# SK UTM – translation rules for SPECIES and SPECISE\_PER

## Source Attributes

### sp10, sp11, sp12

* Predominant species #1, #2, and #3.

### sp20, sp21

* Secondary species #1 and #2

### sa

* species association. Polygon level attribute that can take the following values:
  + S – softwood >= 75%
  + H – hardwood >= 75%
  + SH – softwood/hardwood where 75% > softwood > 50%
  + HS – hardwood/softwood where 75% > hardwood > 50%

## Translation rules

* We define a new species level variable, TYPE as follows:
  + SOFTWOOD if species code is ‘WS’, ‘BS’, ‘JP’, ‘BF’, ‘TL’, or ‘LP’.
  + HARDWOOD if species code is ‘GA’, ‘TA’, ‘BP’, ‘WB’, ‘WE’, ‘MM’, or ‘BO’.
* Most rules for MIXEDWOOD stands use either ‘=’ to indicate that TYPEs match between two species, or ‘!=’ to indicate TYPEs do not match.

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| --- | --- | --- | --- | --- | --- |
| **Species association** | **Number of species** | **Number of Predominant species** | **Number of Secondary species** | **Other rules** | **SPECIES PERCENT (1, 2, 3, 4, 5)** |
| HARDWOOD/SOFTWOOD  sa is S or H | 1 | 1 | 0 |  | (100, 0, 0, 0, 0) |
| 2 | 1 | 1 |  | (80, 0, 0, 20, 0) |
| 2 | 2 | 0 | sp10 is not JP and sp11 is not BS.  OR  sp11 is not BS or JP. | (70, 30, 0, 0, 0) |
| 2 | 2 | 0 | sp10 is JP or BS  AND  sp11 is JP or BS | (60, 40, 0, 0, 0) |
| 3 | 3 | 0 |  | (40, 30, 30, 0, 0) |
| 3 | 2 | 1 |  | (50, 30, 0, 20, 0) |
| 3 | 1 | 2 |  | (70, 0, 0, 20, 10) |
| 4 | 3 | 1 |  | (50, 20, 20, 10, 0) |
| 4 | 2 | 2 |  | (40, 30, 0, 20, 10) |
| 5 | 3 | 2 |  | (40, 20, 20, 10, 10) |
| MIXEDWOOD  sa is SH or HS | 2 | 2 | 0 |  | (60, 40, 0, 0, 0) |
| 2 | 1 | 1 |  | (65, 0, 0, 35, 0) |
| 3 | 2 | 1 | sp10 TYPE != sp11 TYPE  AND  sp11 TYPE = sp20 TYPE | (60, 30, 0, 10, 0) |
| 3 | 2 | 1 | sp10 TYPE != sp11 TYPE  AND  sp10 TYPE = sp20 TYPE | (40, 40, 0, 20, 0) |
| 3 | 2 | 1 | sp10 TYPE = sp11 TYPE  AND  sp10 TYPE != sp20 TYPE | (50, 20, 0, 30, 0) |
| 3 | 1 | 2 | sp10 TYPE != sp20 TYPE  AND  sp20 TYPE = sp21 TYPE | (60, 0, 0, 30, 10) |
| 3 | 1 | 2 | sp10 TYPE != sp20 TYPE  AND  sp10 TYPE = sp21 TYPE | (40, 0, 0, 40, 20) |
| 3 | 3 | 0 | sp10 TYPE != sp11 TYPE  AND  sp11 TYPE = sp12 TYPE | (60, 30, 10, 0, 0) |
| 3 | 3 | 0 | sp10 TYPE != sp11 TYPE  AND  sp10 TYPE = sp12 TYPE | (40, 40, 20, 0, 0) |
| 4 | 2 | 2 | sp10 TYPE = sp20 TYPE  AND  sp11 TYPE = sp21 TYPE  AND  sp10 TYPE != sp11 TYPE | (30, 30, 0, 20, 20) |
| 4 | 2 | 2 | sp10 TYPE = sp20 TYPE  AND  sp10 TYPE = sp21 TYPE  AND  sp10 TYPE != sp11 TYPE | (40, 30, 0, 20, 10) |
| 4 | 2 | 2 | sp10 TYPE != sp11 TYPE  AND  sp11 TYPE = sp20 TYPE  AND  sp11 TYPE = sp21 TYPE | (50, 30, 0, 10, 10) |
| 4 | 2 | 2 | sp10 TYPE = sp11 TYPE  AND  sp20 TYPE = sp21 TYPE  AND  sp10 TYPE != sp20 TYPE | (30, 20, 0, 30, 20) |
| 4 | 2 | 2 | sp10 TYPE != sp12 TYPE  AND  sp12 TYPE = sp20 TYPE  AND  sp20 TYPE = sp21 TYPE | (50, 0, 20, 20, 10)  WE NEED TO DECIDE ABOUT THIS ONE |
| 4 | 3 | 1 | sp10 TYPE = sp12 TYPE  AND  sp11 TYPE = sp20 TYPE  AND  sp10 TYPE != sp11 TYPE | (30, 30, 20, 20, 0) |
| 4 | 3 | 1 | sp10 TYPE = sp12 TYPE  AND  sp10 TYPE = sp20 TYPE  AND  sp10 TYPE != sp11 TYPE | (40, 30, 20, 10, 0) |
| 4 | 3 | 1 | sp10 TYPE != sp11 TYPE  AND  sp11 TYPE = sp12 TYPE  AND  Sp11 TYPE = sp20 TYPE | (50, 30, 10, 10, 0) |
| 4 | 3 | 1 | sp10 TYPE = sp11 TYPE  AND  sp11 TYPE = sp12 TYPE  AND  sp10 TYPE != sp20 TYPE | (40, 20, 10, 30, 0) |
| 5 | 3 | 2 | sp10 TYPE != sp11 TYPE  AND  sp10 TYPE = sp12 TYPE  AND  sp10 TYPE = sp20 TYPE  AND  sp10 TYPE = sp21 TYPE | (30, 30, 20, 10, 10) |
| 5 | 3 | 2 | sp10 TYPE != sp11 TYPE  AND  sp10 TYPE = sp12 TYPE  AND  sp10 TYPE = sp20 TYPE  AND  sp11 TYPE = sp21 TYPE | (30, 30, 20, 10, 10) |
| 5 | 3 | 2 | sp10 TYPE = sp12 TYPE  AND  sp11 TYPE = sp20 TYPE  AND  sp11 TYPE = sp21 TYPE  AND  sp10 TYPE != sp11 TYPE | (30, 30, 20, 10, 10) |
| 5 | 3 | 2 | sp10 TYPE != sp11 TYPE  AND  sp11 TYPE = sp12 TYPE  AND  sp11 TYPE = sp20 TYPE  AND  sp11 TYPE = sp21 TYPE | (40, 30, 10, 10, 10) |
| 5 | 3 | 2 | sp10 TYPE = sp11 TYPE  AND  sp11 TYPE = sp12 TYPE  AND  sp20 TYPE = sp21 TYPE  AND  sp10 TYPE != sp20 TYPE | (30, 20, 10, 30, 10) |

**From Cosco Specifications 2011**:

