Tables

There are four primary tables (screens) that are used to run various SuperACE™ reports. These are Species, Sort/Grade, Price, and Cost tables. The information contained in the species and sort/grade tables are used for the calculation of timber volumes. It is critical that each table contain the correct information in respect to other tables and to the data being processed. Any discrepancies in the tables could cause erroneous volume and reporting calculations.

Species Table

This table lists all the species used in the project and gives critical information on each of these species.

Code	Abrv	Description	Bark	ASubo	Form Factor	Wood Type	Comp-onent	Yield Table	Log Min Dia	Log Min Len	Log Max Len	Tree Max Dia	Tree Max Ht	Trim	BdFt Rule	CuFt Rule	Weight	Weight Type
1	WH	WHEMLOCK	.944	WH	WH	C	C	WH--EQUA-050	5	12	40	0	0	1.0	W	S	6400	C
2	RA	R ALDER	.953	RA	RA	H	H	RA-EQUA-050	5	12	40	40	0	1.0	W	S	5500	C
3	BM	BL MAPLE	.953	RA	RA	H	H	RA-EQUA-050	5	12	40	0	0	1.0	W	S	5300	C
4	SS	S SPRUCE	.962	SS	SS	C	C	WH-EQUA-050	5	12	40	0	0	1.0	W	S	5200	C
5	OG	OGDF	.901	DF	DF	C	C	DF-EQUA-050	5	12	40	0	0	1.0	W	S	5600	C
6	DF	DOUG FIR	.920	DF	DF	C	C	DF--EQUA-050	5	12	40	0	200	1.0	W	S	5700	C
7	SF	PS FIR	.944	SS	SF	C	C	WH--EQUA-050	5	12	40	0	0	1.0	W	S	5730	C
8	RC	WR CEDAR	.951	SS	RC	C	C	WH-EQUA-050	5	12	40	0	0	1.0	W	S	4700	C
9	CW	COTWOOD	.940	RA	RA	H	H	WH--EQUA-050	5	12	40	0	0	1.0	W	S	4900	C
10	PP	PONDEROS	.907	PP	PP	C	C	PP--REF--050	5	12	40	0	0	1.0	W	S	4800	C
11	WP	W PINE	.950	PP	PP	C	C	DF-EQUA-050	5	12	40	0	0	1.0	W	S	4800	C
12	MP	M PINE	.940	PP	PP	C	C	DF-EQUA-050	5	12	40	0	0	1.0	W	S	4800	C
14	NF	NOB FIR	.924	NF	NF	C	C	DF-EQUA-050	5	12	40	0	0	1.0	W	S	4800	C
16	MH	MHEMLOCK	.944	WH	WH	C	C	WH--EQUA-050	5	12	40	0	0	1.0	W	S	6350	C
21	PO	PO CEDAR	.945	SS	RC	C	C	DF-EQUA-050	5	12	40	0	0	1.0	W	S	4500	C
22	OA	OR ASH	.953	RA	RA	H	H	DF-EQUA-050	5	12	40	0	0	1.0	W	S	5800	C
24	OK	OR W OAK	.953	RA	RA	H	H	RA-EQUA-050	5	12	40	0	0	1.0	W	S	6900	C
25	TO	TAN OAK	.940	RA	RA	H	H	RA-EQUA-050	5	12	40	0	0	1.0	W	S	6900	C
31	RF	SH R FIR	.924	DF	NF	C	C	DF-EQUA-050	5	12	40	0	0	1.0	W	S	5000	C

Table Name (required)
The table name reflects the choice of sort table made from the **Table Names** dropdown list box located at the upper left of the screen. These tables may already exist, or may need to be created.

Code (required)
A five character wide numeric field, representing a specific species. For example, 0001 could be assigned to western hemlock and 0004 could be Sitka spruce.

Abrv (required)
A two character wide alphanumeric field, representing a specific species. For example, western hemlock is WH, Douglas-fir is DF, etc.

Description (required)
An eight character wide alphanumeric field, describing a species, e.g. NOB FIR for noble fir, or COTWOOD for cottonwood.

Bark (required)
The bark thickness ratio for a given species.

A$_{sub}$o (Ao) (required)
A factor used in Behre's hyperbola, which describes tree form. Enter one of the following species codes to use as an Ao factor based upon age (DF, LP, WH, RA, PP, SS, SF, RC or NF). For example, red alder and cottonwood have a similar tree bole form, so for both species in this column, RA may be entered (the Ao for red alder). Age must be defined for each species in every stand. The age is defined on the type master screen. If age is not defined on the type master, the program uses a default age of 50 years old. An Ao factor may also be entered as a numeric value to be run against all ages for the specified species (i.e. 0.593 for WH).

Form Factor (required)
The diameter outside the bark measured at Form Point (generally 16 feet) divided by the diameter outside bark measured at D4H . Either a number value or one of thirteen species codes can be entered. If a number value is entered then the value is used as a default for the species when a form factor isn't entered in the tree input or edit screen . If a species code is entered then the form factor will be predicted based on the active form table and the tree's total height. When a form factor is entered with the tree data in a field data recorder or in the tree input screen, then it will override the value entered in the species table.

Wood type (required)
A one character wide alphabetic field, referring to the type of wood. Used for the grouping of species for reporting purposes. For example, a W code would describe WHITEWOODS. Codes are defined by the user and are stored in the active Wood Type table.

Component (required)
A one character alphabetic code used to classify species for reporting. Codes are defined by the user and are stored in the active Component table.

Yield Table (required)
The yield equation that best mimics the volume yields for a given species. Occasionally, if a species has a similar yield equation as another species, then the same yield equation can be applied. Used only in the Flips 98™ program.

Min Dia (optional)
The minimum allowed small-end diameter of a log for a particular tree species. For example, in many timber cruises, logs smaller than a 5" x 12' are not accounted for. If a value entered is less than the Min Dia value defined in the Sort/Grade table, then the value in the Sort/Grade table will be overridden.

Min Len (optional)
The overall minimum acceptable length of a log by species. If a value is entered, it overrides a lesser Min Len value defined in the Sort/Grade table.

Max Len (optional)
The ovarall maximum acceptable length of a log relative to scaling rules. Logs over this length are split scaled. If a value is entered, it overrides any Max Len value defined in the Sort/Grade table.

Max Ht (optional)
The maximum total tree height.

Trim (required)
Excess length added on to the log that is not reported. It compensates for length that will be lost in processing at the mill. For example, a 40 foot log may actually be 41 feet because approximately 1 foot may be lost in processing.

BdFt Rule (required)
The board foot rule to be employed. For example, depending on where the project is located, westside, eastside or doyle rules may be employed.

CuFt Rule (required)
The cubic foot rule to be employed when calculating volumes. S=Samalian, 1=Northwest, W=Weyerhaeuser.

Weight (optional)
The pounds of wood per either MBF or CCF

Weight Type (optional)
The volume unit used in the measurement of weight. Would enter an M for MBF or a C for CCF (cunit).

Sort/Grade Table

The sort/grade table is the table in which the project's sorts and grades are defined. These definitions or classifications will be used when generating reports that have a reference to tree sorts and grades. Below is a description of the fields of the sort/grade table.
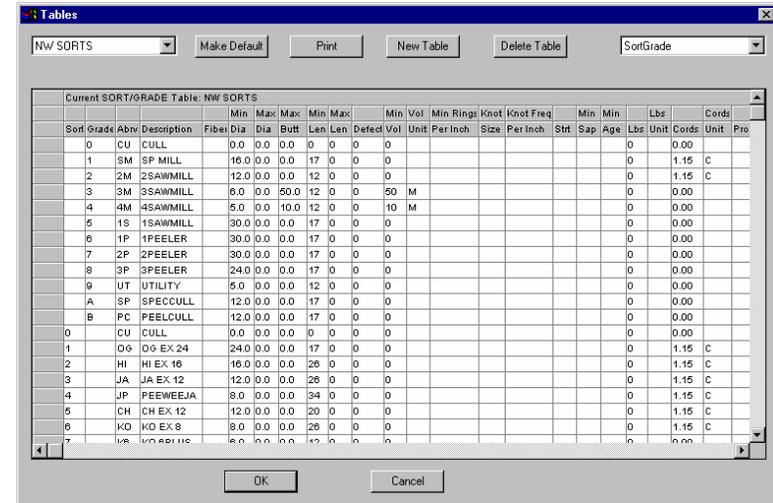
Table Name (required)
The table name reflects the choice of sort table made from the **Table Names** dropdown list box (of existing tables) located at the upper left of the screen. These tables may be existing, or newly created. See Creating a New Table.

Sort (required)
One character wide alphanumeric field, representing a specific sort. For example, an export table might assign a 0 to a cull log, a 1 to an old growth log, a 4 for a peewee Japan log, an H for a hardwood sawlog, etc. This field may be turned off in the Tree Input screen by unselecting the sort option in the Measurements/Fields screen under Defaults.

Grade (required)
A one character wide alphanumeric field that represents a specific grade.

Abrv (required)
Two character wide alphabetic field, representing a specific sort. For example, an export table might assign CU to a cull log, OG to an old growth log, PW for a peewee Japan log, an HD for a hardwood sawlog, etc.

Description (required)
An eight character wide alphanumeric field, describing a specific sort. It may relate to a log's probable destination or to its surface characteristics. For example, a Japan export with a 12 inch minimum diameter might have a description such as JA EX 12.

Fiber (optional)
Refers to whether or not the log should have board foot volume calculated. Entering an F in this column will cause any logs of this sort to have no Scribner

volume calculated for it. If a G or a blank is in this column, Scribner volume will be calculated.

Min Dia (required)
The minimum acceptable small end diameter to meet a specific sort requirement. E.g., a China export may have a minimum diameter of 12 inches on the small end of the log. If a log does not meet a Min Dia requirement the volume and assigned sort and grade are still reported. A message will appear in the TC-Tree Edit screen noting the discrepancy.

Max Dia (optional)
The maximum acceptable small end diameter to meet a specific sort requirement.

Max Butt (optional)
The maximum acceptable large end diameter of a log to meet a specific sort requirement.

Min Len (required)
The minimum acceptable log length for a given log sort. For example, for a PeeWee Japan log, the minimum length accepted by the buyer might be 34 feet.

Max Len (optional)
The maximum acceptable log length for a given log sort relative to the scaling rules. Logs over this length are split scaled as 2 or more segments.

Defect (optional)
The maximum amount of defect allowable for a particular log expressed as a percent.

Min Vol (optional)
The minimum amount of volume that a log must contain in order to be classified as a given sort.

Vol Unit (optional)
Refers to the choice of units used when defining minimum volume. For example, the units may be in cubic feet or board feet, so would put a C or M, respectively in this column.

Min Rings Per Inch (optional)
The minimum number of rings per inch that the butt end of a log must contain to be classified as a given sort. For user information only, not used in the program.

Knot Size (optional)
The maximum allowable diameter of knots for a particular log sort. For user information only, not used in the program.

Knot Frequency Per Foot (optional)
The maximum number of knots per foot allowable for a given log sort. For user information only, not used in the program.

Strt (optional)
Enter a Y or N in this column to express whether the log is straight or not. For user information only, not used in the program.

Sap (optional)
A measurement, in inches, of the minimum sapwood thickness. For user information only, not used in the program.

Min Age (optional)
The minimum allowable age measured by ring count on the butt end of the log for a given log sort. For user information only, not used in the program.

Lbs (optional)
The weight, in pounds per thousand board feet or cunit. This information can be gathered from scaling bureaus, state forestry departments, timberland owners, etc.

Lbs Unit (optional)
The type of volume unit being used to describe weight. This would be either thousand board feet (M) or cunits (C).

Cords (optional)
Cords per ton (T), cunit (C), or thousand board feet (M) taken from scaling bureaus, state forestry departments, timberland owners, etc.

Cords Unit (optional)
The type of unit being used to describe cords. This would be either weight units of tons (T) or volume units such as thousand board feet (M) or cunits (C).

Product (optional)
A description of the expected end product for the log. For example, pulp , veneer, etc. In the South, product refers to sort.

Cost Table

Defines the various per unit costs associated with harvesting and transporting trees in a stand.

Tables

| GENERAL ▼ | Make Default | Print | New Table | Delete Table | Cost ▼ |

Current COST Table: GENERAL

Group	Spp	Items	Fiber	Cost	Cost Unit
		ADMINISTRATION	G	8	M
		FALLING & BUCKING	G	21	M
		HARVEST TAXES	G	21	M
		HAULING	G	26	M
		LOADING	G	26	M
		REFORESTATION	G	195	A
		ROAD MAINTENANCE	G	1	M
		YARDING	G	65	M

[OK]   [Cancel]

Table Name (required)
The table name reflects the choice of cost table made from the Table Names dropdown list box located at the upper left of the screen. These tables may already exist, or may need to be created.

Group (optional) Not available at this time.

Spp (optional)
Species abbreviation from the species table. For example, DF for Douglas fir.

Items (required)
Any tasks such as falling and bucking, rafting, road construction, etc., associated with the harvest operation.

Fiber (required)
Refers to whether or not the log is being graded, or will be used for its fiber (pulped). Entering an F in this column will cause any logs of this sort to have no Scribner volume calculated for it. If a G or a blank is in this column, Scribner volume will be calculated.

Cost (required)
The amount in dollars per unit that a given task costs. For example, reforestation may be given a cost of $200 per acre. 200 would be entered into this cell.

Cost Unit (required)
The unit for which the cost is being assigned. For example, the costs might be in terms of thousands of board feet (M), Cunits (C), tons (T), or acres (A).

Price Table

The price table (screen) allows the user to apply log values to the volume being inventoried. These values are usually "pond" prices (i.e., delivered to the destination) without costs subtracted. They are useful in facilitating appraisal work.

Tables

| GENERAL ▼ | Make Default | Print | New Table | Delete Table | Price ▼ |

Current PRICE Table: GENERAL

Spp	Copy Spp	Product Name	Product	Sorts	Grades	Min Dia	Max Dia	Min Len	Max Len	Rate	Rate Unit	Destination	Load Size	Margin	Margin Unit	Plots
BM	RA					0.0	99.0	0	99	0			0	0		
BM		PULP	RA	4		0.0		0	99		M					
CQ		CAMPRUN	*	*		1.0	1.0	1	1	240	M		0	0		
CW		CAMPRUN	*	*		0.0		0	99	240	M		0	0		
DF		CAMPRUN	*	*		0.0	99.0	0	99	240	M		0	0		
DF		UTILITY	0	9		0.0	99.0	0	99	250	M	TILLAMO...	0	0		
DF		UTILITY	1	12		0.0	99.0	0	99	240	M		0	0		
DF		UTILITY	1	2		7.0	99.0	0	99	240	M		0	0		
DF	DF	32	1	468		1.0	99.0	0	99	99	M	M	0	0	0	
DF		3-PEELER	23	8		0.0	99.0	0	99	825	M	TILLAMO...	0	0		
DF		2-SAWMIL	23578	72		0.0	99.0	0	99	750	M	TILLAMO...	0	0		
DF		3-SAWMIL	468	32		1.0	99.0	0	99	675	M	TILLAMO...	0	0		
DF		3-PEELER	79	23		0.0	99.0	0	99	625	M	TILLAMO...	0	0		
DF		4-SAWMIL	89	94		0.0	99.0	0	99	625	M	TILLAMO...	0	0		
DF		D3	D	3		6.0	99.0	32	99	625	M	TILLAMO...	0	0		
DF		D4	D	4		1.0	99.0	0	99	625	M	TILLAMO...	0	0		
DF		D9	D	9		0.0	99.0	0	99	240	M		0	0		
DF		J1	J	1		0.0	99.0	0	99	250	M		0	0		
DF		2-JAPA	J	2		0.0	99.0	0	99	629	M	YOKOHA...	0	0		
DF		K3	K	3		1.0	99.0	4	99	640	M		0	0		

[OK]   [Cancel]

Table Name (required)
The table name reflects the choice of price table made from the Table Names dropdown list box located at the upper left of the screen. These tables may already exist, or may need to be created.

Species (required)
The species abbreviation for which the price is being determined.

Copy Species (optional)
Use this to copy and apply the same prices for one species to another. For example, Red Alder and Big Leaf Maple may have the same prices, so entering Red Alder in the Big Leaf Maple Copy Species column will apply Red Alder prices to Big Leaf Maple, by sort and grade.

Product Name (required)
An eight character wide alphanumeric field, describing the type of log being priced. For example, a Japan export log with a minimum of 12 inches for the butt log diameter would be JAEX 12+.

Product (optional)
The type of product expected.

Sorts (required)
An alphanumeric field, representing the sorts of the logs being priced. E.g., JCK would mean that all 3 sorts, Japan, China, and Korea would have the same price. Up to five sorts can be assigned to a single price.

Grades (required)
An alphanumeric field, representing the grades of the logs being priced. Up to five grades can be assigned to a single price.

Min Dia (required)
The minimum allowed diameter of the log being priced.

Max Dia (optional)
The maximum allowed diameter of the log being priced.

Min Len (required)
The minimum allowed length of the log being priced.

Max Len (optional)
The maximum allowed length of the log being priced.

Rate (required)
The number of dollars assigned to a Rate Type.

Rate Unit (required)
Units of measure, i.e.: Thousands of board feet (M), cunits (C), tons (T), piece (P), etc.

Destination (optional)
Name of the destination where logs will be delivered.

Load Size (optional**)**
Average load size.

Margin (optional)
Percentage

Margin Unit (optional)
Thousands of board feet (M), cunits (C), tons (T), piece (P), etc.

Other SuperACE Tables

Status

A table classifying the status of a tree damage in a stand. This table is accessed when a code is entered into the **ST** column of the **Tree Input** screen.

For example, with code of D, the description is DEAD.

Crown Positon (T1)

This table is used to define the code entered into the **PO** column of the **Tree Input** screen.
There are two fields, Code and Description.

For example, with a code of D, the description might be DOMINANT.

Crown Ratio (T2)

This table is used to define the code entered into the **CR** column of the **Tree Input** screen.

The table describes the percent of total tree height covered by live crown. There are two fields, Code and Description.

For example, with a code of 2, the description might be 20%.

Vigor (T3)

A table that classifies the trees relative to their position in a stand or health (diseased, suppressed, etc.). This table is used to define the code entered into the **VI** column of the **Tree Input** screen.

For example, if a tree has mechanical defect from a pre-commercial thin done to the stand, the code would be M, and the description would be MECH. DEFECT.

Damage (T4)

This table is used to define the code entered into the **DA** column of the **Tree Input** screen. The table classifies the tree damage in a stand.

For example, with code of W, the description is WIND.

T5

A table for user defined coding. The table is accessed when the **T5** column is utilized in the **Tree Inuput** screen. There are two fields, Code and Description.

Component

Defines the codes used in describing stand component. This table is used to define the codes entered into the **Component** field of the **Species Table.** There are two columns, Code and Description.

For example, a code of C would have a description of CONIFER Component.

Form

This table stores the inside and outside bark constants used for predicting form. The table is accessed when a form table species code is entered into the **Form** column of the **Species Table**.

Wood Type

A table describing the type of wood in a stand. The table defines wood type codes entered into the species table.

For example, with a code of P, the description would be PINE; or, with a code of W, the description would be WHITEWOODS.

Creating Tables

If the table needed for a project does not already exist in the system, the user may create a new one. A table may be created by either typing the information one cell at a time, or by copying and editing a table that already exists.

1. Choose **Tables** from the menu bar.

2. Choose a table category from the pull down menu.

3. Click the **New Table** tool button. The **New Table** dialog appears.

4. Select a **Table Type** from the drop down list of tables.

5. Name the table in the **New Table** box and click **OK** to begin entering table data.

6. If copying the table, choose the most similar table from the **Copy from Table** list of available tables then edit the copied table appropriately.

Assigning Tables in SuperACE™

At any time, the project may refer to any one of a number of the different tables described in this booklet. Once the user has determined which tables are to be used on a project, the tables must be assigned to the project as default tables.

There are two methods to set default tables. The first method is the recommended procedure.

Method One:

1. Choose **Defaults** from the **Setup** drop down menu.

2. The defaults screen appears.

3. If the Tables screen isn't visible click on the tables tab.

4. Click in the field next to the table category you wish to change.

5. Use the drop list arrow button to show a list of available tables.

6. Click on the table you require.

7. Click **OK**.
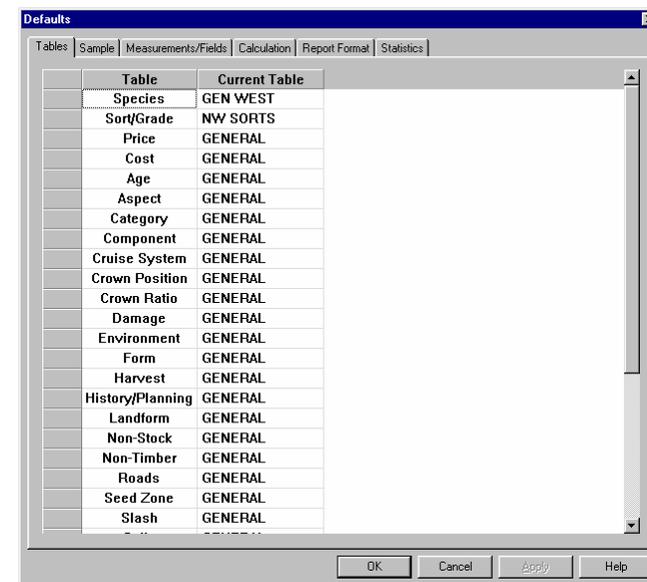
Method Two:

1.	Choose **Tables** from the menu bar.

2.	From the drop down menu choose a table category.

3.	Click on the table name you require in the upper left corner of the screen.

4.	Click the **Make Default** button.

5.	Close the Tables screen.

After the tables have been assigned the user can edit cruise data and run reports against the variables assigned in the associated tables.

Using Tables

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Atterbury Consultants Inc.

SuperACE 2004 (TM)

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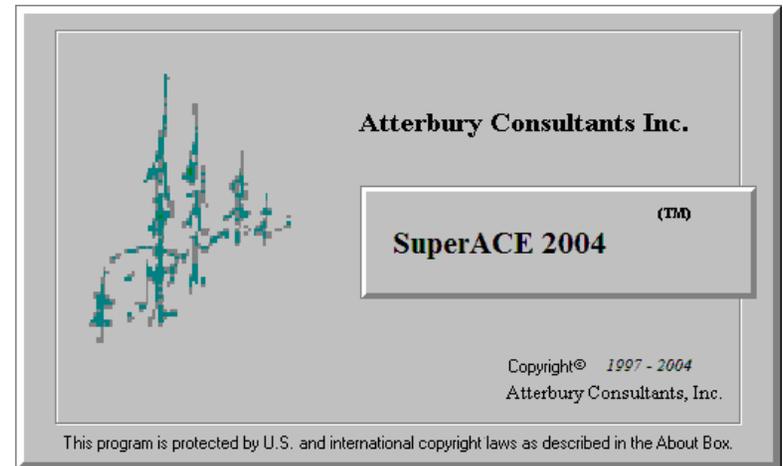
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