

Entity and Attribute Definitions Report

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Total Pages: 15
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Parameters

<i>Application:</i>	VSC
<i>Entities:</i>	%
<i>ER Diagram:</i>	%
<i>Include Entity Notes?</i>	Y
<i>Include Attribute Descriptions?</i>	Y
<i>Include Attribute Notes?</i>	Y
<i>Include Attribute Values?</i>	Y
<i>Include Table of Contents?</i>	N
<i>Include Index of Entities?</i>	Y

Entity Name: AGE 10YR CLASS CODE			<i>Short Name:</i>	A1CC
<i>Plural:</i> AGE 10YR CLASS CODE				
<i>Init. Volume:</i>	<i>Avg. Volume:</i>	<i>Max. Volume:</i>	<i>Annual Growth Rate:</i>	

Description:

The average age of the leading species of the stand classed into age ranges of 10 years.
Code 01 signifies an average stand age of 01 to 10, and so on.

Attributes:

<u>Name</u>	<u>Domain</u>	<u>Opt</u>	<u>Format</u>	<u>Length</u>
* AGE 10YR CLASS CODE		N	VARCHAR2	10
The average age of the leading species of the stand classed into age ranges of 10 years.				
DESCRIPTION		N	VARCHAR2	500
The description of SAMPLE AGE IN TENS CODE.				
EFFECTIVE DATE		N	DATE	
The date that the code becomes effective.				
EXPIRY DATE		N	DATE	
The date that the code expires.				
UPDATE TIMESTAMP		Y	DATE	
The date that the code was last updated.				
* = Attributes in primary unique identifier.				

Relationships:

Each Occurrence Of This Entity:

MAY BE pertains to one or more VOLUME SAMPLE AREA
* = Relationships in primary unique identifier.

Unique Identifiers:

A10CC	Primary	Y
AGE 10YR CLASS CODE		

Entity Name: AGE CLASS CODE			Short Name:	ACC
Plural:	AGE CLASS CODE			
Init. Volume:	Avg. Volume:	Max. Volume:	Annual Growth Rate:	

Description:

A code indicating the age class of the stand at the reference year. Age classes are intervals, or ranges, of ages into which trees, forests, stands, or forest types are divided into for classification and use.

1 1 to 20 years
2 21 to 40 years
3 41 to 60 years
4 61 to 80 years
5 81 to 100 years
6 101 to 120 years
7 121 to 140 years
8 141 to 250 years
9 251+ years

Attributes:

<u>Name</u>	<u>Domain</u>	<u>Opt</u>	<u>Format</u>	<u>Length</u>
* AGE CLASS CODE		N	VARCHAR2	10
A code indicating the age class of the stand at the reference year. Age classes are intervals, or ranges, of ages into which trees, forests, stands, or forest types are divided into for classification and use.				
DESCRIPTION		N	VARCHAR2	500
The description of AGE CLASS CODE.				
EFFECTIVE DATE		N	DATE	
The date that the code becomes effective.				
EXPIRY DATE		N	DATE	
The date that the code expires.				
UPDATE TIMESTAMP		Y	DATE	
The date that the code was last updated.				
* = Attributes in primary unique identifier.				

Relationships:

Each Occurrence Of This Entity:

MAY BE pertains to one or more VOLUME SAMPLE AREA

* = Relationships in primary unique identifier.

Unique Identifiers:

ACC	Primary	Y
AGE CLASS CODE		

CROWN CANOPY POS CODE

(HEIGHT_CLASS_CD exists in denominations of 10 --> probably named incorrectly being as it assumes there won't ever be a requirement for height classes with other denominations.)

Entity Name: HEIGHT CLASS CODE		<i>Short Name:</i>	HCC
<i>Plural:</i>	HEIGHT CLASS CODE		
<i>Init. Volume:</i>	<i>Avg. Volume:</i>	<i>Max. Volume:</i>	<i>Annual Growth Rate:</i>

Description:

A code indicating the height class of the stand at the reference year. Height classes represent (approximately 9 meter) intervals into which the range of tree or stand heights are subdivided for classification and use.

Attributes:

<u>Name</u>	<u>Domain</u>	<u>Opt</u>	<u>Format</u>	<u>Length</u>
* HEIGHT CLASS CODE		N	VARCHAR2	10
A code indicating the height class of the stand at the reference year. Height classes represent intervals into which the range of tree or stand heights are subdivided for classification and use.				
DESCRIPTION		N	VARCHAR2	500
The description of HEIGHT CLASS CODE.				
EFFECTIVE DATE		N	DATE	
The date that the code becomes effective.				
EXPIRY DATE		N	DATE	
The date that the code expires.				
UPDATE TIMESTAMP		Y	DATE	
The date that the code was last updated.				
* = Attributes in primary unique identifier.				

Relationships:

Each Occurrence Of This Entity:

MAY BE pertains to one or more VOLUME SAMPLE AREA

* = Relationships in primary unique identifier.

Unique Identifiers:

HCC	Primary	Y
HEIGHT CLASS CODE		

Entity Name: INV TYPE GROUP CODE		Short Name:	ITGC
Plural:	INV TYPE GROUP CODE		
Init. Volume:	Avg. Volume:	Max. Volume:	Annual Growth Rate:

Description:

A numerical code for the species grouping of the stand in which the sample is located, based on the estimate of the stand at the time of sampling.
eg 23 could represent a combination of douglas fir and spruce

Attributes:

<u>Name</u>	<u>Domain</u>	<u>Opt</u>	<u>Format</u>	<u>Length</u>
* INV TYPE GROUP CODE		N	VARCHAR2	10
A numerical code for the species grouping the stand in which the sample is located, based on the estimate of the stand at the time of sampling.				
DESCRIPTION		N	VARCHAR2	500
The description of INV TYPE GROUP CODE.				
EFFECTIVE DATE		N	DATE	
The date that the code becomes effective.				
EXPIRY DATE		N	DATE	
The date that the code expires.				
UPDATE TIMESTAMP		Y	DATE	
The date that the code was last updated.				
* = Attributes in primary unique identifier.				

Relationships:

Each Occurrence Of This Entity:

MAY BE pertains to one or more VOLUME SAMPLE AREA

* = Relationships in primary unique identifier.

Unique Identifiers:

ITGC	Primary	Y
INV TYPE GROUP CODE		

Entity Name: SAMPLE TYPE CODE		Short Name:	STC
Plural:	SAMPLE TYPE CODE		
Init. Volume:	Avg. Volume:	Max. Volume:	Annual Growth Rate:

Description:

- A code indicating the kind of the sample.
- O = usual designation
- V = Diameter-Limit cutting. Outside the plot. Type group and sample size will be a series of 9s.
- Z = non-inventory sampling (eg private company)

Attributes:

<u>Name</u>	<u>Domain</u>	<u>Opt</u>	<u>Format</u>	<u>Length</u>
* SAMPLE TYPE CODE		N	VARCHAR2	10
A code indicating the kind of the sample.				
DESCRIPTION		N	VARCHAR2	500
The description of SAMPLE HEIGHT IN THREES CODE.				
EFFECTIVE DATE		N	DATE	
The date that the code becomes effective.				
EXPIRY DATE		N	DATE	
The date that the code expires.				
UPDATE TIMESTAMP		Y	DATE	
The date that the code was last updated.				
* = Attributes in primary unique identifier.				

Relationships:

Each Occurrence Of This Entity:

- MAY BE pertains to one or more VOLUME SAMPLE AREA
- * = Relationships in primary unique identifier.

Unique Identifiers:

STC	Primary	Y
SAMPLE TYPE CODE		

Entity Name: SITE CLASS CODE			<i>Short Name:</i>	SCC
<i>Plural:</i> SITE CLASS CODE				
<i>Init. Volume:</i>	<i>Avg. Volume:</i>	<i>Max. Volume:</i>	<i>Annual Growth Rate:</i>	

Description:

A code for the class of stand productivity (site class). A derived field, based on height and age of the leading species, retained for its historical stand information value.

Attributes:

<u>Name</u>	<u>Domain</u>	<u>Opt</u>	<u>Format</u>	<u>Length</u>
* SITE CLASS CODE		N	VARCHAR2	10
A code for the class of stand productivity (site class). A derived field, based on height and age of the leading species, retained for its historical stand information value.				
DESCRIPTION		N	VARCHAR2	500
The description of SITE CLASS CODE.				
EFFECTIVE DATE		N	DATE	
The date that the code becomes effective.				
EXPIRY DATE		N	DATE	
The date that the code expires.				
UPDATE TIMESTAMP		Y	DATE	
The date that the code was last updated.				
* = Attributes in primary unique identifier.				

Relationships:

Each Occurrence Of This Entity:

MAY BE pertains to one or more VOLUME SAMPLE AREA

* = Relationships in primary unique identifier.

Unique Identifiers:

SCC	Primary	Y
SITE CLASS CODE		

Notes:

The site class codes are as follows:

- G - Good site
- M - Medium site
- P - Poor site
- L - Low site

Entity Name:	TREE SPECIES CODE	<i>Short Name:</i>	TSC
<i>Plural:</i>	TREE SPECIES CODE		
<i>Init. Volume:</i>	<i>Avg. Volume:</i>	<i>Max. Volume:</i>	<i>Annual Growth Rate:</i>

Description:

A code for the botanical species name of the tree.

Attributes:

<u>Name</u>	<u>Domain</u>	<u>Opt</u>	<u>Format</u>	<u>Length</u>
* TREE SPECIES CODE		N	VARCHAR2	10
A code for the botanical species name of the tree.				
DESCRIPTION		N	VARCHAR2	500
The description of TREE SPECIES CODE.				
EFFECTIVE_DATE		N	DATE	
The date that the code becomes effective.				
EXPIRY_DATE		N	DATE	
The date that the code expires.				
UPDATE_TIMESTAMP		Y	DATE	
The date that the code was last updated.				
* = Attributes in primary unique identifier.				

Relationships:

Each Occurrence Of This Entity:

MAY BE pertains to one or more VOLUME SAMPLE TREE

* = Relationships in primary unique identifier.

Unique Identifiers:

TSC	Primary	Y
TREE SPECIES CODE		

Entity Name: VOLUME SAMPLE AREA

Short Name:

VSA

Plural: VOLUME SAMPLE AREA

Init. Volume:

Avg. Volume:

Max. Volume:

Annual Growth Rate:

Description:

A chosen area utilized for deriving tree volume information.

Attributes:

<u>Name</u>	<u>Domain</u>	<u>Opt</u> <u>Format</u>	<u>Length</u>
* SAMPLE ID		N NUMBER	10
Artificial number used to uniquely identify a sample. It is a sequential integer assigned by the database.			
SAMPLE NO		N NUMBER	4
A number assigned at the point of data collection to identify this sample within a region and compartment.			
SAMPLE DATE		N DATE	
The year the sample was collected. The date is arbitrarily set to June 1 of that year.			
ELEVATION		Y NUMBER	5
The elevation(s), relative to the mean sea level, of the land contained within the polygon.			
<i>Allowable Values of Attribute</i>			
0 thru 9999			
FOREST INVENTORY ZONE	FOREST INVENTORY ZONE	N VARCHAR2	1
The Forest Inventory Zone(s) (FIZ) that fall within the forest cover polygon. FIZ zones are broadly based ecological classification of the forestland in British Columbia. The province of British Columbia is split into 12 FIZ zones. eg A,B,C are coastal zones K,L are North East areas of the province <i>FIZ zones were developed to provide a broadly based ecological classification of the forestland in British Columbia. FIZ zones closely follow the early Biogeoclimatic zones developed by Dr. Drajina. The province of British Columbia is split into 12 FIZ zones.</i>			
INVENTORY REGION	INVENTORY REGIONS	N NUMBER	4
The Inventory Region(s) that fall within the forest cover polygon. Inventory Regions are an administrative and planning level boundary used to subdivide the Province into 88 units. <i>Inventory Region is also part of the reference key for identifying the geographic location of all Inventory Branch samples. Inventory Region, along with Inventory Compartment and Compartment Letter, form the key to identifying the Inventory samples.</i>			
COMPARTMENT NUMBER		N NUMBER	4
The Inventory Compartment(s) that fall within the forest cover polygon. Inventory Compartments are a geographic subdivision of an Inventory Region, usually defining a watershed or part thereof. Inventory compartment is also part of the reference key for identifying the geographic location of all Inventory Branch samples. Inventory Compartment, along with Compartment Letter and Inventory Region form the key to identifying Inventory samples.			
COMPARTMENT LETTER		Y VARCHAR2	2
The Compartment Letter(s) that fall within the forest cover polygon. Compartment Letter is a geographic subdivision of an Inventory Compartment. Compartment Letter only applies to some Inventory Compartments (e.g. only in Inventory Regions 1, 3, 5, 6, 7, 9, 10, 11, 56). Compartment Letter is also part of the reference key for identifying the geographic location of all Inventory Branch samples. Compartment Letter, along with Inventory Compartment and Inventory Region form the key to identifying Inventory samples.			
PSYU		Y NUMBER	4
PSYU BLOCK		Y NUMBER	2

Entity Name:	VOLUME SAMPLE AREA (cont'd)	Short Name:	VSA
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The numbers of the Public Sustained Yield Unit (PSYU) Block(S) that fall within the forest cover polygon. PSYU Blocks are subdivisions of a PSYU and indicate the presence of a sub-unit survey (i.e.. 1:10,000 scale inventory).			
BEC ZONE	Y	VARCHAR2	4
The Biogeoclimatic Zone(s) that fall within the forest cover polygon. A Biogeoclimatic Zone is a large geographic area with a broad homogeneous macroclimate that influences the development of vegetation and soil.			
BEC SUBZONE	Y	VARCHAR2	2
The Biogeoclimatic Subzone(s) that fall within the forest cover polygon. A Biogeoclimatic Subzone is a subdivision of the Biogeoclimatic Zone. The subdivision is based on the floristic differences in the zonal ecosystem with sequences influenced primarily by regional climate.			
BEC VARIANT	Y	VARCHAR2	2
The Biogeoclimatic Variant(s) that fall within the polygon. A Biogeoclimatic Variant is a further division of the Biogeoclimatic Zone and Subzone. The division reflects the differences in species cover and vigour of the plant species.			
* = Attributes in primary unique identifier.			

Relationships:

Each Occurrence Of This Entity:

- MAY BE described by one and only one AGE 10YR CLASS CODE
 - MAY BE described by one and only one AGE CLASS CODE
 - MAY BE described by one and only one HEIGHT 3M CLASS CODE
 - MAY BE described by one and only one HEIGHT CLASS CODE
 - MAY BE described by one and only one INV TYPE GROUP CODE
 - MUST BE described by one and only one SAMPLE TYPE CODE
 - MAY BE described by one and only one SITE CLASS CODE
 - MAY BE collect data for one or more VOLUME SAMPLE TREE
- * = Relationships in primary unique identifier.

Unique Identifiers:

VSA1	Primary	N
COMPARTMENT LETTER		
SAMPLE NO		
COMPARTMENT NUMBER		
INVENTORY REGION		
VSA	Primary	Y
SAMPLE ID		

Entity Name: VOLUME SAMPLE TREE*Short Name:*

VST

Plural: VOLUME SAMPLE TREE*Init. Volume:**Avg. Volume:**Max. Volume:**Annual Growth Rate:***Description:**

A tall woody perennial plant usually with a single elongated stem and having a crown of branches and foliage.

Attributes:

<u>Name</u>	<u>Domain</u>	<u>Opt</u>	<u>Format</u>	<u>Length</u>
* TREE NO		N	NUMBER	10
Unique arbitrary number assigned to a tree at time of collection.				
DBH		Y	NUMBER	5,1
Diameter (outside bark) of a tree at 1.3 meters.				
DBH_2CM		Y	NUMBER	4
Diameter of the tree to the nearest 2 centimeters.				
DBH_5CM		Y	NUMBER	4
Diameter of the tree to the nearest 5 centimeters.				
AGE_MEASMT_EST_IND		Y	VARCHAR2	1
An indicator of whether an age is estimated.				
<i>Allowable Values of Attribute</i>				
Y	Yes		Y	
N	No		N	
STUMP AGE		Y	NUMBER	4
Age of the tree at 10 cm from the ground.				
HEIGHT_MEASMT_QLTY		Y	VARCHAR2	10
An indicator of whether a height is estimated.				
<i>Allowable Values of Attribute</i>				
ACTUAL	Actual		A	
GOOD	Good		G	
MEDIUM	Medium		M	
POOR	Poor		P	
HEIGHT		Y	NUMBER	5,2
Height of the tree in meters.				
NO OF FORKS		Y	NUMBER	2
The quantity of forks emanating from the main tree stem to a maximum of 3.				
NO OF SECTIONS		Y	NUMBER	3
The quantity of sections into which the tree has been divided. The main stem is divided into 14 sections except where the tree is less than 11.3 m total height.				
(Tree is divided into sections at 0.3 m, 0.6 m, 0.9 m, and 1.3 m in height and into 10 equal (decile) lengths thereafter. The minimum decile length is 1.0 m and therefore trees less than 11.3 m have less than 14 sections.)				

* = Attributes in primary unique identifier.

Relationships:Each Occurrence Of This Entity:

MAY BE described by one and only one CROWN CANOPY POS CODE

MUST BE described by one and only one TREE SPECIES CODE

* MUST BE contained within one and only one VOLUME SAMPLE AREA

MAY BE divided into one or more VOLUME SAMPLE TREE LEADER

* = Relationships in primary unique identifier.

Unique Identifiers:

Entity Name:	VOLUME SAMPLE TREE (cont'd)	<i>Short Name:</i>	VST
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ST

Primary Y

TREE NO

MUST BE contained within one and only one VOLUME SAMPLE AREA

Notes:

The tree in the context of forest mensuration is further defined by belonging to a sample or experimental unit (and accordingly is individually numbered) and whose species is identified in the MOF codelist table.

Entity Name:	VOLUME SAMPLE TREE LEADER			<i>Short Name:</i>	VSTL
<i>Plural:</i>	VOLUME SAMPLE TREE LEADER				
<i>Init. Volume:</i>	<i>Avg. Volume:</i>	<i>Max. Volume:</i>	<i>Annual Growth Rate:</i>		

Description:

The length of sample tree stem from the end of the tree down to the first set of branches, representing one year of growth and reflecting the tree's vigor and the site's growing potential.

Attributes:

<u>Name</u>	<u>Domain</u>	<u>Opt</u>	<u>Format</u>	<u>Length</u>
* TREE LEADER ID		N	NUMBER	10
Primary key for this table as business key may have NULL values for Tree Leader No.				
TREE LEADER NO		Y	NUMBER	6
Unique arbitrary number assigned to a tree leader at time of collection.				
TREE_LEADER_PRIMARY_IND		N	VARCHAR2	1
Indicates whether the tree leader is of the primary or secondary type.				
<i>Allowable Values of Attribute</i>				
Y	Yes		Y	
N	No		N	

* = Attributes in primary unique identifier.

Relationships:

Each Occurrence Of This Entity:

MUST BE a part of one and only one VOLUME SAMPLE TREE

MAY BE divided into one or more VOLUME SAMPLE TREE SECTION

* = Relationships in primary unique identifier.

Unique Identifiers:

STL	Primary	Y
TREE LEADER ID		

Entity Name: VOLUME SAMPLE TREE SECTION*Short Name:*

VSTS

Plural: VOLUME SAMPLE TREE SECTION*Init. Volume:**Avg. Volume:**Max. Volume:**Annual Growth Rate:***Description:**

A portion of a felled tree created by bucking (sectioning) a log into prescribed intervals. Sections may be created at regular intervals, or where breaks, forks or at other junctions.

Attributes:

<u>Name</u>	<u>Domain</u>	<u>Opt</u> <u>Format</u>	<u>Length</u>
* SECTION NO		N NUMBER	3
A number assigned to a section of the tree which has been cut or otherwise designated as a log. (A felled tree is bucked into 2.5 or 5.0 m logs or sections which are numbered consecutively from one, the stump, to the tree top. Secondary fork stems, if any, are also sectioned and numbered from the highest main stem section number). Section numbers are unique within a tree.			
CUMULATIVE TREE LENGTH		N NUMBER	5,2
The cumulative length of the sections in meters above germination point (or highest side since 1990) to the top of the described section. This is the length (or height) of the tree at the top of the section being described. The actual length of the section may be derived by subtracting the previous cl from the current cl. With the first section of a fork, cumalitive height is the height above ground at which the leader starts.			
DIAM INSIDE BARK		Y NUMBER	5,1
The diameter, inside bark, (DIB) of the section top averaged from two representative measurements.			
SECTION VOLUME		Y NUMBER	8,4
The gross volume of the tree section in cubic meters particular to the Volume Sampling sectioning methodology. Smalian's formula is used for the volume calculation where: Volume = (1/2 section bottom basal area + 1/2 section top basal area) x Section Lenth. (A derived field, retained for present data use and later tree compiler testing). * = <i>Attributes in primary unique identifier.</i>			

Relationships:Each Occurrence Of This Entity:

* MUST BE a part of one and only one VOLUME SAMPLE TREE LEADER

* = *Relationships in primary unique identifier.***Unique Identifiers:**

STS

Primary Y

SECTION NO

MUST BE a part of one and only one VOLUME SAMPLE TREE LEADER

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