

Appendix 1

Mean percentage cover (\bar{x}) and frequency (fr) of vascular plant and moss species in the sampling locations of pristine, drained and restored mires. Abbr. = abbreviations of the names used in the NMDS ordination plots. N = number of sampling locations (total N = 162). Differences in the covers among treatments were tested with Kruskal-Wallis rank sum test (H, df = 2; treatments not sharing the same letter differed significantly according to a posteriori test with critical $\alpha = 0.05$; test statistics are given for species occurring in > 9% of the sampling locations). We adjusted the original p-values (p adj. in the Appendix) to control false discovery rate in multiple testing using the method in Benjamini and Yekutieli (2001).

| Species | Abbr. | Treatment | | | | | | Total | | Test statistics | |
|--|--------|----------------------|----|---------------------|----|----------------------|----|-----------|-----|-----------------|----------|
| | | Pristine (N = 54) | | Drained (N = 48) | | Restored (N = 60) | | \bar{x} | fr | H | p adj. |
| | | \bar{x} | fr | \bar{x} | fr | \bar{x} | fr | | | | |
| <i>Andromeda polifolia</i> L. | Andpol | 1.5 a | 54 | 0.8 b | 36 | 0.9 b | 54 | 1.1 | 144 | 26.22 | < 0.0001 |
| <i>Aulacomnium palustre</i> (Hedw.) Schwägr. | Aulpal | 0.3 a | 14 | 1.7 b | 30 | 1.2 b | 32 | 1.1 | 76 | 19.19 | 0.0009 |
| <i>Betula nana</i> L. | Betnan | 1.3 | 42 | 1.8 | 33 | 2.5 | 51 | 1.9 | 126 | 4.51 | 0.5101 |
| <i>Betula pubescens</i> Ehrh. | Betpub | 0.0 | 0 | 0.0 | 4 | 0.1 | 7 | 0.0 | 11 | | |
| <i>Calamagrostis arundinacea</i> (L.) Roth | Calaru | 0.0 | 0 | 0.0 | 0 | 0.0 | 1 | 0.0 | 1 | | |
| <i>Calluna vulgaris</i> (L.) Hull | Calvul | 4.4 a | 26 | 2.7 a | 13 | 2.2 a | 17 | 3.1 | 56 | 8.12 | 0.0922 |
| <i>Carex brunnescens</i> (Pers.) Poir. | Carbru | 0.0 | 0 | 0.0 | 1 | 0.0 | 0 | 0.0 | 1 | | |
| <i>Carex canescens</i> L. | Carcan | 0.0 | 0 | 0.0 | 0 | 0.2 | 2 | 0.1 | 2 | | |
| <i>Carex chordorrhiza</i> L. f. | Carcho | 0.0 | 1 | 0.0 | 0 | 0.0 | 0 | 0.0 | 1 | | |
| <i>Carex echinata</i> Murray | Carech | 0.0 | 0 | 0.0 | 0 | 0.0 | 1 | 0.0 | 1 | | |
| <i>Carex globularis</i> L. | Carglo | 0.0 a | 1 | 0.7 a | 12 | 0.4 a | 10 | 0.4 | 23 | 11.62 | 0.0219 |
| <i>Carex lasiocarpa</i> Ehrh. | Carlas | 0.1 | 6 | 0.0 | 3 | 0.0 | 1 | 0.1 | 10 | | |
| <i>Carex limosa</i> L. | Carlim | 0.4 a | 18 | 0.0 b | 0 | 0.0 b | 0 | 0.1 | 18 | 40.07 | < 0.0001 |
| <i>Carex paupercula</i> Michx. | Carmag | 0.0 | 0 | 0.0 | 0 | 0.0 | 2 | 0.0 | 2 | | |
| <i>Carex pauciflora</i> Lightf. | Carpau | 0.2 a | 36 | 0.0 b | 3 | 0.0 b | 11 | 0.1 | 50 | 57.46 | < 0.0001 |
| <i>Carex rostrata</i> Stokes | Carros | 0.1 a | 17 | 0.0 b | 0 | 0.0 b | 1 | 0.0 | 18 | 34.19 | < 0.0001 |
| <i>Chamaedaphne calyculata</i> (L.) Moench | Chacal | 0.7 | 24 | 0.6 | 19 | 0.7 | 29 | 0.7 | 72 | 0.48 | 1.0000 |
| <i>Cladopodiella fluitans</i> (Nees) H.Buch | Claflu | 0.1 | 3 | 0.0 | 0 | 0.0 | 0 | 0.0 | 3 | | |
| <i>Dactylorhiza maculata</i> (L.) Soó | Dacmac | 0.0 | 1 | 0.0 | 0 | 0.0 | 0 | 0.0 | 1 | | |
| <i>Dicranum undulatum</i> Schrad. ex Brid. | Dicber | 0.0 a | 4 | 0.0 a | 1 | 0.1 a | 13 | 0.1 | 18 | 11.55 | 0.0219 |

| | | | | | | | | | | | |
|---|-----------|-----|------|------|-------|------|------|------|-----|-------|----------|
| <i>Dicranella cerviculata</i> (Hedw.) Schimp. | Diccer | 0.0 | 0 | 0.0 | 0 | 0.0 | 1 | 0.0 | 1 | | |
| <i>Dicranum fuscescens</i> Sm. | Dicfus | 0.0 | 0 | 0.0 | 2 | 0.0 | 2 | 0.0 | 4 | | |
| <i>Dicranum majus</i> Sm. | Dicmaj | 0.0 | 1 | 0.0 | 8 | 0.0 | 2 | 0.0 | 11 | | |
| <i>Dicranum polysetum</i> Sw. ex anon. | Dicpol | 0.0 | a 2 | 0.8 | b 26 | 0.1 | a 17 | 0.3 | 45 | 35.92 | < 0.0001 |
| <i>Dicranum scoparium</i> Hedw. | Diesco | 0.0 | a 0 | 0.3 | a 10 | 0.0 | a 5 | 0.1 | 15 | 13.37 | 0.0098 |
| <i>Drosera longifolia</i> L. | Drolon | 0.0 | 7 | 0.0 | 0 | 0.0 | 0 | 0.0 | 7 | | |
| <i>Drosera rotundifolia</i> L. | Drorot | 0.1 | a 44 | 0.0 | b 4 | 0.0 | b 9 | 0.0 | 57 | 77.99 | < 0.0001 |
| <i>Dryopteris carthusiana</i> (Vill.) H. P. Fuchs | Drycar | 0.0 | 0 | 0.1 | 3 | 0.0 | 0 | 0.0 | 3 | | |
| <i>Empetrum nigrum</i> L. | Empnig | 3.6 | 52 | 4.7 | 42 | 4.1 | 50 | 4.1 | 144 | 0.92 | 1.0000 |
| <i>Epilobium angustifolium</i> L. | Epiang | 0.0 | 0 | 0.0 | 0 | 0.0 | 1 | 0.0 | 1 | | |
| <i>Equisetum palustre</i> L. | Equpal | 0.0 | 0 | 0.0 | 0 | 0.0 | 1 | 0.0 | 1 | | |
| <i>Equisetum sylvaticum</i> L. | Equsyl | 0.0 | 1 | 0.0 | 0 | 0.0 | 0 | 0.0 | 1 | | |
| <i>Eriophorum vaginatum</i> L. | Erivag | 8.7 | a 52 | 3.3 | b 40 | 16.6 | a 56 | 10.1 | 148 | 39.86 | < 0.0001 |
| <i>Festuca pratensis</i> Huds. | Fespra | 0.0 | 0 | 0.0 | 1 | 0.0 | 0 | 0.0 | 1 | | |
| <i>Hieracium</i> | Hieracium | 0.0 | 0 | 0.0 | 1 | 0.0 | 0 | 0.0 | 1 | | |
| <i>Hylocomium splendens</i> (Hedw.) Schimp. | Hylspl | 0.0 | 0 | 0.2 | 6 | 0.3 | 1 | 0.2 | 7 | | |
| <i>Juncus filiformis</i> L. | Junfil | 0.0 | 1 | 0.0 | 0 | 0.0 | 0 | 0.0 | 1 | | |
| <i>Ledum palustre</i> L. | Ledpal | 0.1 | a 15 | 0.5 | ab 14 | 1.3 | b 28 | 0.7 | 57 | 9.12 | 0.0647 |
| <i>Lepidozia reptans</i> (L.) Dumort. | Leprep | 0.0 | 0 | 0.0 | 0 | 0.0 | 1 | 0.0 | 1 | | |
| <i>Lycopodium annotinum</i> L. | Lycann | 0.0 | 0 | 0.0 | 1 | 0.0 | 0 | 0.0 | 1 | | |
| <i>Melampyrum pratense</i> L. | Melpra | 0.0 | 2 | 0.0 | 3 | 0.0 | 4 | 0.0 | 9 | | |
| <i>Melampyrum sylvaticum</i> L. | Melsyl | 0.0 | 1 | 0.0 | 3 | 0.0 | 1 | 0.0 | 5 | | |
| <i>Menyanthes trifoliata</i> L. | Mentri | 0.1 | 6 | 0.0 | 0 | 0.0 | 1 | 0.0 | 7 | | |
| <i>Molinia caerulea</i> (L.) Moench | Molcae | 0.0 | 2 | 0.0 | 1 | 1.6 | 5 | 0.6 | 8 | | |
| <i>Mylia anomala</i> (Hook.) Gray | Mylano | 0.3 | a 24 | 0.1 | a 11 | 0.3 | a 15 | 0.2 | 50 | 8.13 | 0.0922 |
| <i>Orthilia secunda</i> (L.) House | Ortsec | 0.0 | 0 | 0.0 | 1 | 0.0 | 0 | 0.0 | 1 | | |
| <i>Picea abies</i> (L.) H. Karst. | Picabi | 0.0 | 0 | 0.0 | 0 | 0.1 | 3 | 0.0 | 3 | | |
| <i>Pinus sylvestris</i> L. | Pinsyl | 0.2 | 26 | 0.0 | 13 | 0.1 | 23 | 0.1 | 62 | 4.36 | 0.5333 |
| <i>Plagiothecium</i> | Plagiot | 0.0 | 0 | 0.0 | 4 | 0.0 | 1 | 0.0 | 5 | | |
| <i>Pleurozium schreberi</i> (Willd. ex Brid.) Mitt. | Plesch | 1.3 | a 20 | 31.7 | b 43 | 14.4 | c 47 | 15.2 | 110 | 61.24 | < 0.0001 |
| <i>Pohlia nutans</i> (Hedw.) Lindb. | Pohnut | 0.0 | a 0 | 0.0 | a 6 | 0.0 | a 9 | 0.0 | 15 | 8.49 | 0.0846 |
| <i>Polytrichum commune</i> Hedw. | Polcom | 0.0 | a 0 | 0.6 | a 9 | 1.6 | a 12 | 0.8 | 21 | 11.96 | 0.0194 |
| <i>Polytrichastrum longisetum</i> (Sw. ex Brid.) | Pollon | 0.0 | 0 | 0.0 | 1 | 0.0 | 1 | 0.0 | 2 | | |

| G.L.Sm. | | | | | | | | | | | | | | |
|---|---------|------|----|----|------|----|----|------|----|----|------|-----|-------|----------|
| <i>Polytrichum strictum</i> Menzies ex Brid. | Polstr | 1.1 | a | 29 | 2.9 | ab | 31 | 4.6 | b | 47 | 2.9 | 107 | 11.36 | 0.0230 |
| <i>Ptilidium ciliare</i> (L.) Hampe | Pticil | 0.0 | | 1 | 0.0 | | 0 | 0.0 | | 0 | 0.0 | 1 | | |
| <i>Rhynchospora alba</i> (L.) Vahl | Rhyalb | 0.2 | | 4 | 0.0 | | 0 | 0.0 | | 0 | 0.1 | 4 | | |
| <i>Rubus chamaemorus</i> L. | Rubcha | 2.5 | ab | 42 | 4.0 | a | 39 | 2.1 | b | 38 | 2.8 | 119 | 7.26 | 0.1334 |
| <i>Salix myrsinifolia</i> Salisb. | Salmyr | 0.0 | | 0 | 0.0 | | 2 | 0.0 | | 0 | 0.0 | 2 | | |
| <i>Scheuchzeria palustris</i> L. | Schpal | 0.0 | | 4 | 0.0 | | 0 | 0.0 | | 0 | 0.0 | 4 | | |
| <i>Sorbus aucuparia</i> L. | Sorauc | 0.0 | | 0 | 0.0 | | 1 | 0.0 | | 0 | 0.0 | 1 | | |
| <i>Sphagnum angustifolium</i> (C.E.O.Jensen ex Russow) C.E.O.Jensen | Sphang | 21.7 | | 41 | 18.7 | | 42 | 18.7 | | 52 | 19.7 | 135 | 0.31 | 1.0000 |
| <i>Sphagnum balticum</i> (Russow) C.E.O.Jensen | Sphbal | 8.7 | a | 24 | 0.0 | b | 0 | 1.1 | ab | 15 | 3.3 | 39 | 29.93 | < 0.0001 |
| <i>Sphagnum capillifolium</i> (Ehrh.) Hedw. | Sphcap | 0.0 | | 0 | 0.1 | | 1 | 0.0 | | 1 | 0.0 | 2 | | |
| <i>Sphagnum cuspidatum</i> Ehrh. ex Hoffm. | Sphcus | 0.0 | | 1 | 0.0 | | 0 | 0.3 | | 3 | 0.1 | 4 | | |
| <i>Sphagnum fallax</i> (H.Klinggr.) H.Klinggr. | Sphfal | 12.9 | a | 20 | 0.0 | b | 0 | 4.6 | a | 21 | 6.0 | 41 | 22.80 | < 0.0001 |
| <i>Sphagnum fuscum</i> (Schimp.) H.Klinggr. | Sphfus | 30.3 | a | 46 | 7.7 | b | 20 | 11.4 | b | 39 | 16.6 | 105 | 33.11 | < 0.0001 |
| <i>Sphagnum girgensohnii</i> Russow | Sphgir | 0.0 | | 0 | 0.1 | | 1 | 0.0 | | 1 | 0.0 | 2 | | |
| <i>Sphagnum magellanicum</i> Brid. | Sphmag | 4.3 | a | 44 | 2.9 | ab | 30 | 2.1 | b | 42 | 3.1 | 116 | 7.45 | 0.1254 |
| <i>Sphagnum majus</i> (Russow) C.E.O.Jensen | Sphmaj | 2.9 | | 9 | 0.0 | | 0 | 0.2 | | 2 | 1.0 | 11 | | |
| <i>Sphagnum papillosum</i> Lindb. | Sphpap | 7.5 | a | 20 | 0.0 | b | 0 | 1.1 | b | 4 | 2.9 | 24 | 32.39 | < 0.0001 |
| <i>Sphagnum pulchrum</i> (Lindb. ex Braithw.) Warnst. | Sphpul | 0.2 | | 2 | 0.0 | | 0 | 0.0 | | 0 | 0.1 | 2 | | |
| <i>Sphagnum riparium</i> Ångstr. | Sphrip | 0.0 | | 0 | 0.0 | | 0 | 0.0 | | 1 | 0.0 | 1 | | |
| <i>Sphagnum rubellum</i> Wilson | Sphrub | 0.6 | a | 17 | 0.0 | b | 1 | 0.0 | ab | 4 | 0.2 | 22 | 23.24 | < 0.0001 |
| <i>Sphagnum russowii</i> Warnst. | Sphrus | 0.7 | ab | 21 | 1.2 | b | 12 | 6.4 | a | 29 | 3.0 | 62 | 8.44 | 0.0846 |
| <i>Sphagnum squarrosum</i> Crome | Sphsqu | 0.0 | | 0 | 0.0 | | 0 | 0.0 | | 3 | 0.0 | 3 | | |
| <i>Sphagnum tenellum</i> (Brid.) Pers. ex Brid. | Spten | 0.1 | | 9 | 0.0 | | 0 | 0.0 | | 1 | 0.0 | 10 | | |
| <i>Straminergon stramineum</i> (Dicks. ex Brid.) Hedenäs | Strastr | 0.0 | | 0 | 0.0 | | 0 | 0.0 | | 5 | 0.0 | 5 | | |
| <i>Trichophorum cespitosum</i> (L.) Hartm. | Trices | 1.6 | a | 13 | 0.0 | a | 2 | 0.0 | a | 0 | 0.6 | 15 | 22.04 | < 0.0001 |
| <i>Trientalis europaea</i> L. | Trieur | 0.0 | | 0 | 0.0 | | 1 | 0.0 | | 4 | 0.0 | 5 | | |
| <i>Vaccinium microcarpum</i> (Turcz. ex Rupr.) Schmalh. | Vacmic | 0.1 | a | 46 | 0.1 | b | 23 | 0.0 | b | 37 | 0.1 | 106 | 24.02 | < 0.0001 |
| <i>Vaccinium myrtillus</i> L. | Vacmyr | 0.0 | a | 3 | 2.7 | b | 19 | 0.6 | ab | 10 | 1.0 | 32 | 20.41 | < 0.0001 |

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|---------------------------------|--------|-------|----|--------|----|-------|----|-----|-----|-------|----------|
| <i>Vaccinium oxycoccos</i> L. | Vacoxy | 0.2 | 51 | 0.3 | 37 | 0.2 | 53 | 0.2 | 141 | 0.67 | 1.0000 |
| <i>Vaccinium uliginosum</i> L. | Vaculi | 1.6 a | 37 | 3.2 ab | 35 | 5.0 b | 48 | 3.3 | 120 | 9.26 | 0.0635 |
| <i>Vaccinium vitis-idaea</i> L. | Vacvit | 0.1 a | 4 | 5.7 b | 26 | 0.8 b | 21 | 2.0 | 51 | 30.41 | < 0.0001 |