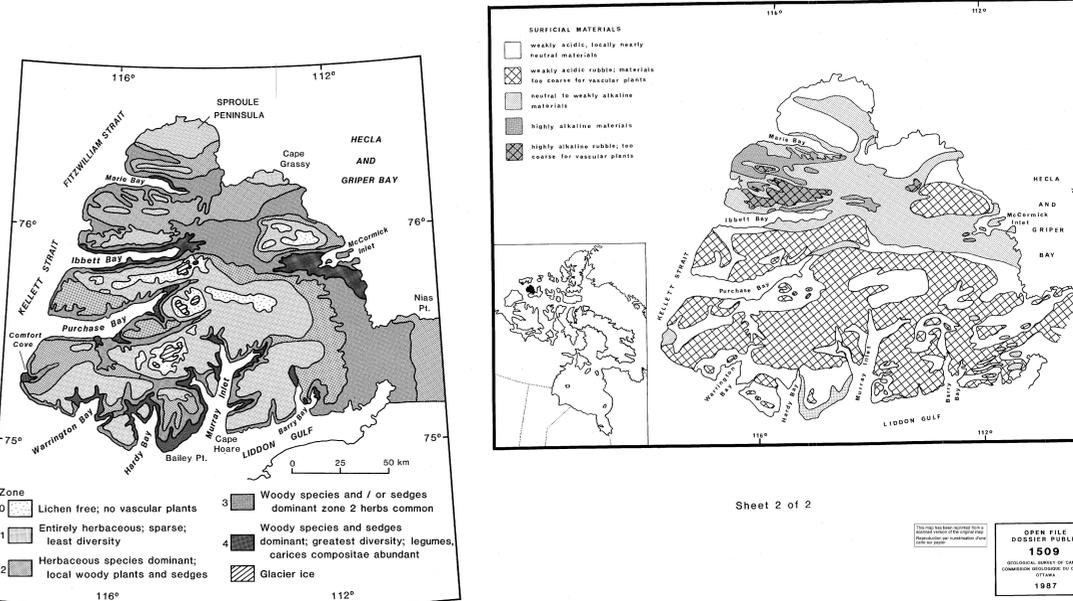


VEGETATION TYPES (MAP UNITS)	ASSOCIATED SURFICIAL MATERIALS AND DRAINAGE CHARACTERISTICS	BIOClimATIC ZONES			
		BIOClimATIC ZONE 4	BIOClimATIC ZONE 3	BIOClimATIC ZONE 2	BIOClimATIC ZONE 1
DRYAS-SALIX TUNDRA					
Ds	Moderately to imperfectly drained mid to lower slopes and rolling plains on weakly to moderately alkaline silty sand and sandy gravel. pH 7.0-7.6	Locally generally absent; may be replaced by Ds.		Absent.	Absent.
Dn	Moderately to imperfectly drained mid to lower slopes and rolling plains on weakly to moderately alkaline silty sand and sandy gravel. pH 7.0-7.6	Locally generally absent.	Dryas-Salix-Alpececurus Tundra: Dryas and Salix dominant (13-30% cover). Alpececurus alpinus most common associate. Herbs as in Ds also present. Lower stratum nearly continuous cryptogamic cover.	Absent.	Absent.
Dp	Moderately drained mid to lower slopes and rolling plains on weakly to moderately alkaline silty sand and sandy gravel. pH 7.0-7.6	Locally common. See Zone 3.	Dryas-saxifrage Tundra: Dryas, and to a lesser extent Salix dominant (13-30% cover). Saxifraga oppositifolia the most common associate. Other common herbs include Poa abbreviata, Alpececurus, Parrya arctica, Papaver, Draba, Lesquerella arctica, Minuartia. Lower stratum nearly continuous cryptogamic cover.	Absent.	Absent.
DRYAS-SALIX BARRENS					
Do	Moderately to well drained weakly to moderately alkaline gravelly, platey shale fragments, sand, sandy gravel. Most often on the upper slopes and hill crests. pH 7.0-7.6	Absent.	Absent.	Absent.	Absent.
Dh	Moderately drained silty sand, sandy silt and sandy gravels weakly to moderately alkaline. pH 7.2-7.6		Dryas-Salix-herb Barrens: Dryas and Salix dominant (10-25% cover); no clear common associates; herbs similar to those of Zone 4. Lower stratum absent.	Absent.	Absent.
Dp	Moderately drained sandy silt, silty sand, and sandy gravel materials weakly to moderately alkaline.		Dryas-Salix-saxifrage Barrens: Dryas and Salix dominant (11-25% cover). Saxifraga oppositifolia most common associate. Calliphilus herbs present as in Ds. Lower stratum absent.	Absent.	Absent.
SALIX TUNDRA					
Ws	Moderately to imperfectly drained lower slopes and plains on weakly acidic or circumneutral silty, silty sand, silty sand and silty diamicton. pH 5-7		Salix-Alpececurus Tundra: Salix arctica dominant (13-25% cover). Alpececurus alpinus most common associate. Other herbs include Cerastium alpinum, Potentilla hypericifolia, Draba, Stellaria, Cerastium alpinum. Lower stratum absent.	Rare generally absent.	Absent.
Wa	Moderately to imperfectly drained lower slopes and plains on weakly acidic or circumneutral silty, silty sand and silty diamicton. pH 5-7	Locally more common in Zone 3.	Salix-Alpececurus Tundra: Salix arctica dominant (10-25% cover). Alpececurus alpinus most common associate. Other herbs include Cerastium alpinum, Potentilla hypericifolia, Draba, Stellaria, Cerastium alpinum. Lower stratum is nearly continuous to broken cryptogamic cover.	Absent.	Absent.
Wg	Moderately to imperfectly drained lower slopes and plains on weakly acidic or circumneutral silty, silty sand, silty sand and silty diamicton. pH 5-7	Local, more common in Zone 3.	Salix-grass Tundra: Salix arctica dominant (13-25% cover). Grasses such as Poa abbreviata, Alpececurus, and Festuca present as in Ds present. Lower stratum is nearly continuous to broken cryptogamic cover.	Absent.	Absent.
Wl	Moderately to imperfectly drained lower slopes and plains on weakly acidic or circumneutral silty, silty sand, silty sand and sandy gravel. pH 5-7		Salix-Luzula Tundra: Salix arctica dominant (10-25% cover). Luzula nivalis and L. nivalis most common associates. Other herbs include Cassiope tetragona (in locally disturbed areas), Potentilla hypericifolia, Draba, Stellaria, Cerastium alpinum, Papaver, Draba, Stellaria, Cerastium alpinum. Lower stratum is nearly continuous to broken cryptogamic cover.	Absent.	Absent.
WILLOW BARRENS					
Wb	Moderately to well drained upper slopes on weakly acidic to neutral silty, silty sand, silty diamicton. pH 5-7		Salix-Alpececurus Barrens: Salix arctica dominant (13-25% cover). Alpececurus alpinus most common associate. Other herbs include Draba, Rayssa purpurens, Papaver, Puccinellia sp. and Poa. Lower stratum absent.	Rare generally absent.	Absent.
Wc	Moderately to well drained upper slopes and plains on weakly acidic to neutral silty sand, silty sand diamicton. pH 5-7		Salix-herb Barrens: Salix arctica dominant (13-10% cover) no clear dominance among herbs. Associates include Alpececurus, Luzula confusa, Poa, Puccinellia, Papaver, Draba, Stellaria and Cerastium. Lower stratum generally absent.	Rare generally absent	Absent.
Wl	Moderately to well drained upper slopes and plains on sandy silty sand, sandy diamicton on weakly acidic soils. pH 5-7		Salix-Luzula Barrens: Salix arctica dominant (13-25% cover). Luzula most common associate; herbs as in Zone 4. Lower stratum absent.	Rare generally absent	Absent.
PURPLE SAXIFRAGE TUNDRA					
Ds	Moderately to imperfectly drained, weakly to moderately alkaline silty, silty sand and silty diamicton; generally lower slopes and rolling plains. pH 7.0-7.6	Rare generally absent.	Rare generally absent	Purple Saxifrage-Alpececurus Tundra: Saxifraga oppositifolia dominant (6-9% cover) herb associates as in Zone 2. Lower stratum thin, discontinuous cryptogamic layer.	Purple Saxifrage-Alpececurus Tundra: Saxifraga oppositifolia dominant (6-9% cover) herb associates as in Zone 2. Lower stratum thin, discontinuous cryptogamic layer.
Dp	Moderately to imperfectly drained weakly to moderately alkaline silty, silty sand, sand and silty sand diamicton generally on lower slopes and rolling plains. pH 7.0-7.6	Rare generally absent.	Rare generally absent	Purple Saxifrage-grass Tundra: Saxifraga oppositifolia dominant (5-10%); most common herb associates include Alpececurus, Arctostaphylos, Puccinellia, Poa abbreviata and Festuca. Other calliphilus herbs present. Lower stratum is nearly continuous cryptogamic cover.	Purple Saxifrage-grass Tundra: Saxifraga oppositifolia dominant (6-9% cover). Associates and lower stratum similar to Zone 2.
Dh	Moderately to imperfectly drained mid to lower slopes and rolling plains on moderately alkaline silty, silty sand and silty diamicton. pH 7.0-7.6	Rare generally absent.	Purple Saxifrage-herb Tundra: Saxifraga oppositifolia dominant (5-10% cover); no clear dominance among the associated herbs. Associates include Parrya and Lesquerella are generally absent. Lower stratum as in Zone 3.	Purple Saxifrage-herb Tundra: Saxifraga oppositifolia dominant (6-9% cover) herb associates as in Zone 2. In some places Saxifraga oppositifolia appears in monoculture.	
PURPLE SAXIFRAGE BARRENS					
Ph	Moderately to well drained weakly to moderately alkaline silty, silty sand and silty diamicton; generally on mid to upper slopes and ridge crests. pH 7.0-7.6	Rare generally absent	Local; see Zone 2; generally present on exposed knolls and ridges.	Purple Saxifrage-Alpececurus Barrens: Saxifraga oppositifolia dominant (6-9% cover). Alpececurus alpinus most common associate; herbs commonly present include Draba, Fragaria, Minuartia, Poa and Festuca. Lower stratum absent.	Purple Saxifrage-Alpececurus Barrens: Saxifraga oppositifolia dominant (6-9% cover). Herbs similar to Zone 2. Lower stratum absent.
Ph	Moderately to well drained, weakly to moderately alkaline silty sand, sandy diamicton and gravelly diamicton. pH 7.0-7.6	Rare generally absent	Local; see Zone 2; generally present on exposed knolls and ridges.	Purple Saxifrage-herb Barrens: Saxifraga oppositifolia dominant (6-9% cover) herb associates as in Zone 2. Lower stratum absent.	Purple Saxifrage-herb Barrens: Saxifraga oppositifolia dominant (6-9% cover) herb associates as in Zone 2. Lower stratum absent.
Pw	Moderately to well drained, weakly to moderately alkaline silty, silty sand and silty diamicton. pH 7.0-7.6	Rare generally absent	Rare when present, as in Zone 4.	Absent.	Absent.
Pc	Moderately to well drained, weakly to moderately alkaline silty, silty sand and silty diamicton and gravelly diamicton. pH 7.0-7.6	Rare generally absent	Rare to local; see Zone 2.	Purple Saxifrage-lichen Barrens: Saxifraga oppositifolia dominant (6-9%); most common associates are lichens, including Cladonia, Thamnolia, and soil lichens. Sparse assortment of herb present as in Ph.	Purple Saxifrage-lichen Barrens: Saxifraga oppositifolia dominant (6-9% cover). Common associates and herbs as in Zone 2.
HERB BARRENS					
H	Imperfectly to well drained silty, silty sand, and silty diamicton on both acidic and alkaline substrates.	Local generally absent. Usually areas that have little or no snow cover during winter, or are undergoing early stages of plant colonization. In some places this community develops on highly alkaline substrates (pH 7.0).	Similar to Zone 4; unusual colonizers limited to Taraxacum sp. and grasses	Local to common; see Zone 1. Colonizers generally species in more stable communities.	Herb Barrens herbs sparse (6-9% cover). No obvious dominance. Species include Alpececurus, Puccinellia, Luzula, Papaver, Draba, Oxyria, Cerastium alpinum, Stellaria, Saxifraga oppositifolia, S. cernua, S. caespitosa, Poa, and Festuca. Lower stratum broken to absent.
CRYPTOGAMIC BARRENS					
Cr	Imperfectly to well drained (sandstone and coarse gravel). On neutral to acidic rock, generally sandstone.	Local wherever acidic sandstone and coarse gravel. Occurs in this zone. See Zone 2.	Local as in Zone 4.	Cryptogamic Barrens: crustacean lichens on exposed facets of boulders; Rhinidium, Rhizocarpon, Xanthoria, Lecidea and Peronospora species and foliose lichens such as Parmelia, Dermatozoum, Umbilicaria, and Nephroma sp. Mats of Rhacomitrium moss in sheltered niches. Materials too coarse for establishment of vascular plants.	Cryptogamic Barrens: Crustacean lichens, foliose lichens and Rhacomitrium moss mats as in Zone 2.
GLACIER ICE					
I	Absent.	Absent.	Absent.	Absent.	Present only at elevations above 500 m a.s.l. Confined to the sandstone plateaus of western Melville Island. Absent on carbonate plateaus at similar elevations.
UNVEGETATED AREAS					
0	All drainage regimes highly alkaline (pH 8.0-10.0) highly acidic (pH 4.0-6.0) silty, silty clay, gravel or rubble. Also includes zones with nearly permanent snow cover and major late-lying snowbeds as well as actively crystallized soil, and recently deposited alluvium and materials lacking plant nutrients, like white sands.	Generally restricted to alluvial deposits, included channels still undergoing annual flooding.	Local; only common on pure carbonates or where snowbeds persist throughout most of the thawing season.	Common on pure carbonates and on the sandstone plateaus at elevations above 400 m a.s.l., as well as locally where snowbeds persist throughout most of the thawing season.	Common on pure carbonates, and on the sandstone plateaus at elevations above 400 m a.s.l., as well as locally where snowbeds persist throughout most of the thawing season.

VEGETATION TYPES (MAP UNITS)	ASSOCIATED SURFICIAL MATERIALS AND DRAINAGE CHARACTERISTICS	BIOClimATIC ZONES			
		BIOClimATIC ZONE 4	BIOClimATIC ZONE 3	BIOClimATIC ZONE 2	BIOClimATIC ZONE 1
SEIGE MEADOWS					
Ss	Soils saturated to poorly drained throughout the thaw period. On all but the coarsest textured materials. Commonly at the edges of lakes and ponds, and below persistent snowbeds. Also found in low centres or troughs on polygonal ground. pH 5.2-7.2		Rare generally absent.	Absent.	Absent.
Sg	Soils saturated to poorly drained throughout the thaw period. On all but the coarsest textured materials. Commonly at the edges of lakes and ponds, and below persistent snowbeds. Also found in low centres or troughs on polygonal ground. pH 5.2-7.2		Sedge-grass Meadows: Carex and Eriophorum sp. cover (10-30%). Alpececurus and Duromia common associates. Carex membranacea local. Salix arctica occurs on raised mossy ridges and hummocks. Lower stratum continuous bryophytic mat. Associated emergents: dominant sedges, Arctophila fulva, Pleuroppogon sibirici, Ranunculus hyperboreus and R. gmelini. Callix hololepis and Hippuris vulgaris locally present.	Absent generally replaced by Grass Meadow.	Absent.
GRASS MEADOWS					
Gs	Soils saturated to poorly drained throughout the thaw period. On all but the coarsest textured materials. Commonly at the edges of lakes and ponds, and below persistent snowbeds. Also found in low centres or troughs on polygonal ground. pH 6.4-7.6	Grass-edge Meadows: Alpececurus alpinus dominant (10-15% cover). Carex agrostifolia and Eriophorum tritice commonly to 5% cover. Grasses and herbs local. Lower stratum is bryophytic mat. Emergents: Alpececurus, Pleuroppogon, Ranunculus hyperboreus.	Local; generally absent.	Absent.	Absent.
Ga	Soils saturated to poorly drained throughout the thaw period. On all but the coarsest textured materials. Commonly at the edges of lakes and ponds, and below persistent snowbeds. Also found in low centres or troughs on polygonal ground. pH 6.4-7.6	Rare, generally absent.	Grass (Alpececurus) Meadows: Alpececurus alpinus dominant (5-15% cover, locally 19%). Alpececurus common to codominant; Luzula nivalis present. Sedges rare, generally absent. Lower stratum continuous bryophytic mat.	Grass Meadows similar to Zone 3; cover 5-10%. Lower stratum generally continuous bryophytic mat. Emergents: Alpececurus, Pleuroppogon sibirici and R. hyperboreus rare.	Grass Meadows: Alpececurus (1-9% cover) dominant, Luzula nivalis common associate. Emergents: restricted to Alpececurus.
Gh	Soils saturated to poorly drained throughout the thaw period. On all but the coarsest textured materials. Commonly at the edges of lakes and ponds, and below persistent snowbeds. Also found in low centres or troughs on polygonal ground. pH 6.4-7.6	Generally absent.	Local; generally absent.	Grass-herb Meadows: Alpececurus alpinus dominant (10% cover). Luzula nivalis and a variety of other species present. Lower stratum discontinuous bryophytic mat. Locally continuous.	Grass-herb Meadows: Alpececurus alpinus dominant (1-9% cover). Luzula nivalis common associate. Emergents: restricted to Alpececurus.
Gp	Soils saturated to poorly drained throughout the thaw period. On all but the coarsest textured materials. Commonly at the edges of lakes and ponds, and below persistent snowbeds. Also found in low centres or troughs on polygonal ground. pH 6.4-7.6	Rare generally absent.	Generally absent.	Grass-saxifrage Meadows: Alpececurus alpinus dominant (10% cover). Saxifraga oppositifolia, S. caespitosa and S. hypnoides common associates. Calliphilus herbs present as in Ds. Lower stratum thin and broken.	Grass-saxifrage Meadows: Alpececurus alpinus dominant (6-9% cover). Saxifraga oppositifolia, S. caespitosa and S. hypnoides common associates. Calliphilus herbs present as in Ds. Lower stratum thin and broken.
GRASS BARRENS					
Ga	Moderately to well drained slopes and plains most common on silty loam, and silty diamicton. In some places creosote, Tristram stage of colonization of asellon or disturbed deposits. pH 5.0-7.2	Rare generally confined to recently disturbed silt. Salix may be present.	Rare to local; generally absent or freshly deposited silt.	Grass Barrens: Dominated by Alpececurus (10% cover). Puccinellia, Poa and Festuca common associates. Luzula and some forbs present in small amounts. Calliphilus herbs present as in Ds. Emergents: Alpececurus, Deschampsia caespitosa, Tristram stage, Poa alpigena, P. plauca, Agropyron latifolium, Hieracium aglymum, Poa abbreviata, Festuca sp., Puccinellia sp.	Grass Barrens: Dominated by Alpececurus (1-9% cover). Common associates as in Zone 2. Colonizers absent.
Gh	Moderately to well drained knolls, terraces and slopes. Most common on silty, silty loam and silty diamicton. pH 5.0-7.2	Local to very rare. Generally absent.	Local; generally absent.	Grass-herb Barrens: Alpececurus dominant (10% cover). A variety of herb common associates, including colonizing Salix arctica, Alpececurus, Saxifraga, Draba, Stellaria longipes, Cerastium alpinum. Lower stratum generally absent.	Grass-herb Barrens: Alpececurus dominant (1-9% cover). Herb associates as in Zone 2.
Gp	Moderately to well drained slopes and plains, knolls and ridges most common on weakly alkaline silty, silty loam and silty diamicton. pH 7.0-7.6	Extremely local; too small to map.	Local; generally absent.	Grass-saxifrage Barrens: Alpececurus dominant (6-9% cover). Saxifraga oppositifolia, S. caespitosa, and S. hypnoides common associates. Calliphilus herbs present as in Ds. Lower stratum is nearly continuous to broken cryptogamic cover.	Grass-saxifrage Barrens: Alpececurus dominant (6-9% cover) common associates as in Zone 2.
LUZULA TUNDRA					
Lw	Moderately to imperfectly drained lower slopes and rolling plains on weakly acidic silty sand, silty sand and silty diamicton. pH 5-7	"Rare generally in pockets where snow remains later than on the surrounding terrain."	Luzula-Salix Tundra: Luzula confusa and L. nivalis dominant (10-25% cover). Salix arctica present (to 5% cover). Herb associates include Potentilla hypericifolia, Draba, Stellaria, and Cerastium alpinum. Lower stratum nearly continuous bryophytic mat. Rhacomitrium may be present in depressions. Lichens common. Cassiope mats present locally.	Local; generally absent.	Absent.
Ls	Imperfectly to moderately drained weakly acidic silty sand, silty sand diamicton. pH 5-7	Rare, generally absent.	Local to common (see Zone 2); present where snow may remain a little longer in spring.	Luzula-grass Tundra: Luzula confusa and to a lesser extent L. nivalis dominant (6-9% cover). Alpececurus common associate. Forbs include Potentilla hypericifolia, Draba, Stellaria and Cerastium alpinum. Poa and Festuca local. Lower stratum as in Lw. Most common bryophyte is a liverwort, Gymnomitrium coralloides.	Luzula-grass Tundra: Luzula confusa dominant (6-9% cover) herb associates as in Zone 2. Luzula confusa sometimes monoculture.
Lh	Imperfectly to moderately drained acidic to neutral sand and sandy diamicton. pH 5-7	Rare	Rare, generally absent.	Luzula-herb Tundra: Luzula confusa dominant (5-10% cover). No strong associate among herbs. Papaver, Potentilla hypericifolia, Draba, Stellaria, Cerastium alpinum and grasses present. Lower stratum as in Lw.	Luzula-herb Tundra: Luzula confusa dominant (6-9% cover). Common herb associates as in Zone 2. Lower stratum absent.
Lp	Imperfectly to moderately drained weakly acidic to neutral sand, with a locally abundant iron content. pH 5-7	Rare generally absent.	Rare, generally absent.	Luzula-saxifrage Tundra: Luzula confusa dominant (6-9% cover). Saxifraga oppositifolia and S. caespitosa, most common associates. Other herbs as in Lh. Lower stratum nearly continuous bryophytic mat.	Luzula-saxifrage Tundra: Luzula confusa dominant (6-9% cover). Saxifraga oppositifolia and S. caespitosa, most common associates. Other herbs as in Lh. Lower stratum nearly continuous bryophytic mat.
LUZULA BARRENS					
Lw	Moderately to well drained weakly acidic sandy diamicton and sandy marine deposits. pH 5.2-7.0	Local, see Zone 3.	Luzula willow Barrens: L. confusa tussocks dominant (5-15% cover). Salix arctica (6-9% cover) present in shallow depressions and troughs. Herb associates include Hieracium aglymum, Alpececurus, Papaver, Potentilla hypericifolia, Draba, and Caryophyllaceae. Lower stratum generally absent.	Rare generally absent.	Absent.



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