

Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.



AUG 13 REC'D



United States
Department of
Agriculture

Forest Service

Pacific Northwest
Research Station

Research Note
PNW-RN-568

July 2012



Estimating Sawmill Processing Capacity for Tongass Timber: 2009 and 2010 Update

Susan J. Alexander and Daniel J. Parrent¹

Abstract

In spring and summer of 2010 and 2011, sawmill production capacity and wood utilization information was collected from major wood manufacturers in southeast Alaska. The estimated mill capacity in southeast Alaska for calendar year (CY) 2009 was 249,350 thousand board feet (mbf) (log scale), and for CY 2010 was 155,850 mbf (log scale), including idle sawmills. Mill consumption in CY 2009 was estimated at 13,422 mbf (log scale), and for CY 2010 was 15,807 mbf (log scale). Wood products manufacturing employment in southeast Alaska increased from 57.5 full-time equivalent positions in 2009 to 63.5 in 2010 despite the loss of 23,500 mbf of capacity in two sawmills owing to fires, the decommissioning of one large sawmill (65,000 mbf), and equipment sales at two small mills (5,000 mbf).

Keywords: Alaska sawmills, mill capacity, timber usage.

Introduction

Two federal acts have sought to ensure a timber supply specifically from the Tongass National Forest. The Alaska National Interest Lands Conservation Act (ANILCA 1980) in section 705(a) provided funds to maintain a constant supply of timber from the Tongass at a rate of 4.5 billion board feet per decade. A decade later, section 101 of the Tongass Timber Reform Act (TTRA 1990) amended ANILCA by deleting section 705 and inserting a new section 705(a):

Subject to appropriations, other applicable law, and the requirements of the National Forest Management Act of 1976 (Public Law 94-588), ... the Secretary shall, to the extent consistent with providing for the multiple use and sustained yield of all renewable forest resources, seek to provide a supply of timber from the Tongass National Forest which (1) meets the annual market demand for timber from such forest and (2) meets the market demand from such forest for each planning cycle.

¹ **Susan J. Alexander** is the regional economist, Alaska Region, P.O. Box 21628, Juneau, AK 99802; and **Daniel J. Parrent** is a natural resource specialist, State and Private Forestry, 161 East 1st Ave., Anchorage, AK 99501.

Sawmills in southeast Alaska have been assessed each year since 2000 to provide information for annual demand calculations.

Morse (2000) developed procedures, as directed by the 1997 Tongass Land and Resource Management Plan, “to ensure that annual timber sale offerings are consistent with market demand” (USDA FS 1997: 37). The Morse methodology is based on an inventory adjustment process whereby uncut volume under contract is considered inventory, timber sales are considered additions to inventory, and harvest is considered a deletion from inventory. Morse’s methodology specifically relies on estimates of installed and operable mill capacity, industry rate of capacity utilization, share of raw material provided by the Tongass, and other parameters. Sawmills in southeast Alaska have been assessed each year since 2000 (with the exception of 2001) to provide information for the annual demand calculations. Four previous capacity reports (Alexander and Parrent 2010, Brackley and Crone 2009, Brackley et al. 2006a, Kilborn et al. 2004) have summarized these southeast Alaska wood manufacturer assessments from 2000 to 2008. This report presents results from mill assessments for 2009 and 2010.

In this annual assessment of sawmills in southeast Alaska, mill capacity is defined as the amount of net sawlog volume (Scribner log scale) that could be processed by the mill, as currently configured, during a standard 250-day, two-shifts-per-day, annual operating schedule. This operating schedule benchmark was set in 2000 to assess sawmills on an equal basis from year to year, using an industry standard for assessing operations. The estimate of maximum capacity is not limited by the availability of employment, raw material, or markets. The estimate of capacity is for primary manufacture from net sawlog volume (i.e., used to manufacture lumber, cants, veneer, music bolts, etc.). Chips from utility logs, products from wood residue, or secondary manufacture from logs already accounted for are not considered primary manufacture from sawlogs.

The forest products industry in southeast Alaska has undergone considerable changes in the past decade. The capacity reports have become an important source of information for land managers, policymakers, and scientists in assessing future demand for Tongass timber.

Background

Originally, the 20 largest and most active sawmills in the region were included in the wood manufacturing assessment, which began in 2001 (for CY 2000). These 20 mills represented the majority of total capacity of all wood products manufacturing in southeast Alaska at the time. In 2007, the 20 original mills became 22 with the partial subdivision of 1 mill. Of those 22 mills, 10 were active in 2010, 3

were idle, and 9 had been decommissioned or were no longer in production (i.e., “uninstalled”). There have been no significant mill installations since 2000. A new manufacturer will be added to the assessment when equipment is installed, an inventory of logs is onsite, and product is produced.

In spring and summer of 2010, and again in 2011, information for the previous calendar year was collected directly from producers. Sampling was conducted onsite in most cases with the remainder conducted via telephone interviews. Respondents were asked to supply information relative to any equipment purchases or modifications that would affect sawmill capacity, and the volume of logs that were processed during the respective calendar years. Estimated wood manufacturing capacity, mill consumption, and wood manufacturing employment in southeast Alaska have declined steadily since the initial survey for 2000 (table 1).

Information collected in 2010, as in other years, was as follows:

- Mill name
- Owner’s name(s)
- Mill location
- Mill description
- Estimated mill capacity
- Estimated mill consumption (the net sawlog volume (Scribner log scale) that received primary manufacture during the calendar year)
- Mill employment
- Sources of logs processed by the mill
- Products produced
- Market information (where sold)

The last of the long-term sale volume from the Tongass National Forest was harvested in 2000. A history of timber harvest on the Tongass National Forest, including details of the long-term timber sales, is provided in “Tongass Timber,” by James Mackovjak (2010). Data from 2002 through 2010 are characterized by independent sales from Forest Service lands to locally owned sawmills, in addition to volume from state and private timber sales. Although capacity utilization has averaged about 9 to 10 percent since 2002, employment and total capacity have declined considerably. In 2007, the U.S. Department of Agriculture (USDA) Forest Service Alaska Region began appraising small-diameter Sitka spruce (*Picea sitchensis* (Bong.) Carr.) and western hemlock (*Tsuga heterophylla* (Raf.) Sarg.) for shipment out of state, but the effects are difficult to assess (table 1). Although log shipments increased in 2009 and 2010 from the previous 2 years, log shipments to both domestic and foreign destinations were fewer from 2007 to 2010 than they

Table 1—Comparison of southeast Alaska mill assessment results, calendar year 2000 through 2010^a

Calendar year	Volume not included in mill consumption						Total volume not included in mill consumption	Percentage mill utilization	Employees
	Estimated installed mill capacity ^b	Estimated mill consumption ^c	Manufacture products ^d	Log exports ^e		Foreign			
				Domestic	Foreign		Percent	Number	
2000	501,850	87,117	46,079	6,787	28,094	80,960	17.4	321	
2002	453,850	39,702	9,164	115	2,540	11,819	8.8	160	
2003	369,850	32,005	763	400	3,893	5,055	8.7	155	
2004	370,350	31,027	509	1,412	9,748	11,669	8.4	148	
2005	359,850	34,695	0	3,937	15,547	19,485	9.6	136	
2006	354,350	32,141	7,620	2,517	1,836	11,973	9.1	123	
2007	292,350	31,717	4,015	214	3,410	7,639	10.9	133 ^f	
2008	282,350	23,666	2,882	1,390	4,449	8,721	8.4	94	
2009	249,350	13,422	1,250	279	13,121	14,650	5.4	58	
2010	155,850	15,807	385	41	12,826	13,252	10.1	64	

^a Information for 2001 is not available.

^b Mill capacity includes sawmills that are operable but idle.

^c Net sawlog volume, Scribner log scale, that received primary manufacture during the calendar year. This is the actual net sawlog volume used during the year to manufacture sawn products. In previous reports in this series (e.g., Alexander and Parrent 2010), this was labeled "Estimated mill production," but it is still the same data type.

^d Primarily chips manufactured from utility logs (produced from logs that do not go through the sawmill). Can also include firewood.

^e Annual calendar year log exports from the Tongass National Forest to domestic and foreign destinations.

^f Includes 35 positions reported at the reopened Ketchikan Renaissance Group veneer mill, which was open for a few months in 2007, and inactive again in 2008. These positions lasted about 4 months so were prorated to 10 full-time equivalents.

were in 2005, when there was no limited shipment policy. With the severe downturn in domestic wood products markets for the past several years, it is likely that log exports are helping the few remaining sawmills in southeast Alaska remain in business, as they can balance product sales into the best markets available.

Results and Discussion

A summary of basic sawmill information for 2010, including mill name, location, description, and number of employees, is presented in table 2 for both active and inactive sawmills. Mill employment is the number of full-time equivalent personnel employed during the year, both salaried and nonsalaried. Although mill employment numbers are collected directly from each mill owner, the numbers are very close to employment figures reported in state employment data. This survey captures some self-employment that is not reflected in state employment figures. Mill employment increased from 57.5 in 2009 to 63.5 in 2010 despite a loss of 20.5 million board feet (mmbf) capacity at Icy Straits Lumber and Milling and 3 mmbf at Thorne Bay Enterprises owing to fires, the decommissioning of the Silver Bay mill (65 mmbf), and various equipment sales at Northern Star Cedar (2.5 mmbf) and The Mill (2.5 mmbf). Thorne Bay Enterprises is listed as “idle” as they appear to be planning to rebuild following a fire that occurred in November 2009.

Table 3 lists mills from the original assessment that are no longer in operation and are considered uninstalled as of 2010. Sawmills are classified as uninstalled when they are idle and deteriorate to the point that they cannot be repaired and operated with a reasonable investment of time and funding, or when they are dismantled. Mill capacity and consumption for mills active in 2009 or in 2010 are listed in table 4.

Each year, the USDA Forest Service Alaska Region estimates logging and sawmill employment related to the Tongass National Forest timber program in ANILCA (1980) 706(a) Timber Supply and Demand reports to Congress. Through 2001, the reports assumed that all sawmill and pulp mill employment depended on timber supplied from the Tongass National Forest. Beginning in 2002, this assumption was no longer valid. Data from Kilborn et al. (2004), Brackley et al. (2006a), Brackley and Crone (2009), Alexander and Parrent (2010), and this research note show that federal timber from the Tongass National Forest supplied 73 percent of the wood sawn in southeast Alaska mills in 2002, 59 percent in 2003, 64 percent in 2004, 65 percent in 2005, 62 percent in 2006, 53 percent in 2007, 75 percent in 2008, 67 percent in 2009, and 87 percent in 2010. These proportions have fluctuated as timber supply from the Tongass has declined, and the independent sawmills in the region have turned to state ownerships for timber. In 2009 and 2010, no mills

It is likely that log exports are helping the few remaining sawmills in southeast Alaska remain in business, as they can balance product sales into the best markets available.

Table 2—Basic sawmill information for southeast Alaska, calendar year 2010

Mill name	Location	Description	Number of employees
Active sawmills:			
D&L Woodworks	Hoonah	Portable band-saw mill and portable circle-saw mill	2
Falls Creek Forest Products (formerly Southeast Alaska Wood Products)	Petersburg	Portable circle-saw mill, trim saw, dry kiln, moulder	1
Icy Straits Lumber and Milling Co.	Hoonah	Conventional carriage, circle-saw headrig, edger, bull edger, trim saw, log debarker and merchandiser, resaw, dry kiln, planer, moulder [Major mill fire July 22, 2010]	12
Porter Lumber Co.	Thorne Bay	Portable circle-saw mill, dry kiln	1
St. Nick Forest Products (formerly W.R. Jones and Son Lumber Co.)	Craig	Portable circle-saw mill, dry kiln, planer/moulder	2.5
The Mill	Petersburg	Portable circle-saw mills (3)	0.5
Thorne Bay Wood Products	Thorne Bay	Portable circle-saw mill, trim saw, dry kiln, planer/moulder	8
Thuja Plicata Lumber	Thorne Bay	Portable circle-saw mills, carriage mill with circle saw headrig, shake/shingle mill	3
Viking Lumber Co.	Craig	Conventional carriage, band-saw headrig, linebar, and gang resaws, edgers, trim saw, log debarker and merchandiser, small-log line with end-dogging circular-saw scragg	32
Western Gold Cedar Products (part of Northern Star Cedar breakup)	Thorne Bay	Shake and shingle mills	1
Idle sawmills:			
Northern Star Cedar (partially subdivided)	Thorne Bay	MightyMite sawmill	
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, planing mill, 60-ft bandmill added in 2006	
Thorne Bay Enterprises (part of Northern Star Cedar breakup)	Thorne Bay	Log and lumber decks are all that remained in 2010 following a mill fire in November 2009 [Intend to rebuild]	

Table 3—Sawmills uninstalled as of 2010 in southeast Alaska included in original survey in 2000

Mill name	Location	Description
Alaska Fibre	Petersburg	Portable circle-saw mill, horizontal band resaw, edger
Annette Island Sawmill (Ketchikan Pulp Co. Hemlock Mill)	Metlakatla	Conventional carriage, single-cut band-saw headrig, linebar resaw, gang edger/resaw, trim saw, log debarker and merchandiser
Chilkoot Lumber Co.	Haines	Conventional carriage, 8-ft band headrig, 6-ft and 7-ft band resaws, debarker, chipper, edger
Gateway Forest Products (lumber)	Ketchikan	Twin band mill with end-dogging carriage, resaws, edgers, trim saw, log debarker, and merchandiser
Herring Bay Lumber	Ketchikan	Conventional carriage, circle-saw headrig, resaw edger, trim saw
Kasaan Mountain Lumber and Log	Kasaan	Conventional carriage, circle-saw headrig, circle-saw linebar resaw, edger, log debarker
Ketchikan Renaissance Group (formerly Gateway Forest Products [veneer])	Ketchikan	Rotary veneer mill, log debarker, and merchandiser
Metlakatla Forest Products	Metlakatla	Conventional carriage, circle-saw headrig with top saw, horizontal resaw, edger, log debarker, and merchandiser
Silver Bay, Inc.	Wrangell	Conventional carriages, band-saw headrigs, linebar resaw edgers, trim saw, planer mill, log debarker, and merchandiser

in the study reported getting timber from Native Corporation lands or from federal lands other than the Tongass. Sources of logs processed in the region’s wood manufacturing facilities are shown in table 5.

An average stand in southeast Alaska has about 27 percent Sitka spruce sawlogs, 57 percent western hemlock, 6 percent western redcedar (*Thuja plicata* Donn ex D. Don), and about 10 percent Alaska yellow-cedar (*Chamaecyparis nootkensis* (D. Don) Spach) (derived from van Hees 2003: table 13). Table 6 shows the breakdown of mill consumption by species for 2009 and 2010. The 2-year average of proportion by species used by the sawmills is an indication of what species the mill owners are choosing to saw versus export as whole logs. About 30 percent of the sawn wood is spruce, slightly more than the proportion in an average timber stand. Of course this could simply represent the species mix in timber sales harvested in the past few years, but it is also an indication of the fact that spruce lumber commands a premium price, particularly in larger sizes and in export markets (see tables 55 and 62 in Warren 2011). However, the proportion of western hemlock sawn is about 36 percent in 2009 and 2010, much less than the typical 57 percent in

Table 4—Estimated sawmill capacity and consumption for active and idle mills in southeast Alaska, calendar years 2009 and 2010

Mill name	Estimated mill capacity		Estimated mill consumption ^a		Estimated utilization of installed capacity	
	2009	2010	2009	2010	2009	2010
	----- Thousand board feet (Scribner log scale) -----				----- Percent -----	
D&L Woodworks	1,750	1,750	104	120	5.9	6.9
Falls Creek Forest Products ^b	3,000	3,000	60	30	2	1
Icy Straits Lumber and Milling Co.	21,000	500	430	500	2	NA ^c
Northern Star Cedar	5,000	2,500	0	0	0	0
Pacific Log and Lumber	39,600	39,600	0	0	0	0
Porter Lumber Co.	2,500	2,500	40	30	1.6	1.2
St. Nick Forest Products ^d	1,000	1,000	150	200	15	20
Silver Bay, Inc.	65,000	Uninstalled	0	0	0	NA
The Mill	8,500	6,000	20	20	0.2	0.3
Thorne Bay Enterprises	3,000	0	20	0	0.7	NA
Thorne Bay Wood Products	5,000	5,000	500	600	10	12
Thuja Plicata Lumber	7,500	7,500	200	165	2.7	2.2
Viking Lumber Co.	80,000	80,000	11,698	13,892	14.6	17.4
Western Gold Cedar Products	6,500	6,500	200	250	3.1	3.8
Total	249,350	155,850	13,422	15,807	5.4	10.1

^a Net sawlog volume, Scribner log scale, that received primary manufacture during the calendar year. This is the actual net sawlog volume used during the year to manufacture sawn products. In previous reports in this series (e.g., Alexander and Parrent 2010), this was labeled “Estimated mill production” but it is still the same data type.

^b Formerly Southeast Alaska Wood Products.

^c Capacity reduced from 21,000 owing to a major fire in July 2010. Mill consumption occurred prior to fire.

^d Formerly W.R. Jones and Son Lumber Co.

**Log exports from
Tongass National
Forest timber sales
have increased since
2008, and many
of these logs are
hemlock.**

an average stand. As can be observed in table 1, log exports from Tongass National Forest timber sales have increased since 2008, and many of these logs are hemlock. Foreign export prices for hemlock have often been high enough to make it more profitable to export the logs rather than saw them in Alaska mills. The proportion of western redcedar sawn in 2009 and 2010 (table 6) averages 31 percent, compared to only 6 percent in an average stand. Western redcedar is appraised by the Forest Service Alaska Region for shipment to domestic markets, owing to export restrictions. Sawn redcedar products are comparatively valuable, and so this species is worth focusing on for local manufacturers. Alaska yellow-cedar, by contrast, constitutes only 2 percent of sawn products, compared to 10 percent in an average stand. The Forest Service Alaska Region appraises Alaska yellow-cedar with foreign market pricing structures, under the assumption that it will be exported to foreign markets, as allowed under provisions of annual appropriations law that have been in place for over a decade. Although purchasers often sell this species as unprocessed whole logs to overseas markets, not all Alaska yellow-cedar is exported from federal timber sales. Even if a given species or diameter is appraised for out-of-state shipment, the purchaser can still process the wood in local sawmills if they choose. Individual

Table 5—Estimated sources of logs processed (source of logs included in estimated mill consumption) by southeast Alaska sawmills, calendar years 2009 and 2010

Mill name	National forest		State of Alaska ^a		Private (non-Native)		Imported		Total	
	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010
	<i>Thousand board feet (Scribner log scale)</i>									
D&L Woodworks	104	120	0	0	0	0	0	0	104	120
Falls Creek Forest Products ^b	60	30	0	0	0	0	0	0	60	30
Icy Straits Lumber and Milling Co	22	0	408	500	0	0	0	0	430	500
Porter Lumber Co.	0	30	40	0	0	0	0	0	40	30
St. Nick Forest Products ^c	150	180	0	0	0	20	0	0	150	200
The Mill	20	16	0	0	0	4	0	0	20	20
Thorne Bay Enterprises	20	0	0	0	0	0	0	0	20	0
Thorne Bay Wood Products	125	540	250	60	125	0	0	0	500	600
Thuja Plicata Lumber	200	145	0	0	0	20	0	0	200	165
Viking Lumber Co.	8,189	12,642	3,510	1,250	0	0	0	0	11,698	13,892
Western Gold Cedar Products	40	0	160	250	0	0	0	0	200	250
Total	8,929	13,703	4,368	2,060	125	44	0	0	31,719	23,666

^a Alaska Department of Natural Resources, Division of Forestry, unless noted otherwise.

^b Formerly Southeast Alaska Wood Products.

^c Formerly W.R. Jones and Son Lumber Co.

timber sales will not necessarily have the same proportions of species as an average stand. Purchasers can apply for an export permit after a timber sale is sold for species appraised for local manufacture, but they generally have to pay an extra fee (owing in part to the difference between appraised price and actual sale price). Timber from state lands can generally be exported, and there are no restrictions on exports from private lands.

Primary manufactured products not included in actual mill consumption include products from logs that do not go through the sawmill, such as chips, firewood, poles, and so forth. In 2009, there were 1,250 thousand board feet (mbf) of primary manufactured product not included in mill consumption. Of this volume, 1,200 mbf were chips made from utility logs and shipped to Canada. The remainder was firewood. The 2009 volume consisted of 233 mbf of Sitka spruce, 1,006 mbf of western hemlock, and 11 mbf of Alaska yellow-cedar. In 2010, there were 385 mbf of primary manufactured product not included in mill consumption. Of this volume, 250 mbf of chips went to Canada, and 135 mbf was firewood. The 2010 volume consisted of 47 mbf of Sitka spruce, 330 mbf of western hemlock, and 9 mbf of Alaska yellow-cedar.

Table 6—Estimated southeast Alaska sawmill consumption^a by species, calendar years 2009 and 2010

Mill name	Estimated mill consumption		Sitka spruce ^b		Western hemlock ^c		Western redcedar ^d		Alaska yellow-cedar ^e	
	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010
<i>Thousand board feet (Scribner log scale)</i>										
D&L Woodworks	104	120	69	65	12	15	0	0	23	40
Falls Creek Forest Products ^f	60	30	30	10	25	15	0	1	5	4
Icy Straits Lumber and Milling Co.	430	500	200	80	100	120	100	300	30	0
Porter Lumber Co.	40	30	0	1	36	29	4	0	0	0
St. Nick Forest Products ^g	150	200	23	20	15	100	105	70	8	10
The Mill	20	20	5	4	14	14	0	0	1	2
Thorne Bay Enterprises	20	0	20	0	0	0	0	0	0	0
Thorne Bay Wood Products	500	600	100	180	350	240	40	120	10	60
Thuja Plicata Lumber	200	165	20	50	1	0	162	110	17	5
Viking Lumber Co.	11,698	13,892	4,098	3,998	4,800	4,759	2,667	4,912	133	223
Western Gold Cedar Products	200	250	0	0	0	0	190	250	10	0
Total	13,422	15,807	4,565	4,408	5,353	5,292	3,268	5,763	237	345

^a Net sawlog volume, Scribner log scale, that received primary manufacture during the calendar year. This is the actual net sawlog volume used during the year to manufacture sawn products. In previous reports in this series (e.g., Alexander and Parrent 2010), this was labeled “Estimated...sawmill production...” but it is still the same data type.

^b Sitka spruce (*Picea sitchensis* (Bong.) Carr.).

^c Western hemlock (*Tsuga heterophylla* (Raf.) Sarg.).

^d Western redcedar (*Thuja plicata* Donn. ex D. Don).

^e Alaska yellow-cedar (*Chamaecyparis nootkatensis* (D. Don) Spach).

^f Formerly Southeast Alaska Wood Products.

^g Formerly W.R. Jones and Son Lumber Co.

As Brackley and Crone (2009) noted, information on the production of shop lumber began to be collected in 2005. Information on the production of dimension lumber, cants, and “other” products is also gathered. Evans (2000) defined shop lumber as lumber that is further processed into products such as door and window parts. In general, shop lumber is worth more than dimension lumber (Brackley and Crone 2009). In 2009 and 2010, 43 percent of lumber produced in southeast Alaska was shop lumber (table 7). Dimension lumber is used for framing, joists, planks, and so forth. Dimension lumber was 23 percent of production in 2009 and 2010. Cants and flitches are large slabs of wood that vary in dimension and are meant to

USDA Forest Service



PNW-FS-1600-21 (1/2008)
OMB 0596-0163 (Exp. 12/2010)

Dear Reader,

To help us improve our publications and service to you, please take a few minutes and share your comments about the publication you received. If you would like to discuss this publication, please include your name and telephone number on the cut card at the bottom. Your response will be very valuable to us as we work to meet your needs.

You can also contact us on the Web at:

<http://www.fs.fed.us/pnw/contact/index.shtml>

BURDEN AND NONDISCRIMINATION STATEMENTS

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0596-0163. The time required to complete this information collection is estimated to average 3 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or part of an individual's income is derived from any public assistance. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, 1400 Independence Avenue, SW, Washington, DC 20250-9410 or call toll free (866) 632-9992 (voice). TDD users can contact USDA through local relay or the Federal relay at (800) 877-8339 (TDD) or (866) 377-8642 (relay voice). USDA is an equal opportunity provider and employer.

READER RESPONSE CARD

Title or number of publication PNW-RN-568

Please rate this publication:

	Extremely unsatisfied					Extremely satisfied	
1. Ease in finding the publication	1	2	3	4	5		
2. Ease in ordering the publication	1	2	3	4	5		
3. Usefulness of information	1	2	3	4	5		
4. Clarity of content	1	2	3	4	5		
5. Effectiveness of organization	1	2	3	4	5		
6. Helpfulness of graphics (photos, tables, charts)	1	2	3	4	5		

Did you obtain this publication online or in print form ?

How can we better serve you?

Check all that apply to you:

- | | | | | | | | |
|---|--------------------|------------------|-----------------------------------|-------------------------------------|---|---|---|
| 7. How likely are you to request Pacific Northwest Research Station publications in the future? | Extremely unlikely | Extremely likely | <input type="checkbox"/> Educator | <input type="checkbox"/> Researcher | | | |
| | 1 | 2 | 3 | 4 | 5 | <input type="checkbox"/> Landowner | <input type="checkbox"/> Resource manager |
| | | | | | | <input type="checkbox"/> Media professional | <input type="checkbox"/> Other (please specify) |
| | | | | | | <input type="checkbox"/> Nonprofit representative | |

Thank you very much for helping us to improve our publications and service.

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE \$300



NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

BUSINESS REPLY MAIL
FIRST-CLASS MAIL PERMIT NO. 10040 WASHINGTON, DC
POSTAGE WILL BE PAID BY USDA FOREST SERVICE



COMMUNICATIONS & APPLICATIONS PROGRAM
PNW RESEARCH STATION
PO BOX 3890
PORTLAND OR 97208-3890



be remanufactured into other products. In 2009 and 2010, about 32 percent of sawn production was in the form of cants, fitches, railroad ties, and large timbers. The “other” category in table 7 is primarily cedar shakes, shingles, and bolts, although it can also include music wood and other miscellaneous products.

Destinations for Alaska-milled lumber have shifted through time. Shipments of finished products milled in southeast Alaska to domestic markets have become more significant over the past 10 to 15 years compared to prior decades, when virtually all production from Alaska was shipped overseas. Information about where manufactured products from southeast Alaska are sold and how those end-markets shift is important in estimating long-term derived demand for those products. Morse (2000) listed domestic market sales of lumber products from southeast Alaska as a monitoring issue. Morse (2000) stated that when domestic sales became significant, that shift suggested the need for a revised long-term derived

Table 7—Estimated southeast Alaska sawmill consumption by product, calendar years 2009 and 2010^a

Mill name	Estimated mill consumption		Dimension lumber		Shop lumber		Cants		Other ^b	
	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010
<i>Thousand board feet (Scribner log scale)</i>										
D&L Woodworks	104	120	33	100	70	20	0	0	0	0
Falls Creek Forest Products ^c	60	30	20	30	0	0	10	0	30	0
Icy Straits Lumber and Milling Co.	430	500	175	80	60	260	195	160	0	0
Porter Lumber Co.	40	30	14	30	11	0	15	0	0	0
St. Nick Forest Products ^d	150	200	23	70	128	130	0	0	0	0
The Mill	20	20	20	3	0	0	0	17	0	0
Thorne Bay Enterprises	20	0	20	0	0	0	0	0	0	0
Thorne Bay Wood Products	500	600	217	150	283	324	0	126	0	0
Thuja Plicata Lumber	200	165	160	125	27	0	13	40	0	0
Viking Lumber Co.	11,698	13,892	2,880	2,666	5,540	5,807	3,279	5,419	0	0
Western Gold Cedar Products	200	250	0	0	0	0	0	0	200	250
Total	13,422	15,807	3,562	3,254	6,118	6,541	3,512	5,762	230	250

^a Net sawlog volume, Scribner log scale, that received primary manufacture during the calendar year. This is the actual net sawlog volume used during the year to manufacture sawn products. In previous reports in this series (e.g., Alexander and Parrent 2010), this was labeled “Estimate sawmill production...” but it is still the same data type.

^b Other forest products includes primarily cedar shakes, shingles, and bolts.

^c Formerly Southeast Alaska Wood Products.

^d Formerly W.R. Jones and Son Lumber Co.

demand assessment. Owing in part to the increase in sales to domestic markets brought to light through the mill surveys, Brackley et al. (2006b) recalculated long-term derived demand for Tongass timber previously estimated by Brooks and Haynes (1997).

Detailed information about the destination of wood products manufactured in southeast Alaska in 2009 and 2010 is presented in table 8. Halbrook et al. (2009) provides additional information about market destinations of Alaska-made wood products.

Conclusion

Struggles in the timber industry in southeast Alaska reflected by the mill capacity findings in this study mirror recent national trends. In Oregon, the largest timber and softwood lumber producer in the Nation, timber harvest in 2009 was the lowest it had been since the middle of the Great Depression (Dietz 2010). Western timber markets began to recover during the first half of 2010, fueled by optimism

Table 8—Estimated destination of products manufactured from logs processed by southeast Alaska sawmills in calendar years 2009 and 2010 (net sawlog volume, Scribner log scale, that received primary manufacture during the calendar year)

Mill name	Alaska		Other U.S. states		Canada		Pacific Rim		Europe		Total	
	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010
	<i>Thousand board feet (Scribner log scale)</i>											
D&L Woodworks	104	120	0	0	0	0	0	0	0	0	104	120
Falls Creek Forest Products ^a	60	30	0	0	0	0	0	0	0	0	60	30
Icy Straits Lumber and Milling Co	430	450	0	50	0	0	0	0	0	0	430	500
Porter Lumber Co.	40	30	0	0	0	0	0	0	0	0	40	30
St. Nick Forest Products ^b	150	200	0	0	0	0	0	0	0	0	150	200
The Mill	20	20	0	0	0	0	0	0	0	0	20	20
Thorne Bay Enterprises	20	0	0	0	0	0	0	0	0	0	20	0
Thorne Bay Wood Products	500	600	0	0	0	0	0	0	0	0	500	600
Thuja Plicata Lumber	66	20	134	145	0	0	0	0	0	0	200	165
Viking Lumber Co.	0	0	6,282	9,586	0	0	5,416	4,306	0	0	11,698	13,892
Western Gold Cedar Products	10	5	190	245	0	0	0	0	0	0	200	250
Total	1,400	1,475	6,606	10,026	0	0	5,416	4,307	0	0	13,422	15,807

^a Formerly Southeast Alaska Wood Products.

^b Formerly W.R. Jones and Son Lumber Co.

in domestic housing markets and strong Asian markets. However, when the home-buyer credit expired, new home starts fell, and remain lower than expected (Walker 2010). The lone stabilizing factor in Western timber and log markets is export demand, primarily from China and Korea. However, exports are not likely to keep prices from falling; experts expect exports to moderate falling prices (Walker 2010). Domestic markets are not projected to recover soon, and timber prices are likely to continue to fall. When demand for logs does recover, the lean inventories being held throughout the domestic supply chain make it probable that there will be a temporary price spike until inventories can be rebuilt (Walker 2010). Alaskan wood products markets are closely tied to North America and the Pacific Rim, and are deeply affected by tight credit, low cost margin issues, and the continued depression in the domestic housing market.

The stabilizing factor in Western timber and log markets is export demand, primarily from China and Korea.

Metric Equivalents

When you know:	Multiply by:	To find:
Feet (ft)	0.305	Meters
Board feet, log scale	0.0045	Cubic meters, logs

Literature Cited

- Alaska National Interest Lands Conservation Act [ANILCA] of 1980;** 16 U.S.C. 3101 et seq.
- Alexander, S.J.; Parrent, D.J. 2010.** Estimating sawmill processing capacity for Tongass timber: 2007 and 2008 update. Res. Note PNW-RN-565. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 15 p.
- Brackley, A.M.; Crone, L.K. 2009.** Estimating sawmill processing capacity for Tongass timber: 2005 and 2006 update. Res. Note PNW-RN-561. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 15 p.
- Brackley, A.M.; Parrent, D.J.; Rojas, T.D. 2006a.** Estimating sawmill processing capacity for Tongass timber: 2003 and 2004 update. Res. Note PNW-RN-553. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 15 p.
- Brackley, A.M.; Rojas, T.D.; Haynes, R.W. 2006b.** Timber products output and timber harvests in Alaska: projections for 2005–25. Gen. Tech. Rep. PNW-GTR-677. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 33 p.
- Brooks, D.J.; Haynes, R.W. 1997.** Timber products output and timber harvests in Alaska: projections for 1997–2010. Gen. Tech. Rep. PNW-GTR-409. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 17 p.
- Dietz, D. 2010.** A bitter harvest for wood products: to an industry hardened by three decades of hard knocks, this is still a body blow. *The Register Guard*, Eugene, OR. August 22, 2010. <http://www.registerguard.com/csp/cms/sites/web/news/cityregion/25178789-57/billion-lumber-depression-timber-mill.csp>. (October 7, 2011).
- Evans, D. 2000.** *Terms of the trade*. 4th ed. Eugene, OR: Random Lengths Publications, Inc. 423 p.

Halbrook, J.M.; Morgan, T.A.; Brandt, J.P.; Keegan, C.E., III; Dillon, T.; Barrett, T.M. 2009. Alaska's timber harvest and forest products industry, 2005. Gen. Tech. Rep. PNW-GTR-787. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 30 p.

Kilborn, K.A.; Parrent, D.J.; Housley, R.D. 2004. Estimating sawmill processing capacity for Tongass timber. Res. Note PNW-RN-545. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 12 p.

Mackovjak, J. 2010. Tongass timber: a history of logging and timber utilization in southeast Alaska. Durham, NC: Forest History Society. 386 p.

Morse, K.S. 2000. Responding to the market demand for Tongass timber: using adaptive management to implement Sec. 101 of the Tongass Timber Reform Act. R10-MB-413. Juneau, AK: U.S. Department of Agriculture, Forest Service, Alaska Region. 47 p.

Tongass Timber Reform Act [TTRA] of 1990; Public Law 101-626, 104 Stat. 4426.

van Hees, W. 2003. Forest resources of southeast Alaska, 2000: results of a single-phase systematic sample. Res. Pap. PNW-RP-557. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 96 p.

Walker, S. 2010. Western timber, log markets on shakey ground as housing starts remain slow. RISI Log Lines, Sept. 3, 2010. <http://www.risiinfo.com>. (June 22, 2011).

Warren, D.D. 2011. Production, prices, employment, and trade in Northwest forest industries, all quarters 2010. Resour. Bull. PNW-RB-260. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 161 p.

U.S. Department of Agriculture, Forest Service [USDA FS]. 1997. Tongass land and resource management plan revision record of decision. R10-MB-338a. Juneau, AK: Alaska Region. 44 p.

Pacific Northwest Research Station

Web site	http://www.fs.fed.us/pnw/
Telephone	(503) 808-2592
Publication requests	(503) 808-2138
FAX	(503) 808-2130
E-mail	pnw_pnwpubs@fs.fed.us
Mailing address	Publications Distribution Pacific Northwest Research Station P.O. Box 3890 Portland, OR 97208-3890

The **Forest Service** of the U.S. Department of Agriculture is dedicated to the principle of multiple use management of the Nation's forest resources for sustained yields of wood, water, forage, wildlife, and recreation. Through forestry research, cooperation with the States and private forest owners, and management of the National Forests and National Grasslands, it strives—as directed by Congress—to provide increasingly greater service to a growing Nation.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, 1400 Independence Avenue, SW, Washington, DC 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.



Federal Recycling Program
Printed on Recycled Paper



1023165831

U.S. Department of Agriculture
Pacific Northwest Research Station
333 SW First Avenue
P.O. Box 3890
Portland, OR 97208-3890

Official Business
Penalty for Private Use, \$300