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# Timber Resource Statistics for the Yakataga Inventory Unit, Alaska, 1976

Willem W.S. van Hees



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**Author**

WILLEM W. S. VAN HEES is a research forester for Alaska Forest Inventory and Analysis located at Forestry Sciences Laboratory, Pacific Northwest Forest and Range Experiment Station, 2221 E. Northern Lights Blvd., Anchorage, Alaska 99508.

## Abstract

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Statistics on forest area, total gross and net timber volumes, and annual net growth and mortality are presented from the 1976 timber inventory of the Yakataga unit, Alaska. Timberland area is estimated at 209.3 thousand acres (84.7 thousand ha), net growing stock volume at 917.1 million cubic feet (26.0 million m<sup>3</sup>), and annual net growth and mortality at 13.6 and 1.2 million cubic feet (385.3 and 32.9 thousand m<sup>3</sup>), respectively.

Keywords: Forest surveys, timber inventory, statistics (forest), resources (forest), Alaska (south-central).

## Summary

This report for the 661.9-thousand-acre (267.9-thousand-ha) Yakataga timber inventory unit contains estimates of land and forest area, total **gross** and net timber volumes, and annual net growth and mortality developed from data collected for the 1976 Yakataga timber resources inventory. The first estimates for forests of the Yakataga area, made in 1962, were based on aerial photo reconnaissance; estimates did not include on-the-ground sampling. The 1976 effort, however, was the first complete forest inventory of the unit; it included measurements of growth and mortality. Compilation of inventory data produced the following estimates of forest resources in the Yakataga unit: timberland area 209.3 thousand acres (84.7 thousand ha), net growing stock volume 917.1 million cubic feet (26.0 million m<sup>3</sup>), annual net growth 13.6 million cubic feet (385.3 thousand m<sup>3</sup>), and annual mortality 1.2 million cubic feet (32.9 thousand m<sup>3</sup>).

## Preface

Forest Inventory and Analysis (FIA) is a nationwide project of the USDA Forest Service authorized by the Forest and Rangeland Renewable Resources Research Act of 1978. **Work** units of the project, located at Forest Service Experiment Stations, conduct forest resource inventories throughout the 50 States. The Pacific Northwest Forest and Range Experiment Station at Portland, Oregon, is responsible for forest inventories in Alaska, California, Hawaii, Oregon, and Washington.

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## Highlights<sup>1/</sup>

	<i>Thousand acres</i>	<i>Thousand hectares</i>
Total Yakataga		
inventory unit area:	661.9	267.9
With forest	284.5	115.1
With nonforest	315.1	127.5
With non-Census water	24.8	10.0
With Census water	37.6	15.2
Forested area:		
Timberland	209.3	84.7
Other forest land	75.2	30.4
Timberland composition:		
Old-growth sawtimber	78.6	31.8
Young-growth sawtimber	54.8	22.2
Poletimber	27.3	11.1
Seedlings and saplings, and nonstocked	48.6	19.7
Timberland forest type composition:		
Hemlock-spruce	14.2	5.7
Sitka spruce	127.0	51.4
Mountain hemlock	10.3	4.2
Western hemlock	13.6	5.5
Alaska-cedar	<u>1/</u>	<u>1/</u>
Black cottonwood	44.2	17.9

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1/ No data were collected.

	<u>All growing stock</u>		<u>Sawtimber growing stock</u>	
	<i>Million cubic feet</i> <u>2/</u>	<i>Million cubic meters</i> <u>2/</u>	<i>Million board feet</i> <u>3/</u>	<i>Million cubic meters</i> <u>4/</u>
Volumes on timberland:				
Total gross volume	974.2	27.6	5,191.8	24.2
Total net volume	917.1	26.0	4,567.8	22.7
Annual net growth	13.6	<b>0.4</b>	43.8	0.2
Annual net mortality	1.2	<b>5/</b>	4.3	<u>5/</u>

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2/ Volume of roundwood for live trees 5.0 inches (12.7 cm) in d.b.h. and larger.

3/ Net volume, International 1/4-inch rule, for trees 11.0 inches (**20** cm) in d.b.h. and larger.

4/ Volume of roundwood for trees 11.0 inches (28 cm) in d.b.h. and larger.

5/ Less than 50,000 cubic meters.

## Introduction

The Yakataga timber inventory unit is located in the eastern portion of the south-central Alaska coast (fig. 1). The west boundary of the unit is Cape Suckling, approximately **144°00'** W. longitude; the east boundary is Yakutat Bay, approximately **139°30'** W. longitude. The unit is entirely coastal and roughly straddles the **60°00' N.** latitude line. Geographic limits are Robinson Mountains and Malaspina Glacier on the north and the Gulf of Alaska on the south.

Timber resources of the Yakataga unit can be characterized by three distinct regions: (1) from Yakutat Bay on the east end to Icy Bay near the center of the unit, (2) from Icy Bay to Cape Yakataga, and (3) from Cape Yakataga to Cape Suckling on the west end of the unit.

From Yakutat Bay to Icy Bay, timber resources occur in a 2- to 4-mile-wide (**3.2- to 6.4-km**) band between the coast and Malaspina Glacier. Areas with immature black cottonwood are found on river deltas, but the soil on these deltas is new and developing, building up fast enough to kill trees by deposition of new soil. Sitka spruce is also found in this region, in narrow bands along old beach lines.

Timber resources in the region from Icy Bay to Cape Yakataga are in a narrower band, 1-2 miles wide (**1.6-3.2 km**). Forest types are basically Sitka spruce and hemlock (both western and mountain hemlock), with hemlock predominantly on mountain slopes. Volumes per acre are high on the coastal flats but diminish quickly as elevation increases.

The region from Cape Yakataga to Cape Suckling is a flat plain up to 8 miles (**12.9 km**) wide and supports muskeg with scattered spruce and cottonwood. Along the slopes of Robinson Mountains, up to 1,500 feet (**457.2 m**) elevation, there are areas of dense spruce stands and scattered hemlock.

Data compiled from the 1976 timber inventory of the Yakataga unit provided estimates of forest area, total gross and net timber volumes, and annual net growth and mortality. Timberland area is estimated at **209.3** thousand acres (**84.7** thousand ha), net growing stock volume at **917.1** million cubic feet (**26.0** million  $m^3$ ), and net annual growth and mortality at **13.6** and **1.2** million cubic feet (**0.4** and **0.03** million  $m^3$ ), respectively.

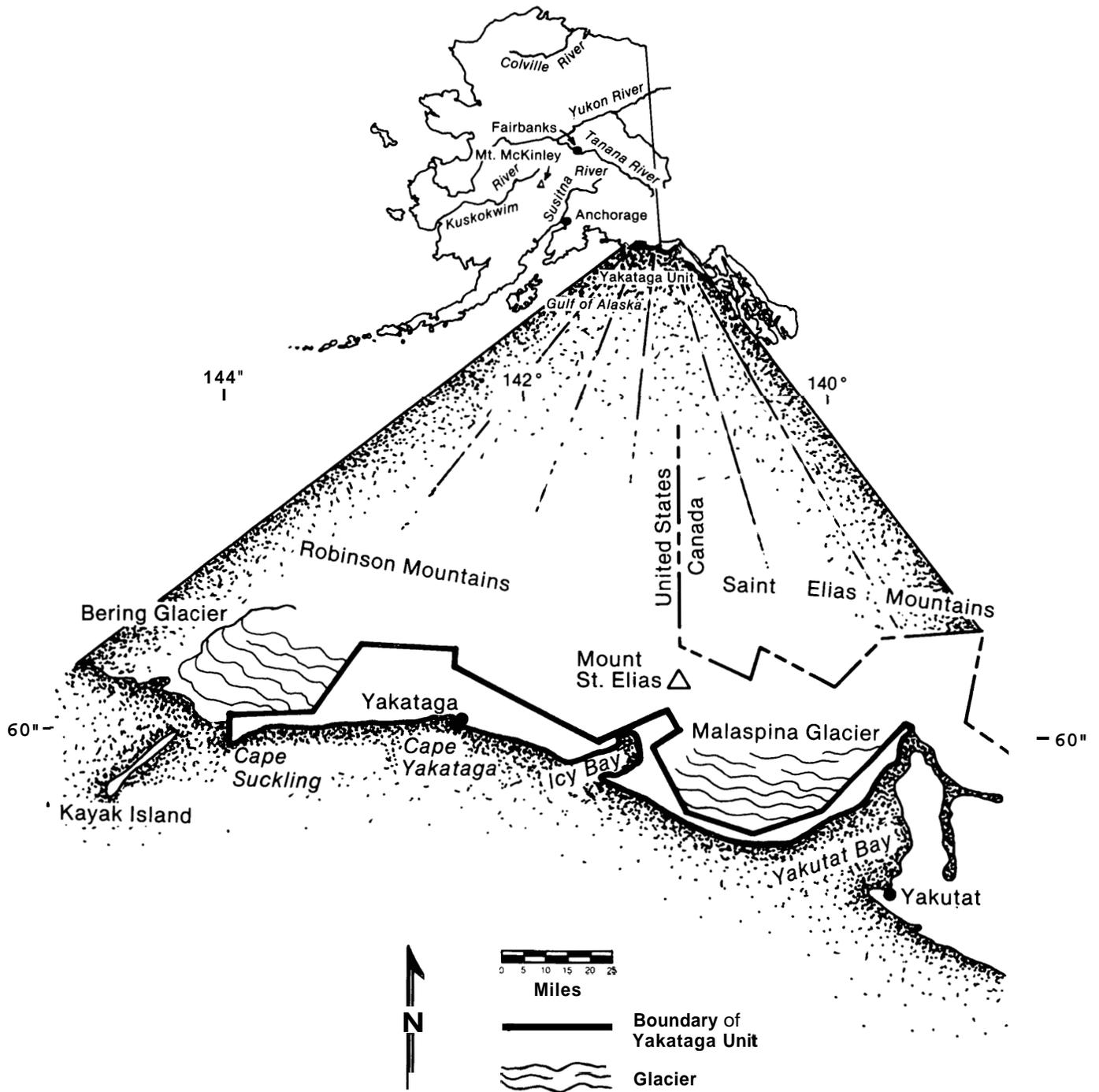


Figure 1.--Yakataga inventory unit.

## Inventory procedures

The estimates of area and timber volumes from the 1976 timber inventory are based on a double sampling procedure (Bickford 1952). In the first phase of the procedure, we systematically distributed over 1:15,840 scale aerial photographs enough points to satisfy specific levels of statistical precision. A circular, 1-acre (0.4-ha) plot around each photo point was then interpreted to identify land type, forest type, and volume strata. From these interpreted photo points, we randomly selected a subsample from all land types, and re-examined them on the photos. All plots in the subsample originally classified as timberland, along with any points questionably classed as timberland, were then examined on the ground.

For the Yakataga inventory unit, the sampling procedure yielded 5,254 photo points and 187 ground locations. Each ground location was in exactly the same spot as its associated photo plot. A 10-point cluster of variable-radius plots was established at each ground location, and at each of the 10 points, a 62.5 basal-area-factor prism was used to select sample trees on which detailed measurements of tree density, condition, growth, and volume were made. Area classifications and measurements of volume on these ground plots served as the basis **for** the area and volume estimates presented in this report.

Estimates of growth volumes presented are based on increment borings; the estimates of mortality were based on estimates of volume in trees that died in the 5-year period before the inventory was taken.

## Ownership Statistics

Statistics on land ownership are presented in this report, but uncertainties exist regarding changes of land status associated with Alaska Native and State of Alaska land selections and wilderness area withdrawals. These changes in land status are the result of Federal legislation: the Alaska Statehood Act of 1958, Public Law 85-508; the Alaska Native Claims Settlement Act of 1971, Public Law 92-203; and the Alaska National Interest Lands Conservation Act, Public Law 96-487.

Additional statistics on ownership and reserved land status will be published when the status of land shifts is more clear. It is already clear, however, that the Alaska Native and State of Alaska land selections are concentrating partly on timberlands, which will reduce the proportion of highly productive timberland under Federal stewardship.

**Reliability of  
Inventory Data**

All area and volume statistics reported here are estimates based on sampling and are subject to sampling error. sampling errors **for** all estimates presented in the tables are available on request. The reliability of the inventory is expressed in terms **of** relative sampling error at the 68-percent confidence level:

	<u>Design sampling error</u>	<u>Sampling error achieved</u>	<u>Sampling error of the total estimate</u>
	- - - - - <b>Percent</b> - - - - -		
Timberland area:			
Per million acres	3.0	3.1	
For the total 209.3 thousand acres			6.7
Other forest land area:			
Per million acres	10.0	<b>5.4</b>	
For the total 75.2 thousand acres			19.6
Net growing stock volume:			
Per billion cubic feet	10.0	9.6	
For the total 917.1 million ft <sup>3</sup>			10.0
Net growth of growing stock:			
Per billion cubic feet	10.0	1.9	
For the total 13.6 million ft <sup>3</sup>			16.1

For the Yakataga inventory unit, we estimate 209,200 acres of timberland,  $\pm$  6.7 percent, yielding 68-percent confidence limits of 195,184 and 223,316 acres. A 68-percent confidence level means that if repeated samples are taken **of** this population, the estimate of total volume would be between 195,184 and 223,316 acres 68 percent of the time.

For our estimates of other forest land, net growing stock volume, and net growth of growing stock we met our design sampling error goals. We slightly exceeded our design sampling goal for timberland area.

## Terminology<sup>6/</sup>

Census water--Areas of water classed as water by the Bureau of the Census that are at least 40 acres (16 ha) in size with a minimum width of one-eighth mile (200 m). (Also see non-Census water.)

Class of timber--A classification of trees as growing stock, cull, and salvable dead. Growing stock trees are subdivided into poletimber and sawtimber trees.

Cull trees--Live trees of sawtimber or poletimber size that are not merchantable for saw logs nor are they likely to become merchantable because of defect, rot, or species.

Diameter class--A classification of trees based on diameter of the tree outside the bark measured at breast height, 4-1/2 feet (1.37 m) above the ground. D.b.h. is the common abbreviation for "diameter at breast height." Each 2-inch diameter class is assigned to the appropriate even inch at midpoint. For example, the 6-inch class includes trees 5.0 through 6.9 inches d.b.h.

Forest land--Land at least 16.7 percent stocked by live trees of any size, or land formerly having such tree cover and not currently developed for nonforest use. The minimum area for classification as forest land or subclasses of forest land is 1 acre (0.4 ha). Roadside, streamside, and shelterbelt strips of timber must be at least 120 feet (36 m) wide to be classified as forest land. Unimproved road and trails, streams, and clearings in forest areas must be less than 120 feet wide to be classified as forest land. (Also see timberland, other forest land, reserved forest land, and nonforest land.)

Forest types--A classification of forest land based on the species forming a plurality of stocking on the area currently occupied by tree cover. The following summarizes the forest types of the Yakataga unit:

Alaska-cedar--Forests in which Alaska-cedar comprises the plurality of the stocking. Common associates are mountain or western hemlock and Sitka spruce.

Black cottonwood--Forests in which black cottonwood comprises the plurality of the stocking. A common associate is Sitka spruce.

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<sup>6/</sup> Terminology is from USDA Forest Service, Forest Service Handbook, Title 4813.1, 1967, and the manual of field instructions for the forest survey of Yakataga, 1975.

Hemlock-spruce--Forests in which **50** percent or more of the stand is western or mountain hemlock and where Sitka spruce comprises **30-49** percent of the stocking. Common associates are Alaska-cedar and cottonwood.

*Mountain* hemlock--Forests in which mountain hemlock comprises the plurality of the stocking. Common associates are western hemlock and Alaska-cedar.

Paper birch--Forests in which paper birch comprises the plurality of the stocking. Common associates are cottonwood and occasionally balsam poplar.

**Sitka** spruce--Forests in which Sitka spruce comprises the plurality of the stocking. Common associates are western hemlock and occasionally cottonwood and Alaska-cedar.

Western hemlock--Forests in which western hemlock comprises the plurality of the stocking. Common associates are Sitka spruce, Alaska-cedar, mountain hemlock, and occasionally cottonwood.

Gross growth--Net annual growth plus the annual growth on mortality.

Growing stock trees--All live trees except cull trees.

Growing stock volume--Net volume in cubic feet of live sawtimber and poletimber growing stock trees from stump to a minimum 4.0-inch (10-cm) top (of central stem) outside the bark. Net volume equals gross volume less deductions for rot and missing bole sections.

Growth--See net annual growth, gross growth, and ingrowth.

Hardwoods--(1) Trees that are angiosperms, usually broad-leaved, and often deciduous. (2) Forests predominantly cottonwood or red alder, singly or in combination.

Ingrowth--The net volume of trees that grew into poletimber or sawtimber growing stock during a specified year.

Inoperable timberland--Includes areas of timberland that are presently inoperable because of marginal volume (usually less than 20,000 board feet per acre) or rough, rocky, cliffy, or otherwise broken terrain. This also includes pockets of high volume timberland that are isolated or more than one-fourth mile (396 m) from operable timberland areas. (Also see operable timberland.)

International 1/4-inch rule--The standard board-foot log rule adopted nationally by the USDA Forest Service for the presentation of inventory volume statistics.

Land area--Area reported as land by the Bureau of the Census. Total land area includes dry land and land temporarily or partially covered by water such as marshes, *swamps*, and river flood plains (omitting tidal flats below mean high tide); streams, sloughs, estuaries, and canals less than one-eighth mile (200 m) wide; and lakes, reservoirs, and ponds less than 40 acres (16 ha) in area. (Also see non-Census water.)

Land class--A classification of land by major use, such as timberland, other forest, and nonforest. The minimum size area for classification is 1 acre (0.4 ha).

Mean annual increment (MAI)--A measure of the productivity of forest land in terms of the average increase in cubic-foot volume per acre per year. The FIA minimum standard for timberland is the ability to produce 20 cubic feet per acre (1.4 m<sup>3</sup>/ha) per year.

Merchantable saw log--For softwood sawtimber, a merchantable saw log must be at least 12 feet (3.6 m) long to a minimum top of 7.0 inches (18 cm) outside the bark or to a top diameter inside the bark that is 40 percent of d.b.h. At least one-third of its board-foot volume must be in sound, recoverable wood. For hardwood sawtimber, a merchantable saw log must be at least 8 feet (2.5 m) long to a minimum top of 9.0 inches (23 cm) outside the bark or to a top diameter inside the bark that is 40 percent of d.b.h. At least half its board-foot volume must be in sound, recoverable wood.

Mortality--Number of or the sound wood volume from live trees dying from natural causes during a specified year.

Net annual growth--The increase in net volume of wood for growing stock trees during a specified year. Components of net annual growth are: (a) the increment in net volume of trees alive at the beginning of the specified year, including that on periodic mortality, plus (b) the net volume of trees reaching sawtimber or poletimber size during the year, minus (c) the net volume of trees that died during the year, minus (d) the net volume lost to tree decay during the year.

Net volume--The gross volume of a tree less deductions for rot, sweep, or other defect affecting product use.

Non-Census water--Areas of water classed as land area by the Bureau of the Census, but that are either 1-40 acres (0.4-16 ha) in area or have a minimum width of 120 feet (36 m) and a maximum width of one-eighth mile (200 m). (Also see Census water.)

Nonforest land--Land that does not qualify as forest land. Includes land that has never supported forests and lands formerly forested where forest use is precluded by development for nonforest uses. Included are lands used for agricultural crops, improved pasture, residential areas, and city parks, improved roads, operating railroads and their right-of-way clearings, and pipeline clearings. If intermingled in forest areas, unimproved roads, streams, canals, and nonforest strips must be more than 120 feet (36 m) wide, and clearings or other areas must be 1 acre (0.4 ha) or larger to qualify as nonforest land.

Nonstocked land--Timberland less than 16.7 percent stocked with growing stock trees.

Old-growth stands--Stands with at least 50 percent of the live-tree stocking per acre comprised of old-growth trees.

Old-growth trees--Trees that have reached or passed the age of physiological maturity, assumed to 150 years for coastal Alaska.

Operable timberland--All timberland considered silviculturally and economically operable. This includes areas on stable soils, on slopes that are not too steep to log without causing serious site damage, and stands valuable enough to pay logging costs using methods and costs in effect at the time of the inventory. Stands that require new, undeveloped logging methods are not in the operable class.

Other forest land--Unproductive forest land incapable of yielding crops of industrial wood because of adverse site conditions. This includes sterile or poorly drained forest land, subalpine forests, and steep, rocky areas where topographic conditions are likely to prevent management for timber production indefinitely. In coastal Alaska, this includes forest lands that are not capable of producing 8,000 board feet per acre (net International 1/4-inch rule).

Poletimber stands--Stands at least 16.7 percent stocked with growing stock trees, with half or more of this stocking in poletimber and sawtimber trees, and with poletimber stocking exceeding that of sawtimber.

Poletimber trees--Growing stock trees 5.0 to 10.9 inches (12.5 to 27.5 cm) in d.b.h.

Reserved forest land--Forest land withdrawn from timber utilization through statute or administrative regulation.

Rotten trees--Live trees at least **5.0** inches (**12.7** cm) in d.b.h. that do not contain a saw log and are not likely to, primarily because of rot.

Rotten cull trees--Live trees that do not contain a merchantable saw log and are not likely to, primarily because of rot.

Rough trees--Live trees that do not contain a merchantable saw log and are not likely to, primarily because of roughness, poor form, or they are noncommercial species.

Salvable dead trees--Standing or down dead trees of commercial species at least **11.0** inches (28 cm) in d.b.h., containing at least **50** percent of their volume in sound wood, and with at least one merchantable saw log.

Sapling trees--Trees **1.0** to **4.9** inches (**2.5** to 12.5 cm) in d.b.h.

Saw log--A log meeting minimum standards of diameter, length, and defect, including logs at least 8 feet (**2.5** m) long, sound and straight, and with a minimum small-end diameter of **6.0** inches (**15** cm) inside the bark for softwoods and **8.0** inches (20 cm) for hardwoods.

Saw-log portion--The bole of sawtimber trees between the stump and the saw-log top.

Sawtimber stands--Stands at least **16.7** percent stocked with growing stock trees, with half or more of this stocking in sawtimber or poletimber trees, and with sawtimber stocking at least equal to that of poletimber.

Sawtimber trees--Growing stock trees at least **11.0** inches (**28** cm) in d.b.h.

Sawtimber volume--Net volume of sawtimber trees measured in board feet. Net volume equals **gross** volume less deduction for rot, sweep, crook, and other defects that affect product use.

Seedling and sapling stands--Stands at least **16.7** percent stocked with growing stock trees and with saplings and/or seedlings comprising more than half this stocking.

Seedling--An established tree less than 1.0 inch (**2.5** cm) in d.b.h.

Site class--A classification of forest land based on its' capacity to grow crops of industrial wood.

Softwoods--Coniferous trees, usually evergreen with needles or scalelike leaves. Species in coastal Alaska are Sitka spruce, western hemlock, mountain hemlock, Alaska-cedar, western redcedar, lodgepole pine, Pacific silver fir, subalpine fir, and Pacific yew.

Soil classes--Developed by Freeman R. Stephans (Stephans and others **1969**), these classes were designed to aid in gathering facts needed for resource and multiple use management decisions:

F1B IMMATURE--Uplifted beach soils.

F3 IMMATURE--Morainal soils.

F3G IMMATURE--Coarse outwash soils, showing no flood deposits, well drained, with organic duff over undeveloped outwash material.

F3L IMMATURE--Morainal soils with many small lakes on the moraines.

F3N IMMATURE--Alluvial soils on outwash material next to old stream beds. These soils are 4-6 inches (10.2-15.2 cm) deep with a loam texture.

F3T IMMATURE--Alluvial soils on outwash material, with a strong soil profile.

F3T2 IMMATURE--Young, moderately drained alluvial soils with a poor soil profile and a water table at 6-8 inches (15.2-20.3 cm) depth.

F4F IMMATURE--Heavy, gray alluvial **loam** or brown alluvial sandy loam with no gravel or cobbles in the upper 12-18 inches (30.5-45.8 cm).

F5 IMMATURE--Alluvial soils, showing flood deposits, with surface water present.

F1 MATURE--Well- to moderately well-drained soils with sandy loam to silt loam textures. These soils have at least **10** inches (25.4 cm) of mineral soil over bedrock.

F2R MATURE--These soils are essentially just a duff layer over bedrock.

Stand size class--A classification of forest land based on the predominant size of timber present: sawtimber, poletimber, or seedlings and saplings.

Stocking--A measure of the area occupied by trees of specified classes. **FIA** forest inventories consider three categories of stocking: all live trees, growing stock trees, and desirable trees. Stocking of all live trees is used to delineate forest land **and** forest types. Stocking of growing stock trees is used in classifications of stand size and stand age. Stocking of desirable trees is used to delineate area condition classes.0

Timberland--Forest land producing or capable of producing crops of industrial wood and not withdrawn from timber utilization. Areas qualifying as timberland could produce in excess of 20 cubic feet per acre (1.4 m<sup>3</sup>/ha) per year of industrial wood under management. In old-growth forests of coastal Alaska, this is equated to stands that could produce 8,000 board feet per acre (net International 1/4-inch rule).

Tree size class--A classification of sawtimber trees, poletimber trees, saplings, and seedlings based on the diameter at breast height.

## Names of Trees <sup>L/</sup>

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Common name	Scientific name
<u>Softwoods:</u>	
Alaska-cedar	<i>Chamaecyparfs nootkatensfs</i> (D. Don) Spach
Fir, Pacific silver	<i>Abies amabilis</i> (Dougl.) Forbes
Fir, Subalpine	<i>A. lasiocarpa</i> (Hook.) Mutt.
Hemlock, mountain	<i>Tsuga mertensiana</i> (Bong.) Carr.
Hemlock, western	<i>T. heterophylla</i> (Raf.) Sarg.
Pine, lodgepole	<i>Pinus contorta</i> var. <i>latffolfa</i> (Engelm.)
Redcedar, western	<i>Thuja plicata</i> Donn
Spruce, Sitka	<i>Pfcea sitchensfs</i> (Bong.) Carr.
Yew, Pacific	<i>Taxus brevifolia</i> Nutt.
<u>Hardwoods:</u>	
Birch, paper	<i>Betula papyrffera</i> (Harsh.)
Cottonwood, black	<i>Populus trichocarpa</i> Torr. & Gray
Poplar, balsam	<i>P. balsamifera</i> L.

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<sup>L/</sup> Scientific names are according to Viereck and Little (1972).

## Tables

Estimates in this report are developed from statistically based samples and therefore are subject to sampling error. Sampling error for estimates of various sizes are presented in the section "Reliability of Inventory Data."

TABLE 1--AREA OF FOREST LAND BY FOREST TYPE AND FOREST LAND CLASS, YAKATAGA UNIT, ALASKA, 1976

FOREST TYPE	TIMBERLAND	OTHER FORESTLAND	ALL CLASSES
<i>ACRES</i>			
SOFTWOODS:			
HEMLOCK-SPRUCE	14,207.4	7,286.3	21,493.7
SITKA SPRUCE	127,013.3	42,664.3	169,677.6
MOUNTAIN HEMLOCK	10,269.0	7,339.3	17,608.3
WESTERN HEMLOCK	13,613.7	7,286.3	20,900.0
ALASKA-CEDAR	--	--	--
<hr/>			
TOTAL	165,103.3	64,576.2	229,679.6
HARDWOODS:			
BLACK COTTONWOOD	44,192.2	10,647.7	54,839.9
<hr/>			
TOTAL	44,192.2	10,647.7	54,839.9
ALL TYPES	209,295.5	75,224.0	284,519.5

Estimates are subject to sampling error.

-- = no data were collected.

Totals may be off because of rounding.

TABLE 2--AREA BY LAND CLASS AM, OWNER, YAKATAGA UNIT, ALASKA, 1976

LAND CLASS	BLH <u>1/</u>	OTHER FEDERAL	ALASKA STATE	FOREST INDUSTRY	OTHER	ALL OWNERS
ACRES						
<b>TIMBERLAND:</b>						
SEEDLING AND SAPLING, AND NONSTOCKED	20,677.3	--	27,921.1	--	--	48,598.5
POLETIMBER	10,417.2	--	16,914.8	--	--	27,332.1
SAWTIMBER VOLUME STRATA <u>2/</u> --						
LESS THAN 8,000	--	--	13,871.4	--	--	13,871.4
8,000-20,000	3,407.4	--	23,646.9	--	--	27,054.3
20,001-30,000	6,861.6	--	23,923.4	--	--	30,785.0
30,001-50,000	13,566.9	--	19,319.1	--	--	32,886.1
50,001-75,000	6,603.9	--	18,710.2	--	--	25,314.0
75,001 OR MORE	3,454.2	--	--	--	--	3,454.2
<b>TOTAL</b>	<b>64,988.5</b>	<b>--</b>	<b>144,307.0</b>	<b>--</b>	<b>--</b>	<b>209,295.5</b>
<b>OTHER FOREST (AM):</b>						
ROCKY	--	--	--	--	--	--
LOW VOLUME <u>3/</u>	6,814.8	--	10,653.0	--	--	17,467.8
MUSKEG	--	--	--	--	--	--
HIGH ELEVATION	--	--	18,268.7	--	--	18,268.7
SLIDE ZONE	--	--	3,407.4	--	--	3,407.4
HARDWOODS	--	--	3,584.9	--	--	3,584.9
OTHER NONPRODUCTIVE	32,495.1	--	--	--	--	32,495.1
<b>TOTAL</b>	<b>39,309.9</b>	<b>--</b>	<b>35,914.1</b>	<b>--</b>	<b>--</b>	<b>75,224.0</b>
<b>NONFOREST:</b>						
FARMS (AM) GRASSLANDS	--	--	--	--	--	--
ALDER SHRUBLAND	36,961.4	--	39,676.1	--	--	76,637.5
MOB-ALDER SHRUBLAND	25,539.3	--	51,127.7	--	--	76,667.1
ALPINE MEADOW	3,696.1	--	3,696.1	--	--	7,392.3
MUSKEG MEADOW	18,480.7	--	36,582.4	--	--	55,063.1
URBAN AND OTHER	--	--	--	--	--	--
ALPINE ROCK	36,616.5	--	40,546.3	--	--	77,162.8
ICE AND SNOWFIELDS	14,784.5	--	7,392.3	--	--	22,176.8
<b>TOTAL</b>	<b>136,078.6</b>	<b>--</b>	<b>179,021.0</b>	<b>--</b>	<b>--</b>	<b>315,099.6</b>
CENSUS WATER	30,851.2	--	6,702.6	--	--	37,553.8
BOM-CENSUS WATER <u>4/</u>	14,468.6	--	10,299.5	--	--	24,768.1
<b>TOTAL</b>	<b>45,319.8</b>	<b>--</b>	<b>17,002.1</b>	<b>--</b>	<b>--</b>	<b>62,321.9</b>
<b>ALL LANDS</b>	<b>285,696.8</b>	<b>--</b>	<b>376,244.2</b>	<b>--</b>	<b>--</b>	<b>661,941.0</b>

Estimates are subject to sampling error.

-- = no data were collected.

Totals may be off because of rounding.

1/ U. S. Department of the Interior, Bureau of Land Management.

2/ Board feet, Scribner scale, except base value of 8,000 board feet, which is international 1/4-inch rule.

3/ Less than 8,000 board feet per acre, International 1/4-inch rule.

4/ Water as classified by Forest Inventory and Analysis standards.

TABLE 3--AREA OF TIMBERLAND BY FOREST TYPE AND OWNER, YAKATAGA UNIT,  
ALASKA, 1976

FOREST TYPE	NATIONAL FOREST	OTHER PUBLIC	FOREST INDUSTRY	MISC. PRIVATE	ALL OWNERS
ACRES					
SOFTWOODS :					
HEHLOCK-SPRUCE	--	14,207.4	--	--	14,207.4
SITKA SPRUCE	--	127,013.3	--	--	127,013.3
MOUNTAIN HEMLOCK	--	10,269.0	--	--	10,269.0
WESTERN HEMLOCK	--	13,613.7	--	--	13,613.7
ALASKA-CEDAR	--	--	--	--	--
<hr/>					
TOTAL	--	165,103.3	--	--	165,103.3
HARDWOODS :					
BUCK COTTONWOOD	--	44,192.2	--	--	44,192.2
<hr/>					
TOTAL	--	44,192.2	--	--	44,192.2
ALL TYPES	--	209,295.5	--	--	209,295.5

Estimates are subject to sampling error.

-- = no data were collected.

Totals may be off because of rounding.

TABLE 4--AREA OF TIMBERLAND BY FOREST TYPE AND STAM) SIZE CUSS, YAKATAGA UNIT, ALASKA, 1976

FOREST TYPE	SAWIHBER			SEEDLINGS AND SAPLINGS	NONSTOCKED	ALL CLASSES
	OLD GROWTH	YOUNG GROWTH	POLETIMBER			
<b>ACRES</b>						
<b>SOFTWOODS:</b>						
HEMLOCK-SPRUCE	7,433.3	3,407.4	--	3,366.7	--	14,207.4
SITKA SPRUCE	47,264.0	41,196.2	7,009.8	31,543.3	--	127,013.3
MOUNTAIN HEMLOCK	10,269.0	--	--	--	--	10,269.0
WESTERN HEMLOCK	13,613.7	--	--	--	--	13,613.7
ALASKA-CEDAR	--	--	--	--	--	--
<b>TOTAL</b>	<b>78,580.0</b>	<b>44,603.6</b>	<b>7,009.8</b>	<b>34,910.0</b>	<b>--</b>	<b>165,103.3</b>
<b>HARDWOODS:</b>						
BUCK COTTONWOOD	--	10,181.5	20,322.2	13,688.5	--	44,192.2
<b>TOTAL</b>	<b>--</b>	<b>10,181.5</b>	<b>20,322.2</b>	<b>13,688.5</b>	<b>--</b>	<b>44,192.2</b>
<b>ALL TYPES</b>	<b>78,580.0</b>	<b>54,785.1</b>	<b>27,332.0</b>	<b>48,598.5</b>	<b>--</b>	<b>209,295.5</b>

Estimates are subject to sampling error.

-- = no data were collected

Totals may be off because of rounding.

TABLE 5--AREA OF TIMBERLAND BY FOREST TYPE AM) SOIL CLASS, YAKATAGA WIT. ALASKA, 1976

FOREST TYPE	IMMATURE SOILS <u>1/</u>				MATURE SOILS <u>1/</u>			ALL CLASSES
	F1B	F3N F3T	F3 F3L F3G F3T2	F4F	F5	F1	P2R	
<b>ACRES</b>								
<b>SOFTWOODS:</b>								
HEMLOCK-SPRUCE	--	3,407.4	8,658.2	--	--	2,141.8	--	14,207.4
SITKA SPRUCE	9,964.5	3,454.2	20,152.0	17,512.8	3,366.7	68,919.9	3,643.2	127,013.3
MOUNTAIN HEMLOCK	6,861.6	--	--	3,407.4	--	--	--	10,269.0
WESTERN HEMLOCK	--	3,643.2	3,454.2	3,366.7	3,149.7	--	--	13,613.7
ALASKA-CEDAR	--	--	--	--	--	--	--	--
<b>TOTAL</b>	<b>16,826.1</b>	<b>10,504.7</b>	<b>32,264.4</b>	<b>24,286.9</b>	<b>6,516.4</b>	<b>71,061.7</b>	<b>3,643.2</b>	<b>165,103.3</b>
<b>HARDWOODS:</b>								
BLACK COTTONWOOD	3,407.4	--	10,144.3	--	--	30,640.5	--	44,192.2
<b>TOTAL</b>	<b>3,407.4</b>	<b>--</b>	<b>10,144.3</b>	<b>--</b>	<b>--</b>	<b>30,640.5</b>	<b>--</b>	<b>44,192.2</b>
<b>ALL TYPES</b>	<b>20,233.5</b>	<b>10,504.7</b>	<b>42,400.6</b>	<b>24,286.9</b>	<b>6,516.4</b>	<b>101,702.2</b>	<b>3,643.2</b>	<b>209,295.5</b>

Estimates are subject to sampling error.

-- = no data were collected.

Totals may be off because of rounding.

1/ Soil classes are defined in the section "Terminology."

TABLE 6--NUMBER OF OLD-GROWTH GROWING STOCK TREES ON TIMBERLAND BY DIAMETER CLASS AND SPECIES, YAKATAGA UNIT, ALASKA, 1976

DIAMETER CLASS	SOFTWOODS				TOTAL	BLACK COTTONWOOD	ALL SPECIES
	SITKA SPRUCE	WESTERN HEHLOCK	MOUNTAIN HEMLOCK				
<i>INCHES AT BREAST HEIGHT</i>		<i>THOUSAND TREES</i>					
SEEDLINGS	12,595.4	11,838.3	1,731.1	26,164.8	--	26,164.8	
1.0-2.9	2,374.4	2,486.4	156.2	5,017.1	--	5,017.1	
3.0-4.9	469.7	1,252.1	312.4	2,034.2	--	2,034.2	
5.0-6.9	670.1	1,064.7	--	1,734.7	--	1,734.7	
7.0-8.9	350.5	498.2	275.6	1,124.2	--	1,124.2	
9.0-10.9	912.5	385.4	117.1	1,415.1	--	1,415.1	
11.0-12.9	415.9	277.2	118.3	811.4	--	811.4	
13.0-14.9	532.5	306.1	56.8	895.3	--	895.3	
15.0-16.9	598.1	229.1	104.6	931.9	--	931.9	
17.0-18.9	362.9	199.5	110.5	672.9	--	672.9	
19.0-20.9	238.3	178.7	71.9	488.9	--	488.9	
21.0-22.9	239.4	139.4	49.1	428.0	--	428.0	
23.0-24.9	183.8	174.8	40.4	398.9	--	398.9	
25.0-26.9	202.2	121.4	34.8	358.4	--	358.4	
27.0-28.9	158.6	61.5	35.9	256.0	--	256.0	
29.0-30.9	121.9	47.8	25.8	195.4	--	195.4	
31.0-32.9	124.2	49.0	15.2	188.4	--	188.4	
33.0-34.9	80.3	45.3	17.6	143.2	--	143.2	
35.0-36.9	73.6	38.5	5.9	118.1	--	118.1	
37.0-38.9	44.0	5.9	8.2	58.2	--	58.2	
39.0-40.9	23.9	11.6	2.5	38.0	--	38.0	
41.0-42.9	43.7	8.2	--	51.9	--	51.9	
43.0-44.9	22.4	2.0	4.0	28.3	--	28.3	
45.0-46.9	11.3	--	--	11.3	--	11.3	
47.0-48.9	19.8	--	--	19.8	--	19.8	
49.0-50.9	24.2	1.5	--	25.8	--	25.7	
51.0-52.9	7.2	--	--	7.2	--	7.2	
53.0-54.9	1.4	--	--	1.4	--	1.4	
55.0-56.9	--	--	--	--	--	--	
57.0-58.9	2.4	--	--	2.4	--	2.4	
59.0-60.9	4.4	--	--	4.4	--	4.4	
61.0 AND LARGER	9.8	--	--	9.8	--	9.8	
ALL CLASSES	20,918.9	19,422.6	3,293.8	43,635.3	--	43,635.3	

Estimates are subject to sampling error.

-- = no data were collected.

Totals may be off because of rounding.

TABLE 7--NUMBER OF YOUNG-GROWTH GROWING STOCK TREES ON TIMBERLAND BY DIAMETER CLASS  
AM) SPECIES, YAKATAGA UNIT, ALASKA, 1976

SOFTWOODS						
DIAMETER CLASS	SITKA SPRUCE	WESTERN HEMLOCK	MOUNTAIN HEMLOCK	TOTAL	BLACK COTTOWOOD	ALL SPECIES
<i>INCHES AT BREAST HEIGHT</i>	<i>THOUSAND TREES</i>					
SEEDLINGS	26,110.1	7,112.9	--	33,223.0	16,994.0	50,216.9
1.0-2.9	20,851.2	2,328.8	--	23,180.0	3,351.3	26,531.3
3.0-4.9	11,610.8	1,597.3	--	13,208.2	3,403.2	16,611.4
5.0-6.9	4,428.4	416.1	--	4,844.5	3,028.6	7,873.1
7.0-8.9	2,621.8	252.2	--	2,874.0	2,453.5	5,327.5
9.0-10.9	1,724.8	204.9	40.9	1,970.6	1,342.6	3,313.2
11.0-12.9	1,422.1	158.5	30.0	1,610.5	616.9	2,227.5
13.0-14.9	774.4	125.4	21.3	921.1	198.6	1,119.7
15.0-16.9	709.0	109.9	--	818.8	203.3	1,022.1
17.0-18.9	498.3	36.9	40.4	575.6	57.6	633.2
19.0-20.9	329.8	18.8	--	348.6	41.2	389.8
21.0-22.9	128.7	--	8.5	137.2	17.3	154.5
23.0-24.9	122.8	6.9	--	129.7	6.8	136.6
25.0-26.9	70.4	11.0	--	81.4	12.3	93.7
27.0-28.9	25.6	--	--	25.6	--	25.6
29.0-30.9	17.4	4.2	--	21.5	--	21.5
31.0-32.9	23.2	--	--	23.2	--	23.2
33.0-34.9	13.3	--	--	13.3	--	13.3
35.0-36.9	18.8	--	--	18.8	--	18.8
37.0-38.9	2.7	--	--	2.7	--	2.7
39.0-40.9	--	--	--	--	--	--
41.0-42.9	4.4	--	--	4.4	--	4.4
43.0-44.9	4.0	--	--	4.0	--	4.0
45.0-46.9	--	--	--	--	--	--
47.0-48.9	--	--	--	--	--	--
49.0-50.9	--	--	--	--	--	--
51.0-52.9	1.4	--	--	1.4	--	1.4
53.0-54.9	4.1	--	--	4.1	--	4.1
55.0-56.9	--	--	--	--	--	--
57.0-58.9	--	--	--	--	--	--
59.0-60.9	1.1	--	--	1.1	--	1.1
61.0 AM) LARGER	--	--	--	--	--	--
ALL CLASSES	71,518.6	12,383.6	141.1	84,043.3	31,727.2	115,770.5

Estimates are subject to sampling error.

-- = no data were collected.

Totals may be off because of rounding.

TABLE 8--NUMBER OF MORTALITY TREES ON TIMBERLAND BY DIAMETER CLASS AND SPECIES,  
YAKATAGA UNIT, ALASKA, 1976

DIAMETER CLASS	SOFTWOODS					BLACK COTTONWOOD	ALL SPECIES
	SITKA SPRUCE	WESTERN HEMLOCK	MOUNTAIN HEMLOCK	TOTAL			
<i>INCHES AT BREAST HEIGHT</i>							
							<i>THOUSAND TREES</i>
SEEDLINGS	--	--	--	--	--	--	--
1.0-2.9	--	--	--	--	--	--	--
3.0-4.9	--	--	--	--	--	--	--
5.0-6.9	99.7	--	--	99.7	104.9	204.7	
7.0-8.9	--	--	--	--	--	--	--
9.0-10.9	36.8	--	--	36.8	80.6	117.4	
11.0-12.9	27.6	--	--	27.6	27.6	55.1	
13.0-14.9	--	--	--	--	--	--	--
15.0-16.9	--	--	--	--	--	--	--
17.0-18.9	--	--	--	--	--	--	--
19.0-20.9	--	--	--	--	--	--	--
21.0-22.9	--	--	--	--	--	--	--
23.0-24.9	--	--	--	--	--	--	--
25.0-26.9	--	--	--	--	--	--	--
27.0-28.9	4.9	--	--	4.9	--	4.9	
29.0-30.9	--	--	--	--	--	--	--
31.0-32.9	--	--	--	--	--	--	--
33.0-34.9	3.6	--	--	3.6	--	3.6	
35.0-36.9	--	1.9	--	1.9	--	1.9	
37.0-38.9	--	--	--	--	--	--	--
39.0-40.9	--	--	--	--	--	--	--
41.0-42.9	--	--	--	--	--	--	--
43.0-44.9	--	--	--	--	--	--	--
45.0-46.9	1.9	--	--	1.9	--	1.9	
47.0-48.9	--	--	--	--	--	--	--
49.0-50.9	--	1.0	--	1.0	--	1.0	
51.0-52.9	--	--	--	--	--	--	--
53.0-54.9	--	--	--	--	--	--	--
55.0-56.9	--	--	--	--	--	--	--
57.0-58.9	--	--	--	--	--	--	--
59.0-60.9	--	--	--	--	--	--	--
61.0 AND LARGER	--	--	--	--	--	--	--
ALL CLASSES	174.5	2.8	--	177.3	213.1	390.5	

Estimates are subject to sampling error.

-- = no data were collected.

Totals may be off because of rounding.

TABLE 9--NET VOLUME OF TIMBER, CUBIC FEET, ON OPERABLE AND POTENTIALLY OPERABLE  
TIMBERLAND BY CLASS OF TIMBER AND SPECIES, YAKATAGA UNIT, ALASKA, 1976

CLASS OF TIMBER	SOFTWOODS			TOTAL	BUCK COTTONWOOD	ALL SPECIES
	SITKA SPRUCE	WESTERN HEMLOCK	MOUNTAIN HEMLOCK			
<i>THOUSAND CUBIC FEET</i>						
SAUHTIMBER TREES:						
SAW-LOG PORTION	309,597.2	70,057.3	--	379,654.5	14,233.9	393,888.4
UPPER-STEM PORTION	8,091.1	1,939.0	--	10,030.1	553.8	10,583.9
TOTAL	317,688.4	71,996.2	--	389,684.6	14,787.7	404,472.3
POLETIMBER TREES	35,087.4	4,421.1	--	39,508.6	16,096.5	55,605.1
ALL GROWING STOCK	352,775.8	76,417.4	--	429,193.2	30,884.2	460,077.4
ROUGH TREES	71.3	--	--	77.3	36.2	113.6
ROTTEN TREES	2,952.8	1,797.3	--	4,750.1	576.4	5,326.5
SALVABLE DEAD TREES	1,260.2	467.2	--	1,727.4	--	1,727.4
ALL TIMBER	357,066.1	78,681.8	--	435,747.9	31,496.9	467,244.8

Estimates are subject to sampling error.

-- = no data were collected.

Totals may be off because of rounding.

TABLE 10--NET VOLUME OF TIMBER, CUBIC FEET, ON INOPERABLE TIMBERLAND BY CLASS OF TIMBER AND SPECIES, YAKATAGA UNIT, ALASKA, 1976

CLASS OF TIMBER	SOFTWOODS					BLACK COTTONWOOD	ALL SPECIES
	SITKA SPRUCE	WESTERN HEMLOCK	MOUNTAIN HEMLOCK	TOTAL			
	<i>THOUSAND CUBIC FEET</i>						
SAUTIMBER TREES :							
SAW-LOG PORTION	232,440.0	94,102.6	49,664.6	376,207.2	8,547.6	384,754.8	
UPPER-STEM PORTION	6,381.1	2,623.0	1,498.8	10,502.9	396.6	10,899.6	
TOTAL	238,821.1	96,725.6	51,163.5	386,710.1	8,944.2	395,654.3	
POLETIKBER TREES	23,666.1	12,028.3	2,249.9	37,944.3	23,460.8	61,405.1	
ALL GROWING STOCK	262,487.2	108,753.9	53,413.4	424,654.4	32,405.0	457,059.4	
ROUGH TREES	--	--	--	--	--	--	
ROTTEN TREES	5,715.3	4,886.8	714.2	11,316.3	788.5	12,104.8	
SALVABLE DEAD TREES	1,443.1	--	--	1,443.1	269.9	1,713.0	
ALL TIMBER	269,645.5	113,640.7	54,127.6	437,413.8	33,463.4	470,877.3	

Estimates are subject to sampling error.

-- = no data were collected.

Totals may be off because of rounding.

TABLE 11--NET VOLUME OF YOUNG GROWTH, CUBIC FEET, ON TIMBERLAND BY FOREST TYPE AND SITE CLASS, YAKATAGA UNIT, ALASKA, 1976

FOREST TYPE	SITE CLASS <u>1</u> / <sup>1</sup>						ALL CLASSES
	1	2	3	4	5	6	
<i>THOUSAND CUBIC FEET</i>							
<b>SOFTWOODS:</b>							
HEMLOCK-SPRUCE	--	--	32,235.0	4,842.5	--	--	37,077.5
SITKA SPRUCE	--	--	11,260.4	96,946.8	103,509.4	25,455.0	237,171.6
MOUNTAIN HEMLOCK	--	--	--	--	--	--	--
WESTERN HEMLOCK	--	--	--	--	--	--	--
ALASKA-CEDAR	--	--	--	--	--	--	--
<b>TOTAL</b>	--	--	43,495.4	101,789.3	103,509.4	25,455.0	274,249.1
<b>HARDWOODS:</b>							
BLACK COTTONWOOD	--	--	--	13,732.8	40,510.1	428.4	54,671.3
<b>TOTAL</b>	--	--	--	13,732.8	40,510.1	428.4	54,671.3
<b>ALL TYPES</b>	--	--	43,495.4	115,522.1	144,019.5	25,883.4	328,920.4

Estimates are subject to sampling error.

-- = no data were collected.

Totals may be off because of rounding.

<sup>1</sup>/ Young-growth site class is yield per acre based on mean annual increment (MAI): site class 1 = 225 cubic feet and over, site class 2 = 165-224 cubic feet, site class 3 = 120-164 cubic feet, site class 4 = 85-119 cubic feet, site class 5 = 50-84 cubic feet, site class 6 = 20-49 cubic feet.

TABLE 12--NET VOLUME OF OLD GROWTH, CUBIC FEET, ON TIMBERLAND BY FOREST TYPE AND SITE CLASS, YAKATAGA WIT, ALASKA, 1976

FOREST TYPE	SITE CLASS 1/					ALL CLASSES
	1	2	3	4	5	
<i>THOUSAND CUBIC FBhT</i>						
<b>SOFTWOODS:</b>						
HEMLOCK-SPRUCE	39,070.4	14,479.4	--	--	--	53,549.8
SITKA SPRUCE	89,087.8	82,320.1	17,651.7	91,729.2	101,476.2	382,265.0
MOUNTAIN HEHLOCK	24,021.1	--	18,651.9	16,529.3	--	59,202.3
WESTERN HEWLOCK	38,439.5	--	22,557.0	32,203.0	--	93,199.5
ALASKA-CEDAR	--	--	--	--	--	--
<b>TOTAL</b>	<b>190,618.8</b>	<b>96,799.5</b>	<b>58,860.6</b>	<b>140,461.5</b>	<b>101,476.2</b>	<b>588,216.6</b>
<b>HARDWOODS:</b>						
BLACK COTTONWOOD	--	--	--	--	--	--
<b>TOTAL</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>ALL TYPES</b>	<b>190,618.8</b>	<b>96,799.5</b>	<b>58,860.6</b>	<b>140,461.5</b>	<b>101,476.2</b>	<b>588,216.6</b>

Estimates are subject to sampling error.

-- = no data were collected

Totals may be off because of rounding.

1/ Old-growth site class is yield per acre based on average number of 16-foot logs: site class 1 = 6 logs, site class 2 = 5 logs, site class 3 = 4 logs, site class 4 = 3 logs, site class 5 = 2 logs.

TABLE 13--NET VOLUME OF GROWING STOCK ON TIMBERLAND, IN CUBIC FEET MID VOLUME PER ACRE, BY FOREST TYPE MID STAND SIZE CLASS, YAKUTAGA UNIT, ALUM. 1976

FOREST TYPE AND UNIT	SAWTIMBER			SEEDLINGS AND SAPLINGS	NONSTOCKED	ALL CLASSES
	OLD GROWTH	YOUNG GROWTH	POLETIMBER			
<b>HEMLOCK-SPRUCE:</b>						
LT3	53,549,137	32,234,986	--	4,842,464	--	90,627,186
ACRES	7,433	3,407	--	3,367	--	14,207
FT <sup>3</sup> /ACRE	7,204	9.461	--	1,438	--	6.379
<b>SITKA SPRUCE:</b>						
FT3	382,265,024	213,893,166	8,897,458	14,380,897	--	619,436,550
ACRES	47,264	41,196	7,010	31,543	--	127,013
FT <sup>3</sup> /ACRE	8,088	5,192	1,269	456	--	4,877
<b>MOUNTAIN HEMLOCK:</b>						
Fr3	59,202,334	--	--	--	--	59,202,334
ACRES	10,269	--	--	--	--	10,269
FT <sup>3</sup> /ACRE	5,765	--	--	--	--	5,765
<b>WESTERN HEMLOCK:</b>						
FT3	93,199,410	--	--	--	--	93,199,410
ACRES	13,614	--	--	--	--	13,614
FT <sup>3</sup> /ACRE	6,846	--	--	--	--	6,846
<b>ALASKA-CEDAR:</b>						
LT3	--	--	--	--	--	--
ACRES	--	--	--	--	--	--
FT <sup>3</sup> /ACRE	--	--	--	--	--	--
<b>BLACK COTTONWOOD:</b>						
FT <sup>3</sup>	--	16,980,027	30,732,870	6,958,456	--	54,671,351
ACRES	--	10,182	20,322	13,689	--	44,192
FT <sup>3</sup> /ACRE	--	1,668	1.512	508	--	1,237
<b>ALL TYPES:</b>						
LT3	588,216,505	263,106,179	39,630,327	26,181,816	--	917,136,825
ACRES	78,580	54,785	27,332	48,599	--	209,296
FT <sup>3</sup> /ACRE	7,486	4,803	1,450	539	--	4,382

Estimates are subject to sampling error.

-- = no data were collected.

Totals may be off because of rounding.

TABLE 14--NET VOLUME OF SAUHTHBER ON TIMBERLAND, IN BOARD FEET INTERNATIONAL 114-INCH RULE AND VOLUME PER ACRE, BY FOREST TYPE AND STAM) SIZE CLASS, YAKATAGA UNIT, ALASKA, 1976

FOREST TYPE AND UNIT	SAWTIMBER			SEEDLINGS AND SAPLINGS	NONSTOCKED	W CLASSES
	OLD GROWTH	YOUNG GROWTH	POLSTIMBER			
HEMLOCK-SPRUCE:						
FBM 1/	299,407,056	158,345,322	--	11,837,111	--	469,589,491
ACRES	7,433	3,407	--	3,367	--	14,207
F8M/ACRE	40,279	46,476	--	3,516	--	33,053
SITKA SPRUCE:						
FBM	2,243,616,358	1,011,306,874	11,586,978	14,942,371	--	3,281,452,581
ACRES	47,264	41,196	7,010	31,543	--	127,013
F8M/ACRE	47,410	24,549	1.653	474	--	25,836
MOUNTAIN HEMLOCK:						
FBM	290,659,818	--	--	--	--	290,659,818
ACRES	10,269	--	--	--	--	10,269
F8M/ACRE	28.305	--	--	--	--	28,305
WESTERN HEMLOCK:						
FBM	457,403,162	--	--	--	--	457,403,162
ACRES	13,614	--	--	--	--	13,614
F8M/ACRE	33,599	--	--	--	--	33,599
ALASKA-CEDAR:						
FBM	--	--	--	--	--	--
ACRES	--	--	--	--	--	--
F8M/ACRE	--	--	--	--	--	--
BLACK COTTWOOD:						
FBM	--	54,107,358	12,127,975	2,501,914	--	68,731,248
ACRES	--	10,182	20,322	13,689	--	44,192
F8M/ACRE	--	5,314	591	183	--	1,555
ALL TYPES:						
FBM	3,291,086,393	1,223,759,554	23,714,953	29,281,397	--	4,567,842,291
ACRES	78,580	54,185	27,332	48,599	--	209,296
F8M/ACRE	41,882	22.338	868	603	--	21,825

Estimates are subject to sampling error.

-- = no data were collected.

Totals may be off because of rounding.

1/ F8M = board-foot measure, International 114-inch rule.

TABLE 15--NET VOLUME OF OLD GROWTH, INTERNATIONAL 1/4-INCH RULE, OB TIMBERLAND BY DIAMETER CLASS AND SPECIES, YAKATAGA WIT, ALASKA, 1976

SOFTWOODS						
DIAMETER CLASS	SITKA SPRUCE	WESTERN HEMLOCK	MOUNTAIN HEMLOCK	TOTAL	BLACK COTWOOD	ALL SPECIES
<b>INCHES AT BREAST HEIGHT</b>	<b>THOUSAND BOARD FEET</b>					
SEEDLINGS	--	--	--	--	--	--
1.0-2.9	--	--	--	--	--	--
3.0-4.9	--	--	--	--	--	--
5.0-6.9	--	--	--	--	--	--
7.0-8.9	--	--	--	--	--	--
9.0-10.9	--	--	--	--	--	--
11.0-12.9	29,297.2	20,644.2	5,360.7	55,302.1	--	55,302.1
13.0-14.9	64,541.5	32,337.8	5,040.3	101,919.6	--	101,919.6
15.0-16.9	122,965.7	37,832.7	15,164.7	175,963.1	--	175,963.1
17.0-18.9	96,716.0	53,362.6	25,113.2	175,191.8	--	175,191.8
19.0-20.9	88,301.0	54,209.0	20,863.3	163,373.3	--	163,373.3
21.0-22.9	113,093.2	57,857.7	20,373.0	191,324.6	--	191,324.6
23.0-24.9	130,316.5	92,107.7	20,808.0	243,232.2	--	243,232.2
25.0-26.9	174,746.9	91,486.0	20,444.8	286,677.6	--	286,677.6
27.0-28.9	156,231.7	66,594.1	24,385.4	247,211.2	--	247,211.2
29.0-30.9	148,209.5	46,588.4	22,085.4	216,883.3	--	216,883.3
31.0-32.9	171,044.0	49,795.8	13,179.9	234,019.7	--	234,019.7
33.0-34.9	133,183.2	52,510.8	15,437.9	201,132.0	--	201,132.0
35.0-36.9	137,841.2	49,557.8	5,333.1	192,732.0	--	192,732.0
37.0-38.9	97,171.9	11,872.5	7,312.9	116,357.3	--	116,357.3
39.0-40.9	61,047.1	25,916.6	1,419.9	88,383.6	--	88,383.6
41.0-42.9	122,567.5	15,263.2	--	137,830.7	--	137,830.7
43.0-44.9	59,638.5	6,343.6	7,878.5	73,860.5	--	73,860.5
45.0-46.9	45,600.6	--	--	45,600.6	--	45,600.6
47.0-48.9	83,938.5	--	--	83,938.5	--	83,938.5
49.0-50.9	84,367.7	3,430.2	--	87,797.8	--	87,797.8
51.0-52.9	47,388.4	--	--	47,388.4	--	47,388.4
53.0-54.9	9,544.0	--	--	9,544.0	--	9,544.0
55.0-56.9	--	--	--	--	--	--
57.0-58.9	15,185.7	--	--	15,185.7	--	15,185.7
59.0-60.9	32,440.9	--	--	32,440.9	--	32,440.9
61.0 AM) LARGER	67,795.9	--	--	67,795.9	--	67,795.9
<b>ALL CLASSES</b>	<b>2,293,174.1</b>	<b>767,710.7</b>	<b>230,201.6</b>	<b>3,291,086.4</b>	<b>--</b>	<b>3,291,086.4</b>

Estimates are subject to sampling error.

-- = no data were collected.

Totals may be off because of rounding.

TABLE 16--NET VOLUME OF YOUNG GROWTH, INTERNATIONAL 1/4-INCH RULE, ON TIMBERLAND BY DIAMETER CLASS AND SPECIES, YAKATAGA UNIT, ALASKA, 1976

DIAMETER CLASS	SOFTWOODS					BLACK COTTONWOOD	ALL SPECIES
	SITKA SPRUCE	WESTERN HEMLOCK	MOUNTAIN HEMLOCK	TOTAL			
<i>INCHES AT BREAST HEIGHT</i>							
<i>THOUSAND BOARD FEET</i>							
SEEDLINGS	--	--	--	--	--	--	--
1.0-2.9	--	--	--	--	--	--	--
3.0-4.9	--	--	--	--	--	--	--
5.0-6.9	--	--	--	--	--	--	--
7.0-8.9	--	--	--	--	--	--	--
9.0-10.9	--	--	--	--	--	--	--
11.0-12.9	134,547.0	13,271.8	3,548.9	151,361.7	25,012.7	176,380.4	
13.0-14.9	103,465.4	21,598.4	2,020.3	127,084.0	15,443.3	142,527.3	
15.0-16.9	157,641.5	23,826.5	--	181,468.1	18,883.2	200,351.3	
17.0-18.9	175,155.8	12,859.9	9,221.9	197,237.6	13,044.1	210,281.7	
19.0-20.9	138,918.8	7,247.6	--	146,166.4	7,808.1	153,974.5	
21.0-22.9	71,098.9	--	4,211.1	75,310.0	5,682.8	80,992.8	
23.0-24.9	78,391.0	4,148.5	--	82,539.5	2,645.1	85,184.6	
25.0-26.9	53,410.6	9,418.1	--	62,828.7	6,033.5	68,862.2	
27.0-28.9	25,060.0	--	--	25,060.0	--	25,060.0	
29.0-30.9	19,428.2	3,929.4	--	23,357.6	--	23,357.6	
31.0-32.9	19,156.2	--	--	19,156.2	--	19,156.2	
33.0-34.9	19,418.8	--	--	19,418.8	--	19,418.8	
35.0-36.9	31,162.4	--	--	31,162.4	--	31,162.4	
37.0-38.9	4,492.1	--	--	4,492.1	--	4,492.1	
39.0-40.9	--	--	--	--	--	--	
41.0-42.9	8,897.1	--	--	8,897.1	--	8,897.1	
43.0-44.9	5,894.1	--	--	5,894.1	--	5,894.1	
45.0-46.9	--	--	--	--	--	--	
47.0-48.9	--	--	--	--	--	--	
49.0-50.9	--	--	--	--	--	--	
51.0-52.9	6,527.5	--	--	6,527.5	--	6,527.5	
53.0-54.9	9,052.2	--	--	9,052.2	--	9,052.2	
55.0-56.9	--	--	--	--	--	--	
57.0-58.9	--	--	--	--	--	--	
59.0-60.9	5,183.1	--	--	5,183.1	--	5,183.1	
61.0 AND LARGER	--	--	--	--	--	--	
ALL CLASSES	1,066,900.7	96,300.3	19,002.2	1,182,203.2	94,552.7	1,276,755.9	

Estimates are subject to sampling error.

-- = no data were collected.

Totals may be off because of rounding.

TABLE 17--NET VOLUME OF OLD GROWTH, CUBIC FEET, OH TIMBERLAND BY DIAMETER CLASS AND SPECIES, YAKATAGA UNIT, ALASKA, 1976

SOFTWOODS						
DIAMETER CLASS	SITKA SPRUCE	WESTERN HEWLOCK	MOUNTAIN HEMLOCK	TOTAL	BLACK COTTOWOOD	ALL SPECIES
<i>INCHES AT BREAST HEIGHT</i>			<i>THOUSAND CUBIC FEET</i>			
SEEDLINGS	--	--	--	--	--	--
1.0-2.9	--	--	--	--	--	--
3.0-4.9	--	--	--	--	--	--
5.0-6.9	1,517.6	3,332.2	--	4,849.8	--	4,849.8
7.0-8.9	2,096.7	2,729.9	805.0	5,631.5	--	5,631.5
9.0-10.9	11,701.0	5,440.8	1,079.9	18,221.7	--	18,221.7
11.0-12.9	6,671.5	4,853.8	1,473.7	12,999.0	--	12,999.0
13.0-14.9	13,422.2	7,468.1	1,140.0	22,030.2	--	22,030.2
15.0-16.9	22,720.5	8,116.6	3,262.5	34,099.5	--	34,099.5
17.0-18.9	17,448.4	10,661.7	5,157.3	33,267.4	--	33,267.4
19.0-20.9	15,370.7	11,143.1	4,148.8	30,662.5	--	30,662.5
21.0-22.9	19,026.2	11,686.7	4,239.2	34,952.1	--	34,952.1
23.0-24.9	20,563.7	17,998.7	4,139.3	42,701.7	--	42,701.7
25.0-26.9	27,736.8	17,140.7	4,100.0	48,977.5	--	48,977.5
27.0-28.9	24,499.3	11,644.8	4,761.5	40,905.6	--	40,905.6
29.0-30.9	22,977.0	8,546.9	4,532.8	36,056.8	--	36,056.8
31.0-32.9	26,339.0	9,563.9	2,629.9	38,532.8	--	38,532.8
33.0-34.9	20,005.2	10,166.3	3,160.2	33,331.8	--	33,331.8
35.0-36.9	20,395.3	9,812.8	1,229.3	31,437.4	--	31,437.4
37.0-38.9	13,955.4	2,152.7	1,623.9	17,732.0	--	17,732.0
39.0-40.9	8,791.9	4,466.1	396.6	13,654.7	--	13,654.7
41.0-42.9	17,988.3	2,825.0	--	20,813.3	--	20,813.3
43.0-44.9	8,838.3	1,024.4	1,373.0	11,235.7	--	11,235.7
45.0-46.9	6,267.6	--	--	6,267.6	--	6,267.6
47.0-48.9	12,258.5	--	--	12,258.5	--	12,258.5
49.0-50.9	13,571.8	661.5	--	14,233.3	--	14,233.3
51.0-52.9	6,535.0	--	--	6,535.0	--	6,535.0
53.0-54.9	1,273.9	--	--	1,273.9	--	1,273.9
55.0-56.9	--	--	--	--	--	--
57.0-58.9	2,087.8	--	--	2,087.8	--	2,087.8
59.0-60.9	4,599.4	--	--	4,599.4	--	4,599.4
61.0 AND LARGER	8,867.9	--	--	8,867.9	--	8,867.9
ALL CLASSES	377,526.9	161,436.5	49,253.1	588,216.5	--	588,216.5

Estimates are subject to sampling error.

-- = no data were collected.

Totals may be off because of rounding.

TABLE 18--NET VOLUME OF YOUNG GROWTH, CUBIC FEET, ON TIMBERLAND BY DIAMETER CLASS AND SPECIES, YAKATAGA WIT, ALASKA, 1976

DIAMETER CLASS	SOFTWOODS					BLACK COTTONWOOD	ALL SPECIES
	SITKA SPRUCE	WESTERN HEWLOCK	MOUNTAIN HEWLOCK	TOTAL			
<i>INCHES AT BREAST HEIGHT</i>		<i>THOUSAND CUBIC FEET</i>					
SEEDLINGS	--	--	--	--	--	--	--
1.0-2.9	--	--	--	--	--	--	--
3.0-4.9	--	--	--	--	--	--	--
5.0-6.9	9,293.6	073.2	--	10,166.8	8,482.9	18,649.7	
7.0-8.9	14,779.5	2,228.4	--	17,008.0	16,288.3	33,296.2	
9.0-10.9	19,365.1	1,844.9	365.0	21,575.1	14,786.2	36,361.3	
11.0-12.9	29,380.6	3,065.4	715.3	33,161.3	7,357.3	40,518.6	
13.0-14.9	21,293.2	4,174.2	488.5	25,955.8	4,027.6	29,983.4	
15.0-16.9	29,314.1	4,695.6	--	34,009.6	5,044.5	39,054.2	
17.0-18.9	30,389.1	2,338.4	1,795.2	34,522.7	2,654.0	37,176.7	
19.0-20.9	24,181.8	1,349.7	--	25,531.5	1,832.3	27,363.8	
21.0-22.9	12,082.8	--	796.2	12,879.1	1,125.0	14,004.1	
23.0-24.9	13,038.5	743.8	--	13,782.3	575.1	14,357.4	
25.0-26.9	8,709.1	1,633.4	--	10,342.5	1,116.2	11,458.6	
27.0-28.9	4,091.1	--	--	4,091.1	--	4,091.1	
29.0-30.9	3,273.7	787.6	--	4,061.3	--	4,061.3	
31.0-32.9	3,669.6	--	--	3,669.6	--	3,669.6	
33.0-34.9	3,232.8	--	--	3,232.8	--	3,232.8	
35.0-36.9	5,050.9	--	--	5,050.9	--	5,050.9	
37.0-38.9	806.1	--	--	806.1	--	806.1	
39.0-40.9	--	--	--	--	--	--	
41.0-42.9	1,386.6	--	--	1,386.6	--	1,386.6	
43.0-44.9	1,032.9	--	--	1,032.9	--	1,032.9	
45.0-46.9	--	--	--	--	--	--	
47.0-48.9	--	--	--	--	--	--	
49.0-50.9	--	--	--	--	--	--	
51.0-52.9	968.3	--	--	968.3	--	968.3	
53.0-54.9	1,543.9	--	--	1,543.9	--	1,543.9	
55.0-56.9	--	--	--	--	--	--	
57.0-58.9	--	--	--	--	--	--	
59.0-60.9	852.7	--	--	852.7	--	852.7	
61.0 AND LARGER	--	--	--	--	--	--	
ALL CLASSES	237,736.1	23,734.7	4,160.3	265,631.1	63,289.2	328,920.3	

Estimates are subject to sampling error.

-- = no data were collected.

Totals may be off because of rounding.

TABLE 19--NET VOLUME OF SAWTIMBER, SCRIBNER RULE, ON TIMBERLAND BY FOREST TYPE AND SOIL CLASS, YAKUTAGA UNIT, ALASKA, 1976

FOREST TYPE	IMMATURE SOILS <u>1/</u>				MATURE SOILS <u>1/</u>			
	F1B	P3N P3T	P3 F3L P3G F3T2	P4P	F5	P1	P2R	ALL CLASSES
<i>MILLION BOARD FEET</i>								
SOFTWOODS :								
HEMLOCK-SPRUCE	--	140.9	165.2	--	--	127.3	--	433.4
SITKA SPRUCE	564.4	223.1	354.6	381.8	45.0	1,320.8	110.1	3,000.5
MOUNTAIN HEMLOCK	193.9	--	--	76.9	--	--	--	270.7
WESTERN HEMLOCK	--	91.9	194.9	106.1	32.8	--	--	425.6
ALASKA CEDAR	--	--	--	--	--	--	--	--
<b>TOTAL</b>	758.2	455.9	114.7	564.0	77.8	1,448.1	110.1	4,130.4
HARDWOODS :								
BLACK COTTONWOOD	33.13	--	--	--	--	26.0	--	59.8
<b>TOTAL</b>	33.8	--	--	--	--	26.0	--	59.8
ALL TYPES	192.0	455.9	714.7	564.8	77.0	1,474.1	110.1	4,190.1

Estimates are subject to sampling error.

-- = no data were collected.

Totals may be off because of rounding.

1/ Soil classes are defined in the section "Technology."

TABLE 20--NET ANNUAL GROWTH OF GROWING STOCK, CUBIC FEET, OS TIMBERLAND BY DIAMETER CLASS AND SPECIES, YAKATAGA UNIT, ALASKA, 1976

DIAMETER CLASS	SOFTWOODS			TOTAL	BLACK COTTONWOOD	ALL SPECIES
	SITKA SPRUCE	WESTERN HEMLOCK	MOUNTAIN HEMLOCK			
<i>INCHES AT BREAST HEIGHT</i>						
<i>THOUSAND CUBIC FBhT</i>						
SEEDLINGS	--	--	--	--	--	--
1.0-2.9	--	--	--	--	--	--
3.0-4.9	--	--	--	--	--	--
5.0-6.9	1,477.7	284.0	--	1,761.8	898.6	2,660.4
7.0-8.9	914.9	147.9	--	1,062.8	919.9	1,982.7
9.0-10.9	1,443.8	185.4	93.9	1,723.1	350.4	2,073.5
11.0-12.9	547.6	313.4	95.8	956.8	13.8	970.6
13.0-14.9	683.7	223.5	18.5	925.8	108.2	1,034.0
15.0-16.9	936.8	121.8	87.4	1,146.1	74.4	1,220.4
17.0-18.9	630.6	90.8	161.9	883.3	10.6	893.9
19.0-20.9	677.0	101.7	22.2	800.8	62.4	863.2
21.0-22.9	455.8	60.5	54.9	571.2	--	571.2
23.0-24.9	320.5	162.0	19.5	502.0	--	502.0
25.0-26.9	223.9	91.4	7.0	322.3	--	322.3
27.0-28.9	1/ -6.2	21.2	14.3	29.2	--	29.2
29.0-30.9	93.3	29.4	13.8	136.4	--	136.4
31.0-32.9	96.2	26.9	--	123.1	--	123.1
33.0-34.9	45.7	41.9	5.5	93.1	--	93.1
35.0-36.9	98.1	-53.0	8.0	53.1	--	53.1
37.0-38.9	46.6	19.5	1.5	67.5	--	67.5
39.0-40.9	43.8	5.9	--	49.7	--	49.7
41.0-42.9	36.3	--	--	36.3	--	36.3
43.0-44.9	3.7	--	--	3.7	--	3.7
45.0-46.9	-101.0	--	--	-101.0	--	-101.0
47.0-48.9	44.0	--	--	44.0	--	44.0
49.0-50.9	24.7	137.1	--	-112.4	--	-112.4
51.0-52.9	23.1	--	--	23.1	--	23.1
53.0-54.9	23.8	--	--	23.8	--	23.8
55.0-56.9	--	--	--	--	--	--
57.0-58.9	--	--	--	--	--	--
59.0-60.9	31.3	--	--	31.3	--	31.3
61.0 AND LARGER	11.3	--	--	11.3	--	11.3
ALL CLASSES	8,826.9	1,737.2	604.1	11,168.3	2,438.3	13,606.6

Estimates are subject to sampling error.

-- = no data were collected.

Totals may be off because of rounding.

1/ Negative net annual growth indicates that annual mortality exceeded gross annual growth.

TABLE 21--NET ANNUAL GROWTH OF SAWTIMBER, INTERNATIONAL 114-INCH RULE, ON TIMBERLAUD BY DIAMETER CLASS AND SPECIES, YAKATAGA UNIT, ALASKA, 1976

SOFRJOODS						
DIAMETER CLASS	SITKA SPRUCE	WESTERN HEMLOCK	MOUNTAIN HEMLOCK	TOTAL	BLACK COTTONWOOD	ALL SPECIES
<i>INCHES AT BREAST HEIGHT</i>	<i>THOUSAND BOARD FEET</i>					
SEEDLINGS	--	--	--	--	--	--
1.0-2.9	--	--	--	--	--	--
3.0-4.9	--	--	--	--	--	--
5.0-6.9	--	--	--	--	--	--
7.0-8.9	--	--	--	--	--	--
9.0-10.9	--	--	--	--	--	--
11.0-12.9	3,155.2	1,862.2	588.4	5,605.8	207.2	5,813.0
13.0-14.9	4,225.6	1,422.8	77.2	5,725.6	604.0	6,329.6
15.0-16.9	6,044.1	757.9	548.7	7,350.7	404.7	7,755.4
17.0-18.9	4,192.0	531.6	962.4	5,686.0	65.1	5,751.0
19.0-20.9	4,305.0	549.1	124.9	4,979.0	398.1	5,377.1
21.0-22.9	2,825.7	308.6	300.9	3,435.2	--	3,435.2
23.0-24.9	2,128.6	956.8	102.1	3,187.5	--	3,187.5
25.0-26.9	1,467.4	540.5	39.5	2,047.4	--	2,047.4
27.0-28.9	144.8	135.6	80.8	361.1	--	361.1
29.0-30.9	611.5	94.1	83.1	788.7	--	788.7
31.0-32.9	621.2	164.7	--	785.9	--	785.9
33.0-34.9	487.2	244.4	28.7	760.3	--	760.3
35.0-36.9	680.3	1/ -267.8	39.6	452.1	--	452.1
37.0-38.9	356.2	112.3	7.1	475.7	--	475.7
39.0-40.9	315.3	38.4	--	353.8	--	353.8
41.0-42.9	273.7	--	--	273.7	--	273.7
43.0-44.9	25.8	--	--	25.8	--	25.8
45.0-46.9	-444.0	--	--	-444.0	--	-444.0
47.0-48.9	317.2	--	--	317.2	--	317.2
49.0-50.9	178.5	-859.9	--	-681.4	--	-681.4
51.0-52.9	173.2	--	--	173.2	--	173.2
53.0-54.9	150.0	--	--	150.0	--	150.0
55.0-56.9	--	--	--	--	--	--
57.0-58.9	--	--	--	--	--	--
59.0-60.9	221.3	--	--	221.3	--	221.3
61.0 AND LARGER	91.7	--	--	91.7	--	91.7
ALL CLASSES	32,547.5	6,591.5	2,983.3	42,122.3	1,679.0	43,801.3

Estimates are subject to sampling error.

-- = no data were collected.

Totals may be off because of rounding.

11 Negative net annual growth indicates that annual mortality exceeded gross annual growth.

TABLE 22--AVERAGE ANNUAL MORTALITY OF GROWING STOCK, CUBIC FEET, ON TIMBERLAND BY DIAMETER CLASS AND SPECIES, YAKATAGA UNIT, ALASKA, 1976

DIAMETER CLASS	SOFTWOODS			TOTAL	BLACK COTTONWOOD	ALL SPECIES
	SITKA SPRUCE	WESTERN HEMLOCK	MOUNTAIN HEMLOCK			
<i>INCHES AT BREAST HEIGHT</i>						<i>THOUSAND CUBIC FEET</i>
SEEDLINGS	--	--			--	--
1.0-2.9	--	--			--	--
3.0-4.9	--	--	--	--	--	--
5.0-6.9	59.0	--	--	59.0	56.3	115.3
7.0-8.9	--	--	--	--	--	--
9.0-10.9	56.6	--	--	56.6	178.1	234.7
11.0-12.9	106.8	--	--	106.8	54.0	160.8
13.0-14.9	--	--			--	--
15.0-16.9	--	--			--	--
17.0-18.9	--	--			--	--
19.0-20.9	--	--			--	--
21.0-22.9	--	--			--	--
23.0-24.9	--	--			--	--
25.0-26.9	--	--	--	--	--	--
27.0-28.9	158.6	--	--	158.6	--	158.6
29.0-30.9	--	--	--	--	--	--
31.0-32.9	--	--	--	--	--	--
33.0-34.9	127.6	--	--	127.6	--	127.6
35.0-36.9	--	93.4	--	93.4	--	93.4
37.0-38.9	--	--	--	--	--	--
39.0-40.9	--	--	--	--	--	--
41.0-42.9	--	--	--	--	--	--
43.0-44.9	--	--	--	--	--	--
45.0-46.9	132.6	--	--	132.6	--	132.6
47.0-48.9	--	--	--	--	--	--
49.0-50.9	--	137.1	--	137.1	--	137.1
51.0-52.9	--	--	--	--	--	--
53.0-54.9	--	--	--	--	--	--
55.0-56.9	--	--	--	--	--	--
57.0-58.9	--	--	--	--	--	--
59.0-60.9	--	--	--	--	--	--
61.0 AND LARGER	--	--	--	--	--	--
ALL CLASSES	641.3	230.5	--	871.8	288.3	1,160.1

Estimates are subject to sampling error.

-- = no data were collected.

Totals may be off because of rounding.

TABLE 23--AVERAGE ANNUAL MORTALITY OF SAWTIMBER, INTERNATIONAL 1/4-INCH RULE, OU  
TIMBERLAND BY DIAMETER CLASS AND SPECIES, YAKATAGA WIT, ALASKA, 1976

DIAMETER CLASS	SOFTWOODS					BLACK COTTONWOOD	ALL SPECIES
	SITKA SPRUCE	WESTERN HEWLOCK	MOUNTAIN HEMLOCK	TOTAL			
<i>INCHES AT BREAST HEIGHT</i>							
							<i>THOUSAND BOARD FEET</i>
SEEDLINGS	--	--	--	--	--	--	--
1.0-2.9	--	--	--	--	--	--	--
3.0-4.9	--	--	--	--	--	--	--
5.0-6.9	--	--	--	--	--	--	--
7.0-8.9	--	--	--	--	--	--	--
9.0-10.9	--	--	--	--	--	--	--
11.0-12.9	451.2	--	--	451.2	153.8	605.0	
13.0-14.9	--	--	--	--	--	--	
15.0-16.9	--	--	--	--	--	--	
17.0-18.9	--	--	--	--	--	--	
19.0-20.9	--	--	--	--	--	--	
21.0-22.9	--	--	--	--	--	--	
23.0-24.9	--	--	--	--	--	--	
25.0-26.9	--	--	--	--	--	--	
27.0-28.9	936.9	--	--	936.9	--	936.9	
29.0-30.9	--	--	--	--	--	--	
31.0-32.9	--	--	--	--	--	--	
33.0-34.9	716.8	--	--	716.8	--	716.8	
35.0-36.9	--	517.5	--	517.5	--	517.5	
37.0-38.9	--	--	--	--	--	--	
39.0-40.9	--	--	--	--	--	--	
41.0-42.9	--	--	--	--	--	--	
43.0-44.9	--	--	--	--	--	--	
45.0-46.9	687.9	--	--	687.9	--	687.9	
47.0-48.9	--	--	--	--	--	--	
49.0-50.9	--	859.9	--	859.9	--	859.9	
51.0-52.9	--	--	--	--	--	--	
53.0-54.9	--	--	--	--	--	--	
55.0-56.9	--	--	--	--	--	--	
57.0-58.9	--	--	--	--	--	--	
59.0-60.9	--	--	--	--	--	--	
61.0 AND LARGER	--	--	--	--	--	--	
ALL CUSSES	2,792.8	1,377.3	--	4,170.1	153.8	4,323.9	

Estimates are subject to sampling error.

-- = no data were collected.

Totals may be off because of rounding.

TABLE 24--NET VOLUME OF TIMBER, CUBIC FEET, ON TIMBERLAND BY FOREST TYPE AND OWNER, YAKATAGA UNIT, ALASKA, 1976

FOREST TYPE	BLM <u>1</u> /	OTHER FEDERAL	ALASKA STATE	FOREST INDUSTRY	OTHER	ALL OWNERS
<i>THOUSAND CUBIC FEET</i>						
SOFTWOODS :						
HIMLOCK-SPRUCE	4,042.5	--	85,784.7	--	--	90,627.2
SITKA SPRUCE	217,212.3	--	402,224.2	--	--	619,436.6
MOUNTAIN HEMLOCK	--	--	59,202.3	--	--	59,202.3
WESTERN HEWLOCK	60,996.4	--	32,203 .0	--	--	93,199.4
ALASKA-CEDAR	--	--	--	--	--	--
TOTAL	283,051.2	--	579,414.3	--	--	862,465.5
HARDWOODS:						
BLACK COTTONWOOD	21,960.6	--	32,710.8	--	--	54,671.4
TOTAL	21,960.6	--	32,710.8	--	--	54,671.4
ALL TYPES	305,011.8	--	612,125 .0	--	--	917,136 .8

Estimates are subject to sampling error.

-- = no data were collected.

Totals may be off because of rounding.

1/ U. S. Department of the Interior, Bureau of Land Management.

TABLE 25--NET VOLUME OF SAWTIMBER, INTERNATIONAL 1/4-INCH RULE, ON TIMBERLAND BY FOREST TYPE AND OWNER, YAKATAGA UNIT, ALASKA, 1976

FOREST TYPE	BLM <u>1</u> /	OTHEH FEDERAL	ALASKA STATE	FOREST INDUSTRY	OTHER	ALL OWNERS
<i>THOUSAND BOARD FEET</i>						
SOFTWOODS :						
HEMLOCK-SPRUCE	11,837.1	--	457,752.4	--	--	469,589.5
SITKA SPRUCE	1,139,365.8	--	2,142,086.9	--	--	3,281,452.5
MOUNTAIN HEMLOCK	--	--	290,659.8	--	--	290,659.0
WESTERN HEMLOCK	323,343.4	--	134,059.7	--	--	457,403.2
ALASKA-CEDAR	--	--	--	--	--	--
TOTAL	1,474,546.3	--	3,024,558.8	--	--	4,499,105.1
HARDWOODS:						
BLACK COTTOWOOD	8,804.5	--	59,932.8	--	--	68,737.2
TOTAL	8,804.5	--	59,932.8	--	--	68,737.2
ALL TYPES	1,483,350.8	--	3,084,491.5	--	--	4,567,842.3

Estimates are subject to sampling error.

-- = no data were collected.

Totals may be off because of rounding.

1/ U. S. Department of the Interior, Bureau of Land Management.

TABLE 26--NET VOLUME OF SAWHBER, SCRIBNER RULE, ON TIMBERLAND BY FOREST TYPE AND OWNER, YAKATAGA UNIT, ALASKA, 1976

FOREST TYPE	BLM <u>1</u> /	OTHER FEDERAL	ALASKA STATE	FOREST INDUSTRY	OTHER	ALL OWNERS
<i>THOUSAND BOARD FELT</i>						
<b>SOFTWOODS:</b>						
HEMLOCK-SPRUCE	9,559.4	--	423,886.2	--	--	433,445.5
SITKA SPRUCE	1,036,796.8	--	1,963,741.8	--	--	3,000,538.6
MOUNTAIN HEMLOCK	--	--	270,733.0	--	--	270,733.0
WESTERN HEMLOCK	300,972.3	--	124,661.2	--	--	425,633.5
ALASKA-CEDAR	--	--	--	--	--	--
TOTAL	1,347,328.4	--	2,783,022.2	--	--	4,130,350.6
<b>HARDWOODS:</b>						
BLACK COTTOWOOD	7,435.5	--	52,316.3	--	--	59,751.8
TOTAL	7,435.5	--	52,316.3	--	--	59,751.8
ALL TYPES	1,354,763.9	--	2,835,338.5	--	--	4,190,102.4

Estimates are subject to sampling error.

-- = no data were collected.

Totals may be off because of rounding.

1/ U. S. Department of the Interior. Bureau of Land Management.

## Metric Equivalents

1 inch = 2.54 centimeters (cm)  
1 foot = 0.30 meter (m)  
1 mile = 1.61 kilometers (km)  
1 acre = **0.40** hectare (ha)  
1 cubic foot = 0.03 cubic meter (m<sup>3</sup>)  
1 cubic foot per acre = **0.07** cubic meter per hectare (m<sup>3</sup>/ha)  
1 square foot per acre = 0.23 square meter per hectare (m<sup>2</sup>/ha)

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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.

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Pacific Northwest Forest **and** Range  
Experiment Station  
319 S.W. Pine St.  
**P.O. Box** 3890  
Portland, Oregon 97208

van Hees, Willem W. S. Timber resource statistics for the Yakataga inventory unit, Alaska, 1976. Resour. Bull. W-124. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Forest and Range Experiment Station; 1985. 36 P.

Statistics on forest area, total gross and net timber volumes, and annual net growth and mortality are presented from the 1976 timber inventory of the Yakataga unit, Alaska. Timberland area is estimated at 209.3 thousand acres (84.7 thousand ha), net growing stock volume at 917.1 million cubic feet (26.0 million m<sup>3</sup>), and annual net growth and mortality at 13.6 and 1.2 million cubic feet (385.3 and 32.9 thousand m<sup>3</sup>), respectively.

Keywords: Forest surveys, timber inventory, statistics (forest), resources (forest), Alaska (south-central) .