

Table and Column Definitions Report

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Parameters

Workarea:	GLOBAL SHARED WORKAREA
Container:	NVAF
Table / View / Materialized View:	%
Include Tables?	Y
Include Views?	Y
Include Materialized Views?	Y
Data Structure Diagram:	%
Exclude Prefix:	
Include Table / View / MV Descriptions?	Y
Include Table / View / MV Comments?	N
Include Column Descriptions?	Y
Include Column Comments?	N
Include Column Notes?	Y
Include Unique Constraints?	Y
Include Foreign Key Constraints?	Y
Include Check Constraints?	Y
Include Indexes?	Y

Table: VDHH_ACTUAL_TRLDR_PATHOLOGY**Description:**

Details of a pathology associated with a tree.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	PATH_ID <i>Pathology ID. No business meaning. Unique within a leader?</i>	NOT NULL	NUMBER(2)
2	WIDTH <i>Width of the pathology (cm).</i>	NOT NULL	NUMBER(5,1)
3	HT_TO_PATH_IND_END <i>The height from the ground along the bole to the point at which the pathological indicator ends (metres).</i>	NOT NULL	NUMBER(6,2)
4	VATP_TYPE <i>Type of pathology.</i>	NOT NULL	VARCHAR2(4)
5	HT_TO_PATH_IND_START <i>The height from the ground along the bole to the highest point at which the pathological indicator starts (metres).</i>	NOT NULL	NUMBER(6,2)
* 6	TL_TR_TREE_NO <i>Tree number. No business meaning.</i>	NOT NULL	NUMBER(4)
* 7	TL_TR_PLT_SMP_SAMPLE_ID	NOT NULL	NUMBER(10,0)
* 8	TL_TR_PLT_PLOT_NO <i>Plot number</i>	NOT NULL	NUMBER(2)
* 9	TL_TR_PLT_PLOT_COUNT_ID <i>Count Plot ID. Must be A, B, or F(ull).</i>	NOT NULL	VARCHAR2(1)
* 10	TL_TREE_LEADER_NO <i>Tree leader number. Primary leader = 1, secondary leader = 2, etc.</i>	NOT NULL	NUMBER(1)

Foreign Keys:

TLP_1_TL_1_FK
 TL_TREE_LEADER_NO = VDHH_TREE_LEADERS.TREE_LEADER_NO
 TL_TR_TREE_NO = VDHH_TREE_LEADERS.TR_TREE_NO
 TL_TR_PLT_PLOT_NO = VDHH_TREE_LEADERS.TR_PLT_PLOT_NO
 TL_TR_PLT_SMP_SAMPLE_ID = VDHH_TREE_LEADERS.TR_PLT_SMP_SAMPLE_ID
 TL_TR_PLT_PLOT_COUNT_ID = VDHH_TREE_LEADERS.TR_PLT_PLOT_COUNT_ID

Indexes:

TLP_TL_FK_I
 TL_TREE_LEADER_NO
 TL_TR_TREE_NO
 TL_TR_PLT_PLOT_NO
 TL_TR_PLT_SMP_SAMPLE_ID
 TL_TR_PLT_PLOT_COUNT_ID

Notes:

From DVHand Tr_Path.dbf

Table: VDHH_EST_TREE_PATHOLOGY*Description:*

Details of a pathology associated with a tree.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
1	EST_HT_TO_PATH_IND_END <i>The height from the ground along the bole to the point at which the pathological indicator ends (metres).</i>	NOT NULL	NUMBER(6,2)
* 2	PATH_ID <i>Pathology ID. No business meaning.</i>	NOT NULL	NUMBER(2)
3	EST_WIDTH <i>Width of the pathology (cm).</i>	NOT NULL	NUMBER(5,1)
4	EST_HT_TO_PATH_IND_START <i>The height from the ground along the bole to the highest point at which the pathological indicator starts (metres).</i>	NOT NULL	NUMBER(6,2)
4	EST_TYPE <i>Type of pathology.</i>	NOT NULL	VARCHAR2(4)
* 6	TR_PLT_SMP_SAMPLE_ID	NOT NULL	NUMBER(10,0)
* 7	TR_TREE_NO <i>Tree number. No business meaning.</i>	NOT NULL	NUMBER(4)
* 8	TR_PLT_PLOT_COUNT_ID <i>Count Plot ID. Must be A, B, or F(ull).</i>	NOT NULL	VARCHAR2(1)
* 9	TR_PLT_PLOT_NO <i>Plot number</i>	NOT NULL	NUMBER(2)

Foreign Keys:

NSTP_TR_1_FK
 TR_PLT_SMP_SAMPLE_ID = VDHH_TREES.PLT_SMP_SAMPLE_ID
 TR_PLT_PLOT_NO = VDHH_TREES.PLT_PLOT_NO
 TR_PLT_PLOT_COUNT_ID = VDHH_TREES.PLT_PLOT_COUNT_ID
 TR_TREE_NO = VDHH_TREES.TREE_NO

Indexes:

NSTP_TR_1_FK_I
 TR_PLT_SMP_SAMPLE_ID
 TR_PLT_PLOT_NO
 TR_PLT_PLOT_COUNT_ID
 TR_TREE_NO

Notes:

From DVHand Tr_Path.dbf

Table: VDHH_LAYERS*Description:*

Stand composition information relating to the sample as a whole

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
1	RELATIVE_DENSITY <i>Relative density</i>	NULL	NUMBER(5)
2	AIR_CROWN_CLOSURE_PCT <i>Crown Closure % as viewed from the aerial photo</i>	NULL	NUMBER(3)
* 3	LAYER_ID <i>Layer number</i>	NOT NULL	VARCHAR2(1)
4	STAND_STRUCTURE <i>Stand structure</i>	NULL	VARCHAR2(1)
5	GROUND_CROWN_CLOSURE_PCT <i>Crown Closure % as viewed from the ground</i>	NULL	NUMBER(3)
* 6	SMP_SAMPLE_ID	NOT NULL	NUMBER(10,0)

Foreign Keys:

LYR_1_SMP_1_FK
SMP_SAMPLE_ID = VDHH_SAMPLES.SAMPLE_ID

Indexes:

LYR_SMP_FK_I
SMP_SAMPLE_ID

Notes:

From DVHost Sa_Layer.dbf

Table: VDHH_LAYER_SPP_COMPOSITION*Description:*

Tree species composition of a given layer within a sample

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
1	TREE_SPP_PCT <i>Tree species percent composition</i>	NULL	NUMBER(3)
* 2	TREE_SPP <i>Tree species</i>	NOT NULL	VARCHAR2(3)
* 3	LYR_LAYER_ID <i>Layer number</i>	NOT NULL	VARCHAR2(1)
* 4	LYR_SMP_SAMPLE_ID	NOT NULL	NUMBER(10,0)

Foreign Keys:

LSC_1_LYR_1_FK
LYR_LAYER_ID = VDHH_LAYERS.LAYER_ID
LYR_SMP_SAMPLE_ID = VDHH_LAYERS.SMP_SAMPLE_ID

Indexes:

LSC_LYR_FK_I
LYR_LAYER_ID
LYR_SMP_SAMPLE_ID

Notes:

From SA_LAYER_SL_SPECIE1-7, SA_LAYER_SL_SPPCT1-7 and

SA_LAYER_SL_PREDOM1-7

Table: VDHH_PLOTS*Description:*

Information associated with a plot within a sample

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	PLOT_COUNT_ID <i>Count Plot ID. Must be A, B, or F(ull).</i>	NOT NULL	VARCHAR2(1)
2	ELEVATION <i>Plot elevation (metres). Must be 0 to 5000 metres.</i>	NOT NULL	NUMBER(4)
* 3	PLOT_NO <i>Plot number</i>	NOT NULL	NUMBER(2)
4	SLOPE_PCT <i>Plot slope percent. Must be between 0 and 150. If Plot Aspect is 0, Plot Slope must also be 0. If Plot Aspect >0, Plot Slope must also be > 0.</i>	NOT NULL	NUMBER(3)
5	SITE_UNIT <i>Site unit.</i>	NULL	NUMBER(2)
6	SLOPE_POSITION <i>Plot slope position.</i>	NOT NULL	VARCHAR2(1)
7	ASPECT <i>Plot aspect (degrees).</i>	NOT NULL	NUMBER(3)
* 8	SMP_SAMPLE_ID	NOT NULL	NUMBER(10,0)

Foreign Keys:

PLT_1_SMP_1_FK
SMP_SAMPLE_ID = VDHH_SAMPLES.SAMPLE_ID

Indexes:

PLT_SMP_FK_I
SMP_SAMPLE_ID

Notes:

From DVHand Plot.dbf

Table: VDHH_SAMPLES**Description:**

Information relevant to the Net Volume Adjustment Factor sample as a whole

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 1	SAMPLE_ID	NOT NULL	NUMBER(10,0)
2	BEC_SITE_ASSOC <i>BEC site association.</i>	NULL	NUMBER(2)
3	SAMPLE_NO <i>Sample number.</i>	NOT NULL	NUMBER(3)
4	TSA <i>Timber supply area.</i>	NULL	NUMBER(2)
5	MEASMT_DATA_OWNER <i>Sample measurement data owner.</i>	NOT NULL	VARCHAR2(10)
6	BEC_SITE_SERIES <i>BEC site series.</i>	NULL	NUMBER(2)
7	BGC_ZONE_DATA_SOURCE <i>Biogeoclimatic zone data source.</i>	NULL	VARCHAR2(1)
8	SAMPLE_TYPE <i>Sample type. Can be D(ecay), V(olume) or B(oth). If it is D or V then the tree types must be the same. If it is b, the tree types can be a mixture of D and V.</i>	NOT NULL	VARCHAR2(1)
9	MAP_NO <i>Sample map number. If entered, the first three characters should be 82, 92, 93, 94, 102, 103, 104 or 114. The fourth character should be A to P and characters 5 to 8 should not add up to zero.</i>	NULL	VARCHAR2(8)
10	FLIGHT_NO <i>Flight number.</i>	NOT NULL	VARCHAR2(5)
11	BGC_ZONE <i>Biogeoclimatic zone.</i>	NULL	VARCHAR2(4)
12	NOTES <i>Notes regarding the sample.</i>	NULL	VARCHAR2(100)
13	BEC_SITE_PHASE <i>BEC site phase.</i>	NULL	VARCHAR2(1)
14	BEC_SITE_SUB_ASSOC <i>BEC site sub-association.</i>	NULL	NUMBER(1)
15	BGC_VARIANT <i>Biogeoclimatic variant.</i>	NULL	NUMBER(1)
16	UTM_NORTHING <i>Sample UTM co-ordinate - longitudinal.</i>	NOT NULL	NUMBER(7)
17	POLYGON_NO <i>Sample polygon - forest cover.</i>	NOT NULL	NUMBER(4)
18	MEASMT_CREW_MEMBER_#2 <i>Sample measurement crew member #2.</i>	NOT NULL	VARCHAR2(25)
19	MEASMT_CONTRACTOR <i>Sample measurement contractor.</i>	NOT NULL	VARCHAR2(10)
20	COAST_INTERIOR <i>C(oastal) or I(nterior) sample. Used for determining diameter for utilization top.</i>	NOT NULL	VARCHAR2(1)
21	PROJECT_NO <i>Sample project number.</i>	NULL	VARCHAR2(30)
22	UTM_EASTING <i>Sample UTM co-ordinate - latitudinal.</i>	NOT NULL	NUMBER(6)
23	BGC_SUB_ZONE <i>Biogeoclimatic sub plot zone.</i>	NULL	VARCHAR2(3)
24	REGION <i>Forestry region. Must be 1 to 88.</i>	NOT NULL	NUMBER(2)
25	UTM_ZONE <i>Sample UTM zone.</i>	NOT NULL	NUMBER(2)
26	BEC_SITE_TYPE <i>BEC site type.</i>	NULL	NUMBER(2)

Table: VDHH_SAMPLES (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
27	COLLECTION_PURPOSE	NOT NULL	VARCHAR2(15)
28	MEASMT_AGENCY	NOT NULL	VARCHAR2(1)
	<i>Sample measurement agency.</i>		
29	COMPARTMENT_LETTER	NOT NULL	VARCHAR2(1)
	<i>Sample letter. Valid codes are A to P.</i>		
30	AIR_PHOTO_NO	NOT NULL	NUMBER(3)
	<i>Aerial photograph number. Should be >= 1.</i>		
31	SAMPLE_DATE	NOT NULL	DATE
	<i>Date the sample was created. Must be greater than or equal to January 1, 1999.</i>		
32	BGC_PHASE	NULL	VARCHAR2(1)
	<i>Biogeoclimatic phase.</i>		
33	MEASMT_CREW_MEMBER_#1	NOT NULL	VARCHAR2(25)
	<i>Sample measurement crew member #1.</i>		
34	COMPARTMENT	NOT NULL	NUMBER(3)
	<i>Sample compartment number. Valid numbers are 1 to 206.</i>		
35	PROJECT_NAME	NOT NULL	VARCHAR2(100)
36	INSTALLATION	NOT NULL	NUMBER(3)
	<i>Installation. This attribute may be NULL which makes the REGION, COMPARTMENT, COMPARTMENT LETTER, INSTALLATION and SAMPLE NUMBER combination unsuitable for a primary key but okay for a unique key constraint. Therefore, the NVAF SAMPLES table must have a surrogate primary key.</i>		

Unique Constraints:

SMP_SMP1_UK
 REGION
 COMPARTMENT
 SAMPLE_NO
 COMPARTMENT_LETTER
 INSTALLATION

Notes:

From DVHand Sample.dbf

Table: VDHH_TREES**Description:**

Information associated with a tree within a plot

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
1	SPECIES <i>Tree species.</i>	NOT NULL	VARCHAR2(3)
2	AGE_CORRECTION <i>Age correction (years). Age correction plus stump age must be between 10 and 1500.</i>	NOT NULL	NUMBER(4)
3	SOUND_WOOD_ANNULAR_RADIUS <i>Annular radius of sound wood (cm). The sum of the radius of missing wood and the annular radius of sound wood must be $\geq DIB * 0.25$ and $\leq DIB * 0.75$.</i>	NOT NULL	NUMBER(5,1)
4	DBH13 <i>Diameter of tree measured at breast height which is 1.3 metres above the germination point. Measured in centimetres.</i>	NOT NULL	NUMBER(5,1)
5	HT_TO_BREAK <i>Height to break (metres). 0 if no break. If > 0, should be $>$ live crown height. If 0, diameter at break is 0.</i>	NULL	NUMBER(6,2)
6	TOTAL_AGE_AT_BH <i>Tree total age at breast height (after correction) (years).</i>	NOT NULL	NUMBER(4,0)
* 7	TREE_NO <i>Tree number. No business meaning.</i>	NOT NULL	NUMBER(4)
8	HEIGHT <i>Measured tree height in metres. Must be between 3 and 100 metres. Must be greater than height to base of live crown, utilization top and break height. Crown should start in lowest third of tree.</i>	NOT NULL	NUMBER(4,1)
9	COUNTED_STUMP_AGE <i>Counted stump age (years) excluding missing wood. Should be between 10 and 1500.</i>	NOT NULL	NUMBER(4,0)
10	STUMP_HT <i>Stump height (metres). Must be between 0 and 10.00.</i>	NOT NULL	NUMBER(5,2)
11	UTILIZATION_TOP_DIAM <i>Utilization top diameter (cm). Set up as 15 cm for coastal samples with a breast height age ≥ 121. Otherwise, 10 cm.</i>	NULL	NUMBER(2)
12	MISSING_WOOD_RADIUS <i>Radius of missing (decayed) wood (cm). Must be ≥ 0. Missing radius must be $\leq 0.90 * \text{stump DIB}$.</i>	NULL	NUMBER(5,1)
13	EST_STUMP_DIAM_INSIDE_BARK <i>Estimated stump DIB (cm). Use top DIB of segment below stump height.</i>	NOT NULL	NUMBER(5,1)
14	STUMP_AGE <i>Observed stump age in years. Must be between 10 and 1500.</i>	NULL	NUMBER(4)
15	HT_TO_LIVE_CROWN_BASE <i>Height to base of live crown measured in metres. Must be between 0.1 and 999.99.</i>	NOT NULL	NUMBER(6,2)
16	DBH_ASSESSMENT_TYPE <i>Diameter at breast height assessment type. Must be A(ctual) or E(stimated).</i>	NOT NULL	VARCHAR2(1)
17	NUM_VOL_SEGMT_IN_MAIN_LDR <i>Number of volume sections assigned to the main leader. If tree height $\geq 26.3\text{m}$ then 20 else 10.</i>	NOT NULL	NUMBER(2)
18	DIAM_INSIDE_BARK_AT_BREAK <i>Diameter inside bark at break (cm). 0 if no break. Must be $\leq DBH$.</i>	NULL	NUMBER(5,1)
19	NOTES <i>Tree comments.</i>	NULL	VARCHAR2(100)
20	TREE_TYPE <i>Tree type must be V(olume), D(ecay) or B(oth).</i>	NOT NULL	VARCHAR2(1)
* 21	PLT_SMP_SAMPLE_ID	NOT NULL	NUMBER(10,0)
* 22	PLT_PLOT_COUNT_ID <i>Count Plot ID. Must be A, B, or F(ull).</i>	NOT NULL	VARCHAR2(1)
* 23	PLT_PLOT_NO <i>Plot number</i>	NOT NULL	NUMBER(2)

Foreign Keys:

TR_1_PLT_1_FK
 PLT_PLOT_NO = VDHH_PLOTS.PLOT_NO
 PLT_SMP_SAMPLE_ID = VDHH_PLOTS.SMP_SAMPLE_ID
 PLT_PLOT_COUNT_ID = VDHH_PLOTS.PLOT_COUNT_ID

Table: VDHH_TREES (cont'd)*Indexes:*

TR_PLT_FK_I
PLT_PLOT_NO
PLT_SMP_SAMPLE_ID
PLT_PLOT_COUNT_ID

Notes:

From DVHand Tree.dbf

Table: VDHH_TREE_LEADERS**Description:**

Description of the primary leader and any secondary leader emanating from the primary leader. The data in this entity focuses on the leader as a whole and, for secondary leaders, the fork from which the leader emerges.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
1	PARENT_LEADER_NO <i>Parent leader number for this child leader.</i>	NULL	NUMBER(2,0)
2	UTILIZATION_HT <i>Utilization height for this leader. Must be >= 0. Must be < leader height. Must be > top fork height.</i>	NOT NULL	NUMBER(6,2)
3	TOP_FORK_PARENT_LEADER_DOB <i>Top fork parent leader diameter outside bark (cm). Used only for volume assessment. Must be between 0 and 999. Should be < bottom fork diameter outside bark.</i>	NULL	NUMBER(5,1)
4	DIAM_OVER_BARK_AT_FORK_BOTTOM <i>Diameter over bark at bottom of fork (cm). Must be between 0 and 999. Should be <= the previous lower section's top diameter with bark.</i>	NULL	NUMBER(5,1)
5	TOP_FORK_PARENT_LEADER_DIB#2 <i>Top fork parent leader diameter inside bark #2. Used for decay assessment only.</i>	NULL	NUMBER(5,1)
6	TOP_FORK_SECONDARY_LEADER_DOB <i>Top fork secondary leader diameter outside bark (cm). Used for volume assessment only. Must be between 0 and 999. Should be < parent leader top diameter outside bark.</i>	NULL	NUMBER(5,1)
* 7	TREE_LEADER_NO <i>Tree leader number. Primary leader = 1, secondary leader = 2, etc.</i>	NOT NULL	NUMBER(1)
8	HT_TO_FORK_TOP <i>Height of top of fork from which this child leader emerges above ground (metres).</i>	NULL	NUMBER(6,2)
9	TOP_FORK_PARENT_LEADER_DBT <i>Top fork parent leader double bark thickness (cm). Used only for volume assessment. Must be between 0 and 99.9. If a previous section exists, and it's first double bark thickness is > 0, then this double bark thickness should be within + or - 50% of the previous section's first double bark thickness.</i>	NULL	NUMBER(4,1)
10	TOP_FORK_SECONDARY_LEADER_DBT <i>Top fork secondary leader double bark thickness (cm). Used only for volume assessment. Must be between 0 and 99.9. If a previous section exists, and it's first double bark thickness is > 0, then this double bark thickness should be within + or - 50% of the previous section's first double bark thickness.</i>	NULL	NUMBER(4,1)
11	CHILD_VOLUME_WEDGE_SECTION_NO <i>Child volume wedge section number for this leader.</i>	NULL	NUMBER(2,0)
12	DOUBLE_BARK_THICKNESS <i>Double bark thickness at the bottom of the fork (cm). Must be between 0 and 99.9. If a previous section exists, and it's first double bark thickness is > 0, then this double bark thickness should be within + or - 50% of the previous section's first double bark thickness</i>	NULL	NUMBER(4,1)
13	HT_TO_FORK_BOTTOM <i>Height above ground of bottom of fork from which this child leader emerges (metres). If the leader's utilization top height > 0, then this bottom fork height must be < the child leader's utilization top height. If the leader's utilization top height = 0, then the bottom fork height must be < the child leader height.</i>	NULL	NUMBER(6,2)
14	HT_FROM_GROUND_TO_LEADER_TOP <i>The height from the ground of the top of this leader (metres). Must be < tree height.</i>	NOT NULL	NUMBER(6,2)
15	TOP_FORK_PARENT_LEADER_DIB#1 <i>Top fork parent leader diameter inside bark #1. Used for decay assessment only.</i>	NULL	NUMBER(5,1)
16	CHILD_DECAY_WEDGE_SECTION_NO <i>Child decay wedge section number for this leader.</i>	NULL	NUMBER(2,0)
17	PARENT_DECAY_SECTION_NO <i>Parent decay section number.</i>	NULL	NUMBER(2,0)
18	PARENT_VOLUME_SECTION_NO <i>Parent volume section number.</i>	NULL	NUMBER(2,0)
* 19	TR_TREE_NO <i>Tree number. No business meaning.</i>	NOT NULL	NUMBER(4)

Table: VDHH_TREE_LEADERS (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 20	TR_PLT_SMP_SAMPLE_ID	NOT NULL	NUMBER(10,0)
* 21	TR_PLT_PLOT_NO <i>Plot number</i>	NOT NULL	NUMBER(2)
* 22	TR_PLT_PLOT_COUNT_ID <i>Count Plot ID. Must be A, B, or F(ull).</i>	NOT NULL	VARCHAR2(1)

Foreign Keys:

TL_1_TR_1_FK
TR_TREE_NO = VDHH_TREES.TREE_NO
TR_PLT_PLOT_NO = VDHH_TREES.PLT_PLOT_NO
TR_PLT_SMP_SAMPLE_ID = VDHH_TREES.PLT_SMP_SAMPLE_ID
TR_PLT_PLOT_COUNT_ID = VDHH_TREES.PLT_PLOT_COUNT_ID

Indexes:

TL_TR_FK_I
TR_TREE_NO
TR_PLT_PLOT_NO
TR_PLT_SMP_SAMPLE_ID
TR_PLT_PLOT_COUNT_ID

Notes:

From DVHand TrLeader.dbf

Table: VDHH_TREE_LEADER_DECAY**Description:**

Description of a decay occurrence associated with a particular tree leader.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
1	PFS_TYPE_CD <i>Pits, flecks and spots type code. A code for the categorization of pits, flecks and spots or combinations thereof associated with the decay occurrence.</i>	NOT NULL	VARCHAR2(1)
2	ENTRANCE_CD <i>Entrance code. A code for the entrance of the decay or stain occurrence.</i>	NOT NULL	VARCHAR2(1)
3	PFS_NUM_CD <i>Pits, flecks and spots number code. A code for the qualification of the number of pits, flecks and spots associated with the decay occurrence.</i>	NOT NULL	VARCHAR2(1)
4	DEVELOPMENT_STAGE_CD <i>Development stage code. A code for the development stage of the decay or stain occurrence.</i>	NOT NULL	VARCHAR2(1)
5	TLD_TYPE <i>Decay or stain indicator. Must be D(ecay), S(tain) or V(oid).</i>	NOT NULL	VARCHAR2(1)
6	DECAY_STAIN_COLOUR_CD <i>Decay stain colour code. A code for the colour of the decay or stain occurrence.</i>	NOT NULL	VARCHAR2(1)
7	SEPARATE_MIXED <i>Whether the decay elements are separate or mixed.</i>	NOT NULL	VARCHAR2(1)
8	DECAY_SHAPE_CD <i>Decay shape code. The shape of the cross-section of a body of decay.</i>	NOT NULL	VARCHAR2(1)
9	PFS_SHADE_CD <i>Pits, flecks and spots shade code. A code for the predominant shading and/or patterning of pits, flecks and spots associated with the decay occurrence.</i>	NOT NULL	VARCHAR2(1)
10	ORGANISM_CD <i>Decay or stain organism code. A code for the organism which caused the decay occurrence.</i>	NOT NULL	VARCHAR2(6)
11	MYCELIUM_SHADE_CD <i>Mycelium shade code. A code for the predominant shading and/or patterning of the mycelium associated with the decay occurrence.</i>	NOT NULL	VARCHAR2(1)
12	WOOD_STRENGTH_CD <i>Wood strength code. A code for the wood strength characteristics associated with the decay occurrence.</i>	NOT NULL	VARCHAR2(1)
13	DECAY_SHADE_CD <i>Decay shade code. A code for the patterning and/or shading of the decay or stain occurrence.</i>	NOT NULL	VARCHAR2(1)
14	DECAY_TEXTURE_CD <i>Decay texture code. A code for the textural characteristics of the decay occurrence.</i>	NOT NULL	VARCHAR2(1)
15	PFS_SHAPE_CD <i>Pits, flecks and spots shape code. A code for the shape of pits, flecks and spots associated with the decay occurrence.</i>	NOT NULL	VARCHAR2(1)
16	MYCELIUM_TYPE_CD <i>Mycelium type code. A code for the physical description of the mycelium associated with the decay occurrence.</i>	NOT NULL	VARCHAR2(1)
17	MYCELIUM_COLOUR_CD <i>Mycelium colour code. A code for the predominant colouration of the mycelium associated with the decay occurrence.</i>	NOT NULL	VARCHAR2(1)
18	PFS_COLOUR_CD <i>Pits, flecks and spots colour code. A code for the predominant colouration of the pits, flecks and spots associated with the decay occurrence.</i>	NOT NULL	VARCHAR2(1)
* 19	DECAY_STAIN_ID <i>Decay/stain id number. An assigned number to identify a specific decay or stain occurrence in the tree leader. The number is unique for the tree although occurrences are specific to a leader. Thus a body of decay or stain that spans multiple leaders is recorded as multiple occurrences.</i>	NOT NULL	NUMBER(2)
* 20	TL_TR_TREE_NO <i>Tree number. No business meaning.</i>	NOT NULL	NUMBER(4)
* 21	TL_TR_PLT_SMP_SAMPLE_ID	NOT NULL	NUMBER(10,0)
* 22	TL_TR_PLT_PLOT_NO <i>Plot number</i>	NOT NULL	NUMBER(2)
* 23	TL_TREE_LEADER_NO	NOT NULL	NUMBER(1)

Table: VDHH_TREE_LEADER_DECAY (cont'd)*Columns:*

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
	<i>Tree leader number. Primary leader = 1, secondary leader = 2, etc.</i>		
* 24	TL_TR_PLT_PLOT_COUNT_ID	NOT NULL	VARCHAR2(1)
	<i>Count Plot ID. Must be A, B, or F(ull).</i>		

Foreign Keys:

TLD_1_TL_1_FK
TL_TREE_LEADER_NO = VDHH_TREE_LEADERS.TREE_LEADER_NO
TL_TR_TREE_NO = VDHH_TREE_LEADERS.TR_TREE_NO
TL_TR_PLT_PLOT_NO = VDHH_TREE_LEADERS.TR_PLT_PLOT_NO
TL_TR_PLT_SMP_SAMPLE_ID = VDHH_TREE_LEADERS.TR_PLT_SMP_SAMPLE_ID
TL_TR_PLT_PLOT_COUNT_ID = VDHH_TREE_LEADERS.TR_PLT_PLOT_COUNT_ID

Indexes:

TLD_TL_FK_I
TL_TREE_LEADER_NO
TL_TR_TREE_NO
TL_TR_PLT_PLOT_NO
TL_TR_PLT_SMP_SAMPLE_ID
TL_TR_PLT_PLOT_COUNT_ID

Notes:

From DVHand TI_Decay.dbf

Table: VDHH_TREE_SEGMENTS**Description:**

Description of an assessment of a section or segment of a tree
associated with a parent leader.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
1	SECTION_LENGTH <i>Section length (metres).</i>	NOT NULL	NUMBER(5,2)
2	FIRST_LEADER_SECTION_WITHIN <i>The first section number on the leader to which this section belongs. Volume and decay sectioning being different. Volume section entries may well have different numbering to decay entries.</i>	NOT NULL	NUMBER(2,0)
3	SEGMENT_TYPE <i>Segment type. For sections 1 - 5, the type is B(ase). For sections 6 and above, the type is V(olume) or D(ecay).</i>	NOT NULL	VARCHAR2(2)
4	FORK_PRESENT <i>True if fork present in this section, otherwise false.</i>	NOT NULL	VARCHAR2(1)
5	CUMULATIVE_TREE_LENGTH <i>Cumulative tree length from bottom of lowest section on the leader to the top of this section (metres). Entered for decay assessment, calculated for volume assessment.</i>	NOT NULL	NUMBER(6,2)
6	BARK_THICKNESS_SUM <i>The sum of the two bark thickness measurements taken at opposite sides of the tree at the top of the tree section (cm).</i>	NULL	NUMBER(4,1)
* 7	ASSESSMENT_TYPE <i>Character indicating D(ecay) or V(olume) assessment record. For trees on which both volume and decay assessments are made. The base segments (numbers 1 through 5) are identical for both volume and decay and are duplicated for each of these two assessments.</i>	NOT NULL	VARCHAR2(1)
8	FIRST_DIAMETER_INSIDE_BARK <i>First observed diameter inside bark at section top (cm).</i>	NULL	NUMBER(5,1)
9	LAST_SECTION <i>True if this section is the last segment in the leader, else false.</i>	NOT NULL	VARCHAR2(1)
10	PARENT_LEADER_NO <i>Parent leader number if this section is not in the primary leader. 0 if this section is in the primary leader.</i>	NULL	NUMBER(1,0)
11	TOP_DIAM_WITH_BARK <i>The diameter at the top of the tree section including the bark (cm). Used only for volume assessment.</i>	NULL	NUMBER(5,1)
* 12	SEGMENT_NO <i>Segment or section number. Sections are internally numbered from the base of the stem up the main leader, thence along each secondary, etc. leader. The 5 base sections (1 - 5) are identical for both Volume and Decay. Section 1 is used for that part of the tree that occurs below the high side. Sections higher than 5 are internally numbered separately for Volume and Decay assessment purposes. The section on the parent leader where a fork occurs is considered a normal section. The section of a secondary leader that is below the secondary leader top fork height and joins the parent section is termed the wedge section.</i>	NOT NULL	NUMBER(3)
13	SECOND_DIAMETER_INSIDE_BARK <i>Second observed diameter inside bark at section top (cm).</i>	NULL	NUMBER(5,1)
14	PARENT_SECTION_NO <i>Parent section number if this section is not in the primary leader. 0 if this section is in the primary leader.</i>	NULL	NUMBER(2,0)
* 15	TL_TREE_LEADER_NO <i>Tree leader number. Primary leader = 1, secondary leader = 2, etc.</i>	NOT NULL	NUMBER(1)
* 16	TL_TR_PLT_PLOT_COUNT_ID <i>Count Plot ID. Must be A, B, or F(ull).</i>	NOT NULL	VARCHAR2(1)
* 17	TL_TR_TREE_NO <i>Tree number. No business meaning.</i>	NOT NULL	NUMBER(4)
* 18	TL_TR_PLT_SMP_SAMPLE_ID	NOT NULL	NUMBER(10,0)
* 19	TL_TR_PLT_PLOT_NO <i>Plot number</i>	NOT NULL	NUMBER(2)

Foreign Keys:

TS_1_TL_1_FK

TL_TREE_LEADER_NO = VDHH_TREE_LEADERS.TREE_LEADER_NO

TL_TR_TREE_NO = VDHH_TREE_LEADERS.TR_TREE_NO

Table: VDHH_TREE_SEGMENTS (cont'd)*Foreign Keys:*

TL_TR_PLT_PLOT_NO = VDHH_TREE_LEADERS.TR_PLT_PLOT_NO
TL_TR_PLT_SMP_SAMPLE_ID = VDHH_TREE_LEADERS.TR_PLT_SMP_SAMPLE_ID
TL_TR_PLT_PLOT_COUNT_ID = VDHH_TREE_LEADERS.TR_PLT_PLOT_COUNT_ID

Indexes:

TS_TL_FK_I
TL_TREE_LEADER_NO
TL_TR_TREE_NO
TL_TR_PLT_PLOT_NO
TL_TR_PLT_SMP_SAMPLE_ID
TL_TR_PLT_PLOT_COUNT_ID

Notes:

From DVHand Tr_Seg.dbf

Table: VDHH_TREE_SEGMENT_DECAY**Description:**

Description of a decay instance which must be related to a parent decay occurrence.

Columns:

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
1	TREE_TOP_TO_DECAY_TOP_HT <i>The distance from the top of a tree section to the top of the major body of decay within the tree section (m). Must be < the section length. If a decay instance width and/or breadth > 0, then this must be 0 (indicating that the decay instance extends to the top of the section).</i>	NULL	NUMBER(6,2)
2	DECAY_LENGTH <i>The length of the decay within the section (m). It may reach all the way to the top and/or the bottom of the section.</i>	NOT NULL	NUMBER(6,2)
3	INNER_WIDTH <i>The distance across one dimension of the inner cross-section of a body of decay within the section (cm). The inner width is measured along a dimension perpendicular to the inner width. If > 0, must be <= inner breadth. If inner width or inner breadth > 0, decay top height must be 0. If decay not continued from previous section, inner breadth must be > 0.</i>	NOT NULL	NUMBER(5,1)
4	CONTN_FROM_PREV_SECTION <i>Decay instance is a continuation from previous section's instance.</i>	NOT NULL	VARCHAR2(1)
5	CONTD_TO_NEXT_SECTION <i>Decay instance is continued to the next section's instance.</i>	NOT NULL	VARCHAR2(1)
6	INNER_BREADTH <i>The distance across one dimension of the inner cross-section of a body of decay within the section (cm). The inner breadth width is measured along a dimension perpendicular to the inner width. If > 0, must be <= inner width. If inner width or inner breadth > 0, decay top height must be 0. If decay not continued from previous section, inner width must be > 0.</i>	NOT NULL	NUMBER(5,1)
7	OUTER_BREADTH <i>The distance across one dimension of the outer most cross section of a body of decay within the section (cm). The outer breadth is measured along a dimension perpendicular to the outer width. If > 0, must be >= outer width. Outer breadth must be <= current section's second diameter inside bark. Outer breadth must be > inner breadth.</i>	NULL	NUMBER(5,1)
8	OUTER_WIDTH <i>The distance across one dimension of the outer most cross section of a body of decay within the section (cm). The outer width is measured along a dimension perpendicular to the outer breadth. If > 0, must be >= outer breadth. Outer width must be <= current section's first diameter inside bark. Outer width must be > inner width.</i>	NULL	NUMBER(5,1)
9	DECAY_PCT <i>If decay in this section is mixed, this is the percentage that this part of the mixed decay contributes to the whole in this section.</i>	NOT NULL	NUMBER(3)
10	TREE_TOP_TO_DECAY_BOTTOM_HT <i>The distance from the top of a tree section to the bottom of the major body of decay within the tree section (m). Must be >= distance to top of decay. Must be <= section length.</i>	NULL	NUMBER(6,2)
* 11	TLD_TL_TR_PLT_SMP_SAMPLE_ID	NOT NULL	NUMBER(10,0)
* 12	TLD_DECAY_STAIN_ID <i>Decay/stain id number. An assigned number to identify a specific decay or stain occurrence in the tree leader. The number is unique for the tree although occurrences are specific to a leader. Thus a body of decay or stain that spans multiple leaders is recorded as multiple occurrences.</i>	NOT NULL	NUMBER(2)
* 13	TLD_TL_TR_PLT_PLOT_COUNT_ID <i>Count Plot ID. Must be A, B, or F(ull).</i>	NOT NULL	VARCHAR2(1)
* 14	TLD_TL_TR_PLT_PLOT_NO <i>Plot number</i>	NOT NULL	NUMBER(2)
* 15	TLD_TL_TR_TREE_NO <i>Tree number. No business meaning.</i>	NOT NULL	NUMBER(4)
* 16	TLD_TL_TREE_LEADER_NO <i>Tree leader number. Primary leader = 1, secondary leader = 2, etc.</i>	NOT NULL	NUMBER(1)
* 17	TS_TL_TR_PLT_PLOT_NO <i>Plot number</i>	NOT NULL	NUMBER(2)
* 18	TS_TL_TR_PLT_PLOT_COUNT_ID <i>Count Plot ID. Must be A, B, or F(ull).</i>	NOT NULL	VARCHAR2(1)

Table: VDHH_TREE_SEGMENT_DECAY (cont'd)**Columns:**

<u>Seq.</u>	<u>Column</u>	<u>Nulls?</u>	<u>Type</u>
* 19	TS_ASSESSMENT_TYPE <i>Character indicating D(ecay) or V(olume) assessment record. For trees on which both volume and decay assessments are made. The base segments (numbers 1 through 5) are identical for both volume and decay and are duplicated for each of these two assessments.</i>	NOT NULL	VARCHAR2(1)
* 20	TS_SEGMENT_NO <i>Segment or section number. Sections are internally numbered from the base of the stem up the main leader, thence along each secondary, etc. leader. The 5 base sections (1 - 5) are identical for both Volume and Decay. Section 1 is used for that part of the tree that occurs below the high side. Sections higher than 5 are internally numbered separately for Volume and Decay assessment purposes. The section on the parent leader where a fork occurs is considered a normal section. The section of a secondary leader that is below the secondary leader top fork height and joins the parent section is termed the wedge section.</i>	NOT NULL	NUMBER(3)
* 21	TS_TL_TR_TREE_NO <i>Tree number. No business meaning.</i>	NOT NULL	NUMBER(4)
* 22	TS_TL_TREE_LEADER_NO <i>Tree leader number. Primary leader = 1, secondary leader = 2, etc.</i>	NOT NULL	NUMBER(1)
* 23	TS_TL_TR_PLT_SMP_SMP_ID	NOT NULL	NUMBER(10,0)

Foreign Keys:

TSD_1_TLD_1_FK

TLD_DECAY_STAIN_ID = VDHH_TREE_LEADER_DECAY.DECAY_STAIN_ID
 TLD_TL_TREE_LEADER_NO = VDHH_TREE_LEADER_DECAY.TL_TREE_LEADER_NO
 TLD_TL_TR_TREE_NO = VDHH_TREE_LEADER_DECAY.TL_TR_TREE_NO
 TLD_TL_TR_PLT_PLOT_NO = VDHH_TREE_LEADER_DECAY.TL_TR_PLT_PLOT_NO
 TLD_TL_TR_PLT_SMP_SAMPLE_ID = VDHH_TREE_LEADER_DECAY.TL_TR_PLT_SMP_SAMPLE_ID
 TLD_TL_TR_PLT_PLOT_COUNT_ID = VDHH_TREE_LEADER_DECAY.TL_TR_PLT_PLOT_COUNT_ID

TSD_1_TS_1_FK

TS_ASSESSMENT_TYPE = VDHH_TREE_SEGMENTS.ASSESSMENT_TYPE
 TS_SEGMENT_NO = VDHH_TREE_SEGMENTS.SEGMENT_NO
 TS_TL_TREE_LEADER_NO = VDHH_TREE_SEGMENTS.TL_TREE_LEADER_NO
 TS_TL_TR_TREE_NO = VDHH_TREE_SEGMENTS.TL_TR_TREE_NO
 TS_TL_TR_PLT_PLOT_NO = VDHH_TREE_SEGMENTS.TL_TR_PLT_PLOT_NO
 TS_TL_TR_PLT_SMP_SMP_ID = VDHH_TREE_SEGMENTS.TL_TR_PLT_SMP_SAMPLE_ID
 TS_TL_TR_PLT_PLOT_COUNT_ID = VDHH_TREE_SEGMENTS.TL_TR_PLT_PLOT_COUNT_ID

Indexes:

TSD_TLD_FK_I

TLD_DECAY_STAIN_ID
 TLD_TL_TREE_LEADER_NO
 TLD_TL_TR_TREE_NO
 TLD_TL_TR_PLT_PLOT_NO
 TLD_TL_TR_PLT_SMP_SAMPLE_ID
 TLD_TL_TR_PLT_PLOT_COUNT_ID

TSD_TS_FK_I

TS_ASSESSMENT_TYPE
 TS_SEGMENT_NO
 TS_TL_TREE_LEADER_NO
 TS_TL_TR_TREE_NO
 TS_TL_TR_PLT_PLOT_NO
 TS_TL_TR_PLT_SMP_SMP_ID
 TS_TL_TR_PLT_PLOT_COUNT_ID

Notes:

From DVHand Ts_Decay.dbf