

# Lunenburg Subdivision

Counties Lunenburg, Queens

1966

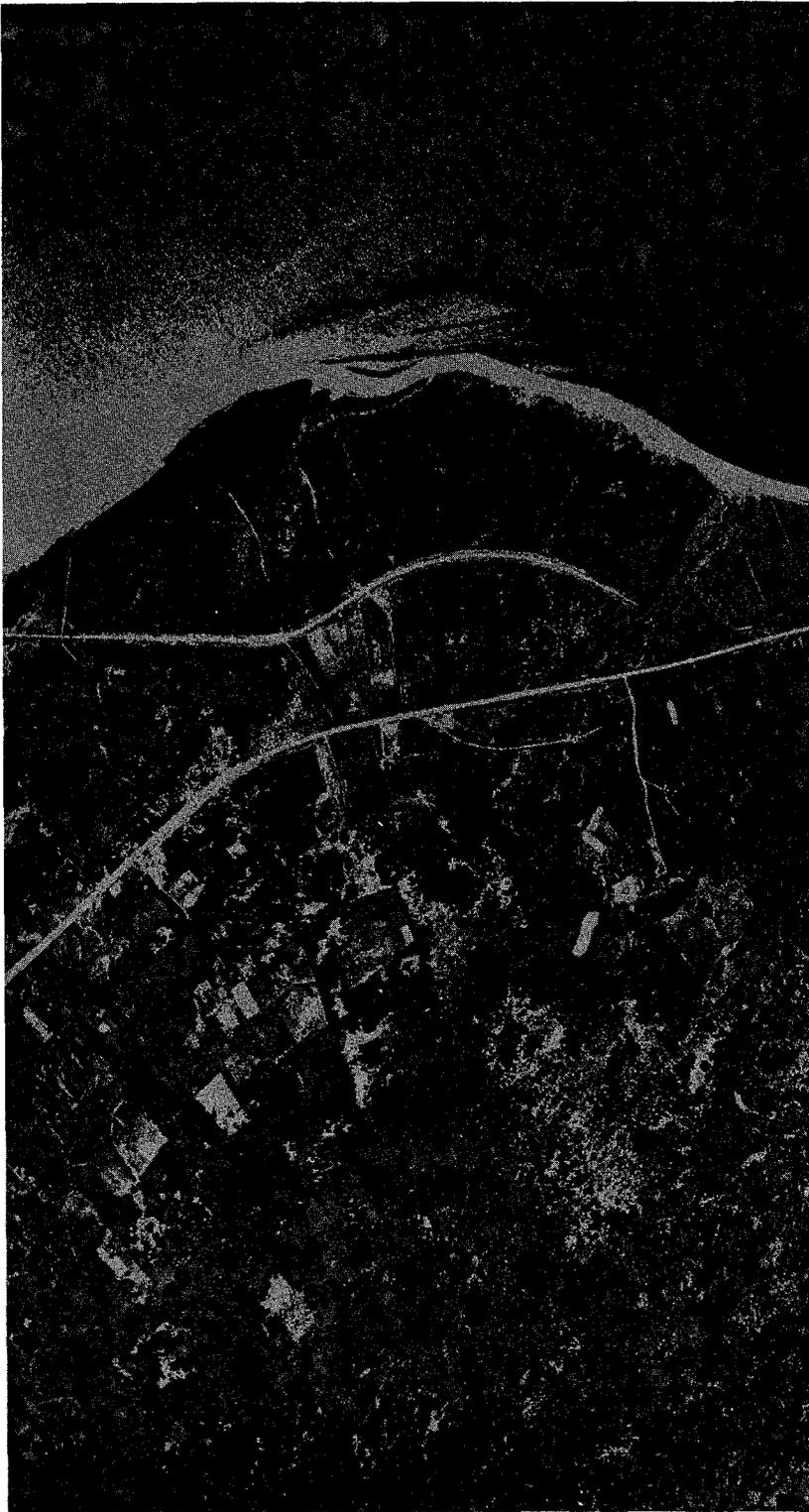


Published by the  
Department of Lands & Forests  
Province of Nova Scotia

Hon. Stephen T. Pyke, Minister  
G.W.I. Creighton, Deputy Minister



nova scotia  
forest inventory



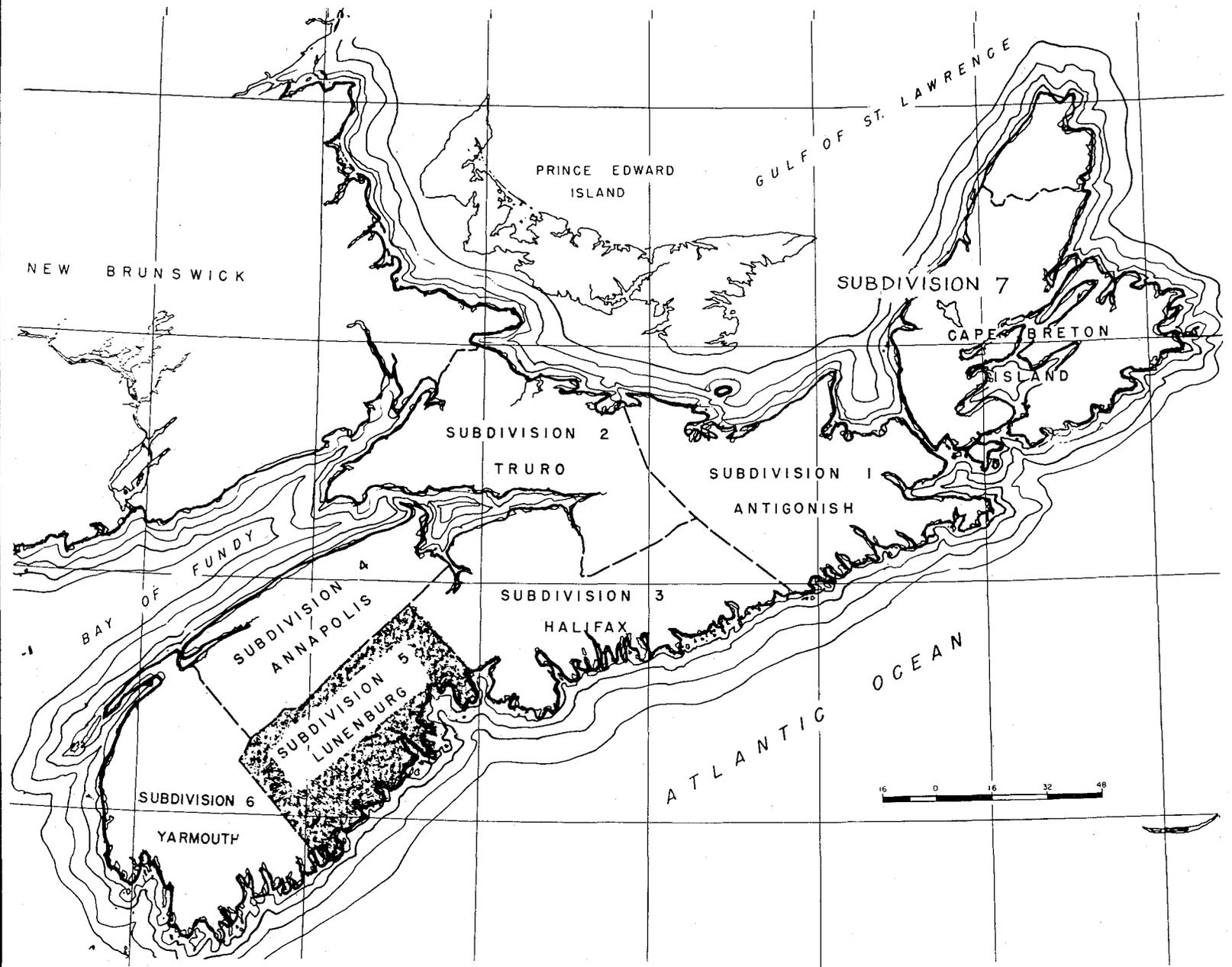
COMPILED BY INVENTORY SECTION OF THE FORESTRY DIVISION  
EDITED AND PREPARED BY EXTENSION DIVISION

DEPARTMENT OF LANDS AND FORESTS  
PROVINCE OF NOVA SCOTIA

# Subdivision V: 1966

1 M/68

# 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:1966	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: 1966 and 1956.....	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 Volumes to Cords...	31
	Four-Foot Bolts.....	31
	Eight-Foot Bolts.....	31
	Converting Cubic Foot Volumes 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, 1966 and 1956.....	22
Table D:	Per Cent Difference in Gross Cubic Foot Volume Between 1966 and 1956 Inventories by County.....	24
Table E:	Per Cent Difference in Gross Cubic Foot Volume by Species Between 1966 and 1956 Inventories, Using 1956 Adjusted Gross Volume as the Basis of Comparison.....	25
Table F:	Comparison of Species Distribution by Gross Cubic Foot Volume Percentages in the 1966 and 1956 Inventories.....	25
Table G:	Per Cent of Gross Cubic Foot Volume by Diameter Groups in 1966 and 1956 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 1965) 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 60% 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

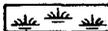
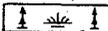
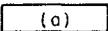
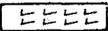
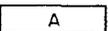
<u>Photograph</u>	<u>Field</u>
A single class for clearcuts occurring within last 10 years; denoted by symbol CC	Same

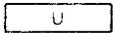
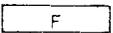
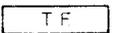
These are the categories used in classifying forest land. Map symbols denoting these categories or classes are used to distinguish the types so classified. For example, the multiple symbol S2C distinguishes a softwood type containing less than 25 per cent hardwood by volume, having a crown closure of 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 V, and compares them with those of the 1956 forest inventory in the same subdivision, on the basis of area and volume.

### FOREST CONDITIONS IN THE SUBDIVISION: 1966

#### 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 percent of the forest area of the subdivision is in Site Quality IV. The poorer site qualities comprise 16.9 per cent of the forest area, and the better site qualities 3.6 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.

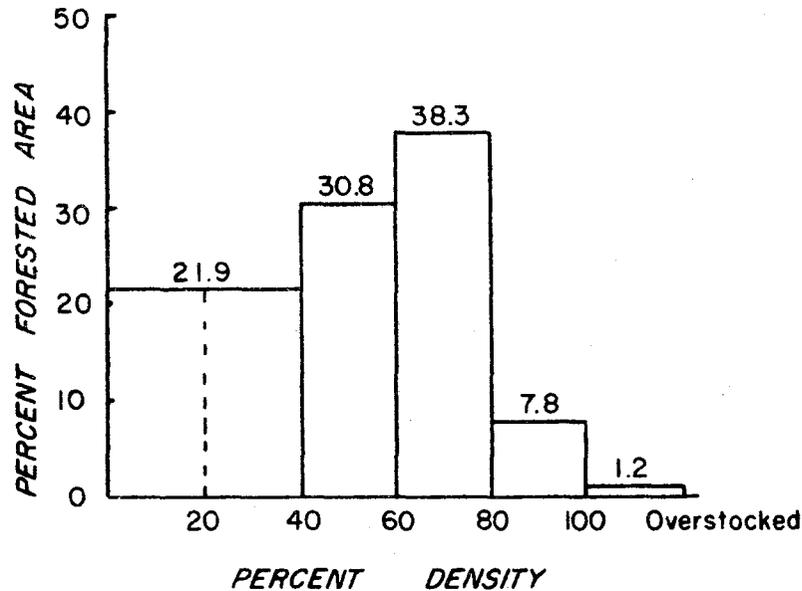
Normal density in a stand of given age-class and site quality is defined in the tables as that basal area which obtains when the site is fully occupied by trees. For convenience, basal area is usually measured by counting trees with an angle gauge designed to relate DBH and per-acre density. Density 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,  
LUNENBURG SUBDIVISION, 1966



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 Chart III on page 17.

CHART II: PER CENT OF AREA BY AGE CLASSES,  
LUNENBURG SUBDIVISION, 1966

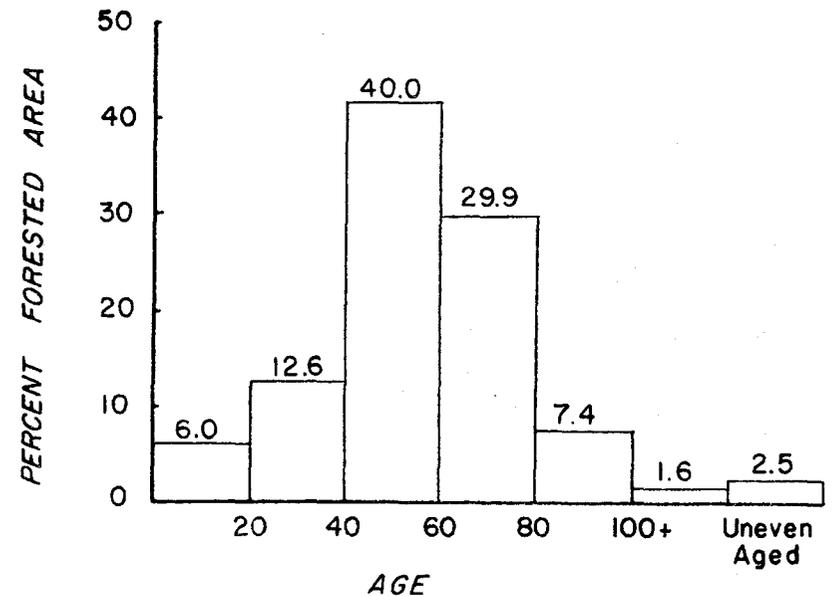
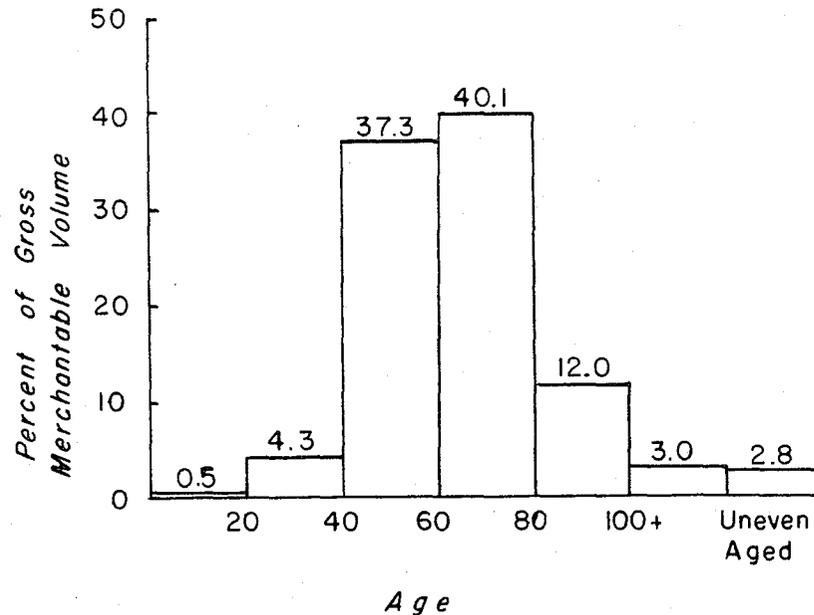


CHART III: PER CENT OF GROSS MERCHANTABLE VOLUME BY AGE CLASSES, LUNENBURG SUBDIVISION, 1966



**OWNERSHIP**

Data for the present inventory were compiled using ownerships as one of the major groupings. Ownerships were divided into four classes: military reservations and Federal parks, small private holdings (less than 1,000 acres), large private holdings (1,000 acres and larger), and Crown (Provincial) holdings. These ownerships were plotted in the spring of 1966, 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, LUNENBURG SUBDIVISION, 1966

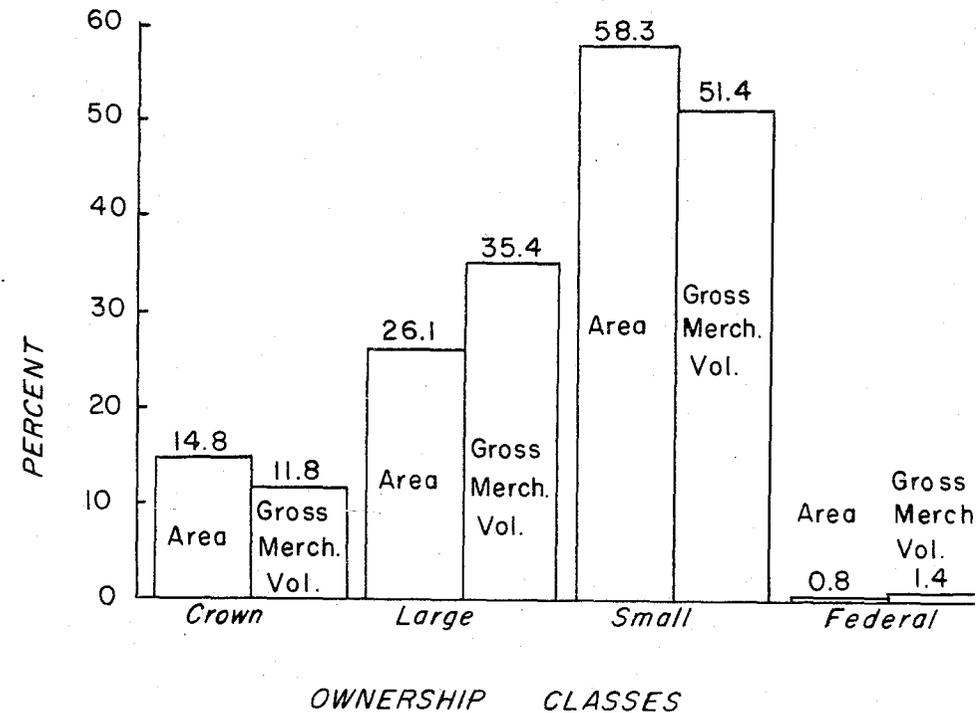


CHART V: PER CENT OF FORESTED AREA BY AGE CLASS AND OWNERSHIP CLASS, LUNENBURG SUBDIVISION, 1966

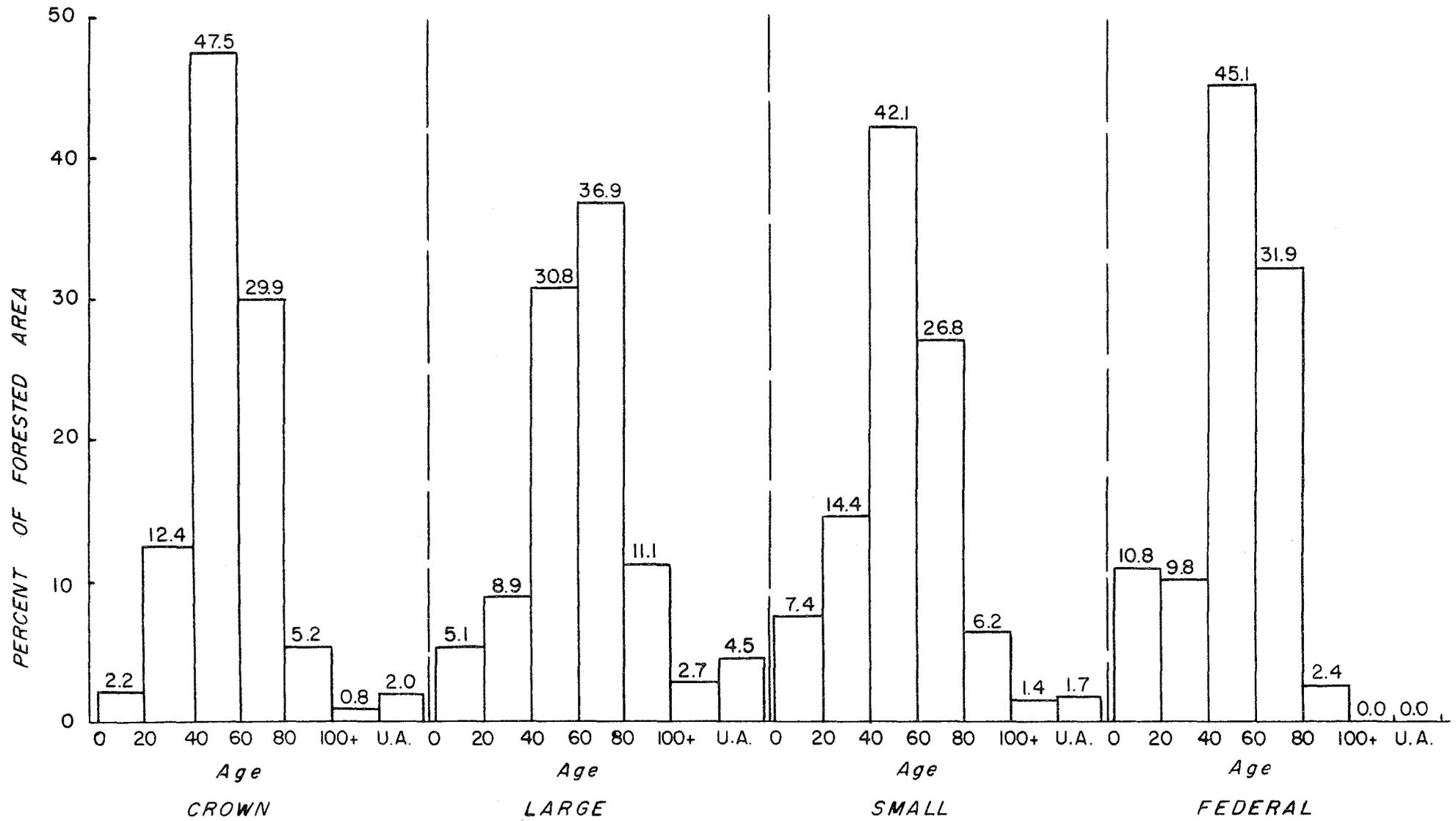
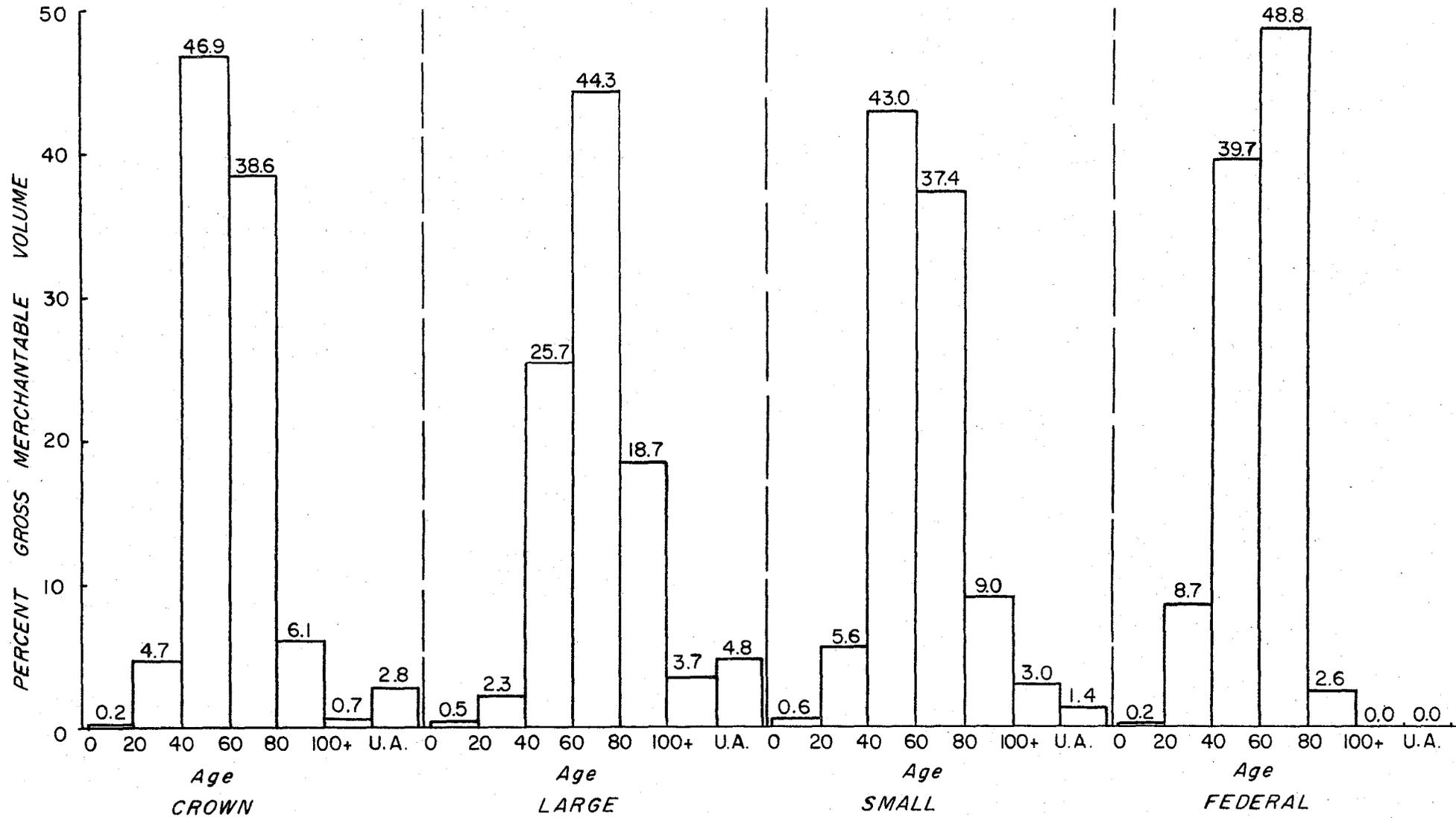


CHART VI: PER CENT OF GROSS MERCHANTABLE VOLUME BY AGE CLASS AND OWNERSHIP CLASS, LUNENBURG SUBDIVISION, 1966



## 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 10 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 3,490 sample trees for the subdivision. Depending on the species group, the "Normal" tree condition class ranged from 81 to 91 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 four per cent. The exceptions occurred in the pines (10 per cent

excessive crook) and in fir (12 per cent excessive rot, seams and scars). Hardwood also showed a high incidence of rot, seams and scars (12 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, LUNENBURG SUBDIVISION, 1966

SPECIES GROUP	C R O W N C L A S S E S			
	Dominant	Codominant	Intermediate	Suppressed
White Spruce	35	37	24	4
Red, Black Spruce	29	46	19	6
Fir	10	37	33	20
Hemlock, Cedar	31	38	24	7
White, Red Pine	38	44	18	0
Hardwood (Other than Aspen)	18	64	14	4
Aspen	31	56	13	0

#### 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: LUNENBURG SUBDIVISION, 1966

	All Values in Thousands			
	Gross Merch. Cubic Feet	(1)	(2)	(3)
		Eight-Foot Rough Cords	Four-Foot Rough Cords	Board Feet
SOFTWOODS	599,000	7,700	7,000	2,562,000
HARDWOODS	271,850	3,500	3,200	1,114,000
TOTALS	870,850	11,200	10,200	3,676,000

- (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 of four-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: 1966 AND 1956

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, 1966 AND 1956;  
LUNENBURG SUBDIVISION

<u>LAND CLASS</u>	<u>1966</u>	<u>1956</u>	<u>DIFFERENCE</u>
Forested			
Softwood	40.2	37.3	+ 2.9
Mixed Wood	21.0	25.0	- 4.0
Hardwood	17.0	1.1	+15.9
Other Forested	0.4	5.1	+ 4.7
Subtotal	78.6	68.5	+10.1
Non-Forested			
Agriculture & Urban	2.4	6.9	- 4.5
Other non-forested	19.0	24.6	- 5.6
Subtotal	21.4	31.5	-10.1
Total	100.0	100.0	00.0

NOTE: "Other Forested" in the 1956 inventory includes depleted forests (recent burns and clear-cuts); in the 1966 inventory it includes plantations, recent burns, and clear-cuts. "Other Non-Forested" in 1956 and 1966 include all non-forest areas (except agriculture and urban): swamps, water, bogs, etc. Cleared rights-of-way were not classified in 1956.

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 1966 specifications. To achieve this, field observations became the primary means for classification, instead of photo-interpretation alone, as in 1956. 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 1966 field observations showed signs of such lands growing in, they were classified as "Forested". Close typing of this kind was not possible in the 1956 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 39% of the forest area of the subdivision, are:

- (a) Softwood cover of 41% to 60% density, 31 to 50 feet tall, average age 58, Site Quality IV.
- (b) Mixed Wood cover of 41% to 60% density, 31 to 50 feet tall, average age 59, Site Quality IV.
- (c) Hardwood cover of 41% to 60% density, 31 to 50 feet tall, average age 57, Site Quality IV.

In all there were some 80 forest photo-types sampled in the subdivision. Of the total sampled area, 40 types comprised 90 percent, 25 types comprised 81 percent, and five types made up 45 percent.

Unfortunately, these forest categories cannot be effectively compared with those of the 1956 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 1956 was defined as the solid cubic foot 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 1966 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 5% decrease from the 1956 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 1956 gross cubic foot volumes should be reduced by 10% for softwoods and 20% for hardwoods in order to make valid comparisons with 1966 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 1956--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 factors 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: PER CENT DIFFERENCE IN GROSS CUBIC FOOT VOLUMES BETWEEN 1967 AND 1955\* INVENTORIES BY COUNTY, LUNENBURG SUBDIVISION (BASE: 1955)

	<u>Queens</u>	<u>Lunenburg</u>	<u>Subdivision</u>
Softwood	+7.9	+7.6	+7.7
Hardwood	+19.4	+8.0	+13.3
Total	+11.6	+7.7	+9.5

\*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, LUNENBURG SUBDIVISION.

SPECIES	PERCENT DIFFERENCE
White Spruce	+17.2
Red, Black Spruce	+28.8
Fir	-10.8
Hemlock	- 6.6
White Pine	- 1.9
Other Softwoods	- 8.1
TOTAL SOFTWOODS	+ 7.8
Sugar Maple	- 8.9
Red Maple	+34.2
Yellow Birch	-11.7
White Birch	-17.1
Other Hardwoods	+ 8.3
TOTAL HARDWOODS	+13.3
TOTAL	+ 9.5

\*Adjust (a) Minus 10% for Softwoods  
(b) Minus 20% for Hardwoods

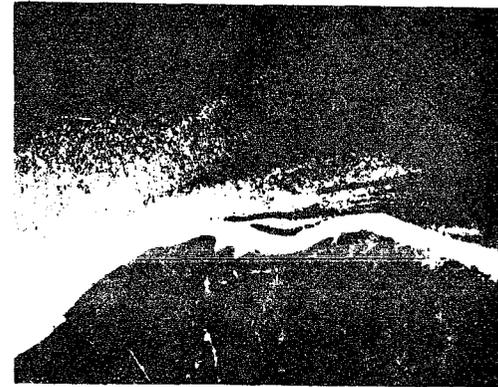
TABLE F: COMPARISON OF SPECIES DISTRIBUTION BY GROSS CUBIC FOOT VOLUME PERCENTAGES IN THE 1956\* AND 1966 INVENTORIES; LUNENBURG SUBDIVISION

SPECIES	1966	1956
White Spruce	1.3	1.2
Red, Black Spruce	32.6	27.7
Fir	14.2	17.3
Hemlock	7.4	8.7
White Pine	10.3	11.4
Other Softwoods	1.9	2.3
TOTAL SOFTWOODS	67.7	68.6
Sugar Maple	1.1	1.4
Red Maple	15.7	12.8
Yellow Birch	2.3	2.9
White Birch	3.2	4.2
Other Hardwoods	10.0	10.1
TOTAL HARDWOODS	32.3	31.4
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 1966 AND 1956\*  
INVENTORIES, LUNENBURG SUBDIVISION

DIAMETER GROUP (DBH)	1966	1956
SOFTWOOD		
4 to 9 inches	40.1	40.2
10 inches and over	27.6	28.5
TOTAL SOFTWOOD	67.7	68.7
HARDWOOD		
4 to 9 inches	21.1	20.6
10 inches and over	11.2	10.7
TOTAL HARDWOOD	32.3	31.3
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 =

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

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 V

SPECIES GROUP 1: WHITE SPRUCE

DBHob Inches	Gross Volume Cubic Feet	Merchantable Volume Cubic Feet
4	0.8	.3
5	1.6	1.1
6	2.7	2.2
7	4.3	3.7
8	6.1	5.4
9	8.4	7.5
10	11.1	10.1
11	14.4	13.8
12	18.0	16.5
13	22.1	20.3
14	26.3	24.2
<hr style="border-top: 1px dashed black;"/>		
15	31.5	28.9
16	36.8	33.9
17	42.6	39.2
18	48.9	45.0
19	55.1	51.1
20	62.5	57.7
21	69.7	64.5
22	77.3	71.5
23	86.3	79.7
24	95.0	87.8

NOTE: Values below the dashed line are extrapolated.

December, 1966

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

Inches	Gross Volume Cubic Feet	Merchantable Volume Cubic Feet
4	1.1	.5
5	2.0	1.5
6	3.2	2.6
7	4.9	4.2
8	7.0	6.0
9	9.4	8.3
10	12.4	11.1
11	16.0	14.4
12	20.0	18.3
13	24.6	22.7
14	29.8	27.6
15	35.6	33.2
16	42.6	39.6
17	49.8	46.6
18	57.7	54.3
19	66.4	62.7
20	75.8	71.6
<hr style="border-top: 1px dashed black;"/>		
21	86.0	81.8
22	97.9	92.9
23	109.9	104.7
24	122.6	117.0

NOTE: Values below the dashed line are extrapolated.

December, 1966

INDIVIDUAL TREE LOCAL VOLUME TABLES BY SPECIES GROUPS: SUBDIVISION V

SPECIES GROUP 3: BALSAM FIR

DBHob Inches	Gross Volume Cubic Feet	Merchantable Volume Cubic Feet
4	1.0	0.6
5	1.8	1.3
6	2.8	2.2
7	4.0	3.3
8	5.5	4.7
9	7.4	6.4
10	9.5	8.5
11	12.0	10.7
12	14.9	13.4
13	18.1	16.4
-----		
14	21.4	19.5
15	25.4	23.2
16	29.9	27.2
17	34.3	31.4
18	39.6	36.1
19	44.8	41.1
20	51.1	46.7
21	57.1	52.1
22	63.5	58.1
23	71.2	64.8
24	78.5	71.2

NOTE: Values below the dashed line are extrapolated.

December, 1965

SPECIES GROUP 4: HEMLOCK, CEDAR

DBHob Inches	Gross Volume Cubic Feet	Merchantable Volume Cubic Feet
4	.9	0.5
5	1.7	1.1
6	2.7	2.0
7	4.2	3.3
8	6.1	5.1
9	8.2	7.1
10	10.8	9.5
11	13.9	12.3
12	17.4	15.7
13	21.5	19.5
14	25.8	23.6
15	30.6	28.0
16	35.8	32.9
17	41.6	38.2
18	47.9	44.2
19	54.8	50.6
20	62.3	57.6
21	69.6	64.2
22	77.3	71.7
23	86.5	80.3
24	95.3	88.2

December, 1966

INDIVIDUAL TREE LOCAL VOLUME TABLES BY SPECIES GROUPS: SUBDIVISION V

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

DBHob Inches	Gross Volume Cubic Feet	Merchantable Volume Cubic Feet
4	.8	.4
5	1.6	1.0
6	2.6	1.9
7	3.9	3.0
8	5.8	4.8
9	7.9	6.7
10	10.5	9.1
11	13.5	11.8
12	16.8	15.0
13	20.8	18.5
14	25.1	22.6
15	29.8	27.0
16	35.1	31.8
17	40.9	37.3
18	47.3	43.2
19	54.3	49.7
20	61.0	55.8
21	69.2	63.3
22	77.1	70.5
23	85.3	78.0
24	94.1	86.3

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

DBHob Inches	Gross Volume Cubic Feet	Merchantable Volume Cubic Feet
4	1.1	.5
5	1.9	1.3
6	3.0	2.4
7	4.4	3.6
8	6.1	5.1
9	8.3	7.0
10	10.9	9.2
11	13.6	11.7
12	16.8	14.4
13	20.4	17.4
14	24.4	21.0
15	28.9	24.9
<hr style="border-top: 1px dashed black;"/>		
16	33.4	28.8
17	38.3	33.1
18	44.1	38.1
19	49.9	43.3
20	56.0	48.2
21	62.6	54.0
22	69.6	60.3
23	77.1	66.8
24	85.0	73.2

NOTE: Values below the dashed line are extrapolated.

December, 1966

December, 1966

INDIVIDUAL TREE LOCAL VOLUME TABLES  
BY SPECIES GROUPS: SUBDIVISION V

SPECIES GROUP 7: ASPEN, Balsam Poplar

DBHob Inches	Gross Volume Cubic Feet	Merchantable Volume Cubic Feet
4	1.0	0.5
5	1.9	1.4
6	3.1	2.5
7	4.6	4.0
8	6.5	5.7
9	8.6	7.7
10	11.4	10.1
11	14.4	12.7
12	17.8	15.9
13	21.7	19.2
14	26.2	23.4
15	31.2	27.8
-----		
16	36.1	32.4
17	42.2	37.8
18	49.0	44.1
19	55.4	50.1
20	62.4	56.7
21	71.1	64.5
22	79.2	72.5
23	87.9	80.3
24	97.2	89.3

NOTE: Values below the dashed line are extrapolated.

December, 1966

## 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 VOLUMES 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.

## 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

### INDEX: VOLUME ESTIMATES IN CUBIC FEET

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

#### QUEENS 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

#### LUNENBURG 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

CHESTER 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

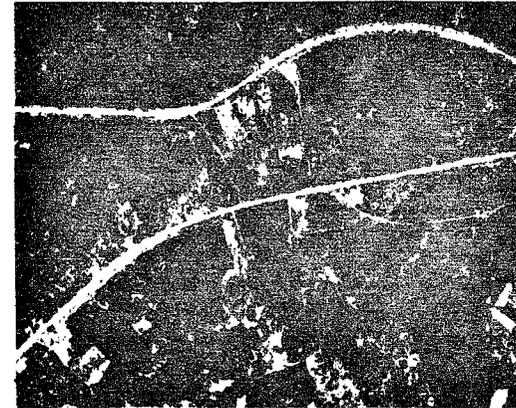
ALL MUNICIPALITIES

Gross Volume by:

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

Gross Merchantable Volume by:

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



# The Tables:



MAJOR FOREST AND NON-FOREST LAND CLASSIFICATION

SUBDIVISION 5

AREA IN ACRES BY MUNICIPALITY AND OWNERSHIP CLASS

FOREST LAND AND NON-FOREST LAND CLASSIFICATION	M U N I C I P A L I T Y																			
	Q U E E N S					L U N E N B U R G					C H E S T E R					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	5411	10062	7904	349	23727	1072	1712	18634		21419	998	5908	6353		13259	7481	17683	32892	349	58407
MIXEDWOOD LAND	1936	4289	7418	311	13955	895	986	7491		9372	1139	2210	3833		7183	3970	7486	18743	311	30511
HARDWOOD LAND	3302	2375	6875	278	12830	902	497	5236		6635	1222	1477	2615		5315	5427	4349	14726	278	24781
CLEAR CUT			67		67		56	44		100			37		37		56	149		205
RECENT BURN PLANTATION	73	156	67		297			84		84						73	156	152		382
TOTAL FORESTED LAND	10723	16883	22333	939	50879	2869	3251	31490		37612	3359	9596	12840		25796	16952	29731	66664	939	114287
NON-FOREST LAND																				
BOGO OPEN + TREED		10	20		30		39	158		198	55				55	55	49	179		284
ALDERS + BRUSH	3679	1687	888	27	6282	170	12	1497		1680	128	159	309		597	3977	1859	2695	27	8560
ROCK BARREN	7	26	559	74	667	37	75	1005		1118	27	25	497		550	73	126	2063	74	2336
AGRICULTURE + MARSH	540	324	265		1130	5		62		67		84	221		306	545	408	549		1503
URBAN		87	654		741		64	1849		1914			465		465		151	2969		3121
ROAD AND R.R.			75		75			336		336			22		22			434		434
TRANSMISSION LINE	89	193	183		466	108	5	400		514	80	37	193		311	277	236	777		1291
TIDAL FLATS + MARSH	62	50	73		186		11	43		55		26	20		46	62	88	136		288
TOT NON-FOREST LAND	4379	2379	2721	101	9581	321	209	5353		5884	291	333	1730		2355	4992	2921	9805	101	17821
WATER																				
FLOWAGE	3850	1484	1000	67	6402	602	600	1645		2848	485	290	425		1202	4938	2375	3071	67	10453
	143	693	369	121	1327		31	390		421			133		133	143	724	892	121	1881
TOTAL	3993	2178	1369	188	7729	602	631	2036		3270	485	290	558		1335	5081	3100	3964	188	12335
OFFSHORE SMALL ISLANDS					159					543					305					1008
GRAND TOTAL	19096	21440	26424	1229	68350	3793	4093	38880		47311	4137	10220	15129		29792	27027	35754	80434	1229	145453

\* M R + P # MILITARY RESERVES AND PARKS

ALL FIGURES ARE IN TENS OF ACRES

S U R D I V I S I O N 1    A R E A   I N   A C R E S   B Y   M U N I C I P A L I T Y   A N D   O W N E R S H I P   C L A S S

FOREST LAND BY DENSITY CLASSES	QUEENS					LUNENBURG					CHESTER					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
<b>SOFTWOOD LAND</b>																				
UP TO 40%	1111	1280	2523	1	4915	336	226	4723		5286	219	469	1194		1883	1666	1976	8441	1	12085
41% - 60%	1954	2424	2186	94	6659	393	520	4925		5838	455	1257	2014		3727	2803	4201	9126	94	16226
61% - 80%	1869	5086	2845	197	9998	342	671	6773		7787	309	2552	2420		5283	2521	8310	12039	197	23068
81% -100%	476	873	524	58	1932		316	2244		2560	13	1551	562		2127	490	2741	3330	58	6621
OVERSTOCKED		408	57		476			238		238		91	183		275		500	490		990
<b>TOTAL</b>	<b>5411</b>	<b>10072</b>	<b>8147</b>	<b>351</b>	<b>23982</b>	<b>1072</b>	<b>1734</b>	<b>18905</b>		<b>21712</b>	<b>998</b>	<b>5923</b>	<b>6375</b>		<b>13297</b>	<b>7481</b>	<b>17731</b>	<b>33428</b>	<b>351</b>	<b>58992</b>
<b>MIXEDWOOD LAND</b>																				
UP TO 40%	673	918	1869	107	3568	139	318	1635		2093	615	512	1008		2135	1427	1749	4513	107	7797
41% - 60%	538	2078	2470	107	5196	261	177	2346		2785	200	788	1654		2653	1000	3044	6481	107	10635
61% - 80%	693	953	2723	95	4466	495	455	3022		3973	300	909	855		2065	1489	2318	6601	95	10505
81% -100%	30	327	164		521		70	345		415	22	156	267		445	52	553	777		1383
OVERSTOCKED													81		81			81		81
<b>TOTAL</b>	<b>1936</b>	<b>4278</b>	<b>7228</b>	<b>309</b>	<b>13753</b>	<b>895</b>	<b>1021</b>	<b>7350</b>		<b>9267</b>	<b>1139</b>	<b>2365</b>	<b>3876</b>		<b>7381</b>	<b>3970</b>	<b>7665</b>	<b>18455</b>	<b>309</b>	<b>30402</b>
<b>HARDWOOD LAND</b>																				
UP TO 40%	477	841	1487	121	2928	296	56	742		1094	171	294	739		1204	944	1191	2969	121	5227
41% - 60%	959	912	2376	12	4259	313	291	1422		2026	781	403	824		2009	2054	1606	4622	12	8296
61% - 80%	1786	667	2845	143	5442	292	148	2790		3230	269	432	816		1517	2347	1247	6451	143	10191
81% -100%	153	110	248		512			211		211			130		130	153	110	591		855
OVERSTOCKED								68		68		177	76		254		177	145		323
<b>TOTAL</b>	<b>3375</b>	<b>2531</b>	<b>6957</b>	<b>278</b>	<b>13143</b>	<b>902</b>	<b>495</b>	<b>5234</b>		<b>6632</b>	<b>1222</b>	<b>1307</b>	<b>2587</b>		<b>5117</b>	<b>5500</b>	<b>4334</b>	<b>14780</b>	<b>278</b>	<b>24893</b>
<b>ALL FOREST LAND</b>																				
UP TO 40%	2261	3040	5880	230	11413	771	600	7101		8474	1005	1276	2941		5223	4039	4917	15924	230	25110
41% - 60%	3452	5415	7033	214	16115	968	988	8693		10650	1437	2449	4504		8391	5858	8853	20231	214	35157
61% - 80%	4348	6707	8413	436	19906	1129	1275	12586		14991	880	3893	4092		8866	6358	11877	25092	436	43765
81% -100%	660	1311	937	58	2966		386	2801		3188	36	1708	960		2704	696	3406	4699	58	8859
OVERSTOCKED		408	67		476			307		307		269	341		611		678	716		1394
<b>TOTAL</b>	<b>10723</b>	<b>16883</b>	<b>22333</b>	<b>939</b>	<b>50879</b>	<b>2869</b>	<b>3251</b>	<b>31490</b>		<b>37612</b>	<b>3359</b>	<b>9596</b>	<b>12840</b>		<b>25796</b>	<b>16952</b>	<b>29731</b>	<b>66664</b>	<b>939</b>	<b>114288</b>

\* M R + P # MILITARY RESERVES AND PARKS

ALL FIGURES ARE IN TENS OF ACRES

SUBDIVISION 1 AREA IN ACRES BY MUNICIPALITY AND OWNERSHIP CLASS

FOREST LAND BY AGE CLASSES	QUEENS					LUNENBURG					CHESTER					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	14	139	499	1	655		50	1712		1763		194	344		538	14	383	2557	1	2957
21YRS - 40YRS	812	881	1130	35	2860	270	365	2824		3460	50	154	1010		1215	1134	1401	4965	35	7536
41YRS - 60YRS	2324	2663	3666		8654	529	734	7527		8791	462	1830	3277		5569	3316	5228	14471		23016
61YRS - 80YRS	1629	3381	2456	291	7759	271	499	5042		5814	375	2660	1000		4036	2276	6542	8499	291	17610
81YRS - 100YRS	430	2045	364	22	2863		31	1355		1387	18	387	354		760	449	2465	2075	22	5011
101YRS OR MORE	102	312	29		444			442		442		266	73		339	102	578	545		1226
UNEVENAGED STANDS	96	648			744		51			51	91	430	313		836	187	1131	313		1632
TOTAL	5411	10072	8147	351	23982	1072	1734	18905		21712	998	5923	6375		13297	7481	17731	33428	351	58992
MIXEDWOOD LAND																				
UP TO 20YRS		288	315		604	62		561		623		256	325		581	62	544	1202		1809
21YRS - 40YRS	51	440	674		1167	49	105	1269		1423	164	227	419		810	265	773	2363		3401
41YRS - 60YRS	982	1417	3117	309	5827	750	263	2187		3201	304	424	1306		2034	2037	2104	6611	309	11063
61YRS - 80YRS	546	1312	2183		4042	33	567	2227		2828	517	1383	1614		3515	1097	3263	6025		10386
81YRS - 100YRS	240	486	306		1033		63	853		917	123	74			198	364	623	1160		2148
101YRS OR MORE		161	83		245			161		161							161	245		407
UNEVENAGED STANDS	114	172	546		833		21	88		110	28		211		240	143	194	846		1184
TOTAL	1936	4278	7228	309	13753	895	1021	7350		9267	1139	2365	3876		7381	3970	7665	18455	309	30402
HARDWOOD LAND																				
UP TO 20YRS	90	469	491	99	1152	36	56	612		705	160	66	30		257	287	592	1134	99	2115
21YRS - 40YRS	158	316	989	56	1521	84	113	911		1110	452	49	369		871	695	479	2271	56	3503
41YRS - 60YRS	1592	981	3487	113	6175	686	34	1979		2701	424	811	1542		2778	2704	1827	7009	113	11655
61YRS - 80YRS	1445	578	1818	7	3850	72	244	992		1309	185	348	487		1020	1702	1171	3297	7	6179
81YRS - 100YRS	52	138	169		360	21	46	574		643			157		189	74	216	902		1192
101YRS OR MORE	36	47			83			164		164						36	47	164		247
UNEVENAGED STANDS																				
TOTAL	3375	2531	6957	278	13143	902	495	5234		6632	1222	1307	2587		5117	5500	4334	14780	278	24893
ALL FOREST LAND																				
UP TO 20YRS	105	897	1307	101	2412	99	106	2886		3092	160	517	700		1377	364	1521	4894	101	6882
21YRS - 40YRS	1022	1638	2794	92	5548	404	584	5005		5994	667	430	1799		2897	2094	2654	9599	92	14441
41YRS - 60YRS	4899	5061	10272	423	20656	1967	1032	11694		14694	1191	3066	6125		10383	8058	9160	28092	423	45735
61YRS - 80YRS	3621	5272	6457	299	15652	376	1312	8263		9951	1078	4391	3102		8572	5076	10976	17823	299	34176
81YRS - 100YRS	723	2670	841	22	4257	21	141	2784		2947	142	493	512		1148	887	3305	4138	22	8353
101YRS OR MORE	138	521	112		772			768		768		266	73		339	138	787	954		1880
UNEVENAGED STANDS	211	821	546		1578		73	88		162	120	430	525		1076	331	1325	1160		2817
TOTAL	10723	16883	22333	939	50879	2869	3251	31490		37612	3359	9596	12840		25796	16952	29731	66664	939	114288

\* M R + P # MILITARY RESERVES AND PARKS

ALL FIGURES ARE IN TENS OF ACRES

SUBDIVISION 1 AREA IN ACRES BY MUNICIPALITY AND OWNERSHIP CLASS

FOREST LAND BY SITE CLASSES	QUEENS					LUNENBURG					CHESTER					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		9			9			48		48							9	48		57
3	185	178	141	35	540		101	1241		1342		505	527	1032	185	785	1909	35	2916	
4	3273	8326	6528	315	18444	822	1402	14027		16253	606	4394	4873	9874	4702	14123	25430	315	44571	
5	1952	1558	1477		4988	249	230	3588		4068	391	1023	874	2289	2594	2812	5939		11345	
6													100	100			100		100	
TOTAL	5411	10072	8147	351	23982	1072	1734	18905		21712	998	5923	6375	13297	7481	17731	33428	351	58992	
MIXEDWOOD LAND																				
1																				
2								22		22										22
3		172			172			139		139		72	156	229		245	295			541
4	1465	3107	6178	155	10906	851	996	6079		7927	798	2247	3373	6420	3115	6351	15632	155	25254	
5	470	998	1049	154	2674	43	25	1109		1178	340	45	346	731	854	1069	2505	154	4584	
6																				
TOTAL	1936	4278	7228	309	13753	895	1021	7350		9267	1139	2365	3876	7381	3970	7665	18455	309	30402	
HARDWOOD LAND																				
1																				
2																				
3	91		120		211			107		107		51	159	210	91	51	387			529
4	2954	1530	5993	278	10756	880	495	4584		5960	1078	1114	2149	4342	4913	3140	12726	278	21058	
5	329	1001	844		2175	21		542		564	144	141	279	564	495	1142	1666		3304	
6																				
TOTAL	3375	2531	6957	278	13143	902	495	5234		6632	1222	1307	2587	5117	5500	4334	14780	278	24893	
ALL FOREST LAND																				
1																				
2		9			9			71		71						9	71			80
3	276	351	261	35	925		101	1488		1589		629	842	1472	276	1082	2592	35	3987	
4	7693	12964	18700	749	40107	2554	2894	24691		30140	2483	7757	10397	20637	12731	23615	53789	749	90885	
5	2753	3558	3370	154	9837	315	255	5240		5811	876	1209	1499	3585	3944	5024	10110	154	19234	
6													100	100			100		100	
TOTAL	10723	16883	22333	939	50879	2869	3251	31490		37612	3359	9596	12840	25796	16952	29731	66664	939	114288	

\* M R + P # MILITARY RESERVES AND PARKS

ALL FIGURES ARE IN TENS OF ACRES

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 - QUEENS

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	1825	1211	2073	5111	2286	2050	3315	7651	2976	2805	4945	10727					7088	6067	10334	23490
41f - 60f	4211	3280	4347	11838	6256	6267	10886	23410	6360	5235	5700	17295	453	531	465	1450	17281	15315	21399	53996
61f - 80f	7074	6404	7058	20537	18795	21458	36626	76880	10466	12789	15303	38559	633	807	2778	4218	36969	41459	61766	140195
81f - 100f	1734	1203	946	3884	3429	4767	10665	18862	1802	2317	3973	8093	232	323	1100	1656	7199	8612	16686	32497
OVERSTOCKED					1811	2095	10032	13939	347	129	185	662					2159	2224	10218	14601
TOTAL	14846	12100	14425	41372	32579	36639	71526	140745	21952	23276	30108	75338	1319	1662	4344	7325	70697	73679	120405	264782
MIXEDWOOD LAND																				
UP TO 40f	841	867	1224	2934	1093	1440	1661	4194	2672	2382	1866	6921	263	135	79	478	4670	4825	4832	14529
41f - 60f	1384	1601	1384	4371	4391	5350	6309	15751	5630	6147	5869	17647	345	501	378	1225	11752	13601	13643	38996
61f - 80f	2284	3295	4338	9918	3232	3557	6398	13188	10048	10646	13191	33887	492	595	1001	2089	16058	18095	24929	59084
81f - 100f	167	214	99	481	942	1734	7836	10513	385	387	292	1064					1495	2335	8228	12059
OVERSTOCKED																				
TOTAL	4677	5979	7047	17705	9659	12082	21906	43648	18737	19564	21220	59521	1102	1232	1459	3794	34177	38858	51633	124670
HARDWOOD LAND																				
UP TO 40f	583	695	1318	2597	302	463	564	1330	1582	1369	1289	4240	65	30	58	154	2533	2558	3230	8323
41f - 60f	2824	1756	1044	5625	2503	2162	2093	6759	5445	4116	4433	13995	27	87	405	521	10800	8123	7977	26901
61f - 80f	6276	6730	5764	18770	2069	1956	1743	5769	10013	9490	5657	25161	730	726	954	2411	19089	18904	14120	52114
81f - 100f	525	433	45	1004	597	466	493	1557	1115	824	374	2314					2238	1724	913	4877
OVERSTOCKED																				
TOTAL	10209	9615	8173	27998	5472	5049	4895	15417	18156	15800	11755	45712	823	845	1418	3087	34662	31310	26242	92216
ALL FOREST LAND																				
UP TO 40f	3250	2775	4617	10643	3681	3953	5541	13176	7231	6557	8101	21890	329	165	137	632	14493	13452	18398	46343
41f - 60f	8420	6638	6776	21835	13151	13780	18989	45921	17435	15499	16003	48939	826	1120	1250	3198	39834	37039	43020	119894
61f - 80f	15635	16430	17160	49226	24097	26973	44768	95839	30528	32926	34153	97608	1856	2130	4733	8720	72117	78460	100816	251394
81f - 100f	2427	1851	1092	5371	4969	6968	18995	30933	3303	3528	4641	11473	232	323	1100	1656	10932	12672	25828	49434
OVERSTOCKED					1811	2095	10032	13939	347	129	185	662					2159	2224	10218	14601
TOTAL	29734	27695	29646	87076	47711	53771	98327	199811	58847	58641	63084	180572	3245	3740	7222	14208	139538	143849	198281	481669

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 - QUEENS

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 + 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	TOTAL
SOFTWOOD LAND																				
UP TO 20YRS	6	31	28	65	127	149	80	357	92	74	19	186					226	255	128	610
21YRS - 40YRS	1571	781	657	3010	2105	981	393	3480	1616	886	885	3388	111	92	74	279	5405	2741	2010	10158
41YRS - 60YRS	6813	6105	5182	18102	9803	10695	12497	32996	11662	11690	11025	34377					28279	28490	28705	85476
61YRS - 80YRS	4521	3922	5913	14357	11634	12801	23398	47833	7473	8853	14400	30727	1094	1432	4135	6663	24725	27009	47848	99583
81YRS - 100YRS	1183	777	1579	3539	5745	8524	25914	40183	1067	1712	3777	6557	112	136	133	382	8108	11150	31405	50663
101YRS OR MORE	311	104	184	600	566	1079	4519	6164	39	59		99					917	1244	4703	6865
UNEVENAGED STANDS	438	378	878	1696	2596	2407	4724	9728									3034	2786	5603	11424
TOTAL	14846	12100	14425	41372	32579	36639	71526	140745	21952	23276	30108	75338	1319	1662	4344	7325	70697	73679	120405	264782
MIXEDWOOD LAND																				
UP TO 20YRS				50	53	51	155	118	71	107	298						169	125	159	453
21YRS - 40YRS	22			22	533	295	616	1446	860	344	192	1397					1416	640	809	2866
41YRS - 60YRS	2487	2766	3676	8930	3234	3041	3610	9886	9099	9159	7312	25571	1102	1232	1459	3794	15924	16199	16059	48183
61YRS - 80YRS	1392	1891	1824	5109	4038	5810	7917	17766	6600	7703	9547	23851					12031	15406	19289	46727
81YRS - 100YRS	380	780	1098	2259	1025	1929	8270	11225	893	1105	1753	3752					2298	3816	11122	17238
101YRS OR MORE				262	382	422	1066	168	252	782	1203						430	634	1204	2269
UNEVENAGED STANDS	394	540	448	1383	514	569	1017	2101	996	926	1523	3446					1905	2036	2989	6931
TOTAL	4677	5979	7047	17705	9659	12082	21906	43648	18737	19564	21220	59521	1102	1232	1459	3794	34177	38858	51633	124670
HARDWOOD LAND																				
UP TO 20YRS				41	28	25	95	4			4		41				87	28	25	141
21YRS - 40YRS	262	121	22	406	229	151	107	487	669	298	168	1136	166	312	471	41	1327	884	769	2981
41YRS - 60YRS	5372	3750	2433	11556	2989	2235	2024	7249	11977	9072	4956	26005	574	490	918	1983	20913	15549	10332	46795
61YRS - 80YRS	4391	5513	4999	14904	1794	1934	1890	5619	5149	5817	5700	16667	40	41	28	110	11375	13306	12619	37302
81YRS - 100YRS	117	123	625	867	282	560	766	1609	356	612	930	1898					756	1296	2322	4375
101YRS OR MORE	65	106	92	264	136	139	79	355									202	246	171	620
UNEVENAGED STANDS																				
TOTAL	10209	9615	8173	27998	5472	5049	4895	15417	18156	15800	11755	45712	823	845	1418	3087	34662	31310	26242	92216
ALL FOREST LAND																				
UP TO 20YRS	6	31	28	66	219	230	157	607	215	146	127	489	41			41	483	408	313	1205
21YRS - 40YRS	1856	902	679	3438	2868	1429	1117	5415	3147	1529	1246	5922	278	405	546	1229	8150	4266	3588	16005
41YRS - 60YRS	14673	12622	11292	38588	16027	15971	18132	50132	32739	29921	23293	85955	1677	1722	2378	5778	65117	60239	55097	180455
61YRS - 80YRS	10306	11326	12737	34371	17467	20546	33206	71219	19223	22374	29649	71247	1135	1474	4164	6774	48132	55722	79757	183612
81YRS - 100YRS	1681	1681	3303	6666	7052	11014	34951	53018	2317	3430	6461	12209	112	136	133	382	11163	16263	44850	72277
101YRS OR MORE	377	211	277	865	964	1601	5020	7586	208	312	782	1302					1549	2125	6080	9755
UNEVENAGED STANDS	833	919	1327	3080	3110	2977	5741	11829	996	926	1523	3446					4940	4823	8592	18355
TOTAL	29734	27695	29646	87076	47711	53771	98327	199811	58847	58641	63084	180572	3245	3740	7222	14208	139538	143849	198281	481669

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

M U N I C I P A L I T Y - Q U E E N S

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			TOTAL
	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	
	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					29	51		81										29	51	81
2																				
3	376	522	671	1570	537	1173	2899	4610	234	246	461	943	111	92	74	279	1261	2034	4107	7404
4	10299	9278	11467	31046	28267	31498	64468	124235	18590	20756	28296	67643	1207	1569	4269	7046	58365	63104	108502	229971
5	4169	2299	2286	8755	3743	3915	4158	11818	3127	2273	1350	6751					11041	8489	7795	27325
6																				
TOTAL	14846	12100	14425	41372	32579	36639	71526	140745	21952	23276	30108	75338	1319	1662	4344	7325	70697	73679	120405	264782
MIXEDWOOD LAND																				
1																				
2																				
3					284	814	6364	7464									284	814	6364	7464
4	3986	4955	5639	14581	7614	9362	13309	30286	16815	17224	18084	52124	676	895	1029	2601	29093	32438	38062	99594
5	691	1023	1408	3123	1760	1905	2231	5897	1921	2339	3135	7396	426	337	430	1193	4799	5605	7206	17611
6																				
TOTAL	4677	5979	7047	17705	9659	12082	21906	43648	18737	19564	21220	59521	1102	1232	1459	3794	34177	38858	51633	124670
HARDWOOD LAND																				
1																				
2																				
3	379	355	23	758					720	418	251	1391					1099	774	275	2150
4	9381	8714	7335	25431	4749	4225	4464	13439	16065	14089	10595	40750	823	845	1418	3087	31021	27874	23813	82709
5	448	545	813	1808	722	824	431	1978	1370	1291	907	3570					2541	2662	2152	7356
6																				
TOTAL	10209	9615	8173	27998	5472	5049	4895	15417	18156	15800	11755	45712	823	845	1418	3087	34662	31310	26242	92216
ALL FOREST LAND																				
1					29	51		81									29	51	81	81
2																				
3	755	878	695	2329	822	1987	9264	12074	955	665	713	2334	111	92	74	279	2645	3624	10748	17018
4	23668	22948	24442	71059	40632	45086	82241	167961	51471	52071	56976	160519	2707	3310	6717	12735	118480	123416	170379	412275
5	5309	3869	4508	13687	6226	6645	6821	19693	6419	5904	5393	17718	426	337	430	1193	18382	16757	17154	52293
6																				
TOTAL	29734	27695	29646	87076	47711	53771	98327	199811	58847	58641	63084	180572	3245	3740	7222	14208	139538	143849	198281	481669

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 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

M U N I C I P A L I T Y - Q U E E N S

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	3	18		21	50	57	144	252	316	704	1269	2290	1		30	31	371	779	1444	2595
SPRUCE-RED + BLACK	10858	7175	3044	21078	19285	20828	23091	63205	14650	17823	14388	46861	372	426	343	1142	45166	46253	40868	132288
FIR	4342	3540	1534	9416	11343	8496	2387	22227	11664	7415	2581	21860	785	533	90	1410	28136	19985	6594	54715
HEMLOCK	193	431	694	1319	1255	3024	21495	25776	881	2419	10235	13536	449	955	4314	5719	2780	6831	36739	46351
WHITE PINE	1297	2340	12769	16407	2330	4319	29147	35797	1522	2894	12896	17313	265	168	190	624	5415	9723	55004	70143
RED PINE	72	168	1105	1347	37	155	712	906	39	138	427	605	3	12		15	153	474	2246	2874
LARCH	798	477	127	1403	633	764	689	2086	833	818	469	2121	51	68		120	2316	2129	1286	5732
JACK PINE																				
SCOTCH PINE																				
CEDAR																				
<b>TOTAL SOFTWOODS</b>	<b>17566</b>	<b>14152</b>	<b>19275</b>	<b>50994</b>	<b>34937</b>	<b>37645</b>	<b>77669</b>	<b>150252</b>	<b>29907</b>	<b>32214</b>	<b>42268</b>	<b>104390</b>	<b>1929</b>	<b>2164</b>	<b>4969</b>	<b>9064</b>	<b>84340</b>	<b>86177</b>	<b>144183</b>	<b>314701</b>
SUGAR MAPLE	97	76	270	444	219	188	561	970	253	235	196	685	3			3	574	501	1028	2103
RED MAPLE	4738	5866	5685	16291	7280	9822	12758	29861	13448	11519	8752	33720	551	627	1034	2214	26019	27836	28231	82087
YELLOW BIRCH	76	147	674	897	212	493	2778	3484	542	797	2422	3762	15	47	103	166	846	1486	5978	8311
WHITE BIRCH	1686	1649	456	3792	1265	1701	904	3871	4395	4103	1259	9758	216	241	35	493	7564	7696	2655	17916
OAK	4625	4464	1419	10509	1558	2099	2440	6098	4740	5073	3377	13191	61	220	667	948	10985	11857	7904	30746
ASPEN	316	1235	1629	3181	331	920	588	1840	1952	3002	3553	8508	184	333	200	717	2784	5491	5971	14247
GREY BIRCH	421			421	675	75	35	786	1854	165	70	2090	224	34		259	3176	275	105	3557
WHITE ASH	12	9		21	226	121	22	370	391	508	396	1296	8	17	80	106	638	656	500	1795
BLACK ASH	25	17		42	33	47	51	132	54	26		80	10		28	39	124	91	79	295
CHERRY					18			18	10			10					29			29
ELM								37	96		22	156					37	96	22	156
BEECH	121	58	235	415	877	598	517	1993	1070	788	553	2412	38	53	103	194	2107	1498	1409	5016
BALSAM POPLAR									3			3					3			3
MISCELLANEOUS	46	17		64	74	58		132	186	109	211	506					306	185	211	702
<b>TOTAL HARDWOODS</b>	<b>12167</b>	<b>13543</b>	<b>10371</b>	<b>36082</b>	<b>12774</b>	<b>16126</b>	<b>20659</b>	<b>49559</b>	<b>28939</b>	<b>26426</b>	<b>20815</b>	<b>76182</b>	<b>1315</b>	<b>1575</b>	<b>2253</b>	<b>5144</b>	<b>55197</b>	<b>57671</b>	<b>54098</b>	<b>166967</b>
<b>TOTAL FOREST LAND</b>	<b>29734</b>	<b>27695</b>	<b>29646</b>	<b>87076</b>	<b>47711</b>	<b>53771</b>	<b>98328</b>	<b>199811</b>	<b>58847</b>	<b>58641</b>	<b>63084</b>	<b>180572</b>	<b>3245</b>	<b>3740</b>	<b>7222</b>	<b>14208</b>	<b>139538</b>	<b>143849</b>	<b>198281</b>	<b>481669</b>

A L L F I G U R E S A R E I N T H O U S A N D S C U . F T .

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 - QUEENS

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	1260	1025	1854	4140	1565	1745	2986	6297	2053	2390	4462	8907					4880	5161	9303	19345
41f - 60f	2839	2789	3887	9517	4365	5337	9836	19538	4379	4445	5127	13953	317	445	417	1181	11901	13018	19269	44190
61f - 80f	4946	5432	6303	16682	13050	18197	32933	64181	7288	10906	13759	31954	433	677	2487	3598	25719	35213	55485	116417
81f - 100f	1162	1012	838	3013	2409	4055	9663	16128	1247	1973	3573	6795	157	268	994	1420	4976	7309	15071	27357
OVERSTOCKED					1272	1765	9059	12097	222	107	164	494					1494	1873	9223	12591
TOTAL	10209	10260	12884	33354	22662	31100	64480	118243	15191	19824	27088	62104	908	1391	3900	6200	48972	62577	108352	219901
MIXEDWOOD LAND																				
UP TO 40f	559	730	1117	2407	757	1214	1474	3446	1789	2007	1658	5455	165	115	68	348	3272	4066	4318	11658
41f - 60f	965	1352	1231	3549	3004	4524	5303	12833	3921	5205	5181	14307	233	424	335	994	8125	11507	12052	31685
61f - 80f	1588	2793	3862	8243	2230	3002	5715	10947	6910	8976	11818	27706	348	503	896	1749	11077	15276	22293	48647
81f - 100f	115	181	85	382	662	1463	7074	9200	261	326	260	848					1040	1970	7420	10432
OVERSTOCKED																				
TOTAL	3229	5057	6297	14583	6654	10205	19568	36428	12884	16515	18918	48318	747	1043	1300	3092	23516	32821	46085	102423
HARDWOOD LAND																				
UP TO 40f	380	579	1139	2099	200	387	484	1073	1058	1155	1122	3335	42	25	49	116	1682	2146	2796	6625
41f - 60f	1839	1468	914	4222	1689	1817	1870	5377	3655	3443	3898	10998	17	73	369	461	7202	6803	7054	21060
61f - 80f	4288	5627	5069	14985	1404	1633	1517	4555	6739	7954	4909	19604	463	617	850	1931	12897	15832	12348	41077
81f - 100f	353	356	40	749	411	387	422	1222	737	694	322	1754					1502	1438	785	3726
OVERSTOCKED																				
TOTAL	6862	8030	7164	22056	3706	4226	4296	12229	12191	13248	10253	35692	523	716	1270	2509	23284	26220	22984	72489
ALL FOREST LAND																				
UP TO 40f	2201	2334	4111	8647	2524	3347	4946	10817	4901	5553	7243	17698	207	140	117	465	9835	11375	16418	37629
41f - 60f	5644	5610	6034	17289	9059	11679	17010	37749	11956	13094	14208	39259	568	944	1123	2636	27229	31329	38376	96935
61f - 80f	10823	13852	15235	39911	16685	22833	40167	79685	20939	27837	30488	79265	1245	1798	4235	7279	49693	66322	90126	206142
81f - 100f	1631	1549	964	4145	3483	5906	17161	26551	2246	2994	4156	9398	157	268	994	1420	7519	10719	23277	41516
OVERSTOCKED					1272	1765	9059	12097	222	107	164	494					1494	1873	9223	12591
TOTAL	20301	23347	26345	69994	33024	45532	88344	166901	40266	49587	56261	146115	2179	3151	6471	11802	95772	121619	177422	394815

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 - QUEENS

10

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	5	25	24	55	85	126	72	284	61	62	17	142					152	215	114	482
21YRS - 40YRS	1034	646	585	2267	1376	832	349	2558	1070	748	809	2627	74	78	66	219	3556	2305	1810	7673
41YRS - 60YRS	4727	5191	4641	14560	6834	9084	11148	27067	8061	9963	9863	27889					19623	24240	25654	69518
61YRS - 80YRS	3104	3329	5279	11713	8113	10887	21055	40056	5209	7540	12977	25727	754	1198	3714	5667	17182	22956	43027	83166
81YRS - 100YRS	816	658	1407	2883	4064	7210	23508	34783	762	1459	3419	5641	78	114	119	312	5722	9443	28455	43621
101YRS OR MORE	206	89	168	464	395	918	4119	5434	25	49		75					627	1057	4288	5973
UNEVENAGED STANDS	314	318	776	1409	1792	2039	4226	8057									2106	2357	5002	9466
TOTAL	10209	10260	12884	33354	22662	31100	64480	118243	15191	19824	27088	62104	908	1391	3900	6200	48972	62577	108352	219901
MIXEDWOOD LAND																				
UP TO 20YRS					35	45	44	124	76	61	97	235					111	106	141	359
21YRS - 40YRS	13			13	330	251	535	1116	554	291	171	1017					897	542	706	2147
41YRS - 60YRS	1692	2338	3280	7311	2195	2565	3205	7965	6255	7715	6516	20487	747	1043	1300	3092	10890	13662	14303	38857
61YRS - 80YRS	974	1604	1620	4199	2818	4903	7019	14740	4578	6521	8521	19620					8371	13029	17160	38561
81YRS - 100YRS	263	657	1002	1924	723	1633	7490	9847	628	932	1544	3105					1615	3223	10038	14877
101YRS OR MORE					188	323	376	887	119	214	705	1039					308	537	1081	1927
UNEVENAGED STANDS	285	456	393	1135	364	483	896	1745	670	779	1361	2811					1320	1719	2652	5692
TOTAL	3229	5057	6297	14583	6654	10205	19568	36428	12884	16515	18918	48318	747	1043	1300	3092	23516	32821	46085	102423
HARDWOOD LAND																				
UP TO 20YRS					27	24	23	75	2			2	27				57	24	23	104
21YRS - 40YRS	163	97	19	279	143	127	92	364	423	253	148	825	112	262	428	27	642	741	688	2272
41YRS - 60YRS	3571	3128	2132	8832	2018	1868	1793	5680	7988	7608	4326	19922	357	418	817	1592	13936	13023	9069	36028
61YRS - 80YRS	3007	4613	4394	12014	1219	1619	1648	4487	3530	4871	4965	13367	26	35	24	86	7784	11139	11032	29956
81YRS - 100YRS	75	102	539	716	201	470	669	1341	246	514	813	1574					523	1087	2022	3633
101YRS OR MORE	45	88	79	213	95	116	68	280									141	204	147	493
UNEVENAGED STANDS																				
TOTAL	6862	8030	7164	22056	3706	4226	4296	12229	12191	13248	10253	35692	523	716	1270	2509	23284	26220	22984	72489
ALL FOREST LAND																				
UP TO 20YRS	5	25	24	55	148	196	139	484	140	124	115	379	27			27	321	346	279	946
21YRS - 40YRS	1211	744	604	2560	1850	1211	977	4039	2048	1293	1128	4470	186	340	495	1022	5297	3589	3206	12093
41YRS - 60YRS	9991	10658	10054	30704	11047	13519	16147	40714	22305	25286	20707	68300	1105	1461	2118	4685	44450	50926	49027	144404
61YRS - 80YRS	7086	9547	11294	27927	12151	17410	29723	59285	13318	18933	26464	58716	781	1234	3738	5754	33337	47125	71220	151684
81YRS - 100YRS	1155	1418	2950	5524	4989	9314	31669	45973	1637	2906	5777	10322	78	114	119	312	7861	13754	40516	62133
101YRS OR MORE	252	177	247	677	679	1357	4564	6601	145	263	705	1114					1076	1799	5518	8394
UNEVENAGED STANDS	599	774	1169	2544	2156	2522	5123	9802	670	779	1361	2811					3427	4077	7654	15159
TOTAL	20301	23347	26345	69994	33024	45532	88344	166901	40266	49587	56261	146115	2179	3151	6471	11802	95772	121619	177422	394815

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 - QUEENS

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	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																				
1					20	43		64									20	43		64
2					371	986	2591	3949	159	212	417	789	74	78	66	219	864	1718	3673	6256
3	259	441	597	1298	19661	26740	58157	104559	12888	17682	25454	56024	833	1313	3833	5980	40519	53605	97701	191826
4	7137	7869	10255	25262	2609	3329	3730	9670	2144	1930	1216	5290					7566	7209	6978	21753
5	2812	1949	2030	6792																
6																				
TOTAL	10209	10260	12884	33354	22662	31100	64480	118243	15191	19824	27088	62104	908	1391	3900	6200	46972	62577	108352	219901
MIXEDWOOD LAND																				
1					196	689	5785	6671									196	689	5785	6671
2					5238	7905	11796	24939	11558	14545	16126	42230	471	758	921	2151	20018	27404	33857	81280
3	2750	4195	5013	11958	1219	1611	1986	4817	1325	1969	2792	6087	276	285	379	940	3300	4728	6442	14470
4	7137	7869	10255	25262																
5	478	861	1283	2624																
6																				
TOTAL	3229	5057	6297	14583	6654	10205	19568	36428	12884	16515	18918	48318	747	1043	1300	3092	23516	32821	46085	102423
HARDWOOD LAND																				
1									476	347	215	1039					735	641	237	1613
2					3231	3534	3923	10689	10784	11815	9241	31842	523	716	1270	2509	20839	23346	20865	65051
3	258	294	21	574	475	691	372	1540	930	1085	795	2811					1709	2232	1882	5824
4	6300	7280	6429	20009																
5	303	455	713	1472																
6																				
TOTAL	6862	8030	7164	22056	3706	4226	4296	12229	12191	13248	10253	35692	523	716	1270	2509	23284	26220	22984	72489
ALL FOREST LAND																				
1					20	43		64									20	43		64
2					568	1675	8376	10620	635	559	633	1828	74	78	66	21	1797	3049	9695	14542
3	518	735	618	1873	28130	38180	73877	140189	35230	44043	50822	130096	1828	2788	6025	10642	81378	104357	152424	338159
4	16188	19344	21698	57231	4304	5632	6090	16027	4400	4985	4804	14190	276	285	379	940	12575	14170	15303	42049
5	3595	3266	4028	10890																
6																				
TOTAL	20301	23347	26345	69994	33024	45532	88344	166901	40266	49587	56261	146115	2179	3151	6471	11802	95772	121619	177422	394815

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 - QUEENS

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	2	15		17	36	50	134	221	213	617	1171	2002			28	29	252	683	1334	2271
SPRUCE-RED + BLACK	7464	6186	2775	16426	13440	18011	21137	52588	10211	15408	13113	38733	265	371	315	952	31381	39977	37342	108701
FIR	3084	2995	1374	7454	8067	7166	2141	17374	8292	6260	2315	16868	564	449	81	1095	20006	16872	5912	42793
HEMLOCK	126	357	628	1113	853	2524	19627	23005	594	2019	9288	11901	306	795	3934	5036	1881	5697	33478	41056
WHITE PINE	832	1922	11517	14272	1498	3538	26330	31367	948	2367	11616	14932	161	138	169	470	3441	7967	49634	61043
RED PINE	47	138	999	1185	23	127	641	793	24	114	384	523	2	10		12	98	390	2025	2514
LARCH	523	411	115	1050	442	659	628	1729	559	708	427	1696	30	59		90	1557	1839	1170	4567
JACK PINE																				
SCOTCH PINE																				
CEDAR																				
TOTAL SOFTWOODS	12081	12027	17412	41521	24361	32078	70640	127080	20845	27496	38316	86658	1331	1824	4530	7686	58620	73428	130899	262948
SUGAR MAPLE	68	63	233	365	152	156	482	792	167	195	167	531	2			2	392	415	883	1691
RED MAPLE	3158	4886	4864	12909	4889	8171	10916	23977	8929	9566	7490	25986	371	523	888	1784	17348	23148	24161	64658
YELLOW BIRCH	52	123	579	755	147	410	2388	2946	361	664	2084	3109	7	39	88	136	568	1238	5140	6947
WHITE BIRCH	1178	1369	390	2939	869	1415	770	3056	2988	3400	1074	7463	147	199	30	377	5184	6385	2266	13836
OAK	3156	3700	1211	8068	1094	1744	2088	4927	3290	4212	2890	10394	39	183	573	796	7581	9840	6765	24187
ASPEN	244	1091	1448	2784	240	807	522	1570	1392	2644	3162	7199	134	293	177	605	2010	4836	5312	12159
GREY BIRCH	225			225	430	62	30	523	1118	136	60	1316	110	28		138	1885	228	90	2204
WHITE ASH	8	7		16	154	99	19	273	259	422	340	1022	4	14	68	88	427	544	428	1400
BLACK ASH	16	14		31	22	39	43	105	39	22		61	7	24	31	85	76	68	229	
CHERRY					11			11	5			5				17			17	
ELM									28	80	19	127				28		80	19	
BEECH	83	48	203	335	598	496	441	1536	712	654	473	1840	22	44	88	154	1416	1243	1207	3866
BALSAM POPLAR									2			2				2				
MISCELLANEOUS	29	15		44	52	50		102	126	89	180	395					207	154	180	541
TOTAL HARDWOODS	8220	11319	8533	28473	8662	13454	17704	39821	19421	22090	17944	59456	847	1326	1941	4116	37151	48191	46523	131867
TOTAL FOREST LAND	20301	23347	26345	69994	33024	45532	88344	166902	40266	49587	56261	146115	2179	3151	6471	11802	95772	121619	177422	394815

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

MUNICIPALITY - LUNENBURG

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	464	394	542	1400	104	203	193	501	5430	4752	4888	15070					5998	5349	5023	16972
41f - 60f	1039	536	1602	3178	968	1129	989	3086	11286	8656	10210	30353					13294	10522	12802	36620
61f - 80f	1321	1489	709	3519	2407	3197	3372	9477	22209	26546	33638	82394					25938	31233	38220	95392
81f - 100f					1465	1430	1367	4283	10298	11391	12894	34584					11784	12821	14261	38868
OVERSTOCKED									1026	370	142	1540					1026	370	142	1540
TOTAL	2824	2419	2853	8098	4966	5960	6423	17350	50251	51918	61774	163944					58043	60298	71051	189393
MIXEDWOOD LAND																				
UP TO 40f				112	322	340	505	1287	1943	1943	2333	6219					2348	2313	2938	7600
41f - 60f	82	29		1961	334	652	588	1576	5846	6284	6307	18438					7152	7683	7140	21976
61f - 80f	1567	1863	2843	6274	1492	2196	3772	7461	8976	8876	11964	29817					12036	12936	18580	43553
81f - 100f					247	417	1340	2005	1053	629	711	2394					1300	1047	2052	4400
OVERSTOCKED																				
TOTAL	2620	2639	3087	8348	2397	3606	6306	12310	17819	17733	21317	56871					22838	23980	30711	77530
HARDWOOD LAND																				
UP TO 40f	409	347	380	1137						875	868	725	2469				1284	1215	1106	3607
41f - 60f	522	460	287	1270	667	1046	1128	3642	2927	2893	4248	10069					4117	4399	6464	14981
61f - 80f	997	711	459	2169	439	218	231	889	6706	5860	8315	20882					8144	6791	9006	23941
81f - 100f									835	565	665	2067					835	565	665	2067
OVERSTOCKED									60	63	36	161					60	63	36	161
TOTAL	1929	1919	1127	4576	1107	1264	2159	4531	11405	10251	13992	35649					14443	13036	17279	44758
ALL FOREST LAND																				
UP TO 40f	956	771	922	2650	426	543	798	1769	8248	7563	7947	23760					9652	8878	9669	28179
41f - 60f	2532	1743	2134	6410	1971	2828	3506	3306	20060	18034	20766	58861					24564	22606	26407	73578
61f - 80f	3886	4064	4011	11963	4340	5612	7876	17828	37892	41284	53919	133095					46119	50561	65807	162887
81f - 100f					1733	1848	2707	5288	12187	12586	14272	39046					13921	14434	16980	45335
OVERSTOCKED									1087	434	179	1701					1087	434	179	1701
TOTAL	7375	6579	7069	21023	8471	10332	14389	34193	79477	79904	97084	256465					95324	97315	119043	311683

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 - LUNENBURG

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				
<b>SOFTWOOD LAND</b>																				
UP TO 20YRS									581	346	550	1477					581	346	550	1477
21YRS - 40YRS	438	48	325	811	579	213	64	856	5569	3394	1923	10887	6586	3656	2313	12556				
41YRS - 60YRS	1561	1527	1574	4663	2656	3015	3009	8681	23993	21694	20461	66149	28210	26237	25045	79493				
61YRS - 80YRS	825	844	953	2623	1469	2491	2853	6814	14956	18459	27299	60715	17250	21795	31107	70153				
81YRS - 100YRS					73	59	351	484	3815	6374	6773	16963	3889	6435	7124	17447				
101YRS OR MORE									1336	1648	4765	7750	1336	1648	4765	7750				
UNEVENAGED STANDS					188	180	144	513					188	180	144	513				
TOTAL	2824	2419	2853	8098	4965	5960	6423	17350	50251	51918	61774	163944	58043	60298	71051	189393				
<b>MIXEDWOOD LAND</b>																				
UP TO 20YRS	34	19		53					174	71	102	349	205	90	102	402				
21YRS - 40YRS	27	10		37	150	9		159	1755	990	1153	3899	1933	1010	1153	4096				
41YRS - 60YRS	2457	2415	3087	7960	474	797	735	2007	6305	5212	6319	17837	9238	8424	10143	27806				
61YRS - 80YRS	101	194		296	1532	2385	4652	8570	6672	7501	8406	22581	8307	10081	13059	31448				
81YRS - 100YRS					196	374	803	1374	2207	3171	3704	9083	2403	3546	4508	10458				
101YRS OR MORE									458	671	1540	2670	458	671	1540	2670				
UNEVENAGED STANDS					43	40	113	198	244	114	89	449	288	155	203	647				
TOTAL	2620	2639	3087	8348	2397	3606	6306	12310	17819	17733	21317	56871	22838	23980	30711	77530				
<b>HARDWOOD LAND</b>																				
UP TO 20YRS	8			8					128	91	120	341	137	91	120	349				
21YRS - 40YRS	92	26	30	148	240	175	170	587	1164	648	694	2507	1496	851	896	3243				
41YRS - 60YRS	1601	1124	600	3326	199	42	60	302	5729	3766	5034	14531	7530	4934	5695	18160				
61YRS - 80YRS	169	288	497	955	642	958	1192	2794	2585	3620	3552	9759	3398	4868	5242	13509				
81YRS - 100YRS	58	78		137	24	87	735	847	1469	1681	2495	5646	1552	1847	3231	6631				
101YRS OR MORE									327	442	2093	2863	327	442	2093	2863				
UNEVENAGED STANDS																				
TOTAL	1929	1519	1127	4576	1107	1264	2159	4531	11405	10251	13992	35649	14443	13036	17279	44758				
<b>ALL FOREST LAND</b>																				
UP TO 20YRS	42	19		61					884	509	773	2167	927	528	773	2229				
21YRS - 40YRS	557	85	355	998	969	398	235	1603	8489	5033	3771	17295	10016	5518	4362	19897				
41YRS - 60YRS	5620	5067	5262	15950	3329	3855	3805	10991	36029	30673	31815	98517	44979	39596	40883	125460				
61YRS - 80YRS	1096	1328	1450	3875	3644	5835	8699	18179	24214	29582	39259	93056	28956	36745	49409	115111				
81YRS - 100YRS	58	78		137	294	521	1890	2706	7491	11227	12974	31693	7845	11827	14864	34538				
101YRS OR MORE									2122	2762	8399	13284	2122	2762	8399	13284				
UNEVENAGED STANDS					232	220	258	711	244	114	89	449	476	335	348	1161				
TOTAL	7375	6579	7069	21023	8471	10832	14889	34193	79477	79904	97084	256465	95324	97315	119043	311683				

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 - LUNENBURG

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 + 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																
1									202	150	862	1215				
2																
3					162	328	642	1134	3195	2659	3458	9313	202	150	862	1215
4	2237	2020	2630	6888	4485	5117	5347	14951	38866	42603	53582	135051	3358	2988	4100	10447
5	587	399	223	1209	317	513	433	1265	7987	6505	3871	18363	45589	49741	61560	156891
6													8892	7418	4527	20838
TOTAL	2824	2419	2853	8098	4966	5960	6423	17350	50251	51918	61774	163944	58043	60298	71051	189393
MIXEDWOOD LAND																
1																
2																
3									3			3	3			3
4	2558	2501	3087	8147	2280	3430	6163	11875	118	41	81	240	118	41	81	240
5	61	138		200	116	176	142	435	14902	14293	17946	47142	19742	20224	27198	67165
6									2795	3399	3289	9484	2973	3714	3432	10120
TOTAL	2620	2639	3087	8348	2397	3606	6306	12310	17819	17733	21317	56871	22838	23980	30711	77530
HARDWOOD LAND																
1																
2																
3																
4	1871	1440	1127	4439	1107	1264	2159	4531	153	247	409	811	153	247	409	811
5	58	78		137					10210	9272	12861	32344	13188	11978	16149	41315
6									1041	731	721	2493	1100	810	721	2631
TOTAL	1929	1519	1127	4576	1107	1264	2159	4531	11405	10251	13992	35649	14443	13036	17279	44758
ALL FOREST LAND																
1																
2									206	150	862	1219	206	150	862	1219
3					162	328	642	1134	3467	2948	3949	10365	3630	3277	4591	11499
4	6667	5962	6845	19475	7873	9813	13671	31358	63978	66169	84390	214538	78520	81944	104907	265372
5	707	617	223	1548	434	689	575	1700	11824	10636	7881	30341	12966	11943	8681	33590
6																
TOTAL	7375	6579	7069	21023	8471	10832	14889	34193	79477	79904	97084	256465	95324	97315	119043	311683

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 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

M U N I C I P A L I T Y - L U N E N B U R G

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					T O T A L			
	4 - 6 DBH	7 - 9 DBH	10 + DBH	U P TOTAL	4 - 6 DBH	7 - 9 DBH	10 + DBH	U P TOTAL	4 - 6 DBH	7 - 9 DBH	10 + DBH	U P TOTAL	4 - 6 DBH	7 - 9 DBH	10 + DBH	U P TOTAL		4 - 6 DBH	7 - 9 DBH	10 + DBH	U P TOTAL
WHITE SPRUCE	6		53	60	12		107	119	1963	2326	2470	6761					1982	2326	2632	6941	
SPRUCE-RED + BLACK	2737	2095	662	5496	2812	4470	4027	11310	31254	32560	26605	90420					36804	39127	31295	107227	
FIR	514	411	76	1002	2723	1838	443	5005	18316	13205	4055	35578					21555	15455	4575	41586	
HEMLOCK		30	331	361	322	741	2491	3555	2571	6051	17864	26487					2894	6822	20687	30404	
WHITE PINE	341	1025	3047	4414	71	229	1794	2096	1249	2361	16594	20206					1662	3617	21437	26717	
RED PINE	42	56	650	750	39	172	72	283	139	378	1312	1831					221	607	2036	2864	
LARCH	227	220	67	516	143	75	67	286	1938	1906	696	4540					2309	2202	830	5343	
JACK PINE																					
SCOTCH PINE																					
CEDAR																					
TOTAL SOFTWOODS	3869	3840	4890	12601	6125	7527	9003	22657	57434	58791	69600	185826					67430	70159	83494	221085	
SUGAR MAPLE	6			6	158	177	1415	1751	474	595	3638	4708					639	772	5054	6466	
RED MAPLE	1367	1051	710	3128	815	1033	1601	3450	9231	9223	10939	29394					11413	11308	13251	35974	
YELLOW BIRCH	2		127	130	274	515	1581	2371	1255	1677	2892	5826					1532	2192	4602	8328	
WHITE BIRCH	374	186	74	635	434	564	207	1206	2081	1452	861	4395					2890	2202	1143	6237	
OAK	718	277	179	1175	58	413	296	768	776	892	1597	3266					1553	1582	2074	5210	
ASPEN	698	1083	1057	2840	166	182	210	559	2539	3326	3461	9326					3404	4592	4729	12726	
GREY BIRCH	292			292	84	18		102	1946	116	86	2150					2323	135	86	2545	
WHITE ASH	27	73	28	129	29	66	199	294	750	985	1062	2798					806	1124	1290	3222	
BLACK ASH	6			6	19	49	78	147	16	17		34					42	67	78	187	
CHERRY		25		25	6	12	35	54	3			3					10	38	35	84	
ELM																					
BEECH					277	243	259	780	2870	2816	2942	8630					3148	3060	3201	9410	
BALSAM POPLAR									6			6					6			6	
MISCELLANEOUS	10	40		50	20	29		49	90	8		98					120	78		198	
TOTAL HARDWOODS	3505	2738	2178	8422	2345	3304	5885	11536	22042	21112	27483	70638					27893	27155	35548	90597	
TOTAL FOREST LAND	7375	6579	7069	21024	8471	10832	14889	34193	79477	79904	97084	256465					95324	97315	119043	311683	

A L L F I G U R E S A R E I N T H O U S A N D S C U . F T .

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 - LUNENBURG

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	UP TOTAL	4 - 6 DBH	7 - 9 DBH	10 + DBH	JP 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	312	339	483	1134	73	173	173	420	3726	4046	4386	12159				
41f - 60f	696	455	1443	2594	690	968	886	2544	7923	7542	9170	24635	4112	4559	5043	13714
61f - 80f	915	1267	635	2818	1695	2727	3497	7920	15606	22674	30332	68613	9309	8965	11499	29775
81f - 100f					1041	1216	1203	3460	7204	9752	11642	28599	18217	26670	34465	79353
OVERSTOCKED									677	316	128	1122	8245	10969	12845	32060
TOTAL	1924	2062	2561	6548	3500	5085	5759	14346	35137	44332	55660	135130	677	316	128	1122
<b>MIXEDWOOD LAND</b>																
UP TO 40f	56	25		82	225	291	530	1047	1330	1645	2061	5037				
41f - 60f	659	636	219	1514	235	550	532	1318	4031	5322	5548	14903	1612	1962	2591	6167
61f - 80f	1069	1577	2528	5175	1044	1855	3325	6226	6273	7522	10631	24427	4925	6509	6301	17736
81f - 100f					171	350	1220	1742	716	536	641	1894	8387	10955	16486	35829
OVERSTOCKED													888	887	1862	3637
TOTAL	1784	2239	2748	6772	1676	3048	5609	10335	12353	15027	18883	46263	888	887	1862	3637
<b>HARDWOOD LAND</b>																
UP TO 40f	265	290	329	885					608	727	629	1965				
41f - 60f	340	394	252	987	474	878	1668	3021	2003	2436	3693	8133	874	1017	958	2850
61f - 80f	656	602	409	1668	301	184	199	685	4532	4950	7255	16737	2818	3709	5614	12143
81f - 100f									549	476	589	1615	5490	5737	7864	19092
OVERSTOCKED									40	53	32	127	549	476	589	1615
TOTAL	1262	1287	991	3541	776	1062	1868	3707	7734	8644	12200	28580	40	53	32	127
<b>ALL FOREST LAND</b>																
UP TO 40f	634	655	812	2102	298	465	703	1467	5665	6418	7078	19162				
41f - 60f	1695	1486	1915	5097	1399	2396	3088	6884	13958	15302	18412	47673	6598	7539	8593	22732
61f - 80f	2640	3448	3573	9662	3042	4768	7022	14832	26412	35147	48219	109779	17054	19185	23415	59655
81f - 100f					1212	1567	2423	5203	8470	10765	12873	32109	32095	43363	58815	134275
OVERSTOCKED									718	370	161	1249	9682	12333	15297	37313
TOTAL	4971	5589	6301	16862	5953	9197	13238	28389	55224	68004	86745	209974	718	370	161	1249

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 - LUNENBURG

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									406	294	505	1206					406	294	505	1206
21YRS - 40YRS	261	41	291	594	385	182	57	625	3717	2903	1725	8346					4364	3127	2074	9566
41YRS - 60YRS	1078	1302	1417	3798	1876	2577	2686	7139	16819	18553	18364	53737					19774	22432	22468	64675
61YRS - 80YRS	584	718	851	2154	1050	2120	2570	5741	10566	15728	24648	50943					12201	18567	28070	58840
81YRS - 100YRS					53	51	317	422	2713	5449	6100	14263					2767	5500	6418	14686
101YRS OR MORE									912	1403	4316	6632					912	1403	4316	6632
UNEVENAGED STANDS					134	153	128	416									134	153	128	416
TOTAL	1924	2062	2561	6548	3500	5085	5759	14346	35137	44332	55660	135130	40562	51480	63982	156025				
MIXEDWOOD LAND																				
UP TO 20YRS	24	16		41					123	60	92	275					147	77	92	317
21YRS - 40YRS	15	8		23	99	7		106	1161	834	1033	3029					1275	850	1033	3159
41YRS - 60YRS	1670	2047	2748	6465	333	679	659	1671	4347	4420	5620	14388					6351	7146	9028	22526
61YRS - 80YRS	74	166		240	1073	2010	4125	7209	4667	6369	7451	18488					5814	8546	11577	25938
81YRS - 100YRS					138	317	725	1181	1557	2678	3251	7488					1696	2996	3977	8670
101YRS OR MORE									325	564	1355	2246					325	564	1355	2246
UNEVENAGED STANDS					31	34	99	165	170	98	78	347					202	133	177	513
TOTAL	1784	2239	2748	6772	1676	3048	5609	10335	12353	15027	18883	46263	15814	20315	27241	63371				
HARDWOOD LAND																				
UP TO 20YRS	4			4					89	78	107	275					94	78	107	280
21YRS - 40YRS	59	22	26	108	161	149	147	457	772	549	618	1940					992	721	792	2506
41YRS - 60YRS	1045	957	532	2535	140	35	52	228	3828	3178	4412	11419					5014	4171	4997	14183
61YRS - 80YRS	114	241	431	788	461	805	1037	2303	1783	3062	3099	7944					2359	4108	4568	11036
81YRS - 100YRS	38	65		104	13	73	631	717	1026	1408	2156	4591					1078	1547	2788	5413
101YRS OR MORE									233	368	1805	2407					233	368	1805	2407
UNEVENAGED STANDS																				
TOTAL	1262	1287	991	3541	776	1062	1868	3707	7734	8644	12200	28580	9773	10995	15060	35829				
ALL FOREST LAND																				
UP TO 20YRS	29	16		46					619	433	705	1758					648	450	705	1804
21YRS - 40YRS	335	73	318	727	645	339	204	1189	5651	4286	3377	13315					6632	4698	3901	15232
41YRS - 60YRS	3794	4307	4698	12800	2350	3291	3397	9039	24995	26152	28397	79545					31140	33751	36493	101385
61YRS - 80YRS	773	1127	1283	3183	2585	4936	7732	15254	17017	25160	35199	77376					20375	31223	44216	95815
81YRS - 100YRS	38	65		104	206	441	1675	2323	5298	9536	11508	26343					5543	10043	13183	28770
101YRS OR MORE									1472	2336	7477	11286					1472	2336	7477	11286
UNEVENAGED STANDS					166	188	227	582	170	98	78	347					337	287	305	929
TOTAL	4971	5589	6301	16862	5953	9197	13238	28389	55224	68004	86745	209974	66149	82791	106284	255225				

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 - LUNENBURG

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	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																					
1									143	127	768	1040					143	127	768	1040	
2									2190	2296	3136	7623					2294	2582	3729	8606	
3	1513	1720	2364	5598	3173	4357	4773	12304	27236	36351	48283	111870					31923	42429	55420	129773	
4	410	341	197	949	223	442	393	1058	5567	5557	3472	14596					6200	6341	4063	16605	
5																					
6																					
TOTAL	1924	2062	2561	6548	3500	5085	5759	14346	35137	44332	55660	135130					40562	51480	63982	156025	
MIXEDWOOD LAND																					
1																					
2										2		2					2			2	
3									86	34	68	190					86	34	68	190	
4	1742	2120	2748	6611	1593	2897	5483	9974	10314	12121	15936	38372					13650	17139	24168	54957	
5	42	118		161	83	151	125	360	1948	2870	2878	7698					2074	3140	3004	8219	
6																					
TOTAL	1784	2239	2748	6772	1676	3048	5609	10335	12353	15027	18883	46263					15814	20315	27241	63371	
HARDWOOD LAND																					
1																					
2																					
3																					
4	1224	1222	991	3437	776	1062	1868	3707	104	208	366	679					104	208	366	679	
5	38	65		104					6920	7824	11206	25951					8920	10109	14066	33096	
6									709	612	627	1949					748	677	627	2053	
TOTAL	1262	1287	991	3541	776	1062	1868	3707	7734	8644	12200	28580					9773	10995	15060	35829	
ALL FOREST LAND																					
1																					
2																					
3																					
4	4480	5063	6103	15646	104	285	592	982	2381	2539	3571	8493					2486	2825	4164	9476	
5	491	526	197	1215	306	593	519	1419	8224	9040	6978	24243					54493	69678	93655	217827	
6																		9023	10160	7695	26878
TOTAL	4971	5589	6301	16862	5953	9197	13238	28389	55224	68004	86745	209974					66149	82791	106284	255225	

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 - LUNENBURG

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					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
WHITE SPRUCE	3		50	53	8		100	108	1354	2042	2286	5683					1366	2042	2436	5845
SPRUCE-RED + BLACK	1879	1810	602	4292	2003	3872	3679	9555	21984	28155	24232	74371					25867	33837	28514	88219
FIR	362	349	68	780	1942	1554	396	3893	13083	11142	3634	27860					15388	13046	4099	32535
HEMLOCK		25	305	330	216	614	2263	3093	1749	5048	16151	22949					1965	5688	18719	26373
WHITE PINE	217	840	2731	3789	47	189	1615	1852	807	1938	14973	17720					1072	2967	19320	23361
RED PINE	28	46	583	658	26	140	63	230	88	312	1173	1575					144	499	1820	2464
LARCH	146	190	60	397	93	65	60	219	1377	1650	630	3658					1617	1906	751	4275
JACK PINE																				
SCOTCH PINE																				
CEGAR																				
<b>TOTAL SOFTWOODS</b>	<b>2638</b>	<b>3262</b>	<b>4401</b>	<b>10302</b>	<b>4338</b>	<b>6435</b>	<b>8178</b>	<b>18952</b>	<b>40446</b>	<b>50290</b>	<b>63082</b>	<b>153819</b>					<b>47422</b>	<b>59988</b>	<b>75662</b>	<b>183074</b>
SUGAR MAPLE	5			5	107	148	1220	1476	324	495	3127	3948					437	644	4348	5430
RED MAPLE	895	874	609	2378	537	859	1372	2770	6168	7669	9364	23202					7601	9403	11345	28351
YELLOW BIRCH	1		110	111	192	429	1358	1981	842	1396	2476	4715					1036	1825	3945	6808
WHITE BIRCH	256	154	63	474	312	470	177	959	1398	1204	740	3343					1967	1829	980	4777
OAK	468	229	154	852	44	344	253	642	529	743	1370	2642					1041	1317	1777	4136
ASPEN	516	952	938	2406	122	162	186	470	1810	2925	3076	7812					2449	4040	4200	10690
GREY BIRCH	164			164	47	15		63	1159	96	74	1329					1371	111	74	1556
WHITE ASH	17	61	24	103	19	55	171	245	501	819	910	2231					538	935	1106	2580
BLACK ASH	3			3	13	40	66	120	12	14		27					29	55	66	152
CHERRY		21		21	5	10	30	49	2			2					7	32	30	70
ELM																				
BEECH					199	202	222	624	1962	2341	2521	6825					2161	2544	2744	7450
BALSAM POPLAR									5			5					5			5
MISCELLANEOUS	5	32		38	12	23		35	60	10		70					77	66		145
<b>TOTAL HARDWOODS</b>	<b>2333</b>	<b>2326</b>	<b>1899</b>	<b>6559</b>	<b>1614</b>	<b>2762</b>	<b>5059</b>	<b>9436</b>	<b>14778</b>	<b>17714</b>	<b>23662</b>	<b>56155</b>					<b>18726</b>	<b>22802</b>	<b>30621</b>	<b>72151</b>
<b>TOTAL FOREST LAND</b>	<b>4971</b>	<b>5589</b>	<b>6301</b>	<b>16862</b>	<b>5953</b>	<b>9197</b>	<b>13238</b>	<b>28389</b>	<b>55224</b>	<b>68004</b>	<b>86745</b>	<b>209974</b>					<b>66149</b>	<b>82791</b>	<b>106284</b>	<b>255225</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 - CHESTER

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				
<b>SOFTWOOD LAND</b>																				
UP TO 40I	560	243	118	922	955	730	559	2245	1838	1388	971	4198					3353	2363	1648	7366
41I - 60I	1399	243	93	1736	4294	4113	5645	14053	6764	6006	4754	17525					12458	10364	10492	33315
61I - 80I	1152	1284	1326	3762	12972	13412	15602	41987	10789	9349	7844	27983					24914	24046	24773	73733
81I - 100I	93	58		152	9271	10865	14833	34971	2368	2189	3981	8540					11734	13114	18815	43664
OVERSTOCKED					329	263	227	820	490	668	402	1561					819	932	630	2381
TOTAL	3205	1830	1538	6574	27824	29386	36868	94078	22250	19604	17954	59809					53280	50820	56360	160462
<b>MIXEDWOOD LAND</b>																				
UP TO 40I	579	538	618	1736	393	519	574	1487	1270	1404	2142	4817					2244	2462	3334	8041
41I - 60I	663	737	555	1956	2529	2902	3410	8842	4696	4955	4890	14541					7889	8594	8855	25340
61I - 80I	1308	1217	730	3256	4457	5697	8192	18348	3285	4013	4805	12105					9051	10929	13728	33709
81I - 100I	77	39	199	316	543	574	755	1873	1116	994	1238	3348					1737	1607	2193	5538
OVERSTOCKED									69	18	35	124					69	18	35	124
TOTAL	2629	2532	2103	7265	7924	9693	12933	30552	10438	11386	13112	34937					20992	23613	28148	72754
<b>HARDWOOD LAND</b>																				
UP TO 40I	136	74	105	316	438	350	463	1252	1327	514	314	2156					1902	939	883	3725
41I - 60I	1360	984	600	2945	1196	530	820	2647	2295	1442	2942	6679					4851	3057	4363	12272
61I - 80I	1270	792	865	2928	2627	2112	1484	6224	3579	2532	2725	8837					7477	5437	5074	17990
81I - 100I									210	81	425	717					210	81	425	717
OVERSTOCKED					1060	489	1025	2575	390	260	184	835					1451	750	1209	3410
TOTAL	2767	1852	1571	6190	5323	3583	3793	12699	7803	4830	6591	19226					15893	10266	11956	38116
<b>ALL FOREST LAND</b>																				
UP TO 40I	1275	857	842	2974	1788	1601	1596	4985	4436	3307	3427	11172					7500	5766	5866	19133
41I - 60I	3423	1965	1248	6638	8020	7646	9876	25543	13755	12404	12586	38746					25200	22016	23711	70928
61I - 80I	3731	3294	2921	9947	20057	21222	25279	66559	17654	15895	15375	48925					41443	40412	43577	125433
81I - 100I	170	98	199	468	9815	11439	15589	36844	3695	3265	5645	12606					13681	14803	21434	49920
OVERSTOCKED					1390	752	1252	3395	950	948	622	2521					2340	1700	1875	5916
TOTAL	8601	6215	5212	20030	41072	42662	53594	137330	40492	35821	37658	113972					90166	84700	96465	271333

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 , A G 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 -- CHESTER

22

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				
SOFTWOOD LAND																				
UP TO 20YRS					182	157	483	822	100	102	47	250					282	259	530	1072
21YRS - 40YRS	179	182	153	515	368	334	290	993	2878	1735	1521	6136					3426	2252	1965	7645
41YRS - 60YRS	1591	490	386	2468	9718	8238	7048	25004	14096	11864	7796	33757					25406	20593	15230	61230
61YRS - 80YRS	1132	1066	976	3176	13457	15244	18777	47478	3151	4227	6116	13496					17741	20538	25870	64151
81YRS - 100YRS	28			28	1370	2086	5432	8889	824	544	394	1763					2223	2631	5826	10681
101YRS OR MORE					993	1422	2983	5398	183	223	1110	1517					1176	1645	4093	6916
UNEVENAGED STANDS	273	90	21	385	1734	1902	1853	5490	1014	905	967	2888					3022	2899	2842	8764
TOTAL	3205	1830	1538	6574	27824	29386	36868	94078	22250	19604	17954	59809					53280	50820	56360	160462
MIXEDWOOD LAND																				
UP TO 20YRS					18	115	386	520	76	42	136	255					94	158	522	775
21YRS - 40YRS	203	87	66	358	306	279	245	831	480	137	342	961					990	504	655	2150
41YRS - 60YRS	356	264	118	739	1881	1262	1420	4564	4092	3594	4362	12050					6330	5121	5902	17354
61YRS - 80YRS	1804	1908	1647	5360	5545	7558	9944	23047	5508	7269	7922	20700					12858	16736	19513	49108
81YRS - 100YRS	248	262	270	781	173	477	936	1587									422	740	1207	2369
101YRS OR MORE																				
UNEVENAGED STANDS	16	9		26					280	341	347	969					296	351	347	995
TOTAL	2629	2532	2103	7265	7924	9693	12933	30552	10438	11386	13112	34937					20992	23613	28148	72754
HARDWOOD LAND																				
UP TO 20YRS	23	74	24	121													23	74	24	121
21YRS - 40YRS	652	310	213	1176	110	71	217	398	1065	521	559	2146					1828	903	989	3720
41YRS - 60YRS	1578	918	409	2905	3624	1985	1882	7492	5030	2438	2980	10449					10232	5341	5272	20847
61YRS - 80YRS	513	549	923	1986	1392	1410	1491	4293	1143	1285	1585	4014					3046	3245	4000	10295
81YRS - 100YRS					196	115	202	514	564	585	1466	2616					760	701	1669	3130
101YRS OR MORE																				
UNEVENAGED STANDS																				
TOTAL	2767	1852	1571	6190	5323	3583	3793	12699	7803	4830	6591	19226					15893	10266	11956	38116
ALL FOREST LAND																				
UP TO 20YRS	23	74	24	121	200	273	869	1343	176	144	184	505					400	491	1078	1970
21YRS - 40YRS	1035	580	434	2050	784	684	753	2223	4424	2395	2423	9243					6244	3660	3611	13517
41YRS - 60YRS	3526	1672	913	6112	15224	11486	10351	37061	23219	17897	15139	56257					41970	31056	26404	99431
61YRS - 80YRS	3450	3525	3547	10523	20394	24213	30212	74820	9803	12782	15624	38211					33648	40521	49384	123554
81YRS - 100YRS	276	262	270	809	1740	2680	6571	10992	1389	1130	1860	4379					3406	4073	8702	16182
101YRS OR MORE					993	1422	2983	5398	183	223	1110	1517					1176	1645	4093	6916
UNEVENAGED STANDS	290	100	21	412	1734	1902	1853	5490	1294	1247	1315	3857					3319	3250	3190	9760
TOTAL	8601	6215	5212	20030	41072	42662	53594	137330	40492	35821	37658	113972					90166	84700	96465	271333

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 - CHESTER

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 + 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>																
1																
2																
3					2615	3621	5485	11722	2142	1995	2762	6900				
4	2077	1501	1475	5054	21574	23201	29463	74240	17674	15540	14048	47264	4758	5616	8248	18623
5	1128	329	62	1519	3533	2562	1918	8115	2426	1946	1087	5460	7188	4838	3068	15096
6									6	121	54	183	6	121	54	183
TOTAL	3205	1830	1538	6574	27824	29386	36868	94078	22250	19604	17954	59809	53280	50820	56360	160462
<b>MIXEDWOOD LAND</b>																
1																
2																
3					213	401	775	1390	529	733	850	2112				
4	2197	2159	1998	6355	7600	9195	12157	28953	9501	10163	11790	31455	742	1134	1625	3502
5	432	373	104	910	111	96		208	408	489	471	1369	19298	21518	25946	66764
6													951	959	576	2487
TOTAL	2629	2532	2103	7265	7924	9693	12933	30552	10438	11386	13112	34937	20992	23613	28148	72754
<b>HARDWOOD LAND</b>																
1																
2																
3					306	347	312	965	884	704	250	1839				
4	2657	1831	1496	5985	4866	3202	3480	11549	6527	4033	6271	16832	1190	1051	562	2805
5	109	20	75	205	150	33		184	390	92	70	554	14051	9067	11248	34367
6													651	146	145	943
TOTAL	2767	1852	1571	6190	5323	3583	3793	12699	7803	4830	6591	19226	15893	10266	11956	38116
<b>ALL FOREST LAND</b>																
1																
2																
3					3135	4369	6573	14078	3557	3432	3863	10853				
4	6931	5492	4970	17395	34040	35600	45102	114743	33703	29737	32110	95551	6692	7802	10436	24931
5	1669	723	241	2635	3896	2692	1918	8508	3225	2529	1629	7384	74676	70830	82183	227690
6									6	121	54	183	8791	5945	3790	18527
TOTAL	8601	6215	5212	20030	41072	42662	53594	137330	40492	35821	37658	113972	90166	84700	96465	271333

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 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

M U N I C I P A L I T Y - C H E S T E R

24

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				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	23	18	57	99	353	587	374	1315	723	1073	1176	2974					1100	1680	1608	4389
SPRUCE-RED + BLACK	2831	1828	1230	5890	16090	19820	29913	65824	12171	12100	11763	36035					31053	33748	42908	107750
FIR	1471	1068	439	2979	11555	9776	3666	24998	13280	9395	3602	26278					26307	20240	7708	54256
HENLOCK	6		31	37	53	64	898	1016	57	170	1295	1523					117	234	2224	2576
WHITE PINE	31	26	428	487	251	707	5399	6359	383	848	4484	5716					666	1582	10312	12562
RED PINE	30	96	216	342		8	123	132	51	105	186	343					81	210	526	818
LARCH	133	134	63	331	21	48	35	105	408	568	967	1944					563	751	1067	2381
JACK PINE	176	15		192													176	15		192
SCOTCH PINE																				
CEDAR																				
<b>TOTAL SOFTWOODS</b>	<b>4704</b>	<b>3188</b>	<b>2467</b>	<b>10361</b>	<b>28325</b>	<b>31014</b>	<b>40411</b>	<b>99751</b>	<b>27076</b>	<b>24261</b>	<b>23477</b>	<b>74815</b>					<b>60107</b>	<b>58464</b>	<b>66356</b>	<b>184928</b>
SUGAR MAPLE					506	329	803	1639	216	151	1022	1390					723	480	1826	3030
RED MAPLE	2176	1611	1498	5286	7730	7694	6927	22352	7073	6950	7454	21477					16980	16257	15879	49117
YELLOW BIRCH	22	62	323	407	487	858	3194	4539	382	642	1941	2967					892	1562	5459	7915
WHITE BIRCH	241	143	134	519	2100	1472	834	4406	2015	1190	992	4198					4357	2806	1961	9125
OAK	306	71	24	403	52	80	55	188	808	347	765	1921					1168	499	845	2513
ASPEN	955	1080	764	2800	522	528	740	1791	1618	1727	1049	4395					3095	3336	2554	8986
GREY BIRCH	187	19		207	41			41	458	13		471					687	33		720
WHITE ASH				97	126	180	404	240	229	616	1087						338	356	796	1491
BLACK ASH	6	37		44	61	59	253	374	80	95	178	354					148	192	431	772
CHERRY																				
ELM																				
BEECH					1136	498	193	1829	496	182	160	838					1633	681	353	2668
BALSAM POPLAR																				
MISCELLANEOUS					10			11	24	27		51					35	28		63
<b>TOTAL HARDWOODS</b>	<b>3896</b>	<b>3026</b>	<b>2744</b>	<b>9668</b>	<b>12746</b>	<b>11648</b>	<b>13183</b>	<b>37578</b>	<b>13415</b>	<b>11559</b>	<b>14181</b>	<b>39157</b>					<b>30059</b>	<b>26235</b>	<b>30109</b>	<b>86404</b>
<b>TOTAL FOREST LAND</b>	<b>8601</b>	<b>6215</b>	<b>5212</b>	<b>20030</b>	<b>41072</b>	<b>42662</b>	<b>53594</b>	<b>137330</b>	<b>40492</b>	<b>35821</b>	<b>37658</b>	<b>113972</b>					<b>90167</b>	<b>84700</b>	<b>96465</b>	<b>271333</b>

A L L F I G U R E S A R E I N T H O U S A N D S C U . F T .

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 - CHESTER

25

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	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 40'	384	209	106	700	652	626	507	1787	1298	1184	885	3368						2336	2020	1500	5857
41' - 60'	917	208	84	1210	3006	3514	5104	11625	4727	5131	4287	14145						8651	8854	9476	26981
61' - 80'	803	1101	1187	3092	9200	11475	14144	34820	7502	7994	7050	22546						17506	20570	22382	60460
81' - 100'	62	50		113	6569	9291	13404	29266	1621	1869	3595	7086						8253	11211	17000	36465
OVERSTOCKED					218	224	200	643	331	568	361	1261						550	793	561	1905
TOTAL	2167	1570	1378	5117	19648	25133	33361	78143	15481	16747	16180	48409						37297	43451	50921	131670
MIXEDWOOD LAND																					
UP TO 40'	386	454	547	1388	270	437	497	1204	872	1187	1887	3947						1529	2079	2932	6540
41' - 60'	471	625	483	1581	1750	2446	3034	7231	3287	4177	4305	11769						5510	7248	7823	20582
61' - 80'	884	1033	653	2570	3122	4815	7271	15209	2292	3397	4225	9915						6299	9246	12150	27696
81' - 100'	56	33	171	261	366	488	670	1525	759	841	1083	2684						1183	1362	1925	4471
OVERSTOCKED									49	15	32	97						49	15	32	97
TOTAL	1799	2146	1856	5801	5510	8187	11474	25171	7262	9619	11533	28415						14572	19952	24864	59388
HARDWOOD LAND																					
UP TO 40'	90	63	90	245	279	297	404	981	848	432	274	1555						1218	793	769	2782
41' - 60'	909	834	526	2270	784	532	724	2041	1533	1214	2581	5329						3227	2582	3831	9641
61' - 80'	863	681	759	2304	1762	1764	1325	4852	2355	2159	2427	6942						4981	4606	4512	14099
81' - 100'									140	68	366	575						140	68	366	575
OVERSTOCKED					708	406	892	2007	259	217	160	636						968	623	1052	2644
TOTAL	1863	1580	1376	4820	3535	3001	3345	9883	5136	4092	5809	15039						10536	8674	10531	29742
ALL FOREST LAND																					
UP TO 40'	861	727	745	2335	1202	1361	1409	3973	3019	2804	3047	8871						5084	4893	5202	15180
41' - 60'	2298	1669	1094	5062	5541	6493	8863	20898	9547	10522	11173	31244						17388	18665	21131	57205
61' - 80'	2551	2816	2599	7967	14086	18056	22740	54882	12149	13551	13704	39405						28787	34423	39044	102255
81' - 100'	119	84	171	374	6936	9779	14075	30791	2522	2778	5045	10346						9578	12642	19291	41512
OVERSTOCKED					927	631	1092	2651	640	801	553	1995						1567	1433	1646	4647
TOTAL	5831	5297	4611	15739	28695	36322	48181	113198	27880	30459	33524	91863						62406	72078	86317	220802

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 - CHESTER

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					119	132	430	682	71	86	41	199					190	218	472	881
21YRS - 40YRS	126	156	139	421	250	285	254	790	1944	1472	1365	4782					2321	1914	1758	5994
41YRS - 60YRS	1071	421	346	1839	6840	7045	6361	20247	9843	10135	7017	26997					17755	17602	13726	49084
61YRS - 80YRS	762	914	873	2551	9570	13029	16944	39543	2229	3620	5510	11359					12562	17564	23328	53455
81YRS - 100YRS	20			20	956	1792	4980	7729	561	465	357	1384					1538	2258	5337	9134
101YRS OR MORE					703	1222	2726	4651	132	191	1012	1336					835	1414	3738	5988
UNEVENAGED STANDS	186	77	19	283	1207	1625	1664	4497	698	775	875	2349					2093	2479	2558	7131
<b>TOTAL</b>	<b>2167</b>	<b>1570</b>	<b>1378</b>	<b>5117</b>	<b>19648</b>	<b>25133</b>	<b>33361</b>	<b>78143</b>	<b>15481</b>	<b>16747</b>	<b>16180</b>	<b>48409</b>					<b>37297</b>	<b>43451</b>	<b>50921</b>	<b>131670</b>
<b>MIXEDWOOD LAND</b>																				
UP TO 20YRS					11	97	335	445	53	35	118	207					65	133	454	652
21YRS - 40YRS	126	73	60	259	195	238	224	659	306	117	304	728					628	428	589	1647
41YRS - 60YRS	233	224	104	563	1289	1065	1266	3620	2797	3043	3857	9697					4319	4334	5228	13881
61YRS - 80YRS	1245	1618	1454	4318	3887	6380	8816	19083	3902	6134	6954	16991					9034	14133	17226	40394
81YRS - 100YRS	183	221	236	641	126	404	831	1362									310	626	1067	2004
101YRS OR MORE																				
UNEVENAGED STANDS	10	8		18					201	288	298	789					212	296	298	807
<b>TOTAL</b>	<b>1799</b>	<b>2146</b>	<b>1856</b>	<b>5801</b>	<b>5510</b>	<b>8187</b>	<b>11474</b>	<b>25171</b>	<b>7262</b>	<b>9619</b>	<b>11533</b>	<b>28415</b>					<b>14572</b>	<b>19952</b>	<b>24864</b>	<b>59388</b>
<b>HARDWOOD LAND</b>																				
UP TO 20YRS	15	63	20	99													15	63	20	99
21YRS - 40YRS	411	266	185	863	69	60	194	324	681	438	501	1622					1162	765	882	2810
41YRS - 60YRS	1080	786	360	2227	2375	1657	1656	5689	3275	2071	2652	7999					6731	4515	4668	15915
61YRS - 80YRS	355	464	810	1629	950	1187	1321	3459	785	1086	1380	3253					2092	2738	3512	8342
81YRS - 100YRS					140	96	173	410	393	495	1274	2163					534	592	1447	2574
101YRS OR MORE																				
UNEVENAGED STANDS																				
<b>TOTAL</b>	<b>1863</b>	<b>1580</b>	<b>1376</b>	<b>4820</b>	<b>3535</b>	<b>3001</b>	<b>3345</b>	<b>9883</b>	<b>5136</b>	<b>4092</b>	<b>5809</b>	<b>15039</b>					<b>10536</b>	<b>8674</b>	<b>10531</b>	<b>29742</b>
<b>ALL FOREST LAND</b>																				
UP TO 20YRS	15	63	20	99	131	230	765	1127	124	121	160	406					271	415	947	1633
21YRS - 40YRS	664	495	385	1545	515	585	673	1773	2933	2027	2172	7133					4113	3108	3230	10452
41YRS - 60YRS	2385	1432	811	4630	10505	9767	9284	29557	15915	15251	13527	44694					28806	26451	23623	78881
61YRS - 80YRS	2363	2997	3138	8499	14408	20596	27082	62087	6917	10841	13845	31605					23689	34435	44066	102192
81YRS - 100YRS	204	221	236	662	1223	2293	5985	9503	954	961	1631	3548					2383	3477	7853	13713
101YRS OR MORE					703	1222	2726	4651	132	191	1012	1336					835	1414	3738	5988
UNEVENAGED STANDS	197	86	19	302	1207	1625	1664	4497	900	1063	1174	3138					2305	2775	2857	7938
<b>TOTAL</b>	<b>5831</b>	<b>5297</b>	<b>4611</b>	<b>15739</b>	<b>28695</b>	<b>36322</b>	<b>48181</b>	<b>113198</b>	<b>27880</b>	<b>30459</b>	<b>33524</b>	<b>91863</b>					<b>62406</b>	<b>72078</b>	<b>86317</b>	<b>220802</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 - CHESTER

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	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																				
1																				
2																				
3																				
4	1430	1290	1325	4046	1883	3115	4931	9930	1500	1709	2509	5719				3384	4824	7441	15650	
5	737	280	53	1070	15256	19831	26696	61784	12282	13273	12640	38196				28969	34394	40662	104027	
6					2508	2186	1733	6428	1693	1661	981	4336				4939	4127	2768	11835	
TOTAL	2167	1570	1378	5117	19648	25133	33361	78143	15481	16747	16180	48409				37297	43451	50921	131670	
MIXEDWOOD LAND																				
1																				
2																				
3					146	341	698	1186	373	626	760	1760				520	567	1459	2947	
4	1494	1829	1764	5088	5286	7764	10775	23826	6604	8573	10362	25540				13384	18167	22902	54455	
5	305	317	91	713	77	81		159	283	418	411	1113				666	816	502	1986	
6																				
TOTAL	1799	2146	1856	5801	5510	8187	11474	25171	7262	9619	11533	28415				14572	19952	24864	59388	
HARDWOOD LAND																				
1																				
2																				
3					217	288	285	791	577	606	217	1401				794	894	503	2193	
4	1801	1562	1311	4675	3233	2683	3059	8977	4323	3409	5532	13264				9358	7655	9903	26917	
5	62	17	64	144	85	29		114	235	77	59	372				383	124	124	632	
6																				
TOTAL	1863	1580	1376	4820	3535	3001	3345	9883	5136	4092	5809	15039				10536	8674	10531	29742	
ALL FOREST LAND																				
1																				
2																				
3					2247	3745	5915	11908	2452	2941	3488	8882				4699	6687	9403	20790	
4	4725	4682	4402	13810	23775	30279	40532	94588	23210	25256	28534	77001				51713	60218	73468	185400	
5	1105	615	208	1929	2671	2296	1733	6702	2213	2157	1452	5822				5990	5069	3394	14454	
6									3	104	49	157				3	104	49	157	
TOTAL	5831	5297	4611	15739	28695	36322	48181	113198	27880	30459	33524	91863				62406	72078	86317	220802	

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 - CHESTER

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	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	14	16	53	84	253	515	344	1113	491	944	1094	2529					759	1476	1492	3727
SPRUCE-RED + BLACK	1936	1579	1121	4636	11385	17147	27393	55924	8578	10459	10733	29771					21900	29186	39245	90332
FIR	1043	902	395	2341	8237	8260	3285	19783	9400	7940	3233	20574					18681	17103	6914	42699
HEMLOCK	4		27	32	34	55	813	903	38	144	1174	1357					77	199	2015	2293
WHITE PINE	20	21	388	431	168	582	4874	5625	250	695	4056	5003					440	1299	9320	11060
RED PINE	19	79	191	291		6	111	118	35	86	167	289					55	173	470	699
LARCH	99	115	57	272	14	41	32	88	282	493	887	1663					397	650	976	2024
JACK PINE	119	13		133													119	13		133
SCOTCH PINE																				
CEDAR																				
<b>TOTAL SOFTWOODS</b>	<b>3258</b>	<b>2729</b>	<b>2235</b>	<b>8224</b>	<b>20094</b>	<b>26610</b>	<b>36852</b>	<b>83557</b>	<b>19077</b>	<b>20763</b>	<b>21347</b>	<b>61188</b>					<b>42430</b>	<b>50103</b>	<b>60435</b>	<b>152970</b>
SUGAR MAPLE					328	274	694	1297	139	126	878	1144					468	400	1572	2441
RED MAPLE	1412	1341	1282	4037	5194	6398	5929	17522	4573	5776	6373	16723					11180	13517	13585	38283
YELLOW BIRCH	15	51	277	344	329	714	2744	3788	264	538	1669	2472					605	1304	4691	6605
WHITE BIRCH	150	118	114	384	1421	1223	715	3360	1339	988	850	3177					2911	2331	1680	6922
DAK	193	59	20	273	32	66	46	146	529	288	655	1473					755	414	723	1893
ASPEN	683	948	679	2312	394	464	658	1517	1137	1520	935	3592					2215	2933	2273	7422
GREY BIRCH	111	16		128	25			25	255	11		267					393	27		421
WHITE ASH					69	105	155	330	161	191	527	880					230	297	683	1211
BLACK ASH	4	31		35	42	50	218	310	55	79	152	287					102	160	370	633
CHERRY																				
ELM																				
BEECH					756	413	165	1335	330	150	135	616					1087	563	301	1951
BALSAM POPLAR																				
MISCELLANEOUS					5			5	16	24		40					21	24		45
<b>TOTAL HARDWOODS</b>	<b>2572</b>	<b>2567</b>	<b>2375</b>	<b>7515</b>	<b>8600</b>	<b>9712</b>	<b>11328</b>	<b>29641</b>	<b>8802</b>	<b>9695</b>	<b>12177</b>	<b>30675</b>					<b>19975</b>	<b>21975</b>	<b>25881</b>	<b>67832</b>
<b>TOTAL FOREST LAND</b>	<b>5831</b>	<b>5297</b>	<b>4611</b>	<b>15739</b>	<b>28695</b>	<b>36322</b>	<b>48181</b>	<b>113198</b>	<b>27880</b>	<b>30459</b>	<b>33524</b>	<b>91863</b>					<b>62406</b>	<b>72078</b>	<b>86317</b>	<b>220802</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

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 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 40f	2850	1849	2734	7434	3346	2984	4068	10398	10244	8946	10805	29996					16441	13781	17607	47829
41f - 60f	6650	4060	6042	16753	11520	11511	17521	40552	24411	20098	20664	65175	453	531	465	1450	43035	36202	44694	123932
61f - 80f	9547	9178	9094	27819	34176	38068	56100	128345	43464	48685	56787	148937	633	807	2778	4218	87821	96739	124760	309322
81f - 100f	1828	1262	946	4037	14186	17063	26866	58116	14470	15898	20850	51218	232	323	1100	1656	30717	34547	49763	115029
OVERSTOCKED					2140	2358	10260	14760	1864	1169	730	3763					4005	3527	10990	18524
<b>TOTAL</b>	<b>20876</b>	<b>16350</b>	<b>18817</b>	<b>56045</b>	<b>65370</b>	<b>71986</b>	<b>114817</b>	<b>252174</b>	<b>94455</b>	<b>94799</b>	<b>109837</b>	<b>299092</b>	<b>1319</b>	<b>1662</b>	<b>4344</b>	<b>7325</b>	<b>182021</b>	<b>184799</b>	<b>247817</b>	<b>614638</b>
<b>MIXEDWOOD LAND</b>																				
UP TO 40f	1503	1436	1843	4782	1809	2300	2840	6950	5886	5730	6341	17959	263	135	79	478	9463	9602	11105	30171
41f - 60f	3019	3085	2184	8289	7256	8905	10008	26170	16173	17387	17067	50628	345	501	378	1225	26794	29879	29639	86314
61f - 80f	5160	6376	7911	19448	9182	11451	18363	38997	22310	23537	29962	75809	492	595	1001	2089	37146	41961	57238	136346
81f - 100f	244	253	299	797	1733	2726	9932	14392	2554	2010	2242	6807					4532	4990	12474	21998
OVERSTOCKED									69	18	35	124					69	18	35	124
<b>TOTAL</b>	<b>9927</b>	<b>11152</b>	<b>12238</b>	<b>33318</b>	<b>19982</b>	<b>25383</b>	<b>41145</b>	<b>86511</b>	<b>46995</b>	<b>48684</b>	<b>55649</b>	<b>151330</b>	<b>1102</b>	<b>1232</b>	<b>1459</b>	<b>3794</b>	<b>78008</b>	<b>86452</b>	<b>110494</b>	<b>274955</b>
<b>HARDWOOD LAND</b>																				
UP TO 40f	1128	1117	1804	4051	740	813	1028	2582	3785	2751	2329	8866	65	30	58	154	5721	4713	5220	15655
41f - 60f	4707	3200	1932	9840	4367	3839	4842	13049	10667	8452	11624	30744	27	87	405	521	19769	15580	18805	54155
61f - 80f	8544	8235	7088	23868	5136	4287	3459	12883	20300	17882	16698	54881	730	726	954	2411	34711	31132	28201	94046
81f - 100f	525	433	45	1004	597	466	493	1557	2162	1471	1466	5099					3285	2371	2005	7662
OVERSTOCKED					1060	489	1025	2575	450	324	220	996					1511	813	1245	3571
<b>TOTAL</b>	<b>14906</b>	<b>12987</b>	<b>10872</b>	<b>38766</b>	<b>11902</b>	<b>9897</b>	<b>10848</b>	<b>32648</b>	<b>37366</b>	<b>30882</b>	<b>32339</b>	<b>100588</b>	<b>823</b>	<b>845</b>	<b>1418</b>	<b>3087</b>	<b>64999</b>	<b>54613</b>	<b>55478</b>	<b>175091</b>
<b>ALL FOREST LAND</b>																				
UP TO 40f	5482	4403	6382	16268	5896	6098	7937	19932	19916	17429	19476	56822	329	165	137	632	31625	28096	33933	93656
41f - 60f	14376	10347	10159	34883	23143	24256	32372	79772	51252	45938	49356	146547	826	1120	1250	3198	89595	81662	93139	264402
61f - 80f	23253	23790	24094	71137	48495	53807	77924	180227	86075	90105	103447	279629	1856	2130	4733	8720	159680	169834	210200	539715
81f - 100f	2598	1949	1291	5840	16517	20256	37292	74066	19186	19380	24558	63126	232	323	1100	1656	38536	41910	64243	144690
OVERSTOCKED					3201	2847	11285	17335	2385	1512	986	4884					5587	4360	12272	22220
<b>TOTAL</b>	<b>45711</b>	<b>40490</b>	<b>41928</b>	<b>128130</b>	<b>97255</b>	<b>107267</b>	<b>166812</b>	<b>371334</b>	<b>178817</b>	<b>174366</b>	<b>197827</b>	<b>551011</b>	<b>3245</b>	<b>3740</b>	<b>7222</b>	<b>14208</b>	<b>325029</b>	<b>325865</b>	<b>413790</b>	<b>1064685</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 , A G 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

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	6	31	28	65	309	307	563	1180	773	522	618	1914					1089	861	1209	3160	
21YRS - 40YRS	2188	1012	1136	4337	3053	1529	747	5330	10065	6016	4330	20412	111	92	74	279	15418	8651	6289	30360	
41YRS - 60YRS	9966	8123	7143	25233	22178	21948	22554	66681	49753	45249	39282	134284					81897	75321	68980	226200	
61YRS - 80YRS	6479	5832	7844	20157	26560	30536	45029	102126	25581	31541	47816	104939	1094	1432	4135	6663	59717	69343	104826	233887	
81YRS - 100YRS	1211	777	1579	3567	7190	10670	31697	49557	5707	8631	10945	25284	112	136	133	382	14221	20215	44356	78793	
101YRS OR MORE	311	104	184	600	1559	2502	7502	11563	1559	1931	5875	9367					3430	4538	13563	21532	
UNEVENAGED STANDS	712	469	900	2082	4518	4491	6722	15732	1014	905	967	2888					6246	5866	8590	20702	
TOTAL	20876	16350	18817	56045	65370	71986	114817	252174	94455	94799	109837	299092	1319	1662	4344	7325	182021	184799	247817	614638	
<b>MIXEDWOOD LAND</b>																					
UP TO 20YRS	34	19		53	69	169	437	675	370	185	347	902					473	374	784	1632	
21YRS - 40YRS	252	97	66	417	990	584	862	2437	3096	1473	1688	6258					4340	2155	2617	9113	
41YRS - 60YRS	5301	5445	6882	17630	5590	5101	5767	16458	19498	17966	17994	55459	1102	1232	1459	3794	31492	29745	32104	93343	
61YRS - 80YRS	3299	3995	3471	10765	11116	15754	22513	49384	18781	22475	25876	67133					33197	42224	51862	127283	
81YRS - 100YRS	628	1043	1368	3041	1395	2782	10011	14188	3100	4277	5458	12836					5124	8103	16838	30066	
101YRS OR MORE					262	382	422	1066	626	923	2322	3873					888	1306	2745	4940	
UNEVENAGED STANDS	410	550	448	1410	558	610	1131	2299	1520	1382	1961	4865					2490	2543	3540	8574	
TOTAL	9927	11152	12238	33318	19982	25383	41145	86511	46995	48684	55649	151330	1102	1232	1459	3794	78008	86452	110494	274955	
<b>HARDWOOD LAND</b>																					
UP TO 20YRS	31	74	24	130	41	28	25	95	133	91	120	345	41				247	194	171	613	
21YRS - 40YRS	1007	458	265	1731	579	398	495	1473	2899	1468	1422	5790	166	312	471	950	4652	2638	2655	9946	
41YRS - 60YRS	8551	5793	3442	17788	6813	4263	3967	15044	22737	15277	12971	50985	574	490	918	1983	38676	25825	21300	85803	
61YRS - 80YRS	5073	6351	6420	17846	3829	4303	4574	12707	8878	10723	10839	30441	40	41	28	110	17822	21420	21863	61106	
81YRS - 100YRS	176	202	625	1005	502	763	1704	2970	2390	2879	4892	10161					3069	3845	7222	14138	
101YRS OR MORE	65	106	92	264	136	139	79	355	327	442	2093	2863					529	688	2265	3483	
UNEVENAGED STANDS																					
TOTAL	14906	12987	10872	38766	11902	9897	10848	32648	37366	30882	32339	100588	823	845	1418	3087	64999	54613	55478	175091	
<b>ALL FOREST LAND</b>																					
UP TO 20YRS	72	124	52	249	420	504	1026	1951	1276	800	1085	3163	41				41	1811	1429	2165	5406
21YRS - 40YRS	3448	1568	1469	6486	4623	2512	2105	9241	16061	8958	7441	32461	278	405	546	1229	24411	13445	11562	49420	
41YRS - 60YRS	23819	19363	17469	60652	34582	31313	32289	98185	91988	78492	70248	240730	1677	1722	2378	5778	152067	130892	122386	405346	
61YRS - 80YRS	14853	16179	17736	48769	41506	50594	72118	164219	53242	64739	84533	202514	1135	1474	4164	6774	110737	132988	178552	422279	
81YRS - 100YRS	2016	2023	3574	7614	9088	14215	43413	66717	11198	15788	21296	48283	112	136	133	382	22415	32164	68418	122998	
101YRS OR MORE	377	211	277	865	1957	3023	8004	12985	2514	3298	10292	16104					4849	6533	18573	29956	
UNEVENAGED STANDS	1123	1019	1348	3492	5075	5101	7853	18031	2535	2288	2929	7753					8736	8410	12131	29277	
TOTAL	45711	40490	41928	128130	97255	107267	166812	371334	178817	174366	197827	551011	3245	3740	7222	14208	325029	325865	413790	1064685	

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			TOTAL
	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	
	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	
SOFTWOOD LAND																				
1																				
2					29	51	81	202	150	862	1215						232	201	862	1296
3	376	522	671	1570	3316	5123	9027	17467	5572	4901	6683	17157	111	92	74	279	9378	10639	16457	36475
4	14614	12800	15573	42988	54328	59818	99279	213426	75131	78900	95928	249954	1207	1569	4269	7046	145281	153089	215051	513422
5	5885	3028	2572	11485	7695	6992	6510	21198	13540	10725	6309	30575					27122	20746	15391	63260
6									6	121	54	183					6	121	54	183
TOTAL	20876	16350	18817	56045	65370	71986	114817	252174	94455	94799	109837	299092	1319	1662	4344	7325	182021	184799	247817	614638
MIXEDWOOD LAND																				
1																				
2									3			3					3			3
3					497	1215	7140	8854	647	774	931	2353					1145	1990	8071	11207
4	8742	9616	10725	29084	17495	21989	31630	71116	41218	41681	47822	130722	676	895	1029	2601	68134	74182	91208	233524
5	1184	1535	1513	4233	1988	2178	2374	6540	5124	6228	6896	18250	426	337	430	1193	8724	10280	11214	30218
6																				
TOTAL	9927	11152	12238	33318	19982	25383	41145	86511	46995	48684	55649	151330	1102	1232	1459	3794	78008	86452	110494	274955
HARDWOOD LAND																				
1																				
2																				
3	379	355	23	758	306	347	312	965	1759	1370	912	4042					2444	2074	1248	5767
4	13910	11986	9959	35856	10723	8692	10105	29520	32803	27396	29728	89927	623	845	1418	3087	58260	48919	51211	158391
5	616	645	888	2151	873	857	431	2162	2803	2115	1699	6616					4293	3619	3019	10932
6																				
TOTAL	14906	12987	10872	38766	11902	9897	10848	32648	37366	30882	32339	100588	823	845	1418	3087	64999	54613	55478	175091
ALL FOREST LAND																				
1																				
2					29	51	81	206	150	862	1219						236	201	862	1300
3	755	878	695	2329	4120	6686	16479	27287	7980	7046	8526	23554	111	92	74	279	12968	14704	25776	53450
4	37268	34403	36258	107930	82547	90500	141015	314063	149153	147977	173478	470609	2707	3310	6717	12735	271676	276191	357470	905339
5	7687	5209	4974	17870	10557	10028	9316	29902	21469	19070	14904	55444	426	337	430	1193	40140	34645	29625	104411
6									6	121	54	183					6	121	54	183
TOTAL	45711	40490	41928	128130	97255	107267	166812	371334	178817	174366	197827	551011	3245	3740	7222	14208	325029	325865	413790	1064685

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 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

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	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	33	36	110	181	416	644	626	1687	3003	4104	4917	12026	1		30	31	3455	4786	5684	13926
SPRUCE-RED + BLACK	16427	11099	4937	32465	38188	45119	57032	140340	58076	62483	52757	173317	372	426	343	1142	113064	119129	115071	347266
FIR	6328	5019	2050	13398	25622	20111	6497	52231	43261	30016	10239	83517	785	533	90	1410	75998	55681	18878	150558
HEMLOCK	199	461	1057	1718	1632	3830	24885	30348	3510	8641	29395	41547	449	955	4314	5719	5792	13889	59652	79333
WHITE PINE	1670	3392	16246	21309	2653	5256	36342	44252	3155	6105	33975	43236	265	168	190	624	7745	14923	86754	109423
RED PINE	145	321	1972	2439	76	336	908	1321	230	622	1927	2780	3	12		15	456	1292	4808	6558
LARCH	1159	833	258	2250	798	888	792	2479	3180	3293	2133	8606	51	68		120	5189	5083	3184	13457
JACK PINE	176	15		192													176	15		192
SCOTCH PINE																				
CEDAR																				
TOTAL SOFTWOODS	26141	21181	26633	73956	69389	76187	127084	272661	114419	115267	135346	365033	1929	2164	4969	9064	211879	214802	294034	720715
SUGAR MAPLE	103	76	270	450	884	695	2781	4361	944	982	4857	6784	3			3	1936	1754	7908	11600
RED MAPLE	8282	8530	7894	24707	15825	18551	21287	55664	29753	27692	27146	84592	551	627	1034	2214	54414	55402	57362	167178
YELLOW BIRCH	101	209	1125	1435	974	1856	7554	10396	2181	3118	7256	12556	15	47	103	166	3272	5241	16040	24554
WHITE BIRCH	2302	1980	665	4947	3801	3738	1945	9484	8493	6746	3114	18353	216	241	35	493	14813	12705	5760	33279
OAK	5650	4813	1624	12088	1669	2593	2791	7054	6325	6312	5740	18378	61	220	667	948	13706	13939	10823	38470
ASPEN	1971	3399	3451	8822	1020	1631	1539	4191	6109	8056	8064	22230	184	333	200	717	9285	13420	13255	35961
GREY BIRCH	901	19		921	802	93	35	931	4259	296	157	4712	224	34		259	6187	444	192	6824
WHITE ASH	40	82	28	151	353	314	402	1069	1382	1723	2076	5182	8	17	80	106	1784	2137	2588	6510
BLACK ASH	38	54		92	114	157	382	654	151	139	178	469	10		28	39	314	351	589	1255
CHERRY		25		25	24	12	35	72			14	14					39	38	35	113
ELM									37	96	22	156					37	96	22	156
BEECH	121	58	235	415	2292	1340	971	4603	4437	3787	3656	11881	38	53	103	194	6889	5240	4965	17095
BALSAM POPLAR									10			10					10			10
MISCELLANEOUS	57	57		114	104	88		192	300	144	211	656					461	291	211	963
TOTAL HARDWOODS	19570	19308	15294	54174	27866	31079	39728	98673	64398	59099	62480	185978	1315	1575	2253	5144	113150	111063	119756	343969
TOTAL FOREST LAND	45711	40490	41928	128130	97255	107267	166812	371334	178817	174366	197827	551011	3245	3740	7222	14208	325029	325865	413790	1064685

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 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	1958	1574	2443	5976	2292	2545	3667	8505	7078	7621	9735	24435					11326	11741	15846	38917
41f - 60f	4453	3453	5415	13322	8061	9819	15826	33708	17029	17119	18585	52734	317	445	417	1181	29862	30838	40245	100946
61f - 80f	6665	7801	8126	22594	23947	32400	50375	106922	30397	41574	51143	123115	433	677	2487	3598	61443	82454	112332	256230
81f - 100f	1224	1063	838	3126	10020	14563	24271	48854	10073	13596	18811	42481	157	268	994	1420	21475	29491	44917	95883
OVERSTOCKED					1490	1990	9259	12741	1231	992	654	2877					2722	2983	9913	15619
TOTAL	14301	13893	16824	45019	45812	61319	103601	210732	65809	80904	98930	245644	908	1391	3900	6200	126832	157509	223256	507597
MIXEDWOOD LAND																				
UP TO 40f	1002	1210	1665	3878	1252	1943	2502	5698	3993	4840	5607	14440	165	115	68	348	6414	8108	9843	24366
41f - 60f	2096	2614	1934	6645	4990	7521	8870	21383	11240	14705	15035	40981	233	424	335	994	18561	25265	26176	70004
61f - 80f	3541	5403	7044	15989	6397	9674	16312	32384	15477	19896	26676	62049	348	503	896	1749	25764	35478	50929	112172
81f - 100f	172	214	257	643	1200	2302	8965	12469	1738	1703	1985	5427					3112	4220	11208	18541
OVERSTOCKED									49	15	32	97					49	15	32	97
TOTAL	6813	9442	10901	27157	13841	21441	36651	71935	32499	41161	49336	122997	747	1043	1300	3092	53902	73089	98191	225183
HARDWOOD LAND																				
UP TO 40f	737	932	1559	3230	480	684	889	2054	2515	2314	2026	6856	42	25	49	116	3775	3958	4524	12258
41f - 60f	3089	2697	1693	7481	2948	3228	4264	10441	7192	7095	10173	24461	17	73	369	461	13248	13095	16501	42844
61f - 80f	5808	6911	6238	18957	3468	3583	3042	10094	13627	15064	14593	43284	463	617	850	1931	23368	26176	24724	74269
81f - 100f	353	356	40	749	411	387	422	1222	1427	1239	1278	3944					2192	1983	1741	5916
OVERSTOCKED					708	406	892	2007	300	271	193	764					1008	677	1085	2772
TOTAL	9989	10897	9531	30418	8018	3291	9510	25821	25062	25985	28264	79312	523	716	1270	2509	43593	45891	48577	138062
ALL FOREST LAND																				
UP TO 40f	3698	3717	5668	13085	4025	5173	7059	16259	13586	14776	17369	45732	207	140	117	465	21518	23808	30214	75542
41f - 60f	9639	8765	9044	27449	16000	20570	28961	65532	35462	38920	43794	118177	568	944	1123	2636	61672	69200	82923	213796
61f - 80f	16016	20116	21408	57541	33813	45657	69930	149401	59501	76535	92412	228449	1245	1798	4235	7279	110576	144109	187987	442673
81f - 100f	1750	1634	1136	4520	11632	17253	33660	62547	13239	16539	22075	51854	157	268	994	1420	26780	35695	57866	120342
OVERSTOCKED					2199	2397	10151	14743	1580	1279	879	3740					3780	3676	11031	18489
TOTAL	31104	34234	37257	102596	67673	91052	149764	308489	123371	148051	176530	447953	2179	3151	6471	11802	224328	276490	370024	870843

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	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	5	25	24	55	205	259	502	967	538	444	565	1547					749	729	1092	2570
21YRS - 40YRS	1422	844	1016	3283	2012	1300	661	3973	6732	5123	3899	15756	74	78	66	219	10242	7347	5644	23233
41YRS - 60YRS	6877	6915	6406	20199	15551	18707	20196	54454	34725	38652	35246	108623					57153	64274	61848	183277
61YRS - 80YRS	4451	4963	7005	16419	18734	26037	40570	85342	18005	26888	43136	88031	754	1198	3714	5667	41946	59088	94426	195461
81YRS - 100YRS	837	658	1407	2903	5075	9054	28806	42936	4037	7374	9877	21289	78	114	119	312	10029	17202	40211	67443
101YRS OR MORE	206	89	168	464	1098	2140	6846	10085	1070	1645	5329	8044					2375	3875	12343	18594
UNEVENAGED STANDS	501	396	795	1693	3134	3819	6018	12972	698	775	875	2349					4334	4990	7689	17015
<b>TOTAL</b>	<b>14301</b>	<b>13893</b>	<b>16824</b>	<b>45019</b>	<b>45812</b>	<b>61319</b>	<b>103601</b>	<b>210732</b>	<b>65809</b>	<b>80904</b>	<b>98930</b>	<b>245644</b>	<b>908</b>	<b>1391</b>	<b>3900</b>	<b>6200</b>	<b>126832</b>	<b>157509</b>	<b>223256</b>	<b>507597</b>
<b>MIXEDWOOD LAND</b>																				
UP TO 20YRS	24	16		41	46	143	379	569	253	156	308	718					324	316	688	1329
21YRS - 40YRS	154	81	60	297	625	497	759	1882	2022	1242	1509	4774					2802	1821	2330	6954
41YRS - 60YRS	3596	4610	6132	14340	3817	4310	5130	13258	13399	15179	15995	44574	747	1043	1300	3092	21561	25143	28559	75265
61YRS - 80YRS	2294	3389	3075	8758	7778	13294	19960	41033	13147	19025	22927	55101					23220	35709	45963	104893
81YRS - 100YRS	447	879	1239	2566	988	2355	9048	12392	2186	3610	4795	10593					3623	6846	15083	25552
101YRS OR MORE					188	323	376	887	445	779	2060	3285					634	1102	2437	4173
UNEVENAGED STANDS	295	464	393	1154	396	517	996	1910	1043	1167	1738	3948					1735	2149	3128	7013
<b>TOTAL</b>	<b>6813</b>	<b>9442</b>	<b>10901</b>	<b>27157</b>	<b>13841</b>	<b>21441</b>	<b>36651</b>	<b>71935</b>	<b>32499</b>	<b>41161</b>	<b>49336</b>	<b>122997</b>	<b>747</b>	<b>1043</b>	<b>1300</b>	<b>3092</b>	<b>53902</b>	<b>73089</b>	<b>98191</b>	<b>225183</b>
<b>HARDWOOD LAND</b>																				
UP TO 20YRS	20	63	20	104	27	24	23	75	92	78	107	278					167	165	151	484
21YRS - 40YRS	633	386	231	1251	374	337	434	1146	1877	1241	1268	4387	112	262	428	803	2997	2228	2363	7589
41YRS - 60YRS	5697	4872	3025	13595	4534	3561	3502	11598	15091	12858	11391	39342	357	418	817	1592	25681	21710	18736	66128
61YRS - 80YRS	3477	5319	5636	14432	2631	3611	4006	10250	6100	9020	9445	24565	26	35	24	86	12235	17987	19112	49335
81YRS - 100YRS	113	168	539	821	355	639	1474	2469	1666	2418	4244	8330					2135	3227	6259	11621
101YRS OR MORE	45	88	79	213	95	116	68	280	233	368	1805	2407					375	572	1953	2901
UNEVENAGED STANDS																				
<b>TOTAL</b>	<b>9989</b>	<b>10897</b>	<b>9531</b>	<b>30418</b>	<b>8018</b>	<b>8291</b>	<b>9510</b>	<b>25821</b>	<b>25062</b>	<b>25985</b>	<b>28264</b>	<b>79312</b>	<b>523</b>	<b>716</b>	<b>1270</b>	<b>2509</b>	<b>43593</b>	<b>45891</b>	<b>48577</b>	<b>138062</b>
<b>ALL FOREST LAND</b>																				
UP TO 20YRS	50	105	45	201	280	426	905	1612	884	678	981	2544	27			27	1242	1211	1932	4385
21YRS - 40YRS	2211	1313	1308	4832	3011	2135	1855	7002	10633	7607	6678	24919	186	340	495	1022	16043	11397	10338	37778
41YRS - 60YRS	16171	16398	15564	48134	23903	26578	28829	79311	63216	66690	62632	192539	1105	1461	2118	4685	104397	111129	109144	324671
61YRS - 80YRS	10223	13671	15716	39611	29144	42943	64538	136626	37253	54935	75509	167698	781	1234	3738	5754	77402	112785	159503	349691
81YRS - 100YRS	1398	1706	3186	6291	6419	12050	39329	57799	7891	13404	18918	40213	78	114	119	312	15788	27275	61553	104617
101YRS OR MORE	252	177	247	677	1382	2580	7290	11253	1750	2792	9195	13738					3384	5550	16734	25669
UNEVENAGED STANDS	797	861	1188	2847	3530	4337	7015	14883	1741	1942	2613	6297					6070	7140	10817	24028
<b>TOTAL</b>	<b>31104</b>	<b>34234</b>	<b>37257</b>	<b>102596</b>	<b>67673</b>	<b>91052</b>	<b>149764</b>	<b>308489</b>	<b>123371</b>	<b>148051</b>	<b>176530</b>	<b>447953</b>	<b>2179</b>	<b>3151</b>	<b>6471</b>	<b>11802</b>	<b>224328</b>	<b>276490</b>	<b>370024</b>	<b>870843</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

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	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																				
1																				
2					20	43	64	143	127	768	1040					164	170	768	1104	
3	259	441	597	1298	2359	4387	8115	14862	3849	4217	6064	14132	74	78	66	219	6543	9125	14843	30512
4	10081	10880	13945	34907	38090	50929	89627	178648	52407	67306	86377	206091	833	1313	3833	5980	101412	130430	193785	425627
5	3960	2571	2281	8813	5341	5958	5357	17157	9404	9148	5670	24223					18707	17678	13809	50195
6									3	104	49	157					3	104	49	157
TOTAL	14301	13893	16824	45019	45812	61319	103501	210732	65809	80904	98930	245644	908	1391	3900	6200	125832	157509	223256	507597
MIXEDWOOD LAND																				
1																				
2									2			2					2			2
3					343	1030	6483	7857	460	661	829	1951					803	1691	7313	9809
4	5986	8144	9526	23658	12117	18567	28055	58740	28477	35240	42424	106143	471	758	921	2151	47053	62711	80928	190693
5	826	1297	1375	3499	1381	1843	2112	5337	3557	5259	6082	14899	276	285	379	940	6041	8686	9949	24677
6																				
TOTAL	6813	9442	10901	27157	13841	21441	36651	71935	32499	41161	49336	122997	747	1043	1300	3092	53902	73089	98191	225183
HARDWOOD LAND																				
1																				
2																				
3	258	294	21	574	217	288	285	791	1158	1161	800	3120					1634	1744	1107	4486
4	9326	10064	8731	28122	7240	7281	8852	23374	22028	23049	25980	71058	523	716	1270	2509	39118	41111	44835	125065
5	404	539	778	1722	560	721	372	1654	1875	1774	1483	5133					2840	3034	2634	8509
6																				
TOTAL	9989	10897	9531	30418	8018	8291	9510	25821	25062	25985	28264	79312	523	716	1270	2509	43593	45891	48577	138062
ALL FOREST LAND																				
1																				
2					20	43	64	146	127	768	1042						167	170	768	1106
3	518	735	618	1873	2919	5707	14885	23512	5469	6040	7693	19203	74	78	66	219	6982	12562	23264	44808
4	25394	29089	32203	86688	57449	76778	126536	260764	102913	125596	154782	383292	1828	2788	6025	10642	187585	234253	319548	741387
5	5191	4408	4435	14035	7283	8523	8342	24149	14838	16182	13235	44256	276	285	379	940	27589	29399	26393	83382
6									3	104	49	157					3	104	49	157
TOTAL	31104	34234	37257	102596	67673	91052	149764	308489	123371	148051	176530	447953	2179	3151	6471	11802	224328	276490	370024	870843

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	20	32	103	156	297	565	579	1443	2059	3603	4551	10215					28	29	2378	4201	5264	11844
SPRUCE-RED + BLACK	11279	9576	4499	25355	26829	39031	52207	118068	40773	54023	48079	142876	265	371	315	952	79148	103001	105102	105102	287253	
FIR	4490	4247	1838	10576	18247	16981	5823	41051	30776	25343	9183	65303	564	449	81	1095	54078	47021	16927	118027		
HEMLOCK	131	383	961	1476	1104	3193	22703	27002	2382	7212	26613	36208	306	795	3934	5036	3924	11585	54213	69723		
WHITE PINE	1070	2784	14638	18493	1714	4310	32820	38845	2007	5001	30647	37656	161	138	169	470	4954	12234	78275	95465		
RED PINE	96	264	1774	2135	50	275	816	1141	148	514	1725	2388	2	10		12	298	1064	4315	5678		
LARCH	769	718	232	1720	550	766	720	2038	2220	2852	1945	7017	30	59		90	3571	4397	2898	10867		
JACK PINE	119	13		133													119		13		133	
SCOTCH PINE																						
CEDAR																						
TOTAL SUFTWOODS	17978	18020	24049	60048	48795	65124	115671	229591	80368	98551	122746	301666	1331	1824	4530	7686	148474	183520	266998	598992		
SUGAR MAPLE	73	63	233	370	589	579	2397	3566	632	817	4174	5623	2			2	1298	1460	6805	9563		
RED MAPLE	5466	7102	6756	19325	10621	15430	18218	44269	19671	23012	23228	65912	371	523	888	1784	36131	46069	49092	131292		
YELLOW BIRCH	69	175	967	1211	669	1555	6491	8716	1468	2599	6229	10297	7	39	88	136	2215	4368	13777	20361		
WHITE BIRCH	1585	1643	568	3797	2603	3110	1663	7376	5726	5593	2665	13984	147	199	30	377	10002	10545	4927	25535		
OAK	3818	3989	1386	9194	1171	2155	2389	5716	4349	5244	4916	14509	39	183	573	796	9378	11572	9266	30217		
ASPEN	1444	2992	3066	7503	757	1434	1367	3559	4340	7089	7174	18604	134	293	177	605	6675	11810	11786	30272		
GREY BIRCH	501	16		517	504	77	30	612	2533	244	134	2913	110	28		138	3649	367	164	4182		
WHITE ASH	26	68	24	119	242	261	346	850	922	1433	1778	4134	4	14	68	88	1196	1778	2218	5192		
BLACK ASH	24	45		69	78	130	328	537	107	116	152	376	7		24	31	217	292	505	1015		
CHERRY		21		21	16	10	30	57									25	32	30	87		
ELM									28	80	19	127					28	80	19	127		
BEECH	83	48	203	335	1554	1112	829	3496	3004	3146	3130	9282	22	44	88	154	4664	4350	4252	13268		
BALSAM POPLAR									8			8					8			8		
MISCELLANEOUS	34	48		83	70	73		143	202	123	180	505					306	245	180	731		
TOTAL HARDWOODS	13126	16214	13208	42548	18877	25928	34092	78898	43002	49500	53784	146287	847	1326	1941	4116	75854	92969	103026	271850		
TOTAL FOREST LAND	31104	34234	37257	102596	67673	91052	149764	308490	123371	148051	176530	447953	2179	3151	6471	11802	224328	276490	370024	870843		

ALL FIGURES ARE IN THOUSANDS CU.FT.