The following are related attributes:

* CAS: stand\_structure, num\_of\_layers
* LYR: structure\_per, structure\_range, layer, layer\_rank
* NFL: structure\_per, structure\_range, layer, layer\_rank
* DST: layer

These four attributes are lumped together for this discussion since they are related to each other. In addition, **structure\_per**, **layer** and **layer\_rank** occur in more than one category i.e., **layer** occurs in the LYR, NFL, and DST attribute tables while **structure\_per** and **layer\_rank** occurs in the LYR and NFL tables. In those cases, we should document differences and similarities in how each is calculated.

* **stand\_structure** - there are 2 additional classes that weren’t in the original specifications: U and V. Why were they created and what are there definitions?
* **structure\_per** (LYR, NFL) - Not used consistently. In all of Canada, it is recorded as 0, 1-9, 10-100. In AB uses values 1-9 for LYR and NFL. Not used in BC since only one layer used. Not used in NB even though complex stand\_structure are indicated in CAS\_04.
* **structure\_range** (LYR, NFL) - Why was this attribute dropped? Only used when stand\_structure is horizontal (AB, NT, WB?, YT?)
* **layer** (LYR, NFL, DST) - Should we separate layers into different tables? For example, for 2 layers (e.g., NB01) we would use 2 tables i.e., nb01\_lyr1.csv and nb01\_lyr2.csv. This attribute only takes values 1-7 (LYR), 1-7 (NFL), and 1-2 (DST) across all inventories.
* **layer\_rank** (LYR, NFL) - is this variable useful? Is there any inventory where lyr and lyr\_rank are not equivalent? This attribute only takes values 1-7 (LYR) and 1-7 (NFL) across all inventories.

STAND\_STRUCTURE

Vertical and horizontal structures never occur in the same inventory.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Inventory | S | M | C | H |
| AB | 1 | 1 | 1 | 1 |
| BC | 1 | 1 | 1 |  |
| NB |  |  |  |  |
| NT |  |  |  |  |
| QC |  |  |  |  |

NUM\_OF\_LAYERS

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Inventory | Standard | 1 | 2 | 2+ |  |
| AB | Phase 3 | 1 | 1 |  |  |
|  | AVI |  |  |  |  |
| BC | FCI | 1 | 1 |  |  |
|  | VRI | 1 | 1 | 1 |  |
| NB | pre 2003 | 1 |  |  |  |
|  | 2003 |  | 1 |  |  |
| NT |  |  |  |  |  |
| QC |  |  |  |  |  |

STRUCTURE\_PER

STRUCTURE\_RANGE

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Inventory | S | M | C | H |
| AB |  |  |  |  |
| BC |  |  |  |  |
| NB |  |  |  |  |
| NT |  |  |  |  |
| QC |  |  |  |  |

LAYER (LYR, NFL)

Possibilities:

* LYR 1, LYR 2
* LYR 1, NFL 2
* NFL 1, NFL 2

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Inventory | S | M | C | H |
| AB |  |  |  |  |
| BC |  |  |  |  |
| NB |  |  |  |  |
| NT |  |  |  |  |
| QC |  |  |  |  |

LAYER\_RANK

CAS04

**Table 1**. Values used in CAS\_04.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Value** | **Description** | **CAS\_04\*** | **AB06, 16** | **BC** | **NB** |
| S | Single layered - vegetation within a polygon where the heights do not vary significantly. | 21,585,343 | 63,644 | 4,402144 | 762,295 |
| M | Multilayered - two or more distinct layers of vegetation occur. Each layer is significant, clearly observable and evenly distributed. Each layer is assigned an independent description. | 1,640,199 | 61,892 |  | 130,194 |
| C | Complex - stands exhibit a high variation of heights with no single | 275,405 | 580 |  | 34,688 |
| H | Horizontal - two or more significant strata within the same polygon; at least one of the strata is too small to delineate as a separate H polygon. | 80,616 | 452 |  |  |
| U |  | 5,169 |  |  |  |
| V |  | 4,118,005 |  |  |  |
| -1111 |  | 1,409,885 | 5374 |  |  |
| -9999 |  | 18 | 18 |  |  |

\* Counts extracted from the CAS\_04 PostgreSQL database=foundry04, schema=cas\_04, table=lyr