

Newfoundland

The Great Northern Peninsula

A Greentours Tour Report

8th - 16th July 2022

Led by Todd Boland

Daily report and systematic lists by Todd Boland

July 9 – After leaving Deer Lake airport, we immediately headed to the Lomond River in Gros Morne National Park. Here we were treated to the first orchids of the trip. Along the trail were clumps of our largest lady's-slipper orchid, *Cypripedium reginae*, the showy lady's-slipper. Other orchids along the trail were northern white leafy orchid, *Platanthera dilatata*, club-spur orchid, *Platanthera clavellata* and northern green orchid, *Platanthera aquilonis*. In the turfy area immediately next to the parking lot was the very rare striped coralroot, *Coralorhiza striata* var. *vreelandii*. The trip was starting with a bang.

After leaving Lomond River we headed to the unique Tablelands, an area of exposed serpentinite rock. It initially looks quite barren, with orange-coloured rock and a desert-like feel but close examination reveals a host of arctic-alpines and plants which are specifically adapted to toxic serpentinite. The specialty was *Cherleria marsescens*, endemic to serpentinite. Unfortunately these were long faded but adjacent to them were blooming harebells, *Campanula gieseckiana*, sea-thrift, *Armeria maritima* ssp. *siberica*, Beering Strait chickweed, *Cerastium beeringianum* and the disjunct Aleutian fern, *Adiantum aleuticum*. Also home here were very dwarf versions of royal fern, *Osmunda regalis*, which grow less than 50 cm tall. We had dinner in Woody Point, enjoying the first of many seafood based meals. We then headed to Cow Head where we had a two night stay.

July 10 – Today was overcast with the threat of rain in the early morning. We walked the 3 km trail into Western Brook Pond, a land-locked fjord. Here we took a boat tour of the 5 km long lake with towering cliffs, magnificent waterfalls and hanging valleys. And while there, the sun broke out adding to the grandeur of the area. Most surprising was seeing a Caspian tern, a rare species in the area and unknown on freshwater. We had lunch at the boat dock then botanized and birded our way back to the parking lot. Six species of warblers, four species of sparrows, Canada jay and pine grosbeak were among the many birds we saw, most being very cooperative for photos. We found a new orchid along the trail, the dragon's-mouth, *Arethusa bulbosa*. Clumps of dwarf Arctic cottongrass, *Trichophorum alpinum*, danced in the wind as we walked past the bogs along the trail.

From here, we headed north to Arches Provincial Park, a natural scenic area composed of several large limestone outcrops located along the shore. The largest had two caves eroded completely through, affording a unique view to the open ocean beyond. Here we saw our first coastal species of plants: beach-head iris, *Iris hookeri*, Scot's lovage, *Ligusticum scoticum*, oysterleaf, *Mertensia maritima*, beach pea, *Lathyrus japonicus*, and swamp pea, *Lathyrus palustris*. All the while northern gannets flew by offshore. We headed back to the Shallow Bay motel for dinner.

July 11 – We woke to rain which really did not abate until after dinner. In the morning we donned our rain gear and headed to the Bellburn Barrens. The key plant here was Hooker’s orchid, *Platanthera hookeri*. We found 7 plants in total but all but one were past their best. This was our first exposure to a multitude of dwarf Arctic willows...*Salix candida*, *Salix calcicola*, *Salix vestita* and *Salix reticulata*. We then headed to Port-aux-Choix, visiting the Maritime Archaic Indian museum and the Point Riche lighthouse. We then had lunch at the Anchor Café. After lunch we headed back out to the lighthouse, botanizing mostly from the vehicle, jumping out to take pictures before returning to the vehicle to escape the rain. Despite this we found a first for this tour, the northern paintbrush, *Castilleja septentrionalis*. We also saw plenty of spurred gentian, *Halenia deflexa*, Island-loving gentian, *Gentianopsis detonsa* ssp. *nesophila* and pink pyrola, *Pyrola asarifolia*. We also stumbled into a semipalmated plover and one of its young. We arrived at the Plum Point motel around 5 pm, where we would stay for the next two nights.

July 12 – Once again it was raining in the morning, although not as heavy as the day before. We started by visiting nearby Brig Bay. Here we thought we saw greater scaup and common merganser only they turned out to be decoys! Egg on our face! However we did see greater yellowlegs, least sandpiper, spotted sandpiper and American black duck. Next we headed to the St. Barbe Ferry Terminal trail. While walking along this coastal trail, the rain finally stopped. We saw classic coastal plants on one side of the trail but on the opposite was forest edge wildflowers – bunchberry, *Cornus canadensis*, twinflower, *Linnaea borealis*, bluebead lily, *Clintonia borealis*, and two species of twisted-stalk, *Streptopus*, and most exciting, blunt-leaved orchid, *Platanthera obtusata*. We had lunch in St. Barge, then headed to the White Rock Trail in Flower’s Cove. There were loads of small white orchid, *Pseudorchis straminea* but even more exciting was a short-eared owl, an uncommon bird in this area. Next we visited Yankee Point to view our endemic *Braya longii*. Here we also saw the natural hybrid between *Cornus canadensis* and *Cornus suecica* called *Cornus X lepagei*. We also saw a new Arctic willow, *Salix uva-ursi*. We ended the day in Nameless Cove, enjoying the warm sun after two largely grey wet days. On the point we saw lovely specimens of *Iris hookeri* and several short-tailed swallowtails. Seeing a whimbrel was icing on the cake. However, by far the most exciting was another first for the trip, white adder’s-mouth orchid, *Malaxis brachyphylla*. The whole plant was only 3 cm tall with nearly microscopic flowers. It’s a miracle we even found it.

July 13 – Today we headed to St. Anthony. Enroute we stopped in Green island Brook where we saw the diminutive flowers of our endemic *Braya fernaldii*. We then made the relatively long drive to Cape Norman. Here the limestone barrens meet the sea with spectacular cliffs. There was an astonishing array of Arctic-alpines here including alpine velvetbells, *Bartsia alpina*, Arctic plumbago, *Rubus arcticus* and the hybrid *R. X paracaulis*, dwarf tansy, *Tanacetum bipinnatum*, reddish sandwort, *Sabulina rubella* and our endemic barrens willow, *Salix jejuna*. We also found plenty of small white orchids, frog orchids, *Dactylorhiza viride* and broad-leaved twayblade, *Neottia convallarioides*, which were just days from opening. As we pass Cooks Harbour we stopped for views and photos of osprey nesting on a platform alongside the road. We also found the rare narrow-leaved arnica, *Arnica angustifolia*. We then headed into St. Anthony where we checked into our guest house, Bird’s-eye View, where we would stay the next two nights.

In the afternoon we went to the Viking site at L’Anse-aux-Meadows and walked the coastal and bog trail. The coastal portion of the trail afforded views of the many islands spotting the cove and the many common eiders, with young that took advantage of these ideal nesting sites. In the bog we saw the delicate fluffy heads of cottongrass, *Eriophorum vaginatum* in white and *Eriophorum russeolum* in tawny-red. Dinner was back in St. Anthony at the Lighthouse café. Unfortunately, the arrival of a bus tour just before we arrived made for slow delivery of the meal.

July 14 – Today we concentrated on Burnt Cape Ecological Reserve. But first we stopped by an estuary in St. Anthony where a vagrant tricolored heron had been previously reported. Sure enough we saw the bird, which is only the third provincial record for this SE USA species. After this, we stopped at Cape Onion, the northernmost point on the island of Newfoundland, with views of a single iceberg! We then stopped by a high knoll at Raleigh, seeing another short-eared owl and plenty of common eiders in the bay. Next was the coastal trail on Burnt Cape. The purpose of this trail was to see calypso orchids, a very rare orchid in Newfoundland and only known from three locations. Unfortunately they were faded but we did manage to find some yellow lady's-slipper's in pristine condition. While we saw hundreds of plants earlier on the trip, they were all faded. It was great to find some in excellent condition. We also found the rare limestone oak fern, *Gymnocarpium robertianum*. We then headed to Dark Tickle in Griquet for lunch and a sculpin cone with homemade local berry ice-cream.

After lunch we headed back to Burnt Cape where we drove to the end of the Cape. With spectacular cliffs and stunning views of the North Atlantic and the distant Labrador coast. We first scanned alongside the bottom of a north facing cliff in the hopes of finding some lingering early-season alpinists. We were not disappointed! Here we saw blooming entire-leaved mountain-avens, *Dryas integrifolia*, moss campion, *Silene acaulis* and even purple-mountain saxifrage, *Saxifraga oppositifolia*. The willows were still blooming here with catkins from *Salix vestita*, *Salix glauca* and *Salix reticulata*. We then headed for the coastal trail where we found encrusted saxifrage, *Saxifraga paniculata*, field oxytrope, *Oxytropis campestris* var. *minor* and the rare nodding locoweed, *Oxytropis deflexa* var. *foliolosa*. Later we managed to find some round-leaved orchids, *Galaeris rotundifolia*, still in reasonably good condition.

Just before dinner, we stopped by the wharf in St. Lunenburg to see the rare elegant milkvetch, *Astragalus eucosmus*. We also found plenty of encrusted saxifrages and Crantz's cinquefoil, *Potentilla crantzii*, dripping from the cliffside. We then stopped by another roadside cliff in Quirpon to see tufted saxifrages, *Saxifraga cespitosa*. Dinner was a wonderful meal at the Daily Catch restaurant in Griquet.

July 15 – Today was a long driving day from St. Anthony back to the Shallow Bay motel in Cowhead. We stopped by the Thrombolite fossil outcrop in Flower's Cove then went back out to the Point Riche Lighthouse to see the island-loving gentians in open bloom (they had been previously closed in the rain). Here we saw six caribou, including two calves. Lunch was back at the Anchor Café in Port-aux-Choix. Lastly we stopped by St. Paul's to visit a saltmarsh to find glasswort, *Salicornia maritima*, sea-milkwort, *Lysimachia maritima* and Canada sandspurrey, *Spergularia canadensis*. We also had a photo op for killdeer. We then checked into the Shallow Bay motel where we had dinner.

July 16 – Today was a bittersweet drive back to Deer Lake for flights back home. However, we would botanize to the end! We made a stop at the Burnt Berry Pond trail in Gros Morne to find both blunt-leaved orchid and near-blooming round-leaved orchids, *Platanthera orbiculata*. We also found some pinesap, *Monotropa hypopitys*, an uncommon saprophytic plant. A quick stop for birds presented us with both species of chickadees, both black-capped and boreal, as well as American redstart and blue-headed vireo. Next was a stop at Southeast Falls where we heard winter wren and black-throated green warblers. Lastly, just before reaching the airport we stopped by the Humber River Trail where we saw spectacular display of spotted coralroot, *Corallorhiza maculata*. Amazingly we also found pipsesewa, *Chimaphila umbellata*, a new site for a plant previously only known in two places within the province.

In total we saw 166 native species in bloom, 19 taxa of orchids, 70 species of birds, 10 species of butterflies and 4 species of bumblebees – an excellent trip!

Systematic List Number 1 Flora

	Lycopodiaceae												
1	<i>Diphasiastrum alpinum</i>												
2	<i>Diphasiastrum complanatum</i>												
3	<i>Diphasiastrum digitatum</i>												
4	<i>Diphasiastrum sitchense</i>												
5	<i>Diphasiastrum tristachyum</i>												
6	<i>Huperzia appressa</i>												
7	<i>Huperzia miyoshiana</i>												
8	<i>Huperzia selago</i>												
9	<i>Lycopodiella appressa</i>												
10	<i>Lycopodiella inundata</i>												
11	<i>Lycopodium annotinum</i>												
12	<i>Lycopodium clavatum</i>												
13	<i>Lycopodium dendroideum</i>												
14	<i>Lycopodium lagopus</i>												
	Selaginellaceae												
15	<i>Selaginella selaginoides</i>					L		L					
	Equisetaceae												
16	<i>Equisetum arvense</i>					L		L					
17	<i>Equisetum fluviatile</i>												
18	<i>Equisetum palustre</i>		L										
19	<i>Equisetum pratense</i>												
20	<i>Equisetum scirpoides</i>												
21	<i>Equisetum sylvaticum</i>	L											
22	<i>Equisetum variegatum</i>				L	L	L						
	Aspleniaceae												
23	<i>Asplenium viride</i>							L					
	Athyriaceae												
24	<i>Athyrium distentifolium</i>												
25	<i>Athyrium filix-femina</i>	L						L					
	Cystopteridaceae												

26	<i>Cystopteris bulbifera</i>												
27	<i>Cystopteris fragilis</i>						L						
28	<i>Cystopteris laurentiana</i>												
29	<i>Cystopteris montana</i>												
30	<i>Gymnocarpium dryopteris</i>	L			L		L						
31	<i>Gymnocarpium robertianum</i>						L						
	Dennstaedtiaceae												
32	<i>Pteridium aquilinum</i>												
	Dryopteridaceae												
33	<i>Dryopteris campyloptera</i>								L				
34	<i>Dryopteris carthusiana</i>						L	L					
35	<i>Dryopteris intermedia</i>												
36	<i>Polystichum braunii</i>												
37	<i>Polystichum lonchitis</i>												
	Onocleaceae												
38	<i>Matteuccia struthiopteris</i>												
39	<i>Onoclea sensibilis</i>	L	L										
	Ophioglossaceae												
40	<i>Botrychium lunaria</i>				L	L		L	L				
41	<i>Botrychium matricarifolium</i>												
42	<i>Botrychium simplex</i>												
43	<i>Botrypus virginianum</i>							L					
44	<i>Sceptridium multifidum</i>												
	Osmundaceae												
45	<i>Osmunda claytoniana</i>												
46	<i>Osmunda regalis</i>	L											
47	<i>Osmundastrum cinnamomeum</i>	L	L										
	Polypodiaceae												
48	<i>Polypodium appalachianum</i>												
49	<i>Polypodium virginianum</i>												
	Pteridaceae												

50	<i>Adiantum aleuticum</i>	L										
	Schizaeaceae											
51	<i>Schizaea pusilla</i>											
	Thelypteridaceae											
52	<i>Parathelypteris noveboracensis</i>							L				
53	<i>Phegopteris connectilis</i>					L	L					
54	<i>Thelypteris palustris</i>											
	Woodsiaceae											
55	<i>Woodsia alpina</i>											
56	<i>Woodsia glabella</i>											
57	<i>Woodsia ilvensis</i>											
	Cupressaceae											
58	<i>Juniperus communis</i>	L	L	L	L	L	L	L	L			
59	<i>Juniperus horizontalis</i>	L	L	L	L	L	L	L	L			
	Pinaceae											
60	<i>Abies balsamea</i>	L	L	L	L	L	L	L	L			
61	<i>Larix laricina</i>	L	L	L	L	L	L	L	L			
62	<i>Picea glauca</i>	L	L	L	L	L	L	L	L			
63	<i>Picea mariana</i>	L	L	L	L	L	L	L	L			
	Taxaceae											
64	<i>Taxus canadensis</i>				L							
	Aceraceae											
65	<i>Acer rubrum</i>											
66	<i>Acer spicatum</i>		L									
	Adoxaceae											
67	<i>Sambucus racemosa pubens</i>											
68	<i>Viburnum edule</i>				F	F						

69	<i>Viburnum nudum cassinoides</i>	X										
70	<i>Viburnum opulus trilobum</i>		X									
	Amaranthaceae											
71	<i>Atriplex glabriuscula</i>								L			
72	<i>Salicornia maritima</i>								L			
73	<i>Salsola kali</i>											
74	<i>Suaeda maritima</i>											
	Apiaceae											
75	<i>Angelica atropurpurea</i>			X	X	X	X	X				
76	<i>Angelica lucida</i>				X	X	X	X				
77	<i>Cicuta bulbifera</i>											
78	<i>Conioselinum chinense</i>			L	L	L	L					
79	<i>Heracleum maximum</i>	X	X	X	X	X	X	X	X	X		
80	<i>Ligusticum scoticum</i>		X		X	X	X	X				
81	<i>Osmorhiza berteroi</i>				X							
82	<i>Osmorhiza depauperata</i>											
83	<i>Sanicula marilandica</i>											
84	<i>Sium suave</i>											
	Apocynaceae											
85	<i>Apocynum androsaemifolium</i>											
86	<i>Apocynum cannabinum</i>											
	Aquifoliaceae											
87	<i>Ilex mucronata</i>											
	Araliaceae											
88	<i>Aralia hispida</i>											
89	<i>Aralia nudicaulis</i>	L			X							
	Asteraceae											
90	<i>Achillea millefolium lanulosa</i>			X	X			X				
91	<i>Anaphalis margaritacea</i>	X	X									
92	<i>Antennaria alpina</i>				X	X	X					
93	<i>Antennaria howellii</i>						X					
94	<i>Antennaria pulcherrima eucosma</i>					X	X					

95	<i>Antennaria rosea pulvinata</i>											
96	<i>Arnica angustifolia</i>					X	X					
97	<i>Arnica lonchophylla</i>						X					
98	<i>Artemisia campestris canadensis</i>											
99	<i>Askellia pygmaea</i>											
100	<i>Cirsium muticum</i>											
101	<i>Doellingeria umbellata</i>											
102	<i>Erigeron hyssopifolius</i>	X		X	X	X	X					
103	<i>Eurybia radula</i>											
104	<i>Euthamia graminifolia</i>											
105	<i>Eutrochium maculatum</i>	B	B									
106	<i>Nabalus trifoliolata</i>					B						
107	<i>Oclemena nemoralis</i>											
108	<i>Omalotheca sylvatica</i>											
109	<i>Packera aurea</i>											
110	<i>Packera pauciflora</i>											
111	<i>Packera paupercula</i>	X		X	X	X	X	X				
112	<i>Petasites frigidus</i>											
113	<i>Senecio pseudoarnica</i>				L			L				
114	<i>Solidago brendae</i>											
115	<i>Solidago fallax</i>											
116	<i>Solidago hispida</i>			X	X	X	X	X				
117	<i>Solidago macrophylla</i>			B								
118	<i>Solidago multiradiatus</i>			B			X					
119	<i>Solidago rugosa</i>											
120	<i>Solidago sempervirens</i>											
121	<i>Solidago uliginosa</i>	X										
122	<i>Symphyotrichum novi-belgii</i>	L	L									
123	<i>Symphyotrichum puniceum</i>											
124	<i>Tanacetum bipinnatum huronense</i>			X		X						
125	<i>Taraxacum ceratophorum</i>							X				
	Balsaminaceae											
126	<i>Impatiens capensis</i>											
	Betulaceae											
127	<i>Alnus alnobetula crispa</i>	L	L	L	L	L	L	L	L			
128	<i>Alnus incana rugosa</i>											
129	<i>Betula alleghaniensis</i>											
130	<i>Betula cordifolia</i>											
131	<i>Betula glandulosa</i>											
132	<i>Betula michauxii</i>					L						

133	<i>Betula minor</i>				L						
134	<i>Betula papyrifera</i>	L	L	L	L	L	L	L	L		
135	<i>Betula pumila</i>	L		L	L	L	L	L			
136	<i>Corylus cornuta</i>		L								
	Boraginaceae										
137	<i>Mertensia maritima</i>		X		X	X	X	X			
138	<i>Myosotis laxa</i>	X	X						X		
	Brassicaceae										
139	<i>Arabis alpina</i>			X			X				
140	<i>Barbarea orthoceras</i>										
141	<i>Boechera stricta</i>										
142	<i>Braya fernaldii</i>					X					
143	<i>Braya longii</i>				X						
144	<i>Cakile edentula</i>										
145	<i>Cardamine pensylvanica</i>										
146	<i>Cochlearia groenlandica</i>										
147	<i>Cochlearia tridactylites</i>					X		X			
148	<i>Draba arabiscans</i>						X				
149	<i>Draba aurea</i>										
150	<i>Draba glabella</i>			X	X						
151	<i>Draba incana</i>			X	X	X					
152	<i>Draba nivalis</i>										
153	<i>Draba norvegica</i>				X		X				
154	<i>Physaria arctica</i>										
	Comandraceae										
155	<i>Comandra umbellata</i>				X						
156	<i>Geocaulon lividum</i>						L				
	Campanulaceae										
157	<i>Campanula gieseckiana</i>	X	X	X	X	X	X	X			
158	<i>Lobelia dortmanna</i>								X		
159	<i>Lobelia kalmii</i>	X									
	Caprifoliaceae										
160	<i>Diervilla lonicera</i>										
161	<i>Linnaea borealis</i>	X	X	X	X	X	X				

162	<i>Lonicera villosa</i>			L									
	Caryophyllaceae												
163	<i>Arenaria humifusa</i>						X						
164	<i>Cerastium alpinum</i>						X						
165	<i>Cerastium arvense</i>					X	X	X					
166	<i>Cerastium beeringianum</i>	X											
167	<i>Cerastium terrae-novae</i>												
168	<i>Cherleria marcescens</i>	L											
169	<i>Honckenya peploides</i>				X	X		X					
170	<i>Moehringia lateriflora</i>		X	X	X	X			X				
171	<i>Mononeuria groenlandica</i>												
172	<i>Sabulina dawsonensis</i>	X											
173	<i>Sabulina rubella</i>					X	X	X					
174	<i>Sagina nodosa</i>			X					X				
175	<i>Sagina procumbens</i>												
176	<i>Silene acaulis</i>	L			X	X	X						
177	<i>Spergularia canadensis</i>								X				
178	<i>Stellaria alsine</i>												
179	<i>Stellaria borealis</i>												
180	<i>Stellaria humifusa</i>												
181	<i>Stellaria longifolia</i>												
182	<i>Stellaria longipes</i>				X	X							
183	<i>Viscaria alpina</i>												
	Celastraceae												
184	<i>Parnassia glauca</i>	B											
185	<i>Parnassia kotzebuei</i>												
186	<i>Parnassia palustris</i>			X	X				X				
187	<i>Parnassia parviflora</i>												
	Convolvulaceae												
188	<i>Calystegia sepium americanum</i>												
	Cornaceae												
189	<i>Cornus canadensis</i>	X	X	X	X	X	X	X	X	X			
190	<i>Cornus stolonifera</i>				X		X						
191	<i>Cornus suecica</i>				X	X	X						
192	<i>Cornus X lepagei</i>					X							

	Crassulaceae											
193	<i>Rhodiola rosea</i>			X	X	X	X	X				
	Diapensiaceae											
194	<i>Diapensia lapponica</i>											
	Droseraceae											
195	<i>Drosera anglica</i>											
196	<i>Drosera intermedia</i>											
197	<i>Drosera rotundifolia</i>	L	L			L		L				
	Elaeagnaceae											
198	<i>Shepherdia canadensis</i>	F	F	F	F	F	F	F				
	Eriacaceae											
199	<i>Andromeda polifolia</i>					X	X					
200	<i>Arctostaphylos uva-ursi</i>			L	L		L					
201	<i>Arctous alpina</i>				L	L						
202	<i>Arctous rubra</i>					L	L					
203	<i>Chamaedaphne calyculata</i>											
204	<i>Chimaphila umbellata</i>	B								X		
205	<i>Epigaea repens</i>									L		
206	<i>Empetrum atropurpureum</i>											
207	<i>Empetrum eamesii</i>											
208	<i>Empetrum nigrum</i>		L	L	L	L	L	F				
209	<i>Gaultheria hispidula</i>											
210	<i>Gaylussacia bigeloviana</i>											
211	<i>Harrimanella hypnoides</i>											
212	<i>Kalmia angustifolia</i>	X	X							L		
213	<i>Kalmia polifolia</i>				X	X						
214	<i>Kalmia (Loiseleuria) procumbens</i>					L						
215	<i>Moneses uniflora</i>											
216	<i>Monotropa hypopitys</i>									X		
217	<i>Monotropa uniflora</i>											
218	<i>Orthilia secunda</i>	X			X	X				X		
219	<i>Phyllodoce caerulea</i>											
220	<i>Pyrola americana</i>											
221	<i>Pyrola asarifolia</i>			X	X	X	X	X				
222	<i>Pyrola chlorantha</i>											

223	<i>Pyrola elliptica</i>								L		
224	<i>Pyrola minor</i>										
225	<i>Rhododendron canadense</i>										
226	<i>Rhododendron groenlandicum</i>	X	X		X	X	X				
227	<i>Rhododendron lapponicum</i>	L			L						
228	<i>Vaccinium angustifolium</i>										
229	<i>Vaccinium boreale</i>										
230	<i>Vaccinium caespitosum</i>										
231	<i>Vaccinium macrocarpon</i>		X								
232	<i>Vaccinium myrtilloides</i>										
233	<i>Vaccinium ovalifolium</i>										
234	<i>Vaccinium oxycoccus</i>			X		X	X	X			
235	<i>Vaccinium uliginosum</i>			L		X	X	L			
236	<i>Vaccinium vitis-idaea</i>				X	X	X				
	Fabaceae										
237	<i>Astragalus alpinus</i>										
238	<i>Astragalus bodinii</i>										
239	<i>Astragalus eucosmus</i>						X				
240	<i>Astragalus robbinsii</i>										
241	<i>Hedysarum alpinum</i>			X			X				
242	<i>Hedysarum boreale</i>										
243	<i>Lathyrus japonicus</i>		X		X	X	X	X			
244	<i>Lathyrus palustris</i>		X	X	X	X		X			
245	<i>Oxytropis campestris johannensis</i>										
246	<i>Oxytropis campestris minor</i>			X			X				
247	<i>Oxytropis deflexa foliolosa</i>						X				
	Gentianaceae										
248	<i>Gentianella amarella</i>										
249	<i>Gentianella propinqua</i>		B			B		X			
250	<i>Gentianopsis detonsa nesophila</i>			X				X			
251	<i>Halenia deflexa</i>			X							
252	<i>Lomatogonium rotatum</i>										
	Grossulariaceae										
253	<i>Ribes glandulosum</i>										
254	<i>Ribes hirtellum</i>				L		L				
255	<i>Ribes lacustre</i>						L				
256	<i>Ribes triste</i>										

	Hypericaceae											
257	<i>Hypericum canadense</i>											
258	<i>Hypericum ellipticum</i>											
259	<i>Hypericum mutilum</i>											
260	<i>Triadenum fraseri</i>											
	Lamiaceae											
261	<i>Lycopus americanus</i>											
262	<i>Lycopus uniflorus</i>											
263	<i>Prunella vulgaris</i>	X	X	X	X	X						
264	<i>Scutellaria galericulata</i>											
265	<i>Scutellaria lateriflora</i>											
	Lentibulariaceae											
266	<i>Pinguicula vulgaris</i>	X	X	X	X	X	X	X				
267	<i>Utricularia minor</i>											
268	<i>Utricularia cornuta</i>											
	Menyanthaceae											
269	<i>Menyanthes trifoliata</i>				L	X		X				
	Myricaceae											
270	<i>Morella pensylvanica</i>											
271	<i>Myrica gale</i>		L		L	L		L				
	Nymphaeaceae											
272	<i>Nuphar variegata</i>		X			X		X				
273	<i>Nymphaea odorata</i>											
	Onagraceae											
274	<i>Chamaenerion angustifolium</i>	X			X	X		X				
275	<i>Chamaenerion latifolium</i>			X	X	X	X					
276	<i>Circaea alpina</i>											
277	<i>Epilobium ciliatum</i>											
278	<i>Epilobium hornemannii</i>											
279	<i>Epilobium leptophyllum</i>											
280	<i>Epilobium palustris</i>									X		

281	<i>Epilobium strictum</i>												
282	<i>Oenothera oakesiana</i>												
283	<i>Oenothera parviflora</i>	X	X										
	Orobanchaceae												
284	<i>Bartsia alpina</i>					X							
285	<i>Castilleja septentrionalis</i>			X									
286	<i>Euphrasia disjuncta</i>												
287	<i>Euphrasia farlowii</i>												
288	<i>Euphrasia nemorosa</i>		X	X					X				
289	<i>Euphrasia oakesii</i>												
290	<i>Euphrasia randii</i>				X				X				
291	<i>Euphrasia suborbicularis</i>												
292	<i>Orobanche uniflora</i>												
293	<i>Pedicularis palustris</i>				X								
294	<i>Rhinanthus minor</i>	X	X	X	X	X	X	X					
	Plantaginaceae												
295	<i>Callitriche palustris</i>												
296	<i>Chelone glabra</i>												
297	<i>Hippuris vulgaris</i>				X								
298	<i>Plantago maritima</i>		X	X	X	X	X	X					
299	<i>Veronica americana</i>												
300	<i>Veronica serpyllifolia humifusa</i>												
301	<i>Veronica wormskjoldii</i>												
	Plumbaginaceae												
302	<i>Armeria maritima siberica</i>	X					X						
	Polygonaceae												
303	<i>Bistorta vivipara</i>		X	X	X	X	X	X					
304	<i>Oxyria digyna</i>												
305	<i>Polygonum fowleri</i>												
306	<i>Rumex occidentalis</i>												
307	<i>Rumex pallidus</i>												
	Potamogetonaceae												
308	<i>Potamogeton species</i>												

	Primulaceae												
309	<i>Lysimachia (Glaux) maritima</i>									X			
310	<i>Lysimachia terrestris</i>												
311	<i>Lysimachia thrysiflora</i>												
312	<i>Primula egaliksensis</i>			X									
313	<i>Primula laurentiana</i>		L	L	X	X	X	X					
314	<i>Primula mistassinica</i>				X	X							
315	<i>Primula stricta</i>												
316	<i>Trientalis borealis</i>	L		X	X	X	X						
	Ranunculaceae												
317	<i>Actaea rubra</i>				F								
318	<i>Anemone parviflora</i>	X			X	X	X	X					
319	<i>Caltha palustris</i>	L	L		L								
320	<i>Coptis trifolia</i>												
321	<i>Halerpestes cymbalaria</i>				X	X							
322	<i>Ranunculus abortivus</i>												
323	<i>Ranunculus aquatilis</i>												
324	<i>Ranunculus flammula</i>												
325	<i>Ranunculus hyperboreus</i>												
326	<i>Ranunculus pensylvanicus</i>												
327	<i>Ranunculus sceleratus</i>												
328	<i>Thalictrum alpinum</i>	L					X						
329	<i>Thalictrum pubescens</i>	X	X	X	X	X	X	X					
	Rhamnaceae												
330	<i>Endotropis (Rhamnus) alnifolia</i>				L			L					
	Rosaceae												
331	<i>Agrimonia striata</i>												
332	<i>Alchemilla filicaulis</i>				X	X	X	X					
333	<i>Amelanchier bartramiana</i>												
334	<i>Amelanchier intermedia</i>												
335	<i>Amelanchier laevis</i>												
336	<i>Amelanchier spicata</i>												
337	<i>Argentina (Potentilla) anserina</i>		X	X	X	X	X	X					
338	<i>Aronia prunifolia</i>												
339	<i>Comarum palustre</i>						L			B			
340	<i>Dasiphora (Potentilla) fruticosa</i>	X		X	X	X	X	X					
341	<i>Dryas integrifolia</i>			L	X	X	X	X					

342	<i>Fragaria vesca</i>											
343	<i>Fragaria virginiana</i>	F	F	F	X	X	X	X				
344	<i>Geum macrophyllum</i>							X				
345	<i>Geum rivale</i>	X		X	X	X						
346	<i>Potentilla crantzii</i>				X		X	X				
347	<i>Potentilla litoralis</i>			X								
348	<i>Potentilla nivea</i>			L		L	L					
349	<i>Potentilla norvegica</i>		X		X		X					
350	<i>Potentilla pulchella (usticapensis)</i>						X					
351	<i>Prunus pensylvanica</i>											
352	<i>Prunus virginiana</i>											
353	<i>Rosa nitida</i>		X					X				
354	<i>Rosa virginiana</i>											
355	<i>Rubus arcticus acaulis</i>				X	X	X	X				
356	<i>Rubus canadensis</i>											
357	<i>Rubus chamaemorus</i>		F			X						
358	<i>Rubus idaeus</i>		X									
359	<i>Rubus pubescens</i>		F		X	X						
360	<i>Rubus X paracaulis</i>		X			X	X					
361	<i>Sanguisorba canadensis</i>	L			L		L	L				
362	<i>Sibbaldia procumbens</i>											
363	<i>Sibbaldia tridentata</i>	X		X	X	X	X	X				
364	<i>Sorbus americana</i>				X	X	X					
365	<i>Sorbus decora</i>											
366	<i>Spiraea latifolia</i>											
	Rubiaceae											
367	<i>Galium asprellum</i>											
368	<i>Galium kamstshaticum</i>											
369	<i>Galium labradoricum</i>											
370	<i>Galium palustre</i>		X	X	X	X						
371	<i>Galium tinctorium</i>											
372	<i>Galium trifidum</i>											
373	<i>Galium triflorum</i>											
	Salicaceae											
374	<i>Populus balsamifera</i>											
375	<i>Populus tremuloides</i>											
376	<i>Salix arctica</i>											
377	<i>Salix arctophila</i>				L		L					
378	<i>Salix argyrocarpa</i>											
379	<i>Salix bebbiana</i>											

380	<i>Salix calcicola</i>			L	L		X	X			
381	<i>Salix candida</i>		L	L	L	L	X	X			
382	<i>Salix discolor</i>										
383	<i>Salix glauca</i>	L		L	L	X	X	X			
384	<i>Salix jejuna</i>					L					
385	<i>Salix planifolia</i>										
386	<i>Salix reticulata</i>			L	L	X	X	X			
387	<i>Salix uva-ursi</i>						X				
388	<i>Salix vestita</i>			L	L	X	X				
	Sarraceniaceae										
389	<i>Sarracenia purpurea</i>	X	X		X	X					
	Saxifragaceae										
390	<i>Mitella nuda</i>				X	X		X			
391	<i>Saxifraga aizoides</i>	B		X	X		X				
392	<i>Saxifraga cespitosa</i>				X		X				
393	<i>Saxifraga oppositifolia</i>			L		L	X				
394	<i>Saxifraga paniculata</i>						X				
	Urticaceae										
395	<i>Urtica dioica gracilis</i>										
	Violaceae										
396	<i>Viola blanda</i>										
397	<i>Viola cucullata</i>										
398	<i>Viola labradorica</i>						X				
399	<i>Viola lanceolata</i>										
400	<i>Viola macloskeyi</i>										
401	<i>Viola nephrophylla</i>				X		L	L			
402	<i>Viola palustris</i>										
403	<i>Viola renifolia</i>										
404	<i>Viola selkirkii</i>										
405	<i>Viola sororia</i>										
	Alismataceae										
406	<i>Alisma triviale</i>										
407	<i>Baldellia ranunculoides</i>										
408	<i>Sagittaria graminea</i>										

	Amaryllidaceae												
409	<i>Allium schoenoprasum</i>			B	X								
	Araceae												
410	<i>Calla palustris</i>												
	Asparagaceae												
411	<i>Maianthemum canadense</i>				X	X							
412	<i>Maianthemum stellatum</i>		F	L	L	L	X						
413	<i>Maianthemum trifolium</i>				L	X							
	Colchicaceae												
414	<i>Streptopus amplexifolius</i>												
415	<i>Streptopus lanceolatus</i>												
	Cyperaceae												
416	<i>Eriophorum angustifolium</i>	X	X						X				
417	<i>Eriophorum brachyantherum</i>												
418	<i>Eriophorum callitrix</i>												
419	<i>Eriophorum gracile</i>												
420	<i>Eriophorum russeolum</i>						X	X					
421	<i>Eriophorum scheuchzeri</i>												
422	<i>Eriophorum tenellum</i>												
423	<i>Eriophorum vaginatum</i>												
424	<i>Eriophorum virginicum</i>					X							
425	<i>Eriophorum viridicarinatum</i>												
426	<i>Trichophorum alpinum</i>	X	X					X					
	Eriocaulaceae												
427	<i>Eriocaulon aquaticum</i>												
	Iridaceae												
428	<i>Iris hookeri</i>		X	X	X	X	X	X	X				
429	<i>Iris versicolor</i>	X	X	X	X	X	X	X	X				
430	<i>Sisyrinchium montanum</i>	L	X		X								

	Juncaginaceae											
431	<i>Triglochin gaspensis</i>											
432	<i>Triglochin maritima</i>			X	X	X	X	X				
433	<i>Triglochin palustris</i>	X										
	Liliaceae											
434	<i>Clintonia borealis</i>	L	L	L	X	X	X	L				
	Melanthiaceae											
435	<i>Trillium cernuum</i>	L										
	Orchidaceae											
436	<i>Arethusa bulbosa</i>		X									
437	<i>Calypto bulbosa</i>						L					
438	<i>Coeloglossum viride</i>					X	X					
439	<i>Corallorhiza maculata</i>	X							X			
440	<i>Corallorhiza striata</i> var. <i>zreelandii</i>	X										
441	<i>Corallorhiza trifida</i>											
442	<i>Cypripedium acaule</i>											
443	<i>Cypripedium parviflorum</i>			X			X					
444	<i>Cypripedium reginae</i>	X										
445	<i>Galearis rotundifolia</i>						X					
446	<i>Malaxis monophyllos</i>				X							
447	<i>Neottia convallarioides</i>						B					
448	<i>Neottia cordata</i>											
449	<i>Platanthera aquilonis</i>	X	X	X	X	X	X	X				
450	<i>Platanthera clavellata</i>	X										
451	<i>Platanthera dilatata</i>	X	X	X	X	X	X		X			
452	<i>Platanthera hookeri</i>			X								
453	<i>Platanthera huronensis</i>		X	X	X	X	X	X				
454	<i>Platanthera obtusata</i>								X			
455	<i>Platanthera obtusata</i> var. <i>collectanea</i>				X							
456	<i>Platanthera orbiculata</i>									B		
457	<i>Platanthera psycodes</i>											
458	<i>Pseudorchis straminea</i>			X	X	X	X					
459	<i>Spiranthes romanzoffiana</i>											
	Tofieldiaceae											
460	<i>Tofieldia pusilla</i>			X	X	X	X					

461	<i>Trantha glutinosa</i>	X		X	X	X		X			
-----	--------------------------	---	--	---	---	---	--	---	--	--	--

Systematic List Number 2 Birds

1	Mallard	<i>Anas platyrhynchos</i>						X				
2	American Black Duck	<i>Anas rubripes</i>				X		X	X			
3	Northern Pintail	<i>Anas acuta</i>										
4	Green-winged Teal	<i>Anas carolinensis</i>										
5	Ring-necked Duck	<i>Aythya collaris</i>		X	X				X	X		
6	Greater Scaup	<i>Aythya marila</i>										
7	Common Eider	<i>Somateria mollissima</i>		X	X	X	X	X	X			
8	Common Goldeneye	<i>Bucephala clangula</i>										
9	White-winged Scoter	<i>Melanitta deglandi</i>										
10	Common Merganser	<i>Mergus merganser</i>										
11	Red-breasted Merganser	<i>Mergus serrator</i>										
12	Canada Goose	<i>Branta canadensis</i>	X	X	X							
13	Ruffed Grouse	<i>Bonasa umbellus</i>										
14	Mourning Dove	<i>Zenaida macroura</i>										
15	Feral Pigeon	<i>Columba livia</i>			X							
16	Killdeer	<i>Charadrius vocifera</i>							X			
17	Semiplamated Plover	<i>Charadrius semipalmatus</i>			X	X						
18	Whimbrel	<i>Numenius phaeopus</i>				X						
19	Greater Yellowlegs	<i>Tringa melanoleuca</i>		X		X	X		X			
20	Spotted Sandpiper	<i>Actitis macularius</i>		X		X	X					
21	Least Sandpiper	<i>Calidris minutilla</i>				X			X			
22	Wilson's Snipe	<i>Gallinago delicata</i>				X						
	Tricolored Heron								X			
23	Black Guillemot	<i>Cephus grylle</i>								X		
24	Common Murre	<i>Uria aalge</i>										
25	Atlantic Puffin	<i>Fratercula arctica</i>										
26	Razorbill	<i>Alca torda</i>										
27	Black-legged Kittiwake	<i>Rissa tridactyla</i>										
28	Ring-billed Gull	<i>Larus delawarensis</i>	X	X	X	X	X	X	X	X	X	
29	Herring Gull	<i>Larus argentus</i>	X	X	X	X	X	X	X	X	X	
30	Iceland Gull	<i>Larus glacoides</i>										
31	Great Black-backed Gull	<i>Larus marinus</i>		X	X	X	X	X	X	X	X	
32	Common Tern	<i>Sterna hirundo</i>	X	X	X	X	X		X	X		
33	Arctic Tern	<i>Sterna paradisaea</i>										
34	Caspian Tern	<i>Hydroprogne caspia</i>		X		X			X			
35	Common Loon	<i>Gavia immer</i>				X			X			

36	Great Cormorant	<i>Phalacrocorax carbo</i>											
37	Double-crested Cormorant	<i>Phalacrocorax auritus</i>	X	X	X	X	X	X	X	X			
38	Northern Gannet	<i>Morus bassanus</i>		X			X	X	X				
39	Sharp-shinned Hawk	<i>Accipiter striatus</i>											
40	Northern Goshawk	<i>Accipiter gentilis</i>											
41	Osprey	<i>Pandion haliaetus</i>					X						
42	Northern Harrier	<i>Circus cyaneus</i>		X		X	X	X	X				
43	Bald Eagle	<i>Haliaeetus leucocephalus</i>								X			
44	Great Horned Owl	<i>Bubo virginianus</i>											
45	Short-eared owl	<i>Asio flammeus</i>				X		X	X				
46	Belted Kingfisher	<i>Megaceryle alcyon</i>	X										
47	Downy Woodpecker	<i>Dryobates pubescens</i>		X									
48	Hairy Woodpecker	<i>Dryobates villosus</i>											
49	Northern Flicker	<i>Colaptes auratus</i>											
50	Merlin	<i>Falco columbarius</i>											
51	American Kestrel	<i>Falco sparverius</i>											
52	Yellow-bellied Flycatcher	<i>Empidonax flaviventris</i>		X									
53	Olive-sided Flycatcher	<i>Conopus cooperi</i>											
54	Canada Jay	<i>Perisoreus canadensis</i>		X									
55	Blue Jay	<i>Cyanocitta cristata</i>											
56	American Crow	<i>Corvus brachyrhynchos</i>	X	X	X	X	X	X	X	X	X		
57	Northern Raven	<i>Corvus corax</i>			X	X	X			X	X		
58	Horned Lark	<i>Eremophila alpestris</i>					X	X					
	Winter Wren										X		
59	Bank Swallow	<i>Riparia riparia</i>	X	X	X					X			
60	Tree Swallow	<i>Tachycineta bicolor</i>		X		X	X	X	X				
61	Black-capped Chickadee	<i>Poecile atricapillus</i>									X		
62	Boreal Chickadee	<i>Poecile hudsonicus</i>									X		

63	Red-breasted Nuthatch	<i>Sitta canadensis</i>		X									
64	Golden-crowned Kinglet	<i>Regulus satrapa</i>									X		
65	Ruby-crowned Kinglet	<i>Regulus calendula</i>	X	X							X		
66	American Robin	<i>Turdus americanus</i>	X	X	X	X	X	X	X	X	X		
67	Hermit Thrush	<i>Catharus guttatus</i>		X									
68	Swainson's Thrush	<i>Catharus ustulatus</i>		X							X		
69	European Starling	<i>Sterna vulgaris</i>	X		X	X				X			
70	American Pipit	<i>Anthus rubescens</i>						X					
71	Blue-headed Vireo	<i>Vireo solitarius</i>									X		
72	Cedar Waxwing	<i>Bombycilla cedrorum</i>											
73	Northern Waterthrush	<i>Parkesia noveboracensis</i>		X			X				X		
74	Common Yellowthroat	<i>Geothlypis trichas</i>		X									
75	Black and White Warbler	<i>Mniotilta varia</i>		X							X		
76	Tennessee Warbler	<i>Leiothlypis peregrina</i>											
77	Mourning Warbler	<i>Geothlypis philadelphia</i>											
78	American Redstart	<i>Setophaga ruticilla</i>									X		
79	Magnolia Warbler	<i>Setophaga magnolia</i>		X							X		
80	Yellow Warbler	<i>Setophaga petechia</i>		X									
81	Blackpoll Warbler	<i>Setophaga striata</i>		X									
82	Palm Warbler	<i>Setophaga palmarum</i>											
83	Yellow-rumped Warbler	<i>Setophaga coronata</i>		X									
84	Black-throated Green Warbler	<i>Setophaga virens</i>									X		
85	Evening Grosbeak	<i>Coccothraustes vespertinus</i>											
86	Fox Sparrow	<i>Passerella iliaca</i>		X		X	X	X					
87	White-crowned Sparrow	<i>Zonotrichia leucophrys</i>					X						
88	White-throated Sparrow	<i>Zonotrichia albicollis</i>	X	X		X	X	X			X		
89	Savannah Sparrow	<i>Passerculus sandwichensis</i>	X		X	X	X	X	X				
90	Lincoln's Sparrow	<i>Melospiza lincolni</i>		X			X						

91	Song Sparrow	<i>Melospiza melodia</i>		X								
92	Swamp Sparrow	<i>Melospiza georgiana</i>		X		X	X					
93	Dark-eyed Junco	<i>Junco hyemalis</i>						X				
94	Rusty Blackbird	<i>Euphagus carolinus</i>										
95	Common Grackle	<i>Quiscalus quiscula</i>										
96	Pine Grosbeak	<i>Pinicola enucleator</i>		X						X		
97	Pine Siskin	<i>Spinus pinus</i>								X		
98	American Goldfinch	<i>Spinus tristis</i>										
99	Common Redpoll	<i>Acanthis flammea</i>					X	X				
100	Purple Finch	<i>Haemorhous purpureus</i>		X								
101	Red Crossbill	<i>Loxia curvirostra</i>										
102	White-winged Crossbill	<i>Loxia leucoptera</i>										
103	House Sparrow	<i>Passer domesticus</i>					X		X			

Systematic List Number 3 Butterflies

1	European Cabbage White	<i>Pieris rapae</i>						X				
2	Mustard White	<i>Pieris oleracea</i>										
3	Pink-edged Sulphur	<i>Colias interior</i>					X	X				
4	Clouded Sulphur	<i>Colias philodice</i>										
5	Orange Sulphur	<i>Colias eurytheme</i>										
6	Pelidne Sulphur	<i>Colias pelidne</i>										
7	Jutta Arctic	<i>Oeneis jutta</i>										
8	Polixenes Arctic	<i>Oeneis polixenes</i>										
9	White Admiral	<i>Limenitis arthemis</i>										
10	Eastern Comma	<i>Polygona comma</i>										
11	Gray Comma	<i>Polygona progne</i>										
12	Green Comma	<i>Polygona faunus</i>										
13	Question Mark	<i>Polygona interrogationis</i>										
14	Satyr Fritillary	<i>Polygona satyrus</i>										
15	Silver-bordered Fritillary	<i>Boloria selene</i>						X				
16	Red Admiral	<i>Vanessa atalanta</i>										
17	Painted Lady	<i>Vanessa cardui</i>										
18	American Painted Lady	<i>Vanessa virginiensis</i>										
19	Compton's Tortoiseshell	<i>Nymphalis vaualbum</i>										
20	Milbert's Tortoiseshell	<i>Nymphalis milbereti</i>						X				
21	Mourning Cloak	<i>Nymphalis antiopa</i>										
22	Atlantis Fritillary	<i>Speyeria atlantis</i>										
23	Meadow Fritillary	<i>Boloria bellona</i>										
24	Bog Fritillary	<i>Boloria eunomia</i>										
25	Freija Fritillary	<i>Boloria freija</i>										
26	Inornate Ringlet	<i>Coenonympha inornata</i>	X					X	X			
27	Northern Crescent	<i>Phyciodes cocyta</i>										
28	Canadian Tiger Swallowtail	<i>Papilio canadensis</i>						X				
29	Short-tailed Swallowtail	<i>Papilio brevicauda</i>				X	X	X	X			
	Monarch							X				
30	Checkered Skipper	<i>Carterocephalus palaemon</i>										
31	European Skipper	<i>Thymelicus lineola</i>										
32	Grizzled Skipper	<i>Pyrgus centaureae</i>										
33	Peck's Skipper	<i>Polites peckius</i>										
	Virginia Ctenucha Moth			X								
34	Arctic Blue	<i>Agriades glandon</i>						X				
35	Brown Elfin	<i>Callophrys augustinus</i>										
36	Dorcas Copper	<i>Lycaena dorcas</i>							X			
37	Bog Copper	<i>Lycaena epixanthe</i>										

38	Northern Blue	<i>Plebejus idas</i>											
39	Silvery Blue	<i>Glaucopsyche lygdamus</i>											
40	Spring Azure	<i>Celastrina ladon</i>											

Systematic List Number 4 Other Animals

	Humpback Whale												
	Minke Whale												
	Pilot Whale												
	Caribou									X			
	Moose				X								
	Red Fox				X								
	Snowshoe Hare					X							
	Red Squirrel												
	Meadow Vole												
	Banded Shrew								X	X			
	American Toad		X	X								X	
	Green Frog											X	
	Three-spined Stickleback												
	Brook Trout												
	Half-black Bumblebee				X								
	Northern Amber Bumblebee				X								
	Frigid Bumblebee												
	Tricolored Bumblebee												
	Forest Bumblebee							X					
	Yellow-banded Bumblebee										X		
	Common Eastern Bumblebee												