SUPPLEMENTARY MATERIALS

Table S1. Average values of variables in ELC categories

Table S2. Mainland Finland *in situ* complementary sites and species

Table S3. Mainland Finland and Åland Islands *in situ* complementary sites and species

Table S4. *Ex situ* gap analysis - complementary species/ELC in collecting sites

Table S1. Average values of variables in ELC categories

ELC category (zone)	Bio_12: average annual rainfall (mm)	Bio_7: annual average temp. range(℃)	Ref_depth: average elevation above sealevel (m)	Average eastness	Average northness	Average slope (degrees of the land surface)	Latitude (decimal degrees)	T_oc : average organic carbon content in surface soil (% weight)	t_ph_h2o: average pH in soil water solution in surface soil (log(H+))	ref_depth: average depth of the soil unit (m)
1	520	3.62	119	0.000	0.066	189.782	65.216804	33.630	4.300	100
2	535	3.44	13	0.065	0.059	166.718	63.850137	1.400	7.500	10
3	522	3.54	95	0.000	0.065	194.744	64.541804	2.180	4.400	100
4	514	3.72	227	0.000	0.041	180.000	67.116804	33.630	4.300	100
5	486	3.69	261	0.000	0.039	175.236	68.200137	2.180	4.400	100
6	603	3.43	157	0.013	0.047	181.548	62.883470	33.630	4.300	100
7	621	3.12	39	0.017	0.030	180.000	60.575137	0.960	7.300	100
8	618	3.37	114	0.000	0.060	178.668	62.300137	2.180	4.400	100
9	595	3.65	258	0.024	0.022	186.115	65.166804	33.630	4.300	100
10	522	3.28	266	0.013	0.008	170.489	69.125137	2.180	4.400	100

Table S2. Mainland Finland *in situ* complementary sites and species. (Site ID number provided by the World Database of Protected Areas)

COMPLEMENTARY SITE	SITE ID	COMPLEMENTARY SPECIES	ELC CATEGORY	SITE NAME
1	853	Barbarea stricta	10	Oulanka National Park
1	853	Barbarea stricta	13	Oulanka National Park
1	853	Dactylis glomerata	13	Oulanka National Park
1	853	Festuca ovina	9	Oulanka National Park
1	853	Festuca ovina	10	Oulanka National Park
1	853	Festuca ovina	12	Oulanka National Park
1	853	Festuca ovina	13	Oulanka National Park
1	853	Festuca ovina	15	Oulanka National Park
1	853	Festuca rubra	10	Oulanka National Park
1	853	Festuca rubra	13	Oulanka National Park
1	853	Festuca rubra	15	Oulanka National Park
1	853	Festuca trachyphylla	10	Oulanka National Park
1	853	Fragaria vesca	10	Oulanka National Park
1	853	Fragaria vesca	13	Oulanka National Park
1	853	Lolium perenne	13	Oulanka National Park
1	853	Mentha arvensis	15	Oulanka National Park
1	853	Phalaroides arundinacea	9	Oulanka National Park
1	853	Phalaroides arundinacea	10	Oulanka National Park
1	853	Phalaroides arundinacea	12	Oulanka National Park
1	853	Phalaroides arundinacea	13	Oulanka National Park
1	853	Phalaroides arundinacea	15	Oulanka National Park
1	853	Phleum pratense	10	Oulanka National Park
1	853	Phleum pratense	13	Oulanka National Park
1	853	Phleum pratense	15	Oulanka National Park
1	853	Poa alpina	13	Oulanka National Park
1	853	Poa pratensis	13	Oulanka National Park
1	853	Poa pratensis	15	Oulanka National Park
1	853	Ribes spicatum	10	Oulanka National Park
1	853	Ribes spicatum	13	Oulanka National Park
1	853	Ribes spicatum	15	Oulanka National Park
1	853	Rubus arcticus	9	Oulanka National Park
1	853	Rubus arcticus	10	Oulanka National Park
1	853	Rubus arcticus	12	Oulanka National Park
1	853	Rubus arcticus	13	Oulanka National Park
1	853	Rubus arcticus	15	Oulanka National Park
1	853	Rubus chamaemorus	9	Oulanka National Park
1	853	Rubus chamaemorus	10	Oulanka National Park
1	853	Rubus chamaemorus	12	Oulanka National Park
1	853	Rubus chamaemorus	13	Oulanka National Park
1	853	Rubus chamaemorus	15	Oulanka National Park

1	853	Rubus idaeus	10	Oulanka National Park
COMPLEMENTARY SITE	**SITE ID**	**COMPLEMENTARY SPECIES**	**ELC CATEGORY**	**SITE NAME**
1	853	Rubus idaeus	13	Oulanka National Park
1	853	Rubus idaeus	15	Oulanka National Park
1	853	Schedonorus pratensis	10	Oulanka National Park
1	853	Trifolium pratense	10	Oulanka National Park
1	853	Trifolium pratense	13	Oulanka National Park
1	853	Trifolium repens	10	Oulanka National Park
1	853	Trifolium repens	13	Oulanka National Park
1	853	Trifolium repens	15	Oulanka National Park
1	853	Vaccinium microcarpum	9	Oulanka National Park
1	853	Vaccinium microcarpum	10	Oulanka National Park
1	853	Vaccinium microcarpum	12	Oulanka National Park
1	853	Vaccinium microcarpum	13	Oulanka National Park
1	853	Vaccinium microcarpum	15	Oulanka National Park
1	853	Vaccinium myrtillus	9	Oulanka National Park
1	853	Vaccinium myrtillus	10	Oulanka National Park
1	853	Vaccinium myrtillus	12	Oulanka National Park
1	853	Vaccinium myrtillus	13	Oulanka National Park
1	853	Vaccinium myrtillus	15	Oulanka National Park
1	853	Vaccinium oxycoccos	10	Oulanka National Park
1	853	Vaccinium oxycoccos	12	Oulanka National Park
1	853	Vaccinium oxycoccos	13	Oulanka National Park
1	853	Vaccinium oxycoccos	15	Oulanka National Park
1	853	Vaccinium uliginosum	9	Oulanka National Park
1	853	Vaccinium uliginosum	10	Oulanka National Park
1	853	Vaccinium uliginosum	12	Oulanka National Park
1	853	Vaccinium uliginosum	13	Oulanka National Park
1	853	Vaccinium uliginosum	15	Oulanka National Park
1	853	Vaccinium vitis-idaea	9	Oulanka National Park
1	853	Vaccinium vitis-idaea	10	Oulanka National Park
1	853	Vaccinium vitis-idaea	12	Oulanka National Park
1	853	Vaccinium vitis-idaea	13	Oulanka National Park
1	853	Vaccinium vitis-idaea	15	Oulanka National Park
2	852	Barbarea vulgaris	2	Nuuksio National park
2	852	Barbarea vulgaris	3	Nuuksio National park
2	852	Barbarea vulgaris	7	Nuuksio National park
2	852	Barbarea vulgaris	8	Nuuksio National park
2	852	Carum carvi	3	Nuuksio National park
2	852	Corylus avellana	7	Nuuksio National park
2	852	Dactylis glomerata	2	Nuuksio National park
2	852	Dactylis glomerata	7	Nuuksio National park
2	852	Festuca ovina	2	Nuuksio National park
2	852	Festuca ovina	7	Nuuksio National park
2	852	Festuca rubra	2	Nuuksio National park
2	852	Festuca rubra	7	Nuuksio National park

2	852	Fragaria vesca	2	Nuuksio National park
COMPLEMENTARY SITE	**SITE ID**	**COMPLEMENTARY SPECIES**	**ELC CATEGORY**	**SITE NAME**
2	852	Fragaria vesca	7	Nuuksio National park
2	852	Lolium perenne	7	Nuuksio National park
2	852	Mentha arvensis	2	Nuuksio National park
2	852	Mentha arvensis	7	Nuuksio National park
2	852	Phleum pratense	2	Nuuksio National park
2	852	Phleum pratense	3	Nuuksio National park
2	852	Phleum pratense	7	Nuuksio National park
2	852	Phleum pratense	8	Nuuksio National park
2	852	Poa pratensis	2	Nuuksio National park
2	852	Poa pratensis	3	Nuuksio National park
2	852	Poa pratensis	7	Nuuksio National park
2	852	Ribes nigrum	2	Nuuksio National park
2	852	Ribes nigrum	7	Nuuksio National park
2	852	Ribes spicatum	2	Nuuksio National park
2	852	Rubus chamaemorus	2	Nuuksio National park
2	852	Rubus chamaemorus	3	Nuuksio National park
2	852	Rubus chamaemorus	7	Nuuksio National park
2	852	Rubus idaeus	2	Nuuksio National park
2	852	Rubus idaeus	3	Nuuksio National park
2	852	Rubus idaeus	7	Nuuksio National park
2	852	Rubus idaeus	8	Nuuksio National park
2	852	Schedonorus pratensis	2	Nuuksio National park
2	852	Schedonorus pratensis	7	Nuuksio National park
2	852	Trifolium hybridum	2	Nuuksio National park
2	852	Trifolium hybridum	7	Nuuksio National park
2	852	Trifolium pratense	2	Nuuksio National park
2	852	Trifolium pratense	3	Nuuksio National park
2	852	Trifolium pratense	7	Nuuksio National park
2	852	Trifolium repens	2	Nuuksio National park
2	852	Trifolium repens	3	Nuuksio National park
2	852	Trifolium repens	7	Nuuksio National park
2	852	Trifolium repens	8	Nuuksio National park
2	852	Vaccinium microcarpum	2	Nuuksio National park
2	852	Vaccinium microcarpum	7	Nuuksio National park
2	852	Vaccinium myrtillus	2	Nuuksio National park
2	852	Vaccinium myrtillus	3	Nuuksio National park
2	852	Vaccinium myrtillus	7	Nuuksio National park
2	852	Vaccinium myrtillus	8	Nuuksio National park
2	852	Vaccinium oxycoccos	2	Nuuksio National park
2	852	Vaccinium oxycoccos	3	Nuuksio National park
2	852	Vaccinium oxycoccos	7	Nuuksio National park
2	852	Vaccinium uliginosum	2	Nuuksio National park
2	852	Vaccinium uliginosum	3	Nuuksio National park
2	852	Vaccinium uliginosum	7	Nuuksio National park

2	852	Vaccinium uliginosum	8	Nuuksio National park
COMPLEMENTARY SITE	**SITE ID**	**COMPLEMENTARY SPECIES**	**ELC CATEGORY**	**SITE NAME**
2	852	Vaccinium vitis-idaea	2	Nuuksio National park
2	852	Vaccinium vitis-idaea	3	Nuuksio National park
2	852	Vaccinium vitis-idaea	7	Nuuksio National park
2	852	Vaccinium vitis-idaea	8	Nuuksio National park
3	867	Barbarea vulgaris	6	Torronsuo National Park
3	867	Brassica rapa	6	Torronsuo National Park
3	867	Carum carvi	6	Torronsuo National Park
3	867	Festuca ovina	6	Torronsuo National Park
3	867	Festuca rubra	1	Torronsuo National Park
3	867	Festuca rubra	6	Torronsuo National Park
3	867	Fragaria vesca	1	Torronsuo National Park
3	867	Fragaria vesca	6	Torronsuo National Park
3	867	Phleum pratense	1	Torronsuo National Park
3	867	Phleum pratense	6	Torronsuo National Park
3	867	Poa pratensis	1	Torronsuo National Park
3	867	Poa pratensis	6	Torronsuo National Park
3	867	Ribes nigrum	1	Torronsuo National Park
3	867	Ribes nigrum	6	Torronsuo National Park
3	867	Rubus arcticus	6	Torronsuo National Park
3	867	Rubus chamaemorus	1	Torronsuo National Park
3	867	Rubus chamaemorus	6	Torronsuo National Park
3	867	Rubus idaeus	1	Torronsuo National Park
3	867	Rubus idaeus	6	Torronsuo National Park
3	867	Schedonorus pratensis	1	Torronsuo National Park
3	867	Trifolium hybridum	6	Torronsuo National Park
3	867	Trifolium pratense	6	Torronsuo National Park
3	867	Trifolium repens	6	Torronsuo National Park
3	867	Vaccinium microcarpum	6	Torronsuo National Park
3	867	Vaccinium myrtillus	1	Torronsuo National Park
3	867	Vaccinium myrtillus	6	Torronsuo National Park
3	867	Vaccinium oxycoccos	1	Torronsuo National Park
3	867	Vaccinium oxycoccos	6	Torronsuo National Park
3	867	Vaccinium uliginosum	1	Torronsuo National Park
3	867	Vaccinium uliginosum	6	Torronsuo National Park
3	867	Vaccinium vitis-idaea	1	Torronsuo National Park
3	867	Vaccinium vitis-idaea	6	Torronsuo National Park
4	824	Allium schoenoprasum	3	Laajalahti conservation area
4	824	Armoracia rusticana	3	Laajalahti conservation area
4	824	Barbarea stricta	3	Laajalahti conservation area
4	824	Barbarea stricta	8	Laajalahti conservation area
4	824	Bromopsis inermis	8	Laajalahti conservation area
4	824	Carum carvi	8	Laajalahti conservation area
4	824	Corylus avellana	3	Laajalahti conservation area
4	824	Corylus avellana	8	Laajalahti conservation area

4	824	Dactylis glomerata	3	Laajalahti conservation area
COMPLEMENTARY SITE	**SITE ID**	**COMPLEMENTARY SPECIES**	**ELC CATEGORY**	**SITE NAME**
4	824	Dactylis glomerata	8	Laajalahti conservation area
4	824	Festuca ovina	3	Laajalahti conservation area
4	824	Festuca ovina	8	Laajalahti conservation area
4	824	Festuca rubra	3	Laajalahti conservation area
4	824	Festuca rubra	8	Laajalahti conservation area
4	824	Festuca trachyphylla	3	Laajalahti conservation area
4	824	Festuca trachyphylla	8	Laajalahti conservation area
4	824	Fragaria vesca	3	Laajalahti conservation area
4	824	Fragaria vesca	8	Laajalahti conservation area
4	824	Lolium perenne	8	Laajalahti conservation area
4	824	Phalaroides arundinacea	3	Laajalahti conservation area
4	824	Phalaroides arundinacea	8	Laajalahti conservation area
4	824	Poa pratensis	8	Laajalahti conservation area
4	824	Ribes nigrum	3	Laajalahti conservation area
4	824	Ribes nigrum	8	Laajalahti conservation area
4	824	Ribes spicatum	8	Laajalahti conservation area
4	824	Ribes uva-crispa	3	Laajalahti conservation area
4	824	Ribes uva-crispa	8	Laajalahti conservation area
4	824	Schedonorus pratensis	8	Laajalahti conservation area
4	824	Trifolium hybridum	3	Laajalahti conservation area
4	824	Trifolium hybridum	8	Laajalahti conservation area
4	824	Trifolium pratense	8	Laajalahti conservation area
5	1960	Allium schoenoprasum	5	Kaldoaivi Wilderness Area
5	1960	Barbarea stricta	2	Kaldoaivi Wilderness Area
5	1960	Festuca ovina	4	Kaldoaivi Wilderness Area
5	1960	Festuca ovina	5	Kaldoaivi Wilderness Area
5	1960	Festuca rubra	4	Kaldoaivi Wilderness Area
5	1960	Festuca rubra	5	Kaldoaivi Wilderness Area
5	1960	Fragaria vesca	5	Kaldoaivi Wilderness Area
5	1960	Poa alpina	4	Kaldoaivi Wilderness Area
5	1960	Poa alpina	5	Kaldoaivi Wilderness Area
5	1960	Poa pratensis	4	Kaldoaivi Wilderness Area
5	1960	Poa pratensis	5	Kaldoaivi Wilderness Area
5	1960	Rubus arcticus	2	Kaldoaivi Wilderness Area
5	1960	Rubus arcticus	5	Kaldoaivi Wilderness Area
5	1960	Rubus chamaemorus	4	Kaldoaivi Wilderness Area
5	1960	Rubus chamaemorus	5	Kaldoaivi Wilderness Area
5	1960	Vaccinium microcarpum	4	Kaldoaivi Wilderness Area
5	1960	Vaccinium microcarpum	5	Kaldoaivi Wilderness Area
5	1960	Vaccinium myrtillus	4	Kaldoaivi Wilderness Area
5	1960	Vaccinium myrtillus	5	Kaldoaivi Wilderness Area
5	1960	Vaccinium oxycoccos	4	Kaldoaivi Wilderness Area
5	1960	Vaccinium oxycoccos	5	Kaldoaivi Wilderness Area
5	1960	Vaccinium uliginosum	4	Kaldoaivi Wilderness Area

5	1960	Vaccinium uliginosum	5	Kaldoaivi Wilderness Area
COMPLEMENTARY SITE	**SITE ID**	**COMPLEMENTARY SPECIES**	**ELC CATEGORY**	**SITE NAME**
5	1960	Vaccinium vitis-idaea	4	Kaldoaivi Wilderness Area
5	1960	Vaccinium vitis-idaea	5	Kaldoaivi Wilderness Area
6	1404	Festuca rubra	11	Rahja Archipelago
6	1404	Festuca rubra	16	Rahja Archipelago
6	1404	Fragaria vesca	16	Rahja Archipelago
6	1404	Phalaroides arundinacea	11	Rahja Archipelago
6	1404	Phalaroides arundinacea	16	Rahja Archipelago
6	1404	Poa pratensis	11	Rahja Archipelago
6	1404	Ribes nigrum	11	Rahja Archipelago
6	1404	Ribes spicatum	11	Rahja Archipelago
6	1404	Rubus arcticus	11	Rahja Archipelago
6	1404	Rubus arcticus	16	Rahja Archipelago
6	1404	Rubus chamaemorus	11	Rahja Archipelago
6	1404	Rubus chamaemorus	16	Rahja Archipelago
6	1404	Rubus idaeus	11	Rahja Archipelago
6	1404	Rubus idaeus	16	Rahja Archipelago
6	1404	Trifolium pratense	11	Rahja Archipelago
6	1404	Trifolium repens	11	Rahja Archipelago
6	1404	Vaccinium myrtillus	11	Rahja Archipelago
6	1404	Vaccinium myrtillus	16	Rahja Archipelago
6	1404	Vaccinium oxycoccos	16	Rahja Archipelago
6	1404	Vaccinium uliginosum	11	Rahja Archipelago
6	1404	Vaccinium uliginosum	16	Rahja Archipelago
6	1404	Vaccinium vitis-idaea	11	Rahja Archipelago
6	1404	Vaccinium vitis-idaea	16	Rahja Archipelago
7	1021	Festuca ovina	14	Korouoma Nature Reserve
7	1021	Festuca rubra	12	Korouoma Nature Reserve
7	1021	Festuca rubra	14	Korouoma Nature Reserve
7	1021	Fragaria vesca	9	Korouoma Nature Reserve
7	1021	Phalaroides arundinacea	14	Korouoma Nature Reserve
7	1021	Poa pratensis	14	Korouoma Nature Reserve
7	1021	Ribes nigrum	12	Korouoma Nature Reserve
7	1021	Ribes nigrum	14	Korouoma Nature Reserve
7	1021	Ribes spicatum	9	Korouoma Nature Reserve
7	1021	Ribes spicatum	12	Korouoma Nature Reserve
7	1021	Ribes spicatum	14	Korouoma Nature Reserve
7	1021	Rubus arcticus	14	Korouoma Nature Reserve
7	1021	Rubus chamaemorus	14	Korouoma Nature Reserve
7	1021	Rubus idaeus	9	Korouoma Nature Reserve
7	1021	Rubus idaeus	12	Korouoma Nature Reserve
7	1021	Rubus idaeus	14	Korouoma Nature Reserve
7	1021	Trifolium repens	12	Korouoma Nature Reserve
7	1021	Vaccinium myrtillus	14	Korouoma Nature Reserve
7	1021	Vaccinium oxycoccos	14	Korouoma Nature Reserve

7	1021	Vaccinium uliginosum	14	Korouoma Nature Reserve
COMPLEMENTARY SITE	**SITE ID**	**COMPLEMENTARY SPECIES**	**ELC CATEGORY**	**SITE NAME**
7	1021	Vaccinium vitis-idaea	14	Korouoma Nature Reserve
8	1662	Festuca rubra	9	Vaarajänkkä-Rovajänkkä
8	1662	Fragaria vesca	14	Vaarajänkkä-Rovajänkkä
8	1662	Phleum pratense	9	Vaarajänkkä-Rovajänkkä
8	1662	Poa pratensis	9	Vaarajänkkä-Rovajänkkä
8	1662	Trifolium hybridum	9	Vaarajänkkä-Rovajänkkä
8	1662	Trifolium pratense	9	Vaarajänkkä-Rovajänkkä
8	1662	Trifolium pratense	14	Vaarajänkkä-Rovajänkkä
8	1662	Trifolium repens	9	Vaarajänkkä-Rovajänkkä
8	1662	Trifolium repens	14	Vaarajänkkä-Rovajänkkä
8	1662	Vaccinium oxycoccos	9	Vaarajänkkä-Rovajänkkä
9	59040	Barbarea stricta	7	Sipoonkorpi National Park
9	59040	Brassica rapa	7	Sipoonkorpi National Park
9	59040	Carum carvi	2	Sipoonkorpi National Park
9	59040	Carum carvi	7	Sipoonkorpi National Park
9	59040	Corylus avellana	2	Sipoonkorpi National Park
9	59040	Phalaroides arundinacea	2	Sipoonkorpi National Park
9	59040	Phalaroides arundinacea	7	Sipoonkorpi National Park
9	59040	Ribes spicatum	7	Sipoonkorpi National Park
10	20625	Barbarea stricta	1	Räyrinki
10	20625	Festuca ovina	1	Räyrinki
10	20625	Phalaroides arundinacea	1	Räyrinki
10	20625	Ribes uva-crispa	1	Räyrinki
10	20625	Rubus arcticus	1	Räyrinki
10	20625	Trifolium pratense	1	Räyrinki
10	20625	Trifolium repens	1	Räyrinki
10	20625	Vaccinium microcarpum	1	Räyrinki
11	62665	Barbarea vulgaris	5	Losonvaara
11	62665	Carum carvi	5	Losonvaara
11	62665	Dactylis glomerata	5	Losonvaara
11	62665	Phleum pratense	5	Losonvaara
11	62665	Ribes spicatum	5	Losonvaara
11	62665	Rubus idaeus	5	Losonvaara
11	62665	Trifolium hybridum	5	Losonvaara
11	62665	Trifolium pratense	5	Losonvaara
11	62665	Trifolium repens	5	Losonvaara
12	1326	Brassica rapa	3	Preiviikinlahti - Yyteri
12	1326	Bromopsis inermis	3	Preiviikinlahti - Yyteri
12	1326	Medicago sativa	3	Preiviikinlahti - Yyteri
12	1326	Mentha arvensis	3	Preiviikinlahti - Yyteri
12	1326	Ribes spicatum	3	Preiviikinlahti - Yyteri
12	1326	Rubus arcticus	3	Preiviikinlahti - Yyteri
12	1326	Schedonorus pratensis	3	Preiviikinlahti - Yyteri
12	1326	Vaccinium microcarpum	3	Preiviikinlahti - Yyteri

13	34361	Barbarea vulgaris	13	Pallas-Yllästunturi National Park
COMPLEMENTARY SITE	**SITE ID**	**COMPLEMENTARY SPECIES**	**ELC CATEGORY**	**SITE NAME**
13	34361	Carum carvi	13	Pallas-Yllästunturi National Park
13	34361	Phleum pratense	12	Pallas-Yllästunturi National Park
13	34361	Poa alpina	12	Pallas-Yllästunturi National Park
13	34361	Poa pratensis	12	Pallas-Yllästunturi National Park
13	34361	Schedonorus pratensis	13	Pallas-Yllästunturi National Park
13	34361	Trifolium hybridum	13	Pallas-Yllästunturi National Park
14	64941	Allium schoenoprasum	8	Laukkallio conservation area
14	64941	Rubus arcticus	8	Laukkallio conservation area
14	64941	Rubus chamaemorus	8	Laukkallio conservation area
14	64941	Vaccinium microcarpum	8	Laukkallio conservation area
14	64941	Vaccinium oxycoccos	8	Laukkallio conservation area
15	28034	Bromopsis inermis	14	Martinselkonen nature reserve
15	28034	Carum carvi	14	Martinselkonen nature reserve
15	28034	Dactylis glomerata	14	Martinselkonen nature reserve
15	28034	Phleum pratense	14	Martinselkonen nature reserve
15	28034	Vaccinium microcarpum	14	Martinselkonen nature reserve
16	42162	Brassica rapa	2	Koli National Park
16	42162	Fragaria moschata	2	Koli National Park
16	42162	Ribes uva-crispa	7	Koli National Park
16	42162	Rubus arcticus	7	Koli National Park
17	93381	Barbarea stricta	15	Itämäki conservation area
17	93381	Carum carvi	15	Itämäki conservation area
17	93381	Fragaria vesca	15	Itämäki conservation area
17	93381	Trifolium pratense	15	Itämäki conservation area
18	31313	Carum carvi	12	Näränkävaara
18	31313	Trifolium pratense	4	Näränkävaara
18	31313	Trifolium pratense	12	Näränkävaara
18	31313	Trifolium repens	4	Näränkävaara
19	30421	Festuca trachyphylla	6	Huosianmaankallio
19	30421	Mentha arvensis	6	Huosianmaankallio
19	30421	Phalaroides arundinacea	6	Huosianmaankallio
19	30421	Schedonorus pratensis	6	Huosianmaankallio
20	42204	Barbarea stricta	5	Saana
20	42204	Festuca nigrescens	5	Saana
20	42204	Lolium perenne	5	Saana
21	858	Carum carvi	1	Pyhä-Häkki National Park
21	858	Ribes spicatum	1	Pyhä-Häkki National Park
21	858	Trifolium hybridum	1	Pyhä-Häkki National Park
22	1353	Dactylis glomerata	10	Kellojärvi
22	1353	Mentha arvensis	10	Kellojärvi
22	1353	Poa pratensis	10	Kellojärvi
23	868	Lactuca sibirica	12	Urho Kekkonen National Park
23	868	Lactuca sibirica	13	Urho Kekkonen National Park
23	868	Ribes nigrum	13	Urho Kekkonen National Park

COMPLEMENTARY SITE	SITE ID	COMPLEMENTARY SPECIES	ELC CATEGORY	SITE NAME
24	1453	Lactuca sibirica	9	Heinäjänkä-Karhuaapa-Kokonräme
24	1453	Lactuca sibirica	14	Heinäjänkä-Karhuaapa-Kokonräme
24	1453	Ribes nigrum	15	Heinäjänkä-Karhuaapa-Kokonräme
25	26270	Brassica rapa	8	Kummelbergen
25	25870	Mentha arvensis	8	Kummelbergen
26	25870	Lolium perenne	2	Aulanko conservation area
26	25633	Ribes uva-crispa	2	Aulanko conservation area
27	25633	Barbarea vulgaris	1	Rauhanmaja
27	45483	Fragaria moschata	1	Rauhanmaja
28	1331	Brassica rapa	10	Revonneva-Ruonneva
28	1610	Ribes nigrum	10	Revonneva-Ruonneva
29	1610	Dactylis glomerata	1	Suomijärvi
29	20805	Festuca trachyphylla	1	Suomijärvi
31	42203	Phleum nodosum	2	Lohjanjärvi
31	24735	Phleum nodosum	7	Lohjanjärvi
32	24735	Fragaria vesca	12	Riisitunturi National park
32	860	Rubus arcticus	4	Riisitunturi National park
33	860	Lactuca sibirica	5	Värriö
33	928	Phalaroides arundinacea	5	Värriö
34	928	Mentha arvensis	14	Kutujoki
34	81833	Ribes nigrum	9	Kutujoki
35	81833	Phalaroides arundinacea	4	Issakka
35	966	Trifolium hybridum	4	Issakka
36	42203	Schedonorus pratensis	9	Liimanninkoski
37	43401	Lactuca sibirica	6	Päätyeenlahti
38	45483	Lolium multiflorum	7	Siikalahti
39	966	Allium schoenoprasum	13	Kielajoki
40	83162	Allium schoenoprasum	2	Lövkullaudden
41	843	Allium schoenoprasum	7	Isojärvi national park
42	83164	Festuca nigrescens	13	Järämä
43	889	Lactuca sibirica	7	Lohijoki
44	1149	Barbarea stricta	6	Ruosmesuo-Hanhisuo
45	849	Festuca trachyphylla	13	Lemmenjoki National Park
46	1512	Brassica rapa	15	Kiiminki
47	83163	Poa alpina	2	Kalddasjohka
48	45761	Festuca trachyphylla	7	Valklammi
49	1641	Carum carvi	9	Suuripää - Saaranoja
50	862	Malus sylvestris	3	Archipelago Sea National Park
51	1962	Schedonorus pratensis	5	Käsivarsi Wilderness Area
52	89186	Trifolium hybridum	15	Pirnesoja
53	1403	Festuca trachyphylla	2	Päijänne
54	93419	Lactuca sibirica	4	Sorsatunturi conservation area
55	92822	Mentha arvensis	13	Hossa National Park

COMPLEMENTARY SITE	SITE ID	COMPLEMENTARY SPECIES	ELC CATEGORY	SITE NAME
56	64798	Festuca trachyphylla	9	Louhensuo conservation area
57	25750	Lactuca sibirica	10	Pisavaara nature reserve
58	27652	Mentha arvensis	1	Patvinsuo
59	1647	Ribes spicatum	4	Särkivaara - Löyhkönen

Table S3. Mainland Finland and Åland Islands *in situ* complementary sites and species (Site ID number provided by the World Database of Protected Areas)

COMPLEMENTARY SITE	SITE ID	COMPLEMENTARY SPECIES	ELC CATEGORY	SITE NAME
1	555543215	Allium schoenoprasum	7	Tammisaari and Hanko Archipelago
1	555543215	Allium schoenoprasum	8	Tammisaari and Hanko Archipelago
1	555543215	Asparagus officinalis	7	Tammisaari and Hanko Archipelago
1	555543215	Barbarea stricta	7	Tammisaari and Hanko Archipelago
1	555543215	Barbarea stricta	8	Tammisaari and Hanko Archipelago
1	555543215	Barbarea vulgaris	7	Tammisaari and Hanko Archipelago
1	555543215	Barbarea vulgaris	8	Tammisaari and Hanko Archipelago
1	555543215	Brassica rapa	7	Tammisaari and Hanko Archipelago
1	555543215	Bromopsis inermis	8	Tammisaari and Hanko Archipelago
1	555543215	Carum carvi	7	Tammisaari and Hanko Archipelago
1	555543215	Carum carvi	8	Tammisaari and Hanko Archipelago
1	555543215	Corylus avellana	7	Tammisaari and Hanko Archipelago
1	555543215	Corylus avellana	8	Tammisaari and Hanko Archipelago
1	555543215	Crambe maritima	8	Tammisaari and Hanko Archipelago
1	555543215	Dactylis glomerata	7	Tammisaari and Hanko Archipelago
1	555543215	Dactylis glomerata	8	Tammisaari and Hanko Archipelago
1	555543215	Festuca ovina	7	Tammisaari and Hanko Archipelago
1	555543215	Festuca ovina	8	Tammisaari and Hanko Archipelago
1	555543215	Festuca rubra	7	Tammisaari and Hanko Archipelago
1	555543215	Festuca rubra	8	Tammisaari and Hanko Archipelago
1	555543215	Fragaria moschata	7	Tammisaari and Hanko Archipelago
1	555543215	Fragaria vesca	7	Tammisaari and Hanko Archipelago
1	555543215	Fragaria vesca	8	Tammisaari and Hanko Archipelago
1	555543215	Lactuca tatarica	8	Tammisaari and Hanko Archipelago
1	555543215	Lolium perenne	7	Tammisaari and Hanko Archipelago
1	555543215	Lolium perenne	8	Tammisaari and Hanko Archipelago
1	555543215	Malus sylvestris	8	Tammisaari and Hanko Archipelago
1	555543215	Medicago lupulina	7	Tammisaari and Hanko Archipelago
1	555543215	Mentha arvensis	7	Tammisaari and Hanko Archipelago
1	555543215	Mentha arvensis	8	Tammisaari and Hanko Archipelago
1	555543215	Phalaroides arundinacea	7	Tammisaari and Hanko Archipelago
1	555543215	Phalaroides arundinacea	8	Tammisaari and Hanko Archipelago
1	555543215	Phleum pratense	7	Tammisaari and Hanko Archipelago
1	555543215	Phleum pratense	8	Tammisaari and Hanko Archipelago
1	555543215	Poa pratensis	7	Tammisaari and Hanko Archipelago
1	555543215	Poa pratensis	8	Tammisaari and Hanko Archipelago
1	555543215	Ribes nigrum	7	Tammisaari and Hanko Archipelago
1	555543215	Ribes nigrum	8	Tammisaari and Hanko Archipelago
1	555543215	Ribes spicatum	7	Tammisaari and Hanko Archipelago
1	555543215	Ribes uva-crispa	7	Tammisaari and Hanko Archipelago

COMPLEMENTARY SITE	SITE ID	COMPLEMENTARY SPECIES	ELC CATEGORY	SITE NAME
1	555543215	Rubus chamaemorus	8	Tammisaari and Hanko Archipelago
1	555543215	Rubus idaeus	7	Tammisaari and Hanko Archipelago
1	555543215	Rubus idaeus	8	Tammisaari and Hanko Archipelago
1	555543215	Schedonorus pratensis	7	Tammisaari and Hanko Archipelago
1	555543215	Schedonorus pratensis	8	Tammisaari and Hanko Archipelago
1	555543215	Trifolium hybridum	7	Tammisaari and Hanko Archipelago
1	555543215	Trifolium hybridum	8	Tammisaari and Hanko Archipelago
1	555543215	Trifolium pratense	7	Tammisaari and Hanko Archipelago
1	555543215	Trifolium pratense	8	Tammisaari and Hanko Archipelago
1	555543215	Trifolium repens	7	Tammisaari and Hanko Archipelago
1	555543215	Trifolium repens	8	Tammisaari and Hanko Archipelago
1	555543215	Vaccinium myrtillus	7	Tammisaari and Hanko Archipelago
1	555543215	Vaccinium myrtillus	8	Tammisaari and Hanko Archipelago
1	555543215	Vaccinium oxycoccos	7	Tammisaari and Hanko Archipelago
1	555543215	Vaccinium uliginosum	8	Tammisaari and Hanko Archipelago
1	555543215	Vaccinium vitis-idaea	7	Tammisaari and Hanko Archipelago
1	555543215	Vaccinium vitis-idaea	8	Tammisaari and Hanko Archipelago
2	555580012	Festuca ovina	10	Urho Kekkonen National Park
2	555580012	Festuca ovina	4	Urho Kekkonen National Park
2	555580012	Festuca ovina	5	Urho Kekkonen National Park
2	555580012	Festuca ovina	9	Urho Kekkonen National Park
2	555580012	Festuca rubra	4	Urho Kekkonen National Park
2	555580012	Festuca rubra	5	Urho Kekkonen National Park
2	555580012	Lactuca sibirica	4	Urho Kekkonen National Park
2	555580012	Lactuca sibirica	5	Urho Kekkonen National Park
2	555580012	Phalaroides arundinacea	4	Urho Kekkonen National Park
2	555580012	Phalaroides arundinacea	5	Urho Kekkonen National Park
2	555580012	Phalaroides arundinacea	9	Urho Kekkonen National Park
2	555580012	Phleum pratense	5	Urho Kekkonen National Park
2	555580012	Poa alpina	10	Urho Kekkonen National Park
2	555580012	Poa alpina	5	Urho Kekkonen National Park
2	555580012	Poa pratensis	5	Urho Kekkonen National Park
2	555580012	Ribes nigrum	5	Urho Kekkonen National Park
2	555580012	Ribes spicatum	4	Urho Kekkonen National Park
2	555580012	Ribes spicatum	5	Urho Kekkonen National Park
2	555580012	Ribes spicatum	9	Urho Kekkonen National Park
2	555580012	Rubus arcticus	10	Urho Kekkonen National Park
2	555580012	Rubus arcticus	4	Urho Kekkonen National Park
2	555580012	Rubus arcticus	5	Urho Kekkonen National Park
2	555580012	Rubus arcticus	9	Urho Kekkonen National Park
2	555580012	Rubus chamaemorus	10	Urho Kekkonen National Park
2	555580012	Rubus chamaemorus	4	Urho Kekkonen National Park
2	555580012	Rubus chamaemorus	5	Urho Kekkonen National Park
2	555580012	Rubus chamaemorus	9	Urho Kekkonen National Park

COMPLEMENTARY SITE	SITE ID	COMPLEMENTARY SPECIES	ELC CATEGORY	SITE NAME
2	555580012	Rubus idaeus	4	Urho Kekkonen National Park
2	555580012	Rubus idaeus	5	Urho Kekkonen National Park
2	555580012	Trifolium hybridum	5	Urho Kekkonen National Park
2	555580012	Trifolium pratense	5	Urho Kekkonen National Park
2	555580012	Trifolium repens	4	Urho Kekkonen National Park
2	555580012	Trifolium repens	5	Urho Kekkonen National Park
2	555580012	Vaccinium microcarpum	10	Urho Kekkonen National Park
2	555580012	Vaccinium microcarpum	4	Urho Kekkonen National Park
2	555580012	Vaccinium microcarpum	5	Urho Kekkonen National Park
2	555580012	Vaccinium myrtillus	10	Urho Kekkonen National Park
2	555580012	Vaccinium myrtillus	4	Urho Kekkonen National Park
2	555580012	Vaccinium myrtillus	5	Urho Kekkonen National Park
2	555580012	Vaccinium myrtillus	9	Urho Kekkonen National Park
2	555580012	Vaccinium oxycoccos	10	Urho Kekkonen National Park
2	555580012	Vaccinium oxycoccos	4	Urho Kekkonen National Park
2	555580012	Vaccinium oxycoccos	5	Urho Kekkonen National Park
2	555580012	Vaccinium uliginosum	10	Urho Kekkonen National Park
2	555580012	Vaccinium uliginosum	4	Urho Kekkonen National Park
2	555580012	Vaccinium uliginosum	5	Urho Kekkonen National Park
2	555580012	Vaccinium uliginosum	9	Urho Kekkonen National Park
2	555580012	Vaccinium vitis-idaea	10	Urho Kekkonen National Park
2	555580012	Vaccinium vitis-idaea	4	Urho Kekkonen National Park
2	555580012	Vaccinium vitis-idaea	5	Urho Kekkonen National Park
2	555580012	Vaccinium vitis-idaea	9	Urho Kekkonen National Park
3	555525183	Barbarea stricta	3	Kiiminki River
3	555525183	Barbarea vulgaris	1	Kiiminki River
3	555525183	Barbarea vulgaris	3	Kiiminki River
3	555525183	Brassica rapa	3	Kiiminki River
3	555525183	Carum carvi	1	Kiiminki River
3	555525183	Carum carvi	3	Kiiminki River
3	555525183	Festuca ovina	1	Kiiminki River
3	555525183	Festuca ovina	3	Kiiminki River
3	555525183	Festuca rubra	1	Kiiminki River
3	555525183	Festuca rubra	3	Kiiminki River
3	555525183	Fragaria vesca	1	Kiiminki River
3	555525183	Fragaria vesca	3	Kiiminki River
3	555525183	Lactuca sibirica	1	Kiiminki River
3	555525183	Mentha arvensis	1	Kiiminki River
3	555525183	Mentha arvensis	3	Kiiminki River
3	555525183	Phalaroides arundinacea	1	Kiiminki River
3	555525183	Phalaroides arundinacea	3	Kiiminki River
3	555525183	Phleum pratense	1	Kiiminki River
3	555525183	Phleum pratense	3	Kiiminki River
3	555525183	Poa pratensis	1	Kiiminki River

COMPLEMENTARY SITE	SITE ID	COMPLEMENTARY SPECIES	ELC CATEGORY	SITE NAME
3	555525183	Poa pratensis	3	Kiiminki River
3	555525183	Ribes nigrum	1	Kiiminki River
3	555525183	Ribes spicatum	3	Kiiminki River
3	555525183	Rubus arcticus	1	Kiiminki River
3	555525183	Rubus arcticus	3	Kiiminki River
3	555525183	Rubus chamaemorus	1	Kiiminki River
3	555525183	Rubus chamaemorus	3	Kiiminki River
3	555525183	Rubus idaeus	1	Kiiminki River
3	555525183	Rubus idaeus	3	Kiiminki River
3	555525183	Schedonorus pratensis	3	Kiiminki River
3	555525183	Trifolium pratense	1	Kiiminki River
3	555525183	Trifolium pratense	3	Kiiminki River
3	555525183	Trifolium repens	1	Kiiminki River
3	555525183	Trifolium repens	3	Kiiminki River
3	555525183	Vaccinium myrtillus	1	Kiiminki River
3	555525183	Vaccinium myrtillus	3	Kiiminki River
3	555525183	Vaccinium oxycoccos	1	Kiiminki River
3	555525183	Vaccinium oxycoccos	3	Kiiminki River
3	555525183	Vaccinium uliginosum	1	Kiiminki River
3	555525183	Vaccinium uliginosum	3	Kiiminki River
3	555525183	Vaccinium vitis-idaea	1	Kiiminki River
3	555525183	Vaccinium vitis-idaea	3	Kiiminki River
4	555524483	Barbarea stricta	6	Evo
4	555524483	Dactylis glomerata	6	Evo
4	555524483	Festuca ovina	6	Evo
4	555524483	Schedonorus pratensis	6	Evo
4	555524483	Festuca rubra	6	Evo
4	555524483	Fragaria vesca	6	Evo
4	555524483	Phalaroides arundinacea	6	Evo
4	555524483	Phleum pratense	6	Evo
4	555524483	Poa pratensis	6	Evo
4	555524483	Ribes nigrum	6	Evo
4	555524483	Ribes spicatum	8	Evo
4	555524483	Ribes uva-crispa	6	Evo
4	555524483	Ribes uva-crispa	8	Evo
4	555524483	Rubus chamaemorus	6	Evo
4	555524483	Rubus idaeus	6	Evo
4	555524483	Trifolium pratense	6	Evo
4	555524483	Trifolium repens	6	Evo
4	555524483	Vaccinium myrtillus	6	Evo
4	555524483	Vaccinium oxycoccos	6	Evo
4	555524483	Vaccinium oxycoccos	8	Evo
4	555524483	Vaccinium uliginosum	6	Evo
4	555524483	Vaccinium vitis-idaea	6	Evo

COMPLEMENTARY SITE	SITE ID	COMPLEMENTARY SPECIES	ELC CATEGORY	SITE NAME
5	555524483	Barbarea stricta	5	Oulanka National Park
5	902780	Dactylis glomerata	5	Oulanka National Park
5	902780	Festuca rubra	10	Oulanka National Park
5	902780	Festuca trachyphylla	5	Oulanka National Park
5	902780	Fragaria vesca	5	Oulanka National Park
5	902780	Lolium perenne	5	Oulanka National Park
5	902780	Poa pratensis	10	Oulanka National Park
5	902780	Rubus idaeus	10	Oulanka National Park
5	902780	Schedonorus pratensis	5	Oulanka National Park
5	902780	Trifolium pratense	10	Oulanka National Park
5	902780	Trifolium repens	10	Oulanka National Park
6	555524301	Festuca trachyphylla	7	Hyyppärä
6	555524301	Festuca trachyphylla	8	Hyyppärä
6	555524301	Fragaria moschata	8	Hyyppärä
6	555524301	Rubus arcticus	7	Hyyppärä
6	555524301	Rubus arcticus	8	Hyyppärä
6	555524301	Rubus chamaemorus	7	Hyyppärä
6	555524301	Vaccinium microcarpum	7	Hyyppärä
6	555524301	Vaccinium microcarpum	8	Hyyppärä
6	555524301	Vaccinium uliginosum	7	Hyyppärä
7	555543221	Festuca rubra	2	Rahja Archipelago
7	555543221	Fragaria vesca	2	Rahja Archipelago
7	555543221	Phalaroides arundinacea	2	Rahja Archipelago
7	555543221	Rubus arcticus	2	Rahja Archipelago
7	555543221	Rubus chamaemorus	2	Rahja Archipelago
7	555543221	Vaccinium myrtillus	2	Rahja Archipelago
7	555543221	Vaccinium vitis-idaea	2	Rahja Archipelago
8	555525477	Barbarea stricta	4	Ounas River
8	555525477	Brassica rapa	4	Ounas River
8	555525477	Festuca trachyphylla	4	Ounas River
8	555525477	Phleum pratense	4	Ounas River
8	555525477	Poa pratensis	4	Ounas River
8	555525477	Trifolium pratense	4	Ounas River
9	902791	Barbarea vulgaris	6	Torronsuo National Park
9	902791	Brassica rapa	6	Torronsuo National Park
9	902791	Carum carvi	6	Torronsuo National Park
9	902791	Rubus arcticus	6	Torronsuo National Park
9	902791	Trifolium hybridum	6	Torronsuo National Park
9	902791	Vaccinium microcarpum	6	Torronsuo National Park
10	555580240	Festuca rubra	9	South Kuusamo forests
10	555580240	Trifolium pratense	9	South Kuusamo forests
10	555580240	Trifolium repens	9	South Kuusamo forests
10	555580240	Vaccinium microcarpum	9	South Kuusamo forests
10	555580240	Vaccinium oxycoccos	9	South Kuusamo forests

COMPLEMENTARY SITE	SITE ID	COMPLEMENTARY SPECIES	ELC CATEGORY	SITE NAME
11	555524496	Armoracia rusticana	8	Kukkiajärvi
11	555524496	Brassica rapa	8	Kukkiajärvi
11	555524496	Lolium multiflorum	8	Kukkiajärvi
11	555524496	Medicago sativa	8	Kukkiajärvi
12	555580002	Fragaria vesca	10	Värriö
12	555580002	Lactuca sibirica	10	Värriö
12	555580002	Phalaroides arundinacea	10	Värriö
12	555580002	Ribes spicatum	10	Värriö
13	555525566	Armoracia rusticana	7	Västra Espholm
13	555525566	Medicago sativa	7	Västra Espholm
13	555525566	Rubus caesius	7	Västra Espholm
13	555525566	Sinapis arvensis	7	Västra Espholm
14	149649	Barbarea stricta	10	Saana conservation area
14	149649	Festuca nigrescens	10	Saana conservation area
14	149649	Lolium perenne	10	Saana conservation area
15	902757	Lactuca sibirica	6	Rääkkylä ja Kitee lakes
15	902757	Mentha arvensis	6	Rääkkylä ja Kitee lakes
16	555579976	Barbarea vulgaris	5	Pallas-Ounastunturi
16	555579976	Carum carvi	5	Pallas-Ounastunturi
16	555579976	Poa alpina	4	Pallas-Ounastunturi
17	555543214	Crambe maritima	7	Archipelago Sea
17	555543214	Fragaria viridis	7	Archipelago Sea
17	555543214	Malus sylvestris	7	Archipelago Sea
18	555525221	Ribes nigrum	3	Pitkäsneva
18	555525221	Vaccinium microcarpum	1	Pitkäsneva
18	555525221	Vaccinium microcarpum	3	Pitkäsneva
19	555525292	Festuca trachyphylla	9	Kinnussuo - Mustinsuo
19	555525292	Phleum pratense	9	Kinnussuo - Mustinsuo
19	555525292	Poa pratensis	9	Kinnussuo - Mustinsuo
20	555524242	Asparagus officinalis	8	Lohjanjärvi area
20	555524242	Phleum nodosum	8	Lohjanjärvi area
21	555525143	Dactylis glomerata	3	Lestijoki
21	555525143	Trifolium hybridum	3	Lestijoki
22	555579982	Carum carvi	2	Perämeri islands
22	555579982	Phleum pratense	2	Perämeri islands
23	555579975	Schedonorus pratensis	10	Käsivarsi Wildeness area
23	555579975	Trifolium hybridum	10	Käsivarsi Wildeness area
24	555525199	Fragaria vesca	4	Paljakka
24	555525199	Ribes nigrum	4	Paljakka
25	555524541	Lactuca sibirica	8	Liesjärvi
26	555525515	Allium schoenoprasum	5	Paistunturi Wilderness area
27	555580055	Bromopsis inermis	7	Ruissalo
28	555580018	Allium schoenoprasum	10	Kaldoaivi Wilderness area
29	388514	Lolium multiflorum	7	Kalkkikallio conservation area

COMPLEMENTARY SITE	SITE ID	COMPLEMENTARY SPECIES	ELC CATEGORY	SITE NAME
30	555524330	Medicago lupulina	8	Pomponrahka
31	555524355	Phleum nodosum	7	Rekijoki valley
32	555525358	Mentha arvensis	5	Vasonniemi ja Pahalammenpuro
33	151068	Lactuca sibirica	3	Tornio bird conservation area
34	555525516	Ribes nigrum	10	Pulmankijärvi
35	555563330	Ribes spicatum	6	Lehtola
36	555580272	Brassica rapa	1	Revonneva-Ruonneva
37	555525258	Ribes spicatum	1	Kurimonkoski meadows
38	329930	Corylus avellana	6	Myllyharju conservation area
39	555538774	Festuca trachyphylla	6	Suomijärvi
40	555589893	Lolium perenne	3	Riutta seaside meadow
41	555525208	Schedonorus pratensis	3	Muhos- ja Poikajoki
42	555580235	Phleum pratense	10	Valtavaara - Pyhävaara
43	555525507	Trifolium hybridum	1	Vaarajänkkä-Rovajänkkä
44	555525373	Schedonorus pratensis	4	Jylkkyvaara ja Jylkynsuo
45	555580285	Rubus idaeus	9	Juortanansalo area
46	555538773	Sinapis arvensis	8	Viurilanlahti
47	555525576	Mentha aquatica	7	Gloviken
48	555525530	Prunus spinosa	7	Nåtö - Jungfruskär

Table S4. *Ex situ* gap analysis - complementary species/ELC in collecting sites. (Site ID number provided by the World Database of Protected Areas)

COMPLEMENTARY COLLECTING SITE NUMBER	SITE ID	COMPLEMENTARY SPECIES	ELC CATEGORY
1	9040	Allium schoenoprasum	12
1	9040	Armoracia rusticana	3
1	9040	Barbarea stricta	3
1	9040	Barbarea vulgaris	3
1	9040	Brassica rapa	2
1	9040	Brassica rapa	3
1	9040	Carum carvi	10
1	9040	Corylus avellana	3
1	9040	Dactylis glomerata	11
1	9040	Dactylis glomerata	12
1	9040	Dactylis glomerata	13
1	9040	Fragaria moschata	3
1	9040	Fragaria vesca	3
1	9040	Lolium perenne	3
1	9040	Mentha arvensis	3
1	9040	Ribes nigrum	10
1	9040	Ribes nigrum	15
1	9040	Ribes spicatum	4
1	9040	Ribes spicatum	5
1	9040	Ribes uva-crispa	3
1	9040	Rubus arcticus	3
1	9040	Rubus chamaemorus	3
1	9040	Rubus idaeus	3
1	9040	Trifolium hybridum	5
1	9040	Vaccinium myrtillus	3
1	9040	Vaccinium myrtillus	5
1	9040	Vaccinium uliginosum	3
1	9040	Vaccinium vitis-idaea	1
1	9040	Vaccinium vitis-idaea	2
2	16637	Armoracia rusticana	8
2	16637	Barbarea stricta	7
2	16637	Barbarea stricta	8
2	16637	Barbarea vulgaris	8
2	16637	Bromopsis inermis	7
2	16637	Bromopsis inermis	8
2	16637	Carum carvi	4
2	16637	Chenopodium ficifolium	8
2	16637	Erucastrum gallicum	7

COMPLEMENTARY COLLECTING SITE NUMBER	SITE ID	COMPLEMENTARY SPECIES	ELC CATEGORY
2	16637	Erucastrum gallicum	8
2	16637	Festuca ovina	5
2	16637	Festuca trachyphylla	7
2	16637	Festuca trachyphylla	8
2	16637	Lactuca sibirica	7
2	16637	Mentha arvensis	8
2	16637	Ribes nigrum	2
2	16637	Ribes nigrum	7
2	16637	Ribes nigrum	8
2	16637	Ribes spicatum	3
2	16637	Vaccinium microcarpum	7
2	16637	Vaccinium microcarpum	8
2	16637	Vaccinium oxycoccos	2
2	16637	Vaccinium vitis-idaea	8
3	8498	Carum carvi	3
3	8498	Dactylis glomerata	5
3	8498	Ribes nigrum	13
3	8498	Ribes nigrum	5
3	8498	Ribes spicatum	9
3	8498	Rubus chamaemorus	10
3	8498	Rubus chamaemorus	5
3	8498	Schedonorus pratensis	1
3	8498	Schedonorus pratensis	2
3	8498	Trifolium repens	6
3	8498	Vaccinium myrtillus	6
3	8498	Vaccinium myrtillus	7
3	8498	Vaccinium oxycoccos	4
3	8498	Vaccinium oxycoccos	5
3	8498	Vaccinium vitis-idaea	10
3	8498	Vaccinium vitis-idaea	9
4	17560	Armoracia rusticana	7
4	17560	Barbarea vulgaris	7
4	17560	Carum carvi	5
4	17560	Corylus avellana	7
4	17560	Dactylis glomerata	1
4	17560	Dactylis glomerata	3
4	17560	Festuca ovina	4
4	17560	Festuca rubra	1
4	17560	Fragaria vesca	7
4	17560	Mentha arvensis	7
4	17560	Rubus arcticus	7
4	17560	Rubus idaeus	7
4	17560	Schedonorus pratensis	5

COMPLEMENTARY COLLECTING SITE NUMBER	SITE ID	COMPLEMENTARY SPECIES	ELC CATEGORY
4	17560	Vaccinium myrtillus	10
4	17560	Vaccinium oxycoccos	3
4	17560	Vaccinium vitis-idaea	6
5	9791	Barbarea stricta	1
5	9791	Bromopsis inermis	3
5	9791	Festuca trachyphylla	1
5	9791	Festuca trachyphylla	3
5	9791	Mentha arvensis	1
5	9791	Ribes nigrum	14
5	9791	Rubus arcticus	1
5	9791	Rubus chamaemorus	1
5	9791	Rubus idaeus	1
5	9791	Schedonorus pratensis	12
5	9791	Trifolium repens	1
5	9791	Vaccinium microcarpum	1
5	9791	Vaccinium myrtillus	4
5	9791	Vaccinium oxycoccos	7
5	9791	Vaccinium uliginosum	1
5	9791	Vaccinium vitis-idaea	3
6	14100	Barbarea vulgaris	6
6	14100	Bromopsis inermis	6
6	14100	Carum carvi	6
6	14100	Fragaria vesca	6
6	14100	Fragaria vesca	8
6	14100	Poa pratensis	4
6	14100	Ribes nigrum	1
6	14100	Ribes nigrum	6
6	14100	Ribes spicatum	10
6	14100	Rubus chamaemorus	6
6	14100	Trifolium hybridum	8
6	14100	Trifolium hybridum	9
6	14100	Vaccinium myrtillus	9
7	5235	Barbarea stricta	5
7	5235	Carum carvi	7
7	5235	Cichorium intybus	5
7	5235	Corylus avellana	4
7	5235	Corylus avellana	5
7	5235	Ribes spicatum	2
7	5235	Rubus arcticus	4
7	5235	Rubus arcticus	5
7	5235	Vaccinium myrtillus	1
7	5235	Vaccinium oxycoccos	10
7	5235	Vaccinium oxycoccos	9

COMPLEMENTARY COLLECTING SITE NUMBER	SITE ID	COMPLEMENTARY SPECIES	ELC CATEGORY
7	5235	Vaccinium vitis-idaea	4
7	5235	Vaccinium vitis-idaea	5
8	12594	Brassica rapa	1
8	7854	Festuca ovina	10
8	7854	Festuca rubra	6
8	7854	Lolium perenne	2
8	7854	Mentha arvensis	2
8	7854	Phleum pratense	8
8	7854	Ribes nigrum	16
8	7854	Rubus idaeus	2
8	7854	Schedonorus pratensis	11
8	7854	Trifolium hybridum	10
8	7854	Vaccinium oxycoccos	6
8	7854	Vaccinium oxycoccos	8
9	9233	Barbarea vulgaris	4
9	9233	Dactylis glomerata	4
9	9233	Fragaria vesca	4
9	9233	Phleum pratense	5
9	9233	Ribes nigrum	12
9	9233	Rubus chamaemorus	4
9	9233	Rubus chamaemorus	9
9	9233	Trifolium hybridum	6
9	9233	Vaccinium microcarpum	9
10	5533	Fragaria vesca	5
10	5533	Lolium perenne	5
10	5533	Phalaroides arundinacea	6
10	5533	Ribes uva-crispa	4
10	5533	Ribes uva-crispa	5
10	5533	Rubus idaeus	5
10	5533	Vaccinium myrtillus	2
10	5533	Vaccinium uliginosum	4
10	5533	Vaccinium uliginosum	5
11	7763	Barbarea stricta	10
11	7763	Carum carvi	1
11	7763	Dactylis glomerata	15
11	7763	Fragaria vesca	10
11	7763	Lolium perenne	10
11	7763	Ribes uva-crispa	10
11	7763	Trifolium hybridum	7
11	7763	Vaccinium uliginosum	10
12	16856	Barbarea stricta	6
12	16856	Corylus avellana	6
12	16856	Corylus avellana	8

COMPLEMENTARY COLLECTING SITE NUMBER	SITE ID	COMPLEMENTARY SPECIES	ELC CATEGORY
12	16856	Festuca trachyphylla	6
12	16856	Lolium perenne	6
12	16856	Lolium perenne	8
12	16856	Rubus chamaemorus	8
12	16856	Rubus idaeus	8
13	1929	Festuca ovina	1
13	1929	Festuca rubra	4
13	1929	Ribes spicatum	7
13	1929	Rubus arcticus	10
13	1929	Trifolium pratense	12
13	1929	Trifolium repens	12
14	10085	Barbarea vulgaris	1
14	10085	Bromopsis inermis	1
14	10085	Chenopodium ficifolium	1
14	10085	Festuca nigrescens	3
14	10085	Ribes nigrum	9
14	10085	Ribes uva-crispa	1
15	15495	Allium schoenoprasum	2
15	15495	Asparagus officinalis	8
15	15495	Fragaria moschata	8
15	15495	Ribes uva-crispa	8
15	15495	Vaccinium uliginosum	8
16	12528	Lactuca sibirica	6
16	12528	Rubus arcticus	6
16	12528	Rubus arcticus	8
16	12528	Schedonorus pratensis	7
16	12528	Vaccinium microcarpum	6
17	8499	Barbarea stricta	9
17	8499	Barbarea vulgaris	9
17	8499	Ribes spicatum	8
17	8499	Rubus arcticus	9
17	8499	Rubus idaeus	9
18	7027	Barbarea vulgaris	10
18	7027	Brassica rapa	5
18	7027	Mentha arvensis	10
18	7027	Rubus idaeus	10
19	5348	Barbarea stricta	4
19	5348	Brassica rapa	6
19	5348	Carum carvi	8
19	5348	Ribes spicatum	1
20	17092	Rubus chamaemorus	7
20	17092	Asparagus officinalis	7
20	17092	Crambe maritima	7

COMPLEMENTARY COLLECTING SITE NUMBER	SITE ID	COMPLEMENTARY SPECIES	ELC CATEGORY
20	17092	Fragaria moschata	7
21	7712	Allium schoenoprasum	17
21	7712	Allium schoenoprasum	14
21	7712	Allium schoenoprasum	11
22	4644	Brassica rapa	4
22	4644	Lolium perenne	4
22	4644	Rubus idaeus	4
23	11071	Barbarea stricta	2
23	11071	Ribes nigrum	11
23	11071	Rubus arcticus	2
24	548	Lactuca sibirica	10
24	548	Poa pratensis	2
24	548	Ribes nigrum	4
25	17113	Cichorium intybus	8
25	17113	Lolium multiflorum	8
25	17113	Sinapis arvensis	8
26	13711	Medicago sativa	6
26	13711	Mentha arvensis	6
26	13711	Vaccinium uliginosum	6
27	8044	Fragaria moschata	5
27	8044	Vaccinium microcarpum	4
27	8044	Vaccinium microcarpum	5
28	9937	Chenopodium ficifolium	3
28	9937	Lactuca sibirica	3
28	9937	Vaccinium microcarpum	3
29	10083	Erucastrum gallicum	1
29	10083	Fragaria vesca	1
29	10083	Lactuca sibirica	1
30	15777	Lactuca sibirica	8
30	15777	Vaccinium uliginosum	7
31	14755	Medicago lupulina	8
31	14755	Mentha aquatica	8
32	16937	Allium schoenoprasum	3
32	16937	Allium schoenoprasum	9
33	6814	Barbarea vulgaris	5
33	6814	Bromopsis inermis	5
34	12473	Brassica rapa	11
34	12473	Festuca nigrescens	8
35	15367	Fragaria moschata	6
35	15367	Rubus idaeus	6
36	17352	Lolium perenne	7
36	17352	Medicago lupulina	7
37	11002	Fragaria moschata	9

COMPLEMENTARY COLLECTING SITE NUMBER	SITE ID	COMPLEMENTARY SPECIES	ELC CATEGORY
37	11002	Fragaria vesca	9
38	1928	Trifolium repens	10
38	1928	Trifolium hybridum	1
39	6827	Mentha arvensis	4
39	6827	Mentha arvensis	5
40	11068	Corylus avellana	2
40	11068	Fragaria vesca	2
41	8330	Rubus caesius	1
41	8330	Rubus caesius	3
42	11947	Diplotaxis muralis	8
42	11947	Prunus spinosa	8
43	10065	Cichorium intybus	1
43	10065	Lolium perenne	1
44	7123	Poa alpina	1
44	7123	Poa alpina	3
45	8042	Festuca trachyphylla	5
45	8042	Festuca trachyphylla	4
46	13355	Medicago sativa	8
47	16222	Medicago lupulina	6
48	12594	Allium schoenoprasum	5
49	8892	Medicago lupulina	3
50	3447	Ribes spicatum	6
51	7572	Allium schoenoprasum	18
52	9767	Prunus spinosa	3
53	8598	Medicago sativa	3
54	10066	Cichorium intybus	3
55	7706	Mentha aquatica	3
56	9345	Corylus avellana	1
57	6115	Bromopsis inermis	4
58	4796	Cichorium intybus	4
59	12318	Brassica rapa	10
60	9371	Brassica rapa	12
61	8935	Vaccinium microcarpum	10
62	8209	Vaccinium uliginosum	9
63	9515	Fragaria moschata	4
64	8196	Poa alpina	4
65	17104	Crambe maritima	8
66	16489	Chenopodium ficifolium	7
67	15050	Poa alpina	8
68	13695	Ribes uva-crispa	7
69	16564	Ribes uva-crispa	6
70	15051	Fragaria viridis	8
71	9814	Fragaria moschata	1

COMPLEMENTARY COLLECTING SITE NUMBER	SITE ID	COMPLEMENTARY SPECIES	ELC CATEGORY
72	17647	Medicago sativa	7
73	16340	Diplotaxis tenuifolia	7
74	11007	Bromopsis inermis	10
75	16799	Poa alpina	7
76	17550	Armoracia rusticana	6
77	11651	Prunus spinosa	7
78	11944	Diplotaxis muralis	7
79	398	Poa pratensis	1
80	2462	Trifolium hybridum	2
81	2022	Festuca ovina	2
82	17211	Lactuca tatarica	7
83	17080	Lolium multiflorum	7
84	13408	Poa alpina	6
85	11067	Fragaria moschata	2
86	11211	Ribes uva-crispa	2
87	2021	Festuca rubra	5
88	11802	Prunus spinosa	6
89	11946	Diplotaxis muralis	6
90	14895	Vicia lathyroides	8
91	16115	Rubus caesius	8
92	12719	Lolium multiflorum	6
93	12522	Rubus caesius	7
94	10968	Lolium multiflorum	3
95	8053	Poa alpina	10
96	9973	Fragaria moschata	10
97	8322	Asparagus officinalis	1
98	12375	Festuca nigrescens	7
99	3037	Medicago sativa	5
100	7175	Ribes uva-crispa	9
101	4677	Trifolium repens	11
102	7891	Rubus caesius	5
103	4680	Lolium perenne	9
104	7748	Poa alpina	5
105	5236	Chenopodium ficifolium	5
106	10381	Erucastrum gallicum	3
107	11961	Cichorium intybus	6