Supplementary file for: Møller A.K., Søborg D.A., Abu Al-Soud W., Sørensen S.J. & Kroer N. 2013. Bacterial community structure in High-Arctic snow and freshwater as revealed by pyrosequencing of 16S rRNA genes and cultivation. *Polar Research 32.* Correspondence: Niels Kroer, Department of Environmental Science, Aarhus University, Frederiksborgvej 399, DK-4000 Roskilde, Denmark. E-mail: nk@dmu.dk.

Supplementary Table S3. Distribution of most abundant genera within selected phyla from snow and freshwater.

Phylum Class		% of phylum			
	Genus	Freshwater	Snow: bottom	Snow: middle	Snow: top
Proteobacteria					
Alpha	*Arcobacter*	0.0	2.2	2.0	6.6
Alpha	*Brevundimonas*	1.6	4.6	3.0	1.3
Alpha	*Paracoccus*	0.1	1.6	2.1	9.0
Alpha	*Rhodobacter*	3.0	3.0	4.3	13.1
Alpha	*Roseomonas*	0.3	2.5	12.6	3.8
Alpha	*Sphingomonas*	0.1	13.9	28.7	17.2
Beta	*Herminiimonas*	2.4	0.1	0.5	0.1
Beta	*Rhodoferax*	3.3	0.1	0.0	0.0
Gamma	*Acinetobacter*	0.2	1.0	0.5	9.1
Gamma	*Cellvibrio*	2.5	0.9	0.0	0.0
Gamma	*Pelagibacter*	0.0	8.1	0.2	0.3
Gamma	*Pseudomonas*	11.0	7.4	3.3	7.3
Gamma	*Sulfitobacter*	0.0	6.3	0.9	3.2
Actinobacteria					
Actino	*Actinobaculum*	0.0	0.2	0.3	3.9
Actino	*Actinomyces*	0.0	13.7	0.1	0.8
Actino	*Agrococcus*	0.0	4.2	0.0	0.3
Actino	*Conexibacter*	0.3	1.5	3.7	3.6
Actino	*Cryptosporangium*	0.0	1.0	2.7	3.0
Actino	*Ilumatobacter*	25.6	10.9	17.9	10.0
Actino	*Kineosporia*	0.1	4.0	1.5	0.8
Actino	*Rothia*	0.0	2.6	0.0	0.2
Actino	*Iamia*	0.0	0.3	2.2	2.7
Actino	*Rubrobacter*	0.0	0.3	3.2	9.9
Bacteroidetes					
Bacteroidia	*Prevotella*	0.0	19.4	0.1	1.1
Flavobacteria	*Cloacibacterium*	0.1	9.7	10.3	38.3
Flavobacteria	*Flavobacterium*	49.1	9.1	5.8	4.1
Flavobacteria	*Fluviicola*	3.2	0.7	0.1	0.0
Flavobacteria	*Polaribacter*	0.0	2.8	0.3	0.5
Sphingobacteria	*Chitinophaga*	0.0	2.0	5.1	2.4
Sphingobacteria	*Hymenobacter*	0.0	3.4	13.4	4.8
Sphingobacteria	*Pedobacter*	0.4	5.6	4.2	2.2

Sphingobacteria	*Mucilaginibacter*	0.0	2.9	2.6	1.2
Sphingobacteria	*Spirosoma*	0.0	1.5	4.1	3.0
Cyanobacteria					
Cyanobacteria	*GpI*	13.3	76.2	62.0	78.9
Cyanobacteria	*GpIV*	6.7	2.2	2.3	1.1
Cyanobacteria	*GpV*	0.0	2.4	2.2	1.2
Cyanobacteria	*GpVI*	0.0	3.9	1.7	0.8
Cyanobacteria	*GpXIII*	0.0	1.5	2.0	1.1
Firmicutes					
Bacilli	*Enterococcus*	0.0	0.2	1.9	3.1
Bacilli	*Exiguobacterium*	0.0	0.0	0.7	9.9
Bacilli	*Lactococcus*	0.0	0.5	5.7	6.2
Bacilli	*Lysinibacillus*	0.0	0.0	0.0	3.4
Bacilli	*Staphylococcus*	0.0	9.8	6.9	7.0
Bacilli	*Streptococcus*	4.2	64.4	13.1	29.9
Bacilli	*Bacillus*	0.0	0.5	2.8	2.7
Bacilli	*Gemelia*	0.0	2.9	0.7	1.2
Clostridia	*Finegoldia*	0.0	0.5	5.1	0.8
Clostridia	*Oscillibacter*	0.0	0.4	4.0	0.7
Planctomycetes					
Planctomycetes	*Gemmata*	0.0	2.1	9.2	1.7
Planctomycetes	*Isosphaera*	93.2	10.8	21.0	41.0
Planctomycetes	*Planctomyces*	0.2	41.2	8.1	7.3
Planctomycetes	*Rhodopirellula*	0.1	3.1	2.7	0.9
Planctomycetes	*Singulisphaera*	0.0	19.6	44.1	38.5
Planctomycetes	*Zavarzinella*	0.0	5.2	0.7	0.0