Report to Ecosystem Planning and Natural Resources
USDA Forest Service, Alaska Region

TONGASS NATIONAL FOREST: 2023 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. The purpose of the annual survey is to gather information regarding sawmill operations including total estimated production capacity, actual production, wood supply source, forest products produced, market destinations, and business challenges. The *Tongass National Forest: 2023 Sawmill Capacity and Production Report* summarizes key survey findings, provides a brief supplemental discussion, and presents a longitudinal perspective of sawmill performance over the past twenty-three 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, 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 changes. The survey pool was expanded with the addition of seven sawmills to improve representation of the region's small mills and gain a better understanding of their operations, wood 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 timber volume under contract and log exports 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)
JANUARY 2025

METHODS

The 2023 sawmill survey, covering January to December 2023 production, was conducted from April to May 2024 via onsite and telephone interviews. Rather than utilize a random sampling method, the Alaska Region conducts a key-informant survey with a subset of Southeast sawmills operating on a regular basis. Participation is voluntary. 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. Between 2000 and 2019, more than half (59 percent) of these sawmills were closed and uninstalled or had contracted to fraction of their 2000 output. No sawmills were ever added to the survey pool. The mill survey conducted for 2019[1] found four of the original pool of sawmills were operating and five were idle; thus, the entire Southeast Alaska wood products industry was being represented by four active mills.

During same period, small sawmills (0.1-1.0 MMBF annually) were also a component of the greater Southeast Alaska forest products industry but were not included. In 2021, seven small sawmills were added to better reflect recent trends in forest industry and raise awareness of their business requirements and contributions. 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, and a recommendation from

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

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 shows during the 2023 cycle, D&L Woodworks and The Mill were idle. The Good Faith Lumber Company, which reverted to Thorne Bay Wood Products in 2017, was purchased in late 2022 by JK Forest Products and was doing business as JK Forest Products in 2023. Accordingly, equipment and capacity information for Thorne Bay Wood Products was combined with JK Forest Products, and Thorne Bay Wood Products (formerly Good Faith Lumber Company) has been removed from the mill survey pool. For the second consecutive year, the Viking Lumber Company declined to provide information on the previous year's operations. In response, we continue to assume operations are unchanged from 2021. We recognize that this approach introduces error in the regional estimates. Several mills were in the process of installing new equipment in 2022, but the equipment was not operating yet in 2023.

Table 2. Sawmill population frame, calendar years 2000 – 2023. Small mills added to survey pool in 2021in bold

Active (12)	Idle (2)	Uninstalled since 2000 (14)
Alaska Specialty Woods Alaska Timber and Truss (name changed from Peak Engineering 2022) **Fair and Square Lumber** Icy Straits Lumber and Milling Company **JK Forest Products** **K&D Lumber Company** **Luther Coby** **Mike Allen Enterprises** St. Nick Forest Products **Tenakee Logging Company** Viking Lumber Company Western Gold Cedar Products	D & L Woodworks The Mill	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 small mills added in 2021. Total installed capacity includes the wood processing capacity of twelve active and two idle sawmills (N = 14). Capacity is estimated according to manufacturer specifications for the equipment installed in the mill observed during annual visits. For 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 2023 was 135,556 MBF, a modest increase from 2022 because of firewood processing equipment added to Mike Allen Enterprises in 2023. Actual sawmill production during 2023 was approximately 16,465 MBF, a decrease of 545 MBF compared to 2022.

Sawmill capacity remained significantly underutilized in 2023; regional capacity utilization rate, based on an installed capacity of 135,556 MBF, is 13 percent. Sawmill employment fell from 77 full time equivalents (FTEs) in 2022 to 76 FTEs in 2023, including owners, operators, and other employees.

Table 3. Annual active sawmill survey results, calendar years 2000 – 2023 (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]
2023	12	135,556	16,465	745	13	76
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] Primarily includes firewood and woodchips
[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 location and 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. Total employment in the original survey pool was 58 FTEs in 2023, a gain of 2 FTEs since 2022. Small sawmill employment declined by three for a total of 18 FTEs in 2023. Note that equipment in the Thorne Bay Wood Products (formerly Good Faith) was removed from the mill list after adding its equipment to the JK Forest Products mill in 2023. In addition, the Mike Allen Enterprises added a firewood processor that was operating in 2023.

Table 4. Equipment, location, and employment in active and idle sawmills, CY2023 (Includes 12 active and 2 idle sawmills, N = 14)

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	2.5
Alaska Timber and Truss (formerly Peak Engineering)	Petersburg	Portable circle sawmill, trim saw, log deck	Active	6
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
Subtotal				**58**
Small 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 [a]	Thorne Bay	Bandsaw, resaw, portable circle sawmill, trim saw, log and lumber decks, dry kiln, planer, moulder	Active	3.5
K&D Lumber Company	Thorne Bay	Sawmill: auto log deck/turner, resaw; shake and shingle mill	Active	4
Luther Coby	Kake	Mighty Mite circle sawmill	Active	1
Mike Allen Enterprises	Wrangell	Mighty Mite circle sawmill; Cord King model 48 firewood processor	Active	2.5
Tenakee Logging Company	Tenakee Springs	Woodmizer portable band saw, Mobile dimension circle saw, Woodmaster planer shaper (electric)	Active	1.5
Subtotal				**18**

[a] Includes equipment from the former idled Thorne Bay Wood Products (formerly Good Faith Lumber Company), which JK Forest Products purchased in 2022. Thorne Bay Wood Products (formerly Good Faith Lumber Company) has been removed from the mill survey pool.

CAPACITY AND PRODUCTION VOLUME

Table 5 shows that the largest sawmill, in terms of capacity, production, and employment, is the Viking Lumber Company. Viking again opted to not participate in this year's survey; we again moved forward with this report by assuming their operations were unchanged from 2021. Capacity in the 13 other active and idled mills combined (43,056 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 6 percent of the regional total, respectively. Common challenges operators reported for 2023 included difficulty finding reliable workers, timber supply, and fuel costs, with several still reliant on diesel powered generators to run milling equipment. Several mills were installing new and updating existing equipment in late 2022 and throughout 2023. The new equipment and updated equipment were not included in this year's report because they were not fully operating in 2023. These upgrades will be captured in next year's survey if they are reported as running during calendar year 2024.

Table 5. Estimated sawmill capacity, production, and utilization rate, CY2023 (Includes 12 active and 2 idle sawmills, N = 14)

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	256	8.5
Alaska Timber and Truss (formerly Peak Engineering)	3,000	200	6.7
St. Nick Forest Products	1,000	120	12
Viking Lumber Company	92,500	14,400	15.6
Western Gold Cedar Products	11,500	500	4.35
D & L Woodworks	1,000	Idle	--
The Mill	2,500	Idle	--
Subtotal	**114,500**	**15,476**	**13.5**
Small mills added in CY 2021			
Alaska Specialty Woods	2,500	24	1.0
Fair and Square Lumber	1,000	115	11.5
JK Forest Products	7,250	300	4.1
K & D Lumber Company	3,000	150	5.0
Luther Coby	2,500	20	0.8
Mike Allen Enterprises	3,056	325	10.6
Tenakee Logging Company	1,750	55	3.1
Subtotal	**21,056**	**989**	**4.7**
Total	**135,556**	**16,465**	**12.1%**

[a] Estimated 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.
[b] Actual Sawmill Production: Net sawlog volume (Scribner log scale) used 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 2023. Like last year, the majority wood originated from lands managed by the State of Alaska (70 percent), followed by the Tongass National Forest (23 percent). A modest amount of material originated from Native lands (assuming the Viking Lumber Company obtained similar volume from Native lands in 2023 as in 2021) and private timber sources, mostly from right-of-way and private lot clearing for development. Volume reported in Table 6b was about one quarter wood chips for biomass heat and three quarters firewood.

Table 6a. Actual sawmill production by log source, CY2023 (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	256	0	0	0	0	0	256
Alaska Timber and Truss (formerly Peak Engineering)	132	0	0	0	68	0	200
St. Nick Forest Products	0	0	0	0	120	0	120
Viking Lumber Company	2,160	0	11,520	720	0	0	14,400
Western Gold Cedar Products	475	0	25	0	0	0	500
Subtotal	**3,023**	**0**	**11,545**	**720**	**188**	**0**	**15,476**
Small mills added in CY 2021							
Alaska Specialty Woods	12	0	12	0	0	0	24
Fair and Square Lumber	104	0	0	0	12	0	115
JK Forest Products	300	0	0	0	0	0	300
K & D Lumber Company	0	0	0	0	150	0	150
Luther Coby	20	0	0	0	0	0	20
Mike Allen Enterprises	325	0	0	0	0	0	320
Tenakee Logging Company	55	0	0	0	0	0	55
Subtotal	**816**	**0**	**12**	**0**	**162**	**0**	**990**
Total	3,839	0	11,557	720	350	0	16,465
Percent	**23.3**	**0**	**70.2**	**4.4**	**2.1**	**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	395	0	350	0	0	0	745
Percent	53.0	0	47.0	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 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 2023. Western hemlock led with 48 percent of total production. Western redcedar products represent 35 percent of the total followed by Sitka spruce at 16 percent and Alaska yellow cedar at 0.7 percent. Most of the volume not included in actual sawmill production (Table 7b) consisted of western hemlock used for firewood.

Table 7a. Actual sawmill production by species, CY2023 (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	115	115	0	26	0	256
Alaska Timber and Truss (formerly Peak Engineering)	120	60	0	20	0	200
St. Nick Forest Products	6	24	78	12	0	120
Viking Lumber Company	2,160	7,200	5,040	0	0	14,400
Western Gold Cedar Products	25	25	450	0	0	500
Subtotal	**2,426**	**7,424**	**5,568**	**58**	**0**	**15,476**
Small mills added in CY 2021						
Alaska Specialty Woods	23	0	1	0	0	24
Fair and Square Lumber	92	23	0	0	0	115
JK Forest Products	60	135	105	0	0	300
K & D Lumber Company	0	120	30	0	0	150
Luther Coby	19	1	0	0	0	20
Mike Allen Enterprises	50	150	100	25	0	325
Tenakee Logging Company	28	0	0	27	0	55
Subtotal	**271**	**429**	**236**	**53**	**0**	**989**
Total	2,697	7,853	5,804	111	0	16,465
Percent	**16.4**	**47.7**	**35.3**	**0.7**	**0**	**100.0**

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

Sawmill	Sitka Spruce	Western Hemlock	Western Redcedar	Alaska Yellow Cedar	Other	Total
Total	89	618	15	19	5	745
Percent	11.9	82.9	2.0	2.6	1	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 the majority of wood received by Southeast Alaska sawmills in 2023 was processed into dimension lumber, shop lumber, and cants and timbers. Higher grade products like shop lumber, cants and timbers, and niche products generally command a price premium. 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. 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 450 and 54 MBF of shingle production, respectively. All of Alaska Specialty Woods production (24 MBF) was music wood.

Table 8. Actual sawmill production volume by product, CY2023 (Scribner Log Scale, MBF, active mills N = 12)

Sawmill	Dimension Lumber	Shop Lumber	Cants Timbers	Other	Total
Original survey pool					
Icy Straits Lumber and Milling Company	113	66	78	0	256
Alaska Timber and Truss (formerly Peak Engineering)	90	42	68	0	200
St. Nick Forest Products	18	90	12	0	120
Viking Lumber Company	3,276	6,300	4,824	0	14,400
Western Gold Cedar Products	50	0	0	450	500
Subtotal	**3,547**	**6,498**	**4,982**	**450**	**15,476**
Small mills added in CY 2021					
Alaska Specialty Woods	0	0	0	24	24
Fair and Square Lumber	115	0	0	0	115
JK Forest Products	84	216	0	0	300
K & D Lumber Company	96	0	0	54	150
Luther Coby	19	1	0	0	20
Mike Allen Enterprises	280	0	45	0	325
Tenakee Logging Company	45	3	6	0	55
Subtotal	**639**	**220**	**51**	**78**	**989**
Total	4,186	6,718	5,033	528	16,465
Percent	**25.4**	**40.8**	**30.6**	**3.2**	**100**

YOUNG GROWTH TIMBER UTILIZATION

Mill operators were asked to estimate how much young growth timber they milled as a percent of total production. Because there is considerable interest in quantifying the extent that young growth timber is being milled by regional sawmills, this question was added to the survey instrument in 2021. Table 9 shows that overall young growth utilization increased to three percent in 2023, up one percent from the previous year. Small mill young growth utilization averaged 18 percent, down from 22 percent in 2022 while the original mills' average rose modestly from 1.8 to 2 percent. Discussions with operators revealed that several had no desire to purchase young growth, but several others would purchase more if it was offered because logs were more uniform in size, had less defect than old growth, and met customer needs for rough cut dimension lumber. Several mills surveyed continue to incrementally retool for a young growth industry and invest in firewood processing capacity for community wood heating. Three grants awarded by the Forest Service in 2023 brought almost $775,000 into Southeast Alaska to fund a one-pass log sawmill in Petersburg, a community firewood distribution program in Klawock, and a wood fired boiler to heat kilns at a sawmill in Thorne Bay.

Table 9. Sawmill young growth timber utilization, CY2023 (Scribner Log Scale, MBF, active mills N = 12)

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				
Icy Straits Lumber and Milling Company	256	0	0	0
Alaska Timber and Truss (formerly Peak Engineering)	200	150	75	95
St. Nick Forest Products	120	12	10	10
Viking Lumber Company	14,400	144	1	1
Western Gold Cedar Products	500	0	0	0
Subtotal	**15,476**	**306**	**2.0**	**1.8**
Small mills added in CY 2021				
Alaska Specialty Woods	24	0	0	0
Fair and Square Lumber	115	115	100	100
JK Forest Products	300	38	13	15
K & D Lumber Company	150	0	0	0
Luther Coby	20	0	0	0
Mike Allen Enterprises	325	0	0	0
Tenakee Logging Company	55	28	50	80
Subtotal	**989**	**180**	**18.2**	**22.0**
Total	**16,465**	**486**		
Average	**1,372**	**41**	**3**	**3.7**
Minimum	**20**	**0**	**0**	**0**
Maximum	**14,400**	**150**	**100**	**100**

MARKETS

Tables 10a and 10b contain information about markets served by Southeast Alaska sawmills. In 2021, market categories were revised in two ways: 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 majority (79 percent) of processed material was sent to destinations in the Lower 48 states, primarily the Pacific Northwest. Markets in Pacific Rim nations and within Alaska both received about 8 percent of total sawmill production. Production from the original survey pool went primarily to Lower 48 destinations. Small mill production mostly stayed within Alaska except for music wood from Alaska Specialty Woods, which had the most diverse set of markets of all surveyed mills. Most volume (93 percent) not included in actual production was utilized within Alaska.

Table 10a. Actual sawmill production by product destination (market), CY2023 (Scribner Log Scale, MBF, active mills N = 12)

Sawmill	Alaska	U.S. Pacific Northwest[a]	U.S. Other	Canada	International Pacific Rim[b]	International Other	Total
Original survey pool							
Icy Straits Lumber and Milling Company	256	0	0	0	0	0	256
Alaska Timber and Truss (formerly Peak Engineering)	200	0	0	0	0	0	200
St. Nick Forest Products	120	0	0	0	0	0	120
Viking Lumber Company	144	7,200	5,040	0	1,440	576	14,400
Western Gold Cedar Products	50	450	0	0	0	0	500
Subtotal	**770**	**7,680**	**5,040**	**0**	**1,440**	**576**	**15,476**
Small mills added in CY 2021							
Alaska Specialty Woods	0.2	5.6	11.2	1.2	2.9	2.9	24
Fair and Square Lumber	115	0	0	0	0	0	115
JK Forest Products	300	0	0	0	0	0	300
K & D Lumber Company	135	0	0	0	0	15	150
Luther Coby	20	0	0	0	0	0	20
Mike Allen Enterprises	32.5	292.5	0	0	0	0	325
Tenakee Logging Company	55	0	0	0	0	0	55
Subtotal	**658**	**298**	**11**	**1**	**3**	**18**	**989**
Total	**1,428**	**7,948**	**5,051**	**1**	**1,443**	**594**	**16,465**
Percent	**8.7**	**48.3**	**30.7**	**0.01**	**8.8**	**3.6**	**100**

[a] Pacific Northwest is defined as the states of Oregon and Washington.
[b] Pacific Rim is the combined nations of China, Japan, and South Korea.

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	695	50	0	0	0	0	745
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 end of year reported Tongass timber volume under contract for each sawmill. Table 12 shows the preferred timber sale size, number of existing sales, and volume under contract in 2023. Preferred timber sale size for mills participating in the survey varied from 50 MBF to 10 MMBF and averaged 1,915 MBF. Survey respondents purchased 38 of the 56 total sales under contract, averaging three sales per sawmill. Volume remaining under contract for surveyed mills at the end of 2023 was 15.6 MMBF, down 0.26 MMBF from 2022. Although survey respondent's proportion of volume under contract rose from 48.2 percent in 2022 to 65.9 percent in 2023, the total remaining volume under contract fell from 32.8 to 23.7 MMBF (-9 MMBF).

Table 12. 2023 Preferred timber sale size and Tongass timber volume under contract at the end of calendar year 2023 (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]	Number of USFS sales under contract	Total sale volume awarded (MBF) [b]	Total remaining volume under contract (MBF)
Original survey pool				
Icy Straits Lumber and Milling Company	200	3	502.5	502.5
Alaska Timber and Truss (formerly Peak Engineering)	4,000	7	375.3	340.0
St. Nick Forest Products	n/a	0	0	0
Viking Lumber Company [c]	10,000	4	128,973.3	3,333.2
Western Gold Cedar Products	2,000	5	5,203.5	3,883.2
D & L Woodworks	idle	1	161.2	161.2
The Mill	idle	1	599.2	599.2
Subtotal	**16,200**	**21**	**135,815.1**	**8,819.3**
Small mills added in CY 2021				
Alaska Specialty Woods	50	0	0	0
Fair and Square Lumber	120	0	0	0
JK Forest Products	200	5	1,031.3	750.9
K & D Lumber Company	300	1	158.00	36.0
Luther Coby	100	3	85.4	51.6
Mike Allen Enterprises	4,000	4	12,516.8	5,846.4
Tenakee Logging Company	100	4	171.8	88.4
Subtotal	**4,870**	**17**	**13,963.3**	**6,773.2**
Respondents Total	**21,070**	**38**	**149,778.4**	**15,592.5**
All sale average	**1,915**	**3**	**10,698.5**	**1,113.7**
All other Tongass sale purchasers [d]	n/a	18	70,126.0	8,075.7
Grand Total	n/a	**56**	**219,904.4**	**23,668.2**

[a] Respondents answers to survey question: "what is your preferred timber sale size in terms of volume in MBF?". When respondents provided a range, we used the average.
[b] Total sale volume awarded is the full contracted volume initially awarded after the sale bidding process.
[c] In 2014 Viking Lumber Company was awarded 97,717 MBF under the Big Thorne Stewardship Contract. Three MBF remains under contract as of December 2023.
[d] Predominantly Good Neighbor Authority sales administered by the State of Alaska and a Stewardship sale purchased by Alcan Forest Products, a log exporter.

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 logs to international destinations. Shipments 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. Tongass timber purchasers can 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. One could infer that because exported logs are not available to local sawmills, they do not support forest industry jobs in the region. However, logging, trucking, and forestry support industries are still supported, and industries associated with water transportation typically see more activity. Exports of logs originating from the Tongass National Forest represent a subset of total log exports in the region; timber harvested from state, Native, and other 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 Tongass harvest volume exported as logs to international and Lower 48 destinations by **calendar year**. Cut timber volume (sawtimber only) data were downloaded from the Timber Information Manager database and organized into calendar years. Tongass log exports and interstate shipments reports are posted annually on the Alaska Region Forest Management Reports and Accomplishments website. Figure 1 shows between 2013-2023, harvested volume peaked in 2016 then fell almost 60 percent in 2017 to average near 15 MMBF per year until 2022, when it hit a 10-year low of 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 in 2000. In 2023, log exports again exceeded harvest, but by a more modest amount (354 MBF vs. 841 MBF in 2022). This result is explained by the sizeable volume of young growth timber exported as logs from Good Neighbor Authority sales administered by the State of Alaska, which outpaced Tongass volume available for domestic processing. In addition, sale volume harvested in 2022 could have been exported in 2023. The Tongass is not the only source of timber supply; the majority of wood sawn by survey respondents has originated from State of Alaska managed lands since CY2021.

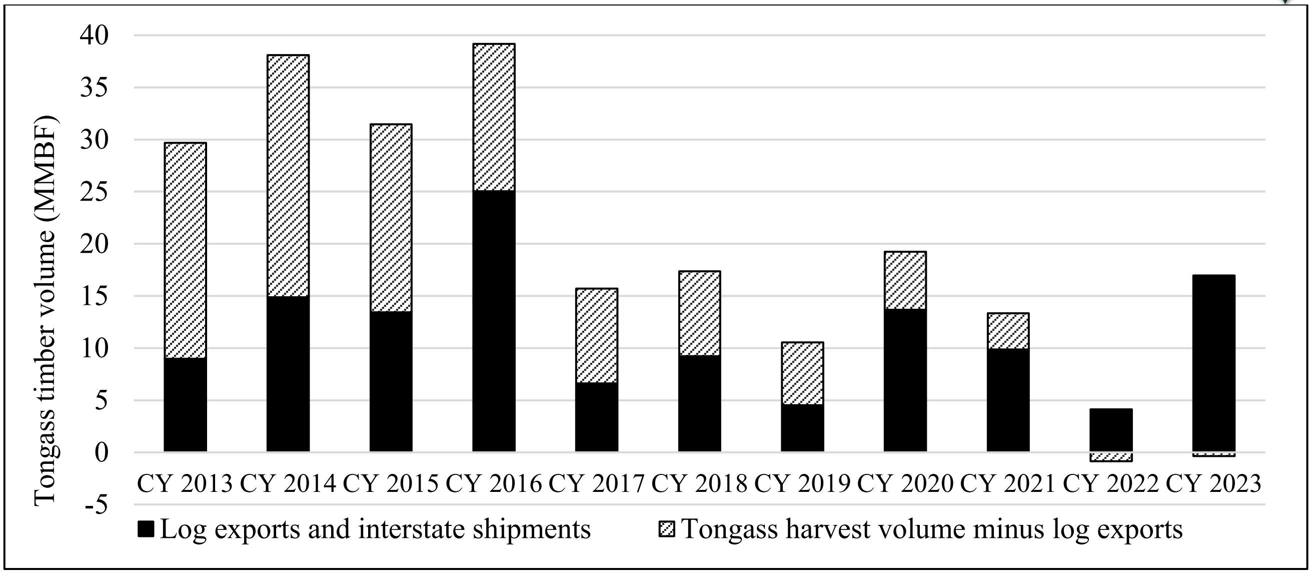

Figure 1. Tongass log exports and timber harvest volume by calendar year

CONCLUSION

Typical of every year, Tongass sawmills remain significantly underutilized. Although the Viking Lumber Company declined to provide information about their 2023 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. Surveyed sawmill employment declined from 77 full time equivalents (FTEs) in 2022 to 75 FTEs in 2023. Of the log volume received by surveyed mills in 2023, 70 percent originated from lands managed by the State of Alaska, followed by the Tongass (23 percent). Utilization of young growth logs varied widely among surveyed mills, ranging from 0 to 100 percent but overall comprising 3.0 percent of total production, down from 3.7 percent in 2022. Preferred timber sale size ranged from 50 MBF to 10,000 MBF with an average of 1.9 MMBF. However, the average total volume remaining under Forest Service contract per surveyed mill was 1.1 MMBF, or 58 percent of the average preferred timber sale size. Because a sawmill typically needs two or more open timber sale contracts to sustain operations, this suggests a considerable gap in Forest Service volume under contract for the region's operating sawmills. For the second year in a row, the volume of logs exported exceeded volume of timber harvested on the Tongass, even though harvest was up by 13.3 MMBF from the historic low in CY 2022. This trend is largely due to increased harvest of young growth from the Tongass National Forest, which comprised only 3 percent of total volume milled by survey respondents. The majority of young growth was exported in 2023, suggesting few accessible markets for young growth timber processed in Alaska. We observed mills continuing to be awarded grants to invest in young growth milling equipment and upgrades and wood energy infrastructure and look forward to evaluating impacts on regional production and employment next year.

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

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)
JANUARY 2025