Quick Guide to the Plants of Barrow & Atgasuk

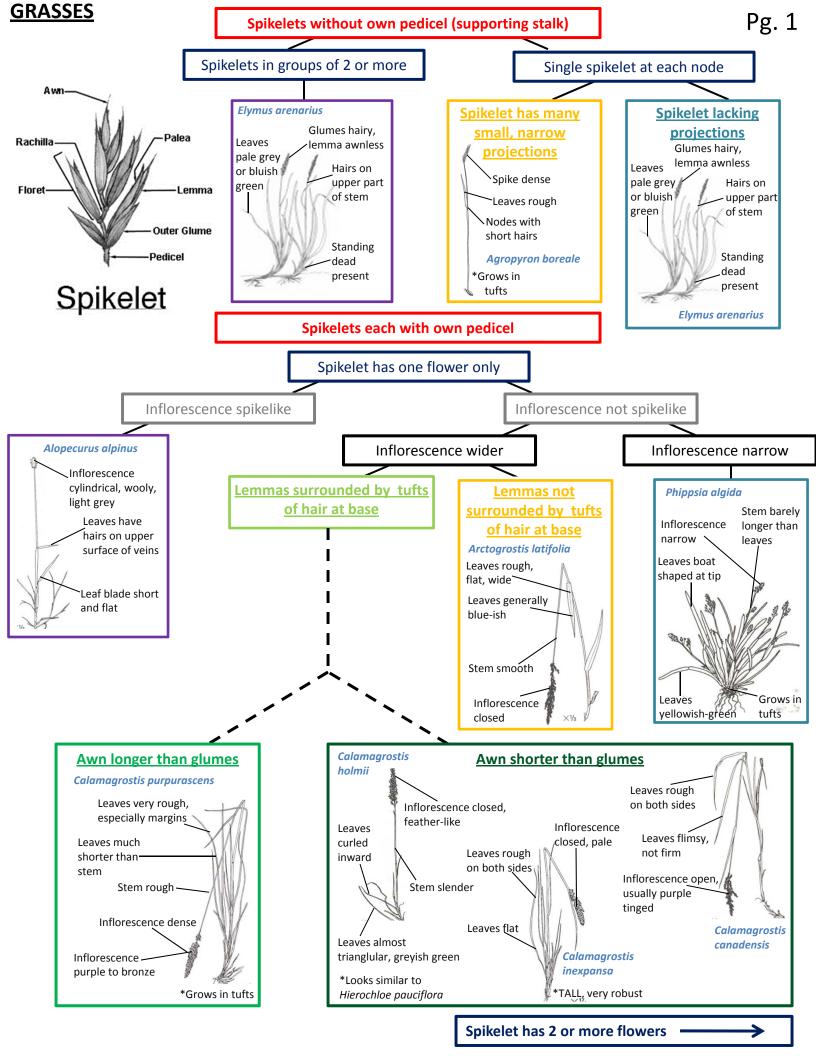
By
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Bob Hollister & the
Arctic Ecology Program

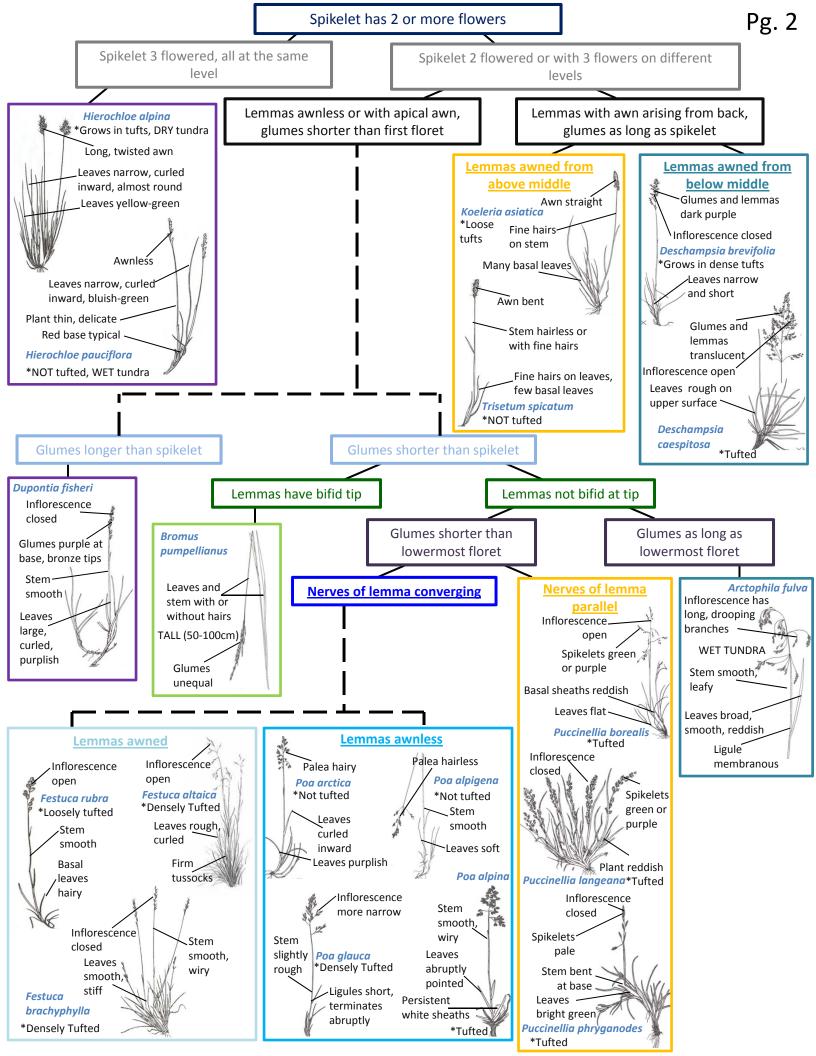
Version: 6/6/2012

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

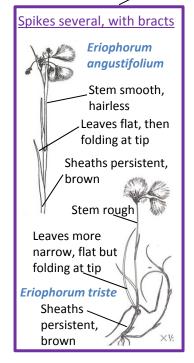


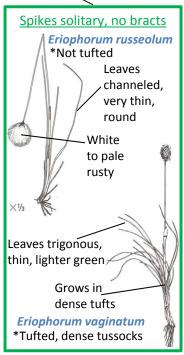


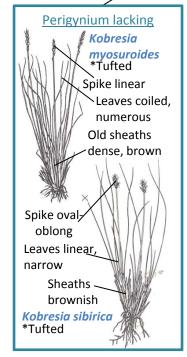
SEDGE-Sheath closed, 1 scale per pistil

Large bristles- cottongrass

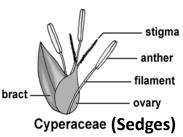
Flowers otherwise







Perigynium present (See Carex key)



stigma

Juncaceae (Rushes)

No hairs present

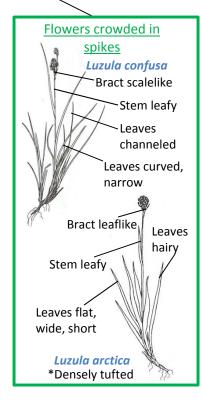
RUSH-Sheath open, flowers lily-like with 6 tepals

Leaves and sheaths with few white hairs

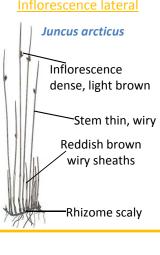
Flowers solitary end of branches **Branches** brown 1 Branches with curly drooping hairs Usually 2 cauline leaves Leaves shiny, thin

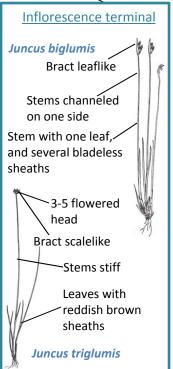
Luzula wahlenbergii

*Tufted



Inflorescence lateral Juncus arcticus





CAREX

Group 1: Spike single, terminal

Staminate and pistillate flowers on different plants

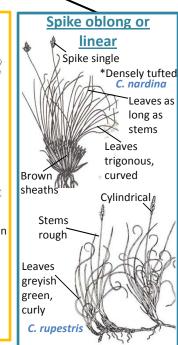
Staminate and pistillate flowers on the same spike

*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

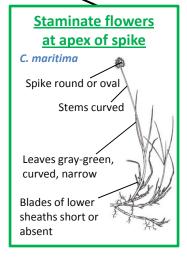
Spike round with pointed tip C. capitata Leaf margins curled Stems slender, wiry Leaves pale green Sheaths purplish $\times^{1/2}$ Leaves Leaves very thin (1mm) C. obtusata Rhizome purplish black



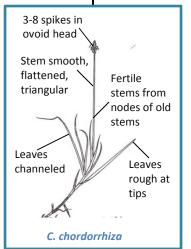
Group 2: Spike compound, attached directly, bisexual

Stem simple

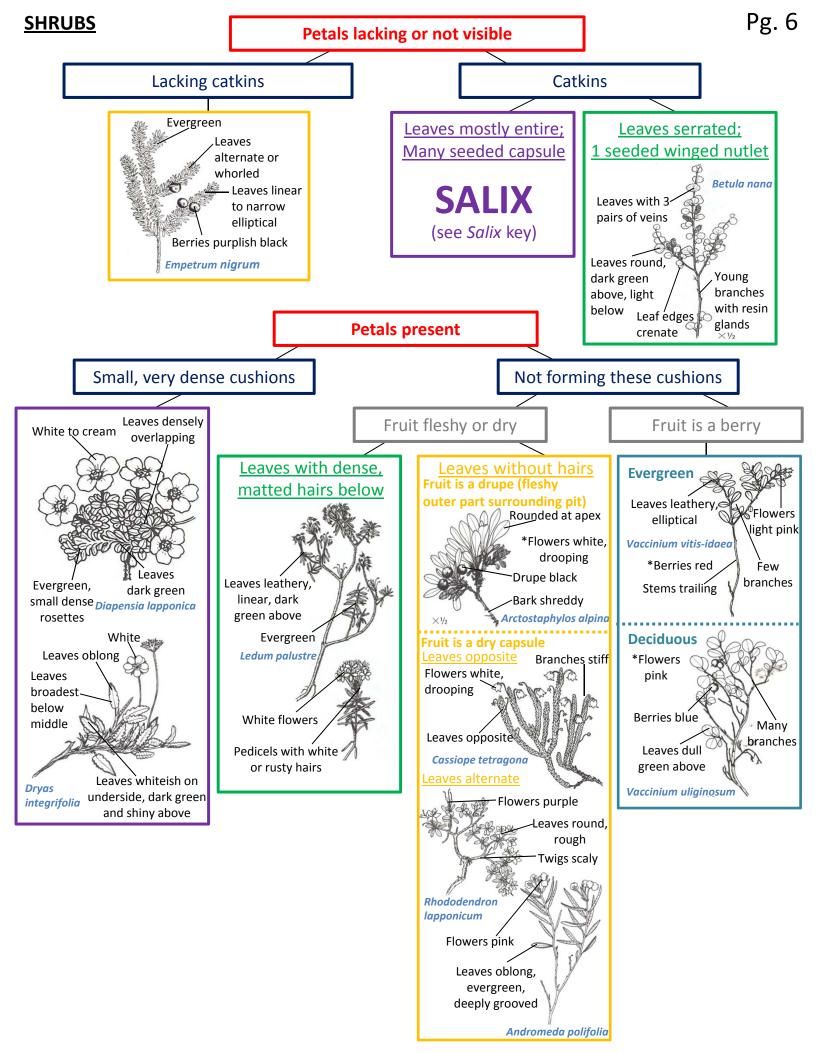
Staminate flowers at base of spike Terminal spike tapers at base Stems stiff Leaves flat, yellow-green, short C. lachenalii Sheaths straw colored 3 spikes Terminal spike Leaves club-like gravish, channeled Stems rough Leaves narrow (<2mm) C. glareosa



Stem branching

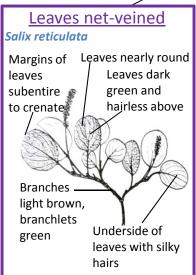


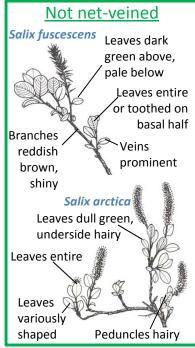
mostly basal

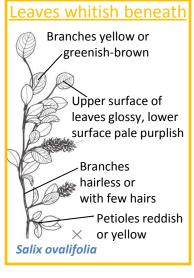


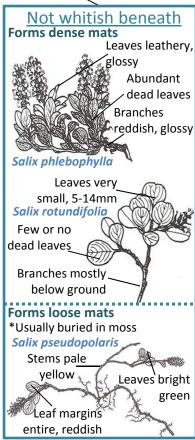
Long creeping branches

Without creeping branches





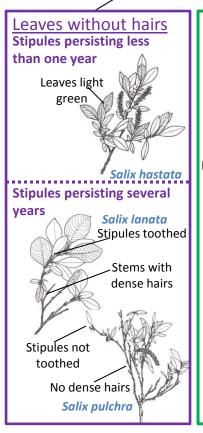


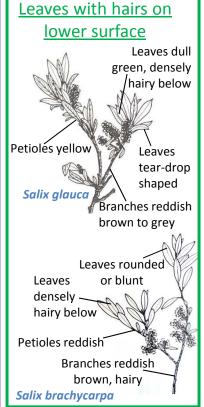


Erect shrubs >1ft tall

More than 3ft tall

Less than 3ft tall

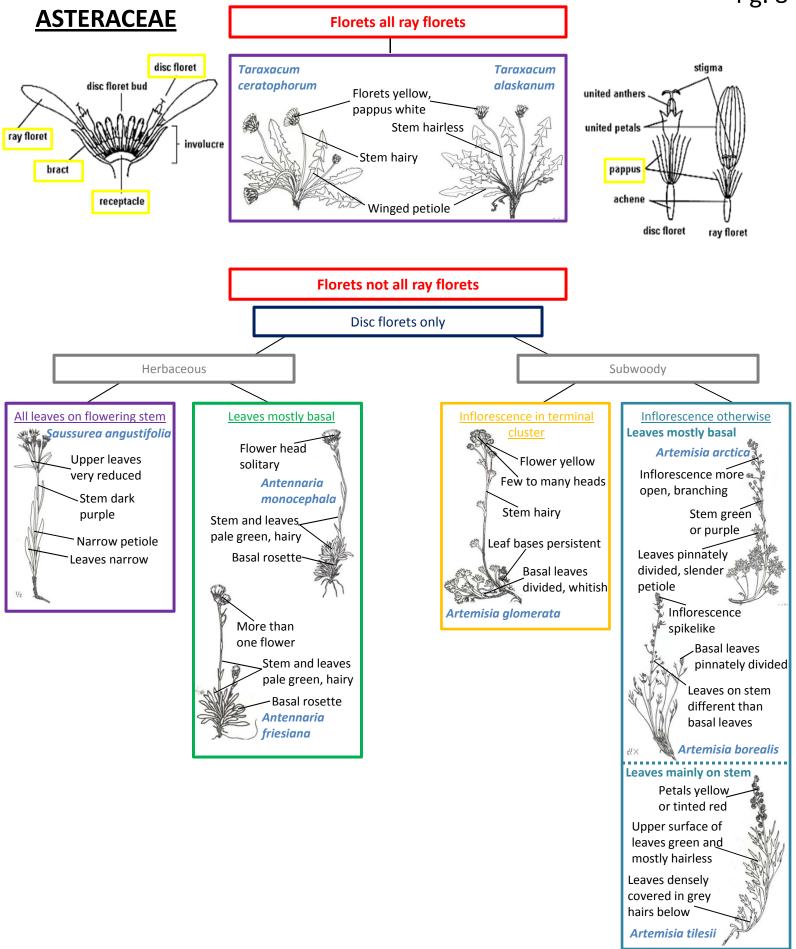






Leaves without hairs



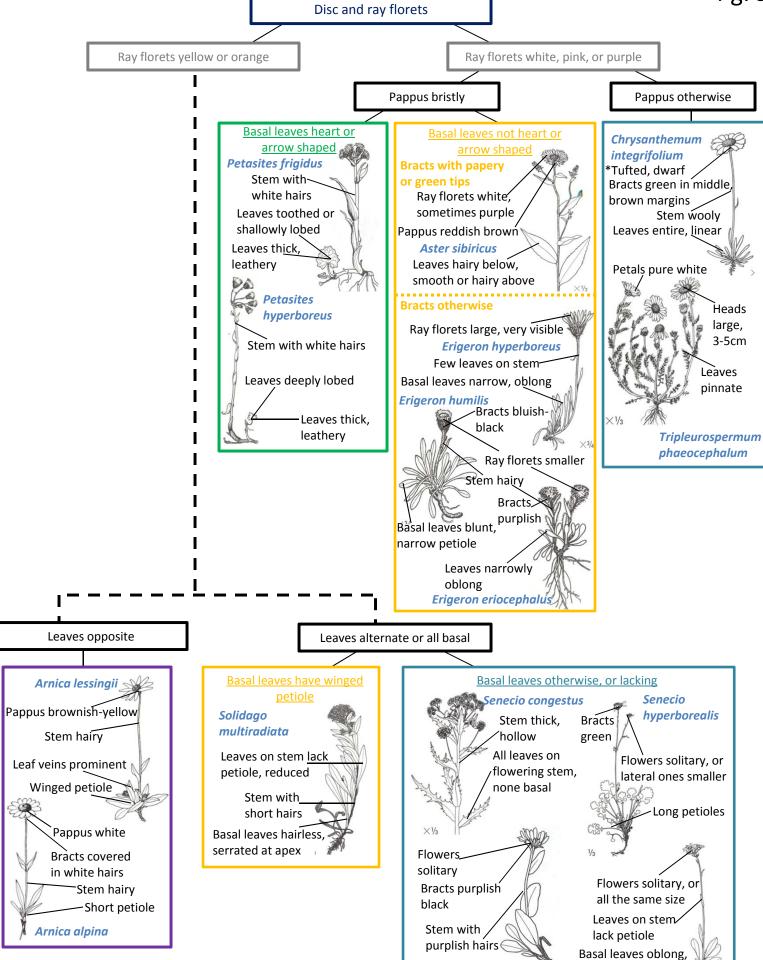


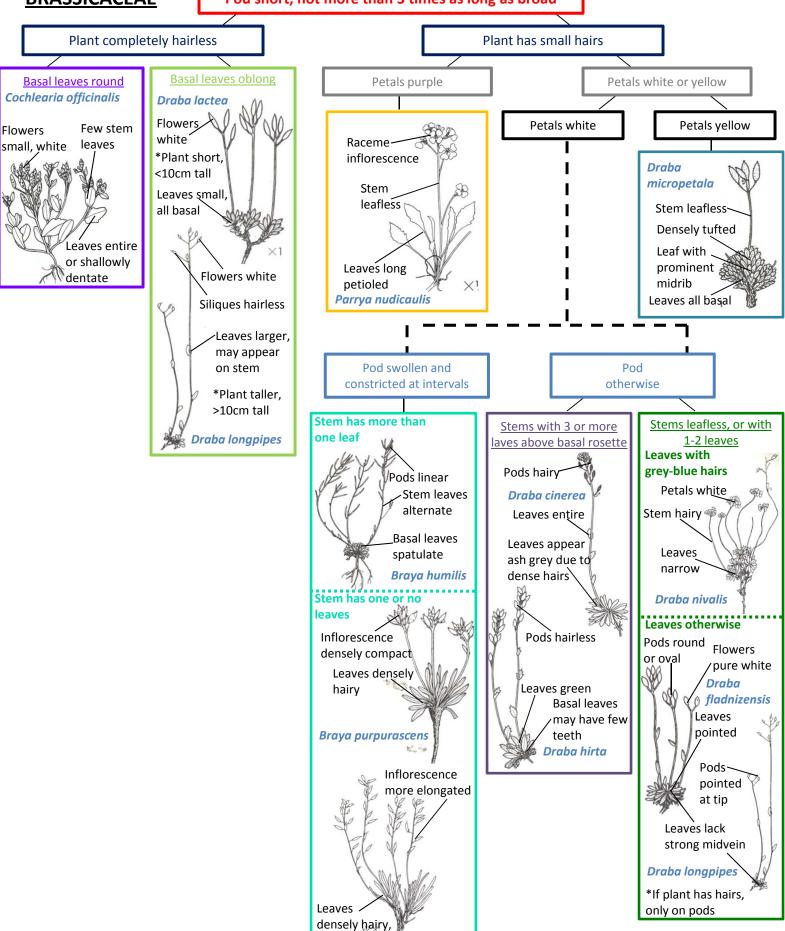
petiole narrow or

Senecio lugens

winged

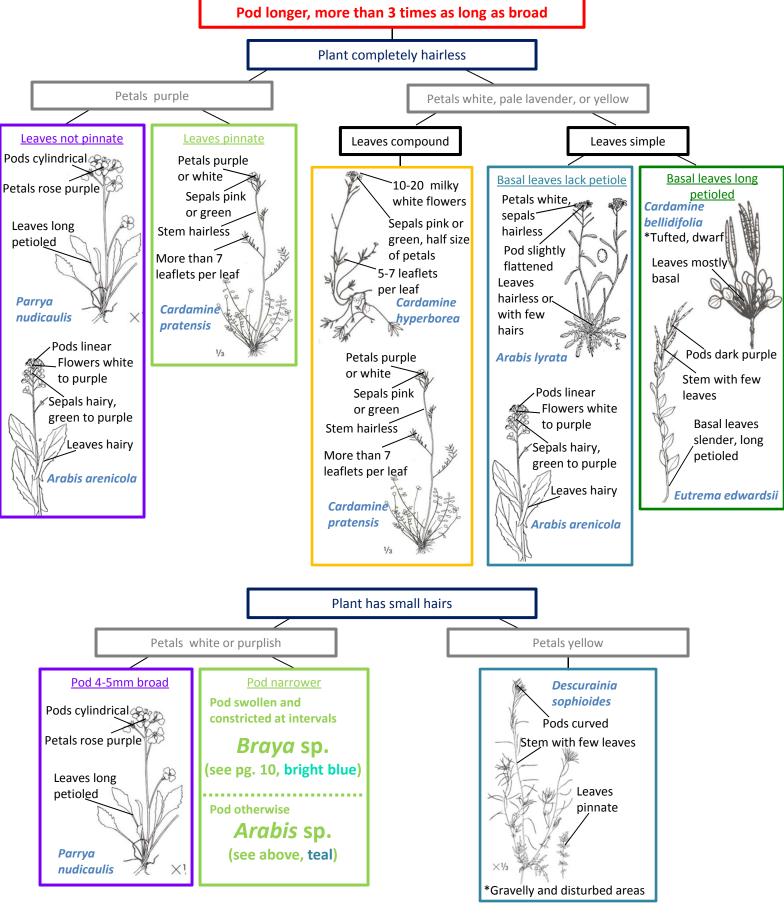
Senecio atropurpureus





linear

Braya pilosa



Leaves linear

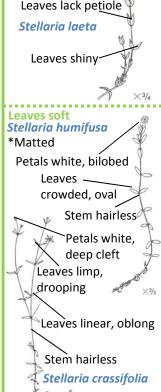
Leaves more broad

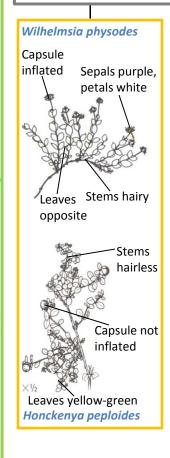
Petals deeply notched, or none

Petals entire or shallowly notched









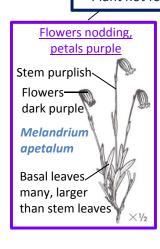
Flower buds spherical,
4-5 styles
Stems
hairless
4 Petals,
white

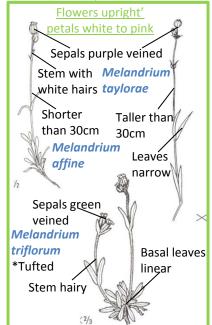
Tufted, reddish green
Sagina intermedia



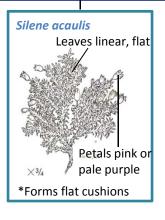
Sepals united into a tube, flowers bell shaped

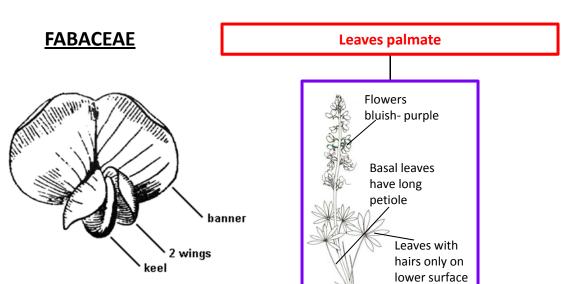
Plant not forming cushion



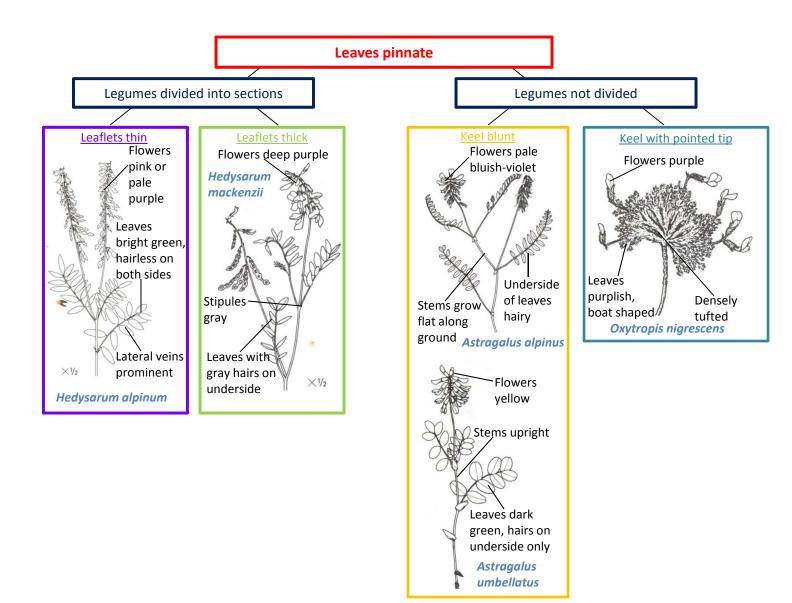


Plant forming dense cushion



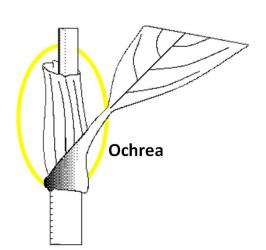


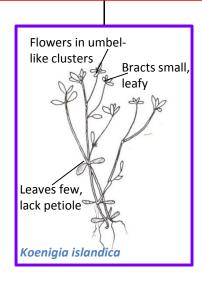
 $\times \frac{1}{3}$



Lupinus arcticus

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





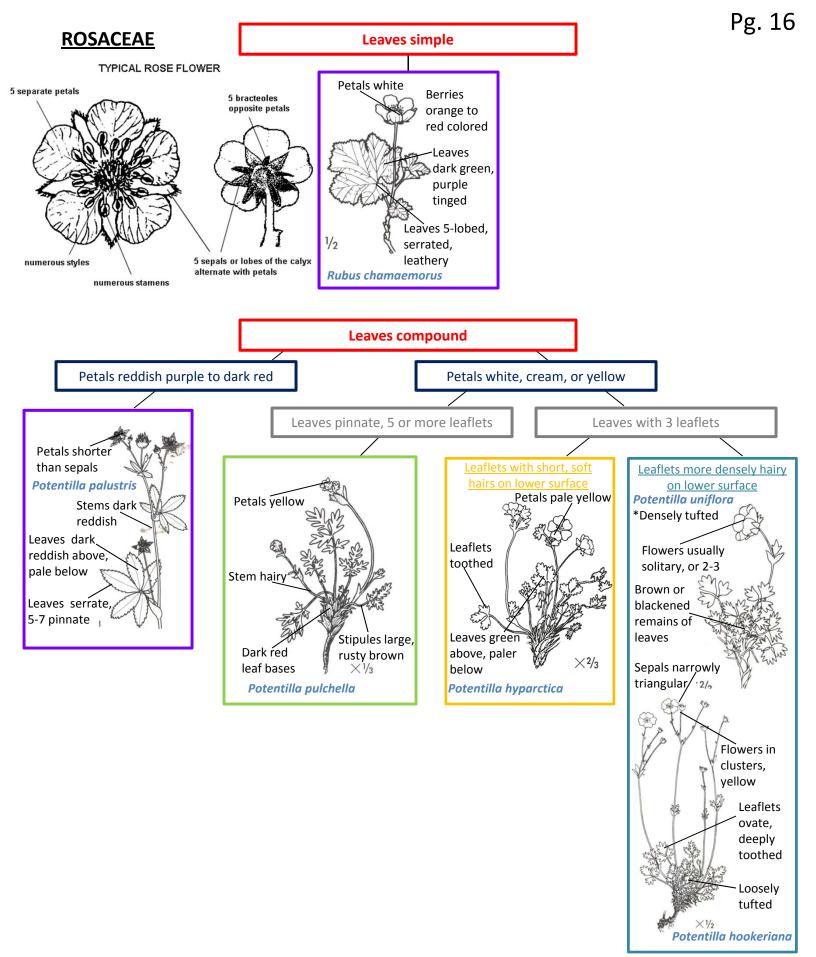
More than 3 petal-like sepals, larger plants 4 or 6 sepals 5 sepals Spike narrow and longer Leaves kidney shaped Leaves oblong, oval Spike wider and shorter Flowers white Flowers pink 4 sepals 6 sepals or light pink Flowers small, Inflorescence reddish Bulbils present deep red Bulbils lacking Stem usually 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

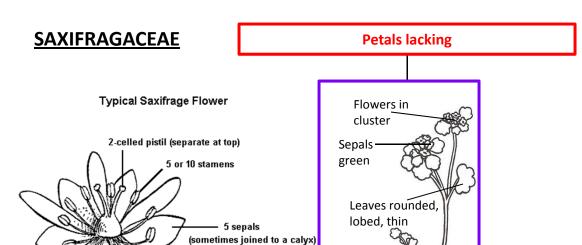
Caltha palustris

green, shiny

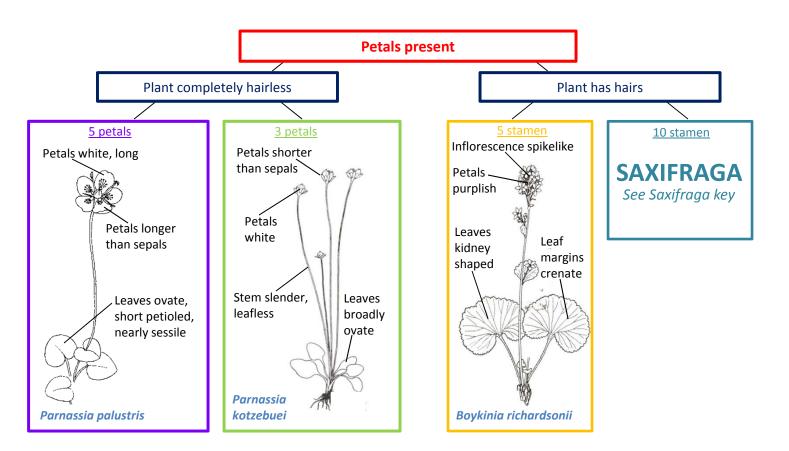
Anemone parviflora

Anemone drummondii

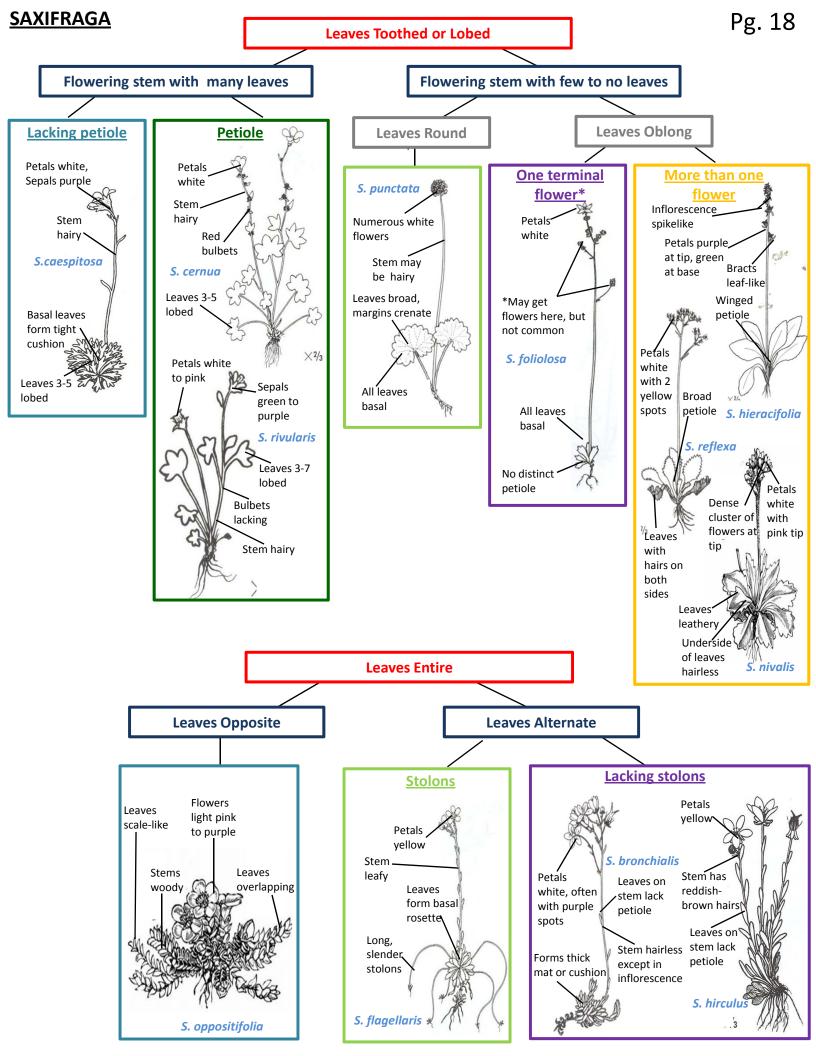


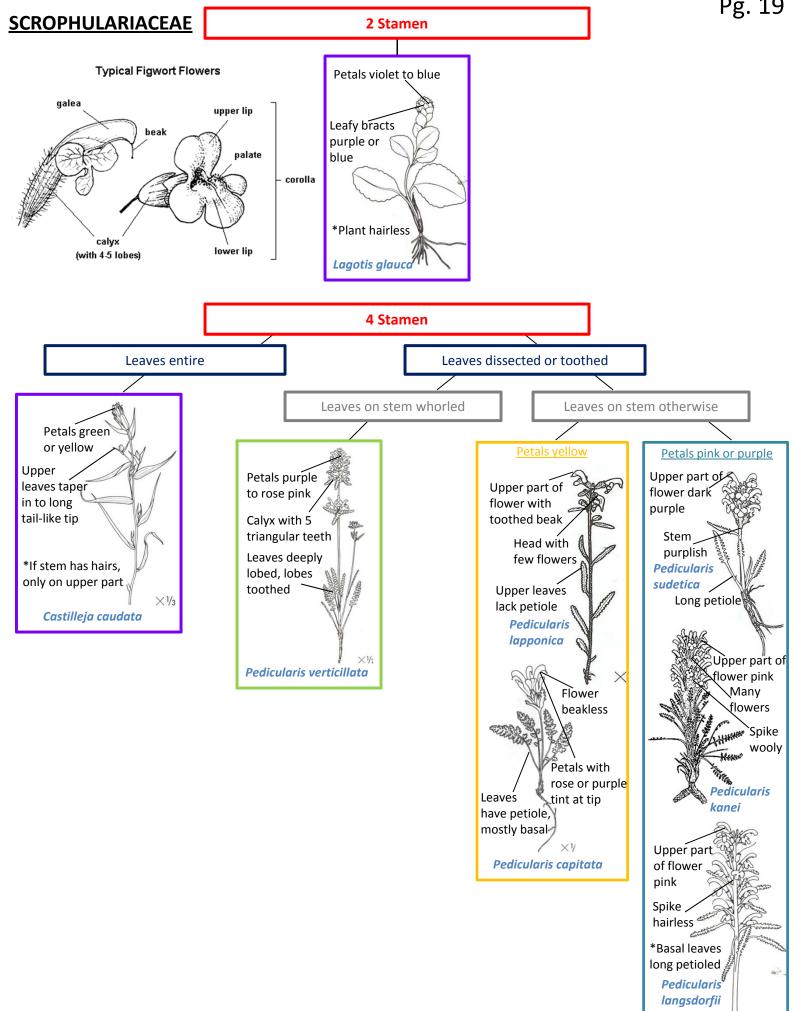


5 petals



Chrysoplenium tetrandum



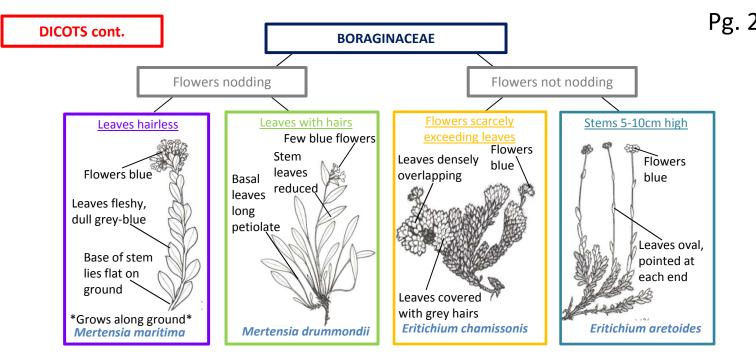


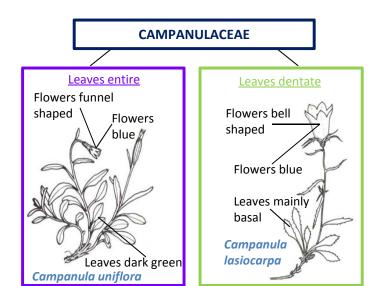
Leaves oblong

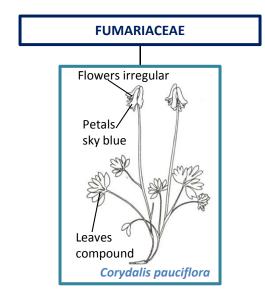
Bupleurum americanum

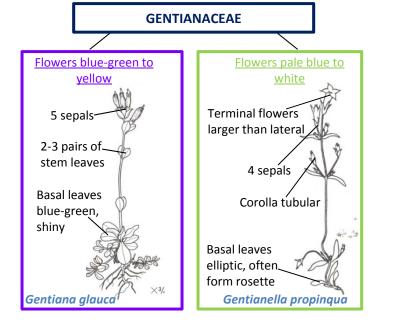
doubly pinnate

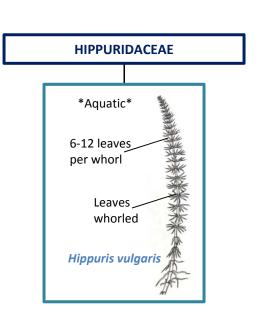
Cnidium cnidiifolium

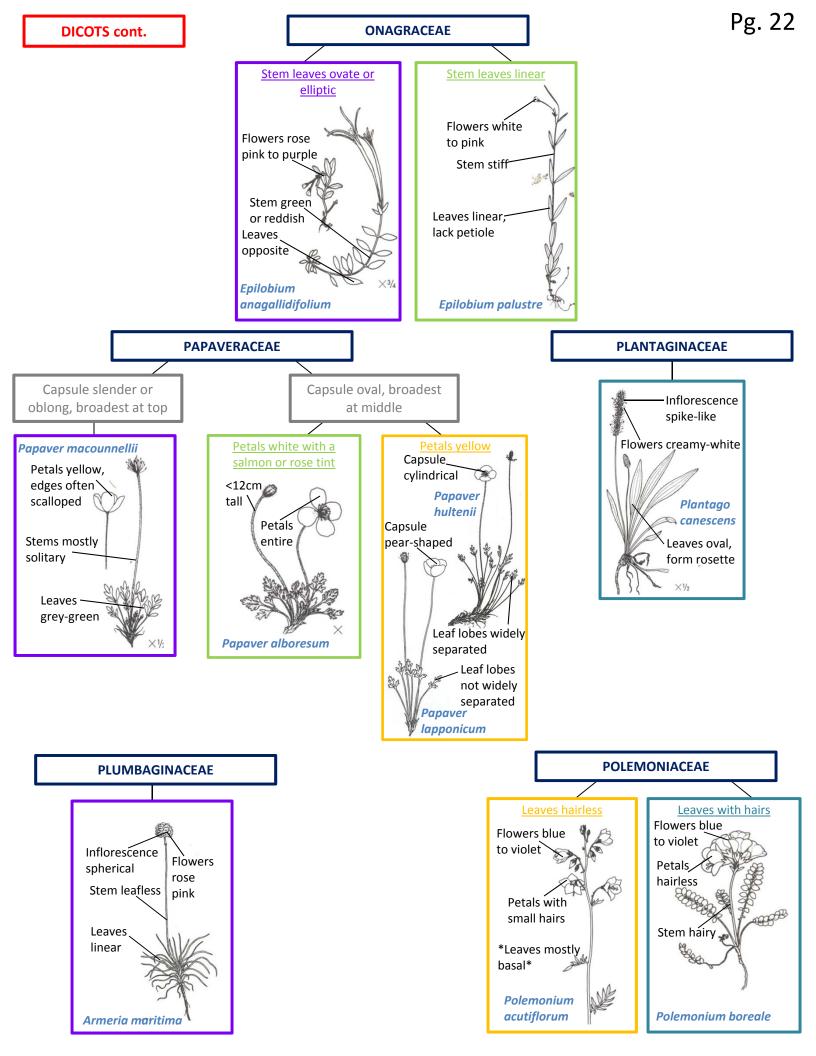


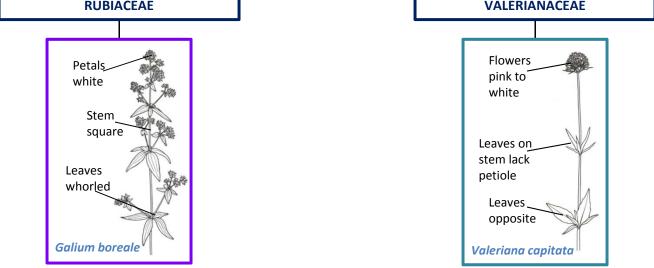












Dodecathon frigidum	23	Papaver macounnellii	22	Saxifraga hirculus	18
Draba cinerea	10	Parnassia kotzebuei	17	Saxifraga nivalis	18
Draba fladnizensis	10	Parnassia palustris	17	Saxifraga nivalis	18
Draba hirta	10	Parrya nudicaulis	10	Saxifraga oppositifolia	18
Draba lactea	10	Parrya nudicaulis	11	Saxifraga punctata	18
Draba longpipes	10	Pedicularis capitata	19	Saxifraga reflexa	18
Draba longpipes	10	Pedicularis kanei	19	Senecio atropurpureus	9
Draba micropetala	10	Pedicularis lapponica	19	Senecio congestus	9
Draba nivalis	10	Pedicularis longsdorfii	19	Senecio hyperborealis	9
Epilobium anagallidifolium	22	Pedicularis sudetica	19	Senecio lugens	9
Epilobium palustre	22	Pedicularis verticillata	19	Silene acaulis	12
Erigeron eriocephalus	9	Petasites frigidus	9	Solidago multiradiata	9
Erigeron humilis	9	Petasites hyperboreus	9	Stellaria crassifolia	12
Erigeron hyperboreus	9	Plantago canescens	22	Stellaria humifusa	12
Eritichium aretoides	21	Polemonium acutiflorum	22	Stellaria laeta	12
Eritichium chamissonis	21	Polemonium boreale	22	Taraxacum alaskanum	8
Eutrema edwardsii	11	Polygonum arcticus	14	Taraxacum certophorum	8
Galium boreale	23	Polygonum bistorta	14	Tofieldia coccinea	20
Gentiana glauca	21	Polygonum viviparum	14	Tofieldia pusilla	20
Gentianella propinqua	21	Potentilla hookeriana	16	Tripleurospermum	
Hedusarum mackenzii	13	Potentilla hyparctica	16	phaeocephalum	9
Hedysarum alpinum	13	Potentilla palustris	16	Valeriana capitata	23
Hippuris vulgaris	21	Potentilla pulchella	16	Wilhelmsia physodes	12
Honckenya peploides	12	Potentilla uniflora	16	Zygadenus elegans	20
Koenigia islandica	14	Primula egaliksensis	23		
Lagotis glauca	19	Pyrola grandifolia	23		
Lloydia serotina	20	Pyrola secunda	23		
Lupinus arcticus	13	Ranunculus gmelinii	15		
Melandrium affine	12	Ranunculus hyperboreus	15		
Melandrium apetalum	12	Ranunculus lapponicus	15		
Melandrium taylorae	12	Ranunculus nivalis	15		
Melandrium trifolium	12	Ranunculus pallasii	15		
Mertensia drummondii	21	Ranunculus pygmaeus	15		
Mertensia maritima	21	Rubus chamaemorus	16		
Minuartia arctica	12	Rumex arcticus	14		
Minuartia obtusiloba	12	Sagina intermedia	12		
Minuartia rossii	12	Saussurea angustifolia	8		
Minuartia rubella	12	Saxifraga bronchialis	18		
Oxyria digyna	14	Saxifraga caespitosa	18		
Oxytropis nigrescens	13	Saxifraga cernua	18		
Papaver alboresum	22	Saxifraga flagellaris	18		
Papaver hultenii	22	Saxifraga foliolosa	18		
Papaver lapponicum	22	Saxifraga hieracifolia	18		

Species	Page	Carex ramenskii	5	Vaccinium vitis-idaea	6
Agropyron boreale	1	Carex rariflora	5	Ameria maritimia	22
Alopecurus alpines	1	Carex rotundata	5	Androsace chamaejasme	23
Arctograstis latifolia	1	Carex rupestris	4	Androsace septentrolalis	23
Arctophila fulva	2	Carex saxitilis	5	Anemone drummondii	15
Bromus pumpellianus	2	Carex scirpoidea	4	Anemone parvifolia	15
Calamagrostis Canadensis	1	Carex stans	5	Antennaria friesiana	8
Calamagrostis holmii	1	Carex subspathacea	5	Antennaria monocephala	8
Calamagrostis inexpansa	1	Carex ursina	4	Arabis arenicola	11
Calamagrostis purpurascens	1	Eriophorum angustifolium	3	Arabis arenicola	11
Deschampsia brevifolia	2	Eriophorum russeolum	3	Arabis lyrata	11
Dupontia fisheri	2	Eriophorum triste	3	Arnica alpina	9
Elymus arenarius	1	Eriophorum vaginatum	3	Arnica lessingii	9
Elymus arenarius	1	Juncus arcticus	3	Artemisia arctica	8
Festuca altaica	2	Juncus biglumis	3	Artemisia borealis	8
estuca brachyphilla	2	Juncus triglumis	3	Artemisia glomerata	8
Festuca rubra	2	Kobresia myosuroides	3	Artemisia tilesii	8
Hierochloe alpina	2	Kobresia sibirica	3	Aster sibiricus	9
Hierochloe pauciflora	2	Luzula arctica	3	Astragalus alpines	13
Koeleria asiatica	2	Luzula confusa	3	Astragalus umbellatus	13
Phippsia algida	1	Luzula wahlenbergii	3	Boykinia richardsonii	17
Poa alpigena	2	Andromeda polifolia	6	Braya humilis	10
Poa alpina	2	Arctostaphylos alpina	6	Braya pilosa	10
Poa arctica	2	Betula nana	6	Braya purpurascens	10
Poa glauca	2	Cassiope tetragona	6	Bupleurum americanum	20
Puccinellia borealis	2	Diapensia lapponica	6	Caltha palustris	15
Puccinellia langeana	2	Dryas integrifolia	6	Campanula lasiocarpa	21
Puccinellia phyrganodes	2	Empetrum nigrum	6	Campanula uniflora	21
Trisetum spicatum	2	Ledum palustre	6	Cardamine bellidifolia	11
Carex aquatilis	5	Rhododendron lapponicum	6	Cardamine hyperborea	11
Carex bigelowii	5	Salix arctia	7	Cardamine pratensis	11
Carex capillaries	5	Salix brachycarpa	7	Cardamine pratensis	11
Carex capitata	4	Salix fuscescens	7	Castilleja caudata	19
Carex chordorrhiza	4	Salix glauca	7	Cerastium beeringianum	12
Carex glareosa	4	Salix hastata	7	Chrysanthemum	
Carex holostoma	5	Salix lanata	7	integreifolium	9
Carex krausei	5	Salix ovalifolia	7	Chrysoplenium tetrandum	17
Carex lachenalii	4	Salix phlebophylla	7	Cnidium cnidiifolium	20
Carex maritima	4	Salix pseudopolaris	7	Cochlearia officinalis	10
Carex misandra	5	Salix pulchra	7	Corallorrhiza trifida	20
Carex nardina	4	Salix reticulata	7	Corydalis pauciflora	21
Carex obtusata	4	Salix rotundifolia	7	Delphinium brachycentrum	15
Carex podocarpa	5	Vaccinium uliginosum	6	Descurainia sophoides	11