

## Appendix 1

**Table S1.** Detail characteristics of 52 plots identified on Rzecin peatland.

ID No	Name of plant community	Codes	Type of vegetation	Longitude (N) Latitude (E)	Dominant species
1	<i>Caricetum lasiocarpae</i>	CL	Peatland rush	52.760947 16.310059	<i>Sphagnum teres</i> , <i>Menyanthes trifoliata</i> , <i>Oxycoccus palustris</i> , <i>Carex lasiocarpa</i> , <i>Calamagrostis stricta</i>
2	<i>Caricetum lasiocarpae</i>	CL	Peatland rush	52.760975 16.309327	<i>Carex lasiocarpa</i> , <i>Sphagnum teres</i> , <i>Comarum palustre</i> , <i>Menyanthes trifoliata</i> , <i>Sphagnum angustifolium</i>
3	<i>Sphagno apiculati-Caricetum rostratae</i>	SACR	Fen vegetation	52.761598 16.30952	<i>Sphagnum fallax</i> , <i>Carex rostrata</i> , <i>Oxycoccus palustris</i> , <i>Sphagnum angustifolium</i>
4	<i>Menyantho-Sphagnetum teretis</i>	MST	Fen vegetation	52.761672 16.310818	<i>Menyanthes trifoliata</i> , <i>Sphagnum teres</i> , <i>Carex limosa</i> , <i>Carex rostrata</i> , <i>Salix aurita</i>
5	<i>Phragmitetum communis</i>	PC	Peatland rush	52.761991 16.310894	<i>Phragmites australis</i> , <i>Sphagnum fimbriatum</i>
6	<i>Sphagno apiculati-Caricetum rostratae</i>	SACR	Fen vegetation	52.762075 16.309544	<i>Sphagnum fallax</i> , <i>Carex rostrata</i> , <i>Oxycoccus palustris</i>
7	<i>Sphagno apiculati-Caricetum rostratae</i>	SACR	Fen vegetation	52.762664 16.310872	<i>Sphagnum fallax</i> , <i>Menyanthes trifoliata</i> , <i>Carex rostrata</i> , <i>Oxycoccus palustris</i> , <i>Carex limosa</i>
8	<i>Thelypterido-Phragmitetum</i>	TP	Peatland rush	52.762851 16.310076	<i>Thelypteris palustris</i> , <i>Carex elata</i> , <i>Sphagnum fimbriatum</i> , <i>Sphagnum teres</i> , <i>Carex rostrata</i>
9	<i>Sphagno recurvi-Eriophoretum angustifolii</i>	SREA	Fen vegetation	52.763181 16.310393	<i>Sphagnum fallax</i> , <i>Eriophorum angustifolium</i> , <i>Oxycoccus palustris</i> , <i>Carex limosa</i> , <i>Sphagnum teres</i>
10	<i>Phragmitetum communis</i>	PC	Peatland rush	52.763344 16.31211	<i>Phragmites australis</i> , <i>Lemna minor</i> , <i>Thelypteris palustris</i>
11	<i>Caricetum lasiocarpae</i>	CL	Peatland rush	52.760822 16.310032	<i>Carex lasiocarpa</i> , <i>Sphagnum teres</i> , <i>Menyanthes trifoliata</i>
12	<i>Sphagno apiculati-Caricetum rostratae</i>	SACR	Fen vegetation	52.760618 16.312318	<i>Sphagnum fallax</i> , <i>Carex rostrata</i> , <i>Carex limosa</i> , <i>Carex panicea</i> , <i>Menyanthes trifoliata</i>
13	<i>Caricion lasiocarpae</i>	CLa	Fen vegetation	52.761195 16.313836	<i>Phragmites australis</i> , <i>Sphagnum teres</i> , <i>Calliergonella cuspidate</i> , <i>Comarum palustre</i> , <i>Sphagnum fallax</i>
14	<i>Caricetum limosae</i>	CLi	Fen vegetation	52.762566 16.310519	<i>Carex limosa</i> , <i>Sphagnum fallax</i> , <i>Oxycoccus palustris</i>
15	<i>Sphagno apiculati-Caricetum rostratae</i>	SACR	Fen vegetation	52.763632 16.310509	<i>Sphagnum teres</i> , <i>Carex rostrata</i> , <i>Comarum palustre</i>
16	<i>Communities Sphagnum teres</i>	CST	Fen vegetation	52.76441 16.310814	<i>Sphagnum teres</i> , <i>Carex acutiformis</i> , <i>Carex canescens</i> , <i>Carex elata</i> , <i>Comarum palustre</i>
17	<i>Phragmitetum communis</i>	PC	Peatland rush	52.763734 16.308493	<i>Phragmites australis</i> , <i>Sphagnum teres</i> , <i>Schoenoplectus tabernaemontani</i>

18	<i>Sphagno recurvi-Eriophoretum angustifoli</i>	SREA	Fen vegetation	52.764282 16.307471	<i>Sphagnum fallax, Eriophorum angustifolium, Oxycoccus palustris, Thelypteris palustris</i>
19	<i>Caricetum lasiocarpae</i>	CL	Peatland rush	52.764562 16.305962	<i>Salix rosmarinifolia, Sphagnum fallax, Typha latifolia, Carex lasiocarpa</i>
20	<i>Sphagno apiculati-Caricetum rostratae</i>	SACR	Fen vegetation	52.762979 16.307096	<i>Sphagnum fallax, Carex lasiocarpa, Salix rosmarinifolia, Sphagnum teres, Betula pubescens</i>
21	<i>Caricetum diandrae</i>	CD	Fen vegetation	52.762085 16.307952	<i>Carex diandra, Sphagnum teres, Sphagnum fallax, Carex nigra, Carex rostrata, Comarum palustre, Oxycoccus palustris</i>
22	<i>Sphagno apiculati-Caricetum rostratae</i>	SACR	Fen vegetation	52.761613 16.308985	<i>Sphagnum fallax, Carex rostrata, Calliergon giganteum, Comarum palustre,</i>
23	<i>Sphagno recurvi--Eriophoretum angustifoli</i>	SREA	Fen vegetation	52.761927 16.308997	<i>Sphagnum angustifolium, Eriophorum angustifolium, Equisetum fluviatile, Oxycoccus palustris</i>
24	<i>Cladietum marisci</i>	CM	Peatland rush	52.763847 16.311149	<i>Cladium mariscus, Salix cinerea</i>
25	<i>Caricetum lasiocarpae</i>	CL	Peatland rush	52.760835 16.309711	<i>Carex lasiocarpa, Sphagnum teres, Comarum palustre</i>
26	<i>Najadatum marinae</i>	Excluded from analyses due to water in the background		52.762124 16.320438	<i>Najas marina</i>
27	<i>Typhetum angustifoliae</i>			52.762033 16.320602	<i>Typha angustifolia, Riccia fluitans, Najas marina</i>
28	<i>Charettum delicatulae</i>	Excluded from analyses due to water in the background		52.762054 16.320161	<i>Chara virgata, Najas marina</i>
29	<i>Caricetum paniculatae</i>	CP	Fen vegetation	52.762746 16.313099	<i>Carex paniculata, Thelypteris palustris</i>
30	<i>Typhetum latifoliae</i>	TL	Peatland rush	52.762648 16.313303	<i>Typha latifolia, Lemna minor, Thelypteris palustris</i>
31	<i>Typhetum angustifoliae</i>	Excluded from analyses due to water in the background		52.761598 16.320101	<i>Typha angustifolia, Phragmites australis</i>
32	<i>Phragmitetum communis</i>	PC	Peatland rush	52.762942 16.320082	<i>Phragmites australis</i>
33	<i>Sphagnum teres</i>	ST	Fen vegetation	52.761286 16.310268	<i>Sphagnum teres, Calamagrostis stricta, Carex limosa</i>
34	<i>Sphagno recurvi-Eriophoretum angustifoli</i>	SREA	Fen vegetation	52.762065 16.312093	<i>Sphagnum fallax, Eriophorum angustifolium, Oxycoccus palustris, Sphagnum teres</i>
35	<i>Sphagno apiculati-Caricetum rostratae</i>	SACR	Fen vegetation	52.762495 16.312885	<i>Sphagnum fallax, Carex rostrata, Oxycoccus palustris</i>
36	<i>Sphagno recurvi-Eriophoretum angustifolii</i>	SREA	Fen vegetation	52.765657 16.331136	<i>Eriophorum angustifolium, Lysimachia thyrsoiflora, Sphagnum angustifolium</i>
37	<i>Corniculario-Corynephorum</i>	CC	Meadows	52.773569 16.31922	<i>Corynephorus canescens, Polytrichum piliferum</i>
38	<i>Calamagrostietum neglectae</i>	Excluded from analyses, out of the image		52.753672 16.32573	<i>Calamagrostis stricta, Drepanocladus polycarpus, Comarum palustre, Lysimachia vulgaris</i>
39	<i>Caricetum elatae</i>			52.754151 16.326071	<i>Carex elata, Drepanocladus polycarpus, Calliergonella cuspidata, Comarum palustre, Calliergon giganteum</i>

40	<i>Stellario palustris-Deschampsietum caespitosae</i>	SPDC	Meadows	52.753437 16.321479	<i>Stellaria palustris, Deschampsia cespitosa, Galium uliginosum, Ranunculus repens, Epilobium palustre</i>
41	<i>Agrostis capillaris-Hieracium pilosell</i>	AP	Meadows	52.762265 16.32415	<i>Agrostis capillaris, Hieracium pilosella, Rumex acetosa, Holcus lanatus, Achillea millefolium</i>
42	<i>Sphagno-Caricetum rostratae</i>	SCR	Fen vegetation	52.763974 16.303765	<i>Carex rostrata, Mentha aquatica, Calliergonella cuspidata, Drepanocladus polycarpos, Epilobium palustre, Sphagnum fallax</i>
43	<i>Typhetum latifoliae</i>	TL	Peatland rush	52.763199 16.305725	<i>Typha latifolia, Comarum palustre, Galium palustre, Lythrum salicaria, Calliergonella cuspidata</i>
44	<i>Caricetum lasiocarpae</i>	CL	Peatland rush	52.760976 16.309736	<i>Carex lasiocarpa, Hamatocaulis vernicosus, Menyanthes trifoliata, Sphagnum teres</i>
45	<i>Caricetum paniculatae</i>	CP	Fen vegetation	52.763057 16.310411	<i>Carex paniculata, Hamatocaulis vernicosus, Carex rostrata, Thelypteris palustris</i>
46	<i>Caricetum lasiocarpae</i>	CL	Peatland rush	52.760798 16.309831	<i>Carex lasiocarpa, Sphagnum teres, Calliergonella cuspidata, Comarum palustre, Sphagnum angustifolium</i>
47	<i>Corniculario-Corynephorretum</i>	CC	Meadows	52.760865 16.304301	<i>Corynephorus canescens, Brachytheticum albicans, Ceratodon purpureus, Polytrichum piliferum</i>
48	<i>Semi-mowed Arrhenatherion grass</i>	SMG	Meadows	52.760046 16.306374	<i>Holcus lanatus, Achillea millefolium, Cardaminopsis arenosa, Festuca ovina, Plantago lanceolata</i>
49	<i>Mowed Arrhenatherion grass</i>	MG	Meadows	52.758467 16.30951	<i>Festuca ovina, Poa pratensis, Ranunculus acris, Ranunculus repens</i>
50	<i>Semi-mowed Arrhenatherion grass</i>	SMG	Meadows	52.757953 16.311527	<i>Anthoxanthum odoratum, Festuca ovina, Poa pratensis, Ranunculus acris, Ranunculus repens</i>
51	<i>Mowed Arrhenatherion grass</i>	MG	Meadows	52.759035 16.316914	<i>Ranunculus repens, Anthoxanthum odoratum, Arrhenatherum elatius</i>
52	<i>Mowed Arrhenatherion grass</i>	MG	Meadows	52.760484 16.323327	<i>Holcus lanatus, Achillea millefolium, Armeria elongate, Dactylis glomerata</i>