

## **NGEE Arctic Vegetation Community Survey Barrow 2012 - Species List**

This list relates to species or groups which form column headings in the data file

### **V\_1.2\_plant\_community\_composition\_Barrow\_2012\_v1.csv**

or are listed in the 'species' column of the data file

### **V\_1.2\_species\_height\_Barrow\_2012\_v1.csv**

Species were identified in the field using:

Hultén, E. (1968) *Flora of Alaska and Neighboring Territories: a manual of the vascular plants*. Stanford University Press, Stanford, USA.

Vitt, D.H., Marsh, J.E., Bovey, R.B. (1988) *Mosses and Lichens of Northwest North America*. Lone Pine Publishing, Vancouver, Canada.

Assistance with moss and lichen identification was also provided by Dr Robert Hollister, Grand Valley State University.

Scientific names, synonyms and authorities as listed below were taken from:

USDA, NRCS. 2014. The PLANTS Database (<http://plants.usda.gov>, 29<sup>th</sup> April 2014). National Plant Data Team, Greensboro, NC 27401-4901 USA.

Plant functional type groupings are modified from:

Chapin *et al.* (1996) Plant functional types as predictors of transient responses of arctic vegetation to global change. *Journal of Vegetation Science*, 7, 347 – 358.

**Plant functional type: wet tundra gramioid**

Chapin et al. 1996 – sedges. Grasses (taxonomic classification) with wetland adaptations are indicated by \* and rushes (taxonomic classification) by <sup>+</sup>

*Carex aquatilis* Wahlenb.

\**Dupontia fisheri* R. Br.

*Eriophorum angustifolium* Honck.

*Eriophorum* sp.

*E. russeolum* Fr. ex Hartm., *E. scheuchzeri* Hoppe

<sup>+</sup> *Juncus biglumis* L.

**Plant functional type: dry tundra gramioid**

Chapin et al. 1996 – grasses. Rushes (taxonomic classification) are indicated by <sup>+</sup>

*Arctagrostis latifolia* (R. Br.) Griseb.

*Alopecurus magellanicus* Lam.

Synonym: *Alopecurus alpinus* Sm.

<sup>+</sup> *Luzula arctica* Blytt

<sup>+</sup> *L. confusa* Lindeberg

*Poa arctica* R. Br.

*P. alpina* L.

Synonym: *P. vivipara* (L.) Willd

**Plant functional type: deciduous shrub**

Chapin et al. 1996 – deciduous shrub

*Salix rotundifolia* Trautv.

**Plant functional type: evergreen shrub**

Chapin et al. 1996 – evergreen shrub

*Vaccinium vitis-idaea* L.

**Plant functional type: forb**

Chapin et al. 1996 – forb

*Cardamine pratensis* L.

*Cochlearia officinalis* L.

*Petasites frigidus* (L.) Fr.

*Ranunculus nivalis* L.

*R. pallasii* Schltdl.

*Saxifraga cernua* L.

*S. foliolosa* R. Br.

*S. hirculus* L.

*Stellaria* sp. L.

**Plant functional type: lichen**

Chapin et al. 1996 – lichen

*Alectoria* sp.

*A. nigricans* (Ach.) Nyl., *A. ochroleuca* (Hoffm.) A. Massal.

*Flavocetraria cucullata* (Bellardi) Karnefelt & A. Thell

Synonym: *Cetraria cucullata*

*Cetraria islandica* (L.) Ach.

*C. laevigata* Rass.

*F. nivalis* (L.) Karnefelt & A. Thell

Synonym: *C. nivalis* (L.) Ach.

*Masonhalea richardsonii* (Hook.) Karnefelt  
Synonym: *C. richardsonii* Hook.

*Cladina mitis* (Sandst.) Hustich  
Synonym: *Cladonia mitis*

*Cladonia amaurocraea* (Flörke) Schaerer

*C. cornuta* (L.) Hoffm.,

*C. pyxidata* (L.) Hoffm.

*C. squamosa* (Scop.) Hoffm.

*C. uncialis* (L.) F.H. Wigg,

*Dactylina arctica* (Richardson) Nyl.

*Peltigera apthosa* (L.) Willd.

*P. canina* (L.) Willd.

*Sphaerophorus globosus* (Huds.) Vain.

*Thamnolia subuliformis* (Ehrh.) W.L. Culb.

White crust (species not identified)

**Plant functional type: bryophyte**

Chapin et al. 1996 – moss

*Aulacomnium turgidum* (Wahlenb.) Schwägr.

*Bryum* sp. Hedw.

*Sarmenthypnum sarmentosum* (Wahlenb.) Tuom. & T. Kop.  
Synonym: *Calliergon sarmentosum*

*Cinclidium* sp. Sw.

*Drepanocladus* sp. (Müll. Hal.) G. Roth

*Pogonatum* sp. P. Beauv.

*Polytrichum* sp. Hedw.

*Sphagnum* sp. L.

Mixed moss and liverworts

*Dicranum* sp. Hedw., *Distichium* sp. Bruch & Schimp., leafy liverworts

Leafy liverworts

Thallose liverworts

**Vascular plant species not in community survey plots but observed during site walkover:**

**Plant functional type: wet tundra gramioid**

*Arctophila fulva* (Trin.) Rupr. ex Andersson.

**Plant functional type: dry tundra gramioid**

*Calamagrostis holmii* Lange.

*Hierchloe pauciflora* R. Br.

**Plant functional type: deciduous shrub**

*Salix pulchra* Cham.

**Plant functional type: evergreen shrub**

*Cassiope tetragona* (L.) D. Don.

**Plant functional type: forb**

*Chrysosplenium tetrandum* (Lund ex Malmgr.) Th. Fr.

*Papaver lapponicum* (Tolm.) Nordh.

*Pedicularis kanei* Durand.

*P. sudetica* Willd.

*Potentilla hyparctica* Willd. ex Schltdl.

*Ranunculus pygmaeus* Wahlenb.

*Saxifraga hieracifolia* Waldst. & Kit. ex Willd.

*S. punctata* L. p.p.

*Tephrosieris frigida* (Richardson) Holub.

*Rumex aquaticus* L.