

CNWI BC Water & Soil Field Form (2024)

Date: _____

Plot ID or Lat/Long: _____

Surveyors: _____

Weather: _____

GENERAL SITE COMMENTS

E.g. landscape position, hummocks/terrain, coarse woody debris, location of soil/water samples, wildlife trees, site history, etc.

WATER

Depth of water to the ground (puddle): _____

_____ cm

pH at surface:

Soil or water reading? _____

Depth to the water table in the soil core: _____

_____ cm

Salinity:

Record unit. _____

ppt

SOIL (see instructions below)

Horizon (simple)	Depth (cm)	Horizon LFH, O, A, B, C	Type / Texture see notes below	Colour (mineral horizons only)				Hydric Signs		Comments: (wetness/saturation/seep age, roots, woody debris, tephra layer, frozen, etc.)
				Colour #1	%	Colour #2	%	Type (S/OM/C/D)	Strength (P/D/F)	
1										
2										
3										
4										
5										
6										

Depth/Horizon:

- Core to least 50cm deep. If not possible, say why. E.g. too compact, bedrock, permafrost, frozen, etc.
- Leaf litter is from upland/forested plants. Record as increasing number. E.g. 6-0 cm means 6 cm litter on top of soil.
- O, A, B, C horizons are below the litter layer. Record as decreasing numbers. E.g. O = 0-10cm; A = 10-15cm; B = 15-40cm+.

Type/Texture:

- **LFH:** Record what you see: twigs, broadleaves, needles, scat, etc. Is it partially decomposed? fully decomposed?
- **Organic Horizons (Of, Om, Oh)**
 - Fibric: Von post 1-3. Plants still identifiable, not very decomposed, squeezed water is clear/light brown.
 - Mesic: Von post 4-6. Plants somewhat recognizable but vague, moderately decomposed, squeezed water is muddy brown.
 - Humic: Von post 7-10. Plants not recognizable, very decomposed, squeezed water is very dark/almost pasty.
- **Mineral Horizons (A, B, C):** Use Mineral Soil Texture Guides. Estimate OM content if present.
 - Sand (S) Silt (Si) Clay (C) Loam (L). LS, SL, SCL, SC, CL, SC, SCL, S.

Colour: Only record for Mineral Horizons

- Use Munsell Book to identify colour. E.g. 10YR, 2/3 - Hue (colour), Chroma (light/dark) / Value (bright/grey).
- If you don't have a Munsell, record the colour type. E.g. very dark brown, medium grey, light yellowish brown, etc.

Hydric Signs: (there can be more than one)

- (S) Smell of sulfur or methane (rotten eggs, stinky).
- (OM) Organic Matter. I.e. An O horizon or Ah/Bh if contains some humic organic content, often appears very dark in colour.
- (C) Redox Concentrations: rust-coloured splotches/streaks in the soil. Can occur with/without depletions "Mottling".
- (D) Redox Depletions: light-medium grey, grey/green, or blue grey. Can occur with/without concentrations "Gleying".

Strength of Hydric Signs

- (P) Prominent: confident it is present and dominant in soil horizon. Visible from standing.
- (D) Distinct: confident it is present, but not dominant in the soil horizon. Visible from arms length.
- (F) Faint: barely visible, or unsure if present in soil horizon. Visible, but only when inspected up close (nose length).

Data collection to support the Canadian National Wetland Inventory in BC

Data Sheet adapted from: "B.C. Ministry of Forests and Range. 2010. Field manual for describing terrestrial ecosystems. -- 2nd ed. Land Management Handbook 25. Co-published with B.C. Ministry of Environment." And "Watson, K., and D. Pennock 2016. Section 3. Soil Profile Description. From: D. Pennock, K. Watson, and P. Sanborn. 2016. Field Handbook for the Soils of Western Canada. Pedology Subcommittee, Canadian Society of Soil Science." And "US Army Corps of Engineers. 2010. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region Version 2.0."



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Changement climatique Canada
Service canadien de la faune

Environment and
Climate Change Canada
Canadian Wildlife Service

CNWI BC Vegetation Plot Field Form (2024)

Date: _____

Plot ID or Lat/Long: _____

Surveyors: _____

Weather: _____

Mid Points: 1% 3% 7.5% 17.5% 37.5% 75%

Woody Stratum Plot size = 30-m diameter. (Equates to ~700m². Seven 1m² plants would equate to ~1% of plot area).

Record dwarf/low woody veg and woody vines in "Ground Stratum.". Use

Specie Name Scientific code or common name	Percent Cover (%) Use canopy cover	Average Height	Dominant Y/N	Native (N) Exotic (E)	Life Form	Other
1.	<1%, 1-5, 5-10, 10-25, 25-50, 50%+	<1m, 1-2, 2-5, 5-10, 10-25, 25m+				
2.	<1%, 1-5, 5-10, 10-25, 25-50, 50%+	<1m, 1-2, 2-5, 5-10, 10-25, 25m+				
3.	<1%, 1-5, 5-10, 10-25, 25-50, 50%+	<1m, 1-2, 2-5, 5-10, 10-25, 25m+				
4.	<1%, 1-5, 5-10, 10-25, 25-50, 50%+	<1m, 1-2, 2-5, 5-10, 10-25, 25m+				
5.	<1%, 1-5, 5-10, 10-25, 25-50, 50%+	<1m, 1-2, 2-5, 5-10, 10-25, 25m+				
6.	<1%, 1-5, 5-10, 10-25, 25-50, 50%+	<1m, 1-2, 2-5, 5-10, 10-25, 25m+				
7.	<1%, 1-5, 5-10, 10-25, 25-50, 50%+	<1m, 1-2, 2-5, 5-10, 10-25, 25m+				
50/20 Dominance Guide:	A. Total % cover all species: _____ %	B. 50% of the total cover: _____ %	C. 20% of the total cover: _____ %			

Ground Stratum Plot size = 1-m diameter. (Equates to ~0.78m². One 10cm² plant would equate ~12% of plot area)

Record all herbaceous veg, bryophytes, algae, dwarf/low woody veg, woody vines AND plants submerged in water e.g. lily pads, milfoil, eelgrass, etc.

Specie Name Scientific code or common name	Percent Cover (%) Use canopy cover	Average Height	Dominant Y/N	Native (N) Exotic (E)	Life Form	Other
1.	<1%, 1-5, 5-10, 10-25, 25-50, 50%+	0-10cm, 10-50, 50-100, 100cm+				
2.	<1%, 1-5, 5-10, 10-25, 25-50, 50%+	0-10cm, 10-50, 50-100, 100cm+				
3.	<1%, 1-5, 5-10, 10-25, 25-50, 50%+	0-10cm, 10-50, 50-100, 100cm+				
4.	<1%, 1-5, 5-10, 10-25, 25-50, 50%+	0-10cm, 10-50, 50-100, 100cm+				
5.	<1%, 1-5, 5-10, 10-25, 25-50, 50%+	0-10cm, 10-50, 50-100, 100cm+				
6.	<1%, 1-5, 5-10, 10-25, 25-50, 50%+	0-10cm, 10-50, 50-100, 100cm+				
7.	<1%, 1-5, 5-10, 10-25, 25-50, 50%+	0-10cm, 10-50, 50-100, 100cm+				
8.	<1%, 1-5, 5-10, 10-25, 25-50, 50%+	0-10cm, 10-50, 50-100, 100cm+				
9.	<1%, 1-5, 5-10, 10-25, 25-50, 50%+	0-10cm, 10-50, 50-100, 100cm+				
10.	<1%, 1-5, 5-10, 10-25, 25-50, 50%+	0-10cm, 10-50, 50-100, 100cm+				
50/20 Dominance Guide:	A. Total % cover all species: _____ %	B. 50% of the total cover: _____ %	C. 20% of the total cover: _____ %			

Other Vegetation (not within the sample plot but are dominant, abundant or notable in wetland complex).

Specie Name	Comments (describe the prevalence / distribution / height of the specie).	Life Form
1.		
2.		
3.		

Notes:

- **Specie Name** – Scientific code is the first 4 letters of Genus and first 3 letters of species (E.g. ACER MAC; CARE AQU)
- **"Dominant"** is determined by the 50/20 Rule which is done in Four Step Method for both Woody and Ground Stratums.
 - Step 1:** Calculate total % cover of all species ("A") by adding the mid-points for each specie (A can be >100%). Record numbers.
 - Step 2:** Calculate what 50% ("B") and 20% ("C") of the total % cover ("A") is. "B" = A/2. "C" = A/5. Record numbers.
 - Step 3:** "50 Rule" - In decreasing order of abundance, select all species until the cumulative coverage exceeds "B".
 - Step 4:** "20 Rule" - Select any other species that, by itself exceeds "C".
 - Note:** for "50 Rule" and "20 Rule" - if two or more species are equal in coverage (i.e., same % bin), they should both/all be selected.
- **Native / Exotic** – Indicate if the species is native to the region or an exotic (ornamental or invasive).
- **Life Form** (T) Tree (S) Shrub (H) Herbaceous (M) Moss (L) Lichen (Aq) Aquatic (Al) Algae (O) Other
- **Other:** (OLB) Obligate (FACW) Facultative Wet (FAC) Facultative (FACU) Facultative Upland (UPL) Upland

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