



Report to Ecosystem Planning and Natural Resources

USDA Forest Service, Alaska Region

TONGASS NATIONAL FOREST: 2022 SAWMILL CAPACITY AND PRODUCTION REPORT

INTRODUCTION

Since 2000, the United States Forest Service (USFS), Alaska Region Office has conducted an annual key-informant survey of sawmills across the Tongass National Forest, spanning from Haines to Metlakatla.

The purpose of the annual survey is to gather information regarding current sawmill operations including total estimated production capacity, actual production, wood supply source, forest products, market destinations, and general business challenges. The *Tongass National Forest: 2022 Sawmill Capacity and Production Report* summarizes key survey findings, provides a brief supplemental discussion, and presents a longitudinal perspective of sawmill performance during the past twenty-two years. Results are organized into ten sections:

- Longitudinal survey results
- Sawmill overview
- Capacity and production volume
- Wood supply source
- Primary product by species
- Production volume by product
- Young growth timber utilization
- Markets
- Preferred timber sale size and volume under contract
- Log exports

Sawmill key-informant survey results provide a framework for assessing sawmill performance and trends over time, current business conditions and challenges, manufactured products and markets, timber harvest from public and private lands, and regional trends in timber utilization.

The survey instrument and population frame remained unchanged from 2000 to 2019 to allow comparative longitudinal analysis over time. The survey was not conducted for 2020 because of challenges during the COVID-19 pandemic. In 2021, the sawmill survey underwent several key changes. The survey pool was expanded for the first time to add seven additional sawmill operations to improve representation of the region's small mills and gain a better perspective of their operations, timber demand, and markets. In addition, two questions were added to the survey instrument to gather key data to support planning efforts on the Tongass National Forest. Last, two sections focusing on Tongass National Forest log exports and timber volume under contract were added to expand the discussion around timber markets, supply, and demand.

PREPARED BY: JEAN DANIELS PhD, REGIONAL ECONOMIST, PRISCILLA MORRIS PhD, NATURAL RESOURCES SPECIALIST, DAN O'LEARY, FOREST PRODUCTS PROGRAM LEAD.

USDA FOREST SERVICE, ALASKA REGION (REGION 10)
SEPTEMBER 2023



METHODS

The 2022 sawmill survey, covering January to December 2022 production, was conducted from March to May 2023. Surveys were conducted via onsite and telephone interviews. Rather than utilize a random sampling method to collect input, the Alaska Region conducts a key-informant survey of a subset of Southeast sawmills operating on a regular basis. The survey instrument includes questions about capacity, equipment, jobs, sawmill activity, products, markets, young growth timber utilization, and timber sale size preference (Table 1). Information about Tongass National Forest harvest and log exports and timber volume under contract are not included in the survey instrument but instead gathered from the [Forest Management Reports and Accomplishments website](#) hosted by the Alaska Region .

Table 1. Survey instrument summary

Business Profile	Sawmill Activity	Primary Products	Other
Business Name, Owner's Name, Location, Sawmill equipment description	Estimated processing capacity, Actual production, Log source, Employment	Primary products, Destination markets	Tongass log exports, Young growth utilization, Preferred timber sale size

POPULATION FRAME

The survey population frame listed in Table 2 represents a subset of the total number of mills in Southeast Alaska. The original population frame was established in 2000 using criteria that required: 1) regular, consistent operation and 2) medium to large size classification. When the survey was initiated in 2000, 20 medium (1.0-5.0 MMBF annually)- to large-scale sawmills (> 5.0 MMBF annually) operated across the Tongass National Forest with the greatest concentration located in southern Southeast Alaska. Since 2000, more than half (59 percent) of these sawmills were closed and uninstalled or operations had contracted to produce a fraction of their 2000 output. No new sawmills of equal size classification have been established to date. The mill survey conducted for 2019¹, found that of original pool of sawmills, four were operating and five were idle; thus, the entire Southeast Alaska wood products industry was being represented by four active mills.

Small sawmills (0.25-1.0 MMBF annually) have also been a component of the greater Southeast Alaska forest products industry, but none were included in the original sawmill survey pool. In 2021, seven small sawmills were added to better reflect the current make up of forest industry and raise awareness of business requirements and contributions of small sawmills. These mills were not new; they were selected from a larger population of all known mills using a combination of three criteria: a history of purchasing timber from the Tongass National Forest, a valid Alaska business license to manufacture wood products,

¹ Survey not conducted for 2020 owing to staffing issues and challenges associated with the COVID-19 pandemic.



and a recommendation from Tongass timber management staff. To preserve longitudinal time series constancy, results for the seven small mills are separated from the original set of mills in the tables below.

Table 2 also shows that during the 2022 cycle, D&L Woodworks and The Mill were idle. The Good Faith Lumber Company, which reverted to Thorne Bay Wood Products in 2017, was also idle, but was purchased in late 2022 by JK Forest Products with expectation of doing business as JK Forest Products in 2023. For the first time, the Viking Lumber Company did not provide information or agree to meet to discuss the previous year's operations. In response, we have moved forward with the report assuming their operations are unchanged from 2021. Several mills were in the process of installing new equipment, which we will evaluate in the survey for 2023.

Table 2. Sawmill population frame, calendar years 2000 – 2022. Mill names in bold added to survey pool in 2021

Active (12)	Idle (3)	Uninstalled (14)
Icy Straits Lumber and Milling Company Peak Engineering (name changed from Falls Creek Forest Products in 2021) St. Nick Forest Products Viking Lumber Company Western Gold Cedar Products Alaska Specialty Woods Fair and Square Lumber JK Forest Products K&D Lumber Company Luther Coby Mike Allen Enterprises Tenakee Logging Company	D & L Woodworks The Mill Thorne Bay Wood Products (formerly Good Faith Lumber)	Alaska Fibre Annette Island Sawmill Chilkoot Lumber Company Gateway Forest Products Ketchikan Renaissance Group Herring Bay Lumber Pacific Log and Lumber Metlakatla Forest Products Silver Bay Incorporated Kasaan Mountain Lumber and Log Thorne Bay Enterprises Porter Lumber Company Northern Star Cedar Thuja Plicata Lumber

LONGITUDINAL SURVEY RESULTS

To avoid disrupting the continuous time series of sawmill data collected since 2000, results are separated with subtotals for the original survey pool and the mills added in 2021. Total installed capacity includes the wood processing capacity of twelve active and three idle sawmills (N = 15). Capacity is estimated according to manufacturer specifications for the equipment installed in the mill observed during annual visits. For the purposes of this report, capacity has been defined as the net sawlog volume that could be utilized by the sawmill, as currently configured, during a standard 250-day per year, two shifts per day annual operating schedule – and not limited by the availability of workforce, raw materials, or market conditions. Table 3 shows that total installed capacity in surveyed mills in 2022 was 135,500 MBF. Actual sawmill production during 2022 was approximately 17,010 MBF, an increase of 269 MBF compared to 2021. Sawmill capacity remained significantly underutilized in 2022; regional capacity utilization rate, based on an installed capacity of 135,500 MBF, is 13 percent. Sawmill employment fell from 80 full time equivalents (FTEs) in 2021 to 77 FTEs in 2022, including owners, operators, and other

PREPARED BY: JEAN DANIELS PhD, REGIONAL ECONOMIST, PRISCILLA MORRIS PhD, NATURAL RESOURCES SPECIALIST, DAN O'LEARY, FOREST PRODUCTS PROGRAM LEAD.

USDA FOREST SERVICE, ALASKA REGION (REGION 10)

SEPTEMBER 2023



employees. Table 4 shows that the original survey pool had a total employment of 56 FTEs in 2022 a loss of 4 FTEs since 2021. The small sawmills gained one FTE for a total of 21 FTEs in 2022.

Table 3. Annual active sawmill survey results, calendar years 2000 – 2022 (Volume in MBF, Scribner Log Scale)

Year	Total Active Sawmills (#)	Installed Sawmill Capacity (MBF) ^a	Estimated Sawmill Production (MBF) ^b	Manufactured Product Volume not Included in Sawmill Production (MBF) ^{b,c}	Sawmill Capacity Utilization (%) ^d	Sawmill Employment (FTEs) ^b
2022	12	135,500	17,010	691	13	77
2021	14	137,000	16,741	1,003	12	80
2019	4	125,400	15,210	500	12	50
2018	7	107,900	15,250	750	14	52
2017	8	113,650	15,544	550	14	51
2016	9	113,650	17,912	1,300	16	58
2015	9	113,650	18,540	145	16	51
2014	10	119,400	18,830	570	16	54
2013	10	120,400	17,593	920	15	60
2012	10	120,400	13,842	899	12	58
2011	10	160,000	11,546	1,295	7	56
2010	10	155,850	15,807	385	10	64
2009	11	249,350	13,422	1,250	5	58
2008	11	282,350	23,666	3,513	8	94
2007	14	292,350	31,717	4,015	11	158 ^e
2006	11	354,350	32,141	7,620	9	123
2005	12	359,850	34,695	0	10	136
2004	13	370,350	31,027	509	8	148
2003	13	369,850	32,005	763	9	155
2002	11	453,850	39,702	9,164	9	160
2000	19	501,850	87,117	46,079	17	321

^a Estimated from inspection of equipment on site; includes idle mills

^b Estimated from mill operator response to survey question

^c Manufactured products primarily include firewood and chips.

^d Calculated value

^e Included 35 positions reported at the reopened Ketchikan Renaissance Group veneer mill, which only operated for a few months.

Note: The annual sawmill capacity and production survey was not conducted during 2001 and 2020.

SAWMILL OVERVIEW

Table 4 shows sawmill locations and lists installed equipment, operation status, and employment for each mill. Past reports included a list of equipment in uninstalled mills, but we discontinued the practice in 2021. See the 2019 report for that information.



Table 4. Equipment, location, and employment in active and idle sawmills, CY2022 (Includes 12 active and 3 idle sawmills, N = 15)

Sawmill	Community	Description	Current Status	Sawmill FTEs
Original survey pool				
Icy Straits Lumber and Milling Company	Hoonah	Mighty Mite sawmill, horizontal band resaw, log debarker and merchandiser (not installed), dry kiln, planer, moulder	Active	5
Peak Engineering (formerly Falls Creek Forest Products)	Petersburg	Portable circle sawmill, trim saw, log deck	Active	2
St. Nick Forest Products	Craig	Portable circle sawmill	Active	1
Viking Lumber Company	Klawock	Conventional carriage, band saw headrig, linebar and gang resaws, edgers, trim saw, log debarker and merchandiser, end-dogging circle saw scragg. Added chipping head slabber to large mill in 2018.	Active	45
Western Gold Cedar Products	Thorne Bay	Shake and shingle mill, Meadows carriage mill, chain-fed scragg added in 2018	Active	3
D & L Woodworks	Hoonah	Portable circle sawmill	Idle	0
The Mill	Petersburg	Two portable circle sawmills	Idle	0
Thorne Bay Wood Products (formerly Good Faith Lumber Company)	Thorne Bay	Portable circle sawmill, trim saw, log and lumber decks, dry kiln, planer, moulder	Idle	0
Mills added in CY 2021				
Alaska Specialty Woods	Craig	3 Mighty Mite bandsaws, 2 head horizontal resaw, 2 planers	Active	3
Fair and Square Lumber	Coffman Cove	Portable circle sawmill	Active	2
JK Forest Products	Thorne Bay	Bandsaw, resaw	Active	2.5
K&D Lumber Company	Thorne Bay	Sawmill: auto log deck/turner, resaw; shake and shingle mill	Active	7
Luther Coby	Kake	Mighty Mite circle sawmill	Active	1.5
Mike Allen Enterprises	Wrangell	Mighty Mite circle sawmill	Active	2.5
Tenakee Logging Company	Tenakee Springs	Woodmizer portable band saw, Mobile dimension circle saw, Woodmaster planer shaper (electric)	Active	2

CAPACITY AND PRODUCTION VOLUME BY MILL

Table 5 shows that the largest sawmill, in terms of capacity, production, and employment, is the Viking Lumber Company. Viking did not participate in this year's survey; we moved forward with this report by assuming their operations were unchanged from 2021. Capacity in the 11 participating active mills combined (43,000 MBF) equals about half of the Viking mill (92,500), which contains 68 percent of total production capacity in the region. Capacity and production in the small mills added in 2021 were 15 and 9 percent of the regional total, respectively. Several operators reported that 2022 had been challenging owing to equipment breakdowns, timber availability issues, transportation and fuel costs, difficulty finding reliable workers, and steep learning curves associated with operation of new equipment. Several mills had installed new equipment that was not operating in 2022 or received grants to purchase new equipment. These upgrades will be captured in the survey conducted next year.



Table 5. Estimated sawmill capacity, production, and utilization rate, CY2022 (Includes 12 active and 3 idle sawmills, N = 15)

Sawmill Name	Estimated Sawmill Capacity (Scribner Log Scale, MBF) ^a	Actual Sawmill Production (Scribner Log Scale, MBF) ^b	Sawmill Capacity Utilization (%)
Original survey pool			
Icy Straits Lumber and Milling Company	3,000	360	13.0
Peak Engineering (formerly Falls Creek)	3,000	125	4.2
St. Nick Forest Products	1,000	100	10.0
Viking Lumber Company	92,500	14,400	15.57
Western Gold Cedar Products	11,500	400	1.86
D & L Woodworks	1,000	Idle	--
The Mill	2,500	Idle	--
Thorne Bay Wood Products	6,250	Idle	--
Subtotal	120,750	15,385	13.4
Mills added in CY 2021			
Alaska Specialty Woods	2,500	20	0.8
Fair and Square Lumber	1,000	300	30.0
JK Forest Products	1,000	193	27.5
K & D Lumber Company	3000	400	13.3
Luther Coby	2,500	12	0.5
Mike Allen Enterprises	3,000	665	24.2
Tenakee Logging Company	1,750	35	3.0
Subtotal	14,750	1,625	12.1
Total	135,500	17,010	12.5%

^aEstimated Sawmill Capacity: An estimate of sawmill processing from installed equipment based on the amount of net sawlog volume (Scribner log scale) that could be utilized by the sawmill, as currently configured, during an industry standard 250-day per year, two shifts per day, annual operating schedule, and not limited by availability of workforce, raw materials, or market. Estimated from equipment installed in the mills.

^bActual Sawmill Production: Net sawlog volume (Scribner log scale) used during the year to manufacture sawn products. Estimated from survey responses.

WOOD SUPPLY SOURCE

Table 6a and 6b show the source of wood received by Southeast Alaska sawmills in 2022. Like last year, the majority wood originated from lands managed by the State of Alaska (68 percent), followed by the Tongass National Forest (24 percent). A modest amount of material originated from Native lands and private timber sources, mostly from right-of-way and private lot clearing for development. Volume reported in Table 6b was about half wood chips for biomass heat and half firewood.



Table 6a. Processed log sources, volume included in actual sawmill production, CY2022 (Scribner Log Scale, MBF, N = 12 active sawmills)

Sawmill	National Forest	Other Federal	State of Alaska	Private Native	Private Other	Import	Total
Original survey pool							
Icy Straits Lumber and Milling Company	228	0	0		72	0	360
Peak Engineering (formerly Falls Creek)	100	0	0	0	25	0	125
St. Nick Forest Products	0	0	0	0	100	0	100
Viking Lumber Company	2,160	0	11,520	720	0	0	14,400
Western Gold Cedar Products	380	0	20	0	0	0	400
Subtotal	2,928	0	11,540	720	197	0	15,385
Mills added in CY 2021							
Alaska Specialty Woods	8	0	12	0	0	0	20
Fair and Square Lumber	30	0		0	270	0	300
JK Forest Products	116	0	77	0		0	193
K & D Lumber Company	360	0	0	0	40	0	400
Luther Coby	12	0	0	0	0	0	12
Mike Allen Enterprises	665	0	0	0	0	0	665
Tenakee Logging Company	35	0	0	0	0	0	35
Subtotal	1,226	0	89	0	310	0	1,625
Total	4,154	0	11,629	720	507	0	17,010
Percent	24.4	0	68.4	4.2	3.0	0	100

Table 6b. Processed log sources, volume not included^a in actual sawmill production (Scribner Log Scale, MBF)

Sawmill	National Forest	Other Federal	State of Alaska	Private Native	Private Other	Import	Total
Total	261	0	425	0	317	0	691
Percent	49.4	0	50.6	0	0	0	100

^a Primary manufactured products NOT included in actual sawmill production consists of all non-sawn products (e.g., chips, firewood, poles, house logs) that are manufactured independently of normal sawmill operations – products from logs that do not go through the sawmill. Non-sawn products that result from processing sawmill residues and byproducts are not included in this category.

PRODUCTION VOLUME BY SPECIES

Table 7a and 7b show the species of wood processed in Southeast Alaska sawmills in 2022. Western hemlock led with 45 percent of total production. Western redcedar products represent 37 percent of the total followed by Sitka spruce at 16 percent and Alaska yellow cedar at 1.3 percent. The original set of mills predominantly processed western hemlock (48 percent), while the added mills used mostly western redcedar (50 percent). The “Other” category contains information about niche production, primarily shingles, shakes, and music wood. Western Gold Cedar Products and K & D Lumber, which both produce lumber and shingles, reported zero and 12 MBF of shingle production, respectively. All of Alaska



Specialty Woods production (20 MBF) was music wood. Most of the volume not included in actual sawmill production (Table 7b) consisted of western hemlock used for firewood.

Table 7a. Volume included in actual sawmill production by species, CY2022 (Scribner Log Scale, MBF, active mills N = 12)

Sawmill	Sitka Spruce	Western Hemlock	Western Redcedar	Alaska Yellow Cedar	Other	Total
Original survey pool						
Icy Straits Lumber and Milling Company	126	198	0	36	0	360
Peak Engineering	115	10	0	0	0	125
St. Nick Forest Products	10	10	50	30	0	100
Viking Lumber Company	2,160	7,200	5,040	0	0	14,400
Western Gold Cedar Products	0	0	400	0	0	400
Subtotal	2,411	7,418	5,490	66	0	15,385
Mills added in CY 2021						
Alaska Specialty Woods	18	0	2	0	0	20
Fair and Square Lumber	150	150	0	0	0	300
JK Forest Products	48	48	96	0	0	193
K & D Lumber Company	34.5	34.5	262	69	0	400
Luther Coby	11	0	0	1.2	0	12
Mike Allen Enterprises	90	50	450	75	0	665
Tenakee Logging Company	28	0	0	7	0	35
Subtotal	379	283	810	152	0	1,625
Total	2,790	7,701	6,300	218	0	17,010
Percent	16.4	45.3	37.0	1.3	0	100.0

Table 7b. Primary product by species, volume not included^a in actual sawmill production, CY2022 (Scribner Log Scale, MBF)

Sawmill	Sitka Spruce	Western Hemlock	Western Redcedar	Alaska Yellow Cedar	Other	Total
Total	85	575	17	15	0	691
Percent	12.3	83.1	2.4	2.2	0	100

^a Primary manufactured products NOT included in actual sawmill production consists of all non-sawn products (e.g., chips, firewood, poles, house logs) that are manufactured independently of normal sawmill operations – products from logs that do not go through the sawmill. Non-sawn products that result from processing sawmill residues and byproducts are not included in this category.

PRODUCTION VOLUME BY PRODUCT

Table 8 shows that 55 percent of the wood received by Southeast Alaska sawmills in 2022 was processed into dimensional lumber, followed by cants and timbers and shop lumber. Higher grade products like shop lumber, cants and timbers, and niche products generally command a price premium. Conversely, dimension lumber is a commodity product for structural use that is highly price competitive. Southeast Alaska sawmills compete with both domestic and international suppliers to make inroads in these markets.



Table 8. Actual sawmill production volume by product, CY2022 (Scribner Log Scale, MBF, active mills N = 12)

Sawmill	Dimension	Shop	Cants	Other	Total
	Lumber	Lumber	Timbers		
Original survey pool					
Icy Straits Lumber and Milling Company	131	167	63	0	360
Peak Engineering	45	0	80	0	125
St. Nick Forest Products	60	5	35	0	100
Viking Lumber Company	3,276	6,300	4,824	0	14,400
Western Gold Cedar Products	0	0	0	400	400
Subtotal	3,512	6,472	5,002	400	15,385
Mills added in CY 2021					
Alaska Specialty Woods	0	0	0	20	20
Fair and Square Lumber	300	0	0	0	300
JK Forest Products	96	96	0	0	193
K & D Lumber Company	191	0	154	55	400
Luther Coby	12	0	0	0	12
Mike Allen Enterprises	578	0	65	23	665
Tenakee Logging Company	28	7	0	0	35
Subtotal	1,205	103	219	98	1,625
Total	4,717	6,575	5,220	498	17,010
Percent	27.7	38.7	30.7	2.9	100

YOUNG GROWTH TIMBER UTILIZATION

Mill operators were asked to estimate how much young growth timber they milled as a percent of total production. This question was added to the survey instrument in 2021 to collect data for forest policy goals and planning efforts to transition away from old growth to young growth timber harvest. There is considerable interest in quantifying the extent that young growth timber is being used by sawmills in the region. Survey data collected over time will help gauge industry demand for young growth timber. Table 9 shows that overall young growth utilization increased by two percent: the added small mills averaged 22 percent, up from 1.3 percent in 2021 and the original sawmills fell from an average of 10 to 1.8 percent of total production. Discussions with operators about young growth timber revealed that several had no desire to ever purchase young growth, but several others would purchase more if more was offered, primarily because logs were more uniform in size, had less defect than old growth, and met customer needs for rough cut dimension lumber. Some mills are retooling for a young growth industry. Three grants awarded by the Forest Service in 2022 brought \$1.1 million into Southeast Alaska to fund a containerized pellet mill near Ketchikan as well as purchase equipment to support value added and young growth milling in Hoonah and Tenakee which will be captured next year's survey.



Table 9. Sawmill young growth timber utilization, CY2022 (Scribner Log Scale, MBF, active and one idle mill N = 13)

Sawmill [1]	Actual Sawmill Production (Scribner Log Scale, MBF) ^b	Young growth volume (MBF)	Young growth percent of total sawmill production (%)	Young growth percent of total sawmill production (%) previous year
Original survey pool				
D & L Woodworks	Idle	Idle	Idle	5
Icy Straits Lumber and Milling Company	360	0	0	0
Peak Engineering	125	119	95	80
St. Nick Forest Products	100	10	10	50
Viking Lumber Company	14,400	144	1	1
Western Gold Cedar Products	400	0	0	0
Subtotal	15,385	273	1.8	10
Mills added in CY 2021				
Alaska Specialty Woods	20	0	0	0
Fair and Square Lumber	300	300.0	100	30
JK Forest Products	193	29.0	15	60
K & D Lumber Company	400	0.0	0	0
Luther Coby	12	0.0	0	0
Mike Allen Enterprises	665	0.0	0	0
Tenakee Logging Company	35	28.0	80	40
Subtotal	1,625	357	22.0	1.3
Total	17,010	620		
Average	8,505	34.2	3.7	1.6
Minimum	12	0	0	0
Maximum	14,400	300	100	80

[1] Sawmills that are idle are not included unless they had previous year young growth production.

MARKETS

Tables 10a and 10b contain information about markets served by Southeast Alaska sawmills. Market categories in the survey instrument were revised in two ways starting in 2021: 1) the Continental U.S. destination category was divided into U.S. Pacific Northwest and U.S. Other and 2) the Other category was changed to International Other. The vast majority (77 percent) of processed material was sent to destinations in the Continental United States (Lower 48), primarily the Pacific Northwest. Markets in Pacific Rim nations and within Alaska both received about 10 percent of total sawmill production. Production from the original survey pool primarily went to Lower 48 destinations. Most production from small mills added in 2021 remained within Alaska, except music wood from Alaska Specialty Woods. All volume not included in actual production was utilized within Alaska.



Table 10a. Product destination, volume included in actual sawmill production, CY2022 (Scribner Log Scale, MBF, active mills N = 12)

Sawmill	Alaska	U.S. Pacific Northwest ^a	U.S. Other	Canada	International Pacific Rim	International Other	Total
Original survey pool							
Icy Straits Lumber and Milling Company	360	0	0	0	0	0	360
Peak Engineering	125	0	0	0	0	0	125
St. Nick Forest Products	100	0	0	0	0	0	100
Viking Lumber Company	144	7,200	5,040	0	1,440	576	14,400
Western Gold Cedar Products	20	380	0	0	0	0	400
Subtotal	749	7,580	5,040	0	1,440	576	15,385
Mills added in CY 2021							
Alaska Specialty Woods	0	5	5	0	5	5	20
Fair and Square Lumber	300	0	0	0	0	0	300
JK Forest Products	193	0	0	0	0	0	193
K & D Lumber Company	360	0	0	40	0	0	400
Luther Coby	12	0	0	0	0	0	12
Mike Allen Enterprises	67	598	0	0	0	0	665
Tenakee Logging Company	28	7	0	0	0	0	35
Subtotal	959	611	5	40	5	5	1,625
Total	1,708	8,191	5,045	40	5	5	17,010
Percent	10.0	48.2	29.7	0.2	8.5	3.4	100

^a Pacific Northwest is defined as the states of Oregon and Washington.

Table 10b. Product destination, volume not included ^a in actual sawmill production, CY2022 (Scribner Log Scale, MBF)

Sawmill	Alaska	U.S. Pacific Northwest	U.S. Other	Canada	International Pacific Rim	International Other	Total
Total	641	50	0	0	0	0	691
Percent	93	7	0	0	0	0	100

^a Primary manufactured products NOT included in actual sawmill production consists of all non-sawn products (e.g., chips, firewood, poles, house logs) that are manufactured independently of normal sawmill operations – products from logs that do not go through the sawmill. Non-sawn products, including chips and firewood, that result from processing sawmill residues and byproducts are not included in this category.

TIMBER SALE SIZE AND FOREST SERVICE VOLUME UNDER CONTRACT

Survey respondents were asked what size of timber sale, in terms of volume, would be ideal to meet the raw material needs of their mill. This information is compared against the Tongass timber volume under contract information for each sawmill, publicly available from the [Forest Management Reports and Accomplishments website](#) hosted by the Alaska Region. Table 12 shows the preferred timber sale size, number of existing sales, and Tongass timber volume under contract in 2022. Preferred timber sale size varied from 25 MBF to 10 MMBF and averaged 1,508 MBF. Survey respondents purchased 36 of the 55 total sales under contract, averaging three sales per sawmill. For all mills surveyed, Forest Service volume remaining under contract at end of 2022 was 15.9 MMBF, just less than half of all volume under contract



(32.9 MMBF). When asked about timber sale size, survey respondents were asked to consider the typical time period needed to complete a sale they purchase.

Table 12. 2022 Preferred timber sale size and Tongass timber volume under contract (Scribner Log Scale, MBF, includes two idle mills with volume under contract and all active mills N = 14)

Sawmill	Preferred timber sale size (MBF) ^a	Tongass volume under contract, end of CY 2022 ^b			
		Number of FS sales under contract	Average volume per FS sale under contract (MBF)	Total contract volume awarded (MBF)	Total remaining volume under contract (MBF)
Original survey pool					
D & L Woodworks	idle	1	161.22	161.22	161.22
Icy Straits Lumber and Milling Company	175	4	169.18	676.72	502.54
The Mill	idle	2	26.89	53.78	43.55
Peak Engineering	4,000	3	15.81	47.43	36.76
St. Nick Forest Products	200	0	0	0	0
Viking Lumber Company ^c	10,000	3	42,723.59	128,170.76	3,753.19
Western Gold Cedar Products	2,000	4	1,193.64	4,774.54	3,946.92
Subtotal	16,375	17	6,327	133,884	8,444
Mills added in CY 2021					
Alaska Specialty Woods	50	2	11.29	22.58	21.38
Fair and Square Lumber	180	1	158.29	158.29	158.29
JK Forest Products	175	3	253.59	760.76	668.87
K & D Lumber Company	200	1	157.99	157.99	36.00
Luther Coby	25	3	33.51	100.53	76.57
Mike Allen Enterprises	4,000	4	3,129.20	12,516.78	6,338.14
Tenakee Logging Company	100	5	40.24	201.19	113.38
Subtotal	4,730	19	541	13,918	7,413
Respondents Total	21,105	36		147,803	15,857
Average	1,508	3	3,434	10,557	1,133
All other Tongass sale purchasers ^d	n/a	19	3,429	65,160	17,166
Grand Total	n/a	55	n/a	212,962	32,865

^a Respondents answers to survey question: "what is your preferred timber sale size in terms of volume in MBF?"

^b Total volume of contract when awarded is the volume initially awarded following sale bidding process.

^c In 2014 Viking Lumber Company was awarded 97,717 MBF under the Big Thorne Stewardship Contract

^d Predominantly Good Neighbor Authority sales administered by the State of Alaska

LOG EXPORTS

Information about log exports from the Tongass National Forest was added to this report in 2021. The Tongass National Forest is unique because its Limited Export Policy makes it the only national forest west of the 100th meridian of the United States authorized to export unprocessed timber to international

PREPARED BY: JEAN DANIELS PHD, REGIONAL ECONOMIST, PRISCILLA MORRIS PHD, NATURAL RESOURCES SPECIALIST, DAN O'LEARY, FOREST PRODUCTS PROGRAM LEAD.

USDA FOREST SERVICE, ALASKA REGION (REGION 10)

SEPTEMBER 2023



destinations. Sale of unprocessed timber from Alaska to destinations in the Lower 48 is also considered export. Although log exports are not a sawn product and thus are not part of mill operations per se, log exports represent another market available to purchasers of timber throughout the region. One could infer that timber volume channeled into log exports is not available to local sawmills and thus does not support forest products industry jobs and labor income in the region. However, Tongass timber purchasers can choose to process timber into forest products, buy and sell logs among each other, or divert wood into log export markets to respond to economic conditions and fluctuating product prices. This additional flexibility does not necessarily have a negative impact on jobs or labor income. Logging and forestry support industries are still supported, and industries associated with water transportation see more activity. Exports of logs originating from the Tongass represent a subset of total log exports; timber harvested from state, Native, and private lands are also exported as logs. Discussion here is limited to log export and timber harvest from federal lands managed by the Tongass National Forest.

Figure 1 shows the proportion of total Tongass harvest volume exported as logs to international and Lower 48 destinations by calendar year. Tongass log exports and interstate shipments reports are posted annually on the [Alaska Region Forest Management Reports and Accomplishments website](#)). Timber cut volume (sawtimber) data were downloaded from the Timber Information Manager database and organized into calendar years. Figure 1 shows harvest peaked in 2016 then fell by almost 60 percent in 2017 to average around 15 MMBF per year. In 2022, Tongass harvest fell to 3.3 MMBF and the volume of logs exported from the Tongass (4.1 MMBF) exceeded harvest for the first time since the survey's inception. The proportion of total harvest exported as logs averaged around 70 percent in 2020 and 2021. By 2022, that proportion grew to 125 percent. Tongass forest management staff explained this result as a combination of low harvest levels and purchaser decision to export logs from timber sales harvested in 2021.

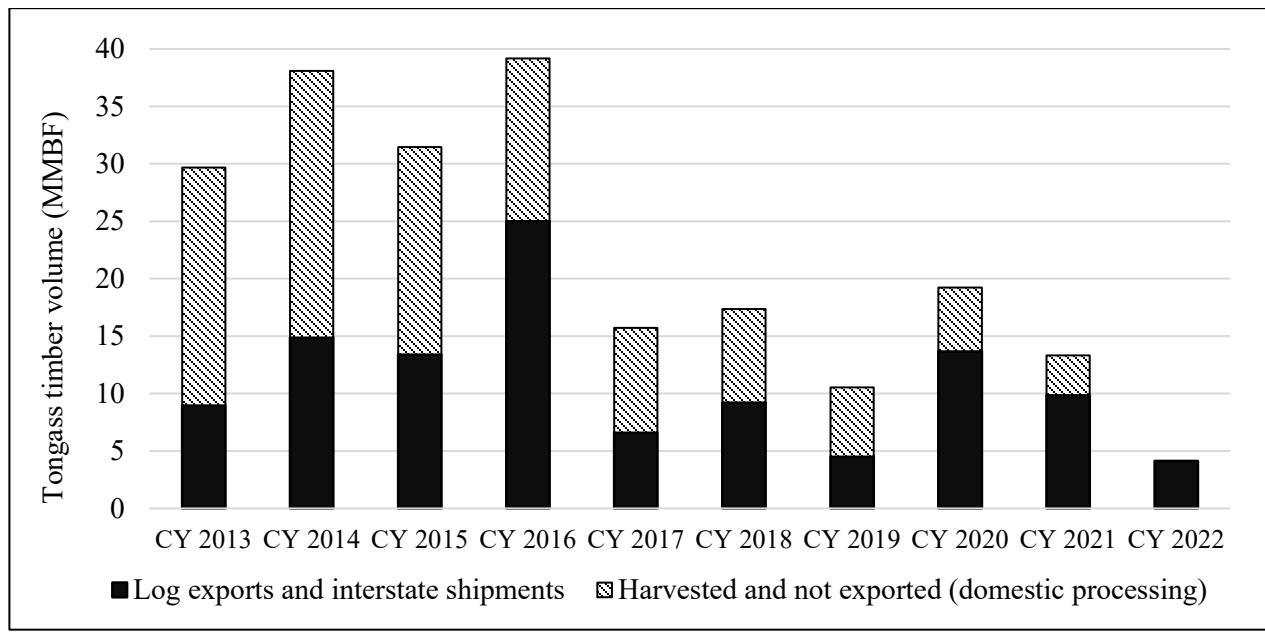


Figure 1. Tongass log exports and timber harvest volume by calendar year

PREPARED BY: JEAN DANIELS PHD, REGIONAL ECONOMIST, PRISCILLA MORRIS PHD, NATURAL RESOURCES SPECIALIST, DAN O'LEARY, FOREST PRODUCTS PROGRAM LEAD.

USDA FOREST SERVICE, ALASKA REGION (REGION 10)
SEPTEMBER 2023



CONCLUSION

Typical of every year, Tongass sawmills remain significantly underutilized. Although the Viking Lumber Company opted not to provide information about their 2022 operations and we selected to use their information from 2021, results are predictably skewed by the Viking Lumber Company as the largest operator in the region. Sawmill employment declined modestly from 80 full time equivalents (FTEs) in 2021 to 77 FTEs in 2022. Most of the log volume received and processed by surveyed mills in 2022 originated from lands managed by the State of Alaska (68 percent versus 56 percent in 2021), followed by the Tongass. Utilization of young growth logs varied widely among surveyed mills, ranging from 0 to 100 percent but overall comprising 3.7 percent of total production, up modestly from less than 2 percent in 2021. According to surveyed mills, preferred timber sale size ranged from 25 MBF to 10,000 MBF with an average of 1,508 MBF, however the total volume remaining under Forest Service contract is 25 percent less than total preferred timber sale size. Because a sawmill typically needs 2-3 open contracts to sustain operations, this indicates a considerable gap in Forest Service volume under contract for the region's currently operating sawmills. For the first time since the survey's inception, the volume of logs exported exceeded volume of timber harvested on the Tongass. There are two contributing factors: historically low levels of harvest from the Tongass in CY 2022 and decisions of purchasers with ongoing sales or inventory to utilize the Tongass Limited Export Policy to respond to market conditions and gains from trade. We observed many mills applying for grants and investing in equipment upgrades and look forward to revisiting to evaluate the impact on regional production and job creation next year.

For more information, contact Jean M. Daniels, Ph.D, Alaska Region Economist at
jean.daniels@usda.gov