Quick Guide to the Plants of Barrow & Atgasuk

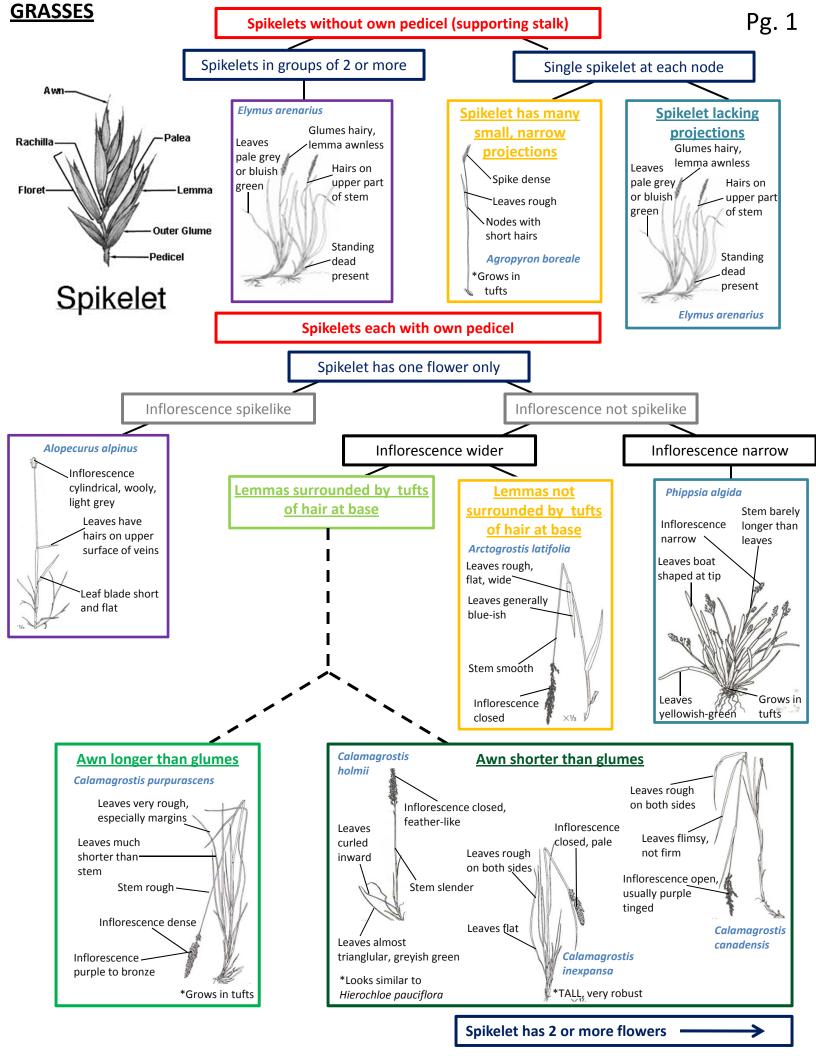
By
Kelsey Kremers,
Bob Hollister & the
Arctic Ecology Program

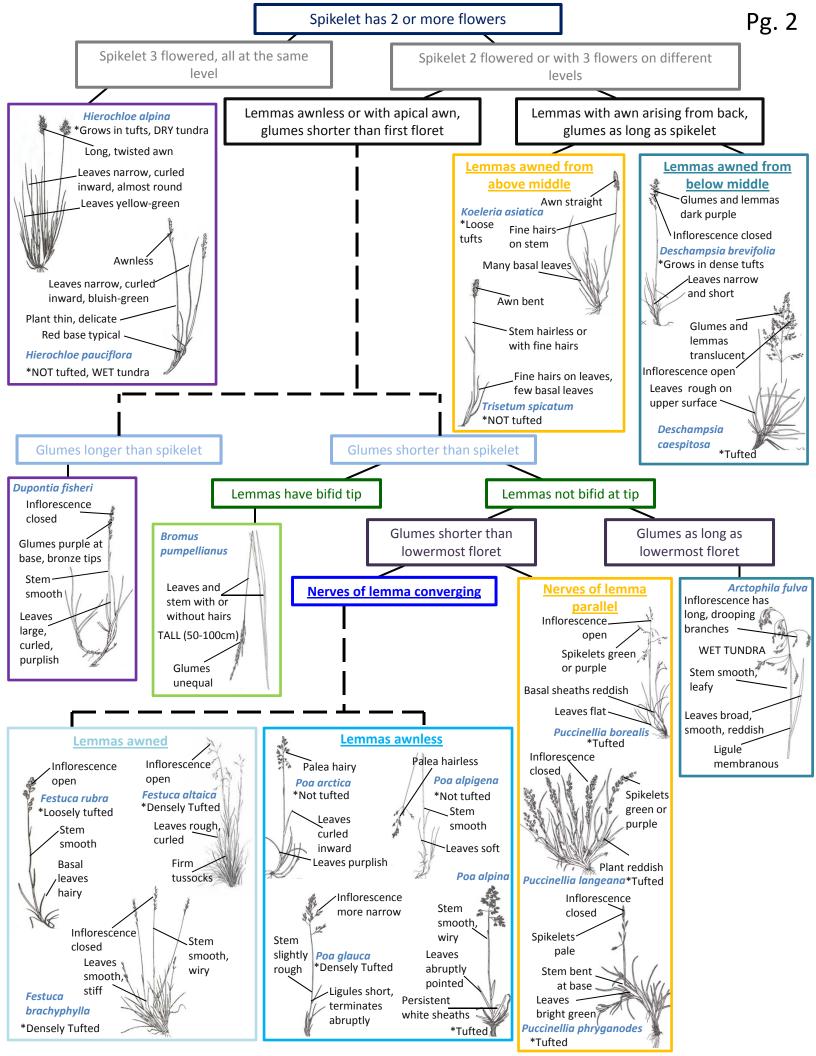
Version: 6/6/2012

Gentianaceae	Other Forbs, p. 21
<u>Leaves opposite</u> or basal; <u>flowers blue, blue-green to yellow, or white.</u>	
Hippuridaceae	Other Forbs, p. 21
Onagraceae Flowers with 4 petals and 4 sepals, pink, purple, or white;	Other Forbs, p. 22
Papaveraceae	Other Forbs, p. 22
Plantaginaceae <u>Tufted</u> ; Leaves oval, <u>forming rosette</u> ; <u>flowers creamy white, in spikes</u> , small (one species: <i>Plantago</i>	
Plumbaginaceae	Other Forbs, p. 22
Polemoniaceae Leaves alternate, pinnately divided (like a fern); flowers blue, showy; 5 petals; 5 sepals	Other Forbs, p. 22
Polygonaceae	Polygonaceae, p. 14
Primulaceae	Other Forbs, p. 23
Pyrolaceae Leaves simple, evergreen; flowers with 5 petals and 5 sepals; stems leafless; raceme inflorescence.	
Ranunculaceae Colorless juice; <u>flowers symmetrical</u> , <u>sepals petal-like</u> ;	Ranunculaceae, p. 15
Rosacea Herbs with <u>woody base</u> (one species, <i>Dryas integrifloia</i> , included in "Other Shrubs" key)	Rosaceae, p. 16
Rubiaceae	Other Forbs, p. 23
Scrophulariaceae	Scrophulariaceae, p. 19
Valerianaceae <u>Leaves opposite</u> ; flowers in terminal head, <u>pink to white</u> ; lowermost leaves with slender petiole, leaves on flowering stem lacking petiole (one species: <i>Valeriana capitata</i>).	Other Forbs, p. 23

<u>Monocots</u> Key

Forbs	Other Forbs, p. 20
Graminoids Cyperaceae (sedges) Sheath closed, stem often has edges, 1 scale subtending each pistil	Sedges and Rushes, p. 3
Juncaceae (rushes)	Sedges and Rushes, p. 3
Poaceae (grasses)	Grasses, p. 1
<u>Dicots</u>	
Woody	Shrubs, p. 6
Herbaceous (see below):	
Apiaceae Stems usually hollow; leaves alternate or basal; compound umbel inflorescence.	Other Forbs, p. 20
Asteraceae Composite flower heads with disc and ray flowers;	Asteraceae, p. 8
Boraginaceae Leaves entire, usually rough and hairy; flowers in one sided cymes, flowers blue	Other Forbs, p. 21
Brassicaceae	Brassicaceae, p. 10
Campanulaceae	Other Forbs, p. 21
Carophyllaceae Leaves opposite, entire; flowers regular with distinct petals and sepals; 5 stamen closely surrounding one style.	Carophyllaceae, p. 12
Fabaceae Leaves compound; flowers irregular; 5 petals typically with upper middle one largest, two lateral ones (wings) similar, and the two lowest ones united (keel).	Fabaceae, p. 13
Fumariaceae	Other Forbs, p. 21

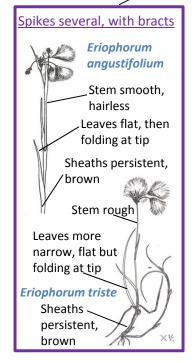


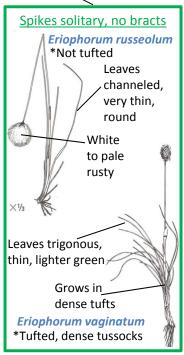


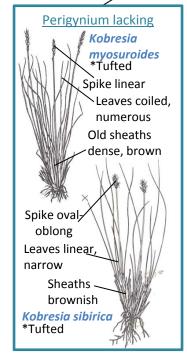
SEDGE-Sheath closed, 1 scale per pistil

Large bristles- cottongrass

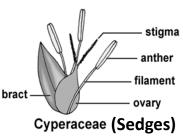
Flowers otherwise







Perigynium present (See Carex key)



stigma

Juncaceae (Rushes)

No hairs present

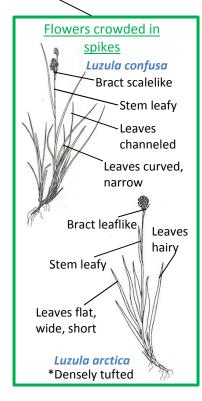
RUSH-Sheath open, flowers lily-like with 6 tepals

Leaves and sheaths with few white hairs

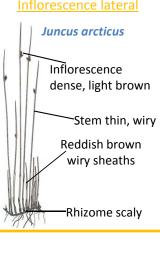
Flowers solitary end of branches **Branches** brown 1 Branches with curly drooping hairs Usually 2 cauline leaves Leaves shiny, thin

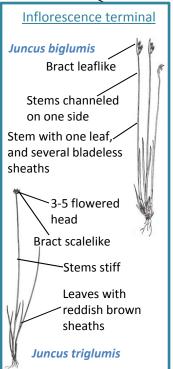
Luzula wahlenbergii

*Tufted



Inflorescence lateral Juncus arcticus





CAREX

Group 1: Spike single, terminal

Staminate and pistillate flowers on different plants

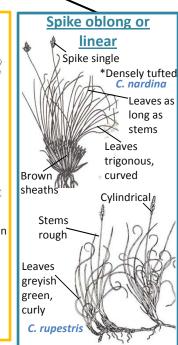
Staminate and pistillate flowers on the same spike

*3 stigmas *Perigynia with small hairs C. scirpoidea **Spikes** single Stem sharply trigonous Leaves flat Rhizome black, scaly

Stems barely longer Leaf margins than leaves, trigonous curled Forms dense tufts Leaves rough along edges

Staminate flowers at base

Spike round with pointed tip C. capitata Leaf margins curled Stems slender, wiry Leaves pale green Sheaths purplish $\times^{1/2}$ Leaves Leaves very thin (1mm) C. obtusata Rhizome purplish black



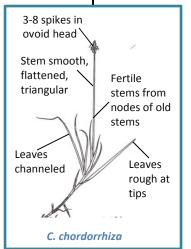
Group 2: Spike compound, attached directly, bisexual

Stem simple

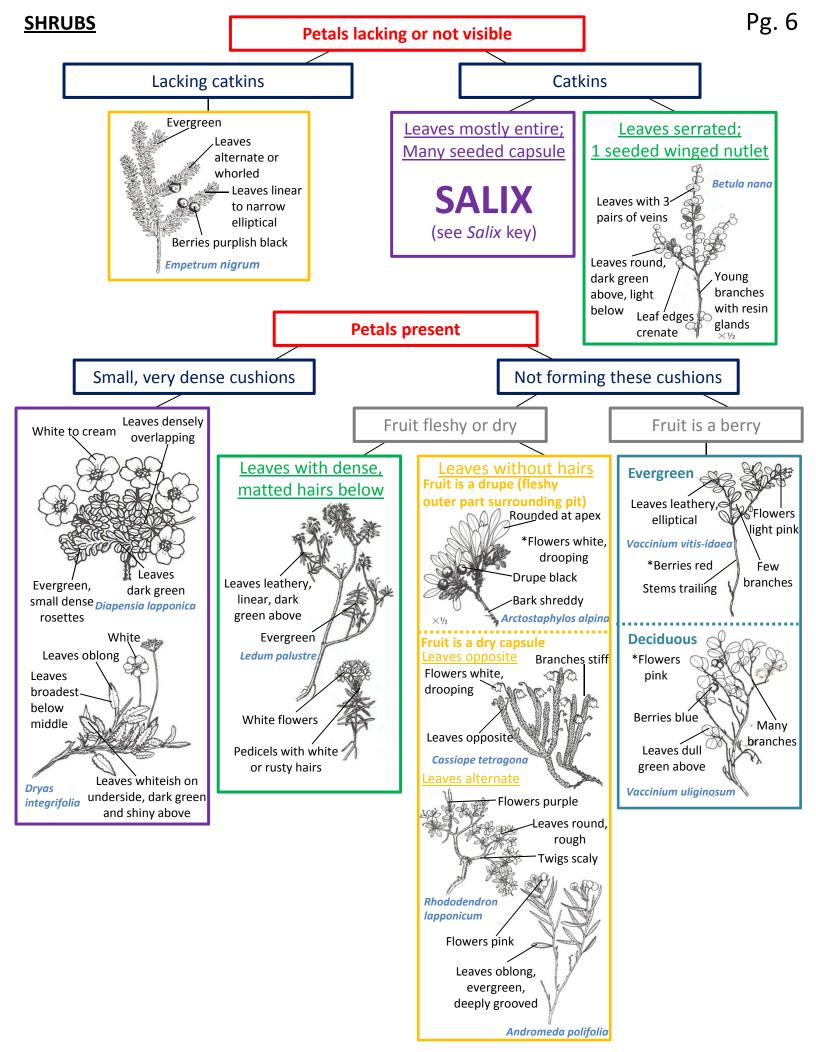
Staminate flowers at base of spike Terminal spike tapers at base Stems stiff Leaves flat, yellow-green, short C. lachenalii Sheaths straw colored 3 spikes Terminal spike Leaves club-like gravish, channeled Stems rough Leaves narrow (<2mm) C. glareosa



Stem branching

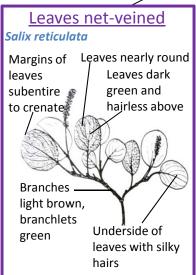


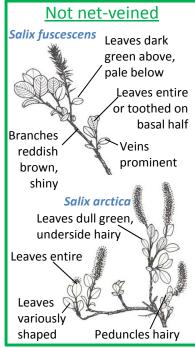
mostly basal

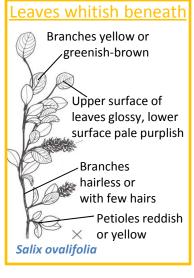


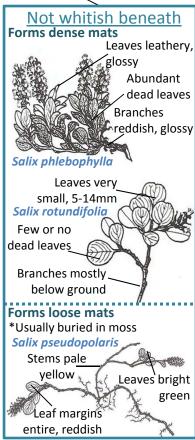
Long creeping branches

Without creeping branches





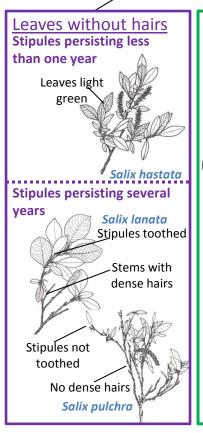


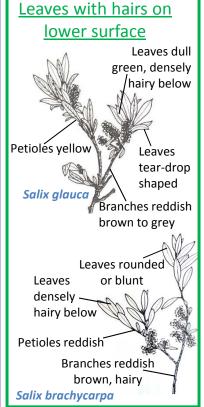


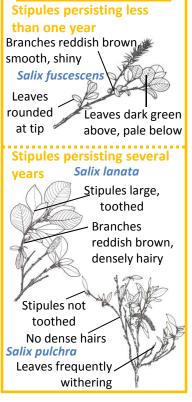
Erect shrubs >1ft tall

More than 3ft tall

Less than 3ft tall

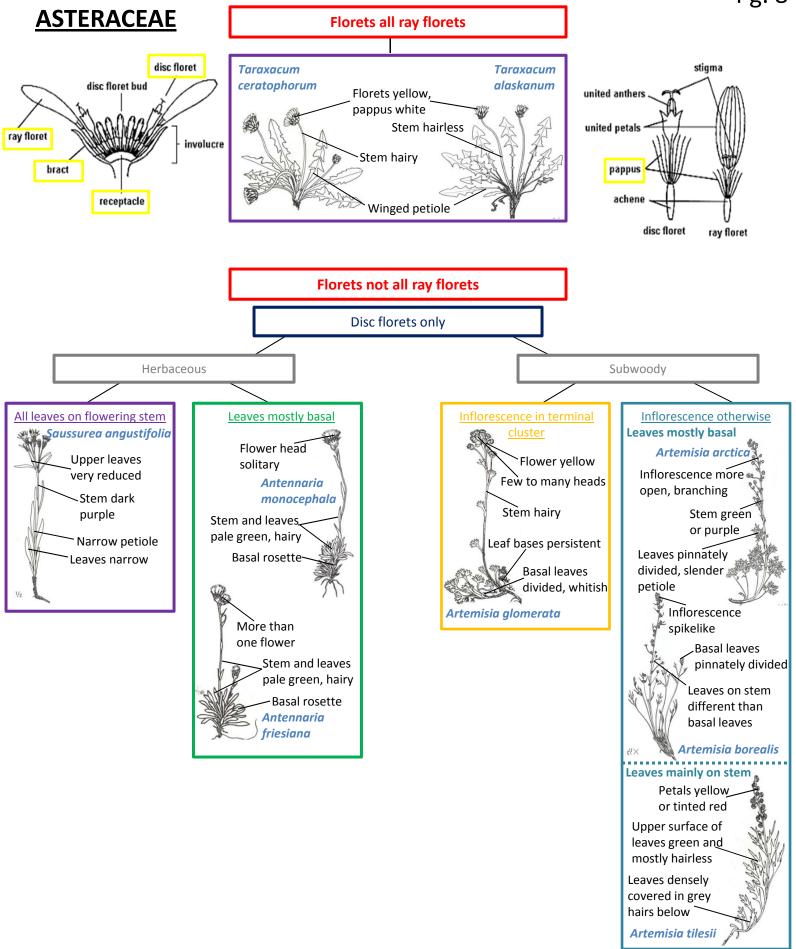






Leaves without hairs



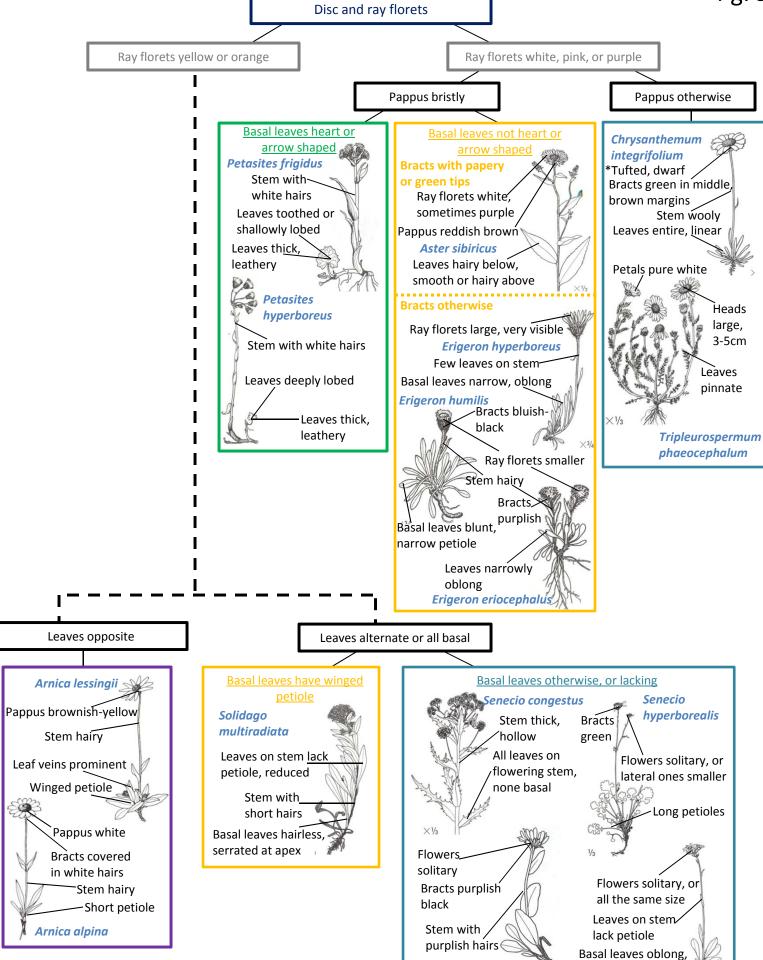


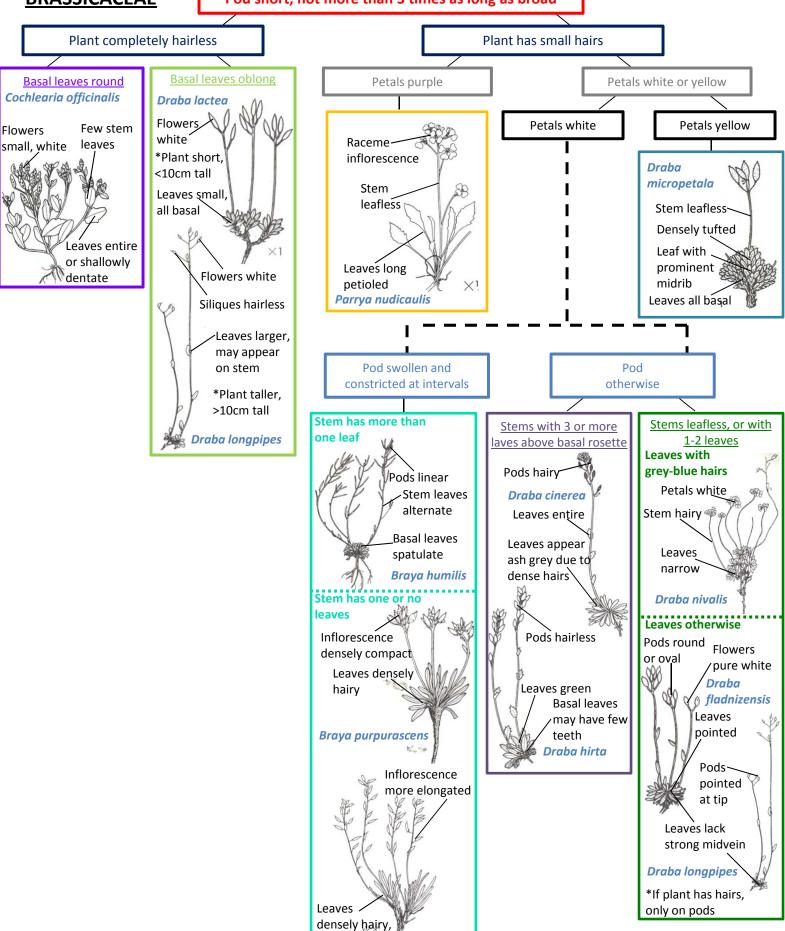
petiole narrow or

Senecio lugens

winged

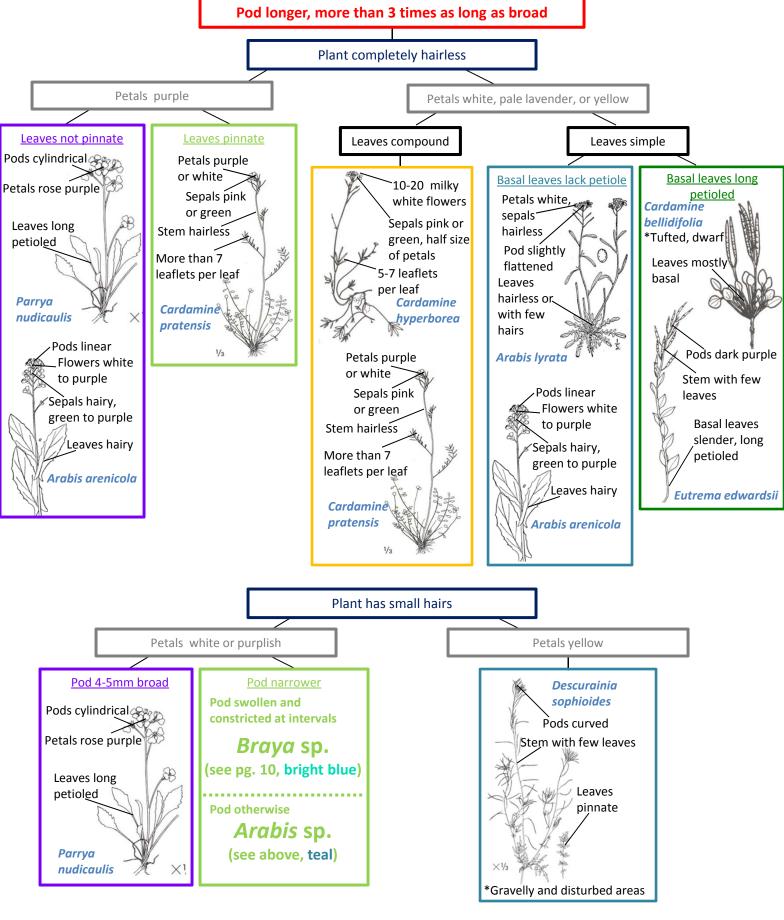
Senecio atropurpureus





linear

Braya pilosa



Leaves linear

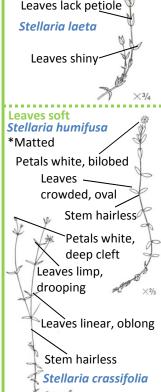
Leaves more broad

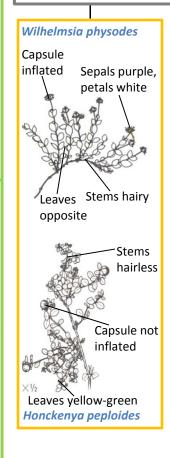
Petals deeply notched, or none

Petals entire or shallowly notched









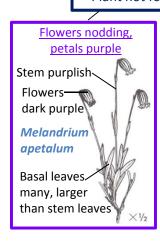
Flower buds spherical,
4-5 styles
Stems
hairless
4 Petals,
white

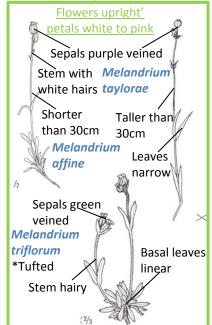
Tufted, reddish green
Sagina intermedia



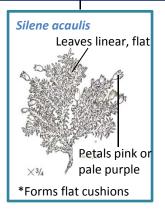
Sepals united into a tube, flowers bell shaped

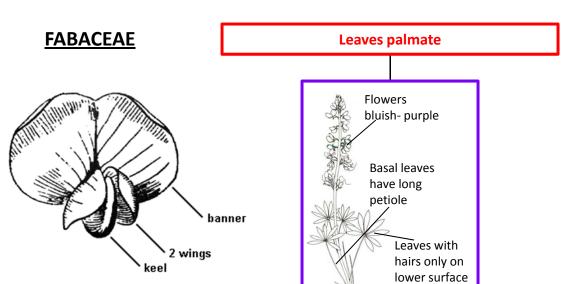
Plant not forming cushion



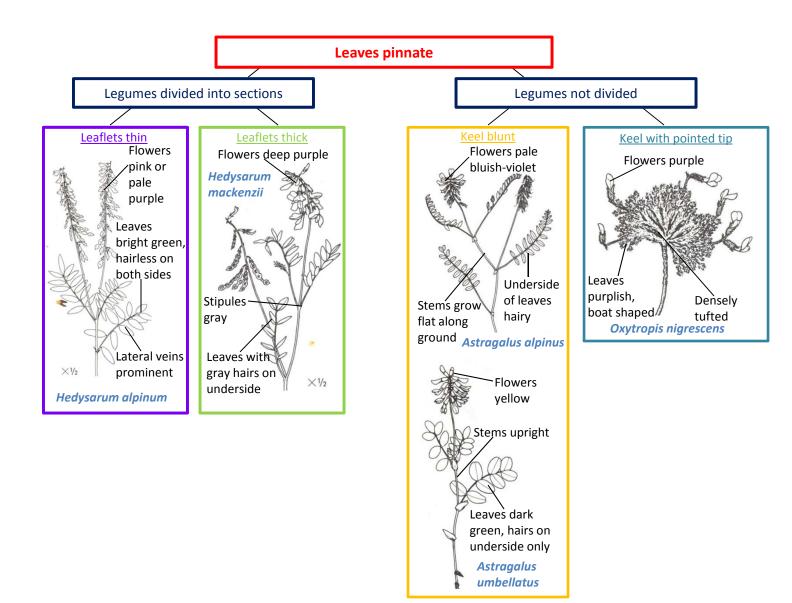


Plant forming dense cushion



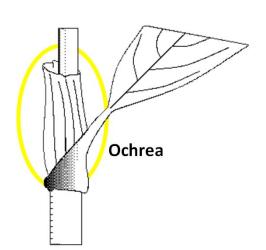


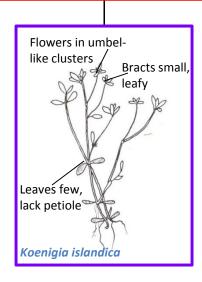
 $\times \frac{1}{3}$



Lupinus arcticus

3 petal-like sepals, plant only a few centimeters tall





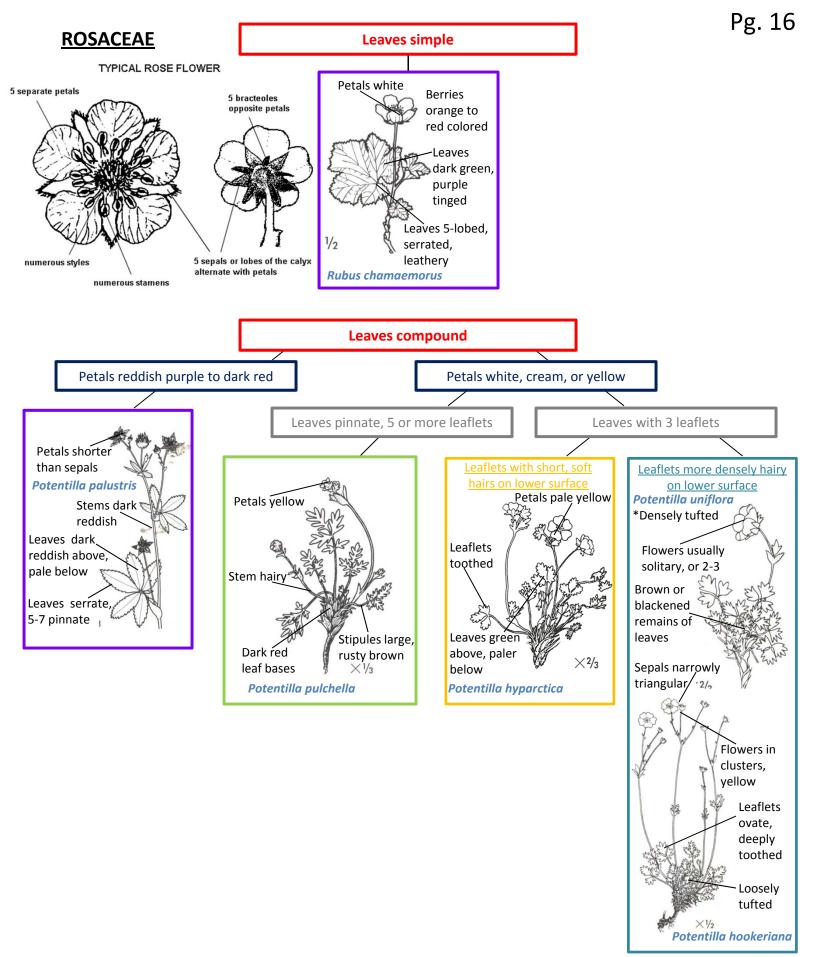
More than 3 petal-like sepals, larger plants 4 or 6 sepals 5 sepals Spike narrow and longer Leaves kidney shaped Leaves oblong, oval Spike wider and shorter Flowers white Flowers pink 4 sepals 6 sepals or light pink Flowers small, Inflorescence reddish Bulbils present deep red Bulbils lacking Stem usually Stem leafless 🛮 Leaves mostly with 1 or 2 or with few Leaves dark basal short petioled leaves green above, leaves greyish below Winged Leavés dark Leaves heart petioles shaped green, fleshy Basal leaves with long petioles Rhizome thick, Long petioles contorted $\times \frac{1}{3}$ Oxyria digyna Polygonum viviparum **Rumex arcticus** Polygonum bistorta

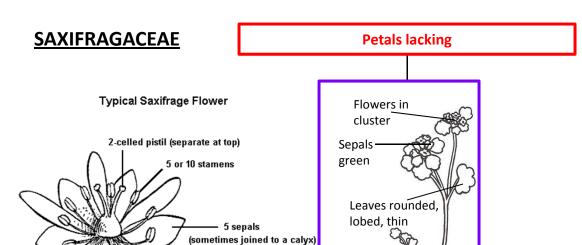
Caltha palustris

green, shiny

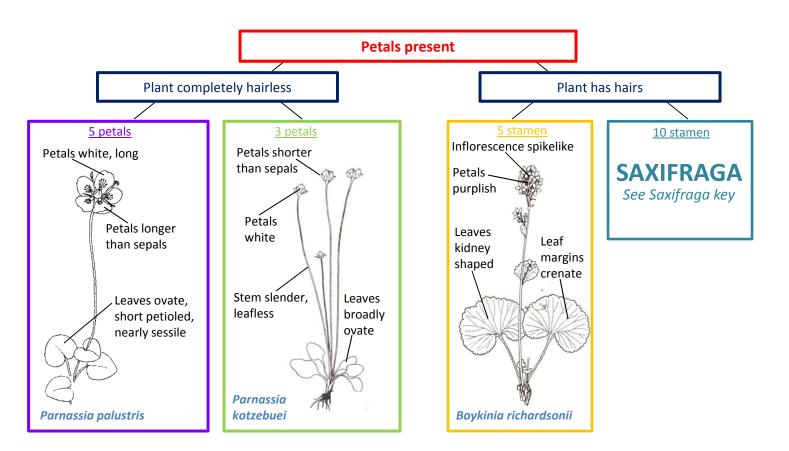
Anemone parviflora

Anemone drummondii

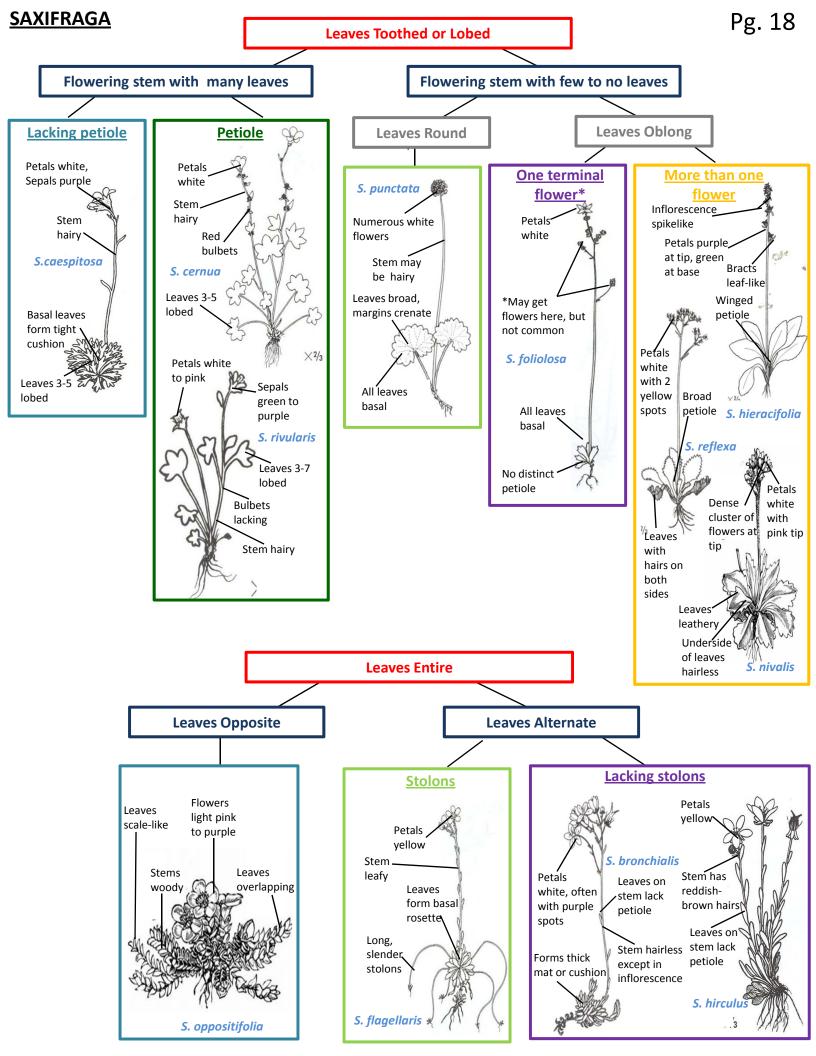


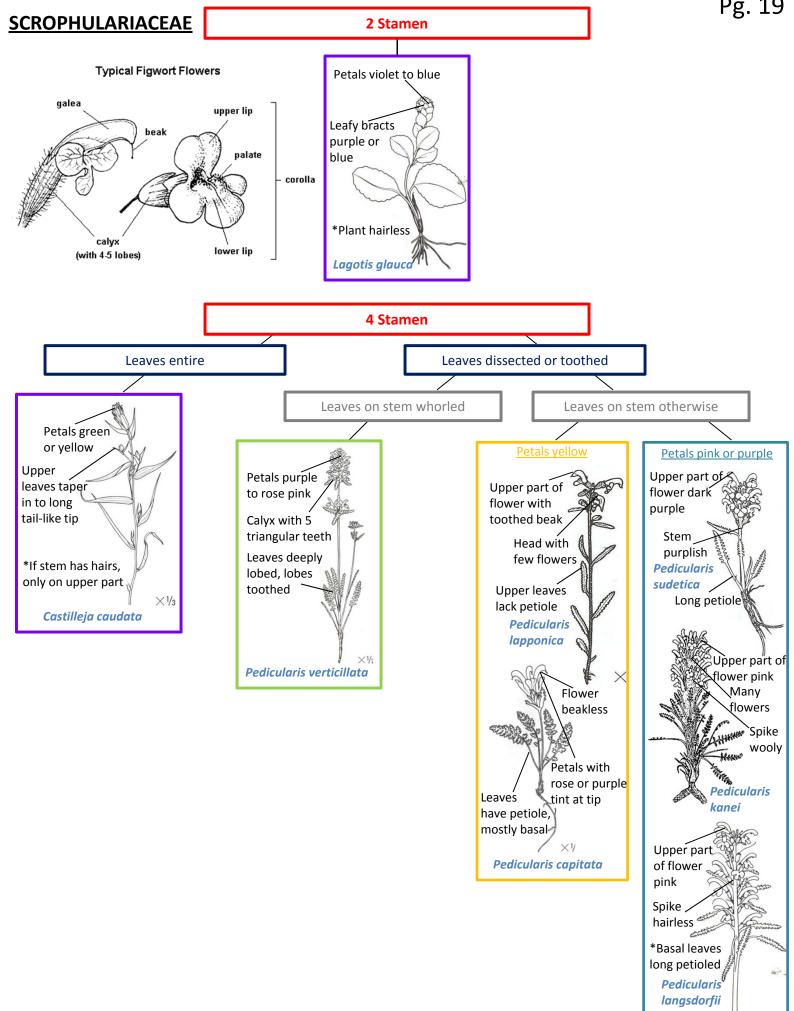


5 petals



Chrysoplenium tetrandum



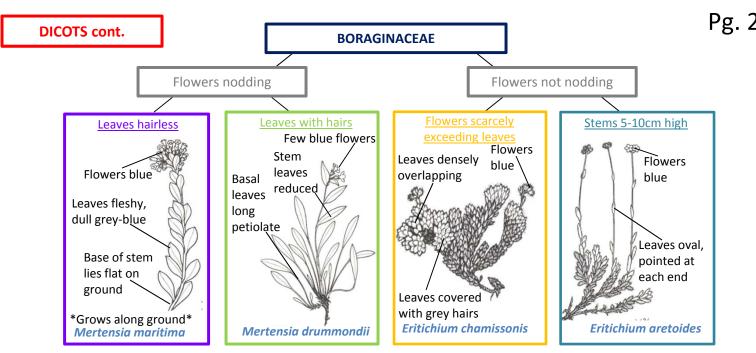


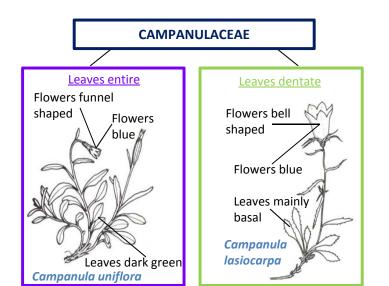
Leaves oblong

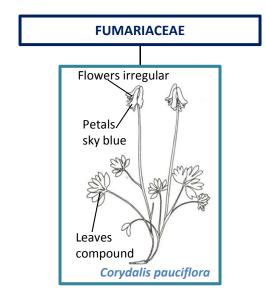
Bupleurum americanum

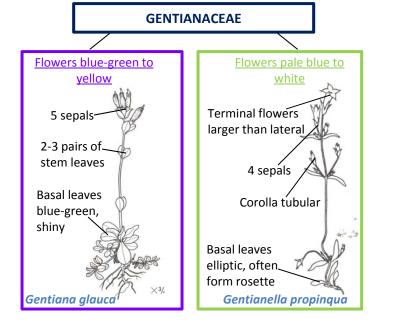
doubly pinnate

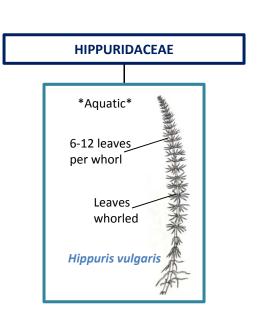
Cnidium cnidiifolium

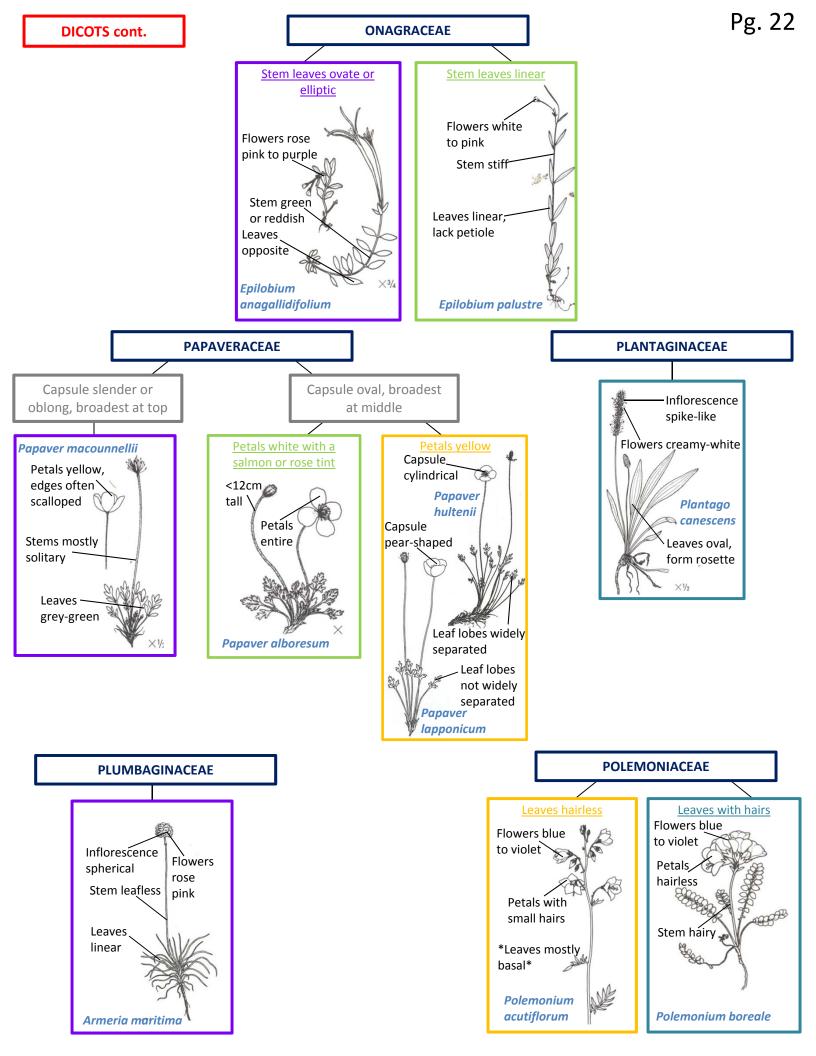


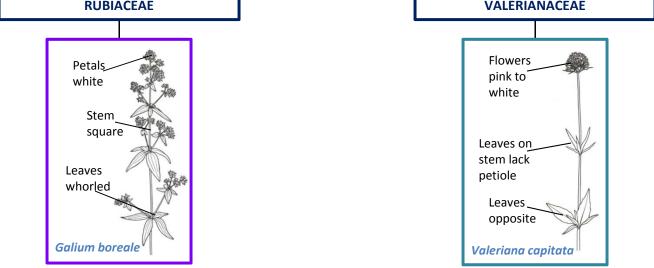












Species	Page #	Cardamine pratensis	11	Draba longpipes	10
Agropyron boreale	1	Carex aquatilis	5	Draba longpipes	10
Alopecurus alpines	1	Carex bigelowii	5	Draba micropetala	10
Ameria maritimia	22	Carex capillaries	5	Draba nivalis	10
Andromeda polifolia	6	Carex capitata	4	Dryas integrifolia	(
Androsace chamaejasme	23	Carex chordorrhiza	4	Dupontia fisheri	:
Androsace septentrolalis	23	Carex glareosa	4	Elymus arenarius	:
Anemone drummondii	15	Carex holostoma	5	Elymus arenarius	2
Anemone parvifolia	15	Carex krausei	5	Empetrum nigrum	(
Antennaria friesiana	8	Carex lachenalii	4	Epilobium anagallidifolium	2
Antennaria monocephala	8	Carex maritime	4	Epilobium palustre	22
Arabis arenicola	11	Carex misandra	5	Erigeron eriocephalus	ģ
Arabis arenicola	11	Carex nardina	4	Erigeron humilis	ģ
Arabis lyrata	11	Carex obtusata	4	Erigeron hyperboreus	g
Arctograstis latifolia	1	Carex podocarpa	5	Eriophorum angustifolium	3
Arctophila fulva	2	Carex ramenskii	5	Eriophorum russeolum	3
Arctostaphylos alpina	6	Carex rariflora	5	Eriophorum triste	:
Arnica alpina	9	Carex rotundata	5	Eriophorum vaginatum	
Arnica lessingii	9	Carex rupestris	4	Eritichium aretoides	2
Artemisia arctica	8	Carex saxitilis	5	Eritichium chamissonis	2
Artemisia borealis	8	Carex scirpoidea	4	Eutrema edwardsii	1
Artemisia glomerata	8	Carex stans	5	Festuca altaica	
Artemisia tilesii	8	Carex subspathacea	5	Festuca brachyphylla	:
Aster sibericus	9	Carex ursine	4	Festuca rubra	2
Astragalus alpines	13	Cassiope tetragona	6	Galium boreale	2
Astragalus umbellatus	13	Castilleja caudate	19	Gentiana glauca	2
Betula nana	6	Cerastium beeringianum	12	Gentianella propinqua	2:
Boykinia richardsonii	17	Chrysanthemum		Hedusarum mackenzii	13
Braya humilis	10	integreifolium	9	Hedysarum alpinum	13
Braya pilosa	10	Chrysoplenium tetrandum	17	Hierochloe alpina	:
Braya purpurascens	10	Cnidium cnidiifolium	20	Hierochloe pauciflora	
Bromus pumpellianus	2	Cochlearia officinalis	10	Hippuris vulgaris	2:
Bupleurum americanum	20	Corallorrhiza trifida	20	Honckenya peploides	12
Calamagrostis Canadensis	1	Corydalis pauciflora	21	Juncus arcticus	:
Calamagrostis holmii	1	Delphinium brachycentrum	15	Juncus biglumis	:
Calamagrostis inexpansa	1	Deschampsia brevifolia	2	Juncus triglumis	:
Calamagrostis purpurasce	ns 1	Descurainia sophoides	11	Kobresia myosuroides	:
Caltha palustris	15	Diapensia lapponica	6	Kobresia sibirica	3
Campanula lasiocarpa	21	Dodecathon frigidum	23	Koeleria asiatica	:
Campanula uniflora	21	Draba cinerea	10	Koenigia islandica	14
Cardamine bellidifolia	11	Draba fladnizensis	10	Lagotis glauca	19
Cardamine hyperborea	11	Draba hirta	10	Ledum palustre	6
Cardamine pratensis	11	Draba lactea	10	Lloydia serotina	20

Lupinus arcticus	13	Potentilla hookeriana	16	Saxifraga oppositifolia	18
Luzula arctica	3	Potentilla hyparctica	16	Saxifraga punctata	18
Luzula confusa	3	Potentilla palustris	16	Saxifraga reflexa	18
Luzula wahlenbergii	3	Potentilla pulchella	16	Senecio atropurpureus	9
Melandrium affine	12	Potentilla uniflora	16	Senecio congestus	9
Melandrium apetalum	12	Primula egaliksensis	23	Senecio hyperborealis	9
Melandrium taylorae	12	Puccinellia borealis	2	Senecio lugens	9
Melandrium trifolium	12	Puccinellia langeana	2	Silene acaulis	12
Mertensia drummondii	21	Puccinellia phyrganodes	2	Solidago multiradiata	9
Mertensia maritime	21	Pyrola grandifolia	23	Stellaria crassifolia	12
Minuartia arctica	12	Pyrola secunda	23	Stellaria humifusa	12
Minuartia obtusiloba	12	Ranunculus gmelinii	15	Stellaria laeta	12
Minuartia rossii	12	Ranunculus hyperboreus	15	Taraxacum alaskanum	8
Minuartia rubella	12	Ranunculus lapponicus	15	Taraxacum certophorum	8
Oxyria digyna	14	Ranunculus nivalis	15	Tofieldia coccinea	20
Oxytropis nigrescens	13	Ranunculus pallasii	15	Tofieldia pusilla	20
Papaver alboresum	22	Ranunculus pygmaeus	15	Tripleurospermum	
Papaver hultenii	22	Rhododendron lapponicum	6	phaeocephalum	9
Papaver lapponicum	22	Rubus chamaemorus	16	Trisetum spicatum	2
Papaver macounnellii	22	Rumex arcticus	14	Vaccinium uliginosum	6
Parnassia kotzebuei	17	Sagina intermedia	12	Vaccinium vitis-idaea	6
Parnassia palustris	17	Salix arctia	7	Valeriana capitata	23
Parrya nudicaulis	10	Salix brachycarpa	7	Wilhelmsia physodes	12
Parrya nudicaulis	11	Salix fuscescens	7	Zygadenus elegans	20
Pedicularis capitata	19	Salix glauca	7		
Pedicularis kanei	19	Salix hastate	7		
Pedicularis lapponica	19	Salix lanata	7		
Pedicularis longsdorfii	19	Salix ovalifolia	7		
Pedicularis sudetica	19	Salix phlebophylla	7		
Pedicularis verticillata	19	Salix pseudopolaris	7		
Petasites frigidus	9	Salix pulchra	7		
Petasites hyperboreus	9	Salix reticulate	7		
Phippsia algida	1	Salix rotundifolia	7		
Plantago canescens	22	Saussurea angustifolia	8		
Poa alpigena	2	Saxifraga bronchialis	18		
Poa alpina	2	Saxifraga caespitosa	18		
Poa arctica	2	Saxifraga cernua	18		
Poa glauca	2	Saxifraga flagellaris	18		
Polemonium acutiflorum	22	Saxifraga foliolosa	18		
Polemonium boreale	22	Saxifraga hieracifolia	18		
Polygonum arcticus	14	Saxifraga hirculus	18		
Polygonum bistorta	14	Saxifraga nivalis	18		
Polygonum viviparum	14	Saxifraga nivalis	18		