

Database Code: TV075

Title:Vegetative Phenology observations at the Andrews Experimental Forest, 2009 - Present

Abstract:

The vegetation phenology study is part of a larger effort to understand the influence of climate variability and change on trophic interactions in mountainous terrain. Phenology Core Sites were selected to capture the variation in elevation and topography across Lookout Creek watershed. Priority was given to sites with long-term air and soil temperature records (Reference stands) and previous phenology observations (Reference stands and stream gauging stations). Sixteen sites were established. At each site five individuals of from each 18 common species (if occurring within the site) from tree, shrub and herb layers were mapped and marked for observation. Weekly observations are conducted each year beginning in March or April depending on winter conditions and snowpack and continuing through June or July. Plant vegetative and reproductive phenophases are scored using a numbered system adapted to each plant species.

Keywords:Air temperature;Biological diversity;Climate change;Environmental gradients;Forest ecology;Microclimate;Phenology;Plant community ecology;Populations;

Date data commenced:2009-03-01

Date data terminated:2015-10-08

Principal Investigator:Mark D Schulze

List of Entities:

1. Vegetative Phenology Observations
2. Vegetative Phenology Flower and Fruit Estimates
3. Vegetative Phenology Text Comments
4. Vegetative Phenology Plant Locations

1. Vegetative Phenology Observations

Plant observations

Attribute List:

| | | | | | | | |
|-------------|---|---|--------------|-------|-----------------------|-----------------------|------------|
| DBC CODE | N | N | char(5) | enum | | | |
| ENTITY | N | N | numeric(2,0) | range | 1.0000 | 1.0000 | number |
| YEAR | N | Y | numeric(4,0) | range | 2009.0000 | 2015.0000 | YYYY |
| PLOT | Y | N | char(5) | place | | | |
| TAG | Y | N | numeric(4,0) | range | 227.0000 | 9999.0000 | number |
| SAMPLE DATE | Y | N | datetime | range | 4/14/2009 12:00:00 AM | 10/8/2015 12:00:00 AM | YYYY-MM-DD |
| SPECIES | N | N | char(6) | taxa | | | |
| VEG_CODE | N | N | char(9) | enum | | | |
| VEG_COM | N | Y | char(8) | enum | | | |
| RPRO_CODE | N | N | char(9) | enum | | | |
| RPRO_COM | N | N | char(8) | enum | | | |

2. Vegetative Phenology Flower and Fruit Estimates

Fruit and Flower maximum estimates

Attribute List:

| | | | | | | | |
|----------|---|---|--------------|-------|--------|--------|--------|
| DBC CODE | N | N | char(5) | enum | | | |
| ENTITY | N | N | numeric(2,0) | range | 2.0000 | 2.0000 | number |

| | | | | | | | |
|------------|---|---|--------------|-------|-----------|-----------|--------|
| PLOT | Y | N | char(5) | place | | | |
| TAG | Y | N | numeric(4,0) | range | 237.0000 | 9220.0000 | number |
| YEAR | Y | N | numeric(4,0) | range | 2010.0000 | 2010.0000 | YYYY |
| SPECIES | N | N | char(6) | taxa | | | |
| OLD_LEAVES | N | Y | numeric(4,1) | range | 0.0000 | 35.0000 | number |
| NEW_LEAVES | N | Y | numeric(4,0) | range | 0.0000 | 50.0000 | number |
| FLOWERS | N | Y | numeric(4,0) | range | 0.0000 | 900.0000 | number |
| FRUIT | N | Y | numeric(4,0) | range | 0.0000 | 450.0000 | number |

3. Vegetative Phenology Text Comments

observation text comments

Attribute List:

| | | | | | | | |
|------------|---|---|--------------|----------|-----------|-----------|------------|
| DBCODE | N | Y | char(5) | enum | | | |
| ENTITY | N | Y | numeric(2,0) | range | 3.0000 | 3.0000 | number |
| YEAR | N | Y | numeric(4,0) | range | 2009.0000 | 2015.0000 | YYYY |
| PLOT | Y | N | char(5) | place | | | |
| SAMPLEDATE | Y | N | datetime | range | 4/14/2009 | 7/6/2015 | YYYY-MM-DD |
| | | | | | 12:00:00 | 12:00:00 | |
| | | | | | AM | AM | |
| COMMENT_ID | Y | N | numeric(2,0) | range | 1.0000 | 12.0000 | number |
| COMMENT | N | N | char(254) | freetext | | | |
| COMMENT2 | N | Y | char(254) | freetext | | | |

4. Vegetative Phenology Plant Locations

Distance and bearing from plot center point for all plants

Attribute List:

| | | | | | | | |
|----------|---|---|--------------|-------|----------|-----------|-----------|
| DBCODE | N | N | char(5) | enum | | | |
| ENTITY | N | N | numeric(2,0) | range | 4.0000 | 4.0000 | number |
| PLOT | Y | N | char(5) | place | | | |
| TAG | Y | N | numeric(4,0) | range | 227.0000 | 9999.0000 | number |
| SPECIES | Y | N | char(6) | taxa | | | |
| DISTANCE | N | Y | numeric(4,1) | range | 0.0000 | 35.0000 | m |
| ANGLE | N | Y | numeric(3,0) | range | 0.0000 | 360.0000 | deg az |

Attributes Definitions:

ANGLE

Bearing angle from plot center to study plant (declination 16 East)

COMMENT

Non-conforming observation at plot

COMMENT_ID

Comment number by plot by sample date

COMMENT2

Continuation of non-conforming observation at plot

DBC CODE

FSDB Database Code

DISTANCE

Distance in meters from plot center to study plant

ENTITY

Entity number

FLOWERS

Peak number of flowers

FRUIT

Peak number of fruit

NEW_LEAVES

Maximum number of new leaves

OLD_LEAVES

Maximum number of old leaves

PLOT

Site code

RPRO_CODE

Code of observed reproductive stage

RPRO_COM

Data comment code; applies to RPRO

SAMPLEDATE

Date of Observation

SPECIES

Plant species code

TAG

Plant tag number. Negative tag numbers are temporary tags

VEG_CODE

Code of observed vegetative stage

VEG_COM

Data comment code, applies to VEG_CODE

YEAR

Year of Observation

Enumerated Domains:

Enumerated Domain for Attribute: DBCODE

TV075

FSDB Database Code Terrestrial Vegetation 75

Enumerated Domain for Attribute: VEG_CODE

| | |
|-----------|--|
| ABAM_01.0 | ABAM Dormant - buds firm, brownish; no green visible through scales |
| ABAM_02.0 | ABAM Buds swollen, scales becoming translucent |
| ABAM_03.0 | ABAM Bud Break - needle tips visible at end of open bud |
| ABAM_03.5 | ABAM First leaf expansion - 1st needles on new shoots are expanded |
| ABAM_04.0 | ABAM Expanding needles <75% full size; new shoots elongating, needles expanding |
| ABAM_05.0 | ABAM Needles >75% full size; most needles on new shoot full size and normal orientation |
| ABAM_05.5 | ABAM Needles medium green, noticeably darker than when first expand |
| ABAM_06.0 | ABAM Needles full size and dark green, difficult to distinguish from old needles from distance |
| ABAM_07.0 | ABAM Buds set at branch tips |
| ABAM_08.0 | ABAM Old needle yellowing/drop |
| ABAM_09.0 | ABAM Old needle drop complete |
| ABPR_01.0 | ABPR Dormant - buds firm, brownish; no green visible through scales |
| ABPR_02.0 | ABPR Buds swollen, scales becoming translucent |
| ABPR_03.0 | ABPR Bud Break - needle tips visible at end of open bud |
| ABPR_03.5 | ABPR First leaf expansion - 1st needles on new shoots are expanded |
| ABPR_04.0 | ABPR Expanding needles <75% full size; new shoots elongating, needles expanding |
| ABPR_05.0 | ABPR Needles >75% full size; most needles on new shoot full size and normal orientation |
| ABPR_05.5 | ABPR Needles medium green-blue, noticeably darker than when first expand |
| ABPR_06.0 | ABPR Needles full size and dark green-blue, difficult to distinguish from old needles from distance |
| ABPR_07.0 | ABPR Buds set at branch tips |
| ABPR_08.0 | ABPR Old needle yellowing/drop |
| ABPR_09.0 | ABPR Old needle drop complete |
| ACCI_01.0 | ACCI Dormant - buds are hard with no separation of scales; usually red or mottled green and red |
| ACCI_02.0 | ACCI Buds swollen - visible separation of bud scales, initially a green/white line appears at separation |
| ACCI_03.0 | ACCI Bud Break; emerging green tip visible at end of separated bud scales |
| ACCI_04.0 | ACCI Emerging leaves; folded leaves are inside a green sheath, which lengthens before opening |
| ACCI_04.5 | ACCI Leaves emerge from green sheath; still folded |
| ACCI_05.0 | ACCI Unfolding leaves < 75% size; leaves are tent-like, but have clearly begun unfolding and expanding |
| ACCI_06.0 | ACCI Leaves >75% size; mature leaves range in size, but are almost flat when fully expanded |
| ACCI_07.0 | ACCI Stem elongation; extension of new green branch |
| ACCI_08.0 | ACCI First leaves turning color - yellow or red depending on whether in full sun |
| ACCI_09.0 | ACCI Majority of leaves have turned color; leaves dropping |
| ACCI_10.0 | ACCI majority of leaves have dropped |

| | |
|-----------|---|
| ACCI_11.0 | ACCI Leaf drop complete |
| ACMA_01.0 | ACMA3 Dormant - buds are hard with no separation of scales; usually red or mottled green and red |
| ACMA_02.0 | ACMA3 Buds swollen / elongating |
| ACMA_03.0 | ACMA3 Bud Break leaf tips visible past tip of bud |
| ACMA_04.0 | ACMA3 Emerging leaves, folded |
| ACMA_05.0 | ACMA3 Unfolding leaves < 75% size; leaves are tent-like, but have clearly begun unfolding and expanding |
| ACMA_06.0 | ACMA3 Leaves >75% size; mature leaves range in size, but are almost flat when fully expanded |
| ACMA_07.0 | ACMA3 Leaves dark green |
| ACMA_08.0 | ACMA3 First leaves turning color - yellow or red depending on whether in full sun |
| ACMA_09.0 | ACMA3 Majority of leaves have turned color; leaves dropping |
| ACMA_10.0 | ACMA3 majority of leaves have dropped |
| ACMA_11.0 | ACMA3 Leaf drop complete |
| CHUM_01.0 | CHUM Dormant- buds are compressed with no separation of scales |
| CHUM_02.0 | CHUM Buds swollen/elongating |
| CHUM_03.0 | CHUM Bud Break: leaf tips visible at tip of elongating bud |
| CHUM_04.0 | CHUM Emerging leaves; leaves outside bud, folded |
| CHUM_05.0 | CHUM Unfolded leaves < 75% size, compared to old leaves |
| CHUM_06.0 | CHUM Leaves >75% size, compared to old leaves |
| COCA_01.0 | COCA13 Basal bud dormant, old leaves only |
| COCA_02.0 | COCA13 Basal bud swell/expansion |
| COCA_03.0 | COCA13 Basal bud break |
| COCA_04.0 | COCA13 Emerging leaves, folded |
| COCA_05.0 | COCA13 Leaves unfolding/expanding, <75% full size of old leaves on same plant |
| COCA_06.0 | COCA13 Leaves >75% full size compared to previous years' leaves present on plant |
| COLA_01.0 | COLA3 No new leaves visible above ground, old leaves typically present |
| COLA_04.0 | COLA3 New leaf shoot visible, begins as reddish stem with leaf tightly folded |
| COLA_04.5 | COLA3 new leaf blades visible above ground |
| COLA_05.0 | COLA3 Leaves unfolding, <75% full size of old leaves on same plant |
| COLA_06.0 | COLA3 Leaves >75% full size compared to previous years' leaves present on plant |
| CONU_01.0 | CONU4 Dormant - buds are compressed with no separation of scales |
| CONU_02.0 | CONU4 Buds swollen, separating |
| CONU_03.0 | CONU4 Bud Break - leaf tips visible at tip of elongating bud |
| CONU_04.0 | CONU4 Emerging leaves outside bud, folded |
| CONU_05.0 | CONU4 Unfolding leaves <75% of full size, many oriented parallel or at angle to |

branch axis

| | |
|-----------|--|
| CONU_06.0 | CONU4 Leaves >75%, generally oriented perpendicular to branches |
| CONU_07.0 | CONU4 Leaves dark green |
| CONU_08.0 | CONU4 Leaves beginning to turn color to yellow-orange or red |
| CONU_09.0 | CONU4 Majority of leaves have turned color; leaves dropping |
| CONU_10.0 | CONU4 Majority of leaves have fallen |
| CONU_11.0 | CONU4 Leaf drop complete |
| LIBO_01.0 | LIBO3 Buds dormant, no obvious swelling |
| LIBO_02.0 | LIBO3 Bud swell/elongation |
| LIBO_03.0 | LIBO3 Bud break - leaf tip visible at end of scales |
| LIBO_04.0 | LIBO3 Emerging leaves, folded tight against stem; leaf shape not discernable |
| LIBO_04.1 | LIBO3 Emerging leaves, flat against stem |
| LIBO_04.2 | LIBO3 1st (bottom) pair of leaves unfolded, oriented parallel to stem |
| LIBO_04.3 | LIBO3 1st pair of leaves perpendicular to stem; 2nd pair parallel |
| LIBO_04.4 | LIBO3 2nd pair of leaves perpendicular to stem |
| LIBO_06.0 | LIBO3 1st and 2nd pairs of leaves full sized compared to old leaves |
| PSME_01.0 | PSME Dormant - buds are small and brown/tan with no swelling; no green tint visible through scales |
| PSME_02.0 | PSME Buds swollen - some expansion in width and extension in length; tip of bud becomes light brown or yellow |
| PSME_03.0 | PSME Bud Break - needle tips visible at end of open bud |
| PSME_03.5 | PSME First leaf expansion - 1st needles on new shoots are expanded |
| PSME_04.0 | PSME Expanding needles <75% full size; new shoots elongating, needles expanding |
| PSME_05.0 | PSME Needles >75% full size; most needles on new shoot full size and normal orientation; color still lighter green than old leaves |
| PSME_05.5 | PSME Needles medium green, noticeably darker than when first fully expanded |
| PSME_06.0 | PSME Needles full size and dark green, difficult to distinguish from old needles from distance |
| PSME_07.0 | PSME Buds set at branch tips |
| PSME_08.0 | PSME Old needle yellowing/drop |
| PSME_09.0 | PSME Old needle drop complete |
| RHMA_01.0 | RHMA Dormant - buds are compressed with no separation of scale |
| RHMA_02.0 | RHMA Buds swollen/elongating |
| RHMA_03.0 | RHMA Bud break - leaf tips visible at tip of elongating bud |
| RHMA_04.0 | RHMA Emerging leaves outside bud, folded |
| RHMA_05.0 | RHMA Unfolding leaves <75% of size of old leaves |
| RHMA_06.0 | RHMA Leaves >75% size, compared to old leaves |
| RHMA_07.0 | RHMA Leaves dark green, similar shade to old leaves |

| | |
|-----------|--|
| RHMA_08.0 | RHMA Old leaves turning yellow, dropping |
| RHMA_09.0 | RHMA Old leaf drop complete |
| RUUR_01.0 | RUUR Dormant - no basal buds above ground, buds on plant not swollen |
| RUUR_02.0 | RUUR Buds swollen/elongating (comments designate basal (B), Terminal (T) and/or Main stem (M)) |
| RUUR_03.0 | RUUR Bud Break: leaf tips visible past tip of bud |
| RUUR_04.0 | RUUR Emerging leaves - outside bud, folded |
| RUUR_05.0 | RUUR Unfolding leaves <75% size compared to old leaves |
| RUUR_06.0 | RUUR Leaves >75% size, compared to old leaves |
| SYRE_01.0 | SYRE No new leaves visible above ground, old leaves typically present |
| SYRE_04.0 | SYRE New leaf shoot visible, with leaf tightly folded |
| SYRE_05.0 | SYRE Leaves unfolding, <75% full size of old leaves on same plant |
| SYRE_06.0 | SYRE Leaves >75% full size |
| TROV_01.0 | TROV2 Nothing visible above ground |
| TROV_04.0 | TROV2 Plant has emerged above ground - only bent stem visible or stem and leaves visible, but leaves rolled around stem |
| TROV_04.5 | TROV2 Leaves parallel to stem, beginning to unroll |
| TROV_05.0 | TROV2 Leaves perpendicular to stem, <75% of full size |
| TROV_06.0 | TROV2 Leaves >75% full size |
| TROV_08.0 | TROV2 Leaves turning yellow |
| TROV_09.0 | TROV2 Aboveground vegetation fully dried (or not visible) |
| TSHE_01.0 | TSHE Dormant - buds are small and brown/tan with no swelling; no green tint visible through scales |
| TSHE_02.0 | TSHE Buds swollen - round and swollen; green tint of needles often visible through scales |
| TSHE_03.0 | TSHE Bud Break - needle tips visible at end of open bud |
| TSHE_03.5 | TSHE First leaf expansion - 1st needles on new shoots are expanded |
| TSHE_04.0 | TSHE Expanding needles <75% full size; new shoots elongating, needles expanding |
| TSHE_05.0 | TSHE Needles >75% full size; most needles on new shoot full size and normal orientation; color still lighter green than old leaves |
| TSHE_05.5 | TSHE Needles medium green, noticeably darker than when first fully expanded |
| TSHE_06.0 | TSHE Needles full size and dark green, difficult to distinguish from old needles from distance |
| TSHE_07.0 | TSHE Buds set at branch tips |
| TSHE_08.0 | TSHE Old needle yellowing/drop |
| TSHE_09.0 | TSHE Old needle drop complete |
| VAME_01.0 | VAME Dormant - red buds are compressed with no separation of scales |
| VAME_02.0 | VAME Buds swollen - visible separation of bud scales, and obvious swelling |
| VAME_03.0 | VAME Bud Break; emerging green tip visible at end of separated bud scales |
| VAME_04.0 | VAME Emerging leaves; leaves outside bud, folded |

| | |
|-----------|--|
| VAME_04.2 | VAME First leaf from buds unfolded; others still folded |
| VAME_04.5 | VAME Terminal leaf from buds unfolded |
| VAME_05.0 | VAME Unfolding leaves < 75% size; some leaves full size, but others still expanding, somewhat droopy |
| VAME_06.0 | VAME Leaves >75% size; mature leaves range in size, but are almost flat when fully expanded |
| VAME_07.0 | VAME Leaves noticeably darker green; stem elongation |
| VAME_08.0 | VAME First leaves turning color |
| VAME_09.0 | VAME Majority of leaves have turned color; leaves dropping |
| VAME_10.0 | VAME Majority of leaves fallen |
| VAME_11.0 | VAME Leaf drop complete |
| VAPA_01.0 | VAPA Dormant - red buds are compressed with no separation of scales |
| VAPA_02.0 | VAPA Buds swollen - visible separation of bud scales, and obvious swelling |
| VAPA_03.0 | VAPA Bud Break; emerging green tip visible at end of separated bud scales |
| VAPA_04.0 | VAPA Emerging leaves; leaves outside bud, folded |
| VAPA_04.2 | VAPA First leaf from buds unfolded; others still folded |
| VAPA_04.5 | VAPA Terminal leaves from buds unfolded |
| VAPA_05.0 | VAPA Unfolding leaves < 75% size; some leaves full size, but others still expanding, somewhat droopy |
| VAPA_06.0 | VAPA Leaves >75% size; mature leaves range in size, but are almost flat when fully expanded |
| VAPA_07.0 | VAPA Leaves noticeably darker green; stem elongation |
| VAPA_08.0 | VAPA First leaves turning color |
| VAPA_09.0 | VAPA Majority of leaves have turned color; leaves dropping |
| VAPA_10.0 | VAPA Majority of leaves fallen |
| VAPA_11.0 | VAPA Leaf drop complete |
| WISE_01.0 | WISE3 No new leaves visible above ground, old leaves typically present |
| WISE_04.0 | WISE3 New leaf shoot visible aboveground, leaf rolled tightly |
| WISE_05.0 | WISE3 Leaves unrolling/expanding, <75% full size |
| WISE_06.0 | WISE3 Leaves >75% full size compared to previous years' leaves present on plant |
| NA | No value assigned |
| SYRE_03.0 | SYRE Bud break - basal buds have broken; very rarely visible in this species without damaging plant |
| TROV_07.0 | TROV2 Leaves full size and dark green; no sign of end of season color change (This is rarely used since we don't generally track into late summer) |

Enumerated Domain for Attribute: RPRO_CODE

| | |
|-----------|---|
| ABAM_01.0 | ABAM Reproductive cones not swollen/visible |
| ABAM_02.0 | ABAM Reproductive cones visible, swollen |
| ABAM_03.0 | ABAM Pollen cones open |
| ABAM_04.0 | ABAM Full pollen release |

| | |
|-----------|---|
| ABAM_05.0 | ABAM Pollen release over, cones wilted or dried |
| ABAM_06.0 | ABAM Immature seed cones visible |
| ABAM_07.0 | ABAM Mature seed cones visible |
| ABAM_08.0 | ABAM No cones visible |
| ABAM_09.0 | ABAM Dispersing seed |
| ABAM_10.0 | ABAM Fruiting over - may have residual old cones seed dispersed |
| ABAM_11.0 | ABAM Cones aborted |
| ABPR_01.0 | ABPR Reproductive cones not swollen/visible |
| ABPR_02.0 | ABPR Reproductive cones visible, swollen |
| ABPR_03.0 | ABPR Pollen cones open |
| ABPR_04.0 | ABPR Full pollen release |
| ABPR_05.0 | ABPR Pollen release over, cones wilted or dried |
| ABPR_06.0 | ABPR Immature seed cones visible |
| ABPR_07.0 | ABPR Mature seed cones visible |
| ABPR_08.0 | ABPR No cones visible |
| ABPR_09.0 | ABPR Dispersing seed |
| ABPR_10.0 | ABPR Fruiting over - may have residual old cones seed dispersed |
| ABPR_11.0 | ABPR Cones aborted |
| ACCI_01.0 | ACCI No Flower buds visible |
| ACCI_02.0 | ACCI Flower buds visible, closed |
| ACCI_03.0 | ACCI Flowers open |
| ACCI_04.0 | ACCI Peak flowering, majority of flower buds at stage 3 |
| ACCI_05.0 | ACCI Past Peak; majority of flowers have passed stage 3, wilted or petals have dropped |
| ACCI_06.0 | ACCI Flowering over |
| ACCI_07.0 | ACCI Immature (green) fruit visible |
| ACCI_08.0 | ACCI Majority of fruits visible |
| ACCI_09.0 | ACCI Mature Fruits visible - red or reddish brown |
| ACCI_09.5 | ACCI Mature fruits have begun dispersing |
| ACCI_10.0 | ACCI Fruiting over |
| ACCI_11.0 | ACCI Flower or fruit aborted |
| ACMA_01.0 | ACMA3 Dormant - noticeably larger buds at branch tips are hard with no separation of scales; will have flowers and leaves |
| ACMA_02.0 | ACMA3 Flower buds (larger buds near branch tips have flrs & lvs) swollen |
| ACMA_02.1 | ACMA3 Terminal buds open, flowers out, petals closed |
| ACMA_03.0 | ACMA3 Flowers open |

| | |
|-----------|---|
| ACMA_04.0 | ACMA3 Peak flowering, majority of flowers open |
| ACMA_05.0 | ACMA3 Majority of flowers past peak; |
| ACMA_06.0 | ACMA3 Flowering over |
| ACMA_07.0 | ACMA3 Immature fruit visible - green samara developing |
| ACMA_08.0 | ACMA3 Majority in stage 7 or aborted |
| ACMA_09.0 | ACMA3 Mature fruit - brown dried samara |
| ACMA_10.0 | ACMA3 Fruiting over - all fruits dispersed |
| ACMA_11.0 | ACMA3 All Flowers or fruits aborted |
| CHUM_01.0 | CHUM No flowers buds visible |
| CHUM_02.0 | CHUM Flower buds visible, closed |
| CHUM_03.0 | CHUM Some flowers open |
| CHUM_04.0 | CHUM Peak Flowering - majority of flowers open |
| CHUM_05.0 | CHUM Past Peak - majority of flowers have wilted or lost petals |
| CHUM_06.0 | CHUM Flowering over |
| CHUM_07.0 | CHUM Immature fruit visible - noticeably swollen green to red capsule |
| CHUM_08.0 | CHUM Majority in stage 7 or aborted |
| CHUM_09.0 | CHUM Mature fruit - brown capsule open and seed exposed |
| CHUM_10.0 | CHUM Fruiting over - all capsules open, seed dispersed |
| CHUM_11.0 | CHUM All flowers or fruits aborted |
| COCA_01.0 | COCA13 Flower buds not present or visible above ground |
| COCA_02.0 | COCA13 Floral bracts visible but closed and green |
| COCA_03.0 | COCA13 Floral bracts open, green; flowers closed |
| COCA_03.1 | COCA13 Floral bracts white, elongated; some flowers open |
| COCA_04.0 | COCA13 Majority of flowers open |
| COCA_05.0 | COCA13 Floral bract turning brown at edges; majority of flowers past peak |
| COCA_06.0 | COCA13 Flowering over |
| COCA_07.0 | COCA13 Immature fruit developing |
| COCA_08.0 | COCA13 Majority have reached stage 7 or aborted |
| COCA_09.0 | COCA13 Mature fruit - bright red |
| COCA_10.0 | COCA13 Fruiting over |
| COCA_11.0 | COCA13 Flowers or fruits aborted |
| COLA_01.0 | COLA3 Flowers buds not visible above ground |
| COLA_02.0 | COLA3 Flower buds visible, closed |
| COLA_03.0 | COLA3 Flowers partly to mostly open |

| | |
|-----------|--|
| COLA_04.0 | COLA3 Flowers fully open, stamens with pollen |
| COLA_05.0 | COLA3 Petals, stamens wilting |
| COLA_06.0 | COLA3 Petals have dropped |
| COLA_07.0 | COLA3 Immature fruit developing, ovaries expanding |
| COLA_09.0 | COLA3 Mature fruits full size, tan or light brown papery capsule |
| COLA_10.0 | COLA3 All capsule tips open seeds dispersed |
| COLA_11.0 | COLA3 Flower or Fruit aborted |
| CONU_01.0 | CONU4 Flower buds absent or present & dormant; floral bracts green, haven't begun elongating |
| CONU_02.0 | CONU4 Floral bracts elongating, green; flowers closed |
| CONU_03.0 | CONU4 Floral bracts elongating turning to white, flowers closed |
| CONU_03.1 | CONU4 floral bract elongated and white, some flowers open |
| CONU_04.0 | CONU4 Peak flowering, majority of flowers open |
| CONU_05.0 | CONU4 Floral bract turning brown at edges; many flowers past peak |
| CONU_06.0 | CONU4 Flowering over |
| CONU_07.0 | CONU4 Immature fruit - noticeably swollen but green |
| CONU_08.0 | CONU4 Majority in stage 7 or aborted |
| CONU_09.0 | CONU4 Ripe fruits - bright red |
| CONU_10.0 | CONU4 Fruiting over - all dropped or removed |
| CONU_11.0 | CONU4 All flowers or fruits aborted |
| LIBO_01.0 | LIBO3 Flower buds not present |
| LIBO_02.0 | LIBO3 Flower buds present, closed and green |
| LIBO_02.1 | LIBO3 Petals visible, closed |
| LIBO_03.0 | LIBO3 Some flowers open |
| LIBO_04.0 | LIBO3 Majority of flowers open |
| LIBO_05.0 | LIBO3 Majority of flowers past peak - petals wilted or dropped |
| LIBO_06.0 | LIBO3 Flowering over |
| LIBO_07.0 | LIBO3 Immature green fruit developing |
| LIBO_08.0 | LIBO3 Majority of have reached stage 7 or aborted |
| LIBO_09.0 | LIBO3 Mature fruit - capsule tan or brown and dried |
| LIBO_10.0 | LIBO3 Fruiting over - all dropped or removed from plant |
| LIBO_11.0 | LIBO3 All flowers or fruits aborted |
| PSME_01.0 | PSME Reproductive cones not swollen/visible |
| PSME_02.0 | PSME Reproductive cones visible, swollen |
| PSME_03.0 | PSME Pollen cones open |

| | |
|-----------|--|
| PSME_04.0 | PSME Full pollen release |
| PSME_05.0 | PSME Pollen release over, cones wilted or dried |
| PSME_06.0 | PSME Immature seed cones visible |
| PSME_07.0 | PSME Mature seed cones visible |
| PSME_08.0 | PSME No cones visible |
| PSME_09.0 | PSME Dispersing seed |
| PSME_10.0 | PSME Fruiting over - may have residual old cones seed dispersed |
| PSME_11.0 | PSME Cones aborted |
| RHMA_01.0 | RHMA Flower buds absent or present but dormant; no separation of scales |
| RHMA_02.0 | RHMA Flower buds swollen, elongating |
| RHMA_02.5 | RHMA Main flower buds partially open, petals visible on at least some flowers |
| RHMA_03.0 | RHMA Main flower bud open, petals visible, closed |
| RHMA_03.5 | RHMA Petals fully open on some flowers |
| RHMA_04.0 | RHMA Peak Flowering - majority of flowers open |
| RHMA_05.0 | RHMA Past Peak - majority of flowers have wilted or lost petals |
| RHMA_06.0 | RHMA Flowering over |
| RHMA_07.0 | RHMA Immature fruit visible, noticeable swelling of fruit since end of flowering |
| RHMA_08.0 | RHMA Majority in stage 7 or aborted |
| RHMA_09.0 | RHMA Mature fruit - rusty brown capsule split open to expose seeds |
| RHMA_10.0 | RHMA Fruiting over - all seeds have dropped |
| RHMA_11.0 | RHMA All flowers or fruits aborted |
| RUUR_01.0 | RUUR Flower buds not visible |
| RUUR_02.0 | RUUR Flower buds present closed |
| RUUR_03.0 | RUUR Flowers open |
| RUUR_04.0 | RUUR Peak flowering, majority of flowers open |
| RUUR_05.0 | RUUR Majority of flowers past peak - petals wilted or dropped |
| RUUR_06.0 | RUUR Flowering over |
| RUUR_07.0 | RUUR Immature fruit noticeably swollen, green |
| RUUR_08.0 | RUUR Majority in stage 7 or aborted |
| RUUR_09.0 | RUUR Mature fruits - purple black |
| RUUR_10.0 | RUUR Fruiting over - all dropped or removed |
| RUUR_11.0 | RUUR All flowers or fruits aborted |
| SYRE_01.0 | SYRE No flower buds or stems visible above ground |
| SYRE_02.0 | SYRE Flowers stems and closed buds visible above ground; no purple visible |

| | |
|-----------|--|
| SYRE_02.1 | SYRE Purple petals visible but closed |
| SYRE_03.0 | SYRE Flowers open |
| SYRE_04.0 | SYRE Majority of flowers on majority of stalks are open |
| SYRE_05.0 | SYRE Majority of flowers have shriveled or lost petals; some flowers still at peak |
| SYRE_06.0 | SYRE Flowering over; no active flowers left |
| SYRE_07.0 | SYRE Immature fruit visible; noticeable swelling but green |
| SYRE_08.0 | SYRE Majority of fruits visible, still immature |
| SYRE_09.0 | SYRE Mature fruits; capsule dark tan to brown significantly larger than sepals |
| SYRE_10.0 | SYRE Fruiting over; all capsules have opens |
| SYRE_11.0 | SYRE Flowers or fruits aborted |
| TROV_01.0 | TROV2 No flower bud visible |
| TROV_02.0 | TROV2 Flower bud visible; at veg stage 4.5 if flowering |
| TROV_03.0 | TROV2 Petals partway to mostly open |
| TROV_04.0 | TROV2 Flower fully open, pollen release from stamens |
| TROV_05.0 | TROV2 Petals turning pink |
| TROV_05.1 | TROV2 Petals fully pink/purple |
| TROV_06.0 | TROV2 Flowering over - petals shriveled or fallen off |
| TROV_07.0 | TROV2 Immature fruit visible, noticeable swelling of fruit since end of flowering |
| TROV_08.0 | TROV2 Immature fruit nearly full size - 1.2 - 2.5 cm - but green |
| TROV_09.0 | TROV2 Fruit mature - yellow or yellow green and fleshy |
| TROV_10.0 | TROV2 Fruiting over |
| TROV_11.0 | TROV2 Flower or fruit aborted |
| TSHE_01.0 | TSHE Reproductive cones not swollen/visible |
| TSHE_02.0 | TSHE Reproductive cones visible, swollen |
| TSHE_03.0 | TSHE Pollen cones open |
| TSHE_04.0 | TSHE Full pollen release |
| TSHE_05.0 | TSHE Pollen release over, cones wilted or dried |
| TSHE_06.0 | TSHE Immature seed cones visible |
| TSHE_07.0 | TSHE Mature seed cones visible |
| TSHE_08.0 | TSHE No cones visible |
| TSHE_09.0 | TSHE Dispersing seed |
| TSHE_10.0 | TSHE Fruiting over - may have residual old cones seed dispersed |
| TSHE_11.0 | TSHE Cones aborted |
| VAME_01.0 | VAME No Flower buds visible |

| | |
|-----------|--|
| VAME_02.0 | VAME Flower buds visible, closed |
| VAME_03.0 | VAME Flowers open |
| VAME_04.0 | VAME Peak flowering, majority of flower buds at stage 3 |
| VAME_05.0 | VAME Past Peak; majority of flowers have passed stage 3 |
| VAME_06.0 | VAME Flowering over |
| VAME_07.0 | VAME Immature fruit visible - noticeable swelling of green fruit |
| VAME_08.0 | VAME Majority of fruits have swollen noticeably |
| VAME_09.0 | VAME Mature fruits - deep purple |
| VAME_10.0 | VAME Fruiting over |
| VAME_11.0 | VAME Flower or fruit aborted |
| VAPA_01.0 | VAPA No Flower buds visible |
| VAPA_02.0 | VAPA Flower buds visible, closed |
| VAPA_03.0 | VAPA Flowers open |
| VAPA_04.0 | VAPA Peak flowering, majority of flower buds at stage 3 |
| VAPA_05.0 | VAPA Past Peak; majority of flowers have passed stage 3 |
| VAPA_06.0 | VAPA Flowering over |
| VAPA_07.0 | VAPA Immature fruit visible - noticeable swelling of green fruit |
| VAPA_08.0 | VAPA Majority of fruits have swollen noticeably |
| VAPA_09.0 | VAPA Mature fruits - red and round |
| VAPA_10.0 | VAPA Fruiting over |
| VAPA_11.0 | VAPA Flower or fruit aborted |
| WISE_01.0 | WISE3 Flower buds not present or visible above ground |
| WISE_02.0 | WISE3 Flowers closed, yellow petals not visible |
| WISE_02.1 | WISE3 Flowers closed, yellow petals visible |
| WISE_03.0 | WISE3 Flower partly to mostly open |
| WISE_04.0 | WISE3 Majority of flowers fully open |
| WISE_05.0 | WISE3 Flower wilting, or if multiple flowers majority wilting |
| WISE_06.0 | WISE3 Flowering over |
| WISE_07.0 | WISE3 Immature fruit developing |
| WISE_08.0 | WISE3 If multiple flowers, majority reached stage 7 |
| WISE_09.0 | WISE3 Mature fruits - mottled purple capsules |
| WISE_10.0 | WISE3 All capsule have opened, seeds dispersed |
| WISE_11.0 | WISE3 Flower or fruit aborted |
| NA | No value assigned |

COLA_08.0

COLA3 Fruits have expanded to full size but still green, capsule tips not open
(In practice there is little difference between 7 and 8 in this species)

Enumerated Domain for Attribute: RPRO_COM

| | |
|--------|--|
| B | Plant buried in snow - observation impossible |
| D | Dead plant |
| E | Reproductive tissue entirely or partially eaten by herbivore |
| EPB | Reproductive tissue entirely or partially eaten by herbivore; plant partially buried in snow |
| NA | No Comment |
| NEW | New plant added in mid-season |
| P | Possible presence of another rpro_code stage |
| P1 | Possible presence of rpro_code stage 1.0 |
| P10 | Possible presence of rpro_code stage 10.0 |
| P11 | Possible presence of rpro_code stage 11.0 |
| P2 | Possible presence of rpro_code stage 2.0 |
| P2.1 | Possible presence of rpro_code stage 2.1 |
| P3 | Possible presence of rpro_code stage 3.0 |
| P4 | Possible presence of rpro_code stage 4.0 |
| P5 | Possible presence of rpro_code stage 5.0 |
| P6 | Possible presence of rpro_code stage 6.0 |
| P7 | Possible presence of rpro_code stage 7.0 |
| P8 | Possible presence of rpro_code stage 8.0 |
| P9 | Possible presence of rpro_code stage 9.0 |
| PB | Plant is partially buried in snow |
| PE | Reproductive tissue partially eaten by herbivore |
| T10 | Trace of rpro_code stage 10.0 |
| T11 | Trace of rpro_code stage 11.0 |
| T2 | Trace of rpro_code stage 2.0 |
| T2.1 | Trace of rpro_code stage 2.1 |
| T2.1PE | Trace of rpro_code stage 2.1; reproductive tissue partially eaten by herbivore |
| T2.5 | Trace of rpro_code stage 2.5 |
| T2PE | Trace of rpro_code stage 2.0; reproductive tissue partially eaten by herbivore |
| T2T2.1 | Trace of rpro_code stage 2.0; trace of rpro_code stage 2.1 |
| T3 | Trace of rpro_code stage 3.0 |
| T3.1 | Trace of rpro_code stage 3.1 |
| T3.5 | Trace of rpro_code stage 3.5 |

| | |
|---------|---|
| T4 | Trace of rpro_code stage 4.0 |
| T5 | Trace of rpro_code stage 5.0 |
| T5.1 | Trace of rpro_code stage 5.1 |
| T6 | Trace of rpro_code stage 6.0 |
| T6PE | Trace of rpro_code stage 6.0; reproductive tissue partially eaten by herbivore |
| T7 | Trace of rpro_code stage 7.0 |
| T7PE | Trace of rpro_code stage 7.0; reproductive tissue partially eaten by herbivore |
| T8 | Trace of rpro_code stage 8.0 |
| T9 | Trace of rpro_code stage 9.0 |
| T2T9 | Trace of rpro_code stage 2.0; trace of rpro_code stage 9.0 |
| TB | Plant buried by treefall; will not be possible to observe in future |
| W | Wilted foliage |
| Mi | Listed RUUR rpro_code stage applies to multiple points on stem |
| BaMi | Listed RUUR rpro_code stage applies to basal bud and multiple points on stem |
| MiP11 | Listed RUUR rpro_code stage applies to multiple points on stem; possible presence of rpro_code stage 11.0 |
| Te | Listed RUUR rpro_code stage applies to terminal bud |
| BaMi3Te | Listed RUUR rpro_code stage applies to basal bud and multiple points on stem; terminal bud is rpro_code stage 3.0 |
| Te3Mi | Listed RUUR rpro_code stage applies to terminal bud; multiple points on stem are rpro_code stage 3.0 |
| BaMi7Te | Listed RUUR rpro_code stage applies to basal bud and multiple points on stem; terminal bud is rpro_code stage 7.0 |
| Ba | Listed RUUR rpro_code stage applies to basal bud |

Enumerated Domain for Attribute: VEG_COM

| | |
|----------|---|
| Ba | Listed RUUR veg_code stage applies to basal bud |
| Ba1Mi | Listed RUUR veg_code stage applies to basal bud; multiple points on stem are veg_code stage 1.0 |
| Ba1Te | Listed RUUR veg_code stage applies to basal bud; terminal bud is veg_code stage 1.0 |
| Ba2Mi | Listed RUUR veg_code stage applies to basal bud; multiple points on stem are veg_code stage 2.0 |
| Ba2Mi5Te | Listed RUUR veg_code stage applies to basal bud; multiple points on stem are veg_code stage 2.0; terminal bud is veg_code stage 5.0 |
| Ba2MiTe | Listed RUUR veg_code stage applies to basal bud; multiple points on stem and terminal bud are veg_code stage 2.0 |
| Ba2Te | Listed RUUR veg_code stage applies to basal bud; terminal bud is veg_code stage 2.0 |
| Ba2TeR | Listed RUUR veg_code stage applies to basal bud; terminal bud is veg_code stage 2.0; points on stem are rooted |
| Ba3Mi | Listed RUUR veg_code stage applies to basal bud; multiple points on stem are veg_code stage 3.0 |
| Ba3MiTe | Listed RUUR veg_code stage applies to basal bud; multiple points on stem and terminal bud are veg_code stage 3.0 |
| Ba3Te | Listed RUUR veg_code stage applies to basal bud; terminal bud is veg_code stage 3.0 |
| Ba4Mi | Listed RUUR veg_code stage applies to basal bud; multiple points on stem are veg_code stage 4.0 |
| Ba4MiTe | Listed RUUR veg_code stage applies to basal bud; multiple points on stem and terminal bud are veg_code stage 4.0 |

| | |
|----------|---|
| Ba4Te | Listed RUUR veg_code stage applies to basal bud; terminal bud is veg_code stage 4.0 |
| Ba5Mi | Listed RUUR veg_code stage applies to basal bud; multiple points on stem are veg_code stage 5.0 |
| Ba5Mi3Te | Listed RUUR veg_code stage applies to basal bud; multiple points on stem are veg_code stage 5.0; terminal bud is veg_code stage 3.0 |
| Ba5Mi4Te | Listed RUUR veg_code stage applies to basal bud; multiple points on stem are veg_code stage 5.0; terminal bud is veg_code stage 4.0 |
| Ba5Mi5Te | Listed RUUR veg_code stage applies to basal bud; multiple points on stem are veg_code stage 5.0; terminal bud is veg_code stage 5.0 |
| Ba5MiTe | Listed RUUR veg_code stage applies to basal bud; multiple points on stem and terminal bud are veg_code stage 5.0 |
| Ba5MiTeR | Listed RUUR veg_code stage applies to basal bud; multiple points on stem and terminal bud are veg_code stage 5.0; points on stem are rooted |
| Ba5Te | Listed RUUR veg_code stage applies to basal bud; terminal bud is veg_code stage 5.0 |
| Ba6Mi | Listed RUUR veg_code stage applies to basal bud; multiple points on stem are veg_code stage 6.0 |
| Ba6Te | Listed RUUR veg_code stage applies to basal bud; terminal bud is veg_code stage 6.0 |
| BaMi | Listed RUUR veg_code stage applies to basal bud and multiple points on stem |
| BaMi3Te | Listed RUUR veg_code stage applies to basal bud and multiple points on stem; terminal bud is veg_code stage 3.0 |
| BaMi4Te | Listed RUUR veg_code stage applies to basal bud and multiple points on stem; terminal bud is veg_code stage 4.0 |
| BaMi5Te | Listed RUUR veg_code stage applies to basal bud and multiple points on stem; terminal bud is veg_code stage 5.0 |
| BaMiE | Listed RUUR veg_code stage applies to basal bud and multiple points on stem; leaf tissue eaten by herbivore |
| BaMiPE | Listed RUUR veg_code stage applies to basal bud and multiple points on stem; leaf tissue partially eaten by herbivore |
| BaMiTe | Listed RUUR veg_code stage applies to basal bud and multiple points on stem and terminal bud |
| BaPB | Listed RUUR veg_code stage applies to basal bud; plant is partially buried in snow |
| BaPE | Listed RUUR veg_code stage applies to basal bud; leaf tissue partially eaten by herbivore |
| BaTe | Listed RUUR veg_code stage applies to basal bud and terminal bud |
| BaTe5Mi | Listed RUUR veg_code stage applies to basal bud and terminal bud; multiple points on stem are veg_code stage 5.0 |
| BaTe6Mi | Listed RUUR veg_code stage applies to basal bud and terminal bud; multiple points on stem are veg_code stage 6.0 |
| BaTeE | Listed RUUR veg_code stage applies to basal bud and terminal bud; leaf tissue eaten by herbivore |
| BaTeR | Listed RUUR veg_code stage applies to basal bud and terminal bud; points on stem are rooted |
| Mi | Listed RUUR veg_code stage applies to multiple points on stem |
| Mi2Ba | Listed RUUR veg_code stage applies to multiple points on stem; basal bud is veg_code stage 2.0 |
| Mi3Ba | Listed RUUR veg_code stage applies to multiple points on stem; basal bud is veg_code stage 3.0 |
| Mi3BaTe | Listed RUUR veg_code stage applies to multiple points on stem; basal bud and terminal bud are veg_code stage 3.0 |
| Mi3Te | Listed RUUR veg_code stage applies to multiple points on stem; terminal bud is veg_code stage 3.0 |
| Mi4Ba | Listed RUUR veg_code stage applies to multiple points on stem; basal bud is veg_code stage 4.0 |
| Mi5Ba | Listed RUUR veg_code stage applies to multiple points on stem; basal bud is veg_code stage 5.0 |
| Mi6Ba | Listed RUUR veg_code stage applies to multiple points on stem; basal bud is veg_code stage 6.0 |
| Mi5Te | Listed RUUR veg_code stage applies to multiple points on stem; terminal bud is veg_code stage 5.0 |
| MiE | Listed RUUR veg_code stage applies to multiple points on stem; leaf tissue |

eaten by herbivore

| | |
|---------|---|
| MiTe | Listed RUUR veg_code stage applies to multiple points on stem and terminal bud |
| MiTe3Ba | Listed RUUR veg_code stage applies to multiple points on stem and terminal bud; basal bud is veg_code stage 3.0 |
| Te | Listed RUUR veg_code stage applies to terminal bud |
| Te2Ba | Listed RUUR veg_code stage applies to terminal bud; basal bud is veg_code stage 2.0 |
| Te3Ba | Listed RUUR veg_code stage applies to terminal bud; basal bud is veg_code stage 3.0 |
| Te3Mi | Listed RUUR veg_code stage applies to terminal bud; multiple points on stem are veg_code stage 3.0 |
| Te4Ba | Listed RUUR veg_code stage applies to terminal bud; basal bud is veg_code stage 4.0 |
| Te4Mi | Listed RUUR veg_code stage applies to terminal bud; multiple points on stem are veg_code stage 4.0 |
| Te5Ba | Listed RUUR veg_code stage applies to terminal bud; basal bud is veg_code stage 5.0 |
| Te5BaMi | Listed RUUR veg_code stage applies to terminal bud; basal bud and multiple points on stem are veg_code stage 5.0 |
| Te5BaPE | Listed RUUR veg_code stage applies to terminal bud; basal bud is veg_code stage 5.0; leaf tissue partially eaten by herbivore |
| Te5Mi | Listed RUUR veg_code stage applies to terminal bud; multiple points on stem are veg_code stage 5.0 |
| Te6Ba | Listed RUUR veg_code stage applies to terminal bud; basal bud is veg_code stage 6.0 |
| Te6BaMi | Listed RUUR veg_code stage applies to terminal bud; basal bud and multiple points on stem are veg_code stage 6.0 |
| P4.4PE | Possible presence of veg_code stage 4.4; leaf tissue partially eaten by herbivore |
| B | Plant buried in snow - observation impossible |
| D | Dead plant |
| E | Leaf tissue eaten by herbivore |
| EPB | Leaf tissue eaten by herbivore; plant partially buried in snow |
| EW | Leaf tissue eaten by herbivore; wilted foliage |
| NA | No comment |
| NEW | New plant added in mid-season |
| P | Possible presence of another veg_code stage |
| P1 | Possible presence of veg_code stage 1.0 |
| P2 | Possible presence of veg_code stage 2.0 |
| P3 | Possible presence of veg_code stage 3.0 |
| P3.5 | Possible presence of veg_code stage 3.5 |
| P4 | Possible presence of veg_code stage 4.0 |
| P4.5 | Possible presence of veg_code stage 4.5 |
| P5 | Possible presence of veg_code stage 5.0 |
| P6 | Possible presence of veg_code stage 6.0 |
| P7 | Possible presence of veg_code stage 7.0 |
| P8 | Possible presence of veg_code stage 8.0 |

| | |
|--------|--|
| PB | Plant is partially buried in snow |
| PE | Leaf tissue partially eaten by herbivore |
| T | Trace of another veg_code stage |
| T1 | Trace of veg_code stage 01.0 |
| T10 | Trace of veg_code stage 10.0 |
| T11 | Trace of veg_code stage 11.0 |
| T2 | Trace of veg_code stage 02.0 |
| T2PB | Trace of veg_code stage 02.0; plant partially buried in snow |
| T3 | Trace of veg_code stage 03.0 |
| T3.5 | Trace of veg_code stage 03.5 |
| T3PB | Trace of veg_code stage 03.0; plant partially buried in snow |
| T3PE | Trace of veg_code stage 03.0; leaf tissue partially eaten by herbivore |
| T4 | Trace of veg_code stage 04.0 |
| T4.1 | Trace of veg_code stage 04.1 |
| T4.2 | Trace of veg_code stage 04.2 |
| T4.2W | Trace of veg_code stage 04.2; wilted foliage |
| T4.3 | Trace of veg_code stage 04.3 |
| T4.4 | Trace of veg_code stage 04.4 |
| T4.5 | Trace of veg_code stage 04.5 |
| T4.5PE | Trace of veg_code stage 04.5; leaf tissue partially eaten by herbivore |
| T4PE | Trace of veg_code stage 04.0; leaf tissue partially eaten by herbivore |
| T4W | Trace of veg_code stage 04.0; wilted foliage |
| T5 | Trace of veg_code stage 05.0 |
| T5.5 | Trace of veg_code stage 05.5 |
| T5PB | Trace of veg_code stage 05.0; plant partially buried in snow |
| T6 | Trace of veg_code stage 06.0 |
| T6PB | Trace of veg_code stage 06.0; plant partially buried in snow |
| T6PE | Trace of veg_code stage 06.0; leaf tissue partially eaten by herbivore |
| T6W | Trace of veg_code stage 06.0; wilted foliage |
| T7 | Trace of veg_code stage 07.0 |
| T8 | Trace of veg_code stage 08.0 |
| T9 | Trace of veg_code stage 09.0 |
| T9W | Trace of veg_code stage 09.0; wilted foliage |
| TB | Plant buried by treefall; will not be possible to observe in future |

W

Wilted foliage

Enumerated Domain for Attribute: DBCODE

TV075

FSDB Database Code Terrestrial Vegetation 75

Enumerated Domain for Attribute: DBCODE

TV075

FSDB Database Code Terrestrial Vegetation 75

Enumerated Domain for Attribute: DBCODE

TV075

FSDB Database Code Terrestrial Vegetation 75