

Changes in Forest Industry Timberland Ownership 1979 - 2000

Prepared by

The Sampson Group, Inc.

**Neil Sampson
Lester DeCoster
James Remuzzi**

September 1, 2000



The Sampson Group, Inc.
5209 York Road
Alexandria, VA 22310
Tel: 703-924-0773
Fax: 703-924-0588
WWW.sampsongroup.com

Changes in Forest Industry Ownerships in the U.S.

In the last two decades of the 20th Century, something on the order of 2 million acres of timber-producing land moved out of forest industry ownership. The net loss of industrial timberland masks a much larger total of land transferred, the full extent of which is difficult to document. We estimate that more than 28 million acres changed hands in the last 20 years. About 14 million acres (about 21 percent of the 67 million acres of industrial timberland reported in the 1997 RPA) was transferred in the last 4 years. No doubt there were other land transfers that were either not publicly reported, or that were overlooked in this review.

Most of these lands moved from company to company but much of it went out of corporate ownership into more tax-advantaged financial ownerships, such as real estate trusts and investment organizations, or into tax-exempt conservation organizations.

The land sales activity in the last two decades was accompanied by a great deal of change in the corporate landscape. Of 40 companies we identified as being large timberland owners (over 400,000 acres) in 1979, almost half (19) are gone or out of the land-owning business today. Because of the tax advantages of moving timber land out of double-taxed structures such as C corporations, and the increased return to shareholders that can be realized, the likelihood of these land transfers continuing in the next few years appears high.

On a regional basis, the industry is concentrating ownership in the south, decreasing most significantly in the North and West. In most of the recent industrial sales, some of the land moved into a growing public land base, particularly in the Eastern U.S. One state – Maine – provides a more local case study. Maine has seen a decline of almost 10 percent in the land held by large private owners since 1993.

Changing strategic beliefs and financial pressures

One explanation for the significant shifts in forest land ownership is that large forest industries, who typically believed in owning large amounts of forest land, have switched to the belief that they should not. This is evidenced by the shift in recent years from a pattern of strategic land acquisitions to one of divestitures. As the more competitive global marketplace and investor dissatisfaction with returns puts pressure on corporate leaders, companies are looking to divestiture as a way to improve financial performance. Instead of owning and managing land, they are turning to long-term supply contracts to provide the strategic assurance needed. As the availability of land-purchasing capital has ballooned with the entry of pension and endowment funds into the timberland market, as well as the willingness of public agencies and private philanthropic funds to purchase land for conservation purposes, sale prices have been high and buyers available. Where deals are structured to gain tax advantages as well, the financial inducement to sell timberland can be strong.

Strong participation by the public sector

As illustrated in Figure 1, the recent years have seen active participation by both public agencies and non-profit conservation organizations (often acting on behalf of public agencies) to enter the timberland market. Driven in many cases by the fear that industrial sales may result in the breakup and fragmentation of large blocks of timberland, states and conservation organizations have teamed up to bid for these lands. Many are destined, according to their buyers, to remain in sustainable forest production. Some, primarily those of low timber value or high conservation value, will be shifted to more preservation-oriented uses. At the moment, there is no evidence to suggest that this trend will not continue to grow, particularly if large blocks of industrial forest continue to come onto the market.

What's next?

Some experts argue that companies with a low percentage of their timber supply coming from fee lands are the most likely candidates to consider land sales as a strategic move in the future. Other factors apply, as well. In an estimate that is, admittedly, highly subjective, we estimate that as much as 30 million acres (45%) of today's industrial timberlands are likely to be up for sale in the near future.

Implications for Sustainable Forestry

One of the questions raised is the implication of these transfers for the future of sustainable forestry on America's timberlands. Most of the companies that were leaders in the development of the Sustainable Forestry InitiativeSM for long-term strategic reasons. Many of the new owners can best be described as financial owners, holding timberland for financial return. The question that arises is whether these financial owners will be as patient in waiting out long investment cycles, as willing to provide the field expertise needed to provide the scientific basis for sustainable forestry, or to forego the timber revenues as might be required by achieving some conservation goals. These new financial owners may be equally susceptible to the public pressure for sustainable management, and equally responsive. The answers are not yet clear because the trends are recent and documentation has been fragmentary. The definitions of industry land and timberland in USFS-RPA data also make it difficult to easily track the movement of large forest tracts.

**Table 1– Large Company Timberland Trends - U.S. - 1979 - 2000 – Thousand acres
Listed in order of size by totals in 2000**

*** Present Land Status: C = Controlled for own use; M = Managed for general market; O = Out of land owning
Large holdings are considered to be about 400,000 acres & above**

Increase	Decrease	Timberland Owned– Thousand acres								Present Land Status*
		North		South		West		Total		
		1979	2000	1979	2000	1979	2000	1979	2000	
Owner										
International Paper		2,993	2,499	4,905	9,299	512	298	8,410	12,096	C
Plum Creek-After GP- TCo merger		0	1,437	0	4,443	0	2,059	0	7,939	M
Weyerhaeuser		0	0	3,082	3,785	2,841	1,960	5,923	5,745	C
Boise Cascade		696	308	510	705	1,434	1,307	2,664	2,320	C
Rayonier		0	0	722	1,822	350	379	1,072	2,201	C
Hancock (HTRG)– estimate		0	600	0	1,400	0	200	0	2,200	M
Mead		607	1,503	728	587	0	0	1,335	2,090	C
Willamette		78	0	254	1,118	216	610	548	1,728	C
Temple-Inland		0	0	0	1,694	0	0	0	1,694	C
J.D. Irving		400	1,600	0	0	0	0	400	1,600	C
Potlatch		247	338	546	500	518	671	1,311	1,509	C
Westvaco		581	232	640	1,094	0	0	1,221	1,326	C
Louisiana-Pacific		48	7	138	885	670	55	856	947	C
Seven Islands*		1,700	900	0	0	0	0	1,700	900	M
Prentiss & Carlisle*		700	850	0	0	0	0	700	850	M
Bowater		0	0	0	800	0	0	0	800	C

McDonald Investment	0	656	0	0	0	0	0	656	M
Longview Fibre	0	0	0	0	408	571	408	571	C
Fraser	182	420	0	0	0	0	182	420	C
Great Northern-Nekoosa – Reorg-GNP	2,417	400	295	0	0	0	3,112	400	C
Deltic Timber	0	0	0	397	0	0	0	397	C
Total-from above	10,649	11,750	11,820	28,529	6,949	8,110	29,842	48,389	
Total- from below	6,746	0	15,512	0	6,002	0	28,260	0	
GRAND TOTAL	17,395	11,750	27,332	28,529	12,951	8,110	58,102	48,389	
Owners below have gone out of land owning since 1979									
American Can	266	0	234	0	0	0	500	0	O
Burlington Northern	0	0	0	0	1,492	0	1,492	0	O
Champion	434	0	1,425	0	1,148	0	3,007	0	O
Continental Group	0	0	1,472	0	0	0	1,472	0	O
Crown Zellerbach	0	0	854	0	885	0	1,739	0	O
Diamond International	1,044	0	0	0	409	0	1,453	0	O
Georgia Pacific - Timber Co	1,258	0	2,448	0	794	0	4,500	0	O
Johns Manville	0	0	584	0	0	0	584	0	O
Kimberly-Clark	196	0	561	0	0	0	757	0	O
Kirby	0	0	654	0	0	0	654	0	O
Masonite	39	0	351	0	107	0	497	0	O
Owens Illinois	270	0	731	0	0	0	1,001	0	O
St Regis	1,228	0	1,488	0	463	0	3,179	0	O
Scott	1,869	0	735	0	242	0	2,846	0	O
Southwest Forest Industries	21	0	425	0	12	0	458	0	O
Southern Pacific	0	0	0	0	450	0	450	0	O
Tenneco - Pkg. Corp.	121	0	298	0	0	0	419	0	O
Time Inc.	0	0	1,530	0	0	0	1,530	0	O
Union Camp	0	0	1,722	0	0	0	1,722	0	O
TOTAL out of land owning	6,746	0	15,512	0	6,002	0	28,260	0	
	1979	2000	1979	2000	1979	2000	1979	2000	

Sources – Extracted from: *Forest Industries*, August 1978; *Forbes*, May 12, 1980; *Northern Logger* (1999-2000 issues to date); *Timber Harvesting* (1999-2000 issues to date); *Forest Products Report* by UBS Warburg., August

3, 2000. *Irland Group correspondence*, August, 2000. The 40 companies listed are the major private holders of U.S. forests— defined as ownerships of about 400,000 acres and above.

* Seven Islands and Prentiss & Carlisle manage forests for trusts / family investment holdings. These holdings were in existence decades before the present Timber Investment Management Organizations such as HTRG started owning and managing land for institutional investors.

Shifting from industrial to public or conservation owners

In 30 timberland transactions that were closed or near closure in 1999, the Hancock Timber Resources Group (HTRG) estimated that 7 purchasers were conservation groups (The Nature Conservancy, The Conservation Fund, and the Trust for Public Land). Together, those purchases amounted to 558,409 acres and involved \$193.5 million. In at least one 1999 sale, HTRG itself purchased 278,000 acres from

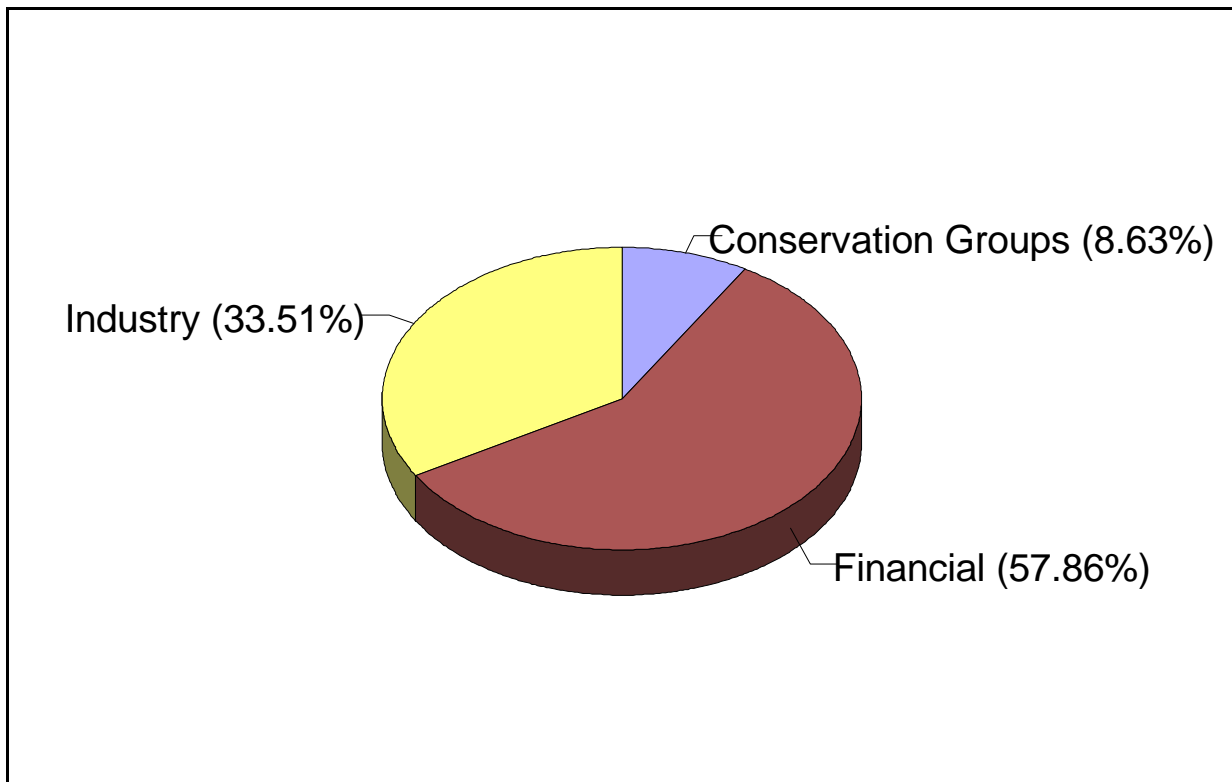


Figure 1. Proportion of 30 1999 land sales purchased by conservation groups, financial organizations, and industrial buyers. Source: HTRG, 1999.

Chesapeake, then sold some 76,000 acres of that purchase to The Conservation Fund (TCF) and the State of Maryland. By the end of the transactions, some 58,000 acres will go to the State of Maryland and 9,000 acres to the State of Delaware. TCF may retain the remainder and manage it for sustainable production.

Trends in National Statistics

The release of the 1997 Resources Planning Act (RPA) data provides another way to illustrate the shifts in industrial timberland, although the data are in aggregated form that masks many of the internal sales and land transfers. Here again, the change in industry timberland reflects the shift from acquisition to divestiture. Table 2 illustrates that, in the last 20 years, the United States has gained a total of about 11 million acres of timberland, an increase of around 2 percent, to a total of around 504 million acres. Industrial timberland declined during that same period by some 2 million acres (about 3 percent). In the Nation as a whole, industry's share of timberland has dropped to 13.2 percent, the lowest figure since 1962. As Figure 2 illustrates, the amount of timberland held by industry stayed stable or rose gradually in the years from 1952 to 1993, but has declined since then.

Table 2– U.S. Timberland, ownership trends--1977 to 1997

Timberland acres– Northeast: CT, DE, ME, MD, MA, NH, NJ, NY, PA, RI, VT, WV							
77 to 97 summary : Public and NIPF increases; Industry decreases; Total acreage up 0.5%							
Public		NIPF		Industry		TOTAL	
Year	Acres	Year	Acres	Year	Acres	Year	Acres
1997	9,603,000	1997	58,324,000	1977	12,789,000	1997	78,923,000
? up 1,370,000 ?		? up 785,000 ?		? down 1,793,000 ?		? up 362,000 ?	
1977	8,233,000	1977	57,539,000	1997	10,996,000	1977	78,561,000

Timberland acres– Northcentral: IL, IN, IA, MI, MN, MO, OH, WI							
77 to 97 summary : Public and NIPF increases; Industry decreases; Total acreage up 7.5%							
Public		NIPF		Industry		TOTAL	
Year	Acres	Year	Acres	Year	Acres	Year	Acres
1997	22,633,000	1997	54,082,000	1977	4,664,000	1997	80,510,000
? up 2,300,000 ?		? up 4,195,000 ?		? down 869,000 ?		? up 5,625,000 ?	
1977	20,333,000	1977	49,887,000	1997	3,795,000	1977	74,885,000

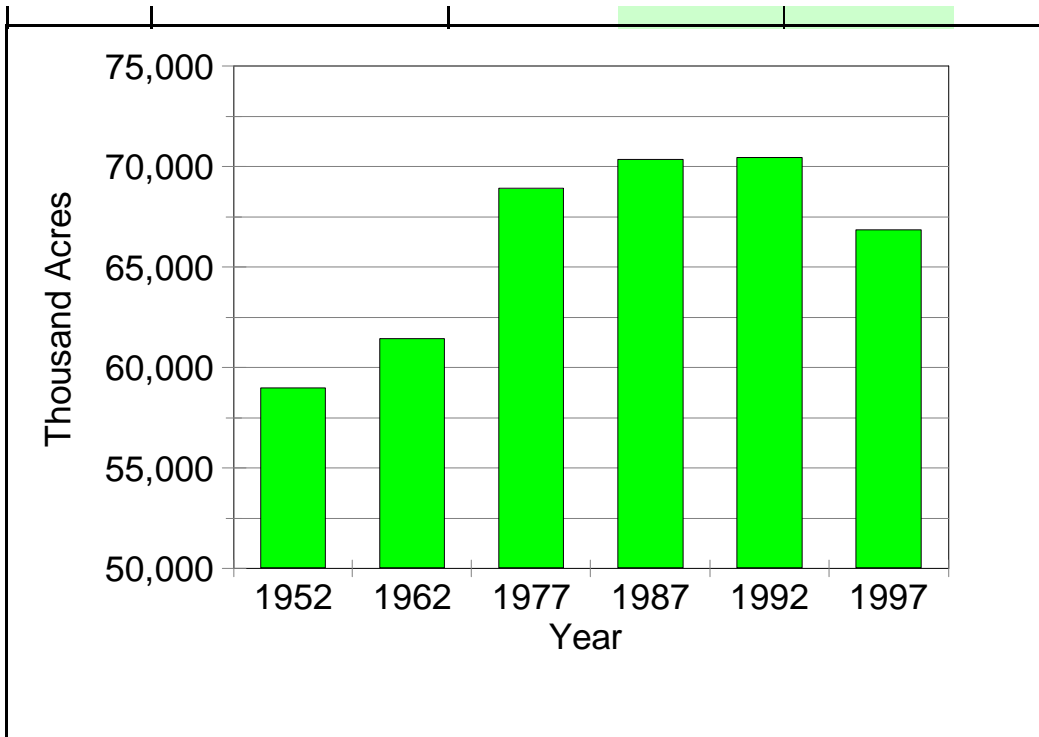
Timberland acres– Southeast: FL, GA, NC, SC, VA,							
77 to 97 summary : Public increases; big decreases in NIPF and Industry; Total acreage down 3.6%							
Public		NIPF		Industry		TOTAL	
Year	Acres	Year	Acres	Year	Acres	Year	Acres
1997	9,373,000	1977	64,044,000	1977	15,312,000	1977	87,818,000
? up 911,000 ?		? down 3,122,000 ?		? down 1,744,000 ?		? down 3,015,000 ?	
1977	8,462,000	1997	60,922,000	1997	14,508,000	1997	84,803,000

Timberland acres– Southcentral: AL, AR, KY, LA, MS, OK, TN, TX							
77 to 97 summary : Increases in all categories; Total acreage up 3.9%							
Public		NIPF		Industry		TOTAL	
Year	Acres	Year	Acres	Year	Acres	Year	Acres
1997	11,417,000	1997	82,249,000	1997	22,529,000	1997	116,196,000
? up 1,444,000 ?		? up 1,958,000 ?		? up 981,000 ?		? up 4,384,000 ?	
1977	9,973,000	1977	80,291,000	1977	21,548,000	1977	111,812,000

Timberland acres– Rocky Mts.: KS, NB, ND, SD, AZ, CO, ID, MT, NV, NM, UT, WY							
77 to 97 summary : Increases in all categories, mostly in Public; Total acreage up 18.0%							
Public		NIPF		Industry		TOTAL	
Year	Acres	Year	Acres	Year	Acres	Year	Acres
1997	49,894,000	1997	18,199,000	1997	2,926,000	1997	71,018,000
? up 9,277,000 ?		? up 739,000 ?		? up 831,000 ?		? up 10,845,000 ?	
1977	40,617,000	1977	17,460,000	1977	2,095,000	1977	60,173,000

Timberland acres– Pacific coast: AK, OR, WA, CA, HI							
77 to 97 summary : Public decreases, NIPF increases, Industry decreases; Total acreage down 9.5%							
Public		NIPF		Industry		TOTAL	
Year	Acres	Year	Acres	Year	Acres	Year	Acres
1977	50,549,000	1997	17,064,000	1977	12,528,000	1977	79,106,000
? down 7,503,000 ?		? up 1,035,000 ?		? down 425,000 ?		? down 6,892,000 ?	
1997	43,046,000	1997	16,029,000	1997	12,103,000	1997	72,214,000

Timberland acres– U.S. TOTAL							
77 to 97 summary : Public and NIPF increases, Industry decreases; Total acreage up 2.3%							
Public		NIPF		Industry		TOTAL	
Year	Acres	Year	Acres	Year	Acres	Year	Acres
1997	145,967,000	1997	290,840,000	1977	68,937,000	1997	503,664,000
? up 7,798,000 ?		? up 5,591,000 ?		? down 2,079,000 ?		? up 11,309,000 ?	



492,355,000

Figure 2. Industrial Timberland trends, 1952-1997. Source: 1997 RPA: Powell et al., 1993

1977	138,169,000	1977	285,249,000	1997	66,858,000	1977
------	-------------	------	-------------	------	------------	------

Figures 2 and 3 illustrate the longer-term industrial timberland ownership trends in the U.S. A long period of acquisition appears to have peaked in 1987, then shifted to divestiture after 1992. Figure 3 illustrates that this trend has affected all major regions of the country, although it is clear that industrial timberland is still heavily concentrated in the South.

A Look at One State

Large forest companies have been the primary owners in Maine’s northern unorganized territory since around 1900. The area remains largely unsettled and in forests for this reason, reinforced by its land forms and remote location. The ownerships show trends similar to those identified nationally– see Table 3. Many acres have switched owners but a huge area remains in forest use. Clearly private ownerships will hold large expanses of forests given the right conditions. Some family and trust ownerships– now managed by Seven Islands– have been held around 100 years. That is very “patient money.” Perhaps this can be so with the new TIMOs starting to accumulate land– if we maintain the right conditions.

**Table 3 – Large Forest Ownerships in Maine - 1972, 1993, 2000 – Thousand acres
(Listed in order of size for 1972 and 2000)**

Owners	1972	1993	2000
--------	------	------	------

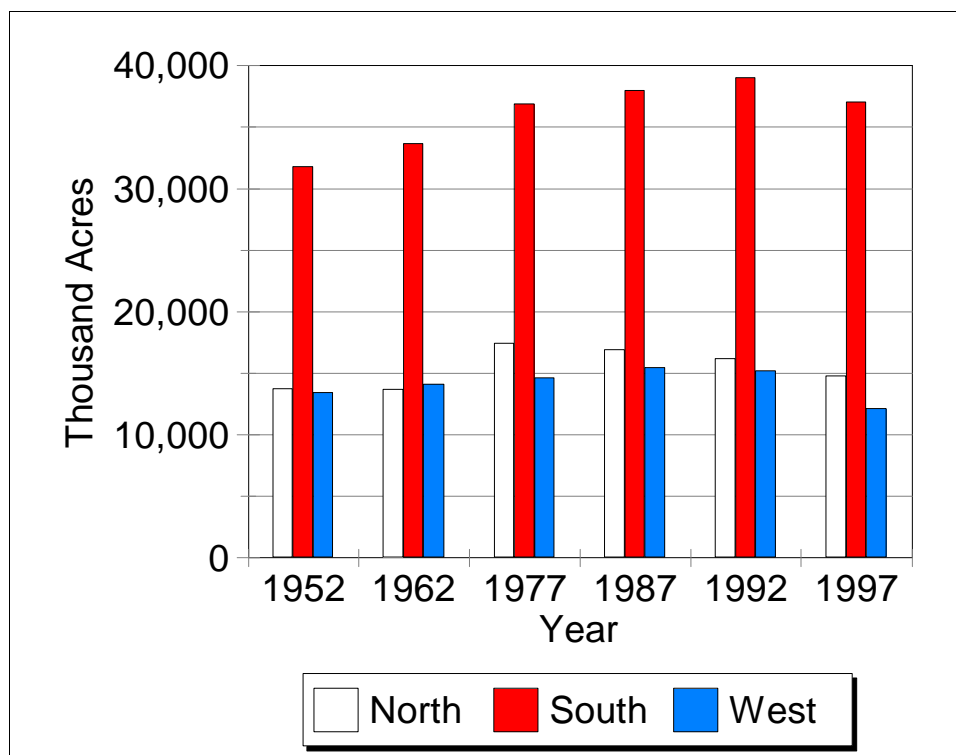


Figure 3. Industrial Timberland trends. 1952-1997, by major regions.
Source: 1997 RPA; Powell et al. 1993.

= Down from 72	= Up from 72				
Great Northern	2,250	2,100	J. D. Irving	1,600	
Seven Islands*	1,700	900	International Paper	1,415	
International Paper	1,132	976	Plum Creek	1,369	
Sappi Ltd	882	930	Seven Islands*	900	
James River	762	350	Prentiss & Carlisle*	850	
Champion	751	730	Mead	670	
Prentiss & Carlisle*	700	1,000	McDonald Investment**	656	
Georgia-Pacific	435	464	Hancock (HTRG)**	450	
J. D. Irving	400	600	Fraser	420	
J. M. Huber	400	400	Great Northern	400	
Fraser	182	420	J. M. Huber***	300	
Dunn Heirs*	150	106	Passamaquoddy, Penobscot Nations	160	
Baskahegan	100	100	Kruger	109	
Timberlands	91	91	Baskahegan	109	
Passamaquoddy, Penobscot Nations	20	160	Dunn Heirs*	106	
Boise Cascade	0	670	Timberlands	0	
Hancock (HTRG)**	0	250	Sappi Ltd	0	
Kruger	0	109	James River	0	
Plum Creek	0	0	Champion	0	
McDonald Investment	0	0	Boise Cascade	0	
Mead	0	0	{ Georgia Pacific-Timber Co. }	0	
TOTALS	9,955	10,356		9,514	

* Managing for trusts and individuals, ** Managing for institutional investors, *** Huber placed about 100,000 acres in a partnership with HTRG in early 1990's, { Georgia Pacific-Timber Co } will merge into Plum Creek in 2000

Sources – Extracted from: *Northern Logger* (1999-2000 issues to date); *Ireland Group correspondence*, August, 2000.

What Companies are likely to sell timberland?

In its analysis of this trend, UBS Warburg suggests that companies with a low percentage of their industrial feedstock coming from fee lands may, because of their operating structures, find it attractive to separate the timberland resource from the production facilities. While this admittedly overlooks much about corporate culture, Table 4 shows how the major companies array when viewed in this manner.

The companies listed in column 1 of Table 4 hold some 60% of the industrial timberland in the U.S.

and, if those acres move as suggested by column 5, almost 3/4 of that land could be separated from its former industrial owners within a few years.

Table 4. Major forest products companies, indicating the percentage of their wood supply that comes from fee lands, and estimating which, on that basis, may be likely to sell timberlands to other entities.

Major forest products Companies - U.S.	Timberland - acres -	% Self-Supplied	Justification for separating land	Acres likely to move in future
International Paper	12,096,000	20%	high	12,096,000
Weyerhaeuser	5,745,000	50%	low	0
Georgia Pacific (Timber Co--Plum Creek, pending)	4,722,000	17%	in process	4,722,000
Plum Creek	3,217,000	--	in process	3,217,000
Boise Cascade	2,320,000	31%	medium	0
Rayonier	2,201,000	low	high	2,201,000
Mead	2,090,000	30%	high	2,090,000
Willamette	1,728,000	60%	low	0
Temple-Inland	1,694,000	60%	low	0
Potlach	1,509,000	32%	high	1,509,000
Westvaco	1,326,000	40%	high	1,326,000
Louisiana-Pacific	947,000	15%	high	947,000
Bowater	800,000	30%	high	800,000
Longview Fibre	571,000	low	high	571,000
Deltic Timber	395,000	31%	high	395,000
Total	41,361,000			29,874,000

Discussion– Changes in the twenty years from 1979 to 2000:

1. **Concentration:** Big owners absorbed others. The top 2 owners added 11,625,000 acres of land. Out of the 40 companies listed, 19 have gone out of land-owning, leaving 21.
2. **Timber Separation:** Companies are separating timber ownership from mill ownership. The GP-Timber Co-Plum Creek move in this direction involves almost 8,000,000 acres of land. Financial analysts predict that more will follow.
3. **Movement to Timber Investment Management Organizations:** Several million acres–3-4 million–moved out of large products company ownerships to TIMOs–companies managing land for institutional investors. More will follow.
4. **Movement to Public ownerships:** Considerable acreage went to public ownerships, directly or indirectly through purchase by Conservation Organizations– sizeable chunks were spun off during many recent sales.
5. **Regional Shifts– Southern Concentration:** Large company holdings decreased the most in the North–dropping 5,645,000 acres. The West showed the next largest decrease– 4,841,000 acres. The South increased by about 1.2 million acres.

Ten Questions:

1. How will forest management and planning time frames change as land moves from being held as a strategic corporate resource to being held as a separate investment? Which is the more “patient money”, investment in timberland ownership by forest products firms for *primarily strategic* reasons or investment in timberland ownership for *primarily financial* reasons?
2. How far will the concentration and separation trend go? Some analysts believe that most companies will sell their timberland to investment organizations and that only 4 or 5 big companies will continue to hold land for strategic reasons. Weyerhaeuser, for example, will probably continue to hold timberland because of their special positions and conditions.
3. How will large financial owners view neighboring family and individual non-industrial ownerships (NIPFs)? One view would be to see them as competition, another would see them as potential customers for services.
4. Will a significant market develop for consolidating NIPF lands into financial ownerships?
5. What kinds of tax policies will financial owners push for and how might these affect owners holding land for less economically-oriented goals?
6. How much of the land being transferred will be go to the public sector directly or to conservation organizations likely to move it to public ownership? Will it continue to be managed for sustainable forestry? A large pool of funds for public acquisition competes for the land with each sale.
7. Will land held for forestry continue to shrivel in the North and West– will shrink faster in the South?
8. Will large public ownerships in the North and West be pushed to rebuild forestry infrastructures to manage their aging, fuel-accumulating woods for fire-safety, wildlife and other needs?
9. How will Forest Industry Associations change if only 4 or 5 product firms continue to hold land and the rest are financial organizations?

10. Will environmental organizations view forest investment owners as enemies or allies?