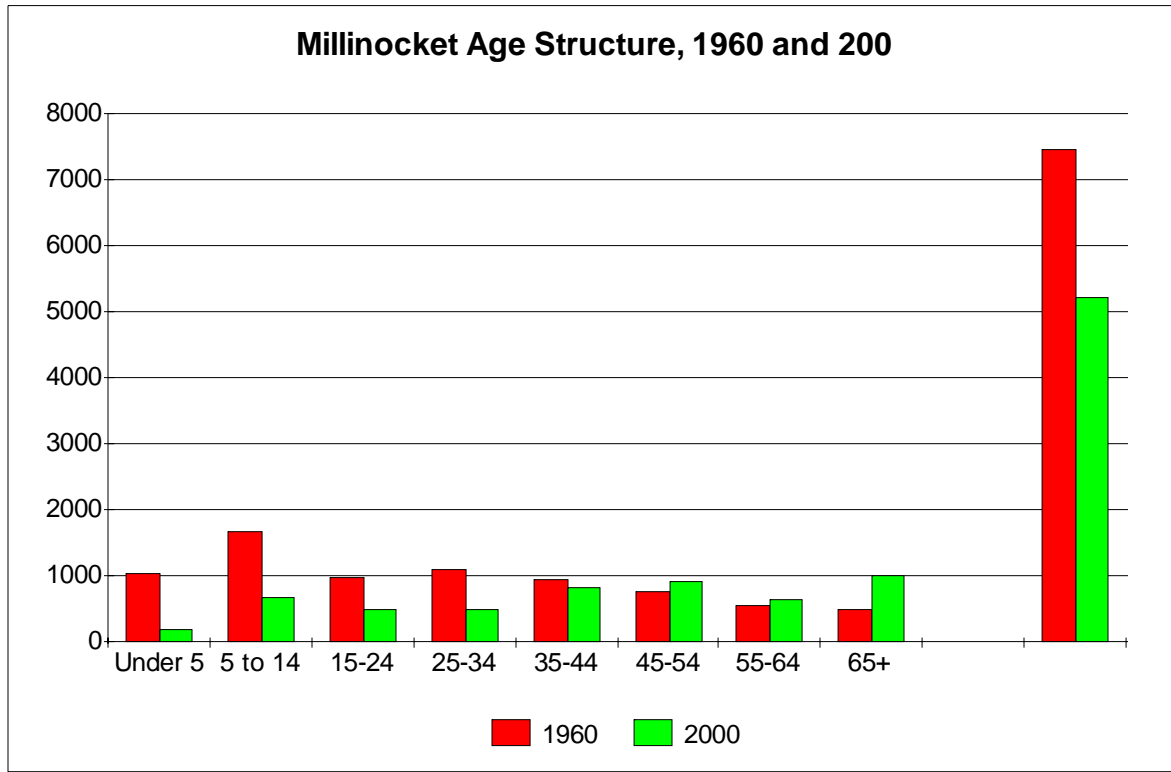
Milltown status is related to a number of social and economic traits that are distinctive (Table 6, Fig. 3). Many of these traits evolve around the high wage levels, the effects of shiftwork, and the limited economic diversification of such towns (see for expanded discussion, Irland, 2002). These issues have never been thoroughly studied, and generalizations must not be allowed to mask considerable variation among these communities. The dwindling of high wage jobs has changed the population age structure in these communities. Millinocket (Fig 3) may be an extreme case. For the mill, the workforce is heavily skewed toward workers older than 50. For the community, school enrollments decline, and the supply of entry level workers – for whatever occupation – decreases. With the mill downtime in 2003, Millinocket entered the winter with 25% unemployment, which has had severe effects on the area economy as well as the individuals and families involved.

Table 6. Socioeconomic Traits of Milltowns

	Comment
Ethnic Mix	Varied by region within state
Geographic Isolation	Some are compact, some draw from wide labor markets
Outdoor culture	Fishing, hunting, snowmobiling strong in milltowns; paperworkers have the means and opportunity to own small camps, often on paper company leases. Conflict over access is common
Employer dominance	Some are true “company towns”, but many are not.
Shift work	Working on shifts affects friendship relationships, family life, civic engagement, and many aspects of social life
Commuting patterns	Residence near the mills remains common
Job tenure	In the past, many spent careers in one mill. Mill work was regarded as secure; there were many multi-generation paperworkers. Town had essentially no similar industrial work at similar pay levels.
Aging workforce	In many mills, a high proportion of the workforce is older than age 50. Significant effects on all aspects of social life
Importance of Union	Key institution in local life
Worker roles in political life	Increasing over time; now a paperworker sits in Congress. (Rep. Mike Michaud of Millinocket)

Source: Irland, 2002. unpub.

Figure 3.



Source: US Bureau of Census, Census of Population.  
 Bars at right are total population.

**Who will Cut the Wood?**

In 1960, horses continued in use in logging, on small operations in Southern Maine for the birch plants and pine mills, and on a large scale in the Wildlands to supply four foot pulpwood to the paper mills. In the North Woods, many of the loggers were Canadians, coming to work season by season in the winter. Many of the contractors were based there in Quebec. A map of the woods in the winter of 1960 would show three and four camps in each town, each camp with 100 men and even more horses. The Canadian role provoked two generations of controversy and contention. In the late 50's there were about 6000 bonds working in Maine's north woods; by the early years of this century, there were less than 600 (PAC/Ireland Group, 1999). Despite a rising demand for wood, there were too many loggers and machines out there. Mill wood buyers regularly rationed the "tickets" to bring in wood; the wood came to them, they did not have to go out and scratch for it.

A rising flow of wood was provided by rebuilding the capital structure of the logging industry -- not once, but twice since 1960. From the early 70s, skidders ruled the woods, becoming ever larger and more capable. The last of the horses were gone by the mid seventies, with only occasional exceptions. A new generation of machines appeared during the late 1980's,

much more powerful and expensive. Large, well capitalized contractors bought fleets of trucks and invested in huge, hydraulically operated "bunchers", "limbers", and cut-to-length (CTL) processors. These new behemoths in turn drove out many of the skidders, pushing them into specialized roles or work on small lots. It was said in 1999 that in Jackman, the logging town par excellence, not a single skidder was owned. But there was, throughout, too much logging capacity. Despite periodic price boomlets in pulp and lumber, longterm returns for the large companies were squeezed. Changing contracting methods shifted returns toward landowners, as they struggled to maintain modest incomes in a period of rising costs.

Then, in late fall 2003, Louisiana Pacific Co. announced that they would have to temporarily close a strandboard (OSB) mill at Woodland, because they could not get enough wood. A season of difficult logging weather had depleted mill logpiles everywhere, and mills were paying panic prices to get wood. This was at a time of unprecedented highs in OSB prices. It later emerged that the problem was getting the loggers to cut and haul the wood. Industry observers began to wonder if the long-expected crisis had arrived -- if a decade of falling contract rates had finally driven out enough capacity to fatally undermine the industry's wood supply chain.

UMO forestry professor Andy Egan conducted a survey of loggers (Egan and Taggart, 2004). He found that many of them did not expect their sons to enter the business. This reinforced indications from an earlier study and kept the question before us: who will cut the wood?

### **Changing Civic Culture**

Looking back to the political culture of the state in relation to forestry in 1960 feels something like walking through the State Museum and walking past interiors of square rigged ships, Lombard log haulers, and 19th century artifacts. It was a LONG time ago. There was no pressure for change; stability in the woods was assumed. There was no budworm, no herbicide controversy. The Allagash referendum was in the future. In their history of the state, Judd, Churchill, and Eastman name their chapter on this period, by R. Condon, "Maine out of the Mainstream".

There was no Tree Growth Tax, and the state's own forestry program was small. Very little was asked of it. An industry committee concerned with fire protection in the wildlands (the Maine Forestry District, or "MFD") (Wilkins, 1978) essentially appointed the State Forester and oversaw his work. Maine's Public Reserved Lands entailed long forgotten "timber and grass rights" on patches of land all across the region, and the State took care of some 40,000 Public Lots in the Plantations. The State Park system at the time was minimal.

The level of wood production was low, traditional forest practices were benign, the economy was changing slowly, and so far as pollution and hydropower were concerned, the rivers belonged to big industry, the power companies, and the big city sewers. This began to change, slowly at first, in the late 60's, as new environmental priorities shoved their way into the political process. Hardly noticed at first, Maine's economy shifted more to a service and retail base, as traditional manufacturing stood still until the 1990's and then shrank dramatically.

Maine suburbanized at a rapid rate. National groups for the first time began to take an interest in Maine affairs, and local environmental groups grew their memberships, sharpened their tactics, and developed allies in the Legislature and the press. Political candidates, however conservative, would all declare themselves “environmentalists”. A political system for forest policymaking built on decades of one-party control and on limited public involvement, entered a prolonged struggle for control over policy against these emerging forces.

In 1960, few people knew what a land trust or conservation easement was, or had any reason to care. A series of legislative leaders began bending history in new direction in the late 1960’s, partly aided by the new activism in Washington. All too often on environmental matters, the states had exercised their prerogatives by doing nothing and resisting federal action. The Maine Land Use Regulation Commission came into being in 1969 to serve as a state-level zoning body for the “Wildlands” -- the ten million acres with no local government. The Tree Growth Tax was adopted in 1973. Governor Ken Curtis re-organized state government from a wilderness of independent agencies beyond counting to a manageable number of fewer than 20 departments. In the bargain, the Department of Conservation was created by a merger of five baronies -- the Land Use Regulation Commission, the Bureau of Public Lands, Parks and Recreation, Forestry, and the Bureau of Geology. Three of these had previously been overseen by citizen boards, and one (LURC) would continue to be. Government crept closer to the position of an independent actor in the Maine woods, a situation not always to everyone’s liking.

Ralph Nader’s people came along and told us that Maine was a paper plantation. The state banned log driving after 1976. The last drive was on the Kennebec. A major spruce budworm epidemic then spread from Ontario to Nova Scotia and beyond, engulfing Maine in a long, costly and contentious spraying program in an effort to staunch the losses. (A compact summary of these times may be found in Rolde (2001) and in Judd, Churchill, and Eastman, Ch. 23.)

In the 1990’s, the state encountered a series of highly polarized issues that culminated in the divisive referendum campaigns of the late 90’s designed to ban clearcutting. This polarization put previously centrist environmental groups on the spot. Arguably, they gave new impetus to conservative and property rights ideological elements who sought to recover and then cement control over their various trade and resource groups. The declines in the spruce -fir inventory, the escalating rate of land sales by companies that seemed in 1960 to be enduring features of the landscape, and the escalating distrust of the paper companies, created fertile ground for the appeals of the clearcut ban proponents. Polarization,, however, could not achieve a clear resolution of some of the most difficult issues, which continue to simmer.

Largely due to paper company investments from the late 70’s to the present, some 800,000 acres of intensively-managed Maine forests are today occupied by managed stands, some of natural origin, that are regrowing in the wake of the heavy clearcutting of the 80’s. Many of these stands are growing at twice the rate of unmanaged natural stands, some even faster. The cumulative private investment involved exceeds \$100 million. This does not include the large public and private outlay for budworm spraying from the 70’s to the mid 80s.

## Prospects

The ills of the wood sector today reflect the widespread shrinkage of manufacturing in our society – from a high of 25% of personal income in Maine in 1960 to just 11% in 2000 (see, e.g. Flynn, Getell, and Sedgley, 1999). But these trends are not just a matter of statistics. They reflect changing opportunities for formerly rooted families to stay rooted. They mean fewer opportunities for multigenerational families to be in touch, to regularly see their grandchildren. They are resulting in schools closing, and small rural hospitals under great stress.

How the wheel has turned. In late 2003, a group of legislators issued a report that called for more entry level jobs to retain Maine young people in the state. The report clearly echoes the concerns of the 60's and 70s, when the economy was not generating jobs sufficient to keep our kids here. Over the generations, small woodworking plants and logging supplied such jobs in tiny towns across the state. Summer jobs there helped put many young people through college. Such jobs often did not make a career, but they enabled a person with only a high school diploma to start one. Today, policymakers in Augusta and economic pundits have finally noticed -- a little bit late, it would seem -- that these jobs counted for something.

Unfortunately, simple solutions do not seem to be at hand. Some things seem fairly clear to me, however.

The forces shrinking US manufacturing have not played out, and there is little Maine can do to influence them. In common with farming and fishing, our state is making a dramatic and permanent shift away from resource dependence for its economic base. Despite arguments to the contrary, I am unable to see that tourism, recreation, or other economic activities will ever be able to offset what has been lost – National Park or no National Park.

The age of a few large organizations owning and managing the Maine woods in huge tracts – and for extremely long periods of time -- is over. We do not even *see*, much less understand all the implications.

A new age of conservation ownership is upon us, in which ownership interests are split in novel ways, and funding comes from novel sources. The number of actors is increasing. We do not understand all of the implications of this, either.

Sprawl and wasteful, inefficient land use will continue to eat away at both the private and public values of the Maine forest. We *can* say that recent efforts to “immunize” large areas against subdividing will be of permanent benefit to our descendants; and we need to be doing more of this in Southern Maine, much more.

Maine's forest has a number of important values – (NOTE: what are these?) – and *all* of them will only increase in importance with time (Irland, 2000). I am not convinced by claims that one or another such value should absolutely dominate any one of the others, much less all of them.

Through much effort and controversy, we know how to manage the Maine forest a good

deal better than has ever been done before. What is now unclear, however, is whether we can sustain the private ownership institutions, a supportive public policy environment, and the public support necessary to carry this forward in the future.

We are at times nostalgic for the simpler life of 1960, when all seemed so stable, conflict was minimal, and so readily resolved. Yet our economy will face still more challenges, and our political system, which seems poorly adapted for making tough choices, will continue to face polarization and division. The policies of the past seem less and less applicable to the challenges of the future, and there are but few new ideas out there.

Yet in all the change and gloom, we should remember that a key trait of Maine has always been adaptability. We have to hope for a future that can still contain small communities, entrepreneurship, and businesses based on renewable raw materials produced here, in the Maine woods. To get to that future, however, there is much to do.

**Table 5.  
Timelines Highlights of Policy, Maine. 1960-2000**

**Federal Policies**

- 1965 Land and Water Conservation Fund Act  
(CAA???)
- 1968 Wild and Scenic Rivers Act
- 1972 Water pollution control Act Amendments
- 1973. Endangered Species Act
- 1978. Cooperative Forestry Assistance Act
- 1990 Dwyer decision (beginning of the end  
For timber production on western federal lands)

Other more recent???

**State Policies and Actions**

- In 1960 – four separate agencies
- 1963 Allagash WW created
- 1969 LURC
- Early 70’s DOC created, Bur. Public Lands created
- 1973 Tree Growth Tax enacted
- 1976 Bigelow referendum
- Late 70’s LURC completes “zoning” of wildlands
- Late 70’s Uniform Property Tax abolished
- 1989 North Woods Park first proposed  
(by The Wilderness Society)
- 1987 Land for Maine’s Future Board
- 1988 Forest Practices Act
- XXX TGT mgt plan requirement enacted
- 2000 Legisl. Creates reserves on Public Lands
- 2001 Public Lands receive “Green Certification”  
from SFI and SCS.

(Table 5, cont.)

**Changes in Land Ownership -- Milestones**

1980	Indian land settlement
1981	W. Branch, Penobscot R. easement
1986	Diamond land sales
1990	GNP merged into Georgia Pacific
1999.	Pingree Conservation easement announced
2001	TNC buys 175,000 A of IP lands along St. John.
2002.	Canadian companies own ½ of Maine's remaining industrial lands
2003	GNP declares bankruptcy after selling most of its lands

## References

- Citizens' Forestry Advisory Council. 1988. Forest for the future: a report on Maine's forest to the Legislature, the Governor, and the People of Maine. Augusta: Maine DOC. 38 pp.
- Egan, Andrew A. and D. Taggart. 2004. Who will log? Occupational choice and prestige in New England's North Woods. *Jour. Forestry*. 102 (1): 20-25.
- Ferguson, R. H. and N. Kingsley, 1972. The timber resources of Maine. USDA For. Serv. NE For. Exp. Sta. Res. Bull. NE-26. 129 pp.
- Flynn, Getell, and Sedgley, 1999. New England as the Twenty-first century approaches: no time for complacency. *New England Economic Review*, Nov/ Dec. pp. 42- 53.
- Francis, Charles., 2003. "The Grand Trunk comes to Paris". *Discover Maine*, vol 1 No. 3, 2003/04, p. 51.
- Gadzik, C. J. , J. H. Blanck, and L. E. Caldwell. 1988. Timber supply outlook for Maine: 1995-2045. Augusta: Maine DOC. 39 p.
- Irland, L. C. 1984. Future employment in the Maine woods: situation, forces, and outlook. in *Proceedings: A Forest based economy --carrying a tradition into the future*. Blaine House Conference on Forestry. Augusta, Maine Department of Conservation. p. 78-108.
- Irland Group, 1999. Forest industry and landownership in the northern forest: economic forces and outlook. Open Space Institute, New York. June 30. 65 p.
- Irland, L. C. 1999. Policies for Maine's Public lands. In *Maine Center for Economic Policy, Maine Choices 1999*. Augusta. P. 7-21.
- Irland, L. C. 2000. Maine forests: a century of change, 1900-2000. *Maine Policy Review*. Winter 2000. 9(1): 66-77.
- Irland, L. C. 2002. Papermaking in New England's Flannel Shirt Frontier: social change in the paper milltowns. Draft chapter for book in preparation, ed. Mark Lapping, USM.
- Irland, 2003. Papermaking in Maine: Economic trends, 1894-2000. Submitted to *Maine History*. (status?)
- Irland, L. C. 2003, This evergreen empire: Maine's forest resources and industries in a New

Century. Background paper for Blaine House Conference on Natural Resource-based industries. Nov. 17. 25 pp. Web: [www.state.me.us/governor/baldacci/news/events/natres\\_conference](http://www.state.me.us/governor/baldacci/news/events/natres_conference). Hard copy publication forthcoming.

Judd, R. W., E. A. Churchiill, and J. W. Eastman. 1995. Maine: the pine tree state from prehistory to the present. Orono: Univ. Maine Press. 616 pp.

Laustsen, K. M. , D. M. Griffith, and J. R. Steinman, 2003. Fourth annual inventory report on Maine's forests. Maine DOC and USFS. Oct. 16. 49 p.

Mageean, D., G. AvRuskin, and R. Sherwood. 2000. Whither Maine's population. Maine Policy Review 9(1):28-43. Winter 2000.

Maine DOC. 2001. The 2001 biennial report on the state of the forest. Rpt to Joint Standing Comm. of the 120<sup>th</sup> Leg. On ACF. Oct 11, 2001. 37 pp.

MFS. Annual Timber Cut and Woodflow reports. Augusta: Maine DOC.

Nellis, J. C. 1912. Wood-using industries of Maine. Printed in 1912 Annual Report of the Forest Commissioner. Waterville: Sentinel Publishing Co. p. 85-188.

Pan Atlantic Consultants and The Irland Group. 1999. Maine logging industry and the bonded labor program: an economic analysis. Augusta: Maine DOL. 252 pp.

Peck, H. Austin. 1957. The wood products industries of Maine: a report to the Department of Economic Development. Univ. of Maine at Orono, August. Typescript. 169 pp.

Pohlman, L. 2003. Being poor in Maine: 1960-2010. Choices. Nov 12 2003. vol. IX No. 8.

Rolde, N. 2001. The interrupted forest: a history of Maine's wildlands. Gardiner: Tilbury Press. 402 pp.

Sendak, P. E., R. C. Abt, and R. J. Turner, timber supply projections for northern New England and New York. North Jour. Of Apl. For. 20(4):1-11.

Wharton, E. H, R. L. Nevel, and D. S. Powell, 1977. Supply and demand for timber for wood turning in Maine. USDA FS FNEFES, Res. Bull.... (tbo)

Wilkins, A. H. 1978. Ten million acres of timber. Woolwich: TBW Books. 312 pp.