Terrestrial T12A 2-Dimensional Cover Ecosite Raw Data Metadata

Rotation

Unique ID T12A_IC00001

Attribute Definition Reference describing when data was collected at a broad level

(i.e., Prototype, Rotation 1, Rotation 2). The rotation number indicates the visit number (i.e. 1 = first visit, 2 = second visit or

first revisit).

Value Type Text

Code Prototype = 2003--2006 | Rotation 1 = 2007 onward | Rotation

2 = 2015 onward

ABMI Site

Unique ID T12A_IC00003

Attribute Definition Reference number given to each ABMI data collection site. An

alphabetized suffix distinguishes a new site from the old site(s). Off grid data collection sites are appended with an OG prefix, 2

-5 letter project code prefix, and a 1-2 digit suffix.

Value Type Number

Format 1-4 digits & 1 letter (if necessary); OG & 2-5 letter prefix, 1-4

digits, and 1-2 digit suffix

Range 1-1656; OG & 2-5 letter prefix (if applicable)

Year

Unique ID T12A_IC00002 Attribute Definition Collection year.

Value Type Date Format YYYY

Field Date

Unique ID T12A IC00015

Attribute Definition Day, month, and year data was collected.

Value Type Date

Format DD-Mon-YY

Missing Values DNC = Did Not Collect | VNA = Variable Not Applicable

Field Crew Member(s)

Unique ID T12A_IC00379

Attribute Definition Initials for the field technicians collecting the field data.

Value Type Text

Format 2 or 3 letters (UPPERCASE) and 1 number (if necessary); 1

set of initials or a combination of many

Missing Values DNC = Did Not Collect | VNA = Variable Not Applicable

Quadrant

Unique ID T12A_IC00259

Attribute Definition Quadrant where the 5 x 5 m plot for Shrub 2D cover was

collected.

Value Type Text

Format 2 letters (UPPERCASE); 8 letter word

Code NE = Northeast quadrant | NW = Northwest quadrant | SE =

Southeast quadrant | SW = Southwest quadrant | Dominant

Primary Ecosite - Nutrient/Moisture Code

Unique ID T12A_IC00162

Attribute Definition
Nutrient and moisture code for the ecological site classification

of each 5 x 5 m plot based on the dominant vegetation

community that is present.

Value Type Code

Code

1 - PX = Poor/Xeric - Bearberry, Lichen, Bog Cranberry common at some sites. | 2 - PM = Poor/Mesic - Labrador Tea, Feather Moss, Bog Cranberry, Bilberry, and Grouse-berry common at some sites. | 3 - MX = Medium/Xeric - Hairy Wild Rye, Bearberry, Canada Buffalo-berry, and Feather Moss common at some sites. | 4 - MM = Medium/Mesic - Low-bush Cranberry, Canada Buffalo-berry, Blueberry, Alder, Rose, Saskatoon, Labrador Tea, Bearberry, Thimbleberry, Bog Cranberry, and Feather Moss may be common at some sites. 5 - MG = Medium/Hygric - Horsetail, Dogwood, Rose, Willow, and Feather Moss common at some sites. | 6 - RG = Rich/Hygric - Dogwood, Fern, Feather Moss, Rose, Alder, Bracted Honeysuckle, Devil's Club, Fir common at some sites. | 7 - NT = Not Treed. | 8 - PD = Bog - Poor/Hydric - Labrador Tea, Peat Moss, Lichen, Bog Cranberry and Cloudberry may also be present (Soil saturated for part or all of the year. Undecomposed organic soil substrate). | 9 - MD = Poor Fen -Medium/Hydric - Labrador Tea, Peat Moss, Sedge, Bog Cranberry, Dwarf Birch and Willow may also be present (Soil saturated for part or all of the year. Undecomposed organic soil substrate). | 10 - RD (2005-2014) = Rich Fen - Rich/Hydric -Dwarf Birch, Willow, Sedge, Grass, Moss (soil saturated for part or all of the year; includes floating mats of vegetation). | 10 - RDp (2015-later) = Rich Fen - Rich/Hydric - Dwarf Birch, Willow, Sedge, Grass, Moss (Soil saturated for part or all the year; undecomposed organic soil substrate; includes floating mats of vegetation). | 10.5 - RDm = Wet Meadow - Rich/Hydric - Dominated by sedge, grass, presence of shrub and trees (e.g. willow). Conductivity <15mS/cm; soil, saturated for part or all of the year. Well decomposed, organic soil substrate. | 11 -VD = Marsh - Very Rich/Hydric - Cattail, Rush, Reed. Conductivity <15 mS/cm, sedge and grass may also be present (Water is above the rooting zone for most or all of the year). | 12 - SD = Swamp - Trees and shrubs present, poorly developed bryophytes, often with pools of water (Water is above the rooting zone for some of the year, mineral or humified organic soil rather than peaty) | 13 - AD = Alkali -Conductivity >15 mS/cm, white salt flats at water's edge, (Water is above the rooting zone for most or all of the year). 14 - OW = Open Water - No trees.

Missing Values

DNC = Did Not Collect | PNA = Protocol Not Applicable | VNA

= Variable Not Applicable

Primary Ecosite - Tree Species Modifier

Unique ID T12A IC00164

Attribute Definition At every 5 x 5 m plot location, the tree species modifier is used

to classify the site if trees are present and is combined with the

moisture/nutrient category to give an ecological site

classification.

Value Type Code Code

01a Pine = Jack Pine + Douglas Fir >80% | 02a Pine = Jack Pine + Lodgepole Pine >50% | 02b Other = Aspen + White Spruce + Engelmann Spruce + Subalpine Fir + Western White Pine >50% | 02c Sb = Black Spruce >50% | 03a None = No Trees | 03b Pine = Jack Pine + Lodgepole Pine >50% | 03c AwMix = Aspen >20% | 03d Spruce = White Spruce + Engelmann Spruce + Subalpine Fir >50% | 04a Pine = Jack Pine + Lodgepole Pine + Subalpine Fir >50% | 04b PiMix = Aspen + White Birch + White Spruce > 20% AND Jack Pine >/=20% | 04c Aw = Aspen >50% | 04d AwMix = Aspen > 20% AND White Spruce + Black Spruce + Lodgepole Pine >20% | 04e Spruce = White Spruce >50% | 05a Poplar = Balsam Poplar + Aspen >50% | 05b Spruce = White Spruce + Engelmann Spruce >50% | 05c Sb = Black Spruce >50% | 06a Pine = Lodgepole Pine >50% | 06b Poplar = Balsam Poplar + Aspen >50% | 06c Spruce = White Spruce + Engelmann Spruce + Subalpine Fir >50% | 07a Alpine = Elevation above tree line | 07b Flood = Site disturbed frequently by flooding 07c Ice = Site disturbed frequently by ice or snow | 07d Dry = Site in prairies/parkland and receives little precipitation | 07e Geo = Geological features not suitable for tree growth | 07f Human = Site disturbed recently by humans | 08a Sb = >/=10% tree cover (may only be in shrub/ground strata), Black Spruce >50% | 08b Shrub = <10% tree cover | 09a SbLt = >/=10% tree cover (may only be in shrub/ground strata), Black Spruce + Tamarack >50% | 09b Shrub = <10% tree cover | 10a SbLt = >/=10% tree cover (may only be in shrub/ground strata), Black Spruce + Tamarack >50% | 10b Shrub = <10% tree cover AND >/=10% shrub cover | 10c None = <10% tree cover AND <10% shrub cover | 10.5a Tree = >/=10% tree cover (usually along wetland edge; may only be in shrub/ground strata | 10.5b Shrub = <10% tree cover AND >/=10% shrub cover | 10.5c None = <10% tree cover AND <10% shrub cover | 11a None = usually along a water body edge >/=10% emergent vegetation cover, <10% tree cover | 12a Tree = >10% tree cover | 12b Shrub = <10% tree cover | 13a None = <10% shrub/tree cover 14a Lake = In standing water <10% emergent vegetation cover | 14b River = In flowing water <10% emergent vegetation cover

Missing Values

DNC = Did Not Collect | PNA = Protocol Not Applicable | VNA = Variable Not Applicable

Primary Ecosite - Structural Stage

Unique ID

T12A IC00163

Attribute Definition Describes the structure stage of the ecosite, as determined

after the ecological-site type has been designated i.e. the nutrient/moisture code designation and tree species modifier. The structure stage code starts with a number that defines 1) tree-dominated, 2) non-tree dominated, or 3) open water ecosites. The subsequent letter codes further describe the ecosite structure, in terms of type of vegetation (or dominant substrate type for non-vegetated sites), as well as height and

density of vegetation.

Value Type Code

Code For full explanation of the code definitions, see

Terrestrial/Wetland Metadata Appendix: Detailed Code

Definitions. 1) = Tree Dominated Ecosites | Tree Height: TS = Short | TT = Tall | Tree Density: D = Dense | S = Sparse | Tree Arrangement: C = Complex | N = Non-Complex | 2) = Non-Tree Dominated Ecosites | N = Non-Vegetated | Substrate Type: R = Rock | S = Sand | B = Beach | M = Mineral Soil | O = Organic Soil | G = Ground Vegetation Only: | Vegetation Type: B = Bryoid/Lichen | F = Forbs | G = Graminoid | R = Reeds and Rushes (Marsh) | Vegetation Density: D = Dense | M = Moderate | S = Sparse | S = Shrubs present | Shrub Height: L

Moderate | S = Sparse | S = Shrubs present | Shrub Height: L = Low | T = Tall | Shrub Density: D = Dense | M = Moderate | S

= Sparse | 3) = Open Water Dominated Communities | Vegetation Type: OV = Vegetated | ON = Non-Vegetated | Vegetation Height: S = Short Submerged | M = Medium Submerged | T = Tall Submerged | F = Floating | Vegetation

Density: D = Dense | M = Moderate | S = Sparse

Missing Values DNC = Did Not Collect | PNA = Protocol Not Applicable | VNA

= Variable Not Applicable

Percent Area of Primary Ecological Site Classification

Unique ID T12A IC00227

Attribute Definition Percent of the area within the 5 x 5 m plot described by the

primary ecological site classification (2007-2011: 5%

increments; 2012 onward: 10% increments).

Value Type Number
Format 2 digits
Range 10%-100%
Unit percent

Missing Values DNC = Did Not Collect | VNA = Variable Not Applicable

Slope Position

Unique ID T12A IC00299

Attribute Definition Position of the 5 x 5 m plot with respect to the slope.

Value Type Code

Format 1 letter (UPPERCASE) and 1 number (if necessary)

Code C = Crest - situated in a relatively level area on the top of a hill

| S1 = Slope - situated on the side of a hill, a modifier of 1 indicates slopes of 2-5 degrees, | S2 = Slope - situated on the side of a hill, a modifier of 2 indicates slopes of 6-10 degrees, | S3 = Slope - situated on the side of a hill, a modifier of 3 indicates slopes of 11-30 degrees, | S4 = Slope - situated on the side of a hill, a modifier of 4 indicates slopes of >30 degrees, | T = Toe - situated at the bottom of a hill where the ground surface transitions from a slope to level | L = Level - situated in an area with <2 degrees slope | D = Depression -

situated in an area that accumulates water after rains

Missing Values DNC = Did Not Collect | VNA = Variable Not Applicable

Slope Direction

Unique ID T12A_IC00298

Attribute Definition Direction of the slope (looking downhill) where the 5 x 5 m is

located.

Value Type Number Format 1-3 digits Range 0-359

Missing Values DNC = Did Not Collect | PNA = Protocol Not Applicable | VNA

= Variable Not Applicable

Total Shrub Cover < 0.5 meters (Percent)

Unique ID T12A_IC00332

Attribute Definition Total percent cover estimate that would be obtained if a

photograph had been taken from a height of 0.5 m. Only recorded for sites in grassland/parkland ecoregions.

Value Type Code

Code 0 | < 1 | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 |

45 | 50 | 55 | 60 | 65 | 70 | 75 | 80 | 85 |

90 | 95 | 100

Missing Values DNC = Did Not Collect | PNA = Protocol Not Applicable | VNA

= Variable Not Applicable

Total Shrub Cover 0.5 to 1.29 meters (Percent)

Unique ID T12A_IC00332_2

Attribute Definition Total percent cover estimate that would be obtained if a

photograph had been taken from a height of 1.3 m, with

shrubs/saplings <0.5 m removed.

Value Type Code

Code 0 | < 1 | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 |

45 | 50 | 55 | 60 | 65 | 70 | 75 | 80 | 85 |

90 | 95 | 100

Missing Values DNC = Did Not Collect | PNA = Protocol Not Applicable | VNA

= Variable Not Applicable

Total Shrub Cover > 1.3 meters (Percent)

Unique ID T12A_IC00332_3

Attribute Definition Total percent cover estimate that would be obtained if a

photograph had been taken from a height of 5 m, with shrubs

<1.3 m removed.

Value Type Code

Code 0 | < 1 | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40

45 | 50 | 55 | 60 | 65 | 70 | 75 | 80 | 85 |

90 | 95 | 100

Missing Values DNC = Did Not Collect | PNA = Protocol Not Applicable | VNA

= Variable Not Applicable