



REPORT TO ECOSYSTEM PLANNING AND BUDGET USDA FOREST SERVICE, ALASKA REGION

TONGASS NATIONAL FOREST: 2016 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 survey is to gather information regarding current sawmill operations including total estimated capacity, actual production, harvested lands, forest products, market destinations, and general business expansion and retention challenges. The *Tongass National Forest: 2016 Sawmill Capacity and Production Report*, summarizes key survey findings, provides brief supplemental discussion, and presents a longitudinal perspective of sawmill performance during the past sixteen years. Survey findings are organized into seven substantive sections including:

- Longitudinal Survey Results
- Sawmill Overview
- Capacity and Production Volume
- Harvested Lands
- Primary Product by Species
- Production Volume by Product
- Markets

Sawmill key-informant survey results provide a framework for assessing sawmill performance over time, exploring current business conditions and challenges, tracking products and markets, and following public and private land timber harvest.

METHODS

The 2016 sawmill survey, covering January to December 2016 timeframe, was conducted from June to August 2017. In contrast to traditional surveys that oftentimes utilize a random sample method to collect input, the USFS Alaska Region implemented a key-informant survey of all Southeast medium to large sawmills operating on a regular basis. Surveys were conducted via onsite or telephone interviews. To allow comparative longitudinal analysis, the survey instrument and population frame remained consistent from 2000 to 2016 and includes a variety of business profile, sawmill activity, and products and markets questionnaire items (Table 1).



Table 1. Survey Instrument Summary

Business Profile	Sawmill Activity	Primary Products	Other
Business Name, Owner's Name, Location, Sawmill Description, Sawmill Size Classification	Estimated Processing Capacity, Actual Production, Percent Overrun, Percent Underrun	Primary Products, Destination Markets	Log Source, Employment

POPULATION FRAME

The population frame of consistently-operating medium to large sawmills was carefully established during 2000 using criteria that required: 1) regular operation and 2) medium to large size classification. In 2000, there were 20 sawmills that evolved into 22 sawmills with the subdivision of one sawmill (2007). To maintain longitudinal consistency and preserve comparative value, the annual sawmill survey has only included the original 22 sawmills. Of noteworthy importance, numerous small sawmills that operate on a seasonal, part-time, or contingent basis have operated across the region, each with varying degrees of success. While these sawmills are part of the greater Southeast Alaska forest products industry, they are outside the original survey population frame and are subsequently not surveyed and excluded from this report.

During 2000, 22 medium- to large-scale sawmills operated across the Tongass National Forest with the greatest concentration located in southern southeast Alaska (Table 2). Since 2000, half (50%) of these sawmills have closed and been uninstalled; no new sawmills of equal size classification have been established during the same timeframe. During 2016, nine sawmills (41%) remained active and eleven sawmills (50%) were no longer in production (i.e., decommissioned, uninstalled). Two sawmills (9%) remain installed with significant equipment onsite, but were idle during calendar year 2016.

Table 2. Sawmill Population Frame, Calendar Years 2000 – 2016

Active (9)	Idle (2)	Uninstalled (11)
Viking Lumber Company Icy Straits Lumber and Milling Company Good Faith Lumber Company Western Gold Cedar Products D and L Woodworks Porter Lumber Company Thuja Plicata Lumber The Mill Falls Creek Forest Products	Northern Star Cedar Saint Nick Forest Products	Gateway Forest Products Ketchikan Renaissance Group Herring Bay Lumber Pacific Log and Lumber Annette Island Sawmill Metlakatla Forest Products Silver Bay Incorporated Alaska Fibre Kasaan Mountain Lumber and Log Chilkoot Lumber Company Thorne Bay Enterprises



LONGITUDINAL SURVEY RESULTS

For the purposes of this report, “total installed capacity” includes the capacity of nine active sawmills and two idle sawmills (N = 11). Capacity is an estimate of sawmill processing capability based on the amount of 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 availability of workforce, raw materials, or market conditions. During 2016, installed capacity of Southeast’s 11 sawmills totaled 113,650 board feet (MBF), which is unchanged from 2015 (Table 3).

Actual sawmill production during 2016 totaled approximately 17,912 MBF, a decrease of 628 MBF (-3%) compared to 2015. Five sawmills (45%) reported higher production in 2016. In contrast, three sawmills (27%) reported decreased production and one sawmill (9%) indicated total production from 2015 to 2016 remained the same. 2016 region-wide sawmill utilization, based on total installed capacity of 113,650 MBF, is estimated at 16 percent. Notably, southeast Alaska sawmills remain significantly underutilized.

2016 sawmill employment totaled approximately 58 full-time equivalent (FTE) positions including owners, operators, and other employees. Despite a small decrease in annual production (-3%), employment increased by seven jobs (14%) from 2015 to 2016.

Table 3. Annual Sawmill Survey Results, Calendar Years 2000 - 2016

Year	Total Active Sawmills (#)	Sawmill Employment (FTEs)	Installed Sawmill Capacity (MBF)	Estimated Sawmill Production (MBF)	Volume NOT Included in Sawmill Production			Percent Sawmill Utilization
					Manufactured Products ^a	Log Exports	Total	
2016	9	58	113,650	17,912	1,300	c	NA	16%
2015	9	51	113,650	18,540	145	c	NA	16%
2014	10	54	119,400	18,830	570	c	NA	16%
2013	10	60	120,400	17,593	920	c	NA	15%
2012	10	58	120,400	13,842	899	c	NA	12%
2011	10	56	160,000	11,546	1,295	c	NA	7%
2010	10	64	155,850	15,807	385	c	NA	10%
2009	11	58	249,350	13,422	1,250	c	NA	5%
2008	11	94	282,350	23,666	3,513	c	NA	8%
2007	14	158 ^b	292,350	31,717	4,015	c	NA	11%
2006	11	123	354,350	32,141	7,620	2,646	10,266	9%
2005	12	136	359,850	34,695	0	3,541	3,541	10%
2004	13	148	370,350	31,027	509	3,088	3,597	8%
2003	13	155	369,850	32,005	763	17,030	17,793	9%
2002	11	160	453,850	39,702	9,164	4,940	14,104	9%
2000	19	321	501,850	87,117	46,079	27,522	73,601	17%

^a Manufactured products primarily include chips and bark manufactured from utility logs, but may also include firewood.

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

^c Data not collected.

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



SAWMILL OVERVIEW

Table 4. Active, Idle, and Uninstalled Sawmills, Calendar Years 2000 – 2016 [N = 22]

Sawmill	Community	Description	Current Status	Sawmill FTEs
Viking Lumber Company	Craig	Conventional carriage, band saw headrig, linebar and gang resaws, edgers, trim saw, log debarker and merchandiser, end-dogging circle saw scragg	Active	37
Icy Straits Lumber and Milling Company	Hoonah	Mighty Mite sawmill, horizontal band resaw, log debarker and merchandiser (not installed), dry kiln, planer, moulder	Active	8
Good Faith Lumber Company (formerly Thorne Bay Wood Products)	Thorne Bay	Portable circle sawmill, trim saw, log and lumber decks, dry kiln, planer, moulder	Active	5
Western Gold Cedar Products (part of Northern Star Cedar breakup)	Thorne Bay	Shake and shingle mills	Active	4
D & L Woodworks	Hoonah	Portable band sawmill and portable circle sawmill	Active	1
Porter Lumber Company	Thorne Bay	Portable circle sawmill, dry kiln	Active	1
Thuja Plicata Lumber	Thorne Bay	Portable circle sawmills, carriage mill with circle saw headrig, shake mill, shingle mill	Active	2
The Mill	Petersburg	Two portable circle sawmills	Active	< 1
Falls Creek Forest Products (formerly Southeast Alaska Wood Products)	Petersburg	Portable circle sawmill, trim saw, log and lumber decks, dry kiln, moulder	Active	< 1
Saint Nick Forest Products (formerly W.R. Jones and Son Lumber Company)	Craig	Portable circle sawmill, dry kiln, planer, moulder	Idle	0
Northern Star Cedar	Thorne Bay	Mighty Mite sawmill	Idle	0
Thorne Bay Enterprises (part of Northern Star Cedar breakup)	Thorne Bay	Portable circle sawmill, log infeed and lumber outfeed decks	Uninstalled	0
Gateway Forest Products	Ketchikan	Twin band mill with end-dogging carriage, resaws, edgers, trim saw, log debarker and merchandiser	Uninstalled	0
Ketchikan Renaissance Group (formerly Gateway Forest Products)	Ketchikan	Rotary veneer mill, log debarker and merchandiser	Uninstalled	0
Herring Bay Lumber	Ketchikan	Conventional carriage, circle saw headrig, resaw edger, trim saw	Uninstalled	0
Pacific Log and Lumber	Ketchikan	Conventional carriage mills (2) with circle saw headrigs, horizontal band resaw, edger, trim saw, log debarker and merchandiser, dry kiln, planer mill, 60-foot band mill	Uninstalled	0
Annette Island Sawmill (aka KPC Hemlock Mill)	Metlakatla	Conventional carriage, single cut band saw headrig, linebar resaw, gang edger/resaw, edger, trim saw, log debarker, merchandiser	Uninstalled	0
Metlakatla Forest Products	Metlakatla	Conventional carriage, circle saw headrig with top saw, horizontal resaw, edger, log debarker, merchandiser	Uninstalled	0
Silver Bay Incorporated	Wrangell	Conventional carriages, band saw headrigs, linebar resaw edgers, trim saw, planer mill, log debarker, merchandise	Uninstalled	0
Alaska Fibre	Petersburg	Portable circle sawmill, horizontal band resaw, edger	Uninstalled	0
Kasaan Mountain Lumber and Log	Kasaan	Conventional carriage, circle saw headrig, circle saw linebar resaw, edger, debarker	Uninstalled	0
Chilkoot Lumber Company	Haines	Conventional carriage, eight-foot band headrig, six and seven foot band resaws, debarker, chipper, and edger	Uninstalled	0



CAPACITY AND PRODUCTION VOLUME

Table 5. 2016 Estimated Sawmill Capacity and Actual Production [Includes 9 Active and 2 Idle Sawmills, N = 11]

Sawmill	Estimated Sawmill Capacity [Scribner Log Scale, MBF] ¹	Actual Sawmill Production [Scribner Log Scale, MBF] ²	Percent Utilization of Installed Capacity
Viking Lumber Company	80,000	16,000	20%
Icy Straits Lumber and Milling Company	3,000	600	20%
Good Faith Lumber Company	6,250	297	5%
Western Gold Cedar Products	6,500	800	12%
D & L Woodworks	1,750	25	1%
Porter Lumber Company	2,500	50	2%
Thuja Plicata Lumber	1,000	100	10%
The Mill	6,000	20	< 1%
Falls Creek Forest Products	3,000	20	< 1%
Saint Nick Forest Products	1,150	Idle	NA
Northern Star Cedar	2,500	Idle	NA
Total	113,650	17,912	16%

¹ Estimated Sawmill Capacity: An estimate of sawmill processing capability based on the amount of net sawlog volume (Scribner log scale) 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 availability of workforce, raw materials, or market.

² Actual Sawmill Production: The net sawlog volume (Scribner log scale) used during the year to manufacture sawn products.



HARVESTED LANDS

Table 6a. Processed Log Sources, Volume Included in Actual Sawmill Production

Sawmill	National Forest	Other Federal	State Forest	Private Native	Private Other	Import	Total
Viking Lumber Company	16,000	-	-	-	-	-	16,000
Icy Straits Lumber and Milling Company	540	-	-	-	60	-	600
Good Faith Lumber Company	297	-	-	-	-	-	297
Western Gold Cedar Products	650	-	-	150	-	-	800
D & L Woodworks	25	-	-	-	-	-	25
Porter Lumber Company	50	-	-	-	-	-	50
Thuja Plicata Lumber	72	-	-	20	8	-	100
The Mill	18	-	-	-	2	-	20
Falls Creek Forest Products	20	-	-	-	-	-	20
Total [Scribner Log Scale, MBF]	17,672	-	-	170	70	-	17,912
Percent	99%	-	-	1%	< 1%	-	100%

Table 6b. Processed Log Sources, Volume Not Included¹ in Actual Sawmill Production

Sawmill	National Forest	Other Federal	State Forest	Private Native	Private Other	Import	Total
Total [Scribner Log Scale, MBF]	1,293	-	-	-	8	-	1,301
Percent	99%	-	-	-	1%	-	100%

¹ 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.



PRIMARY PRODUCT BY SPECIES

Table 7a. Primary Product by Species, Volume Included in Actual Sawmill Production

Sawmill	Sitka Spruce	Western Hemlock	Western Red Cedar	Alaska Yellow Cedar	Other	Total Sawmill Production
Viking Lumber Company	5,000	4,000	7,000	-	-	16,000
Icy Straits Lumber and Milling Company	240	240	-	120	-	600
Good Faith Lumber Company	59.4	118.8	89.1	29.7	-	297
Western Gold Cedar Products	-	-	800	-	-	800
D & L Woodworks	15	-	-	10	-	25
Porter Lumber Company	5	1	43	1	-	50
Thuja Plicata Lumber	-	-	100	-	-	100
The Mill	8	10	-	2	-	20
Falls Creek Forest Products	12	-	-	8	-	20
Total [Scribner Log Scale, MBF]	5,339	4,370	8,032	171	-	17,912
Percent	30%	24%	45%	1%	-	100%

Table 7b. Primary Product by Species, Volume Not Included¹ in Actual Sawmill Production

Sawmill	Sitka Spruce	Western Hemlock	Western Red Cedar	Alaska Yellow Cedar	Other	Total Sawmill Production
Total [Scribner Log Scale, MBF]	68	1,210	-	22	-	1,300
Percent	5%	93%	-	2%	-	100%

¹ 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.



PRODUCTION VOLUME BY PRODUCT

Table 8. Sawmill Production by Product, Volume Included in Actual Sawmill Production

Sawmill	Dimension Lumber	Shop Lumber	Cants Timbers	Other	Total Sawmill Production
Viking Lumber Company	7,000	5,500	3,500	-	16,000
Icy Straits Lumber and Milling Company	60	320	220	-	600
Good Faith Lumber Company	128	104	65	-	297
Western Gold Cedar Products	-	-	-	800	800
D & L Woodworks	25	-	-	-	25
Porter Lumber Company	2	-	48	-	50
Thuja Plicata Lumber	50	-	50	-	100
The Mill	10	-	10	-	20
Falls Creek Forest Products	12	-	8	-	20
Total [Scribner Log Scale, MBF]	7,287	5,924	3,901	800	17,912
Percent	41%	33%	22%	4%	100%



MARKETS

Table 9a. Product Destination, Volume Included in Actual Sawmill Production

Sawmill	Alaska	Continental United States	Canada	Pacific Rim	Other	Total Sawmill Production
Viking Lumber Company	-	11,000	-	5,000	-	16,000
Icy Straits Lumber and Milling Company	600	-	-	-	-	600
Good Faith Lumber Company	297	-	-	-	-	297
Western Gold Cedar Products	-	800	-	-	-	800
D & L Woodworks	25	-	-	-	-	25
Porter Lumber Company	2	48	-	-	-	50
Thuja Plicata Lumber	100	-	-	-	-	100
The Mill	20	-	-	-	-	20
Falls Creek Forest Products	12	8	-	-	-	20
Total [Scribner Log Scale, MBF]	1,056	11,856	-	5,000	-	17,912
Percent	6%	66%	-	28%	-	100%

Table 9b. Product Destination, Volume Not Included¹ in Actual Sawmill Production [Scribner Log Scale, MBF]

Sawmill	Alaska	Continental United States	Canada	Pacific Rim	Other	Total Sawmill Production
Total [Scribner Log Scale, MBF]	300	-	1,000	-	-	1,300
Percent	23%	-	77%	-	-	100%

¹ 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.