

# Halifax Subdivision

Counties Halifax, Hants

1967



Published by the  
Department of Lands & Forests  
Province of Nova Scotia

Hon. George A. Snow, Minister  
G.W.I. Creighton, Deputy Minister



nova scotia  
forest inventory



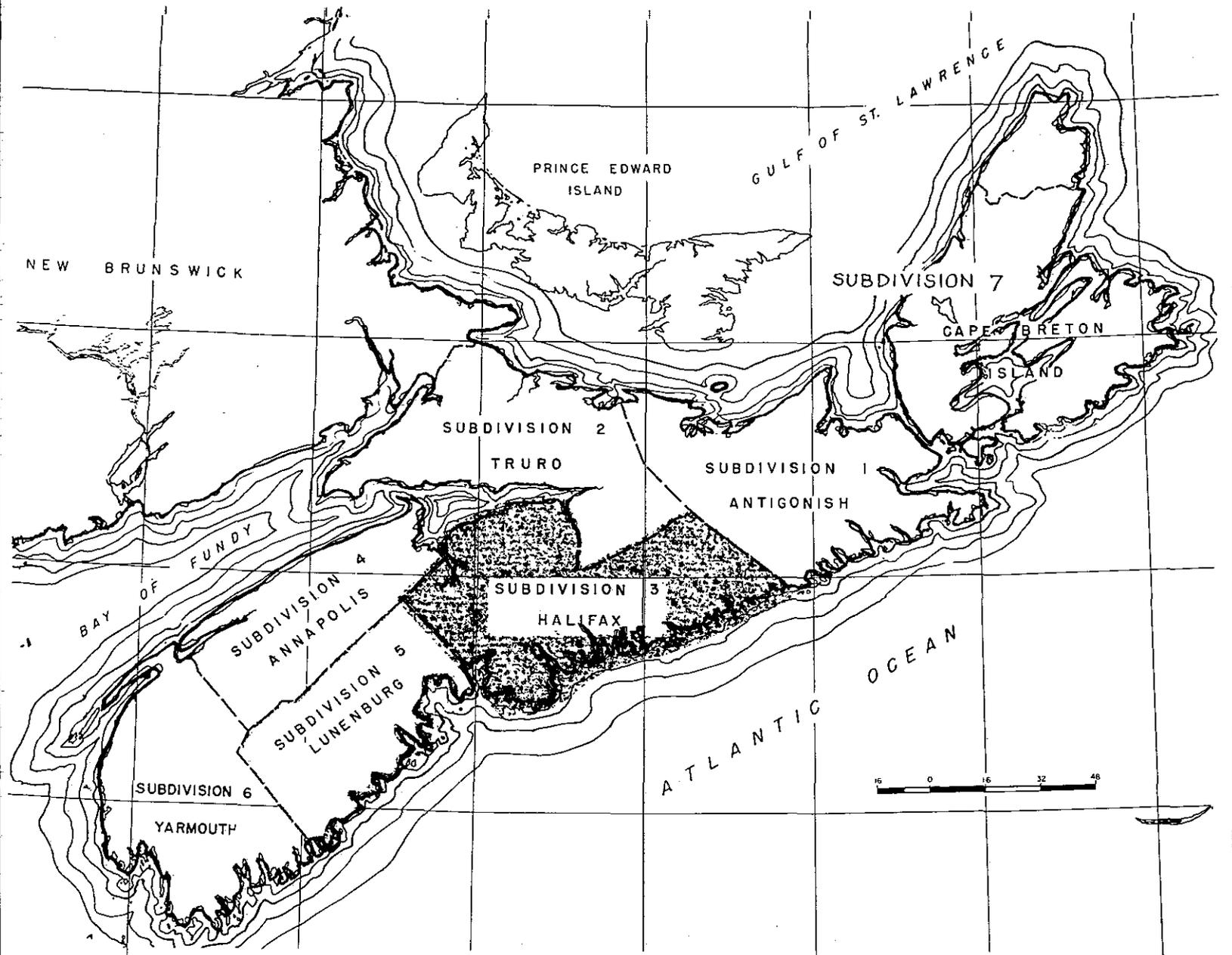
COMPILED BY INVENTORY SECTION OF THE FORESTRY DIVISION  
EDITED AND PREPARED BY EXTENSION DIVISION

DEPARTMENT OF LANDS AND FORESTS  
PROVINCE OF NOVA SCOTIA

# Subdivision III : 1967

1M/69

# Provincial Forest Inventory Subdivisions



# CONTENTS

I	INTRODUCTION.....	1	Mapping.....	13	
II	BACKGROUND.....	2	Processing and Compiling Data.....	13	
	Two Early Surveys.....	2	Programming the Computer.....	13	
	The 1958 Inventory.....	2	Area and Volume Estimates.....	14	
	The 1965 Inventory.....	2			
	Reasons for a Forest Inventory.....	3	IV	SUMMARY OF FINDINGS.....	15
	Limits of Inventory Data.....	4		Forest Conditions in the Subdivision: 1967..	15
III	METHOD.....	4		Site.....	15
	General.....	4		Density.....	15
	Schedule.....	5		Age.....	16
	Aerial Photography.....	6		Ownership.....	17
	Photo-Interpretation.....	7		Tree Condition.....	20
	Classifying Forest Land.....	7		Crown Classes.....	20
	Cover Type Classes.....	8		Volume.....	21
	Crown Closure Classes.....	8		Comparisons: 1967 and 1955.....	22
	Height Classes.....	8		Area.....	22
	Age Classes.....	8		Volume.....	23
	Site Classes.....	9	V	LOCAL VOLUME TABLES.....	27
	Recent Burn.....	9		Method of Construction.....	27
	Recent Clearcut.....	9		Individual Tree Local Volume Tables by	
	Classifying Non-Forest Land.....	9		Species Groups.....	28
	Field Work.....	10		Spruces.....	28
	Temporary Sample Plots.....	10		Fir.....	29
	Permanent Sample Plots.....	11		Hemlock, Cedar.....	29
				Pines.....	30
				Hardwoods (other than Aspen, Balsam	
				Poplar).....	30
				Aspen, Balsam Poplar.....	31

VI	CONVERSION FACTORS.....	31
	Converting Cubic Foot Volume to Cords.....	31
	Four-Foot Bolts.....	31
	Eight-Foot Bolts.....	31
	Converting Cubic Foot Volume to Board Measure.....	32
	An Analysis.....	32
	Explanation.....	33
	Conversion Factor References.....	34
VII	LIST OF SPECIES.....	34
VIII	TABLES.....	35
	Index: Area Classification Estimates.....	35
	Index: Volume Estimates in Cubic Feet....	35
	The Tables:	

INDEX TO TABLES AND CHARTS IN SECTION IV

CHARTS

Chart	I: Per Cent of Area by Density Classes.	16
Chart	II: Per Cent of Area by Age Classes.....	16
Chart	III: Per Cent of Gross Merchantable Volume by Age Classes.....	17
Chart	IV: Per Cent of Area and Gross Merchantable Volume by Ownership Classes...	17

Chart	V: Per Cent of Forested Area by Age Class and Ownership Class.....	18
Chart	VI: Per Cent of Gross Merchantable Volume by Age Class and Ownership Class.....	19

TABLES

Table A:	Per Cent of Sample Trees by Crown Class and Species Group.....	21
Table B:	Estimate of Gross Merchantable Volume as Equivalent Cubic Feet, or Rough Cords, or Board Feet.....	21
Table C:	Land Classes as a Per Cent of Total Subdivision Area, 1967 and 1955.....	22
Table D:	Per Cent Difference in Gross Cubic Foot Volume Between 1967 and 1955 Inventories by County.....	24
Table E:	Per Cent Difference in Gross Cubic Foot Volume by Species Between 1967 and 1955 Inventories, Using 1955 Adjusted Gross Volume as the Basis of Comparison.....	25
Table F:	Comparison of Species Distribution by Gross Cubic Foot Volume Percentages in the 1967 and 1955 Inventories.....	25
Table G:	Per Cent of Gross Cubic Foot Volume by Diameter Groups in 1967 and 1955 Inventories.....	26

# I Introduction

This is one in a series of seven reports on the current status of the forest resource of Nova Scotia. It presents data for a single subdivision of the provincial forest inventory which commenced in 1964-65. The seven inventory subdivisions, with their counties and municipalities, are shown at right.

These are the same subdivisions used in the 1953-1958 provincial forest inventory (Frontispiece). Each contains roughly one-seventh of the total area of the province. To complete the photography, fieldwork, mapping and compilations for one of these units takes approximately two years. But because all four work phases are proceeding simultaneously on several units, each subdivision takes the equivalent of one year to complete. Thus the inventory is to operate on a seven-year cycle of remeasurement, producing on the average one subdivision report a year, and a new report on each subdivision every seven years.

This regularity is one advantage of the continuing forest inventory system over methods used so far in Nova Scotia. Another advantage is that fresh data on growth and yield are obtainable at any time from a system of permanent plots being concurrently established throughout the province.

<u>Subdivision</u>	<u>Counties</u>	<u>Municipalities</u>
I Antigonish	1. Pictou 2. Antigonish 3. Guysborough	1. Pictou 2. Antigonish 3. St. Mary's 4. Guysborough
II Truro	1. Cumberland 2. Colchester	1. Cumberland 2. Colchester
III Halifax	1. Hants 2. Halifax	1. West Hants 2. East Hants 3. Halifax
IV Annapolis	1. Annapolis 2. Kings	1. Annapolis 2. Kings
V Lunenburg	1. Queens 2. Lunenburg	1. Queens 2. Lunenburg 3. Chester
VI Yarmouth	1. Digby 2. Yarmouth 3. Shelburne	1. Clare 2. Digby 3. Yarmouth 4. Argyle 5. Barrington 6. Shelburne
VII Cape Breton Island	1. Inverness 2. Victoria 3. Richmond 4. Cape Breton	1. Inverness 2. Victoria 3. Richmond 4. Cape Breton

The initial inventory cycle is due for completion in 1972 with the publication of the report on Subdivision VII, Cape Breton Island. By this time remeasurement of the early subdivisions is to have begun again for the second cycle.

## II Background

### TWO EARLY SURVEYS

The current series of reports constitutes the fourth description of Nova Scotia's forest resource published since 1800.

The first such report was prepared by Titus Smith as a result of his walking survey of 1801-02, which was sponsored by Lieutenant-Governor Wentworth of Nova Scotia.

The next, entitled Forest Conditions of Nova Scotia, was published in 1912. It was prepared by Dr. B. E. Fernow of the University of Toronto Forestry Faculty. He was hired to survey the resource after the lumbermen of western Nova Scotia pressed the government for such a step.

Dr. Fernow's survey was the first to collect the type of information which we might today expect from a forest inventory. His report included data on species distribution, standing volumes, growth rates and wood consumption. Accompanying these data were small-scale forest type maps. There was also an assessment of the regrowth on burned areas, and recommendations for action

to preserve and improve the resource.

All this information was collected from people who had an intimate association with the woods: lumbermen, woodlot owners, farmers, trappers and others. Considering how few of his conclusions were based on actual measurement, Fernow's report is truly a remarkable document.

### THE 1958 INVENTORY

Some forty years passed before the province again took stock of its forests. With the passing of the Canada Forestry Act in 1952 by the Federal Government, money was provided on a 50:50 basis between the Federal and Provincial Governments to carry out another forest inventory. This survey was carried out between 1953 and 1957, and the results of the survey appeared in a book entitled The Forest Resources of Nova Scotia, published by the Department of Lands and Forests in 1958. It provided the first complete set of large-scale photographs and forest type maps. It also produced the most comprehensive information yet obtained on species, acreages and volumes.

### THE 1965 INVENTORY

Although the present provincial inventory is the fourth assessment in Nova Scotia's history, it is the first to be carried out on a continuing basis. One of the recommendations arising out of the 1958 inventory was that such a continuing system be instituted to replace the intermittent type of survey. With the formation of the Voluntary Economic Planning Program a few years later, the Forestry Sector revived this recommendation and urged its prompt adoption.

Accordingly, in the winter of 1964-65 the Department of Lands and Forests convened a meeting of all foresters in Nova Scotia. Also invited were specialists from consulting firms, the Federal Department of Forestry, and the University of Maine. The proposal of a continuing forest inventory program for Nova Scotia was set before them, and won approval. Out of this meeting and previous discussions at various levels in the Department came a decision to adopt the system. A seven-year cycle of remeasurement was chosen.

Large-scale forest inventories are usually done by outside forestry consultants working under contract. The present survey is unusual in that, except for help from a forestry consultant in drawing up the original specifications, it is being carried out by Department personnel.

This arrangement has several advantages. One is that it allows Department specialists, who have easier access to the forests than would an outside agency, to check their work more frequently. Another advantage is that it provides employment for Nova Scotia rangers and other personnel. Most important, it produces a core of trained local technicians who are familiar with our forests, and who will become more so with time and experience. The Department can draw on this accumulated knowledge whenever necessary.

#### REASONS FOR A FOREST INVENTORY

In any well-run business, an annual stock-taking is necessary to determine the profit position. The forest resource must also be assessed from time to time. However, unlike the business inventory, which is a simple count of merchandise, the forest inventory

must measure a living, changing stock. This means that the information soon goes out of date. Taking inventory of the forest resource is further complicated by the need to consider varying levels of utilization in the woodmarket. For instance, a chemical pulpmill may use low-grade pulpwood of many species, while a veneermill may use only high-quality logs of yellow birch and hard maple. Yet the data must be collected and compiled in such a way that both users can extract useful information.

The forest type maps and aerial photographs being produced from this inventory should benefit both public and private land managers in their efforts. They should prove useful in locating areas that require reforestation, harvest cutting, and forms of silviculture. They should also assist provincial fire fighters, owners wishing to locate roads, cruisers assessing smaller ownerships, and other resource managers.

Another unusual feature of the present inventory is that forest type maps for private forest lands are being produced. This is not done in most provincial inventories, except on a shared-cost basis with the owners. Ordinarily the landowner can obtain forest data, but no forest type maps. However, Nova Scotia's unusually high ratio of private woodland to Crown woodland (about 3:1) makes it necessary to produce such maps for both land classes.

Because this report is basically a summary, it omits much detailed information such as stock tables, volume estimates by forest types, and volumes for temporary sample plots. These and other data are however available at the Truro office of the Department of Lands

and Forests.

### LIMITS OF INVENTORY DATA

It should be pointed out that the inventory was designed to give volumes on a municipality basis. Therefore, using the volume data for areas smaller than the 300,000 acres of a municipality falls outside the accuracy limits of the inventory, and may not give reliable volume estimates.

Applying the volume data to a smaller area would require supplementary field work on the part of the owner. The smaller the ownership, the more supplementary work would have to be done.

## III Method

### GENERAL

As mentioned before, the present inventory is using the same seven subdivisions employed in the 1958 provincial forest inventory. One subdivision consists of two to four counties. This size was chosen as a reasonable working unit on the basis of the work entailed in training, organizing and supervising the necessary staff.

For each subdivision, data will be presented by the subdivision and the municipalities. Information will also be given by four ownership classes: Federal Crown, Provincial Crown, private land of 1,000 acres or more, and private land under 1,000 acres.

To carry out such an inventory, it has been necessary to rely on the staff and facilities of various

agencies. These included the Department's Divisions of Forestry, Surveys and Mapping, and Extension; as well as the Province's Department of Mines, the Queen's Printer, and the Division of Administrative Services. The early stages required the use of computer facilities in Halifax, Toronto, Montreal and the University of Maine. This co-operative involvement is illustrated below:

Aerial photography	Done under contract to private firms
Specifications	Survey Division and Inventory Section
Checking photos	Survey Division and Inventory Section
Photo interpretation	Inventory Section
Establishment of Plots	Inventory Section
Mapping	Survey Division Inventory Section Department of Mines Private firm
Programming, data processing and compilations	Division of Administrative Services, and private firms (initially)
Report	Inventory Section Extension Division Queen's Printer

The inventory program calls for the random location of 300 to 600 temporary line plots for one subdivision each year. These plots are established at the rate of eight per map sheet, each sheet covering  $7\frac{1}{2}$  minutes of latitude by  $7\frac{1}{2}$  minutes of longitude. The plots run at right angles to the local watersheds, and are one mile long by 16.5 feet wide. The number required may be revised as the result of progressive determinations of

standard errors, provided this will improve accuracy without exceeding cost limits.

The desired accuracy calls for volume estimates on a municipality which come within ten per cent at a probability level of nine out of ten times. That is, if a particular number of sample plots was established ten times, the volume estimates would be within plus or minus ten per cent nine of the ten times; the tenth could range outside plus or minus 10 per cent.

SCHEDULE

The inventory can be divided into seven phases. In the general sequence in which they are performed, these are as listed at right:

Aerial photography  
 Interpretation of photographs  
 Establishment of temporary sample plots  
 Establishment of permanent sample plots  
 Mapping  
 Processing of data  
 Report

Because of the inherent complexity of an inventory program and the need to rely on various agencies and their facilities, a workschedule is of prime importance in meeting completion dates.

The schedule of completion dates developed for the present inventory is as shown in the table below.

Subdivision	Photography	Photo-Interpretation	Fieldwork	Compilations and Report	Mapping
Antigonish	1964	1965	1965	1967	1967
Lunenburg	1965	1966	1966	1968	1968
Halifax	1966	1967	1967	1968	1968
Truro	1967	1968	1968	1969	1969
Annapolis	1968	1969	1969	1970	1970
Yarmouth	1969	1970	1970	1971	1971
Cape Breton Island	1970	1971	1971	1972	1972

## AERIAL PHOTOGRAPHY

Specifications for photography are generally based on the latest recommendations of the Federal Inter-Departmental Committee on Air Surveys. The scale is 1:15,840 (1 inch = 20 chains), with a permissible variation of plus or minus five per cent. Tilt is not to exceed 2.5 degrees; crab is not to exceed 3 degrees.

The flight lines run as nearly east and west as possible, with a maximum allowable departure of seven per cent of picture width. Forward overlap averages 60 per cent plus or minus 4 per cent; lateral overlap 20 per cent plus or minus 10 per cent. In the event of re-photography, the unsatisfactory lines or portions thereof shall be re flown along the original lines of flight.

The specifications call for Cronor type 136 film on topographic safety base, or its equivalent or superior. This is black-and-white panchromatic film. Infrared (heat-sensitive) film was tried during the summer of 1964 in the Antigonish Subdivision, but the results were disappointing.

Kodak has developed a new type of printing paper, Kodak No. 1902, which is required in the specifications. Prints are supplied on this paper on request. It has a plastic texture and resists curling and moisture.

Photography of Subdivision I was done during spring and summer of 1964. The leaf-flush period in the spring is preferred, but in the event of a shortage of clear flying weather (as in 1966) the fall color-change period is second choice.

Negatives of the Antigonish Subdivision are numbered by the contracting firm according to the system used by the National Air Photo Library. At the start of each film roll the following information is given: film roll number, line number, photo number, flight line direction, camera type and lens, day, month, year, altitude, and job number. Successive negatives on a film roll show only roll number and photo number except where a new flight line begins. Then the detailed annotations are made, omitting date and camera information. Each photograph was also marked on the back by Department personnel for filing purposes.

For the 1965 and subsequent photography the Department requested additional annotations on the negatives to show: the subdivision, amended flight line number, photo number, and day, month and year of the photography. This annotation always appears on the west edge of each negative and photograph. The flight lines are numbered consecutively from south to north commencing with line number one. The negatives and photographs are numbered consecutively from west to east along the flight line commencing with negative number one. These changes speed the orienting and filing of pictures.

As the photos are received they are inspected to see whether they meet the specifications.

Flight reports are kept on file in Halifax and Truro. Additional information can be supplied on request. Index maps are available from the Surveys and Mapping Division in Halifax.

The Department of Lands and Forests retains the rights and title to the negatives and other working materials. These negatives are stored at the National Air Photo Library in Ottawa, from which contact prints, enlargements, reductions and mosaics are available for a fee.

#### PHOTO-INTERPRETATION

Since only the central portion of each photograph is effective, the first step in interpretation is to mark off the net area to be classified. This is done by drawing the four midlines of the north, south, east, and west overlaps. The effective area so defined equals one-third to one-half the photo area.

Each prospective photo-interpreter must pass a Zeiss test for stereoscopic vision before being assigned to this project. With the aid of an Abrams height finder, a parallax wedge, an air-photo circular slide rule, and crown closure scales, the photo-interpreter proceeds to classify forest types.

Until the interpreter is proficient in this work, he is encouraged to check classifications frequently against actual ground types.

During the first winter, photo-interpretation was checked by the consultant. It is now being supervised by an experienced department specialist.

To achieve consistent interpretation in the Antigonish Subdivision, 20 to 30 pairs of photographs were selected, ground-checked and typed to illustrate typical forest types in the Subdivision. These stereograms, which were prepared by highly skilled photo-interpreters, acted as standards for classifying the variations

encountered in species composition, height, density, and site.

Further use of stereograms is therefore indicated. In time these can form a valuable reference library for succeeding projects.

On completion of field work, the typing is revised with new knowledge obtained from the plots themselves and from information recorded by the cruiser on his way to and from the plots.

Photo interpretation is not a science but a highly skilled art. The photo interpreter must have a knowledge of forest stands and their composition, and be able to relate this knowledge to photographic images in identifying forest stands. Pre-typing the photos, running field checks through the area, and then correcting from the field checks is the best way to become proficient in the work. This requires much study of the types under stereoscope in the field and in the office.

#### CLASSIFYING FOREST LAND

There are differences between classifying forest land on the photograph and on the ground. The ground classification is in two instances more detailed. Thus although only three crown closure classes are used in typing photographs, five are recognized in typing temporary and permanent sample plots. Similarly, the photo-interpreter uses three site classes, but the cruiser six. On the other hand, height classes and cover type classes are identical in both systems. Age classes apply only to field typing.

To illustrate these similarities and differences, all the definitions used by photo-interpreters and cruisers in classifying forest lands are compared below.

Cover Type Classes

Photograph		Field
Softwood (S) --	Less than 25% hardwood by volume	Same
Mixedwood (M) --	26% to 74% hardwood by volume	Same
Hardwood (H) --	More than 75% hardwood by volume	Same

These cover types are separated on the basis of relative volume indications, except in stands of regeneration age, where relative stocking is used. In young stands a combination of relative volume and stocking is used.

Crown Closure Classes

Photograph	Field
(Crown Closure Classes)	(Stand Density Classes)
1. Up to 40% crown closure	1. Up to 40% density
2. 41% to 60% crown closure	2. 41% to 50% density
	3. 61% to 80% density
3. 61% to 100% crown closure	4. 81% to 100% density
	5. Overstocked

Here the photo classes are separated using crown closure aids. The field classes employ the Nova Scotia Site

Quality Normal Yield Tables for Softwoods (normal density concept), which make use of basal area. Hence the two extra field classes.

Height Classes

Photograph	Field
A. Up to 15 feet	Same
B. 16 feet to 30 feet	Same
C. 31 feet to 50 feet	Same
D. 51 feet and over	Same
E. Uneven heights, non-classifiable	Same

Age Classes

Photograph	Field
Not classified	A. Up to 20 years
	B. 21 to 40 years
	C. 41 to 60 years
	D. 61 to 80 years
	E. 81 to 100 years
	F. Over 100 years
	UA. Unevenaged

Age classes are not classified on the photographs because it is very difficult to do so accurately. An attempt to do this on the Antigonish Subdivision gave interpretations which were only about 60 per cent correct. Consequently age classes do not appear on the maps, and age classification has been discontinued from the photo-interpretation programme.

Site Classes

<u>Photograph</u>	<u>Field</u>
III Good or above average	I II III
IV Average	Same
V Poor or below average	V VI

Site quality is determined in the field on the basis of the height-age relationships of dominant and co-dominant trees. That is, the heights of the taller trees at given ages provide a measure of the tree-growing capacity of the site. Height-age curves constructed from the Nova Scotia Site Quality Normal Yield Tables for Softwoods are used for this.

Recent Burn

<u>Photograph</u>	<u>Field</u>
A single class for burns occurring within last 10 years; denoted by symbol (++)	Same

Recent Clearcut

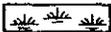
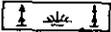
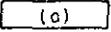
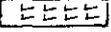
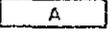
<u>Photograph</u>	<u>Field</u>
A single class for clearcuts occurring within last 10 years; denoted by symbol CC	Same

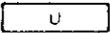
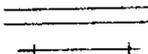
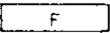
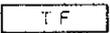
These are the categories used in classifying forest land. Map symbols denoting these categories or classes are used to distinguish the types so classified. For example, the multiple symbol S2C distinguishes a softwood type containing less than 25 per cent hardwood by volume, having a crown closure of from 41 to 60 per cent with heights of 31 to 50 feet, and growing on an average site of IV. Because of the prevalence of site class IV, stands in this category are not so indicated in the map symbols. All other site classes are designated. (E.g. a similar stand on a site class II would be identified by the symbol S2CIII).

The minimum size of forest type in this classification is three acres; any type smaller than this is merged with an adjacent type.

CLASSIFYING NON-FOREST LAND

Non-forest land is that which, because of present usage, past burns, drainage conditions, exposure, or lack of soil, are not likely to become productive forest land. It is classified the same on photographs and in the field. The classification and map symbols are as follows:

Bog and Open Muskeg	
Treed Bog or Muskeg	
Alders and Brush	
Rock Barren	
Agricultural and Marsh Land	

Urban	
Roads and Railroads	
Transmission Lines	 
Water Flowage	
Tidal Flats	

## FIELD WORK

### Temporary Sample Plots

For better statistical analysis of volume data, the plots were located on a random basis. As the controlling block for this procedure, map sheets from the Crown Land Forestry Series ( $7\frac{1}{2}$  minutes latitude by  $7\frac{1}{2}$  minutes longitude: about 32,000 acres) were used.

The maximum number of plots per full map sheet at first was set at 10. The ideal system would be to employ as many plots as would be required to provide accurate estimates for every ownership on each map sheet. But, because of limitations imposed by economy, time and weather, this is impractical in a province-wide inventory. Therefore the number of temporary sample plots per map sheet was reduced to eight.

Before the start of fieldwork each spring, the temporary plots must be located and plotted. To fix the starting points of plots, a transparent dot grid having numbered coordinates is used in conjunction with a table of random numbers. For each map sheet, numbers

are selected from the table and translated into latitude and longitude references. The locations so defined are then examined for their suitability as starting points. To be suitable, a location must lie within the boundary of that map and permit the running of a one-mile strip in some direction without encountering salt water or leaving the subdivision. Locations not satisfying those requirements are eliminated. The first eight suitable points on any given sheet determine the starting points of the eight sample plots for that map.

Once these points are settled, the course of each plot is determined. The guide here is that the plot strips should wherever possible cross the main trend of drainage. This minimizes bias. Magnetic bearings are used. Proceeding clockwise, the cardinal directions are considered first. If none of the four yields a suitable line, 45-degree offsets are next investigated. This procedure is repeated around the azimuth circle until a satisfactory course is found.

When a course for the eight points on each map sheet has been selected, the sample plots are located on a base map and on the aerial photographs. Also located on these maps and photos are the boundaries of land ownerships in the area. These are plotted as accurately as possible from the latest known information.

The dimensions of each line plot are one mile long by 16.5 feet wide (two acres). The forest types and other land classification traversed by this strip are recorded to the nearest one-tenth chain. A separate sheet is used for each forest and non-forest class encountered.

Along each strip all living trees in the four-inch DBH class and greater are calipered for diameter, and recorded by species and diameter class on tally sheets. At five points along each strip (0, 20, 40, 60, 80 chains) detailed measurements are made on three selected sample trees.

Selecting these trees is done on the basis of the three nearest trees of commercial species and merchantable size. The following data are recorded for each: species, DBH, crown class, tree condition class, total height, merchantable height, actual age, projected age, top merchantable diameter outside bark, and stump height. Where no suitable trees occur within the strip, outside samples may be measured.

Diameters are measured outside bark with a diameter tape, and recorded to the nearest tenth-inch class.

Crown class is decided on the basis of four classes defined in Forest Terminology of the Society of American Foresters: dominant, codominant, intermediate, and suppressed. For a detailed description of each class, see section IV.

Tree condition classes are assessed according to whether trees are normal, or show excessive crook, excessive rot, and seams or scars.

Heights are measured with a cloth tape and Spiegel Relaskop and recorded to the nearest one-foot class. Merchantable height is determined on the basis of form, branching, visible defects, or a four-inch top diameter outside bark.

Tree ages are found by means of increment borings made

at breast height (4.5 feet above ground level). Actual age is estimated by adding 10 years to this age. Where initial suppression results in an abnormally high age count, a correction is made by projecting for rings of normal (free-growing) width in place of the narrow rings to arrive at a normal age.

The sample tree data are used to indicate the proper volume tables and formulae to use in calculating tree and plot volumes.

Four ownership classes are recorded, as follows:

Crown land (provincial)

Ownerships of 1,000 acres and more

Ownerships under 1,000 acres

Military reservations and parks (Federal)

The cruiser, party chief and forester are responsible for editing the sheets to ensure that they are properly completed and that fieldwork is satisfactory.

#### PERMANENT SAMPLE PLOTS

An important part of the inventory program is the establishment of approximately 1,750 permanent sample plots between 1965 and 1972, at 250 new plots a year. Unlike the temporary plots, which are employed to give volume estimates at a given point in time and then abandoned, these permanent plots are designed for repeated measurement on a province-wide basis.

The acreages and volumes given in this report are obtained from temporary sample plots. These figures represent the net result, up to the time of measurement, of all the factors which added or subtracted wood during the life of the stands sampled. On the credit side, growth added volume. On the debit side, the factors of cutting, disease, insects, animals, storms and overcrowding subtracted volume. What the temporary plots reveal is the net result of this interplay to a given date. They give a static picture.

But because of the continuous interaction of growth and drain, this picture goes rapidly out of date. Therefore information on growth and drain and yield must be obtained on a continuing basis. In a sense the temporary plots do this--every seven years. Their data, however, comes each time from different trees and different areas, due to the random nature of the sampling. So a separate but complementary system is needed.

Permanent sample plots fill this need. They are established at random, accurately located on maps, and can be recognized in the field by blue paint markings and a metal centre post.

On each plot all living trees 3.6 inches and larger at breast height are marked at the 4.5-foot level and numbered with blue paint. These identification marks permit later re-measurements to be made on the same trees and ensure that diameter will be taped at the same level every time. A truer comparison of growth can thus be made. As an extra precaution, a metal number tag is nailed to the base of each tree.

Once the trees have been numbered and marked, detailed measurements begin. The data collected are essentially the same as those collected for the sample trees on temporary plots. However, age is not ascertained for each tree, but only for enough trees to show average age--or the range of ages, as the case may be.

Trees in the one-inch to three-inch diameter classes are not numbered, but are tallied to the nearest one-inch class. This tally provides valuable information on patterns of mortality and ingrowth in the smaller diameter classes.

Each permanent sample plot is to be re-measured five years after its establishment, and every five years thereafter. Thus a cyclic pattern of re-measurement is to apply. No general assessment of the growth and yield information so obtained is contemplated until the first cycle of re-measurement has been completed, about 1972. However, the plot information will be compiled, and volume summaries will be available at the Inventory Section office in Truro.

The permanent sample plots are being established randomly on all ownerships. All landowners are urged to treat these plots as they would any of their other forest holdings. That is, if plans call for logging a stand in which a plot is located, the plot area should be cut as well. If this impartiality is not observed, the estimates will be biased.

## MAPPING

The objective is to produce forest type maps of the whole province for distribution on request. These will be available in three scales: one inch to twenty chains, one inch to forty chains and one inch to eighty chains. This requires 500 to 600 maps in each case, the smaller scales being on smaller sheets for easier handling.

The making of these maps entails many steps. These reduce to three main ones: preparing a special base map negative of one inch to twenty chains from the latest topographic and tenure information, transferring to this negative the forest types obtained from aerial photographs, and eventually producing a positive print showing all this information plus a legend.

At this point, negatives for the two smaller scales are made by photographic reduction from the original. These yield two scaled-down positives of the original positive. The three positives are then used to produce white prints in the three scales.

Careful editing is essential at each stage of mapping to ensure that all information is accurate, that type lines match between adjacent sheets, and that presentation is consistent throughout.

## PROCESSING AND COMPILING DATA

Compiling acreages, volumes, volume tables and reports used to be one of the slowest parts of an inventory program. It was more time-consuming than the fieldwork. But in recent years a reversal has been taking place.

Mechanical tabulation is steadily shortening the office work. Computers are being used to make necessary compilations, to print out tables, and to store information. These steps are now being done at fantastic speeds compared to previous standards. Data, recorded and stored on tapes, can be instantly recalled. This technique replaces the slower method of having the machine scan every card in order to locate data of current interest.

## PROGRAMMING THE COMPUTER

To use these techniques, every detail of the reporting and compiling process must be programmed into "computer language". This requires that the programmer be completely informed.

The key punch operator can then punch onto cards the tally sheet information obtained from the temporary plots. One card receives the tally information, another the sample tree data, and a third miscellaneous information. All three are identified by the subdivision, county, municipality, ownership, plot number, forest and land classification, and so on. Editing follows, and any incorrectly recorded data is queried and rejected by the computer. Corrections are made where necessary. The cards are then ready for the extraction of desired information. Following a set of instructions, the computer proceeds to run the programs, as follows:

1. The sample tree programme is used to provide summaries of individual tree data, which in turn provide the basic information for preparing local volume tables. The print-out of these data is by species groups. It gives the number of trees in each diameter class (DBH), as well as average values for DBH, total height, merchantable height, stump height, merchantable top diameter

outside bark, and for actual and projected ages.

These data are presented for the following species groups:

1. White spruce
2. Red spruce, black spruce, larch, Jack pine
3. Balsam fir
4. Hemlock and cedar
5. White pine, red pine, scotch pine
6. Sugar maple, red maple, white birch, yellow birch, grey birch, elm, white ash, black ash, cherry, beech, others
7. Aspen, balsam poplar.

2. From the sample plot data, the acreages of the various forested and non-forested categories are next obtained. The procedure here is to total the sampled area for each land class, find the proportion which each land class occupies of the total area sampled, and apply this proportion at the municipality level by using the land and water acreages given for each municipality in the 1955 inventory.

For example, if it were found in a certain municipality that the total sample area for roads was 200 acres out of a total sample of 1,000 acres for all land classes, then the area occupied by roads would be calculated as being 200/1000 times the total area of that municipality as given in the 1955 inventory.

3. Volume summaries are obtained.

Published data, consisting of gross and gross merchantable cubic foot volumes are listed in section VIII.

Non-published data, as outlined below, are available from the Inventory Section, Truro, Nova Scotia.

- (a) Volume summaries are listed by line number for all forest (field) types.
- (b) Volume summaries are listed by line number for all like forest (photo) types.
- (c) Volume summaries are listed by municipality for all like forest (photo) types.
- (d) Modified stock tables are produced for each forest (photo) type in a municipality.
- (e) Tabulations are made of the results of the statistical analysis for each forest (photo) type and county.

#### AREA AND VOLUME ESTIMATES

Two groups of tables are compiled for the subdivision and each municipality therein: (a) area summaries, and (b) volume estimates in cubic feet. These tables appear in section VIII.

## IV SUMMARY OF FINDINGS

This section presents the main findings of the present inventory in Subdivision III, and compares them with those of the 1955 forest inventory in the same subdivision, on the basis of area and volume.

### FOREST CONDITIONS IN THE SUBDIVISION: 1967

#### SITE

Site evaluation is a complex problem involving species, drainage, fertility, exposure, climate, and so on. Although six classes are recognized in the inventory, on the photographs these were reduced to three groups: Site Quality IV (the most common site), those better than Site Quality IV (i.e; I, II, III), and those poorer than Site Quality IV, (i.e; V, VI). It should be noted that in selecting sample trees for site evaluation no attempt is made to use the superior trees; the basis is rather the three nearest dominant or co-dominant trees at each sampling point.

Approximately 80 per cent of the forest area of the subdivision is in Site Quality IV. The poorer site qualities comprise 16.8 per cent of the forest area, and the better site qualities 3.8 per cent.

#### DENSITY

Stand density is a measure of the degree to which an area is occupied by trees. In field classification the reference point is "normal density" as given in the Nova Scotia Site Quality Normal Yield Tables for Soft-

woods. These tables employ the basal area concept, which refers to the aggregate area of wood surface in square feet per acre at breast height of all trees in the two-inch class (in this case) and larger.

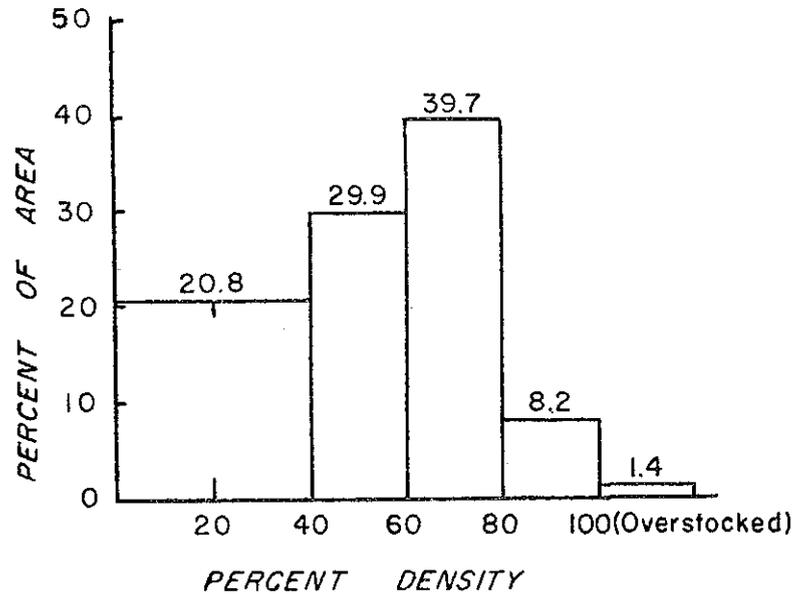
Normal density in a stand of given age-class and site quality is defined in the tables as that basal area which obtains when the site is fully occupied by trees. For convenience, basal area is usually measured by counting trees with an angle gauge designed to relate DBH and per-acre density. Density is expressed as a percentage above (overstocked) or below (understocked) the normal, which is designated as 100 per cent.

Since basal area cannot be determined from the photographs, another measure must be used to relate field classifications of density to photo classifications. Crown closure serves this purpose. (The relationship between Crown Closure Classes and Stand Density Classes in this inventory is shown on page eight).

Using crown closure scales, the photo-interpreter determines the proportion of the type area covered by a downward projection of the crowns, and expresses this as a percentage of full coverage. The stand can then be assigned to one of three Crown Closure Classes.

Chart I on page 16 shows the pattern of stand density in the subdivision. It should be noted that because of a long history of man-made and natural disturbances, our wild stands are very clumpy in nature. A density classification can describe such stands in approximate terms only.

CHART I: PER CENT AREA BY DENSITY CLASSES,  
HALIFAX SUBDIVISION, 1967



AGE

There are six 20-year age classes and one unevenaged class. To prevent the latter from being used as a catch-all for doubtful cases, cruisers are asked to use it only as a last resort. That is, wherever possible every stand must be assigned to a definite age class. This helps ensure that stands classified

as unevenaged are truly so.

The distribution of age classes by area and gross merchantable volume in the subdivision are shown in Chart II below, and in Chart III on page 17.

CHART II: PER CENT OF AREA BY AGE CLASSES,  
HALIFAX SUBDIVISION, 1967

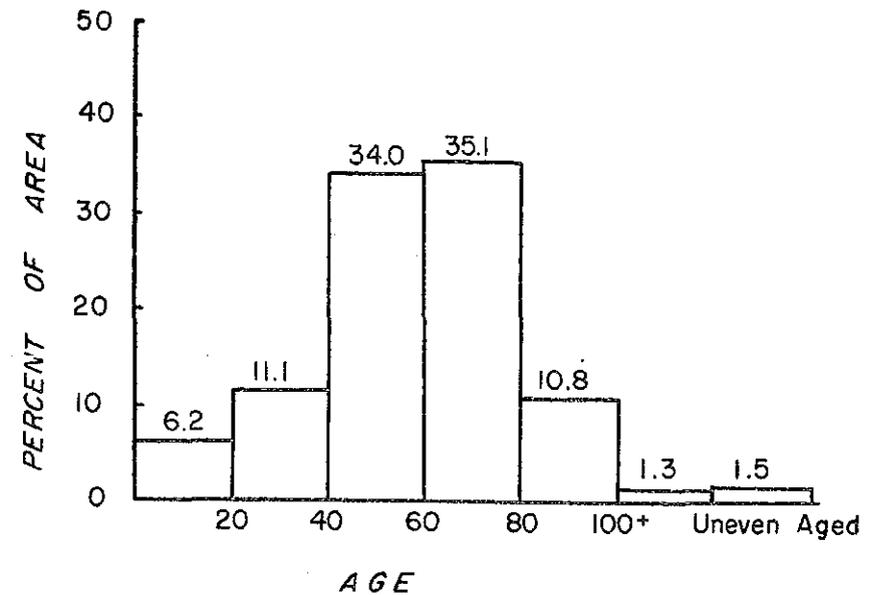
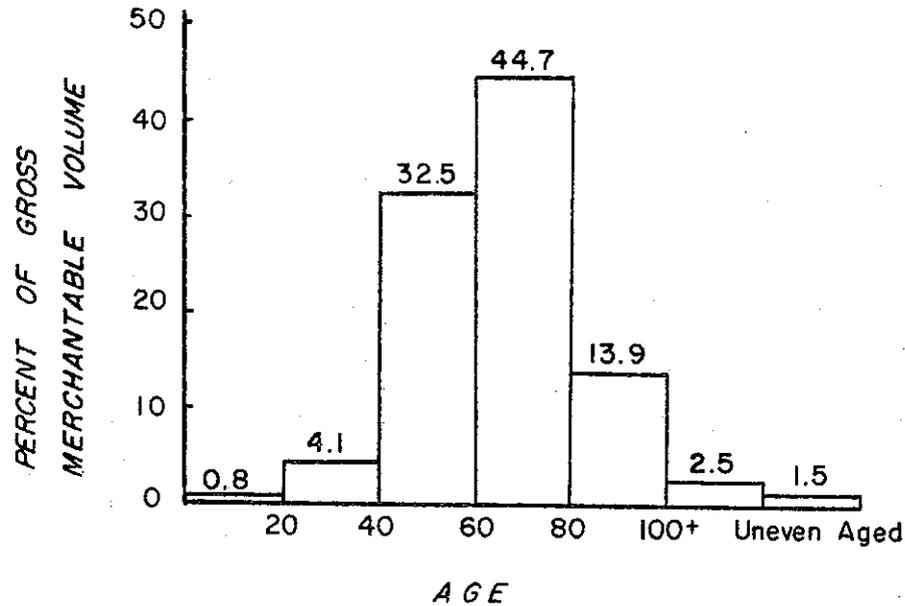


CHART III: PER CENT OF GROSS MERCHANTABLE VOLUME BY AGE CLASSES, HALIFAX SUBDIVISION, 1967



OWNERSHIP

Data for the present inventory were compiled using ownerships as one of the major groupings. Ownerships were divided into four classes: Small private holdings (less than 1,000 acres), large private holdings (1,000 acres and larger), Crown (Provincial), and Crown (Federal) holdings. These ownerships were plotted in the spring of 1967 from the best available information. The likelihood of tenure changes since then should be borne in mind.

The relationships between ownerships, area, age class, and gross merchantable volume (cu.ft.) in the subdivision are shown in Charts IV, V and VI.

CHART IV: PER CENT OF AREA AND GROSS MERCHANTABLE VOLUME BY OWNERSHIP CLASSES, HALIFAX SUBDIVISION, 1967

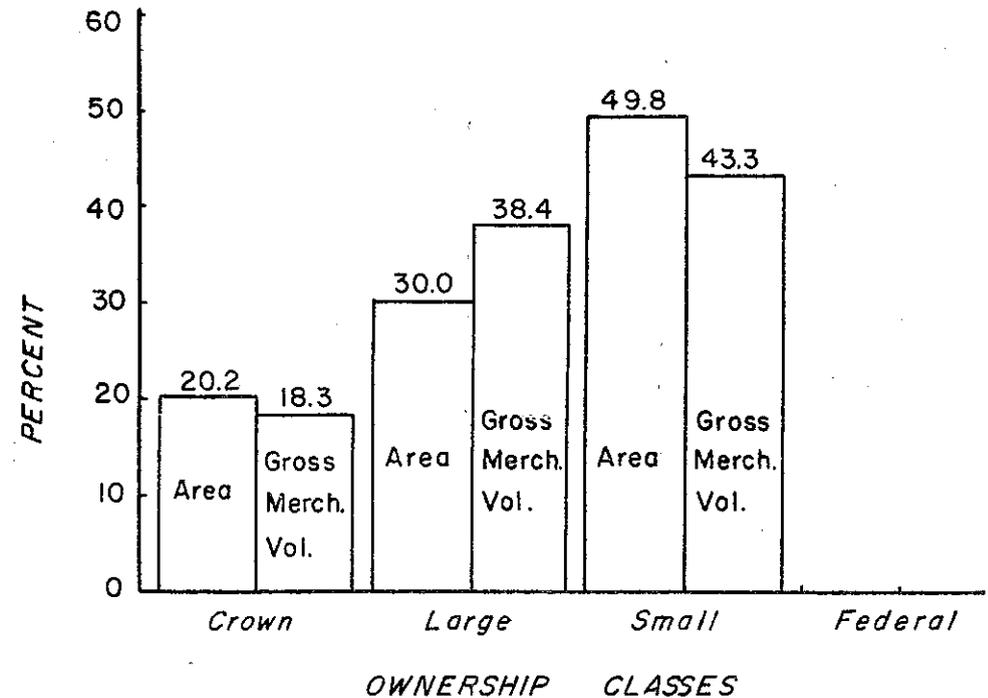


CHART V: PER CENT OF FORESTED AREA BY AGE CLASS AND OWNERSHIP CLASS, HALIFAX SUBDIVISION, 1967

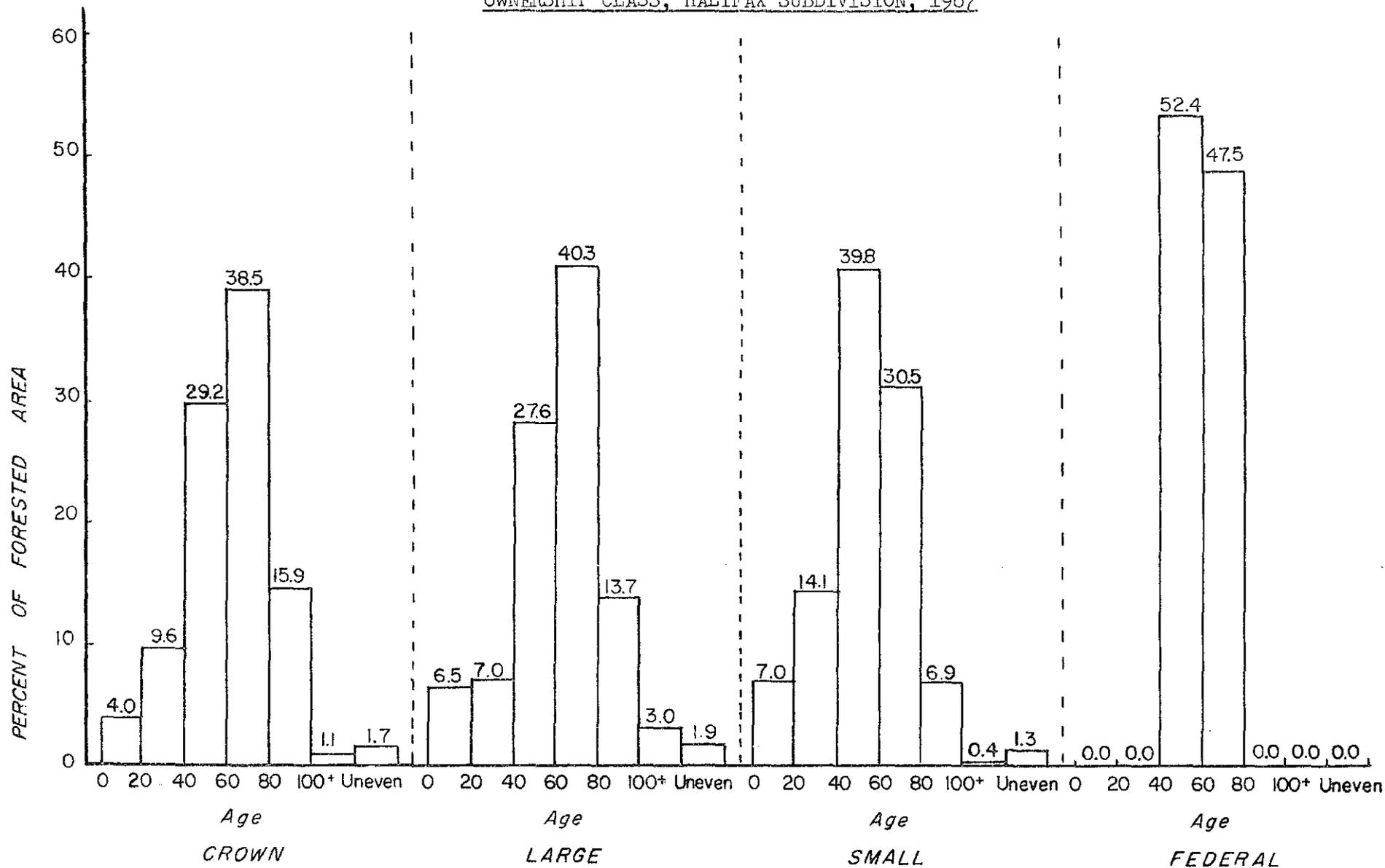
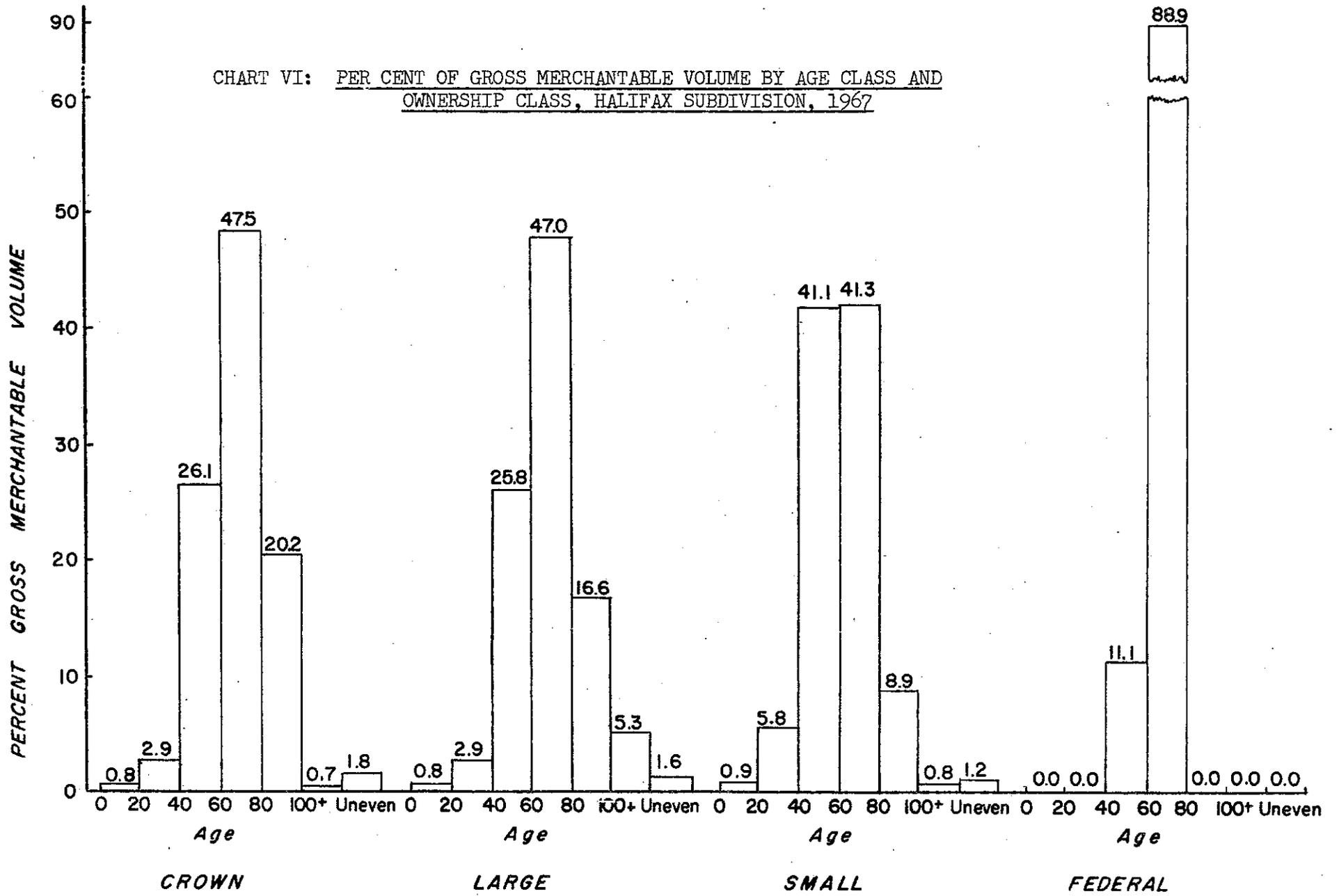


CHART VI: PER CENT OF GROSS MERCHANTABLE VOLUME BY AGE CLASS AND OWNERSHIP CLASS, HALIFAX SUBDIVISION, 1967



## TREE CONDITION

The inventory specifications call for information on four tree condition classes: "Normal", "Excessive Crook", "Excessive Rot, Seams and Scars", and "Excessive Limbiness". These classes are based strictly on visible defects, and are defined as follows:

1. Excessive Crook; Includes trees which are difficult to measure for merchantable length. These would be doubtful trees for use as pulpwood due to crook and difficulty in cutting.
2. Excessive Limbs; Includes trees, generally hardwoods and open-grown white spruce, which are difficult to measure for merchantable length, and which are suitable for pulpwood only.
3. Excessive Rot, Seams, and Scars; Includes trees having ten per cent or more of merchantable length unusable because of rot, seams and scars.
4. Normal; Includes trees that do not fall in any of the first three classes. Where a tree classifies in more than one of the first three condition classes, the cruiser notes on the tally sheet the most evident condition.

The data are expressed as percentages of a total of 5,283 sample trees for the subdivision. Depending on the species group, the "Normal" tree condition class ranged from 75 to 90 per cent of the sample trees. The other three classes made up a relatively small proportion of the total. In most species groups, any single class other than Normal did not exceed seven per cent. The exceptions occurred in hemlock (11 per cent exces-

sive rot, seams and scars) and in fir (21 per cent excessive rot, seams and scars). Hardwood also showed a high incidence of rot, seams and scars (18 per cent).

Concerning the hardwoods, it should be noted that the basis of comparison for tree condition in this inventory was not central Canada hardwoods, but Nova Scotia hardwoods. Because of the prevalence of limbiness, top damage and over-maturity in those hardwoods, their use as standards tends to give a higher assessment of quality than if central Canada standards were used.

## CROWN CLASSES

Crown classes of sample trees were tallied as dominant, co-dominant, intermediate or suppressed, as follows:

1. Dominant; Trees with crowns extending above the general canopy level; receiving full light from above and partial light from the sides; larger than the average trees for the stand, with crowns well developed but possibly somewhat crowded on the sides.
2. Co-dominant; Trees with crowns forming the general canopy level; receiving full light from above but comparatively little from the sides; with the crowns usually medium-sized and more or less crowded on the sides.
3. Intermediate; Trees shorter than those in the preceding classes, but forming part of the same canopy level; receiving little direct light from above and none from the sides; with the crown usually small and considered crowded on the sides.

4. Suppressed; Trees with crowns entirely below the general canopy level, and receiving no direct light either from above or from the sides.

The results of this tally are shown in Table A below.

TABLE A: PER CENT OF SAMPLE TREES BY CROWN CLASS AND SPECIES GROUP, HALIFAX SUBDIVISION, 1967

SPECIES GROUP	C R O W N C L A S S E S			
	Dominant	Codominant	Intermediate	Suppressed
White Spruce	29	43	20	8
Red, Black Spruce	25	50	21	4
Fir	11	41	29	19
Hemlock, Cedar	16	48	22	14
White, Red Pine	43	37	18	2
Hardwood (Other than Aspen)	19	61	17	3
Aspen	18	73	8	1

#### VOLUME

Present volume estimates at the gross merchantable level for the subdivision are shown in Table B opposite. They are expressed four ways: as cubic feet, as cords of eight-foot rough (unbarked) pulpwood, as cords of four-foot rough pulpwood, and as board feet. The estimates

are therefore independent interpretations of the same basic volume. Each column represents a complete and separate picture of the growing stock in the subdivision, expressed in a single unit of measure. The reader is asked to note that the gross merchantable volumes here given make no cull deduction whatsoever, and are based on the assumption that all areas are operable and accessible. Conversion factors are given below the table.

TABLE B: ESTIMATE OF GROSS MERCHANTABLE VOLUME AS EQUIVALENT CUBIC FEET, OR ROUGH CORDS, OR BOARD FEET; HALIFAX SUBDIVISION, 1967

(All values in thousands)

	GROSS MERCH. CUBIC FEET	EIGHT-FOOT ROUGH CORDS <sup>(1)</sup>	FOUR-FOOT ROUGH CORDS <sup>(2)</sup>	BOARD FEET <sup>(3)</sup>
SOFTWOODS	1,174,800	15,100	13,800	4,900,000
HARDWOODS	397,700	5,100	4,700	1,740,000
TOTALS	1,572,500	20,200	18,500	6,640,000

(1) Conversion factor 78 cu. ft. = one cord

(2) Conversion factor 85 cu. ft. = one cord

(3) Conversion factor 176 cu. ft. = 1,000 fbm of sawn product, using trees 6.6 inches DBH and larger to 4-inch minimum top diameter.

The above volumes are based on certain specifications. Merchantable length or height is defined as that part of a tree which would normally be usable at a pulpwood level of utilization. Softwoods will generally be merchantable to the four-inch top diameter (outside bark)

class, with the limiting factor generally being broken tops. Hardwoods on the other hand often display poor form due to excessive limbs and crooks. Hardwoods are normally taken to the four-inch top diameter (outside bark) class, or to the point where most of the larger limbs begin. It is acceptable to have one limb below either of these points, provided the limb is under five inches in diameter where it emerges from the trunk.

Trees which are so crooked as to make piling and scaling as four-foot bolts difficult are not considered merchantable. The minimum merchantable length is four feet above stump height. Trees which branch into distinct boles within four feet of stump height are measured as separate trees and classified as such.

The standard for classifying hardwoods in this inventory is based on the type of trees growing in Nova Scotia. This fact should be borne in mind when attempting to relate the hardwood data contained herein to similar data from elsewhere.

COMPARISONS: 1967 AND 1955

A fundamental purpose in obtaining new forest inventory data is to compare it with previous data in order to investigate trends and to formulate policy. Comparisons can best be made when data are available from a long series of measurements made at regular intervals and under standard specifications. Unfortunately, forest data in Nova Scotia have not been so collected in the past. The present inventory system will gradually improve this situation. Comparisons will thus become more significant with time. Some area and volume comparisons between the two inventories follow.

AREA

TABLE C: LAND CLASSES AS A PER CENT OF TOTAL SUBDIVISION AREA, 1967 AND 1955, HALIFAX SUBDIVISION

<u>Land Class</u>	<u>1967</u>	<u>1955</u>	<u>Difference</u>
Forested			
Softwood	46.3	37.2	+ 9.1
Mixed Wood	20.2	32.5	-12.3
Hardwood	10.6	3.1	+ 7.5
Other Forested		1.9	- 1.9
Subtotal	77.1	74.7	+ 2.4
Non-Forested			
Agriculture & Urban	6.1	8.2	- 2.1
Other non-forested	16.8	17.1	- 0.3
Subtotal	22.9	25.5	- 2.4
Total	100.0	100.0	000.0

NOTE: "Other Forested" in the 1955 inventory includes depleted forests (recent burns and clear-cuts); in the 1967 inventory it includes plantations, recent burns, and clear-cuts. "Other Non-Forested" in 1955 and 1967 include all non-forest areas (except agriculture and urban): swamps, water, bogs, etc. Cleared right-of-ways were not classified in 1955.

In Table C a change in the distribution of land classes is evident. Several things can account for this. One is variations in sampling, which are largely unavoidable. Another is the finer degree of typing called for in the 1967 specifications. To achieve this, field observations became the primary means for classification, instead of photo-interpretation alone, as in 1955. Because field typing in conjunction with photo-typing allows greater precision than photo-typing alone, some of the land previously classed as "Non-Forested" is now being classed as "Forested". This results in more accurate estimation of cover types.

A case in point is the apparent decrease of farmland and waste lands shown by the current data. This decrease is partly explained by the fact that wherever the 1967 field observations showed signs of such lands growing in, they were classified as "Forested". Close typing of this kind was not possible in the 1955 survey, because at that time much of the regeneration did not show on the photographs.

There is also some real decrease in agricultural land in the Subdivision, due to the invasion of abandoned fields by regeneration. It might be noted that this regeneration is mostly softwood.

Each of the forest cover types above were further grouped into forest types, using cover, height, age, density and site. These forest types are of two kinds: photo types and ground types. Basically, the ground types are more detailed than the photo types. The differences are detailed in Section III.

Three of the most commonly occurring photo-types, representing 47% of the forest area of the subdivision, are:

- (a) Softwood cover of 41% to 60% density, 31 to 50 feet tall, average age 62, Site Quality IV.
- (b) Mixed Wood cover of 41% to 60% density, 31 to 50 feet tall, average age 63, Site Quality IV.
- (c) Hardwood cover of 41% to 60% density, 31 to 50 feet tall, average age 59, Site Quality IV.

In all there were 98 forest photo-types sampled in the subdivision. Of the total sampled area, 22 types comprised 85 percent, and six types made up 54 percent.

Unfortunately, these forest categories cannot be effectively compared with those of the 1955 inventory, because the limits of the components which define them are different--in fact, they overlap.

#### VOLUME

When comparing volume estimates of the two inventories, only gross volume (cubic feet) can be used. This is because of differences in specifications, in the tables used, and in method. Actually, there are fewer pitfalls in comparing at this level than at any other.

The gross volume in 1955 was defined as the solid cubic feet content of all trees of 3.6 inches DBH and larger, and included the volume in the stems only from an average stump height of one foot to the tips of the trees, including bark.

The gross volume in 1967 includes the cubic foot volume of solid wood contained in all trees of 3.6 inches DBH and larger in the stems only from ground level to the tips of the trees, excluding bark.

If the two inventories are directly compared, we see that there is a 2.1% increase from the 1955 gross volume. Differences in method, especially regarding volume tables and their application, are at least partly responsible for this.

In order to make such comparisons, then, allowances must be made for differences in specifications and method. The assumption is therefore made that bark volume equals stump volume. Concerning method, tests were conducted to determine what effects different approaches might have had on the resultant volume estimates in both inventories.

Four aspects were investigated: use of different volume tables, different methods of entering volume tables, different methods of applying volume tables, and differences in sample tree specifications.

The investigation showed that the 1955 gross cubic foot volumes should be reduced by 10% for softwoods and 20% for hardwoods in order to make valid comparisons with 1967 data possible.

The causes of these differences were also established. Half the discrepancy in hardwood volumes was traced to the use of softwood volume tables in 1955--there being no suitable local hardwood tables then. The other half was due to differences in sample tree specifications and in the use of the tables. The latter factor applied equally to softwoods and hardwoods.

Using these adjustments, and assuming bark and stump volume to be equal, the following volume comparisons between 1967 and 1955 are made for the subdivision.

TABLE D: PERCENT DIFFERENCE IN GROSS CUBIC FOOT VOLUMES BETWEEN 1967 AND 1955\* INVENTORIES BY COUNTY, HALIFAX SUBDIVISION (BASE:1955)

	Hants	Halifax	Subdivision
Softwood	+14.8	+15.3	+15.1
Hardwood	+34.1	+15.7	+22.9
Total	+19.8	+15.4	+17.1

\* Adjusted (a) minus 10% for softwoods,  
(b) minus 20% for hardwoods.

TABLE E: PER CENT DIFFERENCE IN GROSS CUBIC FOOT VOLUME BY SPECIES BETWEEN 1967 AND 1955 INVENTORIES, USING 1955\* ADJUSTED GROSS VOLUME AS THE BASIS OF COMPARISON; HALIFAX SUBDIVISION.

SPECIES	PERCENT DIFFERENCE
White Spruce	+30.2
Red, Black Spruce	+34.1
Fir	-24.0
Other Softwoods	- 6.1
TOTAL SOFTWOODS	+15.1
Sugar Maple	-33.9
Red Maple	+44.9
Yellow Birch	-16.7
White Birch	+50.1
Other Hardwoods	+19.2
TOTAL HARDWOODS	+22.9
TOTAL	+17.1

\*Adjusted minus 10% for softwoods and minus 20% for hardwoods.

TABLE F: COMPARISON OF SPECIES DISTRIBUTION BY GROSS CUBIC FOOT VOLUME PERCENTAGES IN THE 1967 AND 1955\* INVENTORIES, HALIFAX SUBDIVISION

SPECIES	1967	1955
White Spruce	2.5	2.3
Red, Black Spruce	40.2	35.1
Fir	20.8	25.0
Hemlock		
White Pine		
Other Softwoods	10.0	12.3
TOTAL SOFTWOODS	73.5	74.7
Sugar Maple	0.7	1.3
Red Maple	15.5	12.5
Yellow Birch	4.3	6.1
White Birch	2.4	1.9
Other Hardwoods	3.6	3.5
TOTAL HARDWOODS	26.5	25.3
TOTAL	100.0	100.0

\*Adjusted minus 10% for softwoods, minus 20% for hardwoods.

TABLE G: PER CENT OF GROSS CUBIC FOOT VOLUME  
BY DIAMETER GROUPS IN 1967 AND 1955\*  
INVENTORIES, HALIFAX SUBDIVISION

DIAMETER GROUP (DBH)	1967	1955
SOFTWOOD		
4 to 9 inches	47.0	48.1
10 inches and over	26.5	26.6
TOTAL SOFTWOOD	73.5	74.7
HARDWOOD		
4 to 9 inches	16.5	14.5
10 inches and over	10.0	10.8
TOTAL HARDWOOD	26.5	25.3
<hr/>		
TOTAL	100.0	100.0

\*Adjusted minus 10% for softwoods, minus 20% for hardwoods.



## V Local Volume Tables

### METHOD OF CONSTRUCTION

Local volume tables were produced from the sample tree data collected at five points along each cruise line. From these data three height-diameter curves for each species group were plotted, smoothed and balanced.

The curves provided values for total height, merchantable height, and stump height. These values were then inserted into Honer's formulae to obtain gross and gross merchantable volumes.

Honer's formula for gross volume (cubic feet):

$$\text{Gross Volume} = \frac{D^2}{a + \frac{b}{H}}$$

where D = DBHob

H = total height

a and b = constants for each species group.

Honer's formula for gross merchantable volume (cubic feet):

Gross merchantable volume =

$$\text{Gross Volume} \left[ A (X_1^2 - X_{12}^2) + C (X_1^2 - X_{12}^2) \right]$$

where  $X_1 = \frac{\text{merchantable height}}{\text{total height}}$

$$X_{12} = \frac{\text{Stump height}}{\text{Total height}}$$

A and C = constants for each species group.

"Gross Volume" in every table is defined as solid cubic contents from ground level to tip of tree, excluding bark. "Merchantable Volume" is always gross merchantable, and means solid cubic contents, excluding bark, from stump height to a minimum top diameter of 3.6 inches outside bark (or larger if deformity or damage reduces the merchantable length).

Using Honer's formulae with the curved values from sample plot data, Individual Tree Volume Tables for each species group were produced. These tables follow.

Where data beyond a certain DBH were not available, volumes were extrapolated. The point where extrapolation begins is shown in the tables by a dashed line.

INDIVIDUAL TREE LOCAL VOLUME TABLES BY SPECIES GROUPS: SUBDIVISION III

SPECIES GROUP 1: WHITE SPRUCE

DBHob Inches	Gross Volume Cubic Feet	Merchantable Volume Cubic Feet
4	1.0	0.4
5	1.7	1.0
6	2.7	1.9
7	4.0	3.2
8	5.7	4.7
9	7.8	6.6
10	10.2	8.8
11	13.1	11.5
12	16.2	14.4
13	20.1	17.9
14	24.4	21.9
15	28.9	26.0
16	33.9	30.5
<hr style="border-top: 1px dashed black;"/>		
17	39.9	35.9
18	46.0	41.4
19	52.5	47.4
20	59.7	54.0
21	67.4	60.7
22	75.6	68.2
23	84.5	76.1
24	93.0	84.1

NOTE: Values below the dashed line are extrapolated.

March 1968.

SPECIES GROUP 2: SPRUCE (Red, Black); Larch, Jack Pine

DBHob Inches	Gross Volume Cubic Feet	Merchantable Volume Cubic Feet
4	1.1	0.5
5	2.1	1.5
6	3.3	2.6
7	5.0	4.1
8	7.2	6.1
9	9.6	8.3
10	12.6	11.2
11	16.0	14.3
12	20.0	18.1
13	24.6	22.3
14	29.4	26.7
15	34.7	31.7
16	41.0	37.5
17	47.5	43.7
18	54.5	50.4
19	62.9	58.1
20	71.3	66.0
21	80.3	74.3
22	89.9	83.7
23	101.3	94.0
<hr style="border-top: 1px dashed black;"/>		
24	112.4	104.4

NOTE: Values below the dashed line are extrapolated.

March 1968.

INDIVIDUAL TREE LOCAL VOLUME TABLES BY SPECIES GROUPS: SUBDIVISION III

SPECIES GROUP 3: BALSAM FIR

DBHob Inches	Gross Volume Cubic Feet	Merchantable Volume Cubic Feet
4	1.0	0.5
5	1.9	1.3
6	3.0	2.4
7	4.3	3.6
8	5.9	5.1
9	7.9	6.8
10	10.1	9.0
11	12.7	11.3
12	15.7	14.1
13	18.8	17.1
14	22.5	20.6
15	26.7	24.5
<hr style="border-top: 1px dashed black;"/>		
16	30.9	28.2
17	35.9	33.0
18	40.8	37.4
19	46.1	42.3
20	52.5	48.1
21	58.6	53.8
22	65.1	59.7
23	72.9	66.8
24	80.4	73.5

NOTE: Values below the dashed line are extrapolated.

March 1968.

SPECIES GROUP 4: HEMLOCK, CEDAR

DBHob Inches	Gross Volume Cubic Feet	Merchantable Volume Cubic Feet
4	1.0	0.6
5	1.8	1.2
6	2.8	2.1
7	4.2	3.3
8	5.9	4.9
9	8.0	6.8
10	10.6	9.1
11	13.6	11.9
12	17.1	15.2
13	20.8	18.7
14	25.4	23.0
15	30.6	27.6
16	35.8	32.7
17	42.2	38.7
18	48.6	44.5
19	55.6	51.3
20	63.1	58.3
21	71.3	66.2
22	80.1	74.3
23	89.5	83.1
24	99.7	92.4

March 1968.

INDIVIDUAL TREE LOCAL VOLUME TABLES BY SPECIES GROUPS: SUBDIVISION III

SPECIES GROUP 5: PINE (White, Red, Scotch)

DBHob Inches	Gross Volume Cubic Feet	Merchantable Volume Cubic Feet
4	0.8	0.3
5	1.5	1.0
6	2.5	1.9
7	3.9	3.2
8	5.8	4.9
9	7.9	6.9
10	10.5	9.4
11	13.8	12.3
12	17.4	15.8
13	21.6	19.7
14	26.4	24.2
15	31.3	28.8
16	37.3	34.6
17	43.4	40.3
18	50.1	46.6
<hr style="border-top: 1px dashed black;"/>		
19	58.2	53.6
20	66.2	61.2
21	74.0	68.5
22	83.3	77.1
23	93.2	86.2
24	102.8	94.8

NOTE: Values below the dashed line are extrapolated.

March 1968.

SPECIES GROUP 6: HARDWOODS (Other than Aspen,  
Balsam Poplar)

DBHob Inches	Gross Volume Cubic Feet	Merchantable Volume Cubic Feet
4	1.2	0.4
5	2.0	1.3
6	3.1	2.3
7	4.6	3.6
8	6.4	5.3
9	8.5	7.0
10	11.1	9.2
11	13.9	11.5
12	17.1	14.3
13	20.4	17.2
14	24.4	20.5
15	28.9	23.9
16	33.4	27.6
17	38.3	31.3
18	43.5	35.8
19	49.2	40.0
20	54.5	44.4
21	60.9	49.0
22	66.9	53.8
23	73.1	59.4
24	79.6	64.6

March 1968.

INDIVIDUAL TREE LOCAL VOLUME TABLES  
BY SPECIES GROUPS: SUBDIVISION III

SPECIES GROUP 7: ASPEN, Balsam Poplar

DBHob Inches	Gross Volume Cubic Feet	Merchantable Volume Cubic Feet
4	1.2	0.5
5	2.1	1.5
6	3.3	2.6
7	4.9	4.1
8	6.8	5.9
9	9.2	8.2
10	12.1	10.9
11	15.3	13.8
12	18.9	17.3
-----		
13	23.0	21.2
14	27.2	25.1
15	32.3	29.9
16	38.0	35.2
17	43.7	40.6
18	49.8	46.1
19	56.3	52.3
20	63.4	58.9
21	71.1	66.1
22	79.2	73.5
23	86.6	80.3
24	95.7	88.7

NOTE: Values below the dashed line are extrapolated.

March 1968.

## VI CONVERSION FACTORS

Except where broad comparisons are made, as in section IV, this report presents all volume data in cubic feet. It is left to the user of these data to convert them to the units he requires, using his own conversion factors. However, the guidelines provided in this section may prove useful.

### CONVERTING CUBIC FOOT VOLUME TO CORDS

The number of cubic feet of solid wood in a cord varies with species, average diameter and length of bolts, taper, method of piling, average bark thickness, closeness of limbing, amount of foreign material on the bolts, and the amount of crook, sweep, and abnormal growth projections. With so many variables affecting the result, no conversion factor employing exterior dimensions can be precise. Nonetheless, a number of such factors have been developed.

#### FOUR-FOOT BOLTS

Two factors commonly used for converting from cords of four-foot pulpwood to solid cubic contents are\*:

85 cu. ft. solid wood = one cord rough softwood  
 95 cu. ft. solid wood = one cord peeled softwood

#### EIGHT-FOOT BOLTS

In theory, it should be possible to convert from cubic

\*Flann, I. B., Some Conversion Factors and Related Information For Use in Primary Forest Industry of Eastern Canada; Note # 26, 1962.

feet to cords of eight-foot wood with the same factors used for four-foot wood. Were the bolts perfectly straight in both cases and all other things equal, this could be done.

In practice, the extra length increases the proportion of voids due to crook, sweep, taper and abnormalities. According to Flann, this increase results in the cubic foot content of solid wood per cord being "usually five per cent less for eight-foot wood than for four-foot wood", other things being equal. By this estimate a cord of rough eight-foot softwood would be expected to contain about 81 cubic feet of solid wood, on the average. However, measurements by local pulp companies have shown an average solid wood content of approximately 78 cubic feet per rough cord of softwood.

Regarding eight-foot hardwood pulpwood, it is generally believed that one rough cord contains 70 to 78 cubic feet of solid wood, on the average. Although this estimate has not been proved, it appears a reasonable one when the greater crookedness of hardwoods is considered.

#### CONVERTING CUBIC FOOT VOLUME TO BOARD MEASURE

The actual solid wood content in cubic feet of log volume required to produce one thousand board feet of lumber varies by species, log size, mill equipment and methods, dimensions being sawn, and the quality specifications of the market. These variables can cause the conversion factor for roundwood at roadside or mill to vary from about 140 cubic feet per thousand to over 200 cubic feet per thousand.

No attempt is made here to provide a single factor for

converting cubic feet to board feet. Instead, an analysis is presented showing the factors which enter such a conversion at each level of utilization. This permits the individual to use or alter the factors as he sees fit.

The basic factor used is 176 cubic feet per thousand feet board measure, a figure developed by G. E. Bell. These studies, which were published in the Flann paper cited, included "a wide variety of mill types" in Eastern Canada, "sawing logs with an average diameter of 8.4 inches". Elsewhere in his paper Flann presents other values for different types of head saws and different mill sizes.

Explanations follow the seven steps given below.

#### AN ANALYSIS

1. Gross merchantable (cu. ft.) solid wood from tables in section VIII, minus top, stump and bark, for trees 3.6 inches DBH and larger to 4-inch top.....(VALUE )
2. Gross merchantable volume (cu. ft.) of solid wood in trees between 3.6 inches DBH and 6.5 inches DBH to a 4-inch top; also available from tables, section VIII .....(VALUE )
3. Gross merchantable (cu. ft.) sawlog volume in roundwood form to 4-inch top (ie; 3 = 1 - 2).....(VALUE )
4. Sawlog residue (cu. ft.) equals gross merchantable roundwood volume in step 3 multiplied by 52.8% .....(VALUE )

This residue factor is derived as follows:

176 cu. ft. solid wood in round log = 1,000 fbm  
 83 cu. ft. solid wood in lumber = 1,000 fbm  
 -----  
 93 cu. ft. solid wood in residue =  
 $\frac{93}{176} \times 100 = 52.8\%$

The residue consists of

28 cu. ft./M fbm in sawdust (15.9% of 176)  
 65 cu. ft./M fbm in slabs, edgings, trim  
 (36.9% of 176)

5. Sawn product in gross merchantable cu. ft.  
 (ie; 5 = 3 - 4).....(VALUE)
6. Gross merchantable sawn product in fbm, at 83 cu.  
 ft. of sawn product = 1,000 fbm  
 (ie; 6 =  $\frac{5}{83} \times 1,000$ .....(VALUE)
7. Pulpwood chip potential (7 = 3 x 36.9%)....(VALUE)

#### EXPLANATION

The values in Steps 1 and 2 come directly from the tables. The volume in Step 2 would be the portion from which pulpwood would be cut in an integrated operation. Step 3 gives the difference between the volumes derived from Steps 1 and 2, which is the volume for trees 6.6" DBH and larger to a 4" top. (All the board foot volumes computed from these data are calculated to a 4" top, because the factors needed to find the volume for the portion between a larger top and a 4" top are not available. Those factors would have to take account of such variables as cutting practices and market requirements, which may cause top diameter to

range from nine inches to four.) The trend on integrated operations is to utilize to a four-inch top.

Steps 4, 5 and 6 arrive at the sawn production in feet board measure from the given cubic foot volume of sawlog roundwood. This is done by deducting for sawdust, slabs, edgings and trim and then converting the remainder to board measure.

It should be noted here that the factors commonly used in converting cubic foot standing volumes to roadside or mill volumes in other units tend to overestimate. This is because they are not designed to allow for logging losses arising from cull, breakage and other causes between the standing timber and the roundwood level.

The net effect of these losses is to call for a larger factor when attempting to relate standing volumes to roadside volumes. The size of this factor is further increased when the lower average yield of hardwoods--which are generally estimated with a softwood factor--is considered. The factor would also fluctuate with changing degrees of utilization.

What the correct values are has not been established. Indeed, it would be difficult to do so. It is because of these uncertainties that this report presents all values in cubic feet, leaving it to the reader to select the factors he prefers.

In the two instances where conversion from cubic feet to board feet was made, the value 176 was used for the sake of consistency with former Department publications.

### CONVERSION FACTOR REFERENCES

- Bell, G.E.; Factors Influencing the Manufacture of Sawlogs into Lumber in Eastern Canada. Bulletin 99, Ottawa, 1951.
- Department of Mines and Resources; Form Class Volume Tables (2nd Edition), Ottawa, 1948
- Flann, I.B.; Some Conversion Factors and Related Information for Use in the Primary Forest Industries of Eastern Canada, Technical Note No. 26, Forest Products Research Laboratory, Ottawa, 1962.
- Hawboldt, L.S.; "What is a Cord?" Department of Lands and Forests, Truro, 1965.
- Society of American Foresters; Forestry Hand Book, New York, 1955.

## VII List of Species

On the right is a list of the commercial Nova Scotia trees by their common and botanical names. It is according to the 1966 edition of Native Trees of Canada (Bulletin 61, Department of Forestry, Ottawa).

### SOFTWOODS

Balsam Fir	Abies balsamea (L.) Mill
Red Spruce	Picea rubens Sarg.
White Spruce	Picea glauca (Moench)Voss
Black Spruce	Picea mariana (Mill.)B.S.P.
Eastern Hemlock	Tsuga canadensis (L.)Carr.
Eastern White Pine	Pinus strobus L.
Red Pine	Pinus resinosa Ait.
Jack Pine	Pinus banksiana Lamb.
Tamarack (Larch, Hackmatack)	Larix laricina (Du Roi)K.Koch
Eastern White Cedar	Thuja occidentalis L.

### HARDWOODS

Yellow Birch	Betula alleghaniensis Britt.
White Birch	Betula papyrifera Marsh.
Grey (Wire) Birch	Betula populifolia Marsh.
Hard (Sugar) Maple	Acer saccharum Marsh.
Soft (Red) Maple	Acer rubrum L.
Beech	Fagus grandifolia Ehrh.
Red Oak	Quercus rubra L.
Largetooth Aspen	Populus grandidentata Michx.
Trembling Aspen	Populus tremuloides Michx.
Balsam Poplar	Populus balsamifera L.
American (White) Elm	Ulmus americana L.
Ironwood	Ostrya virginiana (Mill.)K.Koch
White Ash	Fraxinus americana L.
Black Ash	Fraxinus nigra Marsh.

INDEX: VOLUME ESTIMATES IN CUBIC FEET

By cover type (except in "Species" tables), DBH group,  
and ownership class.

## VIII TABLES

The tables are numbered consecutively for easy reference. The first four give acreage estimates by ownership class, municipality and subdivision. The remainder give volume estimates in cubic feet for each of the municipalities, and for the municipalities combined.

These volume estimates are given at the gross and gross merchantable levels, (as defined in section IV), and presented in four ways for each level: by density, by age, by site and by species. Except in the "Species" tables, all data are further classified by cover type, DBH group and ownership class. In the "Species" tables they are classified by DBH group and ownership class only.

INDEX: AREA CLASSIFICATION ESTIMATES

(By ownership class, municipality and subdivision)

1. Major Forest and Non-forest Classes
2. Density Classes
3. Age Classes
4. Site Classes

### WEST HANTS MUNICIPALITY

Gross Volume by:

5. Density Classes
6. Age Classes
7. Site Classes
8. Species

Gross Merchantable Volume by:

9. Density Classes
10. Age Classes
11. Site Classes
12. Species

### EAST HANTS MUNICIPALITY

Gross Volume by:

13. Density Classes
14. Age Classes
15. Site Classes
16. Species

Gross Merchantable Volume by:

17. Density Classes
18. Age Classes
19. Site Classes
20. Species

HALIFAX MUNICIPALITY

Gross Volume by:

- 21. Density Classes
- 22. Age Classes
- 23. Site Classes
- 24. Species

Gross Merchantable Volume by:

- 25. Density Classes
- 26. Age Classes
- 27. Site Classes
- 28. Species

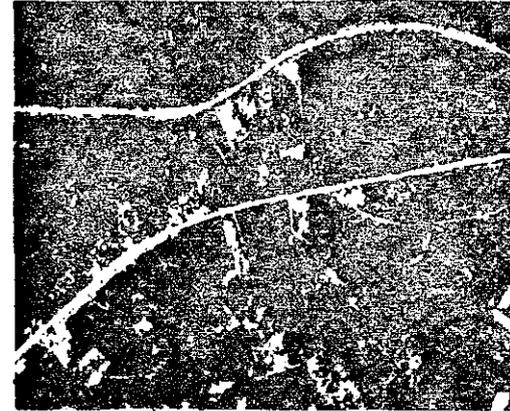
ALL MUNICIPALITIES

Gross Volume by:

- 29. Density Classes
- 30. Age Classes
- 31. Site Classes
- 32. Species

Gross Merchantable Volume:

- 33. Density Classes
- 34. Age Classes
- 35. Site Classes
- 36. Species



# The Tables:



MAJOR FOREST AND NON-FOREST LAND CLASSIFICATION

SUBDIVISION 3

AREA BY MUNICIPALITY AND OWNERSHIP CLASS

FOREST LAND AND NON-FOREST LAND CLASSIFICATION	M U N I C I P A L I T Y																			
	W E S T H A N T S					E A S T H A N T S					H A L I F A X					A L L M U N I C I P A L I T I E S				
	CROWN LAND	LARGE OWNER	SMALL OWNER	M R + P *	TOTAL	CROWN LAND	LARGE OWNER	SMALL OWNER	M R + P *	TOTAL	CROWN LAND	LARGE OWNER	SMALL OWNER	M R + P *	TOTAL	CROWN LAND	LARGE OWNER	SMALL OWNER	M R + P *	TOTAL
FOREST LAND																				
SOFTWOOD LAND	709	4035	5667	20	10432	2789	5487	13098		21374	19002	19566	33650		72219	22501	29089	52416	20	104027
MIXEDWOOD LAND	254	2440	4646		7341	1197	3676	7819	22	12715	5847	8593	10846		25287	7299	14709	23313	22	45345
HARDWOOD LAND	613	2402	2681		5697	683	1222	2014		3919	3827	4584	5720		14132	5124	8209	10416		23750
CLEAR CUT RECENT BURN PLANTATION																				
TOTAL FORESTED LAND	1577	8878	12995	20	23472	4670	10385	22932	22	38010	28677	32744	50217		111640	34926	52008	86145	43	173123
NON-FOREST LAND						139				139						139				139
BOGO OPEN + TREED	154	189	455		799	894	8	195		1097	2610	1527	1846		5984	3659	1725	2497		7882
ALDERS + BRUSH	7	112	378		499	77	168	1009		1255	1191	268	2020	20	3501	1276	550	3409	20	5256
ROCK BAKKEN			28		28						2028	209	1428		3666	2028	209	1457		3695
AGRICULTURE + MARSH	65		2899		2964		21	3187		3208		62	3446		3509	65	84	9532		9683
URBAN	31	20	965		1017			274		274		10	2514	110	2634	31	30	3753	110	3925
ROAD AND R.R.	91	14	67		173	130	12	263		406	550	125	613	2	1292	772	152	943	2	1871
TRANSMISSION LINE		53	39		93		7	25		33	61	56	96		214	61	117	162		341
TIDAL FLATS + MARSH			252		252								65		65			317		317
TOT NON-FOREST LAND	350	391	5087		5828	1241	218	4954		6415	6443	2261	12031	133	20869	8035	2871	22074	133	33114
WATER FLOWAGE	1308	1273	778		3360	275	196	446		918	4373	2555	4628		11557	5957	4025	5852		15835
	27	66	42		136	39	54	208		302	513	263	215		993	580	384	467		1432
TOTAL	1336	1339	820		3496	314	251	654		1221	4887	2819	4844		12550	6538	4409	6319		17268
OFFSHORE SMALL ISLANDS															962					962
GRAND TOTAL	3264	10608	18904	20	32798	6227	10855	28541	22	45647	40007	37825	67093	133	146022	49499	59289	114539	176	224468

\* M R + P = MILITARY RESERVES AND PARKS

ALL FIGURES ARE IN TENS OF ACRES

SUBDIVISION 3 AREA IN ACRES BY MUNICIPALITY AND OWNERSHIP CLASS

2

FOREST LAND BY DENSITY CLASSES	WEST HANTS					EAST HANTS					HALIFAX					ALL MUNICIPALITIES				
	CROWN LAND	LARGE OWNER	SMALL OWNER	M R + P *	TOTAL	CROWN LAND	LARGE OWNER	SMALL OWNER	M R + P *	TOTAL	CROWN LAND	LARGE OWNER	SMALL OWNER	M R + P *	TOTAL	CROWN LAND	LARGE OWNER	SMALL OWNER	M R + P *	TOTAL
SOFTWOOD LAND																				
UP TO 40%	89	778	1461		23302	619	765	2743		41279	4161	3157	7206		145254	4870	4702	11410		20983
41% - 60%	230	866	1666		27625	913	1443	3374		57321	7555	5042	9888		224867	8699	7352	14929		30981
61% - 80%	369	1949	1854	20	41941	943	1759	5354		80580	6058	8442	11524		260258	7371	12151	18734	20	38278
81% - 100%	20	382	601		10051	285	1468	1411		31652	1024	2380	4059		74639	1329	4231	6072		11634
OVERSTOCKED		58	82		1407	28	49	214		2915	202	569	972		17436	230	677	1268		2175
TOTAL	709	4035	5667	20	104329	2789	5487	13098		213749	19002	19592	33650		722456	22501	29115	52416	20	104053
MIXEDWOOD LAND																				
UP TO 40%	96	244	874		12150	110	809	1483		24037	1549	1627	2881		60578	1756	2681	5239		9674
41% - 60%	57	759	1376		21929	379	1027	2266	22	36956	1766	2674	3821		82626	2202	4462	7464	22	14151
61% - 80%	101	1436	2232		37703	639	1744	3875		62598	2460	3871	3462		97945	3201	7052	9570		19824
81% - 100%			163		1634	68	68	194		3313	44	293	651		9889	112	361	1008		1483
OVERSTOCKED							25			252	26	100	30		1577	26	125	30		182
TOTAL	254	2440	4646		73418	1197	3676	7819	22	127158	5847	8567	10846		252617	7299	14683	23313	22	45319
HARDWOOD LAND																				
UP TO 40%	45	168	599		8134	266	260	550		10765	1054	1142	1232		34295	1366	1570	2382		5319
41% - 60%	288	472	453		12145	126	250	770		11466	1079	1024	2270		43739	1494	1746	3494		6735
61% - 80%	279	1635	1504		34191	254	712	693		16597	1374	2215	1920		55107	1908	4562	4118		10589
81% - 100%		126	124		2507	37				370	287	202	264		7552	324	329	388		1042
OVERSTOCKED											31		31		634	31		31		62
TOTAL	613	2402	2681		56978	683	1222	2014		39199	3827	4584	5720		141328	5124	8209	10416		23750
ALL FOREST LAND																				
UP TO 40%	231	1190	2936		43586	995	1835	4776		76083	6765	5927	11320		240128	7992	8953	19033		35979
41% - 60%	575	2098	3495		51701	1418	2721	5411	22	105744	10401	8741	15980		351233	12396	13561	25887	22	51868
61% - 80%	750	5020	5591	20	113836	1836	4216	9924		159775	9894	14529	16907		413311	12481	23766	32423	20	68692
81% - 100%	20	509	889		14194	391	1536	1605		35336	1355	2876	4975		92081	1767	4923	7470		14161
OVERSTOCKED		58	82		1407	28	74	214		3168	260	669	1034		19647	288	802	1330		2422
TOTAL	1577	8878	12995	20	234726	4670	10385	22932	22	380107	28677	32744	50217		1116402	34926	52008	86145	43	173123

\* M R + P = MILITARY RESERVES AND PARKS

ALL FIGURES ARE IN TENS OF ACRES

SUBDIVISION 3 AREA IN ACRES BY MUNICIPALITY AND OWNERSHIP CLASS

FOREST LAND BY AGE CLASSES	WEST HANTS					EAST HANTS					HALIFAX					ALL MUNICIPALITIES				
	CROWN LAND	LARGE OWNER	SMALL OWNER	M R + P *	TOTAL	CROWN LAND	LARGE OWNER	SMALL OWNER	M R + P *	TOTAL	CROWN LAND	LARGE OWNER	SMALL OWNER	M R + P *	TOTAL	CROWN LAND	LARGE OWNER	SMALL OWNER	M R + P *	TOTAL
SOFTWOOD LAND																				
UP TO 20YRS		92	414		5065	97	132	694		8943	534	984	1912		34316	631	1179	3021		4832
21YRS - 40YRS	70	48	527		6468	296	83	1660		20404	1160	1919	6324		94051	1528	2051	8512		12092
41YRS - 60YRS	266	1533	1931		37319	876	2044	7075		99969	6349	4353	12598		233016	7493	7931	21605		37030
61YRS - 80YRS	193	1660	2270	20	41447	1398	2150	3194		67437	6744	7804	9410		239599	8336	11615	14875	20	34848
81YRS - 100YRS	178	86	448		7140	120	1031	473		14255	3694	3673	2982		103511	3993	4792	3904		12690
101YRS OR MORE		516	74		5913		74			740	333	674	61		10696	333	1265	135		1735
UNEVENAGED STANDS		97			973						185	181	360		7263	185	278	360		823
TOTAL	709	4035	5667	20	104329	2789	5487	13098		213749	19002	19592	33650		722456	22501	29115	52416	20	104053
MIXEDWOOD LAND																				
UP TO 20YRS	20	64	203		2886			245		2450	104	1180	746		20313	124	1245	1194		2564
21YRS - 40YRS	25	218	238		4818	102	73	846		10227	293	518	1250		20627	421	810	2335		3567
41YRS - 60YRS	88	746	1536		23726	83	940	4188	22	52348	1442	1967	3311		67218	1615	3655	9036	22	14329
61YRS - 80YRS	88	1009	1970		30684	814	2063	2354		52331	3017	3628	4085		107321	3920	6701	8411		19033
81YRS - 100YRS	31	260	428		7210	81	348	185		6151	670	872	824		23667	783	1481	1437		3702
101YRS OR MORE		23			232						38	59	135		2337	38	82	135		256
UNEVENAGED STANDS		117	268		3860	115	249			3650	279	339	493		11131	395	706	762		1864
TOTAL	254	2440	4646		73418	1197	3676	7819	22	127158	5847	8567	10846		252617	7299	14683	23313	22	45319
HARDWOOD LAND																				
UP TO 20YRS	232	496	574		13028			306		3067	419	474	891		17860	651	970	1772		3395
21YRS - 40YRS	19	329	187		5368	421	66	287		7754	974	374	819		21681	1415	770	1294		3480
41YRS - 60YRS	65	699	1169		19346	130	538	733		13737	924	1533	1734		41921	1090	2771	3637		7500
61YRS - 80YRS	92	733	582		14083	127	350	639		11175	971	1555	1775		43021	1190	2639	2998		6828
81YRS - 100YRS	183	143	67		3950	33	256	45		3465	538	491	486		15166	755	902	600		2258
101YRS OR MORE	20		99		1200							155	12		1677	20	155	112		287
UNEVENAGED STANDS																				
TOTAL	613	2402	2681		56978	683	1222	2014		39199	3827	4584	5720		141328	5124	8209	10416		23750
ALL FOREST LAND																				
UP TO 20YRS	252	653	1191		20981	97	132	1246		14460	1058	2639	3550		72490	1408	3395	5988		10793
21YRS - 40YRS	115	596	953		16656	820	223	2794		38386	2428	2813	8394		136360	3365	3632	12142		19140
41YRS - 60YRS	421	2980	4637		80391	1061	3523	11998	22	166055	8716	7854	17644		342156	10199	14358	34280	22	58860
61YRS - 80YRS	373	3402	4824	20	86214	2340	4565	6188		130943	10733	12988	15272		389942	13447	20956	26285	20	60710
81YRS - 100YRS	394	491	944		18301	235	1647	704		25871	4903	5037	4293		142345	5532	7176	5942		18651
101YRS OR MORE	20	539	174		7346		74			740	372	889	209		14710	392	1503	383		2279
UNEVENAGED STANDS		214	268		4834	115	249			3650	464	520	853		18395	580	984	1122		2687
TOTAL	1577	8878	12995	20	234726	4670	10385	22932	22	380107	28677	32744	50217		1116402	34926	52008	86145	43	173123

\* M R + P = MILITARY RESERVES AND PARKS

ALL FIGURES ARE IN TENS OF ACRES

SUBDIVISION 3 AREA IN ACRES BY MUNICIPALITY AND OWNERSHIP CLASS

FOREST LAND BY SITE CLASSES	WEST HANTS					EAST HANTS					HALIFAX					ALL MUNICIPALITIES				
	CROWN LAND	LARGE OWNER	SMALL OWNER	M R + P *	TOTAL	CROWN LAND	LARGE OWNER	SMALL OWNER	M R + P *	TOTAL	CROWN LAND	LARGE OWNER	SMALL OWNER	M R + P *	TOTAL	CROWN LAND	LARGE OWNER	SMALL OWNER	M R + P *	TOTAL
SOFTWOOD LAND																				
1																				
2																				
3		40	315		356	95	440	715		1250				62						62
4	523	3380	4960	20	8885	2041	4380	11332		17753	403	636	2135		3175	498	1117	3166		4782
5	185	614	391		1190	652	656	1050		2370	11411	14621	23882		49916	13976	22382	40175	20	76555
6													73		19006	8026	5602	8937		22567
													73		73			73		73
TOTAL	709	4035	5667	20	10432	2789	5487	13098		21374	19002	19592	33650		72245	22501	29115	52416	20	104053
MIXEDWOOD LAND																				
1																				
2																				
3		52	43		96		94	71		165	51	179	58		289					
4	254	2256	4431		6942	1050	3423	7578	22	12074	4887	7620	9645		22153	51	326	173		551
5		130	172		302	147	158	170		476	908	767	1143		2818	6192	13300	21654	22	41170
6																1055	1056	1485		3597
TOTAL	254	2440	4646		7341	1197	3676	7819	22	12715	5847	8567	10846		25261	7299	14683	23313	22	45319
HARDWOOD LAND																				
1																				
2																				
3	193	29	481		704		25	24		49	116	241	28		386	310	296	534		1141
4	419	1990	2094		4504	488	1181	1890		3561	2575	4028	5024		11628	3484	7200	9009		19693
5		382	105		488	194	14	99		308	1136	314	667		2118	1330	712	872		2915
6																				
TOTAL	613	2402	2681		5697	683	1222	2014		3919	3827	4584	5720		14132	5124	8209	10416		23750
ALL FOREST LAND																				
1																				
2																				
3	193	123	840		1157	95	560	810		1466	570	1057	2223		3851		11	62		62
4	1198	7627	11486	20	20332	3580	8985	20800	22	33389	18874	26271	38552		83697	859	1740	3874		6475
5	185	1127	669		1982	994	839	1320		3154	9232	5404	9306		23943	23653	42884	70839	43	137420
6																10413	7371	11295		29080
																73		73		73
TOTAL	1577	8878	12995	20	23472	4670	10385	22932	22	38010	28677	32744	50217		111640	34926	52008	86145	43	173123

\* M R + P = MILITARY RESERVES AND PARKS

ALL FIGURES ARE IN TENS OF ACRES

E S T I M A T E - G R O S S C U B I C F T . V O L U M E S O N F O R E S T E D L A N D B Y C O V E R T Y P E , D E N S I T Y C L A S S E S , D B H G R O U P A N D O W N E R S H I P C L A S S

MUNICIPALITY - WEST HANTS

5

COVER TYPE AND DENSITY CLASS	O W N E R S H I P C L A S S												M I L I T A R Y R E S E R V E S A N D P A R K S				T O T A L			
	C R O W N L A N D				L A R G E O W N E R S				S M A L L O W N E R S				4 - 6	7 - 9	10 + UP	TOTAL	4 - 6	7 - 9	10 + UP	TOTAL
	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL
SOFTWOOD LAND																				
UP TO 40f	265	284	627	1177	1083	1251	2679	5013	1788	2151	2083	6024					3137	3688	5390	12215
41f - 60f	930	722	508	2161	2985	2283	2235	7504	5395	5428	6576	17399					9311	8434	9319	27065
61f - 80f	1952	1327	2589	5870	8435	12064	18464	38963	9052	10825	10540	30418	161	117	133	411	19602	24334	31727	75664
81f -100f OVERSTOCKED	218	129		347	921	2199	11157	14278	3430	4400	5988	13819					4570	6728	17146	28444
					509	694	543	1747	466	246	99	812					975	941	643	2560
TOTAL	3366	2464	3725	9556	13935	18493	35079	67508	20132	23052	25289	68474	161	117	133	411	37596	44128	64226	145951
MIXEDWOOD LAND																				
UP TO 40f	113	437	411	962	359	348	520	1227	1729	1902	1713	5345					2202	2688	2644	7535
41f - 60f	215	372	671	1259	2209	3210	5393	10813	4543	5138	5843	15526					6969	8721	11908	27599
61f - 80f	418	533	555	1507	4989	6934	12567	24491	11093	9780	10907	31781					16501	17248	24030	57780
81f -100f OVERSTOCKED									1245	1019	1054	3319					1245	1019	1054	3319
TOTAL	747	1343	1638	3729	7558	10493	18481	36532	18612	17840	19519	55972					26918	29677	39638	96235
HARDWOOD LAND																				
UP TO 40f	115	272	259	648	241	455	963	1659	662	934	1840	3438					1019	1662	3063	5746
41f - 60f	494	864	2434	3793	1474	1043	2134	4652	1222	623	832	2678					3191	2530	5402	11124
61f - 80f	402	500	361	1264	4306	4987	5960	15254	5414	4161	3330	12906					10124	9649	9651	29425
81f -100f OVERSTOCKED					974	655	83	1713	659	584	803	2048					1634	1240	887	3761
TOTAL	1012	1637	3055	5706	6997	7141	9141	23280	7960	6303	6807	21070					15970	15082	19004	50057
ALL FOREST LAND																				
UP TO 40f	495	995	1298	2788	1684	2055	4162	7901	4180	4988	5637	14807					6360	8038	11098	25497
41f - 60f	1640	1959	3614	7213	6669	6537	9763	22970	11161	11189	13252	35604					19472	19686	26630	65788
61f - 80f	2773	2361	3506	8642	17731	23986	36991	78709	25561	24766	24778	75106	161	117	133	411	46227	51232	65410	162870
81f -100f OVERSTOCKED	218	129		347	1896	2855	11240	15991	5335	6004	7847	19187					7449	8989	19087	35526
					509	694	543	1747	466	246	99	812					975	941	643	2560
TOTAL	5127	5445	8419	18991	28491	36129	62701	127322	46705	47196	51615	145518	161	117	133	411	80485	88888	122870	292244

ALL FIGURES ARE IN THOUSANDS CU.FT.

E S T I M A T E - GROSS CUBIC FT. VOLUMES ON FORESTED LAND BY COVER TYPE, AGE CLASSES, DBH GROUP AND OWNERSHIP CLASSES

MUNICIPALITY - WEST HANTS

COVER TYPE AND AGE CLASS	O W N E R S H I P C L A S S																T O T A L			
	C R O W N L A N D				L A R G E O W N E R S				S M A L L O W N E R S				M I L I T A R Y R E S E R V E S A N D P A R K S				4 - 6	7 - 9	10 + UP	TOTAL
	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL
SOFTWOOD LAND																				
UP TO 20YRS					12	40	90	143	162	244	148	554					174	284	238	698
21YRS - 40YRS	133	14		147	99	75	152	327	986	581	512	2080					1219	671	665	2555
41YRS - 60YRS	1462	938	930	3330	7071	7454	4790	19316	7044	5944	5762	18750					15577	14336	11482	41397
61YRS - 80YRS	910	748	707	2366	4776	7420	11576	23774	9755	14005	13530	37291	161	117	133	411	15603	22292	25947	63843
81YRS - 100YRS	860	763	2087	3711	742	485	767	1995	1985	1989	4011	7986					3588	3238	6866	13692
101YRS OR MORE					845	2589	16750	20186	198	288	1324	1811					1044	2878	18075	21998
UNEVENAGED STANDS					387	425	951	1765									387	425	951	1765
TOTAL	3366	2464	3725	9556	13935	18493	35079	67508	20132	23052	25289	68474	161	117	133	411	37596	44128	64226	145951
MIXEDWOOD LAND																				
UP TO 20YRS					48	119	43	211	194	130	72	397					242	249	116	608
21YRS - 40YRS	72	24		97	538	128	40	707	545	237	185	967					1155	390	226	1772
41YRS - 60YRS	296	515	416	1228	3285	3713	3741	10740	7327	5286	3751	16366					10910	9515	7909	28335
61YRS - 80YRS	266	592	667	1526	2709	4733	10690	18133	8214	9190	11470	28876					11190	14516	22828	48535
81YRS - 100YRS	112	210	554	876	557	1121	2773	4452	1176	2113	3099	6389					1847	3445	6427	11719
101YRS OR MORE					57	204	154	416									57	204	154	416
UNEVENAGED STANDS					361	471	1038	1871	1153	882	937	2974					1515	1354	1976	4845
TOTAL	747	1343	1638	3729	7558	10493	18481	36532	18612	17840	19519	55972					26918	29677	39638	96235
HARDWOOD LAND																				
UP TO 20YRS	64	83	71	219	36	53	352	442	92	165	90	348					193	302	514	1011
21YRS - 40YRS					1069	394	1943	3407	328	135	140	604					1398	529	2084	4012
41YRS - 60YRS	368	320	175	864	3516	3264	1598	8379	4585	2912	2879	10378					8471	6497	4652	19622
61YRS - 80YRS	181	504	1059	1745	2200	3100	4328	9528	2624	2530	2248	7404					5005	6135	7636	18778
81YRS - 100YRS	305	629	1616	2552	174	329	918	1422	91	217	502	811					571	1175	3037	4785
101YRS OR MORE	92	100	131	324					236	340	946	1523					328	441	1077	1848
UNEVENAGED STANDS																				
TOTAL	1012	1637	3055	5706	6997	7141	9141	23280	7960	6303	6807	21070					15970	15082	19004	50057
ALL FOREST LAND																				
UP TO 20YRS	64	83	71	219	97	213	486	797	448	540	312	1301					610	837	869	2318
21YRS - 40YRS	205	39		244	1706	598	2136	4442	1860	953	838	3653					3773	1591	2975	8340
41YRS - 60YRS	2128	1773	1522	5424	13873	14432	10129	38436	18957	14143	12393	45494					34959	30350	24045	89355
61YRS - 80YRS	1357	1845	2434	5637	9685	15255	26595	51536	20595	25726	27249	73571	161	117	133	411	31800	42944	56412	131158
81YRS - 100YRS	1278	1602	4259	7140	1474	1936	4458	7869	3254	4319	7613	15187					6007	7859	16331	30198
101YRS OR MORE	92	100	131	324	903	2794	16904	20602	435	629	2270	3335					1431	3524	19307	24262
UNEVENAGED STANDS					749	897	1989	3636	1153	882	937	2974					1903	1780	2927	6610
TOTAL	5127	5445	8419	18991	28491	36129	62701	127322	46705	47196	51615	145518	161	117	133	411	80485	88888	122870	292244

ALL FIGURES ARE IN THOUSANDS CU.FT.

E S T I M A T E - GROSS CUBIC FT. VOLUMES ON FORESTED LAND BY COVER TYPE, SITE CLASSES, DBH GROUP AND OWNERSHIP CLASSES

MUNICIPALITY - WEST HANTS

7

COVER TYPE AND SITE CLASS	O W N E R S H I P C L A S S																T O T A L			
	C R O W N L A N D				L A R G E O W N E R S				S M A L L O W N E R S				M I L I T A R Y R E S E R V E S A N D P A R K S				4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL
	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL				
SOFTWOOD LAND																				
1																				
2																				
3																				
4	2580	2221	3725	8526	95	117	20	233	817	847	464	2128								
5	786	243		1029	1774	900	323	2997	1151	643	489	2285	161	117	133	411	32971	41376	62929	137276
6																	3712	1787	812	6312
TOTAL	3366	2464	3725	9556	13935	18493	35079	67508	20132	23052	25289	68474	161	117	133	411	37596	44128	64226	145951
MIXEDWOOD LAND																				
1																				
2																				
3																				
4	747	1343	1638	3729	85	153	1704	1943	17978	17307	19083	54369								
5					238	528	1029	1796	634	533	435	1603								
6																				
TOTAL	747	1343	1638	3729	7558	10493	18481	36532	18612	17840	19519	55972					25960	28462	36469	90892
																	872	1061	1464	3399
TOTAL	747	1343	1638	3729	7558	10493	18481	36532	18612	17840	19519	55972					26918	29677	39638	96235
HARDWOOD LAND																				
1																				
2																				
3	324	642	1746	2713	98	86	377	562	1591	1363	1946	4900								
4	688	995	1308	2992	6766	6896	8086	21749	5975	4566	4395	14937								
5					132	158	677	968	392	373	465	1232								
6																				
TOTAL	1012	1637	3055	5706	6997	7141	9141	23280	7960	6303	6807	21070					15970	15082	19004	50057
ALL FOREST LAND																				
1																				
2																				
3	324	642	1746	2713	279	357	2102	2739	2408	2210	2410	7029								
4	4016	4560	6672	15248	26066	34184	58569	118820	42117	43434	47814	133367	161	117	133	411	72361	82296	113189	267848
5	786	243		1029	2145	1587	2030	5762	2179	1550	1390	5121					5111	3381	3420	11913
6																				
TOTAL	5127	5445	8419	18991	28491	36129	62701	127322	46705	47196	51615	145518	161	117	133	411	80485	88888	122870	292244

ALL FIGURES ARE IN THOUSANDS CU.FT.

E S T I M A T E - GROSS CUBIC FT. VOLUMES ON FORESTED LAND BY SPECIES, DBH GROUP AND OWNERSHIP CLASS

MUNICIPALITY - WEST HANTS

8

S P E C I E S	O W N E R S H I P C L A S S																T O T A L			
	C R O W N L A N D				L A R G E O W N E R S				S M A L L O W N E R S				M I L I T A R Y R E S E R V E S A N D P A R K S				4 - 6	7 - 9	10 +	TOTAL
	4 - 6	7 - 9	10 +	TOTAL	4 - 6	7 - 9	10 +	TOTAL	4 - 6	7 - 9	10 +	TOTAL	4 - 6	7 - 9	10 +	TOTAL	DBH	DBH	DBH	
WHITE SPRUCE	8			8	327	374	653	1355	2515	3731	4262	10509					2852	4105	4915	11874
SPRUCE-RED + BLACK	2744	2594	3743	9082	11046	16185	25942	54175	12228	16303	15970	44502	46	74	82	203	26065	35158	46740	107964
FIR	941	529	194	1665	4898	5671	2394	13454	13141	8778	2725	24644	106	43		149	19087	15022	5814	39924
HEMLOCK	2		34	36	249	903	11091	12244	966	2191	5952	9109					1217	3094	17078	21390
WHITE PINE	36	130	1185	1352	107	253	2877	3238	202	651	5642	6496					347	1035	9705	11088
RED PINE					9	19	43	72	6			6					15	19	43	79
LARCH	244	54		299	190	69	25	285	515	692	506	1713					949	816	531	2298
JACK PINE																				
SCOTCH PINE																				
CEDAR																				
<b>TOTAL SOFTWOODS</b>	<b>3978</b>	<b>3309</b>	<b>5157</b>	<b>12445</b>	<b>16830</b>	<b>23477</b>	<b>44528</b>	<b>84836</b>	<b>29575</b>	<b>32348</b>	<b>35059</b>	<b>96983</b>	<b>152</b>	<b>117</b>	<b>82</b>	<b>352</b>	<b>50536</b>	<b>59253</b>	<b>84828</b>	<b>194618</b>
SUGAR MAPLE		17		17	364	359	785	1519	515	427	686	1628					880	813	1471	3165
RED MAPLE	860	1526	1994	4380	6633	8035	10394	25063	8329	6922	6696	21948	2		50	52	15825	16484	19136	51446
YELLOW BIRCH	78	53	50	182	750	771	3755	5278	774	866	1829	3470	4			4	1607	1691	5636	8935
WHITE BIRCH	111	317	175	604	2829	2285	1972	7088	1584	1349	892	3826	2			2	4528	3953	3040	11522
OAK					47	48	34	130	745	1095	2157	3997					792	1144	2191	4128
ASPEN	29	186	458	674	38	144	227	409	2497	2773	3123	8394					2564	3103	3809	9477
GREY BIRCH	51	9	22	82	35	12		48	1232	185		1419					1319	208	22	1550
WHITE ASH					364	460	241	1067	431	189	201	823					796	650	443	1890
BLACK ASH	10	25	559	595	12	9		22	6	57		64					29	93	559	682
CHERRY									54			54					54			54
ELM					24	9		33	57	40	118	216					81	50	118	249
BEECH					553	495	760	1809	829	916	777	2523					1382	1411	1538	4332
BALSAM POPLAR																				
<b>TOTAL HARDWOODS</b>	<b>1140</b>	<b>2136</b>	<b>3261</b>	<b>6537</b>	<b>11654</b>	<b>12542</b>	<b>13172</b>	<b>42470</b>	<b>17058</b>	<b>14825</b>	<b>16483</b>	<b>48367</b>	<b>8</b>		<b>50</b>	<b>59</b>	<b>29862</b>	<b>29604</b>	<b>37968</b>	<b>97434</b>
MISCELLANEOUS	8			8	5	9		15	71	22	72	166					86	31	72	191
<b>TOTAL FOREST LAND</b>	<b>5127</b>	<b>5445</b>	<b>8419</b>	<b>18991</b>	<b>28491</b>	<b>36129</b>	<b>52701</b>	<b>127322</b>	<b>46705</b>	<b>47196</b>	<b>51615</b>	<b>145518</b>	<b>161</b>	<b>117</b>	<b>133</b>	<b>412</b>	<b>80485</b>	<b>88888</b>	<b>122870</b>	<b>292244</b>

ALL FIGURES ARE IN THOUSANDS CU. FT.

E S T I M A T E - MERCH CUBIC FT. VOLUMES ON FORESTED LAND BY COVER TYPE, DENSITY CLASSES, DBH GROUP AND OWNERSHIP CLASS

MUNICIPALITY - WEST HANTS

9

COVER TYPE AND DENSITY CLASS	O W N E R S H I P C L A S S																T O T A L					
	C R O W N L A N D				L A R G E O W N E R S				S M A L L O W N E R S				M I L I T A R Y R E S E R V E S A N D P A R K S				4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL		
	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL						
SOFTWOOD LAND																						
UP TO 40f	173	242	500	976	718	1054	2380	4153	1172	1805	1860	4838							2064	3103	4801	9969
41f - 60f	644	604	457	1706	1952	1909	1986	5849	3607	4551	5876	14035							6204	7065	8319	21590
61f - 80f	1296	1107	2340	4745	5804	10135	16597	32536	6014	9088	9324	24427	114	98	117	330			13230	20429	28379	62039
81f - 100f	136	107		243	626	1847	10137	12612	2353	3703	5375	11433							3117	5658	15513	24289
OVERSTOCKED					359	581	483	1425	305	204	90	601							665	786	574	2026
TOTAL	2251	2062	3358	7672	9461	15529	31586	56577	13454	19354	22527	55335	114	98	117	330			25281	37044	57589	119916
MIXEDWOOD LAND																						
UP TO 40f	79	364	303	808	212	289	441	943	1086	1591	1498	4176							1379	2245	2303	5928
41f - 60f	134	312	601	1048	1402	2668	4638	8709	2883	4263	5106	12253							4419	7245	10346	22011
61f - 80f	276	446	506	1230	3316	5781	11127	20225	7107	8157	9623	24888							10700	14385	21258	46344
81f - 100f									815	858	950	2624							815	858	950	2624
OVERSTOCKED																						
TOTAL	490	1124	1471	3086	4931	8739	16207	29879	11892	14871	17179	43943							17315	24735	34859	76909
HARDWOOD LAND																						
UP TO 40f	76	223	217	517	152	371	843	1367	416	769	1555	2741							645	1364	2616	4626
41f - 60f	319	714	2008	3102	871	843	1793	3507	728	513	707	1948							1918	2071	4568	8558
61f - 80f	207	408	301	977	2518	4074	5007	11600	3199	3436	2857	9492							5985	7919	8166	22071
81f - 100f					582	533	74	1190	399	478	713	1591							981	1012	787	2781
OVERSTOCKED																						
TOTAL	663	1347	2587	4598	4124	5822	7718	17666	4742	5197	5833	15774							9531	12367	16139	38038
ALL FOREST LAND																						
UP TO 40f	329	831	1141	2302	1064	1716	3665	6465	2675	4165	4915	11756							4089	6713	9721	20524
41f - 60f	1098	1631	3127	5857	4226	5421	8418	18066	7218	9328	11690	28237							12543	16382	23235	52161
61f - 80f	1841	1963	3149	6953	11638	19990	32732	64362	16321	20682	21804	58808	114	98	117	330			29915	42734	57804	130455
81f - 100f	136	107		243	1209	2381	10211	13801	3568	5041	7039	15649							4914	7530	17251	29696
OVERSTOCKED					359	581	483	1425	305	204	90	601							665	786	574	2026
TOTAL	3406	4533	7417	15357	18517	30091	55512	104122	30090	39423	45540	115053	114	98	117	330			52128	74147	108588	234864

ALL FIGURES ARE IN THOUSANDS CU.FT.

E S T I M A T E - MERCH CUBIC FT. VOLUMES ON FORESTED LAND BY COVER TYPE, AGE CLASSES, DBH GROUP AND OWNERSHIP CLASSES

MUNICIPALITY - WEST HANTS

COVER TYPE AND AGE CLASS	O W N E R S H I P C L A S S																T O T A L			
	C R O W N L A N D				L A R G E O W N E R S				S M A L L O W N E R S				M I L I T A R Y R E S E R V E S A N D P A R K S				4 - 6	7 - 9	10 + UP	TOTAL
	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL
<b>SOFTWOOD LAND</b>																				
UP TO 20YRS					7	33	81	122	103	202	121	427					110	236	203	549
21YRS - 40YRS	83	12		96	60	62	132	255	636	485	445	1568				781	560	578	1919	
41YRS - 60YRS	960	784	831	2577	4759	6252	4275	15287	4629	4978	5113	14721				10349	12015	10221	32586	
61YRS - 80YRS	631	625	633	1889	3260	6233	10298	19793	6586	11784	12034	30404	114	98	117	330	10592	18741	23083	52417
81YRS - 100YRS	576	640	1893	3109	529	406	692	1628	1362	1661	3625	6648				2467	2708	6210	11386	
101YRS OR MORE					584	2179	15241	18005	136	241	1186	1564				721	2421	16427	19570	
UNEVENAGED STANDS					258	361	864	1485								258	361	864	1485	
<b>TOTAL</b>	<b>2251</b>	<b>2062</b>	<b>3358</b>	<b>7672</b>	<b>9461</b>	<b>15529</b>	<b>31586</b>	<b>56577</b>	<b>13454</b>	<b>19354</b>	<b>22527</b>	<b>55335</b>	<b>114</b>	<b>98</b>	<b>117</b>	<b>330</b>	<b>25281</b>	<b>37044</b>	<b>57589</b>	<b>119916</b>
<b>MIXEDWOOD LAND</b>																				
UP TO 20YRS					34	99	39	173	122	106	60	289					157	206	100	463
21YRS - 40YRS	39	20		59	293	103	36	434	327	197	164	690				660	322	201	1184	
41YRS - 60YRS	203	430	376	1011	2165	3108	3402	8575	4565	4403	3333	12302				6934	7942	7012	21889	
61YRS - 80YRS	175	495	599	1270	1788	3936	9415	15140	5387	7675	10094	23157				7351	12108	20109	39569	
81YRS - 100YRS	72	177	495	745	381	931	2398	3711	761	1750	2707	5219				1214	2860	5601	9676	
101YRS OR MORE					36	167	134	338								36	167	134	338	
UNEVENAGED STANDS					232	391	879	1504	728	736	819	2283				960	1128	1699	3787	
<b>TOTAL</b>	<b>490</b>	<b>1124</b>	<b>1471</b>	<b>3086</b>	<b>4931</b>	<b>8739</b>	<b>16207</b>	<b>29879</b>	<b>11892</b>	<b>14871</b>	<b>17179</b>	<b>43943</b>				<b>17315</b>	<b>24735</b>	<b>34859</b>	<b>76909</b>	
<b>HARDWOOD LAND</b>																				
UP TO 20YRS	41	68	60	170	24	44	303	371	59	138	78	276					125	251	442	819
21YRS - 40YRS					586	321	1820	2528	179	112	121	413				766	433	1742	2942	
41YRS - 60YRS	235	260	156	653	2066	2660	1340	6068	2693	2406	2442	7542				4996	5328	3939	14264	
61YRS - 80YRS	119	413	881	1414	1342	2527	3647	7517	1595	2079	1971	5646				3057	5021	6499	14578	
81YRS - 100YRS	203	521	1378	2104	104	267	806	1178	58	177	429	665				366	967	2614	3948	
101YRS OR MORE	62	82	109	254					156	281	790	1229				219	363	900	1483	
UNEVENAGED STANDS																				
<b>TOTAL</b>	<b>663</b>	<b>1347</b>	<b>2587</b>	<b>4598</b>	<b>4124</b>	<b>5822</b>	<b>7718</b>	<b>17666</b>	<b>4742</b>	<b>5197</b>	<b>5833</b>	<b>15774</b>				<b>9531</b>	<b>12367</b>	<b>16139</b>	<b>38038</b>	
<b>ALL FOREST LAND</b>																				
UP TO 20YRS	41	68	60	170	65	177	424	668	286	447	260	994					393	693	745	1832
21YRS - 40YRS	122	32		155	941	487	1789	3218	1143	796	732	2672				2207	1316	2521	6046	
41YRS - 60YRS	1400	1475	1365	4241	8991	12021	8918	29932	11887	11789	10889	34566				22280	25286	21173	68740	
61YRS - 80YRS	926	1534	2113	4574	6390	12698	23361	42451	13569	21539	24100	59209	114	98	117	330	21000	35871	49693	106566
81YRS - 100YRS	652	1339	3768	5960	1015	1606	3897	6518	2181	3589	6761	12533				4049	6535	14426	25012	
101YRS OR MORE	62	82	109	254	621	2347	15375	18344	293	523	1976	2794				977	2953	17462	21393	
UNEVENAGED STANDS					491	753	1744	2989	728	736	819	2283				1219	1489	2563	5272	
<b>TOTAL</b>	<b>3406</b>	<b>4533</b>	<b>7417</b>	<b>15357</b>	<b>18517</b>	<b>30091</b>	<b>55512</b>	<b>104122</b>	<b>30090</b>	<b>39423</b>	<b>45540</b>	<b>115053</b>	<b>114</b>	<b>98</b>	<b>117</b>	<b>330</b>	<b>52128</b>	<b>74147</b>	<b>108588</b>	<b>234864</b>

ALL FIGURES ARE IN THOUSANDS CU.-FT.

E S T I M A T E - MERCH CUBIC FT. VOLUMES ON FORESTED LAND BY COVER TYPE, SITE CLASSES, DBH GROUP AND OWNERSHIP CLASSES

MUNICIPALITY - WEST HANTS

11

COVER TYPE AND SITE CLASS	O W N E R S H I P C L A S S																T O T A L			
	C R O W N L A N D				L A R G E O W N E R S				S M A L L O W N E R S				M I L I T A R Y R E S E R V E S A N D P A R K S				4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL
	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL				
SOFTWOOD LAND																				
1																				
2																				
3					55	95	17	169	539	704	409	1653								
4	1738	1860	3358	6957	8199	14678	31290	54169	12154	18109	21673	51937	114	98	117	330	595	799	427	1822
5	513	202		715	1205	754	277	2238	761	540	443	1745					22206	34747	56440	113393
6																	2480	1497	721	4699
TOTAL	2251	2062	3358	7672	9461	15529	31586	56577	13454	19354	22527	55335	114	98	117	330	25281	37044	57589	119916
MIXEDWOOD LAND																				
1																				
2																				
3					54	127	1511	1693												
4	490	1124	1471	3086	4718	8174	13818	26711	11489	14426	16808	42724					54	127	1511	1693
5					158	438	876	1473	403	444	371	1219					16699	23724	32099	72523
6																	561	883	1248	2693
TOTAL	490	1124	1471	3086	4931	8739	16207	29879	11892	14871	17179	43943					17315	24735	34859	76909
HARDWOOD LAND																				
1																				
2																				
3	216	532	1486	2235	54	69	314	438	940	1121	1642	3705					1212	1723	3443	6379
4	447	814	1100	2362	3992	5620	8832	16445	3570	3768	3801	11141					8010	10204	11735	29949
5					77	132	571	781	231	307	389	927					309	439	960	1709
6																				
TOTAL	663	1347	2587	4598	4124	5822	7718	17666	4742	5197	5833	15774					9531	12367	16139	38038
ALL FOREST LAND																				
1																				
2																				
3	216	532	1486	2235	165	292	1843	2301	1480	1825	2052	5358					1861	2650	5383	9895
4	2676	3798	5931	12406	16910	28473	51942	97327	27214	36305	42283	105802	114	98	117	330	46915	68676	100274	215866
5	513	202		715	1442	1325	1726	4494	1395	1292	1204	3892					3351	2820	2930	9102
6																				
TOTAL	3406	4533	7417	15357	18517	30091	55512	104122	30090	39423	45540	115053	114	98	117	330	52128	74147	108588	234864

ALL FIGURES ARE IN THOUSANDS CU.FT.

E S T I M A T E - M E R C H C U B I C F T . V O L U M E S O N F O R E S T E D L A N D B Y S P E C I E S , D B H G R O U P A N D O W N E R S H I P C L A S S

MUNICIPALITY - WEST HANTS

S P E C I E S	O W N E R S H I P C L A S S																T O T A L			
	C R O W N L A N D				L A R G E O W N E R S				S M A L L O W N E R S				M I L I T A R Y R E S E R V E S A N D P A R K S				4 - 6	7 - 9	10 + UP	TOTAL
	4 - 6	7 - 9	10 + UP	TOTAL	4 - 6	7 - 9	10 + UP	TOTAL	4 - 6	7 - 9	10 + UP	TOTAL	4 - 6	7 - 9	10 + UP	TOTAL	DBH	DBH	DBH	TOTAL
WHITE SPRUCE	5			5	188	307	580	1077	1454	3083	3765	8304					1649	3391	4346	9387
SPRUCE-RED + BLACK	1866	2180	3377	7425	7651	13635	24412	45699	8417	13751	14395	36564	33	62	75	170	17969	29629	42260	89859
FIR	624	450	174	1249	3401	4834	2592	10828	8946	7470	2436	18854	76	36		113	13048	12792	5204	31045
HEMLOCK	1		30	31	174	751	10121	11047	667	1804	5327	7799					844	2555	15480	18879
WHITE PINE	24	112	1069	1226	71	216	2638	2925	136	555	5184	5876					231	884	8912	10028
RED PINE					5	15	39	62	3			3					9	16	39	65
LARCH	157	45		202	124	57	22	204	358	582	455	1396					639	686	477	1803
JACK PINE																				
SCOTCH PINE																				
CEDAR																				
<b>TOTAL SOFTWOODS</b>	<b>2681</b>	<b>2788</b>	<b>4672</b>	<b>10142</b>	<b>11618</b>	<b>19818</b>	<b>40408</b>	<b>71844</b>	<b>19983</b>	<b>27248</b>	<b>31565</b>	<b>78797</b>	<b>109</b>	<b>98</b>	<b>75</b>	<b>284</b>	<b>34393</b>	<b>49954</b>	<b>76722</b>	<b>161069</b>
SUGAR MAPLE		14		14	226	297	654	1178	314	344	564	1223					541	656	1219	2416
RED MAPLE	538	1237	1658	3434	3926	6525	8635	19086	4817	5602	5558	15979			41	42	9283	13365	15894	38543
YELLOW BIRCH	47	43	41	132	449	523	3107	4179	461	702	1514	2678	2			2	961	1368	4663	6994
WHITE BIRCH	75	257	145	478	1657	1856	1539	5153	929	1092	743	2765					2663	3205	2528	8398
OAK					28	39	28	96	468	887	1780	3135					496	926	1808	3232
ASPEN	22	163	418	603	22	125	207	355	1639	2402	2840	6882					1684	2691	3466	7842
GREY BIRCH	29	7	18	55	16	10	27	27	623	147		771					669	165	18	854
WHITE ASH					207	372	201	781	261	154	167	582					468	526	368	1363
BLACK ASH	7	21	461	490	8	7		15	3	46		50					18	75	461	555
CHERRY									29			29					29			29
ELM					13	7		20	36	32	99	168					50	39	99	189
BEECH					339	401	630	1371	480	743	646	1871					820	1145	1277	3242
BALSAM POPLAR																				
<b>TOTAL HARDWOODS</b>	<b>720</b>	<b>1744</b>	<b>2744</b>	<b>5210</b>	<b>6895</b>	<b>10266</b>	<b>15104</b>	<b>32266</b>	<b>10067</b>	<b>12156</b>	<b>13914</b>	<b>36138</b>	<b>4</b>		<b>41</b>	<b>46</b>	<b>17688</b>	<b>24167</b>	<b>31805</b>	<b>73662</b>
MISCELLANEOUS	4			4	3	7		10	39	17	60	117					46	25	60	132
<b>TOTAL FOREST LAND</b>	<b>3406</b>	<b>4533</b>	<b>7417</b>	<b>15357</b>	<b>18517</b>	<b>30091</b>	<b>55512</b>	<b>104122</b>	<b>30090</b>	<b>39423</b>	<b>45540</b>	<b>115053</b>	<b>114</b>	<b>98</b>	<b>117</b>	<b>330</b>	<b>52128</b>	<b>74147</b>	<b>108588</b>	<b>234864</b>

ALL FIGURES ARE IN THOUSANDS CU. FT.

E S T I M A T E - GROSS CUBIC FT. VOLUMES ON FORESTED LAND BY COVER TYPE, DENSITY CLASSES, DBH GROUP AND OWNERSHIP CLASS

MUNICIPALITY - EAST HANTS

COVER TYPE AND DENSITY CLASS	O W N E R S H I P C L A S S																T O T A L			
	C R O W N L A N D				L A R G E O W N E R S				S M A L L O W N E R S				M I L I T A R Y R E S E R V E S A N D P A R K S				4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL
	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL				
SOFTWOOD LAND																				
UP TO 40f	1289	1127	475	2892	1520	1780	1299	4600	5540	4697	3229	13467					8350	7605	5004	20960
41f - 60f	2214	1959	1919	6093	5597	6453	6624	18675	10950	10363	8343	29058					18762	18776	16888	54427
61f - 80f	4624	5040	6636	16300	8601	11982	18223	38807	26629	28520	26985	82135					39855	45543	51845	137244
81f - 100f	2059	2125	1502	5686	8283	10751	27220	46260	9859	12211	7330	29401					20201	25087	36059	81348
OVERSTOCKED	30	10		41	395	395	604	1395	1205	1088	650	2945					1632	1495	1254	4382
TOTAL	10218	10263	10533	31015	24399	31362	53978	109740	54186	56882	46539	157608					88803	98508	111052	298364
MIXEDWOOD LAND																				
UP TO 40f	161	269	604	1035	1681	1958	2328	5968	3329	3636	2531	9496					5172	5864	5464	16500
41f - 60f	1112	1572	1140	3826	3344	4373	5243	13968	8674	6989	6277	21941	12	9	28	50	13144	12950	13691	39786
61f - 80f	2696	3502	4174	10374	8090	12660	12096	32847	18133	17926	15114	51174					28920	34089	31386	94396
81f - 100f	93			93	432	742	257	1432	1224	1546	708	3479					1749	2289	965	5005
OVERSTOCKED					52	48	230	331									52	48	230	331
TOTAL	4064	5344	5920	15329	13600	19788	21158	54547	31362	30098	24631	86092	12	9	28	50	49039	55242	51739	156020
HARDWOOD LAND																				
UP TO 40f	418	74	29	522	481	637	1339	2458	746	755	723	2226					1646	1467	2092	5207
41f - 60f	397	593	487	1479	708	1100	1247	3056	2253	2106	1686	6046					3359	3800	3422	10582
61f - 80f	1045	1074	653	2773	3426	2820	2442	8688	2580	2430	1918	6929					7052	6324	5014	18391
81f - 100f	81	9		91													81	9		91
OVERSTOCKED																				
TOTAL	1943	1751	1170	4865	4616	4558	5028	14203	5580	5292	4329	15202					12140	11602	10528	34271
ALL FOREST LAND																				
UP TO 40f	1869	1470	1110	4450	3683	4377	4967	13027	9616	9089	6484	25189					15169	14937	12561	42668
41f - 60f	3725	4126	3547	11399	9650	11932	14117	35700	21878	19459	16308	57646	12	9	28	50	35266	35527	34002	104796
61f - 80f	8366	9617	11464	29448	20118	27462	32762	80343	47344	48877	44018	140240					75829	85956	88245	250032
81f - 100f	2233	2134	1502	5870	8715	11493	27483	47593	11083	13758	8039	32881					22033	27386	37025	86445
OVERSTOCKED	30	10		41	448	444	834	1727	1205	1088	650	2945					1685	1543	1485	4714
TOTAL	16226	17359	17624	51210	42616	55709	80166	178492	91128	92273	75500	258903	12	9	28	50	149984	165352	173320	488657

ALL FIGURES ARE IN THOUSANDS CU.FT.

E S T I M A T E - GROSS CUBIC FT. VOLUMES ON FORESTED LAND BY COVER TYPE, AGE CLASSES, DBH GROUP AND OWNERSHIP CLASSES

MUNICIPALITY - EAST HANTS

COVER TYPE AND AGE CLASS	O W N E R S H I P C L A S S												T O T A L							
	C R O W N L A N D				L A R G E O W N E R S				S M A L L O W N E R S				M I L I T A R Y R E S E R V E S A N D P A R K S				T O T A L			
	4 - 6 DBH	7 - 9 DBH	10 + DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + DBH	TOTAL
<b>SOFTWOOD LAND</b>																				
UP TO 20YRS	50	21		71	36			36	420	441		202	1064				507	462	202	1172
21YRS - 40YRS	501	187	153	842	294	138	28	461	3816	2364	1543	7724					4613	2690	1725	9029
41YRS - 60YRS	3730	2863	1544	8138	10948	11844	10560	33353	34204	34565	23179	91950					48883	49274	35284	133442
61YRS - 80YRS	5179	6438	7477	19095	9931	13893	21896	45720	13514	16135	19354	49004					28625	36467	48728	113821
81YRS -100YRS	756	751	1357	2866					2229	28996		2229	7864				5824	9189	24714	39727
101YRS OR MORE					349	423	398	1171									349	423	398	1171
UNEVENAGED STANDS																				
TOTAL	10218	10263	10533	31015	24399	31362	53978	109740	54186	56882	46539	157608					88803	98508	111052	298364
<b>MIXEDWOOD LAND</b>																				
UP TO 20YRS									61	29	27	118					61	29	27	118
21YRS - 40YRS	124			124	202	54		257	1638	674	467	2780					1966	729	467	3163
41YRS - 60YRS	327	348	254	929	3578	4285	4415	12279	19715	17084	11871	48671	12	9	28	50	23633	21728	16569	61930
61YRS - 80YRS	2768	4112	4731	11612	7652	12079	13459	33191	9086	11171	10960	31217					19507	27363	29150	76021
81YRS -100YRS	382	546	284	1212	926	2355	2242	5524	860	1138	1305	3304					2168	4040	3832	10041
101YRS OR MORE																				
UNEVENAGED STANDS	461	337	650	1449	1240	1013	1041	3294									1701	1350	1691	4744
TOTAL	4064	5344	5920	15329	13600	19788	21158	54547	31362	30098	24631	86092	12	9	28	50	49039	55242	51739	156020
<b>HARDWOOD LAND</b>																				
UP TO 20YRS									41	13		54					41	13		54
21YRS - 40YRS	1004	166	113	1284	275	48		323	238	115		353					1518	329	113	1961
41YRS - 60YRS	387	170	222	780	2459	1720	1222	5403	3155	2516	1124	6796					6001	4408	2569	12979
61YRS - 80YRS	388	1122	575	2086	1232	1872	1861	4966	2063	2499	2851	7414					3684	5494	5288	14468
81YRS -100YRS	163	291	259	714	648	917	1944	3509	82	147	352	583					894	1356	2556	4807
101YRS OR MORE																				
UNEVENAGED STANDS																				
TOTAL	1943	1751	1170	4865	4616	4558	5028	14203	5580	5292	4329	15202					12140	11602	10528	34271
<b>ALL FOREST LAND</b>																				
UP TO 20YRS	50	21		71	36			36	523	484	229	1237					610	505	229	1345
21YRS - 40YRS	1631	353	266	2252	772	241	28	1042	5693	3154	2010	10858					8098	3749	2306	14153
41YRS - 60YRS	4444	3382	2021	9849	16986	17851	16198	51035	57075	54166	36175	147417	12	9	28	50	78518	75410	54423	208353
61YRS - 80YRS	8335	11674	12784	32794	18817	27845	37217	83879	24664	29806	33165	87636					51817	69326	83167	204310
81YRS -100YRS	1302	1589	1901	4793	4413	8335	25282	38031	3171	4661	3919	11752					8887	14586	31103	54577
101YRS OR MORE					349	423	398	1171									349	423	398	1171
UNEVENAGED STANDS	461	337	650	1449	1240	1013	1041	3294									1701	1350	1691	4744
TOTAL	16226	17359	17624	51210	42616	55709	80166	178492	91128	92273	75500	258903	12	9	28	50	149984	165352	173320	488657

ALL FIGURES ARE IN THOUSANDS CU.FT.

E S T I M A T E - G R O S S C U B I C F T . V O L U M E S O N F O R E S T E D L A N D B Y C O V E R T Y P E , S I T E C L A S S E S , D B H G R O U P A N D O W N E R S H I P C L A S S E S

MUNICIPALITY - EAST HANTS

COVER TYPE AND SITE CLASS	O W N E R S H I P C L A S S																T O T A L				
	C R O W N L A N D				L A R G E O W N E R S				S M A L L O W N E R S				M I L I T A R Y R E S E R V E S A N D P A R K S				4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	
	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL					
SOFTWOOD LAND																					
1																					
2																					
3	288	309	1211	1809	920	2375	11761	15057	4015	6057	4260	14333									
4	8001	8619	3808	25430	21525	26838	40738	89102	47159	47729	40896	135785									
5	1928	1333	513	3775	1953	2148	1478	5581	3011	3095	1382	7489									
6																					
TOTAL	10218	10263	10533	31015	24399	31362	53976	109740	54186	56882	46539	157608									
MIXEDWOOD LAND																					
1																					
2																					
3					333	883	1469	2680	218	240	541	1000									
4	3526	4718	5498	13743	12829	18580	19135	50545	30719	29348	23657	83725	12	9	28	50	552	1124	2010	3687	
5	538	626	422	1586	437	325	553	1315	424	510	432	1366					47087	52656	48320	148064	
6																		1399	1461	1407	4268
TOTAL	4064	5344	5920	15329	13600	19788	21158	54547	31362	30098	24631	86092	12	9	28	50	49039	55242	51739	156020	
HARDWOOD LAND																					
1																					
2																					
3					63	127	56	240	32	9		41									
4	1686	1699	1141	4527	4528	4430	4825	13784	5485	5139	4329	14953					95	137	56	288	
5	250	52	29	338	25		147	172	63	143		206					11700	11269	10295	33265	
6																		344	195	176	717
TOTAL	1943	1751	1170	4865	4616	4558	5026	14203	5580	5292	4329	15202					12140	11602	10528	34271	
ALL FOREST LAND																					
1																					
2																					
3	288	309	1211	1809	1317	3380	13286	17990	4265	6307	4802	15376									
4	13214	15038	15448	43701	38883	49849	64699	153431	83364	82210	68883	234404	12	9	28	50	5871	10004	19300	35176	
5	2723	2011	904	5699	2415	2474	2179	7069	3498	3749	1814	9062					135474	147113	149060	431648	
6																		8637	8235	4959	21831
TOTAL	16226	17359	17624	51210	42616	55709	80166	178492	91128	92273	75500	258903	12	9	28	50	149984	165352	173320	488657	

ALL FIGURES ARE IN THOUSANDS CU-FT.

E S T I M A T E - GROSS CUBIC FT. VOLUMES ON FORESTED LAND BY SPECIES, DBH GROUP AND OWNERSHIP CLASS

MUNICIPALITY - EAST HANTS

S P E C I E S	O W N E R S H I P C L A S S												M U N I C I P A L I T Y - E A S T H A N T S							
	C R O W N L A N D				L A R G E O W N E R S				S M A L L O W N E R S				M I L I T A R Y R E S E R V E S A N D P A R K S				T O T A L			
	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL
WHITE SPRUCE	162	118	319	601	402	669	1175	2248	2732	3979	3734	10446	6			6	3304	4768	5230	13302
SPRUCE-RED + BLACK	8282	7239	7460	22981	15698	23427	47515	86741	24420	32016	28910	85347					48401	62682	83986	195070
FIR	2327	2141	1060	5530	14038	12540	4787	31367	35864	26472	8300	70637	6	9		15	52237	41164	14149	107551
HEMLOCK	12	32	70	115	407	1093	4454	5955	2236	4362	7439	14038					2656	5488	11974	20118
WHITE PINE	223	292	1781	2297	87	267	2779	3133	330	788	3363	4481					640	1348	7924	9913
RED PINE	716	1733	2515	4964	1	48	351	401	145	367	516	1029					863	2149	3382	6395
LARCH	631	347	227	1206	568	832	575	1976	1911	1911	1077	4900			28	28	3111	3091	1908	8111
JACK PINE																				
SCOTCH PINE									164	266	78	508					164	266	78	508
CEDAR																				
TOTAL SOFTWOODS	12356	11905	13436	37697	31205	38879	61749	131834	67805	70165	53419	191390	12	9	28	50	111379	120959	128633	360973
SUGAR MAPLE	66	161	70	298	203	294	424	922	414	685	1703	2905					684	1143	2198	4026
RED MAPLE	2240	4038	2934	9212	7020	11301	11279	29500	11579	12507	11670	35756					20839	27846	25884	74570
YELLOW BIRCH	204	355	314	874	1385	1955	3352	5415	2034	2054	2287	6376					3624	4377	5665	13666
WHITE BIRCH	144	179	278	602	1482	1870	1113	4455	2344	1984	1650	5979					3972	4035	3041	11049
OAK	18	67	300	387	97	108	150	355	62	140	187	391					178	316	639	1134
ASPEN	969	594	289	1853	755	1179	2273	4208	4330	3861	3224	11417					6055	5634	5787	17478
GREY BIRCH	223			223	350	55		405	1561	162		1724					2134	218		2353
WHITE ASH					24	43	49	118	198	148	217	563					223	191	266	681
BLACK ASH					2			2	28	29	24	83					31	29	24	85
CHERRY																				
ELM									5		131	137					5		131	137
BEECH	2			2	84	10	63	157	698	506	903	2108					785	516	966	2268
BALSAM POPLAR										15		15						15		15
TOTAL HARDWOODS	3870	5396	4188	13455	11405	16930	13416	46553	23259	22098	22001	67358					38536	44325	44606	127467
MISCELLANEOUS		58		58	4			4	63	10	79	153					68	68	79	216
TOTAL FOREST LAND	16226	17359	17624	51210	42615	55710	80165	178492	91128	92273	75500	258903	12	9	28	50	149984	165352	173320	488657

ALL FIGURES ARE IN THOUSANDS CU.FT.

E S T I M A T E - MERCH CUBIC FT. VOLUMES ON FORESTED LAND BY COVER TYPE, DENSITY CLASSES, DBH GROUP AND OWNERSHIP CLASS

MUNICIPALITY - EAST HANTS

COVER TYPE AND DENSITY CLASS	O W N E R S H I P C L A S S												T O T A L							
	C R O W N L A N D				L A R G E O W N E R S				S M A L L O W N E R S				M I L I T A R Y R E S E R V E S A N D P A R K S				4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL
	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL				
<b>SOFTWOOD LAND</b>																				
UP TO 40f	874	943	428	2246	1010	1499	1157	3667	3688	3927	2842	10458					5573	6370	4428	16372
41f - 60f	1436	1645	1738	4819	3781	5448	5907	15138	7277	8706	7417	23400					12495	15800	15063	43358
61f - 80f	3065	4245	5983	13294	5859	10096	15370	32326	17728	24016	24075	65820					26652	38359	46429	111441
81f -100f	1407	1792	1338	4537	5622	9051	24602	39275	6603	10277	6517	23399					13633	21120	32458	67213
OVERSTOCKED	20	9		29	257	332	544	1133	817	911	582	2311					1095	1253	1126	3474
<b>TOTAL</b>	<b>6803</b>	<b>8635</b>	<b>9488</b>	<b>24927</b>	<b>16531</b>	<b>26428</b>	<b>43582</b>	<b>91542</b>	<b>36115</b>	<b>47840</b>	<b>41435</b>	<b>125390</b>					<b>59449</b>	<b>82904</b>	<b>99506</b>	<b>241860</b>
<b>MIXEDWOOD LAND</b>																				
UP TO 40f	107	224	526	858	1118	1620	2024	4762	2132	3035	2199	7367					3357	4880	4750	12988
41f - 60f	712	1312	1007	3032	2173	3654	5474	11303	5590	5821	5418	16830	8				8485	10797	11925	31208
61f - 80f	1798	2901	3628	8328	5345	10525	10619	26489	11781	14977	13248	40007		8		25	18924	28405	27495	74825
81f -100f	49			49	285	610	225	1122	809	1282	614	2705					1144	1893	840	3877
OVERSTOCKED					30	40	198	269									30	40	198	269
<b>TOTAL</b>	<b>2667</b>	<b>4439</b>	<b>5161</b>	<b>12268</b>	<b>8954</b>	<b>16451</b>	<b>18541</b>	<b>43947</b>	<b>20313</b>	<b>25117</b>	<b>21480</b>	<b>66911</b>	<b>8</b>	<b>8</b>	<b>25</b>	<b>41</b>	<b>31943</b>	<b>46015</b>	<b>45209</b>	<b>123169</b>
<b>HARDWOOD LAND</b>																				
UP TO 40f	257	64	25	347	319	525	1123	1968	468	625	622	1716					1045	1215	1771	4032
41f - 60f	249	481	411	1142	454	902	1043	2400	1439	1742	1435	4617					2143	3126	2890	8159
61f - 80f	644	891	557	2093	2087	2295	2086	6469	1545	1997	1602	5145					4278	5184	4246	13708
81f -100f	38	8		46													38	8		46
OVERSTOCKED																				
<b>TOTAL</b>	<b>1189</b>	<b>1445</b>	<b>994</b>	<b>3629</b>	<b>2861</b>	<b>3723</b>	<b>4254</b>	<b>10838</b>	<b>3453</b>	<b>4365</b>	<b>3659</b>	<b>11478</b>					<b>7504</b>	<b>9533</b>	<b>8908</b>	<b>25946</b>
<b>ALL FOREST LAND</b>																				
UP TO 40f	1238	1232	981	3452	2448	3645	4305	10398	6289	7588	5663	19542					9976	12466	10950	33393
41f - 60f	2398	3439	3156	8994	6410	10005	12425	28841	14307	16269	14271	44848	8				23124	29723	29878	82726
61f - 80f	5508	8038	10168	23715	13291	22917	29076	65286	31055	40992	38925	110973		8		25	49855	71948	78171	199975
81f -100f	1495	1800	1338	4633	5908	9662	24828	40398	7413	11559	7132	26105					14816	23022	33298	71136
OVERSTOCKED	20	9		29	287	372	742	1403	817	911	582	2311					1126	1293	1324	3743
<b>TOTAL</b>	<b>10660</b>	<b>14520</b>	<b>15645</b>	<b>40825</b>	<b>28346</b>	<b>46603</b>	<b>71378</b>	<b>146327</b>	<b>59883</b>	<b>77322</b>	<b>66575</b>	<b>203781</b>	<b>8</b>	<b>8</b>	<b>25</b>	<b>41</b>	<b>98898</b>	<b>138454</b>	<b>153624</b>	<b>390976</b>

ALL FIGURES ARE IN THOUSANDS CU.FT.

E S T I M A T E - MERCH CUBIC FT. VOLUMES ON FORESTED LAND BY COVER TYPE, AGE CLASSES, DBH GROUP AND OWNERSHIP CLASSES

MUNICIPALITY - EAST HANTS

COVER TYPE AND AGE CLASS	O W N E R S H I P C L A S S												T O T A L			
	C R O W N L A N D				L A R G E O W N E R S				S M A L L O W N E R S				M I L I T A R Y R E S E R V E S A N D P A R K S			
	4 - 6 DBH	7 - 9 DBH	10 + DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + DBH	TOTAL
<b>SOFTWOOD LAND</b>																
UP TO 20YRS	29	17		47	21		21	259	370	174	804					310
21YRS - 40YRS	311	158	138	609	183	115	25	324	2398	1983	1358	5740				2894
41YRS - 60YRS	2492	2403	1387	6283	7385	9950	9442	26778	22759	29073	20584	72417				32637
61YRS - 80YRS	3465	5424	6733	15624	6759	11733	19693	38186	9153	13583	17300	40037				19378
81YRS - 100YRS	503	631	1228	2363	1946	4269	19068	25283	1544	2828	2017	6390				3994
101YRS OR MORE UNEVENAGED STANDS					235	360	353	948								235
<b>TOTAL</b>	<b>6803</b>	<b>8635</b>	<b>9468</b>	<b>24927</b>	<b>16531</b>	<b>26428</b>	<b>48582</b>	<b>91542</b>	<b>36115</b>	<b>47840</b>	<b>41435</b>	<b>125390</b>				<b>59449</b>
<b>MIXEDWOOD LAND</b>																
UP TO 20YRS									34	25	24	84				34
21YRS - 40YRS	67			67	120	44		165	991	567	402	1961				1179
41YRS - 60YRS	224	292	225	742	2321	3577	3886	9785	12701	14288	10335	37324	8	8	25	41
61YRS - 80YRS	1823	3419	4142	9385	5087	10051	11783	26921	6019	9295	9587	24902				12929
81YRS - 100YRS	262	451	249	964	631	1947	1954	4532	566	940	1131	2638				1460
101YRS OR MORE UNEVENAGED STANDS	289	275	543	1108	793	830	916	2541								1083
<b>TOTAL</b>	<b>2667</b>	<b>4439</b>	<b>5161</b>	<b>12268</b>	<b>8954</b>	<b>16451</b>	<b>18541</b>	<b>43947</b>	<b>20313</b>	<b>25117</b>	<b>21480</b>	<b>66911</b>	<b>8</b>	<b>8</b>	<b>25</b>	<b>41</b>
<b>HARDWOOD LAND</b>																
UP TO 20YRS									26	11		37				26
21YRS - 40YRS	586	142	96	826	153	40		194	125	95		221				866
41YRS - 60YRS	234	142	191	567	1478	1396	1063	3937	1936	2087	959	4983				3648
61YRS - 80YRS	262	924	488	1675	813	1532	1561	3906	1313	2051	2391	5756				2389
81YRS - 100YRS	106	235	218	559	416	753	1629	2799	51	119	308	479				574
101YRS OR MORE UNEVENAGED STANDS																574
<b>TOTAL</b>	<b>1189</b>	<b>1445</b>	<b>994</b>	<b>3629</b>	<b>2861</b>	<b>3723</b>	<b>4254</b>	<b>10838</b>	<b>3453</b>	<b>4365</b>	<b>3659</b>	<b>11478</b>				<b>7504</b>
<b>ALL FOREST LAND</b>																
UP TO 20YRS	29	17		47	21		21	320	406	199	927					371
21YRS - 40YRS	966	301	235	1502	457	200	25	683	3516	2646	1760	7923				4939
41YRS - 60YRS	2951	2838	1804	7594	11185	14924	14391	40501	37397	45448	31879	114725	8	8	25	41
61YRS - 80YRS	5551	9769	11364	26685	12659	23316	33038	69015	16486	24931	29278	70695				34697
81YRS - 100YRS	871	1318	1697	3887	2993	6969	22652	32616	2162	3888	3457	9508				6028
101YRS OR MORE UNEVENAGED STANDS	289	275	543	1108	793	830	916	2541								1083
<b>TOTAL</b>	<b>10660</b>	<b>14520</b>	<b>15645</b>	<b>40825</b>	<b>28346</b>	<b>46603</b>	<b>71378</b>	<b>146327</b>	<b>59883</b>	<b>77322</b>	<b>66575</b>	<b>203781</b>	<b>8</b>	<b>8</b>	<b>25</b>	<b>41</b>

ALL FIGURES ARE IN THOUSANDS CU.FT.

E S T I M A T E - MERCH CUBIC FT. VOLUMES ON FORESTED LAND BY COVER TYPE, SITE CLASSES, DBH GROUP AND OWNERSHIP CLASSES

MUNICIPALITY - EAST HANTS

19

COVER TYPE AND SITE CLASS	O W N E R S H I P C L A S S																T O T A L			
	C R O W N L A N D				L A R G E O W N E R S				S M A L L O W N E R S				M I L I T A R Y R E S E R V E S A N D P A R K S				4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL
	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL				
<b>SOFTWOOD LAND</b>																				
1																				
2																				
3	190	262	1104	1557	636	2002	10639	13279	2676	5091	3810	11578								
4	5347	7252	7919	20518	14580	22612	36630	73822	31401	40152	36398	107953								
5	1264	1120	464	2850	1314	1813	1312	4440	2037	2596	1226	5859								
6																				
TOTAL	6803	8635	9488	24927	16531	26428	48582	91542	36115	47840	41435	125390								
<b>MIXEDWOOD LAND</b>																				
1																				
2																				
3					232	732	1311	2276	128	200	471	800								
4	2317	3912	4794	11024	8429	15450	16747	40627	19914	24486	20633	65034	8	8	25	41				
5	350	526	357	1244	292	267	482	1342	270	430	376	1076								
6																				
TOTAL	2667	4439	5161	12268	8954	16451	18541	43947	20313	25117	21480	66911	8	8	25	41				
<b>HARDWOOD LAND</b>																				
1																				
2																				
3					47	105	46	199	22	8		30								
4	1038	1399	908	3406	2795	3617	4083	10497	3389	4238	3659	11287								
5	150	45	25	222	18		123	141	42	118		161								
6																				
TOTAL	1189	1445	994	3629	2861	3723	4254	10838	3453	4365	3659	11478								
<b>ALL FOREST LAND</b>																				
1																				
2																				
3	190	262	1104	1557	916	2841	11996	15755	2827	5300	4281	12409								
4	8703	12563	13682	34949	25805	41680	57462	124947	54705	68877	60691	184275	8	8	25	41				
5	1766	1693	858	4317	1624	2081	1918	5624	2350	3144	1602	7097								
6																				
TOTAL	10660	14520	15645	40825	28346	46603	71378	146327	59883	77322	66575	203781	8	8	25	41				

ALL FIGURES ARE IN THOUSANDS CU.FT.

E S T I M A T E - MERCH CUBIC FT. VOLUMES ON FORESTED LAND BY SPECIES, DBH GROUP AND OWNERSHIP CLASS

MUNICIPALITY - EAST HANTS

S P E C I E S	O W N E R S H I P C L A S S																T O T A L			
	C R O W N L A N D				L A R G E O W N E R S				S M A L L O W N E R S				M I L I T A R Y R E S E R V E S A N D P A R K S				4 - 6	7 - 9	10 + UP	TOTAL
	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL
WHITE SPRUCE	99	96	286	482	237	550	1042	1830	1598	3269	3281	8149	4			4	1940	3916	4610	10466
SPRUCE-RED + BLACK	5580	6097	6731	18409	10804	19777	43144	73725	16681	26983	26035	69700					33065	52858	75911	161835
FIR	1586	1828	947	4362	9542	10687	4284	24513	24373	22534	7429	54337	4	8		12	35506	35058	12660	83225
HEMLOCK	9	25	62	97	266	903	4026	5215	1556	3605	6630	11792					1853	4534	10719	17106
WHITE PINE	148	247	1626	2022	57	228	2550	2836	221	668	3085	3974					427	1144	7262	8834
RED PINE	463	1468	2280	4213		41	324	366	91	311	467	871					556	1822	3072	5451
LARCH	409	295	205	910	396	700	516	1613	1300	1606	970	3876			25	25	2106	2601	1717	6426
JACK PINE									106	223	69	399					106	223	69	399
SCOTCH PINE																				
CEDAR																				
TOTAL SOFTWOODS	8299	10060	12139	30499	21325	32889	55888	110103	45930	59201	47970	153103	8	8	25	41	75563	102159	116023	293746
SUGAR MAPLE	39	130	59	229	130	236	351	718	237	556	1414	2208					407	923	1825	3156
RED MAPLE	1374	3277	2435	7088	4337	9171	9378	22886	6885	10130	9700	26716					12597	22579	21514	56691
YELLOW BIRCH	124	289	261	676	824	1597	2534	4956	1220	1668	1898	4788					2169	3556	4695	10420
WHITE BIRCH	75	146	231	453	924	1509	927	3362	1392	1607	1373	4373					2392	3263	2532	8188
OAK	10	55	251	317	60	87	124	273	42	115	155	313					113	257	532	903
ASPEN	618	512	264	1395	499	1023	2079	3601	2800	3339	2932	9072					3918	4875	5275	14069
GREY BIRCH	117			117	179	44		223	760	128		889					1056	172		1229
WHITE ASH					13	35	41	90	130	119	181	431					143	155	222	522
BLACK ASH									18	23	20	62					19	23	20	63
CHERRY																				
ELM									1		110	112					1		110	112
BEECH					47	8	52	108	427	409	750	1587					476	417	803	1697
BALSAM POPLAR										13		13						13		13
TOTAL HARDWOODS	2361	4412	3505	10279	7018	13713	15490	36222	13917	18112	18538	50568					23296	36239	37533	97069
MISCELLANEOUS		47		47	2			2	35	8	66	110					38	55	66	160
TOTAL FOREST LAND	10660	14520	15645	40825	28346	46603	71378	146328	59883	77322	66575	203781	8	8	25	41	98898	138454	153624	390976

ALL FIGURES ARE IN THOUSANDS CU.FT.

E S T I M A T E - GROSS CUBIC FT. VOLUMES ON FORESTED LAND BY COVER TYPE, DENSITY CLASSES, DBH GROUP AND OWNERSHIP CLASS

MUNICIPALITY - HALIFAX

COVER TYPE AND DENSITY CLASS	O W N E R S H I P C L A S S																T O T A L					
	C R O W N L A N D				L A R G E O W N E R S				S M A L L O W N E R S				M I L I T A R Y R E S E R V E S A N D P A R K S				4 - 6 DBH	7 - 9 DBH	10 + DBH	TOTAL		
	4 - 6 DBH	7 - 9 DBH	10 + DBH	UP TOTAL	4 - 6 DBH	7 - 9 DBH	10 + DBH	UP TOTAL	4 - 6 DBH	7 - 9 DBH	10 + DBH	UP TOTAL	4 - 6 DBH	7 - 9 DBH	10 + DBH	UP TOTAL						
<b>SOFTWOOD LAND</b>																						
UP TO 40f	8797	7407	6601	22807	6008	6533	8134	20676	12959	10826	7410	31195							27765	24767	22146	74679
41f - 60f	25143	22283	23315	70742	18098	20101	24732	62932	35184	30334	21820	87339							78426	72719	69868	221014
61f - 80f	29264	27032	26555	84851	33076	42753	70399	146229	52695	48584	35775	137055							115036	118370	134731	368137
81f -100f	4662	4269	5474	14406	13502	13564	18857	45924	24236	17649	12240	54126							42401	35483	36573	114458
OVERSTOCKED	1145	416	309	1871	1164	801	873	2838	2539	1724	1764	6028							4849	2942	2946	10738
TOTAL	69013	61409	64256	194680	71850	83752	122998	278601	127614	109120	79010	315745							268479	254282	266265	789028
<b>MIXEDWOOD LAND</b>																						
UP TO 40f	2005	2139	2891	7037	2437	3225	4879	10541	5690	5422	6628	17741							10133	10787	14398	35320
41f - 60f	5216	5717	6222	17155	6637	9392	9208	25238	11809	10653	12789	35252							23662	25763	28220	77646
61f - 80f	10486	13076	15502	39066	15170	19418	32981	67571	14839	15353	15227	45420							40497	47849	63712	152058
81f -100f	183	119		303	308	157	728	1195	2566	2154	1440	6161							3059	2432	2169	7660
OVERSTOCKED	33	27		60	86	75		161			9								119	112		231
TOTAL	17926	21080	24617	63623	24640	32269	47797	104707	34906	33594	36085	104586							77473	86944	108500	272917
<b>HARDWOOD LAND</b>																						
UP TO 40f	607	692	985	2285	800	1136	2373	4310	1230	1851	2154	5237							2638	3681	5513	11833
41f - 60f	2725	3141	3680	9548	2595	3119	6556	12271	5086	4368	5705	15159							10408	10629	15942	36979
61f - 80f	4310	5772	5413	15497	9172	10092	12805	32070	7059	6777	6048	19885							20542	22643	24268	67454
81f -100f	1475	1713	1066	4255	407	353	526	1286	1265	1037	493	2796							3147	3105	2086	8339
OVERSTOCKED	23	12	29	64					8		72	80							31	12	101	145
TOTAL	9143	11333	11176	31652	12975	14702	22261	49939	14650	14035	14474	43159							36769	40071	47912	124752
<b>ALL FOREST LAND</b>																						
UP TO 40f	11411	10240	10478	32130	9245	10894	15386	35527	19880	18100	16192	54174							40538	39236	42058	121832
41f - 60f	33085	31142	33218	97447	27331	32613	40497	100442	52079	45356	40314	137751							112497	109112	114030	335640
61f - 80f	44061	45881	49472	139415	57419	72264	116187	245871	74594	70716	57052	202362							176076	188862	222712	587650
81f -100f	6321	6103	6541	18966	14218	14075	20112	48406	28068	20842	14174	63085							48608	41020	40828	130458
OVERSTOCKED	1202	456	338	1996	1250	876	873	3000	2547	1734	1836	6118							5000	3067	3048	11116
TOTAL	96083	93823	100050	289957	109466	130724	193057	433249	177171	156750	129570	463492							382721	381298	422678	1186698

ALL FIGURES ARE IN THOUSANDS CU.FT.

E S T I M A T E - GROSS CUBIC FT. VOLUMES ON FORESTED LAND BY COVER TYPE, AGE CLASSES, DBH GROUP AND OWNERSHIP CLASSES

MUNICIPALITY - HALIFAX

COVER TYPE AND AGE CLASS	O W N E R S H I P C L A S S																T O T A L			
	C R O W N L A N D				L A R G E O W N E R S				S M A L L J W N E R S				M I L I T A R Y R E S E R V E S A N D P A R K S				4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL
	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL				
<b>SOFTWOOD LAND</b>																				
UP TO 20YRS	483	542	1002	2028	907	708	1621	3238	1609	1683	924	4217					3001	2934	3548	9484
21YRS - 40YRS	2548	1095	1126	4769	6789	3543	3268	13600	17712	9070	6357	33139					27049	13708	10751	51510
41YRS - 60YRS	24682	19490	15593	59767	19570	19742	23392	62704	57130	44293	25901	127325					101383	83526	64888	249797
61YRS - 80YRS	26366	25357	28290	80014	30867	41620	60680	133168	38261	42169	36062	116492					95495	109146	125033	329676
81YRS - 100YRS	13543	14096	17111	44751	11324	14806	26980	53112	11384	10500	8809	30694					36252	39403	52901	128558
101YRS OR MORE	810	421	227	1459	1951	2695	6470	11117	143	170	185	499					2905	3287	6884	13077
UNEVENAGED STANDS	579	405	904	1889	439	635	583	1658	1372	1233	769	3375					2391	2274	2256	6922
<b>TOTAL</b>	<b>69013</b>	<b>61409</b>	<b>64256</b>	<b>194680</b>	<b>71850</b>	<b>83752</b>	<b>122998</b>	<b>278601</b>	<b>127614</b>	<b>109120</b>	<b>79010</b>	<b>315745</b>					<b>268479</b>	<b>254282</b>	<b>266265</b>	<b>789028</b>
<b>MIXEDWOOD LAND</b>																				
UP TO 20YRS	42	9	21	73	515	511	605	1632	381	321	438	1140					938	842	1065	2846
21YRS - 40YRS	369	288	117	775	1037	774	1396	3208	2381	1035	576	3993					3788	2097	2091	7977
41YRS - 60YRS	5426	5289	3858	14575	8267	8090	8688	25046	14150	9040	6308	29500					27845	22421	18856	69122
61YRS - 80YRS	9793	12053	14804	36652	11095	16732	26212	54040	13723	17411	20768	51903					34613	46196	61785	142595
81YRS - 100YRS	1535	2294	3965	7794	2975	4490	8640	16106	2390	3330	5262	10983					6901	10114	17868	34885
101YRS OR MORE	46	188	606	841	136	283	491	912	459	971	1440	2871					642	1443	2539	4624
UNEVENAGED STANDS	711	956	1242	2910	613	1386	1762	3761	1418	1484	1289	4193					2743	3827	4294	10865
<b>TOTAL</b>	<b>17926</b>	<b>21080</b>	<b>24617</b>	<b>63623</b>	<b>24640</b>	<b>32269</b>	<b>47797</b>	<b>104707</b>	<b>34906</b>	<b>33594</b>	<b>36085</b>	<b>104586</b>					<b>77473</b>	<b>86944</b>	<b>108500</b>	<b>272917</b>
<b>HARDWOOD LAND</b>																				
UP TO 20YRS	109	87	161	359	48	22	44	116	74	79	114	268					232	190	320	744
21YRS - 40YRS	1810	935	861	3607	327	119	485	932	873	557	400	1831					3011	1612	1747	6371
41YRS - 60YRS	2555	2310	1962	6829	6698	6015	7229	19943	6562	4067	2992	13622					15817	12393	12184	40394
61YRS - 80YRS	3373	5897	4976	14246	4842	6967	10317	22127	5860	7230	7949	21039					14075	20094	23243	57414
81YRS - 100YRS	1293	2101	3214	6609	778	1170	2075	4024	1250	2077	2912	6240					3322	5350	8202	16874
101YRS OR MORE					281	406	2108	2795	28	23	105	156					309	429	2213	2952
UNEVENAGED STANDS																				
<b>TOTAL</b>	<b>9143</b>	<b>11333</b>	<b>11176</b>	<b>31652</b>	<b>12975</b>	<b>14702</b>	<b>22261</b>	<b>49939</b>	<b>14650</b>	<b>14035</b>	<b>14474</b>	<b>43159</b>					<b>36769</b>	<b>40071</b>	<b>47912</b>	<b>124752</b>
<b>ALL FOREST LAND</b>																				
UP TO 20YRS	635	639	1185	2461	1471	1243	2271	4986	2065	2084	1477	5627					4172	3967	4934	13075
21YRS - 40YRS	4728	2318	2105	9152	8153	4436	5150	17741	20967	10663	7334	38965					33850	17418	14590	65859
41YRS - 60YRS	32665	27091	21415	81172	34535	33848	39310	107695	77844	57401	35202	170448					145045	118341	95928	359316
61YRS - 80YRS	39533	43308	48071	130913	46805	65319	97210	209336	57844	66810	64779	189435					144184	175438	210062	529685
81YRS - 100YRS	16372	18492	24291	59156	15078	20468	37696	73243	15025	15907	16984	47918					46476	54868	78972	180318
101YRS OR MORE	856	610	834	2301	2368	3385	9071	14825	631	1165	1731	3528					3857	5161	11637	20655
UNEVENAGED STANDS	1291	1362	2146	4800	1052	2021	2345	5419	2791	2717	2059	7568					5135	6101	6551	17788
<b>TOTAL</b>	<b>96083</b>	<b>93823</b>	<b>100050</b>	<b>289957</b>	<b>109466</b>	<b>130724</b>	<b>193057</b>	<b>433249</b>	<b>177171</b>	<b>156750</b>	<b>129570</b>	<b>463492</b>					<b>382721</b>	<b>381298</b>	<b>422678</b>	<b>1186698</b>

ALL FIGURES ARE IN THOUSANDS CU.FT.

E S T I M A T E - G R O S S C U B I C F T . V O L U M E S O N F O R E S T E D L A N D B Y C O V E R T Y P E , S I T E C L A S S E S , D B H G R O U P A N D O W N E R S H I P C L A S S E S

MUNICIPALITY - HALIFAX

COVER TYPE AND SITE CLASS	O W N E R S H I P C L A S S																T O T A L			
	C R O W N L A N D				L A R G E O W N E R S				S M A L L O W N E R S				M I L I T A R Y R E S E R V E S A N D P A R K S				4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL
	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL				
SOFTWOOD LAND																				
1					70	94	224	389	19	67		86					19	67		86
2																	70	94	224	389
3	1316	1992	3845	7155	2369	4223	7864	14457	9191	8924	6800	24916					12878	15140	18510	46530
4	44366	43122	48475	135964	54992	67204	102230	224427	93717	85076	64519	243313					193076	195402	215225	603704
5	23330	16294	11936	51560	14417	12230	12678	39326	24596	15052	7690	47339					62343	43577	32305	138226
6									89			89					89			89
TOTAL	69013	61409	64256	194680	71850	83752	122998	278601	127614	109120	79010	315745					268479	254282	266265	789028
MIXEDWOOD LAND																				
1																				
2																				
3	175	471	225	872	741	837	1319	2897	178	289	352	821					1095	1598	1897	4591
4	16036	19425	23038	58500	23044	30753	46191	99989	32754	31714	33238	97707					71836	81893	102468	256198
5	1713	1182	1353	4250	854	678	286	1819	1973	1590	2493	6057					4541	3451	4134	12127
6																				
TOTAL	17926	21080	24617	63623	24640	32269	47797	104707	34906	33594	36085	104586					77473	86944	108500	272917
HARDWOOD LAND																				
1																				
2																				
3	546	847	719	2114	784	1382	2762	4929	36	82	193	312					1367	2313	3676	7357
4	7283	9735	9869	26888	12008	13203	19451	44663	14144	13816	14124	42086					33436	36755	43446	113637
5	1313	750	586	2650	183	116	46	346	469	135	155	761					1966	1002	789	3757
6																				
TOTAL	9143	11333	11176	31652	12975	14702	22261	49939	14650	14035	14474	43159					36769	40071	47912	124752
ALL FOREST LAND																				
1									19	67		86					19	67		86
2					70	94	224	389									70	94	224	389
3	2039	3312	4790	10142	3895	6443	11946	22285	9406	9297	7346	26051					15341	19053	24084	58479
4	67687	72283	81382	221353	90045	111161	167874	369080	140616	130607	111883	383107					298349	314051	361140	973541
5	26357	18227	13876	58461	15455	13025	13012	41493	27038	16778	10340	54158					68851	48031	37229	154112
6									89			89					89			89
TOTAL	96083	93823	100050	289957	109466	130724	193057	433249	177171	156750	129570	463492					382721	381298	422678	1186698

ALL FIGURES ARE IN THOUSANDS CU.FT.

E S T I M A T E - GROSS CUBIC FT. VOLUMES ON FORESTED LAND BY SPECIES, DBH GROUP AND OWNERSHIP CLASS

MUNICIPALITY - HALIFAX

24

S P E C I E S	O W N E R S H I P C L A S S												M U N I C I P A L I T Y - H A L I F A X							
	C R O W N L A N D				L A R G E O W N E R S				S M A L L O W N E R S				M I L I T A R Y R E S E R V E S A N D P A R K S				T O T A L			
	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL
WHITE SPRUCE	530	524	913	1968	527	712	882	2121	5155	7707	7707	20569					6212	8944	9502	24660
SPRUCE-RED + BLACK	41269	39590	38438	119297	41350	59539	101735	202575	50457	59928	45921	156307					143078	159107	186096	488282
FIR	30445	21462	6430	58339	39075	31135	11360	81571	66853	41698	13427	121979					136376	94296	31217	261890
HEMLOCK	21	42	328	392	715	2090	3109	10914	1091	2859	7567	11518					1829	4992	16004	22826
WHITE PINE	836	2438	28389	31664	393	1727	17597	19719	722	1926	11266	13915					1952	6092	57253	65299
RED PINE	20	111	297	428	31	74	479	585	23	82	205	311					75	268	982	1325
LARCH	2762	2924	2078	7764	970	999	557	2527	5077	4894	3561	13532					8810	8818	6197	23825
JACK PINE	53	15		68	233	10		244	705	300	53	1058					992	326	53	1371
SCOTCH PINE																				
CEDAR																				
TOTAL SOFTWOODS	75939	67109	76875	219924	83300	96339	143722	320362	140086	119397	89709	349194					299327	282846	307307	889481
SUGAR MAPLE	123	302	593	1019	484	559	2195	3339	499	879	1264	2643					1107	1840	4054	7002
RED MAPLE	13820	18925	14114	46860	16865	22959	25461	66286	22820	22915	20119	65855					53506	64800	60695	179003
YELLOW BIRCH	1887	3336	5874	11097	4810	5569	13750	30131	3736	5454	12514	21705					10434	14360	38139	62934
WHITE BIRCH	3590	3702	1822	9115	2489	2910	1587	7388	3995	3233	1569	8797					10075	9846	5079	25002
OAK	25	64	134	224	13	23	93	130	651	579	1590	2820					689	666	1819	3175
ASPEN	393	207	238	839	483	1125	1211	2821	2137	2128	1289	5555					3015	3461	2739	9216
GREY BIRCH	119	9		129	173	17		191	1116	120		1237					1409	148		1557
WHITE ASH	44	27	195	267	130	59		189	216	166	117	501					391	253	312	958
BLACK ASH	4			4	15			15	49	13	80	143					69	13	80	163
CHERRY									6			6					6			6
ELM									4			4					4			4
BEECH	116	136	201	454	562	1041	933	2537	1677	1822	1315	4815					2457	3000	2450	7907
BALSAM POPLAR																				
TOTAL HARDWOODS	20126	26713	23175	70015	26129	34356	52335	112931	36911	37314	39860	114086					83168	98393	115371	296933
MISCELLANEOUS	16			16	36	19		55	173	38		211					226	58		284
TOTAL FOREST LAND	96083	93823	100050	289957	109466	130724	193057	433249	177171	156750	129570	463492					382721	381298	422678	1186698

ALL FIGURES ARE IN THOUSANDS CU.FT.

E S T I M A T E - MERCH CUBIC FT. VOLUMES ON FORESTED LAND BY COVER TYPE, DENSITY CLASSES, DBH GROUP AND OWNERSHIP CLASS

MUNICIPALITY - HALIFAX

COVER TYPE AND DENSITY CLASS	O W N E R S H I P C L A S S																T O T A L			
	C R O W N L A N D				L A R G E O W N E R S				S M A L L O W N E R S				M I L I T A R Y R E S E R V E S A N D P A R K S				4 - 6	7 - 9	10 + UP	TOTAL
	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL
SOFTWOOD LAND																				
UP TO 40f	5944	6211	5952	18107	4038	5495	7317	16851	8604	9080	6617	24301					18588	20786	19886	59260
41f - 60f	16955	18717	21072	56745	12270	16935	22198	51404	23628	25457	19531	68616					52853	61109	62802	176766
61f - 80f	19892	22724	25788	68406	22461	36021	63172	121656	35190	40817	31883	107891					77545	99563	120845	297954
81f - 100f	3065	3594	4924	11585	9043	11422	16992	37458	15990	14788	10791	41571					28100	29806	32709	90615
OVERSTOCKED	745	347	272	1365	731	668	771	2172	1627	1444	1506	4579					3105	2460	2591	8117
TOTAL	46604	51595	58011	156211	48545	70544	110452	229542	85042	91587	70330	246960					180192	213727	238794	632714
MIXEDWOOD LAND																				
UP TO 40f	1319	1788	2541	5648	1630	2678	4217	8526	3696	4507	5703	13907					6646	8975	12461	28083
41f - 60f	3461	4741	5525	13728	4374	7839	7986	20200	7578	8867	11027	27473					15414	21448	24539	61402
61f - 80f	6969	10842	13613	31426	10033	16217	28899	55150	9616	12800	13305	35722					26620	39860	55818	122299
81f - 100f	117	98		216	182	131	611	926	1675	1789	1268	4732					1975	2019	1879	5875
OVERSTOCKED	19	22		41	50	62		112		7		7					69	92		161
TOTAL	11886	17494	21680	51061	16271	26930	41714	84916	22567	27972	31304	81845					50726	72397	94699	217823
HARDWOOD LAND																				
UP TO 40f	370	566	852	1789	507	935	1982	3426	786	1520	1798	4105					1665	3022	4632	9321
41f - 60f	1718	2584	3132	7436	1650	2562	5505	9717	3086	3592	4848	11527					6456	8738	13486	28681
61f - 80f	2640	4725	4546	11912	5711	8256	13819	24787	4363	5563	5149	15075					12715	18545	20514	51775
81f - 100f	910	1404	901	3216	236	288	443	968	777	849	425	2052					1924	2542	1770	6237
OVERSTOCKED	13	10	24	48					5		60	66					18	10	84	114
TOTAL	5654	9291	9456	24402	8106	12042	18750	38900	9019	11525	12281	32827					22780	32860	40489	96130
ALL FOREST LAND																				
UP TO 40f	7634	8566	9345	25546	6177	9109	13516	28803	13088	15108	14118	42315					26900	32784	36980	96664
41f - 60f	22135	26043	29730	77910	18295	27336	35690	81322	34293	37916	35407	107618					74724	91297	100828	266851
61f - 80f	29503	38292	43949	111745	38207	60495	102891	201593	49170	59180	50338	158690					116881	157969	197178	472029
81f - 100f	4093	5097	5826	15017	9462	11843	18047	39353	18443	17427	12485	48356					32000	34368	36358	102727
OVERSTOCKED	777	380	297	1455	781	731	771	2285	1633	1452	1567	4653					3193	2564	2636	8394
TOTAL	64145	78381	89148	231675	72924	109517	170917	353359	116630	131085	113917	361633					253700	318984	373983	946668

ALL FIGURES ARE IN THOUSANDS CU.FT.

E S T I M A T E - MEKCH CUBIC FT. VOLUMES ON FORESTED LAND BY COVER TYPE, AGE CLASSES, DBH GROUP AND OWNERSHIP CLASSES

MUNICIPALITY - HALIFAX

COVER TYPE AND AGE CLASS	O W N E R S H I P C L A S S												T O T A L							
	C R O W N L A N D				L A R G E O W N E R S				S M A L L O W N E R S				M I L I T A R Y R E S E R V E S A N D P A R K S							
	4 - 6 DBH	7 - 9 DBH	10 + DBH	UP TOTAL	4 - 6 DBH	7 - 9 DBH	10 + DBH	UP TOTAL	4 - 6 DBH	7 - 9 DBH	10 + DBH	UP TOTAL	4 - 6 DBH	7 - 9 DBH	10 + DBH	UP TOTAL				
SOFTWOOD LAND																				
UP TO 20YRS	323	449	898	1671	572	588	1432	2593	1051	1399	804	3255					1947	2437	3135	7520
21YRS - 40YRS	1622	909	1016	3548	4348	2968	2909	10227	11298	7566	5529	24394					17269	11444	9455	38169
41YRS - 60YRS	16587	16375	14023	46987	13152	16634	23754	50541	38038	37162	22967	98168					67778	70173	57745	195697
61YRS - 80YRS	17892	21323	25557	64773	21129	35099	54603	110832	25899	35443	32231	93574					64922	91866	112391	269181
81YRS -100YRS	9241	11844	15499	36584	7720	12456	24352	44529	7761	8831	7932	24525					24723	33132	47784	105640
101YRS OR MORE	551	350	202	1104	1319	2264	5872	9456	102	143	167	413					1973	2758	6242	10975
UNEVENAGED STANDS	385	341	814	1541	301	531	527	1360	891	1040	696	2628					1578	1913	2038	5530
TOTAL	40604	51595	58011	156211	48545	70544	110452	229542	85042	91587	70330	246960					180192	213727	238794	632714
MIXEDWOOD LAND																				
UP TO 20YRS	21	7	18	47	332	426	539	1297	257	266	383	907					611	699	941	2252
21YRS - 40YRS	219	243	104	567	619	652	1201	2472	1471	858	506	2836					2310	1754	1811	5876
41YRS - 60YRS	3512	4380	3377	11270	5441	6759	7534	19734	8938	7536	5546	22020					17891	18675	16458	53025
61YRS - 80YRS	6598	9991	13039	29629	7351	13942	22868	44162	9065	14492	17986	41544					23015	38425	53895	115336
81YRS -100YRS	1026	1917	3499	6443	2027	3750	7551	13328	1612	2772	4476	8861					4666	8440	15527	28633
101YRS OR MORE	29	156	513	699	90	236	429	755	302	818	1276	2398					422	1211	2219	3853
UNEVENAGED STANDS	478	796	1126	2402	410	1164	1590	3165	918	1229	1128	3276					1808	3190	3845	8844
TOTAL	11886	17494	21680	51061	16271	26930	41714	84916	22567	27972	31304	81845					50726	72397	94699	217823
HARDWOOD LAND																				
UP TO 20YRS	78	72	140	291	30	19	38	88	49	66	98	215					158	158	277	595
21YRS - 40YRS	1015	775	748	2538	181	101	412	695	503	462	350	1316					1699	1338	1511	4550
41YRS - 60YRS	1571	1890	1652	5113	4100	4920	6174	15195	3885	3353	2590	9829					9557	10164	10417	30139
61YRS - 80YRS	2141	4824	4212	11178	3094	5698	8641	17434	3731	5912	6710	16354					8967	16435	19564	44967
81YRS -100YRS	848	1728	2703	5279	515	968	1736	3221	829	1711	2444	4986					2193	4409	6884	13487
101YRS OR MORE					184	334	1745	2264	19	18	87	125					203	353	1833	2389
UNEVENAGED STANDS																				
TOTAL	5654	9291	9456	24402	8106	12042	18750	38900	9019	11525	12281	32827					22780	32860	40489	96130
ALL FOREST LAND																				
UP TO 20YRS	423	529	1057	2010	935	1034	2010	3980	1358	1732	1286	4377					2717	3296	4354	10368
21YRS - 40YRS	2857	1928	1808	6654	5148	3722	4524	13395	13273	8886	6386	28546					21279	14537	12778	48596
41YRS - 60YRS	21671	22646	19053	63371	22693	28314	34463	85472	50862	48051	31104	130018					95227	99013	84622	278862
61YRS - 80YRS	26632	36139	42809	105581	31575	54740	85113	172429	38697	55848	56928	151474					96905	146728	185851	429485
81YRS -100YRS	11115	15491	21702	48308	10263	17175	33640	61079	10204	13315	14653	38373					31583	45981	70196	147761
101YRS OR MORE	581	507	715	1804	1594	2834	8047	12476	424	980	1531	2936					2600	4323	10295	17218
UNEVENAGED STANDS	864	1138	1940	3943	712	1695	2118	4525	1810	2269	1825	5905					3386	5103	5884	14374
TOTAL	64145	78381	89148	231675	72924	109517	170917	353359	116630	131085	113917	361633					253700	318984	373983	946668

ALL FIGURES ARE IN THOUSANDS CU.FT.

E S T I M A T E - MERCH CUBIC FT. VOLUMES ON FORESTED LAND BY COVER TYPE, SITE CLASSES, DBH GROUP AND OWNERSHIP CLASSES

MUNICIPALITY - HALIFAX

27

COVER TYPE AND SITE CLASS	O W N E R S H I P C L A S S												T O T A L			
	C R O W N L A N D				L A R G E O W N E R S				S M A L L O W N E R S				M I L I T A R Y R E S E R V E S A N D P A R K S			
	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL
<b>SOFTWOOD LAND</b>																
1					49	79	202	331	13	56		70	13	56	202	70
2													49	79		331
3	890	1676	3486	6053	1600	3563	7031	12194	6150	7465	6053	19670	8641	12704	16571	37918
4	30126	36237	43726	110091	37182	56611	91819	185613	62398	71435	57367	191201	129708	164284	192913	486907
5	15587	13681	10797	40066	9713	10290	11398	31402	16421	12629	6909	35960	41722	36601	29105	107429
6									57			57	57			57
<b>TOTAL</b>	<b>46604</b>	<b>51595</b>	<b>58011</b>	<b>156211</b>	<b>48545</b>	<b>70544</b>	<b>110452</b>	<b>229542</b>	<b>85042</b>	<b>91587</b>	<b>70330</b>	<b>246960</b>	<b>180192</b>	<b>213727</b>	<b>238794</b>	<b>632714</b>
<b>MIXEDWOOD LAND</b>																
1																
2																
3	117	389	195	702	488	707	1152	2349	117	243	313	674	724	1340	1662	3726
4	10666	16116	20277	47059	15222	25658	40320	81201	21185	26404	28807	76398	47074	68179	89405	204658
5	1103	989	1207	3299	560	564	241	1365	1264	1324	2183	4772	2927	2877	3632	9437
6																
<b>TOTAL</b>	<b>11886</b>	<b>17494</b>	<b>21680</b>	<b>51061</b>	<b>16271</b>	<b>26930</b>	<b>41714</b>	<b>84916</b>	<b>22567</b>	<b>27972</b>	<b>31304</b>	<b>81845</b>	<b>50726</b>	<b>72397</b>	<b>94699</b>	<b>217823</b>
<b>HARDWOOD LAND</b>																
1																
2																
3	369	695	606	1671	487	1135	2388	4011	21	67	164	252	878	1898	3159	5935
4	4483	7979	8336	20799	7515	10812	16323	34651	8750	11346	11987	32084	20749	30139	36646	87536
5	800	616	514	1930	103	94	38	236	248	111	130	490	1152	822	683	2658
6																
<b>TOTAL</b>	<b>5654</b>	<b>9291</b>	<b>9456</b>	<b>24402</b>	<b>8106</b>	<b>12042</b>	<b>18750</b>	<b>38900</b>	<b>9019</b>	<b>11525</b>	<b>12281</b>	<b>32827</b>	<b>22780</b>	<b>32860</b>	<b>40489</b>	<b>96130</b>
<b>ALL FOREST LAND</b>																
1									13	56		70	13	56		70
2					49	79	202	331					49	79	202	331
3	1377	2760	4289	8428	2576	5406	10572	18554	6290	7776	6531	20597	10244	15943	21392	47580
4	45276	60333	72339	177950	59921	93082	148463	301467	92334	109187	98162	299684	197532	262603	318966	779102
5	17490	15286	12519	45296	10377	10949	11678	33005	17933	14065	9223	41223	45802	40301	33421	119525
6									57			57	57			57
<b>TOTAL</b>	<b>64145</b>	<b>78381</b>	<b>89148</b>	<b>231675</b>	<b>72924</b>	<b>109517</b>	<b>170917</b>	<b>353359</b>	<b>116630</b>	<b>131085</b>	<b>113917</b>	<b>361633</b>	<b>253700</b>	<b>318984</b>	<b>373983</b>	<b>946668</b>

ALL FIGURES ARE IN THOUSANDS CU.FT.

E S T I M A T E - MERCH CUBIC FT. VOLUMES ON FORESTED LAND BY SPECIES, DBH GROUP AND OWNERSHIP CLASS

MUNICIPALITY - HALIFAX

28

S P E C I E S	O W N E R S H I P C L A S S																T O T A L			
	C R O W N L A N D				L A R G E O W N E R S				S M A L L O W N E R S				M I L I T A R Y R E S E R V E S A N D P A R K S				4 - 6	7 - 9	10 + UP	TOTAL
	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL
WHITE SPRUCE	315	431	810	1557	311	587	776	1675	3084	6348	6800	16233					3712	7366	-8387	19466
SPRUCE-RED + BLACK	28232	33309	34765	96307	28311	50342	92072	170726	41105	50420	41388	132913					97649	134071	168226	399948
FIR	20633	18271	5749	44655	26613	26532	13172	63317	45094	35504	12020	92619					92341	80308	27943	200592
HEMLOCK	15	35	301	352	500	1721	7323	9545	768	2362	6781	9912					1283	4118	14407	19810
WHITE PINE	568	2075	26094	28738	255	1470	16151	17878	480	1641	10318	12439					1304	5187	52564	59056
RED PINE	13	94	273	381	21	62	440	524	15	71	185	272					50	228	899	1178
LARCH	1874	2457	1879	6211	652	846	498	1997	3490	4109	3194	10793					6017	7413	5571	19002
JACK PINE	36	12		49	147	8		156	441	250	47	739					626	272	47	946
SCOTCH PINE																				
CEDAR																				
<b>TOTAL SOFTWOODS</b>	<b>51690</b>	<b>56688</b>	<b>69875</b>	<b>178254</b>	<b>56814</b>	<b>81571</b>	<b>127436</b>	<b>265822</b>	<b>94480</b>	<b>100707</b>	<b>80736</b>	<b>275924</b>					<b>202985</b>	<b>238967</b>	<b>278048</b>	<b>720001</b>
SUGAR MAPLE	73	246	493	812	297	534	1812	2644	320	709	1047	2076					691	1490	3352	5534
RED MAPLE	8557	15357	11738	35653	10373	18629	21998	51001	13575	18564	16722	48862					32506	52551	50458	135516
YELLOW BIRCH	1183	2714	4869	8768	2957	4524	16321	23803	2289	4432	10361	17083					6430	11671	31553	49654
WHITE BIRCH	2179	3001	1514	6694	1531	2349	1397	5278	2331	2615	1304	6251					6042	7965	4216	18224
OAK	13	52	111	178	9	18	77	106	372	471	1314	2157					395	542	1503	2441
ASPEN	273	178	216	668	321	971	1099	2391	1404	1834	1176	4415					1999	2984	2492	7476
GREY BIRCH	65	7		72	83	14		98	582	97		679					730	119		850
WHITE ASH	28	22	162	213	80	48		129	129	135	97	361					238	205	259	704
BLACK ASH	2			2	10			10	25	11	66	102					39	11	66	116
CHERRY									4			4					4			4
ELM									2			2					2			2
BEECH	70	111	167	349	421	839	774	2035	1011	1477	1090	3578					1503	2429	2031	5964
BALSAM POPLAR																				
<b>TOTAL HARDWOODS</b>	<b>12448</b>	<b>21692</b>	<b>19273</b>	<b>53414</b>	<b>16087</b>	<b>27930</b>	<b>43481</b>	<b>87499</b>	<b>22049</b>	<b>30348</b>	<b>33180</b>	<b>85577</b>					<b>50584</b>	<b>79971</b>	<b>95935</b>	<b>226491</b>
MISCELLANEOUS	6			6	22	15		37	100	30		130					130	45		175
<b>TOTAL FOREST LAND</b>	<b>64145</b>	<b>78381</b>	<b>89148</b>	<b>231675</b>	<b>72924</b>	<b>109517</b>	<b>170917</b>	<b>353359</b>	<b>116630</b>	<b>131085</b>	<b>113917</b>	<b>361633</b>					<b>253700</b>	<b>318984</b>	<b>373983</b>	<b>946668</b>

ALL FIGURES ARE IN THOUSANDS CU.FT.

E S T I M A T E - G R O S S C U B I C F T . V O L U M E S O N F O R E S T E D L A N D B Y C O V E R T Y P E , D E N S I T Y C L A S S E S , D B H G R O U P A N D O W N E R S H I P C L A S S

TOTALS ALL MUNICIPALITIES

29

COVER TYPE AND DENSITY CLASS	O W N E R S H I P C L A S S												T O T A L							
	C R O W N L A N D				L A R G E O W N E R S				S M A L L O W N E R S				M I L I T A R Y R E S E R V E S A N D P A R K S				T O T A L			
	4 - 6 DBH	7 - 9 DBH	10 + DBH	UP TOTAL	4 - 6 DBH	7 - 9 DBH	10 + DBH	UP TOTAL	4 - 6 DBH	7 - 9 DBH	10 + DBH	UP TOTAL	4 - 6 DBH	7 - 9 DBH	10 + DBH	UP TOTAL	4 - 6 DBH	7 - 9 DBH	10 + DBH	UP TOTAL
SOFTWOOD LAND																				
UP TO 40f	10352	8819	7704	26877	8613	9564	12112	30290	20288	17675	12722	50687					39253	36060	32540	107855
41f - 60f	28288	24965	25742	78997	26681	28837	33592	89112	51529	46126	36740	134396					106500	99930	96075	302506
61f - 80f	35841	33399	37781	107022	50114	66799	107087	224001	88377	87930	73302	249610	161	117	133	411	174494	188248	218304	581047
81f -100f	6939	6523	6976	20440	22707	26514	57241	106463	37525	34261	25560	97347					67173	67299	89778	224251
OVERSTOCKED	1176	427	309	1913	2069	1891	2021	5982	4211	3060	2514	9786					7457	5380	4844	17681
TOTAL	82599	74137	78515	235252	110185	133609	212056	455851	201933	189055	150839	541828	161	117	133	411	394879	396919	441544	1233343
MIXEDWOOD LAND																				
UP TO 40f	2281	2846	3907	9035	4477	5532	7727	17737	10749	10960	10872	32583					17508	19339	22508	59356
41f - 60f	6544	7662	8034	22241	12190	16981	20847	50019	25027	22782	24910	72720	12	9	28	50	43775	47435	53821	145032
61f - 80f	13601	17112	20233	50947	28250	39013	57645	124909	44067	43060	41249	128376					85919	99186	119128	304234
81f -100f	277	119		396	741	900	986	2627	5036	4721	3203	12961					6054	5741	4189	15986
OVERSTOCKED	33	27		60	138	123	230	492		9		9					172	160	230	562
TOTAL	22738	27768	32176	82682	45798	62551	87437	195788	84881	81534	80236	246652	12	9	28	50	153431	171864	199878	525173
HARDWOOD LAND																				
UP TO 40f	1142	1039	1274	3456	1522	2229	4675	8428	2639	3542	4719	10901					5305	6811	10669	22786
41f - 60f	3617	4599	6603	14820	4779	5262	9938	19980	8562	7097	8224	23884					16959	16960	24766	58686
61f - 80f	5759	7347	6428	19535	16905	17900	21207	56013	15054	13369	11297	39721					37719	38617	38934	115270
81f -100f	1556	1723	1066	4346	1381	1009	609	3000	1925	1622	1297	4844					4863	4355	2973	12192
OVERSTOCKED	23	12	29	64					8		72	80					31	12	101	145
TOTAL	12099	14722	15402	42224	24589	26402	36431	87424	28190	25631	25611	79433					64880	66756	77445	209082
ALL FOREST LAND																				
UP TO 40f	13776	12705	12886	39369	14613	17326	24516	56457	33678	32178	28314	94171					62068	62211	65718	189998
41f - 60f	38451	37228	40380	116060	43652	51082	64378	159113	85120	76006	69875	231002	12	9	28	50	167236	164326	174663	506226
61f - 80f	55202	57859	64443	177506	95269	123714	185941	404925	147499	144359	125849	417709	161	117	133	411	298133	326051	376368	1000553
81f -100f	8773	8367	8043	25184	24830	28424	58837	112092	44487	40605	30060	115153					78091	77396	96941	252430
OVERSTOCKED	1233	466	338	2038	2207	2015	2251	6475	4220	3070	2586	9876					7661	5552	5176	18390
TOTAL	117437	116628	126094	360159	180574	222563	335925	739063	315005	296220	256687	867913	173	127	161	462	613191	635540	718868	1967600

ALL FIGURES ARE IN THOUSANDS CU.FT.

E S T I M A T E - GROSS CUBIC FT. VOLUMES ON FORESTED LAND BY COVER TYPE, AGE CLASSES, DBH GROUP AND OWNERSHIP CLASSES

TOTALS ALL MUNICIPALITIES

30

COVER TYPE AND AGE CLASS	O W N E R S H I P C L A S S																T O T A L			
	C R O W N L A N D				L A R G E O W N E R S				S M A L L O W N E R S				M I L I T A R Y R E S E R V E S A N D P A R K S				T O T A L			
	4 - 6 DBH	7 - 9 DBH	10 + DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + DBH	TOTAL
SOFTWOOD LAND																				
UP TO 20YRS	533	563	1002	2099	956	749	1711	3418	2192	2368	1275	5836					3683	3681	3989	11354
21YRS - 40YRS	3183	1297	1279	5760	7182	3757	3449	14389	22515	12016	8413	42945					32882	17071	13142	63095
41YRS - 60YRS	29875	23292	18068	71236	37589	39041	38742	115374	98379	84803	54843	238026					165844	147137	111655	424637
61YRS - 80YRS	32456	32544	36475	101476	45575	62934	94153	202663	61531	72310	68946	202787	161	117	133	411	139724	167907	199709	507341
81YRS - 100YRS	15160	15611	20557	51328	14905	20355	48844	84104	15599	15864	15081	46544					45665	51831	84482	181978
101YRS OR MORE	810	421	227	1459	3147	5708	23619	32475	342	458	1510	2311					4300	6589	25357	36247
UNEVENAGED STANDS	579	405	904	1889	827	1061	1534	3423	1372	1233	769	3375					2779	2700	3208	8687
TOTAL	82599	74137	78515	235252	110185	133609	212056	455851	201933	189055	150839	541828	161	117	133	411	394879	396919	441544	1233343
MIXEDWOOD LAND																				
UP TO 20YRS	42	9	21	73	563	630	649	1843	637	481	538	1656					1242	1122	1208	3573
21YRS - 40YRS	567	312	117	997	1778	957	1437	4173	4565	1946	1230	7742					6910	3217	2785	12912
41YRS - 60YRS	6050	6153	4529	16733	15131	16089	16845	48066	41193	31412	21932	94538	12	9	28	50	62388	53665	43335	159389
61YRS - 80YRS	12828	16758	20203	49790	21457	33545	50361	105364	31024	37772	43199	111997					65311	88077	113764	267153
81YRS - 100YRS	2030	3051	4803	9884	4459	7967	13656	26083	4427	6582	9668	20678					10917	17601	28128	56646
101YRS OR MORE	46	188	606	841	193	488	646	1328	459	971	1440	2871					699	1648	2693	5041
UNEVENAGED STANDS	1173	1294	1892	4360	2214	2871	3841	8927	2572	2366	2227	7167					5960	6532	7962	20455
TOTAL	22738	27768	32176	82682	45798	62551	87437	195788	84881	81534	80236	246652	12	9	28	50	153431	171864	199878	525173
HARDWOOD LAND																				
UP TO 20YRS	174	171	233	578	85	76	397	558	207	259	205	672					467	506	835	1809
21YRS - 40YRS	2815	1101	974	4891	1672	562	2429	4563	1441	808	540	2790					5928	2471	3944	12345
41YRS - 60YRS	3311	2802	2360	8474	12674	11000	10050	33725	14303	9496	6996	30796					30290	23299	19406	72996
61YRS - 80YRS	3942	7524	6611	18078	8275	11939	16508	36723	10548	12260	13049	35858					22766	31724	36168	90660
81YRS - 100YRS	1762	3023	5090	9876	1601	2417	4937	8956	1424	2442	3768	7634					4788	7882	13797	26468
101YRS OR MORE	92	100	131	324	281	406	2108	2795	264	364	1051	1680					638	870	3291	4801
UNEVENAGED STANDS																				
TOTAL	12099	14722	15402	42224	24589	26402	36431	87424	28190	25631	25611	79433					64880	66756	77445	209082
ALL FOREST LAND																				
UP TO 20YRS	750	744	1257	2752	1605	1457	2758	5320	3038	3109	2018	8165					5393	5310	6034	16738
21YRS - 40YRS	6565	2711	2372	11649	10633	5277	7315	23226	28522	14771	10184	53477					45721	22759	19872	88353
41YRS - 60YRS	39238	32248	24959	96445	65396	66132	65638	197166	153877	125712	83771	363361					258524	224102	174397	657024
61YRS - 80YRS	49227	56828	63290	169346	75308	108419	161023	344752	103104	122343	125195	350643	161	117	133	411	227802	287709	349642	865154
81YRS - 100YRS	18953	21685	30451	71090	20965	30740	67438	119144	21451	24889	28517	74858					61370	77315	126408	265094
101YRS OR MORE	949	710	965	2625	3622	6603	26373	36599	1066	1794	4002	6863					5638	9109	31342	46089
UNEVENAGED STANDS	1752	1699	2797	6249	3042	3932	5376	12351	3945	3599	2997	10542					8740	9232	11170	29143
TOTAL	117437	116628	126094	360159	180574	222563	335925	739363	315005	296220	256687	867913	173	127	161	462	613191	635540	718868	1967600

ALL FIGURES ARE IN THOUSANDS CU.-FT.

E S T I M A T E - G R O S S C U B I C F T . V O L U M E S O N F O R E S T E D L A N D B Y C O V E R T Y P E , S I T E C L A S S E S , D B H G R O U P A N D O W N E R S H I P C L A S S E S

TOTALS ALL MUNICIPALITIES

31

COVER TYPE AND SITE CLASS	O W N E R S H I P C L A S S																T O T A L				
	C R O W N L A N D				L A R G E O W N E R S				S M A L L O W N E R S				M I L I T A R Y R E S E R V E S A N D P A R K S				4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	
	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL					
SOFTWOOD LAND																					
1									19	67								19	67		86
2					70	94	224	389										70	94	224	389
3	1605	2302	5056	8965	3385	6716	19646	29748	14024	15829	11525	41379					19015	24848	36228	80092	
4	54948	53963	61009	169921	88583	111518	177704	377806	159041	154366	129750	443158	161	117	133	411	302735	319966	368597	991299	
5	26044	17870	12449	56365	18145	15279	14480	47905	28758	18791	9563	57113					72949	51942	36492	161384	
6									89			89					89				89
TOTAL	82599	74137	78515	235252	110185	133609	212056	455851	201933	189055	150839	541828	161	117	133	411	394879	396919	441544	1233343	
MIXEDWOOD LAND																					
1																					
2																					
3	175	471	225	872	1160	1874	4492	7527	397	530	894	1822					1733	2876	5612	10222	
4	20310	25487	30174	75972	43108	59145	81075	183329	81451	78369	75980	235802	12	9	28	50	144883	163012	187258	495155	
5	2251	1808	1775	5836	1529	1531	1869	4931	3031	2634	3361	9027					6813	5974	7007	19795	
6																					
TOTAL	22738	27768	32176	82682	45798	62551	87437	195788	84881	81534	80236	246652	12	9	28	50	153431	171864	199878	525173	
HARDWOOD LAND																					
1																					
2																					
3	871	1489	2466	4827	946	1596	3196	5739	1659	1455	2139	5255					3476	4542	7803	15822	
4	9658	12430	12319	34408	23302	24530	32363	80196	25605	23522	22850	71977					58566	60482	67532	186582	
5	1569	802	616	2988	341	275	871	1488	925	653	621	2200					2836	1730	2109	6676	
6																					
TOTAL	12099	14722	15402	42224	24589	26402	36431	87424	28190	25631	25611	79433					64880	66756	77445	209082	
ALL FOREST LAND																					
1									19	67											86
2					70	94	224	389										70	94	224	389
3	2652	4264	7748	14665	5492	10187	27335	43015	16081	17815	14559	48457					24225	32267	49644	106138	
4	84918	91881	103503	280303	154994	195194	291143	641332	266098	256258	228581	750938	173	127	161	462	506185	543462	623389	1673038	
5	29866	20482	14841	65190	20016	17087	17221	54325	32716	22078	13545	68341					82599	59648	45609	187857	
6									89			89					89				89
TOTAL	117437	116628	126094	360159	180574	222563	335925	739063	315005	296220	256687	867913	173	127	161	462	613191	635540	718868	1967600	

ALL FIGURES ARE IN THOUSANDS CU.FT.

E S T I M A T E - GROSS CUBIC FT. VOLUMES ON FORESTED LAND BY SPECIES, DBH GROUP AND OWNERSHIP CLASS

TOTALS ALL MUNICIPALITIES

S P E C I E S	O W N E R S H I P C L A S S																T O T A L			
	C R O W N L A N D				L A R G E O W N E R S				S M A L L O W N E R S				M I L I T A R Y R E S E R V E S A N D P A R K S				4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL
	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL				
WHITE SPRUCE	702	643	1233	2578	1257	1755	2711	5725	10403	15418	15703	41526	6			5	12369	17818	19648	49836
SPRUCE-RED + BLACK	52296	49423	49642	151362	68095	99202	175295	343594	97106	108248	90802	296157	46	74	82	203	217544	256949	316822	791316
FIR	33715	24134	7685	65535	58013	49346	19042	126403	115859	76949	24452	217261	112	53		165	207701	150483	51181	409366
HEMLOCK	36	74	433	544	1373	4085	23554	29124	4293	9413	20959	34666					5703	13575	45056	64335
WHITE PINE	1096	2861	31356	35314	589	2248	23254	26092	1255	3366	20272	24894					2940	8476	74883	86301
RED PINE	736	1844	2812	5393	43	142	874	1059	175	450	721	1347					955	2437	4408	7800
LARCH	3638	3326	2305	9270	1729	1901	1159	4789	7504	7498	5144	20147			28	28	12871	12726	8637	34235
JACK PINE	53	15		68	233	10		244	705	300	53	1058					992	326	53	1371
SCOTCH PINE									164	266	78	508					164	266	78	508
CEDAR																				
TOTAL SOFTWOODS	92274	82324	95469	270067	131335	158595	247001	537033	237468	221911	178188	637568	164	127	111	403	461243	463059	520770	1445073
SUGAR MAPLE	190	480	664	1335	1052	1323	3405	5781	1429	1993	3654	7077					2672	3797	7724	14194
RED MAPLE	16920	24489	19043	60454	30519	42295	48134	120951	42728	42345	38487	123561	2		50	52	90171	109132	105715	305019
YELLOW BIRCH	2170	3745	6239	12155	6945	8307	25570	41824	6545	8376	16630	31552	4			4	15665	20430	49440	85536
WHITE BIRCH	3846	4200	2276	10323	6802	7065	4773	18543	7924	6567	4112	18604	2			2	18576	17834	11162	47574
OAK	44	131	435	612	157	179	278	516	1458	1815	3935	7209					1660	2127	4650	8438
ASPEN	1392	987	986	3367	1277	2449	3712	7438	8966	8762	7637	25366					11635	12200	12336	36172
GREY BIRCH	394	18	22	435	559	85		545	3910	469		4380					4864	575	22	5461
WHITE ASH	44	27	195	267	519	563	291	1374	847	504	536	1888					1411	1095	1023	3530
BLACK ASH	14	25	559	599	31	9		40	84	100	105	291					130	135	665	931
CHERRY									61			61					61			61
ELM					24	9		33	66	40	250	357					90	50	250	390
BEECH	119	136	201	457	1300	1545	1757	4504	3205	3244	2996	9447					4625	4928	4955	14509
BALSAM POPLAR										15		15						15		15
TOTAL HARDWOODS	25137	34245	30625	90008	49190	63839	88924	201954	77229	74237	78346	229813	8		50	59	151566	172322	197946	521835
MISCELLANEOUS	25	58		83	47	28		75	308	71	152	532					381	158	152	691
TOTAL FOREST LAND	117437	116628	126094	360159	180574	222553	335925	739054	315005	296220	256687	867913	173	127	161	452	613191	635540	718868	1967600

ALL FIGURES ARE IN THOUSANDS CU.FT.

E S T I M A T E - MERCH CUBIC FT. VOLUMES ON FORESTED LAND BY COVER TYPE, DENSITY CLASSES, DBH GROUP AND OWNERSHIP CLASS

TOTALS ALL MUNICIPALITIES

COVER TYPE AND DENSITY CLASS	O W N E R S H I P C L A S S																T O T A L			
	C R O W N L A N D				L A R G E O W N E R S				S M A L L J W N E R S				M I L I T A R Y R E S E R V E S A N D P A R K S				4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL
	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL				
SOFTWOOD LAND																				
UP TO 40f	6992	7397	6941	21331	5767	8049	10855	24672	13465	14813	11319	39599					26225	30260	29116	85602
41f - 60f	19036	20967	23268	63271	18005	24293	30392	72391	34512	38714	32824	106052					71554	83976	86185	241715
61f - 80f	24255	28077	34112	86445	34124	56253	96141	186519	58933	73922	65283	198139	114	98	117	330	117427	158353	195654	471435
81f -100f	4609	5494	6262	16366	15292	22321	51732	89346	24948	28770	22685	76404					44851	56585	80680	182118
OVERSTOCKED	765	356	272	1395	1348	1583	1799	4731	2751	2560	2179	7491					4865	4500	4252	13618
TOTAL	55659	62293	70858	188811	74538	112502	190621	377662	134612	158781	134292	427687	114	98	117	330	264924	333676	395890	994491
MIXEDWOOD LAND																				
UP TO 40f	1506	2377	3431	7315	2961	4588	6682	14232	6915	9134	9401	25451					11383	16101	19515	46999
41f - 60f	4308	6367	7133	17809	7950	14162	18099	40212	16052	18952	21553	56558	8	8	25	41	28320	39491	46811	114622
61f - 80f	9044	14190	17749	40984	18695	32524	50646	101866	28505	35935	36176	100618					56246	82651	104572	243469
81f -100f	166	98		265	468	742	837	2048	3300	3930	2832	10063					3935	4772	3670	12377
OVERSTOCKED	19	22		41	80	102	198	382		7		7					100	132	198	431
TOTAL	15045	23057	28314	66417	30157	52121	76463	158742	54774	67961	69964	192700	8	8	25	41	99985	143148	174767	417901
HARDWOOD LAND																				
UP TO 40f	704	854	1095	2654	980	1832	3949	6762	1671	2914	3976	8562					3356	5602	9021	17980
41f - 60f	2287	3780	5612	11680	2976	4307	8341	15626	5254	5847	6991	18093					10517	13935	20946	45399
61f - 80f	3553	6025	5405	14984	10317	14625	17913	42856	9108	10997	9608	29714					22978	31648	32927	87555
81f -100f	948	1412	901	3262	818	822	517	2158	1176	1328	1138	3643					2944	3563	2557	9064
OVERSTOCKED	13	10	24	48					5		60	66					18	10	84	114
TOTAL	7506	12083	13038	32629	15092	21588	30722	67404	17216	21088	21775	60080					39816	54761	65537	160115
ALL FOREST LAND																				
UP TO 40f	9203	10629	11468	31301	9709	14471	21487	45667	22053	26863	24697	73613					40966	51964	57652	150583
41f - 60f	25632	31115	36014	92762	28932	42764	56533	128230	55819	63515	61369	180703	8	8	25	41	110392	137402	153943	401738
61f - 80f	36853	48294	57267	142415	63137	103403	164701	331242	96547	120856	111068	328472	114	98	117	330	196653	272653	333155	802461
81f -100f	5725	7005	7164	19894	16580	23886	53087	93554	29425	34029	26656	90111					51731	64921	86908	203561
OVERSTOCKED	797	389	297	1484	1429	1686	1998	5113	2757	2567	2239	7565					4984	4644	4535	14164
TOTAL	78212	97434	112211	287858	119788	186212	297808	603809	206603	247831	226032	680468	122	106	142	371	404727	531585	636195	1572508

ALL FIGURES ARE IN THOUSANDS CU.FT.

E S T I M A T E - MERCH CUBIC FT. VOLUMES ON FORESTED LAND BY COVER TYPE, AGE CLASSES, DBH GROUP AND OWNERSHIP CLASSES

TOTALS ALL MUNICIPALITIES

COVER TYPE AND AGE CLASS	O W N E R S H I P C L A S S												T O T A L							
	C R O W N L A N D				L A R G E O W N E R S				S M A L L O W N E R S				M I L I T A R Y R E S E R V E S A N D P A R K S							
	4 - 6 DBH	7 - 9 DBH	10 + DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + DBH	TOTAL				
<b>SOFTWOOD LAND</b>																				
UP TO 20YRS	353	466	898	1718	600	622	1514	2737	1414	1972	1101	4487					2368	3061	3513	8943
21YRS - 40YRS	2017	1080	1155	4253	4592	3146	3067	10806	14333	10035	7333	31703					20944	14262	11556	46763
41YRS - 60YRS	20041	19563	16243	55848	25297	32837	34472	92607	65426	71214	48665	185306					110764	123616	99381	333762
61YRS - 80YRS	21989	27373	32923	82286	31150	53067	84594	168812	41639	60811	61566	164016	114	98	117	330	94893	141350	179202	415446
81YRS -100YRS	10320	13116	18620	42057	10196	17132	44113	71441	10668	13321	13575	37564					31185	43569	76309	151064
101YRS OR MORE	551	350	202	1104	2139	4804	21466	28410	238	385	1354	1978					2930	5540	23023	31494
UNEVENAGED STANDS	385	341	814	1541	560	892	1392	2845	891	1040	696	2628					1637	2274	2903	7015
<b>TOTAL</b>	<b>55659</b>	<b>62293</b>	<b>70858</b>	<b>188811</b>	<b>74538</b>	<b>112502</b>	<b>190621</b>	<b>377662</b>	<b>134612</b>	<b>158781</b>	<b>134292</b>	<b>427687</b>	<b>114</b>	<b>98</b>	<b>117</b>	<b>330</b>	<b>264924</b>	<b>333676</b>	<b>395890</b>	<b>994491</b>
<b>MIXEDWOOD LAND</b>																				
UP TO 20YRS	21	7	18	47	366	525	579	1471	415	397	468	1281					803	931	1066	2801
21YRS - 40YRS	326	264	104	694	1033	800	1237	3071	2791	1623	1073	5487					4150	2688	2414	9254
41YRS - 60YRS	3940	5103	3980	13023	9927	13445	14722	38096	26204	26227	19215	71647	8	8	25	41	40081	44784	37943	122809
61YRS - 80YRS	8597	13906	17781	40285	14226	27929	44067	86224	20472	31463	37668	89604					43297	73300	99518	216115
81YRS -100YRS	1361	2547	4245	8153	3039	6528	11904	21573	2940	5463	8314	16718					7341	14639	24465	46446
101YRS OR MORE	29	156	513	699	126	404	563	1094	302	818	1276	2398					459	1379	2353	4191
UNEVENAGED STANDS	768	1072	1670	3510	1436	2386	3386	7210	1647	1965	1948	5560					3851	5424	7005	16282
<b>TOTAL</b>	<b>15045</b>	<b>23057</b>	<b>28314</b>	<b>66417</b>	<b>30157</b>	<b>52121</b>	<b>76463</b>	<b>158742</b>	<b>54774</b>	<b>67961</b>	<b>69964</b>	<b>192700</b>	<b>8</b>	<b>8</b>	<b>25</b>	<b>41</b>	<b>99985</b>	<b>143148</b>	<b>174767</b>	<b>417901</b>
<b>HARDWOOD LAND</b>																				
UP TO 20YRS	120	140	201	462	54	64	341	460	135	216	176	529					310	421	720	1452
21YRS - 40YRS	1602	917	844	3364	921	463	2033	3418	808	670	472	1951					3332	2051	3350	8734
41YRS - 60YRS	2041	2293	1999	6334	7645	8978	8579	25202	8515	7847	5992	22355					18202	19119	16571	53893
61YRS - 80YRS	2522	6163	5582	14268	5249	9758	13850	28858	6641	10044	11072	27758					14413	25966	30505	70885
81YRS -100YRS	1158	2485	4300	7944	1037	1990	4171	7199	939	2008	3183	6131					3134	6484	11655	21275
101YRS OR MORE	62	82	109	254	184	334	1745	2264	176	300	877	1354					423	716	2733	3873
UNEVENAGED STANDS																				
<b>TOTAL</b>	<b>7506</b>	<b>12083</b>	<b>13038</b>	<b>32629</b>	<b>15092</b>	<b>21588</b>	<b>30722</b>	<b>67404</b>	<b>17216</b>	<b>21088</b>	<b>21775</b>	<b>60080</b>					<b>39816</b>	<b>54761</b>	<b>65537</b>	<b>160115</b>
<b>ALL FOREST LAND</b>																				
UP TO 20YRS	495	615	1118	2228	1022	1211	2435	4669	1965	2587	1746	6299					3482	4414	5300	13197
21YRS - 40YRS	3946	2262	2103	8312	6547	4410	6338	17297	17933	12329	8879	39142					28427	19002	17321	64752
41YRS - 60YRS	26022	26960	22223	75206	42870	55261	57774	155906	100147	105289	73873	279310					169049	187519	153896	510465
61YRS - 80YRS	33109	47443	56288	136841	50626	90755	142513	283895	68753	102319	110307	281380	114	98	117	330	152603	240617	309226	702447
81YRS -100YRS	12839	18149	27167	58156	14273	25751	60189	100214	14548	20793	25073	60415					41661	64693	112430	218786
101YRS OR MORE	643	589	825	2059	2451	5542	23775	31769	717	1504	3508	5731					3812	7637	28110	39560
UNEVENAGED STANDS	1153	1413	2484	5052	1997	3279	4779	10056	2538	3006	2644	8188					5689	7699	9908	23298
<b>TOTAL</b>	<b>78212</b>	<b>97434</b>	<b>112211</b>	<b>287858</b>	<b>119788</b>	<b>186212</b>	<b>297808</b>	<b>603809</b>	<b>206603</b>	<b>247831</b>	<b>226032</b>	<b>680468</b>	<b>122</b>	<b>106</b>	<b>142</b>	<b>371</b>	<b>404727</b>	<b>531585</b>	<b>636195</b>	<b>1572508</b>

ALL FIGURES ARE IN THOUSANDS CU.FT.

E S T I M A T E - MERCH CUBIC FT. VOLUMES ON FORESTED LAND BY COVER TYPE, SITE CLASSES, DBH GROUP AND OWNERSHIP CLASSES

TOTALS ALL MUNICIPALITIES

35

COVER TYPE AND SITE CLASS	O W N E R S H I P C L A S S																T O T A L			
	C R O W N L A N D				L A R G E O W N E R S				S M A L L O W N E R S				M I L I T A R Y R E S E R V E S A N D P A R K S				4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL
	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL				
<b>SOFTWOOD LAND</b>																				
1									13	56		70					13	56	202	70
2					49	79	202	331									49	79	202	331
3	1080	1939	4591	7611	2293	5661	17688	25643	9366	13260	10274	32901					12740	20861	32553	66156
4	37213	45350	55003	137567	59962	93902	159741	313605	105954	129698	115439	351092	114	98	117	330	203244	269049	330302	802596
5	17365	15004	11262	43632	12233	12858	12989	38081	19219	15766	8579	43565					48818	43629	32831	125279
6									57			57					57			57
TOTAL	55659	62293	70858	188811	74538	112502	190621	377662	134612	158781	134292	427687	114	98	117	330	264924	333676	395890	994491
<b>MIXEDWOOD LAND</b>																				
1																				
2																				
3	117	389	195	702	775	1567	3975	6318	246	444	784	1475					1139	2401	4956	8496
4	13474	21152	26543	61170	28370	49283	70887	148541	52590	65317	66249	184156	8	8	25	41	94443	135761	163704	393909
5	1453	1515	1574	4544	1010	1270	1600	3881	1937	2199	2930	7068					4402	4985	6106	15494
6																				
TOTAL	15045	23057	28314	66417	30157	52121	76463	158742	54774	67961	69964	192700	8	8	25	41	99985	143148	174767	417901
<b>HARDWOOD LAND</b>																				
1																				
2																				
3	585	1228	2093	3907	589	1310	2748	4648	984	1196	1806	3988					2160	3735	6649	12544
4	5969	10193	10405	26569	14303	20051	27240	61594	15709	19354	19448	54513					35983	49599	57094	142677
5	951	662	539	2153	199	226	733	1160	522	537	519	1579					1673	1426	1793	4893
6																				
TOTAL	7506	12083	13038	32629	15092	21588	30722	67404	17216	21088	21775	60080					39816	54761	65537	160115
<b>ALL FOREST LAND</b>																				
1									13	56		70					13	56	202	70
2					49	79	202	331									49	79	202	331
3	1784	3556	6880	12221	3658	8539	24412	36611	10597	14901	12865	38365					16040	26998	44159	87197
4	56657	76696	91953	225307	102637	163236	257868	523742	174254	214369	201137	589761	122	106	142	371	333671	454409	551102	1339183
5	19770	17182	13377	50329	13443	14356	15323	43123	21680	18503	12029	52213					54894	50041	40731	145667
6									57			57					57			57
TOTAL	78212	97434	112211	287858	119788	186212	297808	603809	206603	247831	226032	680468	122	106	142	371	404727	531585	636195	1572508

ALL FIGURES ARE IN THOUSANDS CU.FT.

E S T I M A T E - MERCH CUBIC FT. VOLUMES ON FORESTED LAND BY SPECIES, DBH GROUP AND OWNERSHIP CLASS

TOTALS ALL MUNICIPALITIES

S P E C I E S	O W N E R S H I P C L A S S																T O T A L				
	C R O W N L A N D				L A R G E O W N E R S				S M A L L O W N E R S				M I L I T A R Y R E S E R V E S A N D P A R K S				4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	
	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL	4 - 6 DBH	7 - 9 DBH	10 + UP DBH	TOTAL					
WHITE SPRUCE	421	527	1096	2045	738	1445	2399	4583	6137	12701	13848	32687	4			4	7301	14674	17344	39320	
SPRUCE-RED + BLACK	35679	41587	44874	122142	46767	83754	159629	290151	66203	91154	81818	239177	33	62	75	170	148684	216559	286398	651642	
FIR	22845	20550	6871	50267	39556	42054	17049	98659	78414	65509	21887	165811	80	44		125	140897	128158	45808	314864	
HEMLOCK	25	61	394	482	961	3375	21472	25809	2993	7771	18740	29505					3980	11208	40607	55796	
WHITE PINE	742	2434	28810	31988	384	1915	21340	23640	837	2865	18588	22290					1963	7215	68739	77919	
RED PINE	477	1563	2554	4595	28	120	804	353	110	383	653	1147					616	2067	4012	6696	
LARCH	2441	2798	2084	7324	1172	1604	1038	3815	5148	6298	4619	16066			25	25	8763	10701	7767	27232	
JACK PINE	36	12		49	147	8		156	441	250	47	739					626	272	47	946	
SCOTCH PINE									106	223	69	399					106	223	69	399	
CEDAR																					
TOTAL SOFTWOODS	62670	69537	86688	218896	89758	134279	223732	447770	160394	187157	160272	507825	118	106	100	325	312942	391081	470794	1174817	
SUGAR MAPLE	112	391	552	1056	654	1068	2818	4541	872	1610	3025	5509					1639	3070	6397	11107	
RED MAPLE	10470	19873	15832	46176	18637	34326	40011	92974	25278	34297	31981	91557			41	42	54387	88496	87867	230751	
YELLOW BIRCH	1356	3047	5173	9577	4231	6745	21962	32939	3971	6803	13775	24550	2			2	9561	16596	40912	67069	
WHITE BIRCH	2329	3405	1891	7627	4114	5715	3964	13794	4653	5314	3421	13389					11098	14435	9278	34811	
OAK	24	107	363	495	98	145	231	476	882	1473	3249	5605					1005	1726	3845	6577	
ASPEN	914	854	899	2668	842	2120	3386	6349	5844	7576	6949	20371					7601	10551	11235	29388	
GREY BIRCH	212	14	18	245	279	69		349	1965	374		2339					2457	458	18	2934	
WHITE ASH	28	22	162	213	302	456	242	1001	521	408	445	1375					851	887	850	2590	
BLACK ASH	10	21	461	493	19	7		26	47	81	86	215					76	110	548	735	
CHERRY									34			34								34	
ELM					13	7		20	41	32	209	283						54	39	209	304
BEECH	71	111	167	350	808	1249	1457	3515	1919	2630	2487	7037					2799	3991	4112	10903	
BALSAM POPLAR										13		13						13		13	
TOTAL HARDWOODS	15530	27849	25523	68904	30001	51911	74075	155988	46033	60617	65633	172284	4		41	46	91569	140378	165274	397222	
MISCELLANEOUS	11	47		58	29	22		51	175	56	126	358					215	126	126	468	
TOTAL FOREST LAND	78212	97435	112211	287858	119788	186212	297808	603810	206603	247831	226033	680468	122	106	142	371	404727	531585	636195	1572509	

ALL FIGURES ARE IN THOUSANDS CU.FT.