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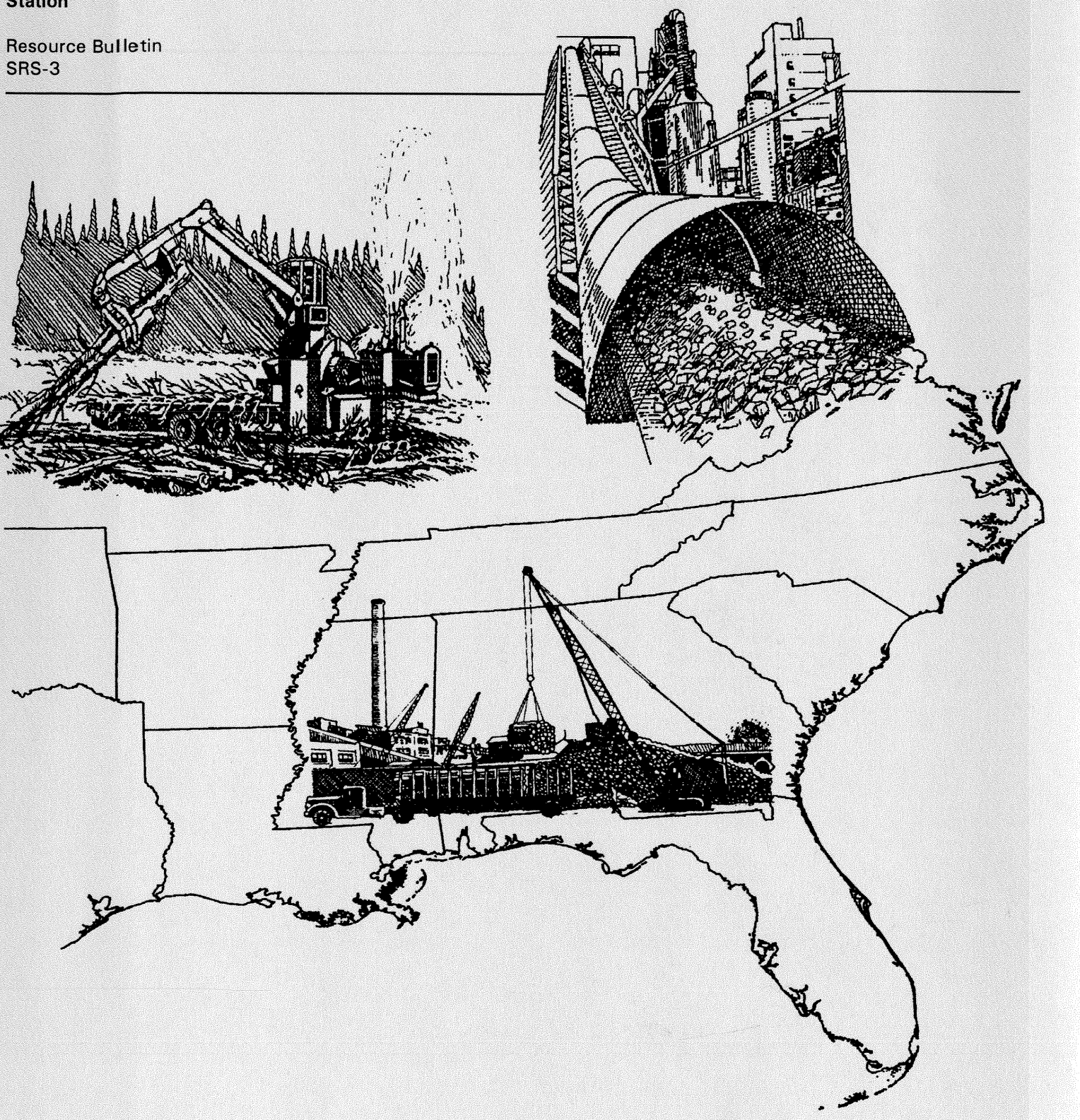
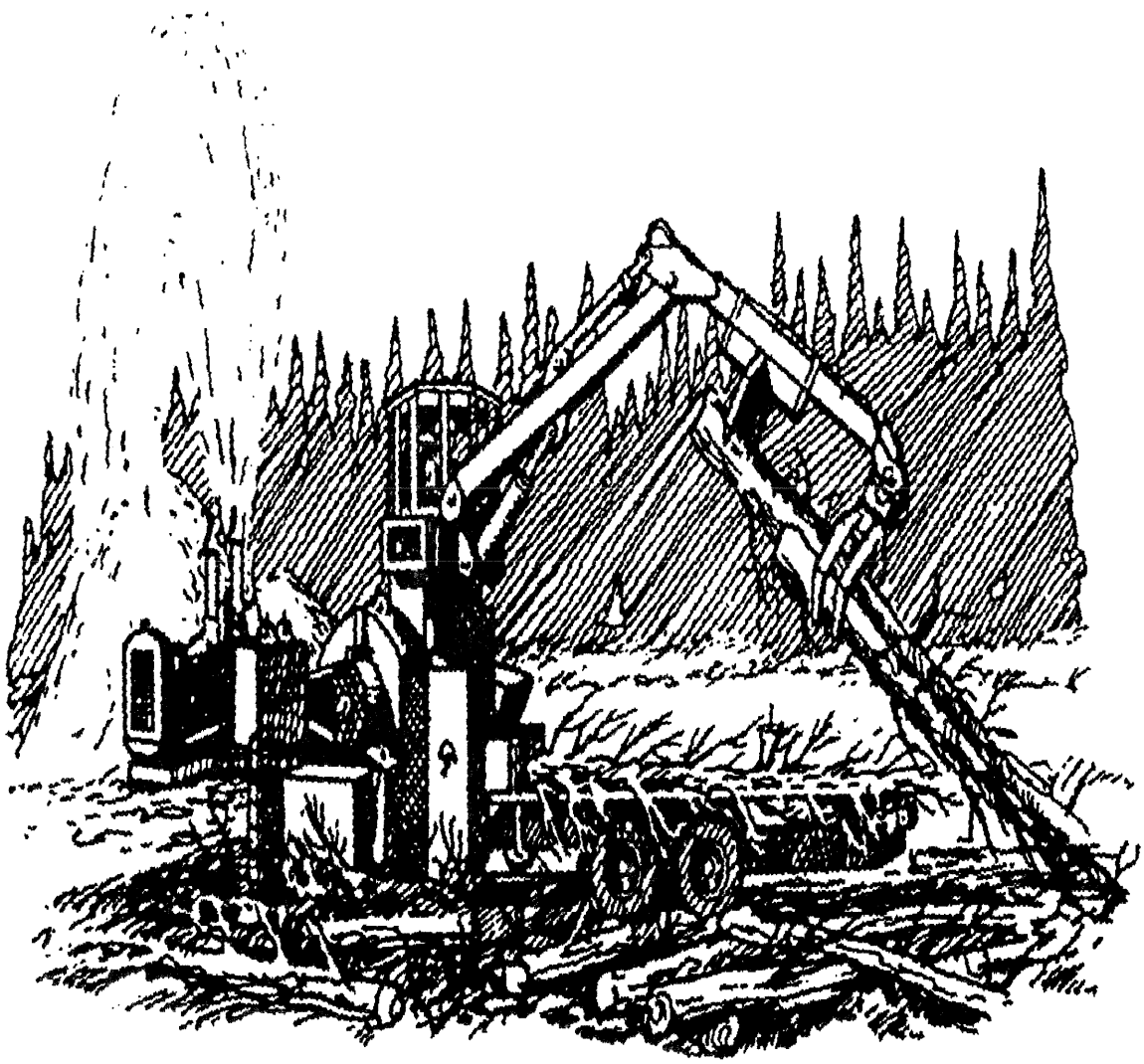
Trends in Southern Pulpwood Production, 1953-1993

Tony G. Johnson





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Trends in Southern Pulpwood Production, 1953-1993

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SOUTHERN RESEARCH STATION
Asheville, North Carolina
and
Forest Service, U.S. Department of Agriculture
in cooperation with
AMERICAN PULPWOOD ASSOCIATION

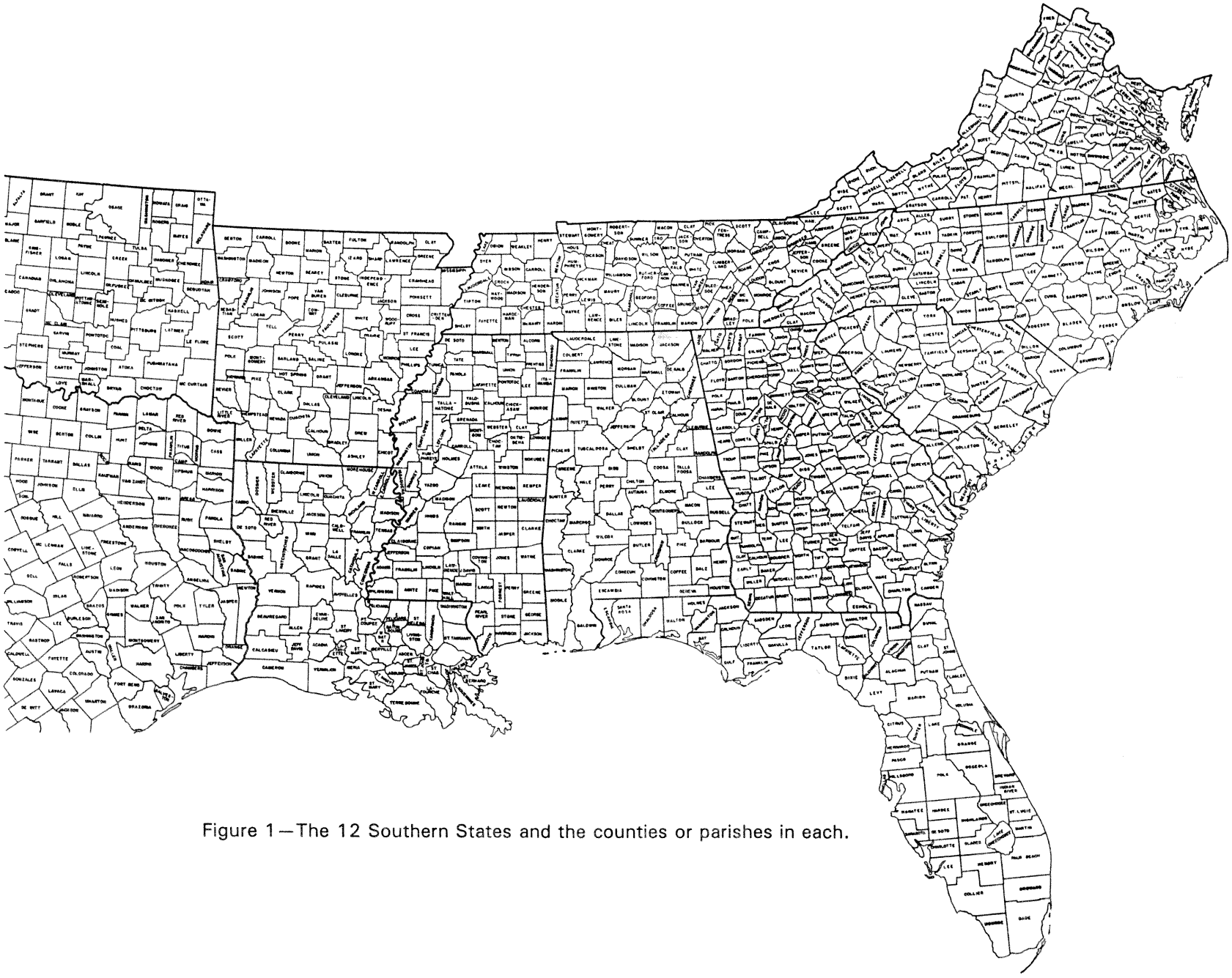

Figure 1—The 12 Southern States and the counties or parishes in each.

Introduction

This publication contains historical pulpwood production data derived from canvasses of wood-using pulpmills that have drawn roundwood or wood residues from the 12 Southern States (fig. 1). These canvasses have been conducted annually for the last 41 years. The pulpwood canvass data were compiled, analyzed, and reported on an alternating basis by personnel from the USDA Forest Service, Southern and Southeastern Forest Experiment Stations (now combined into the Southern Research Station). The canvasses were conducted to determine the amount and source of pulpwood receipts by county and to determine interstate and cross-regional movement of industrial roundwood.

Pulpwood production data is combined with the periodic canvasses of all other primary wood-using plants conducted in Southern States to complete the picture of total timber product output. This data complements the Forest Inventory and Analysis periodic inventory of volume, growth, and removals from each State's timberland. All production figures are reported in cords.

Pulpwood

Relatively stable economic conditions have prevailed over the last four decades, creating a nearly constant increased demand for pulpwood. The rise in population, combined with an increase in the per capita consumption of paper, paperboard, and other nonpaper products of pulpwood have been conducive to expansion throughout the industry and fueled the general upward trend in pulpwood production. Southern production has increased more than fourfold from 16.2 million cords in 1953 to 66.3 million cords in 1993 (table 1). Total pulpwood production for the last 40 years equals almost 1.8 billion cords harvested from Southern timberlands. If these cords were stacked end to end, the resulting 2.6 million miles of wood could circle the earth 106 times or go to the moon and return 5 times. Tables 2 and 3 display total production figures by the Southeastern and South Central regions and year.

Roundwood

Several significant trends have developed in the Southern pulpwood industry over the last 40 years. Softwood roundwood production has more than doubled from 14.1 million cords in 1953 to 30.1 million cords in 1993. However, softwood roundwood expressed as a percent of total production has declined dramatically over the same time period (fig. 2). In 1953, softwood roundwood supplied 87 percent of the total pulpwood production. By 1983, it made up only 45 percent of total production and has remained relatively stable over the last decade. The decline in softwood roundwood as a percent of total wood used was offset by the trend toward greater utilization of wood residues and the abundant hardwood resources in the South.

Hardwood roundwood production has climbed from slightly less than 2.0 million cords in 1953 to more than 16.2 million cords in 1993. Production methods and techniques developed over the last 40 years have enabled the pulp industry to utilize greater quantities of hardwood. In 1953, hardwood roundwood furnished only 12 percent of total production, compared to nearly 25 percent in 1993.

Wood Residues

Mills reported receipts of two kinds: (1) roundwood and (2) wood residues. Wood residues are primarily chips produced as a byproduct. However, an unknown proportion of these chips were produced from roundwood received at a primary processor (i.e., sawmill or veneer mill) and subsequently chipped. Figure 2 illustrates the dramatic increase in the utilization of wood residues for pulpwood. In 1953, the proportion of wood residues used for pulpwood was almost negligible at less than 1 percent. Using wood residues for pulpwood increased from 76,000 cords in 1953 to more than 19.9 million cords in 1993. Wood residue use has remained relatively stable since the late 1970's and in 1993 accounted for 30 percent of total pulpwood production.

Mills and Pulping Capacity

In 1953, 61 Southern pulpmills were operating and drawing wood from the 12 Southern States (table 4). Mill construction proceeded at a feverish pace during the mid-and late 1950's and again during the late 1960's and early 1970's. During the 20-year period between 1953 and 1973, 50 new mills were constructed, more than tripling daily pulping capacity. The number of mills operating in the South peaked at 115 in 1979. Even though the number of mills declined to 102 in 1993, the average daily pulping capacity increased steadily through expansion and modernization projects at existing facilities. In 1953, the combined daily pulping capacity of Southern mills was 28,670 tons or an average of 470 tons per mill, about half the nation's total pulping capacity (Christopher and Nelson 1959). Combined daily pulping capacity in 1993 was 132,992 tons per day and averaged 1,304 tons per mill, more than two-thirds of the nation's total pulping capacity (Johnson and Howell 1996). Mills operating outside Southern borders but drawing some of their wood from the South have fluctuated between 4 and 15 mills.

Table 2—Trends in pulpwood production in the Southeast, by species group, 1953-1993

Year	Total production	Roundwood			Residues		
		Total	Softwood	Hardwood	Total	Softwood	Hardwood
				Thousand cords			
1953	8,837.7	8,796.5	7,990.2	806.3	41.2	15.6	25.6
1954	8,884.0	8,815.8	7,964.2	851.6	68.2	46.3	21.9
1955	10,291.7	10,081.7	9,075.9	1,005.8	210.0	145.0	65.0
1956	11,272.2	11,079.0	9,983.1	1,095.9	193.2	142.0	51.2
1957	10,983.8	10,557.2	9,366.7	1,190.5	426.6	378.4	48.2
1958	11,021.5	10,289.1	8,945.0	1,344.1	732.4	667.4	65.0
1959	12,656.1	11,521.7	9,905.0	1,616.7	1,134.4	1,018.3	116.1
1960	13,303.6	11,839.0	10,108.9	1,730.1	1,464.6	1,272.7	191.9
1961	13,630.8	11,971.6	10,034.4	1,937.2	1,659.2	1,401.2	258.0
1962	14,380.9	12,436.7	10,333.8	2,102.9	1,944.2	1,590.6	353.6
1963	14,924.5	12,784.2	10,575.3	2,208.9	2,140.3	1,744.1	396.2
1964	15,972.3	13,683.6	11,254.1	2,429.5	2,288.7	1,864.5	424.2
1965	16,942.1	14,479.7	11,925.6	2,554.1	2,462.4	1,955.4	507.0
1966	17,560.3	14,850.5	12,161.3	2,689.2	2,709.8	2,066.1	643.7
1967	17,715.2	14,730.7	11,919.2	2,811.5	2,984.5	2,210.7	773.8
1968	18,588.2	15,189.4	12,130.7	3,058.7	3,398.8	2,671.5	727.3
1969	19,788.7	16,294.1	12,928.3	3,365.8	3,494.6	2,738.4	756.2
1970	20,517.4	16,954.8	13,645.7	3,309.1	3,562.6	2,695.1	867.5
1971	19,793.8	15,522.9	12,307.8	3,215.1	4,270.9	3,344.3	926.6
1972	20,745.1	16,153.5	12,715.8	3,437.7	4,591.6	3,649.7	941.9
1973	21,893.0	16,700.8	13,075.7	3,625.1	5,192.2	4,121.2	1,071.0
1974	22,485.4	16,660.6	13,194.9	3,465.7	5,824.8	4,370.9	1,453.9
1975	19,514.7	14,227.0	11,326.2	2,900.8	5,287.7	4,185.9	1,101.8
1976	21,778.8	15,088.2	11,689.6	3,398.6	6,690.6	5,411.2	1,279.4
1977	23,631.3	15,750.9	12,116.2	3,634.7	7,880.4	6,547.4	1,333.0
1978	24,154.5	16,357.5	12,396.9	3,960.6	7,797.0	6,314.7	1,482.3
1979	24,780.1	16,350.5	12,802.1	3,548.4	8,429.6	6,535.3	1,894.3
1980	24,805.8	16,974.9	13,256.4	3,718.5	7,830.9	6,144.6	1,686.3
1981	25,090.3	17,539.2	13,349.8	4,189.4	7,551.1	5,952.3	1,598.8
1982	24,615.9	17,441.0	13,221.5	4,219.5	7,174.9	5,759.0	1,415.9
1983	26,617.5	18,119.9	13,358.8	4,761.1	8,497.6	6,629.7	1,867.9
1984	27,569.8	18,649.9	13,796.5	4,853.4	8,919.9	7,060.2	1,859.7
1985	27,096.1	18,164.3	13,262.5	4,901.8	8,931.8	7,216.5	1,715.3
1986	28,132.1	19,467.3	14,064.7	5,402.6	8,664.8	7,141.9	1,522.9
1987	29,359.6	20,184.9	14,997.7	5,187.2	9,174.7	7,750.3	1,424.4
1988	28,698.6	20,017.4	14,477.0	5,540.4	8,681.2	7,174.8	1,506.4
1989	27,854.6	19,513.7	14,197.6	5,316.1	8,340.9	6,793.9	1,547.0
1990	28,815.7	20,886.2	15,408.7	5,477.5	7,929.5	6,495.2	1,434.3
1991	29,286.0	21,727.4	16,017.0	5,710.4	7,558.6	5,925.7	1,632.9
1992	30,400.9	22,120.1	16,255.5	5,864.6	8,280.8	6,631.6	1,649.2
1993	30,261.9	22,701.9	15,649.0	7,052.9	7,560.0	6,130.4	1,429.6

Table 3—Trends in pulpwood production in the South Central, by species group, 1953-1993

Year	Total production	Roundwood			Residues		
		Total	Softwood	Hardwood	Total	Softwood	Hardwood
				Thousand cords			
1953	7,365.2	7,330.5	6,157.4	1,173.1	34.7	12.4	22.3
1954	7,511.9	7,453.9	6,143.8	1,310.1	58.0	39.5	18.5
1955	8,097.1	7,933.0	6,411.8	1,521.2	164.1	114.0	50.1
1956	9,072.6	8,606.7	6,936.9	1,669.8	465.9	361.2	104.7
1957	8,798.9	8,022.5	6,346.9	1,675.6	776.4	680.0	96.4
1958	9,211.3	8,158.3	6,557.8	1,600.5	1,053.0	921.6	131.4
1959	10,094.1	8,766.3	6,610.5	2,155.8	1,327.8	1,168.1	159.7
1960	10,247.4	8,756.5	6,382.0	2,374.5	1,490.9	1,310.9	180.0
1961	10,599.9	8,947.4	6,486.5	2,460.9	1,652.5	1,431.0	221.5
1962	11,205.4	9,300.1	6,433.3	2,866.8	1,905.3	1,636.6	268.7
1963	11,666.5	9,544.9	6,539.8	3,005.1	2,121.6	1,797.5	324.1
1964	12,853.5	10,425.1	7,266.1	3,159.0	2,428.4	2,081.3	347.1
1965	13,848.7	11,134.2	7,560.4	3,573.8	2,714.5	2,321.8	392.7
1966	15,500.9	12,449.2	8,616.5	3,832.7	3,051.7	2,562.7	489.0
1967	15,935.9	12,441.4	8,845.4	3,596.0	3,494.5	2,934.9	559.6
1968	18,487.2	14,311.3	10,191.4	4,119.9	4,175.9	3,470.1	705.8
1969	21,080.3	16,216.5	11,527.2	4,689.3	4,863.8	3,908.2	955.6
1970	21,635.0	16,592.5	12,180.2	4,412.3	5,042.5	3,874.5	1,168.0
1971	22,120.0	16,252.4	11,772.9	4,479.5	5,867.6	4,830.6	1,037.0
1972	23,534.4	17,238.2	12,089.1	5,149.1	6,296.2	5,231.4	1,064.8
1973	25,213.6	17,669.3	12,183.7	5,485.6	7,544.3	6,153.8	1,390.5
1974	26,616.7	18,955.5	12,995.6	5,959.9	7,661.2	6,023.4	1,637.8
1975	22,820.9	15,816.1	11,423.5	4,392.6	7,004.8	5,775.4	1,229.4
1976	25,633.3	16,928.4	11,893.0	5,035.4	8,704.9	7,182.5	1,522.4
1977	25,227.5	16,296.2	11,541.1	4,755.1	8,931.3	7,454.0	1,477.3
1978	26,472.2	17,408.5	11,714.6	5,693.9	9,063.7	7,531.1	1,532.6
1979	29,555.3	19,455.8	13,337.5	6,118.3	10,099.5	8,074.4	2,025.1
1980	29,714.7	19,991.6	14,013.8	5,977.8	9,723.1	7,333.5	2,389.6
1981	29,214.2	19,078.7	13,586.4	5,492.3	10,135.5	7,247.8	2,887.7
1982	27,616.6	17,972.1	12,388.1	5,584.0	9,644.5	7,226.1	2,418.4
1983	29,995.7	19,630.4	12,401.5	7,228.9	10,365.3	8,127.9	2,237.4
1984	31,159.5	20,060.2	12,656.5	7,403.7	11,099.3	8,344.8	2,754.5
1985	29,881.8	19,053.6	11,968.3	7,085.3	10,828.2	8,198.8	2,629.4
1986	32,457.7	20,972.6	13,050.4	7,922.2	11,485.1	8,425.8	3,059.3
1987	33,075.1	20,979.3	12,984.3	7,995.0	12,095.8	8,440.3	3,655.5
1988	33,431.8	21,408.6	13,162.3	8,246.3	12,023.2	8,407.6	3,615.6
1989	33,058.8	22,304.5	13,281.6	9,022.9	10,754.3	8,209.9	2,544.4
1990	36,216.7	24,735.9	15,998.4	8,737.5	11,480.8	8,122.7	3,358.1
1991	35,796.0	24,922.8	15,994.3	8,928.5	10,873.2	8,438.4	2,434.8
1992	37,538.6	25,131.2	15,734.5	9,396.7	12,407.4	9,240.6	3,166.8
1993	36,009.5	23,640.2	14,476.8	9,163.4	12,369.3	9,276.0	3,093.3

Table 4—Southern Pulpmills and Capacity 1953-1993

Year	Total mills	Southern mills	Mills outside south	Southern pulpwood capacity[a]	Average pulping capacity Southern mills
				Tons/24 hours	
1953	65	61	4	28,670	470
1954	71	67	4	32,376	483
1955	73	69	4	34,100	494
1956	74	70	4	34,675	495
1957	76	72	4	40,997	569
1958	80	75	5	44,502	593
1959	81	76	5	46,112	607
1960	89	81	7	50,000	617
1961	89	81	8	51,156	632
1962	89	80	9	52,146	652
1963	90	81	9	54,222	669
1964	93	82	11	56,530	689
1965	91	82	9	59,230	722
1966	97	87	10	64,726	744
1967	100	92	8	70,527	767
1968	113	100	13	77,140	771
1969	121	105	16	80,980	771
1970	119	107	12	83,316	779
1971	123	109	14	87,496	803
1972	124	109	15	88,124	809
1973	126	111	15	92,255	831
1974	127	114	13	94,982	833
1975	125	113	12	96,555	855
1976	122	112	10	98,074	876
1977	124	113	11	100,894	893
1978	125	113	12	103,130	913
1979	129	115	14	110,053	957
1980	127	114	13	111,927	982
1981	123	114	9	114,552	1,005
1982	115	110	5	116,993	1,064
1983	114	109	5	119,389	1,095
1984	113	108	5	120,069	1,112
1985	110	105	5	121,888	1,161
1986	110	105	5	119,825	1,141
1987	111	106	5	123,189	1,162
1988	110	106	4	126,267	1,191
1989	111	106	5	127,849	1,206
1990	108	103	5	129,290	1,255
1991	108	104	4	133,331	1,282
1992	107	103	4	133,400	1,295
1993	106	102	4	132,992	1,304

[a] Lockwood-Post's Directory and other sources.

Table 5—Trends in pulpwood production by species group, Alabama, 1953-1993

Year	Total production	Roundwood			Residues		
		Total	Softwood	Hardwood	Total	Softwood	Hardwood
				Thousand cords			
1953	1,765.1	1,765.1	1,726.2	38.9	0.0	0.0	0.0
1954	1,831.9	1,831.9	1,764.9	67.0	0.0	0.0	0.0
1955	1,928.8	1,928.8	1,860.1	68.7	0.0	0.0	0.0
1956	2,187.4	2,103.0	2,001.3	101.7	84.4	60.0	24.4
1957	2,294.2	2,134.4	1,997.2	137.2	159.8	136.4	23.4
1958	2,624.6	2,370.2	2,187.8	182.4	254.4	211.1	43.3
1959	2,931.0	2,582.2	2,150.7	431.5	348.8	294.4	54.4
1960	3,019.7	2,593.7	2,016.4	577.3	426.0	354.6	71.4
1961	3,300.4	2,805.6	2,168.9	636.7	494.8	395.9	98.9
1962	3,448.2	2,842.5	2,174.4	668.1	605.7	456.4	149.3
1963	3,649.8	3,014.1	2,325.1	689.0	635.7	477.4	158.3
1964	4,155.4	3,463.4	2,644.8	818.6	692.0	536.3	155.7
1965	4,862.8	4,068.6	3,033.0	1,035.6	794.2	600.9	193.3
1966	5,291.9	4,464.3	3,269.4	1,194.9	827.6	605.5	222.1
1967	5,633.9	4,781.3	3,626.0	1,155.3	852.6	654.6	198.0
1968	6,131.1	5,046.4	3,549.4	1,497.0	1,084.7	866.6	218.1
1969	6,378.7	5,135.7	3,556.6	1,579.1	1,243.0	964.7	278.3
1970	6,409.4	5,188.6	3,676.1	1,512.5	1,220.8	963.0	257.8
1971	6,283.6	4,858.7	3,430.0	1,428.7	1,424.9	1,157.3	267.6
1972	6,991.8	5,458.3	3,819.3	1,639.0	1,533.5	1,258.8	274.7
1973	7,172.2	5,511.2	3,864.6	1,646.6	1,661.0	1,352.2	308.8
1974	7,392.0	5,687.8	3,981.0	1,706.8	1,704.2	1,325.1	379.1
1975	6,335.0	4,668.2	3,402.6	1,265.6	1,666.8	1,377.9	288.9
1976	7,393.5	5,007.3	3,541.1	1,466.2	2,386.2	1,978.0	408.2
1977	7,072.1	4,793.7	3,393.0	1,400.7	2,278.4	1,916.2	362.2
1978	7,353.8	4,797.6	3,075.9	1,721.7	2,556.2	2,218.4	337.8
1979	7,991.7	5,426.7	3,614.7	1,812.0	2,565.0	2,099.8	465.2
1980	8,756.1	6,224.4	4,288.0	1,936.4	2,531.7	2,057.7	474.0
1981	8,644.3	6,400.0	4,515.9	1,884.1	2,244.3	1,728.0	516.3
1982	8,292.0	6,118.3	4,154.4	1,963.9	2,173.7	1,673.8	499.9
1983	8,988.7	6,693.5	4,153.1	2,540.4	2,295.2	1,867.1	428.1
1984	9,573.7	6,943.5	4,244.0	2,699.5	2,630.2	2,037.0	593.2
1985	9,056.7	6,759.7	4,046.9	2,712.8	2,297.0	1,811.5	485.5
1986	9,584.4	7,137.0	4,137.3	2,999.7	2,447.4	1,881.3	566.1
1987	9,322.0	7,061.4	3,972.4	3,089.0	2,260.6	1,661.5	599.1
1988	9,279.4	6,800.0	3,826.2	2,973.8	2,479.4	1,849.5	629.9
1989	8,442.0	6,555.9	3,413.0	3,142.9	1,886.1	1,550.4	335.7
1990	9,913.2	7,310.3	4,269.9	3,040.4	2,602.9	1,936.8	666.1
1991	9,919.4	7,646.3	4,326.9	3,319.4	2,273.1	1,992.4	280.7
1992	11,354.1	8,704.1	5,105.2	3,598.9	2,650.0	1,932.2	717.8
1993	10,328.5	8,002.1	4,700.0	3,302.1	2,326.4	1,839.2	487.2

Table 6—Trends in pulpwood production by species group, Arkansas, 1953-1993

Year	Total production	Roundwood			Residues		
		Total	Softwood	Hardwood	Total	Softwood	Hardwood
				Thousand cords			
1953	781.0	781.0	673.2	107.8	0.0	0.0	0.0
1954	826.3	826.3	725.6	100.7	0.0	0.0	0.0
1955	877.0	877.0	782.7	94.3	0.0	0.0	0.0
1956	1,075.2	934.7	802.3	132.4	140.5	133.2	7.3
1957	1,042.4	832.2	709.9	122.3	210.2	206.2	4.0
1958	1,314.4	1,041.5	893.5	148.0	272.9	265.0	7.9
1959	1,524.3	1,192.4	1,002.0	190.4	331.9	323.4	8.5
1960	1,555.9	1,216.4	983.2	233.2	339.5	329.5	10.0
1961	1,642.8	1,235.8	987.0	248.8	407.0	385.8	21.2
1962	1,729.8	1,310.0	974.0	336.0	419.8	407.4	12.4
1963	1,850.4	1,372.1	1,003.1	369.0	478.3	461.2	17.1
1964	2,062.4	1,497.3	1,041.7	455.6	565.1	548.7	16.4
1965	2,092.2	1,511.1	968.9	542.2	581.1	563.0	18.1
1966	2,193.2	1,544.8	989.9	554.9	648.4	614.7	33.7
1967	2,208.4	1,458.9	1,021.6	437.3	749.5	679.6	69.9
1968	2,297.7	1,532.2	1,011.9	520.3	765.5	659.3	106.2
1969	2,579.0	1,743.0	1,121.8	621.2	836.0	688.6	147.4
1970	2,574.2	1,667.6	1,122.9	544.7	906.6	733.8	172.8
1971	3,175.5	1,884.6	1,236.2	648.4	1,290.9	1,130.7	160.2
1972	3,393.9	2,132.1	1,343.3	788.8	1,261.8	1,113.9	147.9
1973	3,375.6	1,957.7	1,255.3	702.4	1,417.9	1,269.2	148.7
1974	3,291.1	2,139.0	1,402.2	736.8	1,152.1	986.7	165.4
1975	3,242.5	1,983.8	1,360.2	623.6	1,258.7	1,105.5	153.2
1976	3,533.1	2,294.2	1,482.4	811.8	1,238.9	1,111.4	127.5
1977	3,498.6	2,220.2	1,454.6	765.6	1,278.4	1,118.4	160.0
1978	3,948.0	2,332.4	1,447.3	885.1	1,615.6	1,373.3	242.3
1979	4,069.1	2,500.8	1,596.9	903.9	1,568.3	1,269.2	299.1
1980	4,321.5	2,259.6	1,498.3	761.3	2,061.9	1,578.2	483.7
1981	4,232.0	1,992.9	1,366.2	626.7	2,239.1	1,658.8	580.3
1982	4,146.2	1,933.8	1,220.6	713.2	2,212.4	1,619.8	592.6
1983	4,172.4	1,810.0	1,061.9	748.1	2,362.4	1,837.2	525.2
1984	4,339.9	1,578.4	949.9	628.5	2,761.5	2,017.5	744.0
1985	4,130.8	1,637.9	847.7	790.2	2,492.9	1,851.3	641.6
1986	4,477.9	1,766.2	871.8	894.4	2,711.7	1,960.8	750.9
1987	5,013.2	2,070.6	1,154.0	916.6	2,942.6	2,108.0	834.6
1988	5,007.9	2,333.5	1,169.0	1,164.5	2,674.4	1,870.8	803.6
1989	4,861.9	2,306.5	1,340.9	965.6	2,555.4	1,713.4	842.0
1990	4,985.9	2,634.9	1,675.8	959.1	2,351.0	1,483.8	867.2
1991	4,638.9	2,547.7	1,538.7	1,009.0	2,091.2	1,391.3	699.9
1992	4,816.7	2,213.3	1,387.1	826.2	2,603.4	1,723.6	879.8
1993	4,607.1	2,021.8	1,164.2	857.6	2,585.3	1,746.9	838.4

Table 7—Trends in pulpwood production by species group, Florida, 1953-1993

Year	Total production	Roundwood			Residues		
		Total	Softwood	Hardwood	Total	Softwood	Hardwood
				Thousand cords			
1953	1,674.9	1,674.9	1,671.2	3.7	0.0	0.0	0.0
1954	1,661.6	1,661.6	1,661.2	0.4	0.0	0.0	0.0
1955	1,828.5	1,828.5	1,826.9	1.6	0.0	0.0	0.0
1956	1,959.7	1,950.7	1,950.0	0.7	9.0	3.8	5.2
1957	1,997.5	1,947.4	1,921.4	26.0	50.1	48.9	1.2
1958	1,834.9	1,752.3	1,690.8	61.5	82.6	79.3	3.3
1959	2,113.4	1,979.3	1,882.5	96.8	134.1	123.2	10.9
1960	2,100.4	1,923.9	1,825.2	98.7	176.5	164.0	12.5
1961	2,265.4	2,058.8	1,954.4	104.4	206.6	180.9	25.7
1962	2,464.5	2,252.6	2,111.5	141.1	211.9	174.4	37.5
1963	2,527.9	2,289.0	2,121.6	167.4	238.9	194.9	44.0
1964	2,745.3	2,482.5	2,238.9	243.6	262.8	217.5	45.3
1965	2,874.4	2,597.3	2,324.9	272.4	277.1	226.6	50.5
1966	2,986.9	2,673.1	2,421.1	252.0	313.8	254.8	59.0
1967	2,925.6	2,588.7	2,352.3	236.4	336.9	252.9	84.0
1968	3,243.5	2,808.6	2,512.0	296.6	434.9	344.7	90.2
1969	3,446.1	3,020.7	2,752.2	268.5	425.4	330.3	95.1
1970	3,425.2	2,941.9	2,708.2	233.7	483.3	391.0	92.3
1971	3,374.8	2,886.5	2,662.1	224.4	488.3	401.0	87.3
1972	3,393.3	2,896.1	2,687.2	208.9	497.2	397.6	99.6
1973	3,491.4	3,010.0	2,783.1	226.9	481.4	396.4	85.0
1974	3,377.1	2,889.1	2,654.8	234.3	488.0	367.3	120.7
1975	2,991.4	2,534.7	2,320.4	214.3	456.7	337.7	119.0
1976	3,304.2	2,667.6	2,412.4	255.2	636.6	522.2	114.4
1977	3,630.3	2,799.4	2,513.7	285.7	830.9	724.0	106.9
1978	3,670.8	2,925.1	2,595.2	329.9	745.7	653.2	92.5
1979	3,833.0	3,042.9	2,698.0	344.9	790.1	699.4	90.7
1980	3,829.6	3,012.8	2,701.5	311.3	816.8	698.8	118.0
1981	4,057.4	3,113.7	2,774.5	339.2	943.7	775.7	168.0
1982	3,962.8	3,089.3	2,779.5	309.8	873.5	785.5	88.0
1983	4,376.9	3,262.2	2,914.0	348.2	1,114.7	1,031.8	82.9
1984	4,434.1	3,100.0	2,834.5	265.5	1,334.1	1,242.7	91.4
1985	3,946.0	2,781.0	2,551.7	229.3	1,165.0	1,136.9	28.1
1986	4,109.7	3,039.9	2,823.8	216.1	1,069.8	1,025.6	44.2
1987	4,645.5	3,529.9	3,261.0	268.9	1,115.6	1,086.3	29.3
1988	4,896.7	3,803.2	3,415.6	387.6	1,093.5	1,055.2	38.3
1989	5,095.1	3,789.0	3,464.7	324.3	1,306.1	1,097.3	208.8
1990	5,016.5	4,001.0	3,602.0	399.0	1,015.5	884.2	131.3
1991	4,907.0	4,191.6	3,815.1	376.5	715.4	665.8	49.6
1992	4,935.2	4,268.9	3,851.6	417.3	666.3	617.2	49.1
1993	4,679.8	3,904.1	3,395.0	509.1	775.7	736.3	39.4

Table 8—Trends in pulpwood production by species group, Georgia, 1953-1993

Year	Total production	Roundwood			Residues		
		Total	Softwood	Hardwood	Total	Softwood	Hardwood
				Thousand cords			
1953	2,879.2	2,879.2	2,748.9	130.3	0.0	0.0	0.0
1954	3,057.5	3,057.5	2,879.9	177.6	0.0	0.0	0.0
1955	3,759.6	3,759.6	3,568.8	190.8	0.0	0.0	0.0
1956	3,888.6	3,849.9	3,665.0	184.9	38.7	20.5	18.2
1957	3,859.0	3,773.3	3,543.3	230.0	85.7	70.4	15.3
1958	4,092.9	3,860.4	3,583.5	276.9	232.5	211.6	20.9
1959	4,735.1	4,354.5	4,009.0	345.5	380.6	353.7	26.9
1960	4,905.8	4,410.1	4,004.7	405.4	495.7	439.7	56.0
1961	4,949.1	4,406.0	3,923.9	482.1	543.1	463.7	79.4
1962	5,217.0	4,556.3	4,057.5	498.8	660.7	559.9	100.8
1963	5,520.4	4,800.7	4,269.8	530.9	719.7	621.8	97.9
1964	5,842.9	5,082.2	4,556.1	526.1	760.7	652.9	107.8
1965	6,159.6	5,346.8	4,776.5	570.3	812.8	689.1	123.7
1966	6,298.1	5,426.5	4,866.0	560.5	871.6	726.5	145.1
1967	6,326.4	5,425.8	4,840.4	585.4	900.6	736.6	164.0
1968	6,919.3	5,792.2	5,108.7	683.5	1,127.1	967.1	160.0
1969	7,303.5	6,108.5	5,385.4	723.1	1,195.0	1,013.4	181.6
1970	7,280.6	6,178.3	5,584.8	593.5	1,102.3	916.3	186.0
1971	7,258.1	5,720.9	5,116.6	604.3	1,537.2	1,314.5	222.7
1972	7,565.1	6,003.6	5,317.0	686.6	1,561.5	1,346.5	215.0
1973	7,866.3	6,092.1	5,444.2	647.9	1,774.2	1,524.5	249.7
1974	8,117.8	6,210.7	5,517.1	693.6	1,907.1	1,576.1	331.0
1975	6,957.2	5,179.1	4,578.5	600.6	1,778.1	1,549.1	229.0
1976	7,773.7	5,599.2	4,965.7	633.5	2,174.5	1,909.8	264.7
1977	8,365.5	5,830.3	5,133.2	697.1	2,535.2	2,244.4	290.8
1978	8,908.3	6,057.8	5,303.5	754.3	2,850.5	2,494.0	356.5
1979	9,257.7	6,205.4	5,506.0	699.4	3,052.3	2,628.6	423.7
1980	8,812.5	6,001.3	5,392.5	608.8	2,811.2	2,425.6	385.6
1981	8,866.8	6,143.2	5,394.2	749.0	2,723.6	2,349.4	374.2
1982	8,745.1	6,125.8	5,304.3	821.5	2,619.3	2,320.4	298.9
1983	9,590.0	6,374.8	5,479.9	894.9	3,215.2	2,834.8	380.4
1984	9,815.5	6,434.9	5,516.2	918.7	3,380.6	2,928.7	451.9
1985	9,838.8	6,529.3	5,443.4	1,085.9	3,309.5	2,957.0	352.5
1986	10,212.7	7,125.4	5,883.7	1,241.7	3,087.3	2,818.9	268.4
1987	10,659.3	7,322.8	6,075.4	1,247.4	3,336.5	3,066.4	270.1
1988	9,880.2	6,634.1	5,245.9	1,388.2	3,246.1	2,972.5	273.6
1989	8,950.7	6,225.7	4,857.8	1,367.9	2,725.0	2,576.8	148.2
1990	9,293.6	6,541.1	5,252.4	1,288.7	2,752.5	2,602.7	149.8
1991	9,756.6	7,119.8	5,608.1	1,511.7	2,636.8	2,285.0	351.8
1992	10,225.5	7,041.0	5,503.6	1,537.4	3,184.5	2,739.0	445.5
1993	9,635.9	7,004.3	5,067.6	1,936.7	2,631.6	2,339.5	292.1

Table 9—Trends in pulpwood production by species group, Louisiana, 1953-1993

Year	Total production	Roundwood			Residues		
		Total	Softwood	Hardwood	Total	Softwood	Hardwood
				Thousand cords			
1953	1,375.5	1,375.5	1,179.0	196.5	0.0	0.0	0.0
1954	1,504.2	1,504.2	1,265.2	239.0	0.0	0.0	0.0
1955	1,650.1	1,650.1	1,366.6	283.5	0.0	0.0	0.0
1956	1,648.5	1,574.2	1,289.4	284.8	74.3	68.4	5.9
1957	1,564.2	1,440.2	1,180.8	259.4	124.0	113.8	10.2
1958	1,583.6	1,438.2	1,207.6	230.6	145.4	125.6	19.8
1959	1,799.6	1,612.1	1,297.4	314.7	187.5	160.2	27.3
1960	1,856.9	1,645.6	1,290.9	354.7	211.3	182.4	28.9
1961	1,837.5	1,630.3	1,306.2	324.1	207.2	182.6	24.6
1962	2,006.2	1,782.8	1,375.9	406.9	223.4	204.5	18.9
1963	2,238.2	1,968.5	1,503.0	465.5	269.7	242.6	27.1
1964	2,399.5	2,109.0	1,584.0	525.0	290.5	258.2	32.3
1965	2,453.8	2,096.3	1,540.7	555.6	357.5	323.2	34.3
1966	2,675.2	2,200.5	1,653.8	546.7	474.7	432.8	41.9
1967	2,661.9	2,049.6	1,473.0	576.6	612.3	545.2	67.1
1968	3,011.5	2,274.7	1,659.1	615.6	736.8	623.7	113.1
1969	3,596.3	2,719.5	1,947.9	771.6	876.8	707.9	168.9
1970	3,915.9	2,989.4	2,248.3	741.1	926.5	637.5	289.0
1971	3,995.8	3,164.9	2,348.3	816.6	830.9	687.1	143.8
1972	4,137.7	3,164.8	2,351.2	813.6	972.9	802.9	170.0
1973	4,435.3	3,230.5	2,463.3	767.2	1,204.8	1,006.1	198.7
1974	4,528.2	3,242.3	2,312.5	929.8	1,285.9	1,024.7	261.2
1975	3,567.1	2,755.9	2,108.5	647.4	811.2	634.7	176.5
1976	4,282.9	2,875.7	2,174.4	701.3	1,407.2	1,176.6	230.6
1977	4,340.3	2,730.1	2,027.0	703.1	1,610.2	1,368.3	241.9
1978	4,306.2	3,181.8	2,366.3	815.5	1,124.4	924.0	200.4
1979	4,590.1	3,284.4	2,410.3	874.1	1,305.7	1,031.9	273.8
1980	4,633.4	3,342.7	2,586.5	756.2	1,290.7	830.7	460.0
1981	4,613.7	3,237.4	2,519.7	717.7	1,376.3	774.1	602.2
1982	4,365.8	3,194.2	2,510.7	683.5	1,171.6	717.6	454.0
1983	4,795.2	3,459.3	2,579.8	879.5	1,335.9	1,089.7	246.2
1984	5,085.2	3,733.1	2,643.6	1,089.5	1,352.1	1,008.3	343.8
1985	5,002.9	3,567.1	2,686.1	881.0	1,435.8	1,124.2	311.6
1986	5,430.8	3,731.6	2,773.6	958.0	1,699.2	1,324.8	374.4
1987	5,787.7	4,130.8	3,065.5	1,065.3	1,656.9	1,257.8	399.1
1988	5,899.9	4,224.9	3,205.4	1,019.5	1,675.0	1,247.3	427.7
1989	6,076.3	4,496.2	3,231.6	1,264.6	1,580.1	1,394.7	185.4
1990	6,414.2	4,850.1	3,554.4	1,295.7	1,564.1	1,381.7	182.4
1991	5,948.0	4,318.9	3,187.2	1,131.7	1,629.1	1,412.4	216.7
1992	6,923.7	4,461.5	3,107.9	1,353.6	2,462.2	1,889.9	572.3
1993	7,122.3	4,581.3	3,154.8	1,426.5	2,541.0	1,975.8	565.2

Table 10—Trends in pulpwood production by species group, Mississippi, 1953-1993

Year	Total production	Roundwood			Residues		
		Total	Softwood	Hardwood	Total	Softwood	Hardwood
				Thousand cords			
1953	1,923.0	1,923.0	1,273.4	649.6	0.0	0.0	0.0
1954	1,963.8	1,963.8	1,217.4	746.4	0.0	0.0	0.0
1955	1,908.5	1,908.5	1,028.4	880.1	0.0	0.0	0.0
1956	2,135.7	2,069.0	1,191.2	877.8	66.7	6.5	60.2
1957	2,075.7	1,995.8	1,105.9	889.9	79.9	28.4	51.5
1958	1,885.0	1,786.0	1,035.8	750.2	99.0	49.2	49.8
1959	2,015.8	1,875.5	1,024.3	851.2	140.3	93.6	46.7
1960	1,973.6	1,774.3	956.0	818.3	199.3	152.7	46.6
1961	1,918.8	1,718.9	889.4	829.5	199.9	155.9	44.0
1962	2,100.0	1,831.9	858.6	973.3	268.1	206.1	62.0
1963	1,993.2	1,706.2	683.2	1,023.0	287.0	214.1	72.9
1964	2,157.7	1,801.9	941.9	860.0	355.8	273.8	82.0
1965	2,263.3	1,878.8	1,035.5	843.3	384.5	304.0	80.5
1966	2,949.5	2,475.3	1,560.3	915.0	474.2	353.3	120.9
1967	2,924.6	2,346.0	1,460.4	885.6	578.6	449.7	128.9
1968	3,954.5	3,197.9	2,263.8	934.1	756.6	579.2	177.4
1969	5,071.3	4,128.6	3,023.5	1,105.1	942.7	678.2	264.5
1970	5,053.9	4,124.3	3,073.6	1,050.7	929.6	671.1	258.5
1971	4,679.7	3,599.8	2,624.6	975.2	1,079.9	830.9	249.0
1972	4,584.4	3,545.5	2,367.6	1,177.9	1,038.9	793.8	245.1
1973	5,319.7	3,833.6	2,295.0	1,538.6	1,486.1	1,165.9	320.2
1974	6,032.2	4,502.7	2,782.1	1,720.6	1,529.5	1,150.8	378.7
1975	4,916.2	3,279.0	2,117.4	1,161.6	1,637.2	1,330.4	306.8
1976	5,342.3	3,556.1	2,274.9	1,281.2	1,786.2	1,404.6	381.6
1977	5,211.9	3,411.4	2,276.7	1,134.7	1,800.5	1,429.9	370.6
1978	5,529.9	3,620.2	2,198.2	1,422.0	1,909.7	1,518.3	391.4
1979	7,287.0	4,397.9	2,855.6	1,542.3	2,889.1	2,333.5	555.6
1980	6,013.7	4,129.5	2,606.1	1,523.4	1,884.2	1,504.0	380.2
1981	5,873.3	3,932.7	2,584.3	1,348.4	1,940.6	1,496.1	444.5
1982	5,362.2	3,485.9	2,236.8	1,249.1	1,876.3	1,442.2	434.1
1983	5,634.3	4,081.2	2,313.3	1,767.9	1,553.1	1,268.5	284.6
1984	5,910.0	4,239.6	2,475.6	1,764.0	1,670.4	1,307.9	362.5
1985	5,674.2	3,839.0	2,236.4	1,602.6	1,835.2	1,359.0	476.2
1986	7,129.0	4,935.6	2,979.4	1,956.2	2,193.4	1,522.7	670.7
1987	6,955.2	4,649.7	2,604.4	2,045.3	2,305.5	1,546.5	759.0
1988	7,235.1	4,635.1	2,538.6	2,096.5	2,600.0	1,733.0	867.0
1989	7,498.7	5,273.4	2,805.8	2,467.6	2,225.3	1,664.1	561.2
1990	8,020.2	5,631.6	3,249.3	2,382.3	2,388.6	1,767.0	621.6
1991	8,149.8	5,825.0	3,442.6	2,382.4	2,324.8	1,936.2	388.6
1992	7,581.5	5,359.3	2,851.9	2,507.4	2,222.2	1,927.2	295.0
1993	7,799.7	5,310.1	2,812.0	2,498.1	2,489.6	2,110.0	379.6

Table 11—Trends in pulpwood production by species group, North Carolina, 1953-1993

Year	Total production	Roundwood			Residues		
		Total	Softwood	Hardwood	Total	Softwood	Hardwood
				Thousand cords			
1953	1,528.9	1,528.9	1,263.1	265.8	0.0	0.0	0.0
1954	1,507.4	1,507.4	1,228.9	278.5	0.0	0.0	0.0
1955	1,574.0	1,574.0	1,273.4	300.6	0.0	0.0	0.0
1956	1,922.4	1,842.2	1,512.1	330.1	80.2	68.8	11.4
1957	1,865.8	1,763.1	1,437.1	326.0	102.7	85.3	17.4
1958	1,896.1	1,706.0	1,342.7	363.3	190.1	174.1	16.0
1959	2,145.8	1,834.1	1,429.5	404.6	311.7	275.5	36.2
1960	2,273.6	1,887.9	1,486.2	401.7	385.7	325.0	60.7
1961	2,291.9	1,879.9	1,430.4	449.5	412.0	342.0	70.0
1962	2,323.9	1,849.9	1,390.2	459.7	474.0	383.3	90.7
1963	2,422.9	1,898.2	1,439.1	459.1	524.7	417.5	107.2
1964	2,624.4	2,070.1	1,527.7	542.4	554.3	436.9	117.4
1965	2,855.7	2,267.9	1,705.2	562.7	587.8	463.2	124.6
1966	3,052.5	2,396.8	1,733.5	663.3	655.7	500.8	154.9
1967	3,156.8	2,446.0	1,719.6	726.4	710.8	527.9	182.9
1968	3,156.2	2,490.3	1,730.8	759.5	665.9	528.0	137.9
1969	3,516.9	2,829.9	1,910.1	919.8	687.0	531.3	155.7
1970	4,107.5	3,415.0	2,381.5	1,033.5	692.5	493.0	199.5
1971	3,654.4	2,827.5	1,854.1	973.4	826.9	608.2	218.7
1972	4,106.2	3,031.6	1,892.9	1,138.7	1,074.6	861.3	213.3
1973	4,232.6	3,082.0	1,874.0	1,208.0	1,150.6	924.1	226.5
1974	4,515.6	3,064.6	1,993.5	1,071.1	1,451.0	1,109.1	341.9
1975	3,700.5	2,427.0	1,571.4	855.6	1,273.5	1,009.0	264.5
1976	4,158.7	2,483.8	1,490.3	993.5	1,674.9	1,394.3	280.6
1977	4,576.1	2,757.8	1,680.7	1,077.1	1,818.3	1,491.8	326.5
1978	4,639.2	2,925.7	1,674.4	1,251.3	1,713.5	1,374.6	338.9
1979	4,478.4	2,701.1	1,604.7	1,096.4	1,777.3	1,298.7	478.6
1980	4,849.8	3,146.7	1,962.5	1,184.2	1,703.1	1,255.9	447.2
1981	4,900.3	3,213.5	1,956.4	1,257.1	1,686.8	1,197.7	489.1
1982	4,570.1	3,077.2	1,835.0	1,242.2	1,492.9	1,070.7	422.2
1983	4,780.7	3,004.8	1,750.4	1,254.4	1,775.9	1,114.5	661.4
1984	5,234.8	3,394.4	2,005.1	1,389.3	1,840.4	1,338.4	502.0
1985	4,966.4	3,294.7	1,915.2	1,379.5	1,671.7	1,115.3	556.4
1986	5,369.4	3,655.1	2,105.6	1,549.5	1,714.3	1,205.0	509.3
1987	5,766.5	3,889.8	2,290.8	1,599.0	1,876.7	1,356.9	519.8
1988	5,505.1	3,859.4	2,258.6	1,600.8	1,645.7	1,130.2	515.5
1989	5,147.5	3,565.4	2,108.9	1,456.5	1,582.1	1,044.3	537.8
1990	5,637.3	4,165.6	2,525.9	1,639.7	1,471.7	964.7	507.0
1991	6,602.4	4,828.4	3,016.3	1,812.1	1,774.0	1,145.5	628.5
1992	6,351.3	4,525.5	2,802.3	1,723.2	1,825.8	1,291.8	534.0
1993	6,658.8	4,799.8	2,767.5	2,032.3	1,859.0	1,293.7	565.3

Table 14—Trends in pulpwood production by species group, Tennessee, 1953-1993

Year	Total production	Roundwood			Residues		
		Total	Softwood	Hardwood	Total	Softwood	Hardwood
				Thousand cords			
1953	234.2	234.2	105.3	128.9	0.0	0.0	0.0
1954	240.3	240.3	134.1	106.2	0.0	0.0	0.0
1955	326.6	326.6	220.8	105.8	0.0	0.0	0.0
1956	398.8	392.2	244.9	147.3	6.6	0.0	6.6
1957	341.2	334.3	236.1	98.2	6.9	0.0	6.9
1958	354.6	348.5	241.1	107.4	6.1	0.3	5.8
1959	353.0	346.1	200.8	145.3	6.9	0.7	6.2
1960	361.8	353.4	188.8	164.6	8.4	1.1	7.3
1961	418.5	403.8	214.8	189.0	14.7	4.1	10.6
1962	432.3	409.8	201.5	208.3	22.5	9.8	12.7
1963	426.7	395.8	198.6	197.2	30.9	10.6	20.3
1964	417.4	385.5	192.4	193.1	31.9	13.3	18.6
1965	415.9	384.6	184.3	200.3	31.3	10.1	21.2
1966	370.0	327.4	152.1	175.3	42.6	10.0	32.6
1967	395.2	336.5	157.6	178.9	58.7	8.7	50.0
1968	417.0	351.6	159.7	191.9	65.4	9.8	55.6
1969	430.3	364.7	167.9	196.8	65.6	12.8	52.8
1970	567.3	436.9	190.1	246.8	130.4	12.1	118.3
1971	629.7	475.7	195.8	279.9	154.0	12.8	141.2
1972	633.9	453.2	180.8	272.4	180.7	14.8	165.9
1973	681.4	440.6	163.8	276.8	240.8	49.0	191.8
1974	818.9	521.3	229.9	291.4	297.6	23.9	273.7
1975	743.2	561.8	209.4	352.4	181.4	17.8	163.6
1976	758.5	525.2	229.7	295.5	233.3	23.5	209.8
1977	670.6	470.9	213.9	257.0	199.7	17.9	181.8
1978	687.9	466.4	203.9	262.5	221.5	40.2	181.3
1979	955.4	647.0	228.8	418.2	308.4	26.2	282.2
1980	1,236.0	783.2	354.4	428.8	452.8	67.0	385.8
1981	1,344.4	822.7	405.4	417.3	521.7	53.7	468.0
1982	1,221.4	894.9	433.8	461.1	326.5	70.2	256.3
1983	1,419.6	1,016.0	512.4	503.6	403.6	20.0	383.6
1984	1,368.2	1,000.0	530.5	469.5	368.2	32.9	335.3
1985	1,239.8	882.1	506.0	376.1	357.7	39.8	317.9
1986	1,478.8	1,227.8	788.9	438.9	251.0	47.6	203.4
1987	1,353.7	1,020.1	615.1	405.0	333.6	42.4	291.2
1988	1,221.6	960.2	573.9	386.3	261.4	44.1	217.3
1989	1,224.1	997.5	600.7	396.8	226.6	32.9	193.7
1990	1,430.0	1,100.7	716.4	384.3	329.3	53.1	276.2
1991	1,446.0	1,150.3	743.2	407.1	295.7	56.8	238.9
1992	1,337.0	1,027.9	564.5	463.4	309.1	158.3	150.8
1993	1,376.7	1,138.4	599.8	538.6	238.3	29.4	208.9

Table 15—Trends in pulpwood production by species group, Texas, 1953-1993

Year	Total production	Roundwood			Residues		
		Total	Softwood	Hardwood	Total	Softwood	Hardwood
				Thousand cords			
1953	1,210.7	1,210.7	1,159.3	51.4	0.0	0.0	0.0
1954	1,054.3	1,054.3	1,003.6	50.7	0.0	0.0	0.0
1955	1,203.8	1,203.8	1,119.5	84.3	0.0	0.0	0.0
1956	1,552.5	1,459.0	1,339.2	119.8	93.5	93.2	0.3
1957	1,421.3	1,226.2	1,065.7	160.5	195.1	194.7	0.4
1958	1,386.0	1,126.9	954.0	172.9	259.1	254.4	4.7
1959	1,415.6	1,120.0	906.3	213.7	295.6	279.0	16.6
1960	1,426.4	1,134.5	916.6	217.9	291.9	276.1	15.8
1961	1,441.5	1,130.5	906.9	223.6	311.0	288.8	22.2
1962	1,429.6	1,091.4	838.2	253.2	338.2	324.7	13.5
1963	1,443.6	1,063.0	820.3	242.7	380.6	352.2	28.4
1964	1,590.5	1,144.4	857.4	287.0	446.1	404.0	42.1
1965	1,669.0	1,156.2	789.9	366.3	512.8	467.5	45.3
1966	1,904.1	1,374.7	975.1	399.6	529.4	491.6	37.8
1967	1,993.1	1,409.9	1,087.3	322.6	583.2	538.1	45.1
1968	2,520.0	1,818.6	1,507.5	311.1	701.4	668.2	33.2
1969	2,834.0	2,008.0	1,654.5	353.5	826.0	785.6	40.4
1970	2,917.6	2,092.6	1,819.7	272.9	825.0	758.1	66.9
1971	3,129.4	2,177.2	1,883.9	293.3	952.2	880.7	71.5
1972	3,323.1	2,198.6	1,836.1	362.5	1,124.5	1,064.6	59.9
1973	3,612.7	2,373.6	1,985.8	387.8	1,239.1	1,070.5	168.6
1974	3,847.3	2,601.3	2,168.4	432.9	1,246.0	1,125.8	120.2
1975	3,626.8	2,408.5	2,114.9	293.6	1,218.3	1,093.3	125.0
1976	3,801.3	2,405.5	2,004.8	400.7	1,395.8	1,269.5	126.3
1977	3,741.9	2,340.3	1,944.3	396.0	1,401.6	1,240.8	160.8
1978	4,032.6	2,661.2	2,179.4	481.8	1,371.4	1,211.9	159.5
1979	3,890.3	2,504.3	2,057.0	447.3	1,386.0	1,244.9	141.1
1980	4,195.2	2,865.8	2,394.0	471.8	1,329.4	1,153.6	175.8
1981	4,080.8	2,426.0	2,041.3	384.7	1,654.8	1,416.0	238.8
1982	3,917.2	2,391.5	1,892.0	499.5	1,525.7	1,411.6	114.1
1983	4,230.5	2,442.7	1,706.6	736.1	1,787.8	1,645.7	142.1
1984	4,274.3	2,440.3	1,739.3	701.0	1,834.0	1,633.3	200.7
1985	4,135.6	2,129.4	1,573.3	556.1	2,006.2	1,630.2	376.0
1986	3,770.5	2,070.2	1,444.0	626.2	1,700.3	1,315.3	385.0
1987	4,035.2	1,947.9	1,518.1	429.8	2,087.3	1,439.0	648.3
1988	4,056.8	2,122.4	1,718.0	404.4	1,934.4	1,272.3	662.1
1989	4,389.6	2,455.0	1,777.1	677.9	1,934.6	1,513.9	420.7
1990	4,296.3	2,369.4	1,905.9	463.5	1,926.9	1,306.6	620.3
1991	4,431.3	2,360.0	1,899.3	460.7	2,071.3	1,500.0	571.3
1992	4,534.0	2,517.0	2,007.6	509.4	2,017.0	1,480.8	536.2
1993	4,234.2	2,324.7	1,827.1	497.6	1,909.5	1,382.6	526.9

Table 16—Trends in pulpwood production by species group, Virginia, 1953-1993

Year	Total production	Roundwood			Residues		
		Total	Softwood	Hardwood	Total	Softwood	Hardwood
				Thousand cords			
1953	1,267.3	1,267.3	1,033.6	233.7	0.0	0.0	0.0
1954	1,258.4	1,258.4	1,033.7	224.7	0.0	0.0	0.0
1955	1,406.3	1,406.3	1,138.1	268.2	0.0	0.0	0.0
1956	1,656.3	1,629.7	1,273.2	356.5	26.6	22.4	4.2
1957	1,518.4	1,418.3	1,080.2	338.1	100.1	97.0	3.1
1958	1,449.8	1,377.7	981.7	396.0	72.1	67.0	5.1
1959	1,728.4	1,643.8	1,241.8	402.0	84.6	73.9	10.7
1960	1,833.4	1,715.3	1,277.8	437.5	118.1	105.0	13.1
1961	1,833.7	1,662.2	1,190.0	472.2	171.5	153.7	17.8
1962	1,894.0	1,685.9	1,159.5	526.4	208.1	165.3	42.8
1963	1,990.1	1,772.0	1,235.5	536.5	218.1	165.2	52.9
1964	2,130.1	1,883.8	1,273.6	610.2	246.3	181.5	64.8
1965	2,421.0	2,094.2	1,424.0	670.2	326.8	226.9	99.9
1966	2,365.5	2,007.6	1,334.3	673.3	357.9	217.7	140.2
1967	2,358.9	1,898.9	1,230.9	668.0	460.0	264.5	195.5
1968	2,372.0	1,726.5	1,055.0	671.5	645.5	438.3	207.2
1969	2,409.8	1,830.2	996.4	833.8	579.6	391.7	187.9
1970	2,403.3	1,862.0	962.1	899.9	541.3	326.5	214.8
1971	2,300.9	1,711.9	873.8	838.1	589.0	351.8	237.2
1972	2,206.6	1,674.6	827.7	846.9	532.0	293.4	238.6
1973	2,551.4	1,778.7	844.7	934.0	772.7	437.3	335.4
1974	2,631.8	1,714.5	875.2	839.3	917.3	463.6	453.7
1975	2,336.5	1,428.9	721.8	707.1	907.6	553.4	354.2
1976	2,661.8	1,736.1	811.3	924.8	925.7	554.8	370.9
1977	2,637.8	1,680.2	825.6	854.6	957.6	588.1	369.5
1978	2,629.3	1,768.5	889.6	878.9	860.8	440.6	420.2
1979	2,666.7	1,638.5	891.8	746.7	1,028.2	486.7	541.5
1980	3,017.3	2,048.3	1,064.9	983.4	969.0	519.8	449.2
1981	3,163.3	2,254.3	1,042.8	1,211.5	909.0	510.5	398.5
1982	3,260.4	2,291.4	1,133.4	1,158.0	969.0	520.0	449.0
1983	3,499.8	2,551.0	1,124.8	1,426.2	948.8	467.3	481.5
1984	3,612.7	2,550.1	1,293.3	1,256.8	1,062.6	496.9	565.7
1985	3,537.4	2,279.0	1,063.0	1,216.0	1,258.4	709.7	548.7
1986	3,625.2	2,434.9	1,076.0	1,358.9	1,190.3	664.3	526.0
1987	3,016.5	1,854.5	905.0	949.5	1,162.0	737.7	424.3
1988	3,239.0	2,049.4	1,021.3	1,028.1	1,189.6	741.8	447.8
1989	3,416.3	2,219.4	1,164.5	1,054.9	1,196.9	741.2	455.7
1990	3,647.0	2,414.9	1,265.2	1,149.7	1,232.1	761.2	470.9
1991	3,407.2	2,307.0	1,235.4	1,071.6	1,100.2	684.9	415.3
1992	3,478.8	2,406.5	1,333.3	1,073.2	1,072.3	637.6	434.7
1993	3,583.0	2,553.1	1,478.1	1,075.0	1,029.9	686.9	343.0

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Southern pulpwood production has increased more than fourfold from 16.2 million cords in 1953 to 66.3 million cords in 1993. Softwood roundwood production more than doubled in the same time period; however, softwood production expressed as a proportion of the total production dramatically declined. In contrast, hardwood roundwood production and production from residues of all types substantially increased. The average daily pulping capacity of Southern mills climbed from 28,670 tons per day in 1953 to 132,992 tons per day in 1993. Southern mills accounted for more than two-thirds of the nation's total pulping capacity in 1993.

KEYWORDS: Pulpmills, pulpwood, roundwood, residues, pulping capacity.

Southern Research Station

Established 1921

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