



### VEGETATION OF EASTERN MELVILLE ISLAND



COMMUNITY	PLANT COMMUNITIES	SURFICIAL MATERIALS	HYDROLOGIC REGIME	ECOLOGIC
1	SCORPION MEADOW COMMUNITIES: Upper stratum dominated by Scirpus (Scirpus) and Festuca (Festuca) species; abundant grass associates. Lower stratum continuous dense herbaceous mat of Desmodium, Alchemilla, Silene, Lonicera and Ranunculus. Tiliaceae, Umbelliferae, etc.	Weakly to moderately calcareous and non calcareous materials with some fines	Heavily drained throughout summer; often saturated. Slopes of ponds and lakes, seepage slopes, centers or fringes of polygons.	locally 3
2	GRASS-MOSS MEADOW COMMUNITIES: Upper stratum dominated by grasses (S-201), usually Allogonum. Allogonum-mosses common associates. Lower stratum dominated by mosses. Lower stratum dominated by mosses.	Weakly to moderately calcareous and non calcareous materials with some fines	Heavily drained throughout summer; often saturated. Slopes of ponds and lakes, seepage slopes, centers or fringes of polygons.	2, 3, 1
3	GRASS-PATINA TUNDRA: Upper stratum dominated by grasses, mainly Allogonum (S-101); a variety of dwarf shrubs and herb associates may be present. Lower stratum predominantly sedge (S-201) with bromophytes in cracks and depressions; cover is "mossy" and low.	Silt and clay; silty diamict	Heavily drained throughout summer; often saturated. Slopes of ponds and lakes, seepage slopes, centers or fringes of polygons.	locally 4
4	GRASS AND PURPLE SASSIFRAGE TUNDRA: Allogonum (S-101-151), Saxifraga oppositifolia common associates. Cratichneumonid (S-151-152)	Weakly to moderately calcareous silty, clayey material	Non calcareous silts and clays	locally 3
5	GRASS AND WILLOW TUNDRA: Allogonum (S-101-151), dwarf shrubs, esp. willow common associates. Cratichneumonid (S-151-152)	Non calcareous silts and clays	Non calcareous silts and clays	locally 3
6	GRASS AND LUDWIGIA TUNDRA: Allogonum (S-101-151), dwarf shrubs, esp. willow common associates. Cratichneumonid (S-151-152)	Non calcareous silts and clays	Non calcareous silts and clays	locally 3
7	GRASS AND HERB TUNDRA: Allogonum (S-101-151), dwarf shrubs, esp. willow common associates. Cratichneumonid (S-151-152)	Weakly calcareous and non calcareous silts and clays	Weakly calcareous and non calcareous silts and clays	locally 3
8	GRASS BARRIER: Upper stratum dominated by grasses, mainly Allogonum (S-101); a variety of dwarf shrubs and herb associates may be present. Lower stratum predominantly sedge (S-201) with bromophytes in cracks and depressions; cover is "mossy" and low.	Silt and clay; silty diamict	Heavily drained throughout summer; often saturated. Slopes of ponds and lakes, seepage slopes, centers or fringes of polygons.	2, 1, 1
9	GRASS AND PURPLE SASSIFRAGE BARRIERS: Saxifraga oppositifolia common associates. Cratichneumonid (S-151-152)	Weakly to moderately calcareous silts and clays	Weakly to moderately calcareous silts and clays	locally 3
10	GRASS AND LUDWIGIA BARRIERS: Ludwiga confusa common associates. Cratichneumonid (S-151-152)	Non calcareous sandy silt	Well drained materials, briefly wet at somewhat rapidly draining active layer depths. Upper layer usually dry, lower layer damp in late summer. No protective snow cover in winter.	locally 3
11	GRASS AND CRUCIFER BARRIERS: Cruciferae: Draba, Puccinellia and Fig present.	Silt and clay generally of marine origin	Well drained materials, briefly wet at somewhat rapidly draining active layer depths. Upper layer usually dry, lower layer damp in late summer. No protective snow cover in winter.	locally 3
12	GRASS AND HERB BARRIERS: Allogonum (S-101-151), dwarf shrubs, esp. willow common associates. Cratichneumonid (S-151-152)	Silt and clay generally non calcareous	Well drained materials, briefly wet at somewhat rapidly draining active layer depths. Upper layer usually dry, lower layer damp in late summer. No protective snow cover in winter.	locally 3
13	LUDWIGIA-PATINA TUNDRA: Upper stratum dominated by Ludwiga (L-101); a variety of dwarf shrubs and herb associates may be present. Lower stratum predominantly sedge (S-201) with bromophytes in cracks and depressions; cover is "mossy" and low.	Non calcareous sand; some silty sand	Materials imperfectly drained; moderately well drained at depth even when surface is dry in late summer. No protective snow cover in winter.	all zones
14	LUDWIGIA AND WILLOW TUNDRA: Ludwiga (L-101-151), willow common associates. Cratichneumonid (S-151-152)	Non calcareous sand, usually with some Fe present	Materials imperfectly drained; moderately well drained at depth even when surface is dry in late summer. No protective snow cover in winter.	locally 4
15	LUDWIGIA AND ALGONUM TUNDRA: Allogonum (S-101-151), Ludwiga (L-101-151) common associates. Cratichneumonid (S-151-152)	Non calcareous silty sand	Materials imperfectly drained; moderately well drained at depth even when surface is dry in late summer. No protective snow cover in winter.	locally 3
16	LUDWIGIA AND HERB TUNDRA: Ludwiga (L-101-151), dwarf shrubs, esp. willow common associates. Cratichneumonid (S-151-152)	Non calcareous sand, silty	Materials imperfectly drained; moderately well drained at depth even when surface is dry in late summer. No protective snow cover in winter.	locally 3
17	LUDWIGIA BARRIERS: Upper stratum dominated by Ludwiga (L-101); a variety of dwarf shrubs and herb associates may be present. Lower stratum predominantly sedge (S-201) with bromophytes in cracks and depressions; cover is "mossy" and low.	Non calcareous sand; silty sand and local lag gravel commonly present	Materials imperfectly drained; moderately well drained at depth even when surface is dry in late summer. No protective snow cover in winter.	all zones
18	LUDWIGIA AND PURPLE SASSIFRAGE BARRIERS: Saxifraga oppositifolia common associates. Cratichneumonid (S-151-152)	Non calcareous sand, usually with noticeable Fe stain to grains	Well drained materials, briefly wet at somewhat rapidly draining active layer depths. Upper layer usually dry, lower layer damp in late summer.	locally 3
19	LUDWIGIA AND ALGONUM BARRIERS: Allogonum (S-101-151), Ludwiga (L-101-151) common associates. Cratichneumonid (S-151-152)	Non calcareous silty sand	Well drained materials, briefly wet at somewhat rapidly draining active layer depths. Upper layer usually dry, lower layer damp in late summer.	locally 3
20	LUDWIGIA AND HERB BARRIERS: Ludwiga (L-101-151), dwarf shrubs, esp. willow common associates. Cratichneumonid (S-151-152)	Non calcareous sand and gravel	Well drained materials, briefly wet at somewhat rapidly draining active layer depths. Upper layer usually dry, lower layer damp in late summer.	locally 3
21	DWARF SHRUB TUNDRA: Dryas integrifolia and Salix arctica dominate upper stratum (S-501); Cratichneumonid (S-151-152), dwarf shrubs, esp. willow common associates. Cratichneumonid (S-151-152)	Weakly to moderately calcareous sand and gravel; some silty sandy sand	Well drained materials, briefly wet at somewhat rapidly draining active layer depths. Upper layer usually dry, lower layer damp in late summer.	locally 3
22	DWARF SHRUB AND PURPLE SASSIFRAGE TUNDRA: Saxifraga oppositifolia, dwarf shrubs, esp. willow common associates. Cratichneumonid (S-151-152)	Weakly to moderately calcareous sand and gravel; often gravel knobs	Well drained materials, briefly wet at somewhat rapidly draining active layer depths. Upper layer usually dry, lower layer damp in late summer.	locally 3
23	DWARF SHRUB AND ALGONUM TUNDRA: Allogonum (S-101-151), dwarf shrubs, esp. willow common associates. Cratichneumonid (S-151-152)	Weakly to moderately calcareous silty sand and silty sand diamict	Well drained materials, briefly wet at somewhat rapidly draining active layer depths. Upper layer usually dry, lower layer damp in late summer.	locally 3
24	DWARF SHRUB BARRIERS: Dryas integrifolia and Salix arctica dominate upper stratum (S-501); Cratichneumonid (S-151-152), dwarf shrubs, esp. willow common associates. Cratichneumonid (S-151-152)	Weakly to moderately calcareous sand and gravel; silty sand diamict	Well drained materials, briefly wet at somewhat rapidly draining active layer depths. Upper layer usually dry, lower layer damp in late summer.	locally 3
25	DWARF SHRUB AND PURPLE SASSIFRAGE BARRIERS: Saxifraga oppositifolia common associates. Cratichneumonid (S-151-152)	Weakly to moderately calcareous sand and gravel; often gravel knobs	Well drained materials, briefly wet at somewhat rapidly draining active layer depths. Upper layer usually dry, lower layer damp in late summer.	locally 3
26	DWARF SHRUB AND ALGONUM BARRIERS: Allogonum (S-101-151), dwarf shrubs, esp. willow common associates. Cratichneumonid (S-151-152)	Weakly to moderately calcareous silty sand, usually silty sand diamict	Well drained materials, briefly wet at somewhat rapidly draining active layer depths. Upper layer usually dry, lower layer damp in late summer.	locally 3
27	WILLOW-PATINA TUNDRA: Salix arctica dominates the upper stratum (S-101); a variety of dwarf shrubs and herb associates may be present. Lower stratum predominantly sedge (S-201) with bromophytes in cracks and depressions; cover is "mossy" and low.	Non calcareous sand and gravel; silty sand and sandy diamict	Materials imperfectly drained; moderately well drained at depth even when surface is dry in late summer. No protective snow cover in winter.	locally 3
28	WILLOW AND ALGONUM TUNDRA: Allogonum (S-101-151), willow common associates. Cratichneumonid (S-151-152)	Non calcareous silty sand; sometimes marine silt	Materials imperfectly drained; moderately well drained at depth even when surface is dry in late summer. No protective snow cover in winter.	locally 3
29	WILLOW AND LUDWIGIA TUNDRA: Ludwiga (L-101-151), willow common associates. Cratichneumonid (S-151-152)	Non calcareous silty sand; silty sand diamict	Materials imperfectly drained; moderately well drained at depth even when surface is dry in late summer. No protective snow cover in winter.	locally 3
30	WILLOW AND HERB TUNDRA: No clear important herb associates; herbs generally total S1.	Non calcareous, silty sand, often weathered bedrock	Materials imperfectly drained; moderately well drained at depth even when surface is dry in late summer. No protective snow cover in winter.	locally 3
31	WILLOW BARRIERS: Salix arctica dominates the upper stratum (S-101-151); herbs are common associates; non calcareous. Lower stratum typically absent; local lichens may occur.	Non calcareous sand and gravel, silty sand and sandy diamict	Materials imperfectly drained; moderately well drained at depth even when surface is dry in late summer. No protective snow cover in winter.	locally 3
32	WILLOW AND ALGONUM BARRIERS: Allogonum (S-101-151), willow common associates. Cratichneumonid (S-151-152)	Non calcareous silty sand, silty sand diamict	Materials imperfectly drained; moderately well drained at depth even when surface is dry in late summer. No protective snow cover in winter.	locally 3
33	WILLOW AND LUDWIGIA BARRIERS: Ludwiga (L-101-151), willow common associates. Cratichneumonid (S-151-152)	Non calcareous sand and gravel commonly present	Materials imperfectly drained; moderately well drained at depth even when surface is dry in late summer. No protective snow cover in winter.	locally 3
34	WILLOW AND HERB TUNDRA: No clear important herb associates; total herbs usually S1.	Non calcareous silty sand and sand; often weathered bedrock	Materials imperfectly drained; moderately well drained at depth even when surface is dry in late summer. No protective snow cover in winter.	locally 3
35	PURPLE SASSIFRAGE-PATINA TUNDRA: Saxifraga oppositifolia dominates the upper stratum (S-101); dwarf shrubs and herbs, especially Cratichneumonid (S-151-152), are common associates. Lower stratum predominantly sedge (S-201) with bromophytes in cracks and depressions; cover is "mossy" and low.	Weakly to moderately calcareous sand and gravel; silty sand	Materials imperfectly drained; moderately well drained at depth even when surface is dry in late summer. No protective snow cover in winter.	locally 3
36	PURPLE SASSIFRAGE AND WILLOW TUNDRA: Dwarf shrubs and willow common associates to S1.	Weakly to moderately calcareous sand and gravel; silty sand	Materials imperfectly drained; moderately well drained at depth even when surface is dry in late summer. No protective snow cover in winter.	locally 3
37	PURPLE SASSIFRAGE AND ALGONUM TUNDRA: Allogonum (S-101-151), Saxifraga oppositifolia common associates. Cratichneumonid (S-151-152)	Weakly to moderately calcareous silty sand	Materials imperfectly drained; moderately well drained at depth even when surface is dry in late summer. No protective snow cover in winter.	locally 3
38	PURPLE SASSIFRAGE AND HERB TUNDRA: No clear important herb associates; total herbs S1.	Weakly to moderately calcareous sand and gravel; silty sand	Materials imperfectly drained; moderately well drained at depth even when surface is dry in late summer. No protective snow cover in winter.	locally 3
39	PURPLE SASSIFRAGE BARRIERS: Saxifraga oppositifolia dominates the upper stratum (S-101); dwarf shrubs may be present; herbs include many calciphilic species. Lower stratum absent or consists of sporadic lichens and tufts of mosses.	Weakly to moderately calcareous sand and gravel	Well drained materials; briefly wet at somewhat rapidly draining active layer depths. Upper layer usually dry in late summer.	locally 4
40	PURPLE SASSIFRAGE AND WILLOW BARRIERS: Dwarf shrubs, usually Salix arctica, common associates. Cratichneumonid (S-151-152)	Weakly to moderately calcareous sand and gravel	Well drained materials; briefly wet at somewhat rapidly draining active layer depths. Upper layer usually dry in late summer.	locally 3
41	PURPLE SASSIFRAGE AND ALGONUM BARRIERS: Allogonum (S-101-151), Saxifraga oppositifolia common associates. Cratichneumonid (S-151-152)	Weakly to moderately calcareous sand and gravel with a major Fe component	Well drained materials; briefly wet at somewhat rapidly draining active layer depths. Upper layer usually dry in late summer.	locally 3
42	PURPLE SASSIFRAGE AND HERB BARRIERS: No clear important herb associates; total herbs S1.	Non calcareous sand and gravel	Well drained materials; briefly wet at somewhat rapidly draining active layer depths. Upper layer usually dry in late summer.	locally 3
43	HERB-PATINA TUNDRA: Upper stratum shows no clear importance among dwarf shrubs and herbs; Cratichneumonid (S-151-152) typical; Lonicera, Geranium, Carex, etc. Lower stratum dominated by mosses. Lower stratum dominated by mosses.	Sand and gravel, silty gravel both calcareous and non calcareous	Materials imperfectly drained; moderately well drained at depth even when surface is dry in late summer. No protective snow cover in winter.	locally 3, 4
44	HERB BARRIERS: Upper stratum shows no clear dominance as to its lower stratum generally absent.	Sand and gravel, silty gravel, silty sand	Well drained materials	locally 3, 4
45	CRUSTACEAN MATS: Composed of bryophytic mats; herbs less than S1. Lonicera, Geranium, Carex, etc. Lower stratum dominated by mosses. Lower stratum dominated by mosses.	Silty sand and gravel, some silty sand	Materials imperfectly drained; moderately well drained at depth even when surface is dry in late summer. No protective snow cover in winter.	locally 3
46	CRUSTACEAN MATS: Composed of bryophytic mats; herbs less than S1. Lonicera, Geranium, Carex, etc. Lower stratum dominated by mosses. Lower stratum dominated by mosses.	Weakly calcareous and non calcareous materials	Generally well drained	locally 3

**SABINE BAY**  
DISTRICT OF FRANKLIN  
NORTHWEST TERRITORIES  
Scale 1:250,000 Echéelle

Produced by the ARMY SURVEY ESTABLISHMENT, R.C.E. Information correct as of 1982. Printed 1984. The map data of the Sabine Bay area were derived from the map sheets 1:50,000 scale. The map data of the Sabine Bay area were derived from the map sheets 1:50,000 scale. The map data of the Sabine Bay area were derived from the map sheets 1:50,000 scale.

**BYAM CHANNEL**  
DISTRICT OF FRANKLIN  
NORTHWEST TERRITORIES  
Scale 1:250,000 Echéelle

Produced by the ARMY SURVEY ESTABLISHMENT, R.C.E. Information correct as of 1982. Printed 1984. The map data of the Byam Channel area were derived from the map sheets 1:50,000 scale. The map data of the Byam Channel area were derived from the map sheets 1:50,000 scale. The map data of the Byam Channel area were derived from the map sheets 1:50,000 scale.

**OPEN FILE**  
852  
May 1982  
GEOLOGICAL SURVEY  
COMMISSION GÉOLOGIQUE  
OTTAWA

Produced by the ARMY SURVEY ESTABLISHMENT, R.C.E. Information correct as of 1982. Printed 1984. The map data of the Byam Channel area were derived from the map sheets 1:50,000 scale. The map data of the Byam Channel area were derived from the map sheets 1:50,000 scale. The map data of the Byam Channel area were derived from the map sheets 1:50,000 scale.