

Appendix 1a: Riparian mesohabitats in non-restored sections [%]. For site names, see appendix 1c.

Riparian mesohabitat	Site number																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Bank	0.0	41.0	0.0	0.0	34.9	2.8	2.3	0.0	0.0	0.0	0.0	0.0	10.9	0.0	0.0	0.0	0.0	55.6	2.7	0.0	0.0	0.0	2.6	0.0
Embankment	94.6	29.0	70.9	92.7	59.4	76.3	90.0	87.7	98.1	95.9	85.6	100.0	77.6	100.0	83.3	95.7	75.7	44.4	94.3	100.0	98.4	100.0	92.5	100.0
Floodplain area	0.0	21.6	23.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Midchannel bar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Side bar	5.4	8.5	6.1	7.3	5.7	20.9	7.7	12.3	1.9	4.1	14.4	0.0	11.6	0.0	16.7	4.3	11.8	0.0	3.0	0.0	1.6	0.0	4.8	0.0
Vegetated island	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Appendix 1b: Riparian mesohabitats in restored sections [%]. For site names, see appendix 1c.

Riparian mesohabitat	Site number																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Bank	0.0	6.6	0.0	13.9	10.5	1.6	27.5	0.0	0.0	0.0	76.2	0.0	7.9	2.8	1.9	0.0	0.0	7.6	14.4	7.7	7.7	56.9	6.4	5.0
Embankment	8.3	3.6	22.2	4.3	43.1	0.7	48.7	16.1	15.3	19.4	18.6	90.1	8.9	59.7	29.2	27.0	17.6	46.6	44.7	0.7	8.0	1.8	37.4	21.4
Floodplain area	30.9	5.6	35.3	34.2	0.0	95.9	2.2	22.8	26.3	3.5	0.0	0.0	36.7	0.0	0.0	35.4	72.4	0.0	0.0	52.8	0.0	7.6	11.9	15.9
Midchannel bar	11.6	0.0	0.0	0.0	0.0	0.0	0.0	9.8	0.1	0.6	0.0	6.7	0.0	1.6	0.0	0.0	0.3	2.5	0.0	6.0	2.3	0.0	0.0	0.6
Side bar	15.0	3.3	37.4	4.3	8.2	1.3	19.3	14.1	5.9	32.3	3.9	0.0	4.3	18.1	8.8	6.9	4.7	26.9	4.5	0.7	4.0	0.5	9.3	0.4
Vegetated island	34.2	80.8	5.1	43.4	38.2	0.4	2.2	37.3	52.4	44.1	1.3	2.4	43.0	17.9	60.1	30.8	5.1	16.3	36.4	32.1	78.0	33.1	35.0	56.9

Appendix 1c: Site numbers and study sites.

Site number	Stream name	Site name
1	Bröl	Waldbröl
2	Dill	Dillenburg
3	Eder	Dodenau
4	Fulda	Mecklar
5	Fulda	Niederaula
6	Gartroper	Hünxe
7	Josbach	Josbach
8	Lahn	Cölbe
9	Lahn	Ludwigshütte
10	Lahn	Wallau
11	Nette	Weißenthurm
12	Nidda	Ilbenstadt
13	Nidda	Ranstadt
14	Nidda	Bad Vilbel
15	Nidder	Altenstadt
16	Nims	Birtlingen
17	Orke	Niederorke
18	Ruhr	Arnsberg
19	Rur	Jülich
20	Rur	Körrenzig
21	Rur	Millich
22	Schwalm	Brüggen
23	Ulster	Wenigentaft
24	Wurm	Frelenberg

Appendix 2a: Vegetation units in non-restored sections [%]. For site names, see appendix 2c.

Vegetation unit	Site number																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Aegopodion	19.7	0.0	25.8	0.0	0.0	0.0	0.0	14.2	13.0	30.8	21.1	0.0	0.0	0.0	0.0	0.0	19.3	40.0	22.1	0.0	15.1	3.4	0.0	22.8
Alno-Padion	70.8	62.5	6.3	0.0	0.0	50.0	0.0	36.6	50.7	62.5	32.5	0.0	0.0	0.0	0.0	100.0	42.1	0.0	0.0	0.0	0.0	79.9	40.0	0.0
Arrhenatherion - fragment community	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.2	56.0	18.5	1.7	0.0	35.1
Calystegion - fragment community	0.0	33.3	0.0	9.5	21.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Calystegion sepi	0.0	0.0	0.0	42.9	21.1	0.0	33.3	0.0	0.0	0.0	0.0	82.8	5.6	65.0	8.3	0.0	0.0	0.0	0.0	18.1	0.0	0.0	26.7	0.0
Carpinion	9.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phalaridion	0.0	0.0	13.5	0.0	0.0	0.0	33.3	8.1	0.0	0.0	0.0	0.0	16.7	0.0	16.7	0.0	13.6	24.4	0.0	0.0	14.3	0.0	0.0	0.0
Phragmiton Phragmites	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pruno-Rubion-fruticosi / Calystegion sepi - fragment community	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.3	0.0	0.0	0.0	0.0	0.0
Quercion	0.0	0.0	0.0	0.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ranunculon fluitantis	0.0	0.0	54.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.1	35.6	0.0	0.0	0.0	0.0	6.7	0.0
Ranunculon / Nymphaeion	0.0	0.0	0.0	0.0	15.8	0.0	0.0	0.0	0.0	0.0	4.4	17.2	55.6	20.0	62.5	0.0	0.0	0.0	0.0	0.0	0.0	8.2	0.0	42.1
Salicion albae	0.0	4.2	0.0	47.6	42.1	0.0	33.3	41.2	36.3	0.0	42.1	0.0	11.1	15.0	0.0	0.0	0.0	0.0	43.4	0.0	21.8	0.0	26.7	0.0
Salix-, Alnus-, Fraxinus-afforestation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.9	30.3	6.8	0.0	0.0

Appendix 2b: Vegetation units in restored sections [%]. For site names, see appendix 2c.

Vegetation unit	Site number																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Aegopodion	14.6	0.0	21.2	0.0	0.0	0.0	0.0	26.6	15.3	12.8	0.0	0.0	0.0	0.0	0.0	7.2	21.4	11.7	11.5	7.8	18.3	1.1	0.0	5.3
Agropyro-Rumicion	0.0	0.0	0.0	11.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.3	3.3	0.0	0.0	0.0	31.7
Alno-Padion	29.9	27.3	0.0	0.0	0.0	38.9	0.0	6.9	21.5	8.6	0.0	0.0	16.2	0.0	17.4	89.8	47.0	0.0	0.0	0.0	0.0	58.8	49.0	0.0
Arrhenatherion - fragment community	0.0	0.0	4.6	0.0	0.0	8.6	0.0	6.8	8.9	4.7	50.3	0.0	0.0	0.0	0.0	0.0	0.0	16.6	28.5	28.6	5.2	3.6	0.0	20.0
Bidenton - fragment community	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	7.0	0.0	0.0	0.0
Calthion	0.0	0.0	0.0	0.0	0.0	44.4	75.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	0.0	0.0
Calystegion - fragment community	0.0	45.5	0.0	14.0	11.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.1	0.0	8.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	49.0	0.0
Carpinion	43.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Calystegion sepi	0.0	0.0	0.0	2.3	11.1	0.0	0.0	0.0	0.0	0.0	0.0	56.5	10.8	78.0	0.0	0.0	0.0	0.0	0.0	0.0	5.2	0.0	0.0	0.0
Dauco-Melilotion	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	0.0	0.0	0.0	0.0	0.0	4.8
Fagion	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Glycerion Sparganium	0.0	0.0	0.0	0.0	33.3	0.0	0.0	0.0	0.0	0.0	0.0	43.5	24.3	12.2	47.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.0
Magnocaricion	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	0.0	0.0
Mixture of Sysimbriion-Chenopodium-Dauco-Melilotion on gravel bars	10.6	0.0	12.0	0.0	0.0	0.0	0.0	8.1	13.0	28.6	28.4	0.0	0.0	0.0	0.0	0.0	0.3	46.8	0.0	2.9	0.0	0.0	0.0	0.0
Nymphaeion	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.2
Phalaridion	0.0	0.0	7.6	27.1	0.0	0.0	0.0	34.8	28.1	18.9	0.0	0.0	5.4	0.0	0.0	0.0	8.0	14.1	11.3	10.8	5.8	0.0	0.0	5.3
Phragmiton Phragmites	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phragmiton Typha	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Potamogetonion	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.3	0.0	0.0
Potamogetonion-Glycerion - mixed communities	0.0	0.0	0.0	0.0	0.0	8.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ranunculon / Nymphaeion	0.0	0.0	0.0	0.0	0.0	0.0	8.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ranunculon fluitantis	0.0	0.0	38.5	26.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.2	10.7	0.0	0.0	0.0	0.0	2.0	0.0
Salicion albae	0.0	27.3	16.1	18.6	44.4	0.0	16.7	16.8	13.3	26.4	21.3	0.0	0.0	9.8	8.7	3.0	6.1	0.0	31.5	28.6	23.8	0.0	0.0	5.8
Salix-, Alnus-, Fraxinus-afforestation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.1	8.7	5.0	0.0	0.0
Sambuco-Salicion	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26.1	5.8	0.0	0.0
Sambuco-Salicion Betula	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.9	0.0	0.0
Tanacetum vulgare - community	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.8	0.0	0.0	0.0

Appendix 2c: Site numbers and study sites.

Site number	Stream name	Site name
1	Bröl	Waldbrol
2	Dill	Dillenburg
3	Eder	Dodenau
4	Fulda	Mecklar
5	Fulda	Niederaula
6	Gartroper	Hünxe
7	Josbach	Josbach
8	Lahn	Cölbe
9	Lahn	Ludwigshütte
10	Lahn	Wallau
11	Nette	Weißenthurm
12	Nidda	Ilbenstadt
13	Nidda	Ranstadt
14	Nidda	Bad Vilbel
15	Nidder	Altenstadt
16	Nims	Birtlingen
17	Orke	Niederorke
18	Ruhr	Arnsberg
19	Rur	Jülich
20	Rur	Körrenzig
21	Rur	Millich
22	Schwalm	Brüggen
23	Ulster	Wenigtaft
24	Wurm	Frelenberg

Appendix 2d: Recorded vegetation units and descriptions.

Vegetation unit	Description
Aegopodion	Nitrophilous stands dominated by <i>Urtica dioica</i> , <i>Aegopodium podagraria</i> or <i>Galium aparine</i>
Agropyro-Rumicion	Grassland in frequently flooded areas dominated by <i>Alopecurus geniculatus</i>
Alno-Padion	Most frequent floodplain-forests in low-mountain regions dominated or characterized by <i>Alnus glutinosa</i> (tree layer) and <i>Stellaria nemorum</i> in the herb layer
Arrhenatherion - fragment community	Mown (or grazed) grassland dominated or characterized by <i>Arrhenatherum elatius</i> and other meadow-species like <i>Trifolium pratense</i> , <i>T. repens</i> , <i>Alopecurus pratensis</i> or <i>Leucanthemum vulgare</i> , as well as species poor and degraded stands composed of <i>Arrhenatherum elatius</i> and a few other species (e.g. <i>Dactylis glomerata</i> , <i>Taraxacum officinalis</i> agg.) frequently abundant
Bidention – fragment community	Frequently species-rich stands dominated or characterized by <i>Bidens</i> , <i>Chenopodium</i> and <i>Atriplex</i> in early successional stages on river banks with prevailing fine sediments (silt, loam, clay)
Calthion	Moist, species poor grassland dominated by <i>Scirpus sylvaticus</i> (and <i>Juncus effusus</i>)
Calystegion - fragment community	Nitrophilous stands dominated by <i>Impatiens glandulifera</i>
Calystegion sepi	Nitrophilous stands dominated by <i>Calystegia sepium</i> , <i>Convolvulus</i> , <i>Galium aparine</i> (and <i>Urtica dioica</i>)
Carpinion	Forests characterized by <i>Carpinus</i> ssp. and <i>Quercus robur</i> in the tree layer, <i>Stellaria holostea</i> and <i>Poa nemoralis</i> in the herb layer
Dauco-Melilotion	Dry ruderal stands dominated or characterized by <i>Daucus carota</i> , <i>Melilotus</i> ssp. or <i>Echium vulgare</i>
Fagion	Forests dominated by <i>Fagus sylvatica</i>
Glycerion_Sparganium	Stands of <i>Sparganium</i> ssp. in running water bodies with low current
Magnocaricion	Stands of tall sedges like <i>Carex gracilis</i> , <i>C. acutiformis</i>
Mixture of Sysimbrion-Chenopodium-Dauco-Melilotion on gravel bars	Sparse vegetation on open gravel banks comprising a species-mixture from many different units, frequently characterized by predominantly dry-ruderals like <i>Daucus</i> , <i>Melilotus</i> , <i>Sisymbrium</i> , <i>Echium</i> or other ruderals like <i>Arctium</i> , <i>Saponaria</i> , <i>Alliaria</i>
Nymphaeion	Flooding stands of <i>Myriophyllum spicatum</i>
Phalaridion	Reeds of <i>Phalaris arundinacea</i>
Phragmition_Phragmites	Stands of <i>Phragmites australis</i>
Phragmition_Typha	Stands dominated by <i>Typha latifolia</i>

Appendix 2d (continued): Recorded vegetation units and descriptions.

Potamogetonion	Stands of floating species like <i>Nymphaea</i> , <i>Nuphar</i> , <i>Potamogetum</i> etc.
Potamogetonion-Glycerion - mixed communities	Stands built by <i>Glyceria fluitans</i> , <i>-plicata</i> , <i>-declinata</i> or dominated by <i>Potamogetum</i> -species in pools or in water bodies with low current
Pruno-Rubion-fruticosi / Calystegion sepi - fragment community	Shrub patches dominated or characterized by <i>Rubus fruticosus</i> agg. or <i>R. caesius</i>
Quercion	Woods and forest on acidous soils dominated by <i>Quercus petraea</i>
Ranunculion fluitantis	Flooding stands of <i>Ranunculus fluitans</i>
Ranunculion / Nymphaeion	Stands in pools or in water bodies with low current dominated or characterized by <i>Callitriche</i> ssp.
Salicion albae	Frequently flooded woods and forests dominated by <i>Salix alba</i> or <i>S. fragilis</i> (and hybrids), or floodplain-woods characterized by <i>Salix viminalis</i> , <i>S. cinerea</i> or <i>S. triandra</i>
Salix-, Alnus-, Fraxinus-afforestation	Embankement afforestations with <i>Salix</i> -, <i>Alnus</i> or <i>Fraxinus</i> -species (atypical or non-native species)
Sambuco-Salicion	Open woods in early successional stages dominated by <i>Sambucus</i> ssp., <i>Salix caprea</i> or <i>Betula pendula</i>
Sambuco-Salicion Betula	Wood and shrubland of early successional stages dominated by <i>Betula pendula</i>
Tanacetum vulgare - community	Stands dominated by <i>Tanacetum vulgare</i>

Appendix 3a (continued): Taxalists of floodplain vegetation in non-restored sections [habitat-weighted abundances per sample section]. For site names, see appendix 3c.

Taxonname	Site number																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
<i>Thlaspi arvense</i>	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Trifolium pratense</i>	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Trifolium repens</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	0.0	0.0	0.4	0.0
<i>Typha latifolia</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Urtica dioica</i>	15.9	67.8	72.9	174.1	70.7	1.0	115.0	151.6	97.6	64.1	268.8	134.1	87.8	289.0	50.7	85.0	147.9	61.9	167.0	166.1	119.1	30.9	128.9	100.4
<i>Valeriana excelsa</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Valeriana officinalis</i> agg.	17.6	0.0	0.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
<i>Verbascum nigrum</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	1.1	0.0	0.0	0.0
<i>Veronica chamaedrys</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
<i>Viburnum opulus</i>	7.1	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.1	0.0	0.0	0.0
<i>Vicia cracca</i>	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	3.6	0.0	0.5	0.0
<i>Vicia hirsuta</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.5	0.7	0.0	0.0	0.0
<i>Vicia sepium</i>	0.0	0.0	0.1	0.0	0.0	0.0	1.0	0.0	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.8	0.0	0.4	0.0	0.0	0.0
<i>Viola reichenbachiana</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Viola riviniana</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Appendix 3b (continued): Taxalists of floodplain vegetation in restored sections [habitat-weighted abundances per sample section]. For site names, see appendix 3c.

Taxonname	Site number																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
<i>Veronica arvensis</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.4	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0
<i>Veronica beccabunga</i>	0.0	0.0	0.0	0.5	0.0	0.0	27.4	0.0	0.6	0.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.5	0.4	1.0	0.0	4.9	35.2
<i>Veronica chamaedrys</i>	0.3	0.0	0.0	0.2	0.0	0.0	3.0	0.0	0.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Veronica montana</i>	1.3	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Veronica persica</i>	0.3	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Viburnum opulus</i>	0.0	0.0	0.0	0.0	0.0	9.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Vicia cracca</i>	0.0	0.0	0.0	1.1	0.0	0.0	1.8	0.4	0.3	0.2	0.0	0.0	0.6	2.0	0.0	0.0	0.4	0.0	2.5	0.0	0.0	0.0	0.0	0.0
<i>Vicia hirsuta</i>	0.0	0.0	0.0	0.0	0.0	3.9	0.0	0.3	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.5	0.0	0.0	1.4
<i>Vicia sativa</i>	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Vicia sepium</i>	0.0	0.0	0.0	0.0	0.0	0.0	2.2	0.2	0.1	0.6	0.0	0.0	0.0	0.0	1.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	9.8	0.0
<i>Vicia tetrasperma</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	0.0	0.0	0.0	0.0
<i>Vinca minor</i>	12.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Viola arvensis</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
<i>Viola riviniana</i>	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Vulpia myuros</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Appendix 3c: Site numbers and study sites.

Site number	Stream name	Site name
1	Bröl	Waldbröl
2	Dill	Dillenburg
3	Eder	Dodenau
4	Fulda	Mecklar
5	Fulda	Niederaula
6	Gartroper	Hünxe
7	Josbach	Josbach
8	Lahn	Cölbe
9	Lahn	Ludwigshütte
10	Lahn	Wallau
11	Nette	Weißenthurm
12	Nidda	Ilbenstadt
13	Nidda	Ranstadt
14	Nidda	Bad Vilbel
15	Nidder	Altenstadt
16	Nims	Birtlingen
17	Orke	Niederorke
18	Ruhr	Arnsberg
19	Rur	Jülich
20	Rur	Körrenzig
21	Rur	Millich
22	Schwalm	Brüggen
23	Ulster	Wenigentaft
24	Wurm	Frelenberg

Appendix 4b (continued): Habitat-weighted taxalists of carabid beetles in restored sections. For site names, see appendix 4c.

Taxonname	Site number																								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
<i>Notiophilus biguttatus</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	0.0	0.0	0.0
<i>Notiophilus palustris</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.6	0.0	0.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Omophron limbatum</i>	0.0	0.0	0.0	0.0	71.6	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.5	0.0
<i>Ophonus laticollis</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Oxypselaphus obscurus</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.5	0.0	0.0	0.0	0.0	0.0	0.0	52.8	0.0	16.6	0.0	0.0
<i>Panagaeus cruxmajor</i>	0.0	0.0	0.0	0.0	0.0	95.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Paranchus albipes</i>	0.0	45.6	23.4	0.0	5.3	0.0	0.0	59.4	0.0	22.6	4.7	0.0	0.0	39.8	0.0	57.9	259.4	19.2	32.5	2.0	7.7	0.0	9.3	0.0	0.0
<i>Paratachys bistriatus</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Patrobus atrofufus</i>	0.0	0.0	0.0	0.0	27.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.5	0.0	0.0
<i>Poecilus cupreus</i>	0.0	0.0	9.4	0.0	0.0	0.0	0.0	0.0	10.5	19.5	0.0	80.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	0.0	0.0	0.0	0.0
<i>Poecilus versicolor</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	62.9	19.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	0.0	0.0	0.0	0.0	0.0
<i>Pterostichus anthracinus</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.8	36.2	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0
<i>Pterostichus melanarius</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.5	19.5	0.0	10.0	7.1	0.0	9.7	9.0	1.6	0.0	0.0	5.2	2.7	144.4	0.0	0.0	0.0
<i>Pterostichus niger</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Pterostichus nigrata</i>	0.0	1.8	4.7	0.0	2.7	1.2	6.4	3.2	47.3	16.2	0.0	0.0	0.0	0.0	0.0	0.0	45.1	0.0	0.0	2.0	0.0	16.6	0.7	0.0	0.0
<i>Pterostichus oblongopunctatus</i>	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Pterostichus strenuus</i>	0.0	7.1	0.0	0.0	0.0	0.0	0.0	0.0	10.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Pterostichus vernalis</i>	0.0	0.0	70.7	0.0	8.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	36.2	0.0	3.6	0.0	0.0	0.0	0.0	0.0	0.0
<i>Stenolophus teutomus</i>	0.0	0.0	0.0	1.1	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Stomis pumicatus</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	0.0	0.0	0.0	0.0	0.0
<i>Syntomus foveatus</i>	0.0	0.0	0.0	0.0	0.0	95.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Syntomus truncatellus</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	0.0	0.0	0.0	0.0
<i>Trechus obtusus</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Trechus sp.</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Appendix 4c: Site numbers and study sites.

Site number	Stream name	Site name
1	Bröl	Waldbröl
2	Dill	Dillenburg
3	Eder	Dodenau
4	Fulda	Mecklar
5	Fulda	Niederaula
6	Gartroper	Hünxe
7	Josbach	Josbach
8	Lahn	Cölbe
9	Lahn	Ludwigshütte
10	Lahn	Wallau
11	Nette	Weißenthurm
12	Nidda	Ilbenstadt
13	Nidda	Ranstadt
14	Nidda	Bad Vilbel
15	Nidder	Altenstadt
16	Nims	Birtlingen
17	Orke	Niederorke
18	Ruhr	Arnsberg
19	Rur	Jülich
20	Rur	Körrenzig
21	Rur	Millich
22	Schwalm	Brüggen
23	Ulster	Wenigentaft
24	Wurm	Frelenberg

Appendix 5a: Aquatic mesohabitats in restored sections of the Ruhr river [%].

Samples are quoted with the sample code 'sample section_year of investigation'.

Aquatic mesohabitat	Samples																					
	N1_2009	N1_2010	N1_2011	N1_2012	Y1_2008	Y1_2009	Y1_2010	Y1_2011	Y1_2012	Y2_2009	Y2_2010	Y2_2011	Y2_2012	Y3_2010	Y3_2011	Y3_2012	N2_2009	N2_2010	N2_2011	O1_2009	O1_2010	O1_2011
Main channel	100	100	100	100	77.8	89.5	88.9	87.9	89.6	53.6	51.7	46.9	52.4	56.2	74.2	71.8	100	100	100	74.7	74.2	73.7
Secondary channel	0	0	0	0	6.1	1.5	1.6	3.2	4.6	46.4	48.3	47.7	46.2	41.4	25.2	27.3	0	0	0	22.7	24.9	23.7
Connected sidearm	0	0	0	0	4.4	6.9	4.4	3.2	0	0	0	4.2	0.9	0.7	0	0.9	0	0	0	1.7	0	0
Disconnected sidearm	0	0	0	0	5.9	0	2.3	4.9	5.8	0	0	0	0	0	0	0	0	0	0	0	0	0
Permanent standing water body	0	0	0	0	0	0	0	0	0	0	0	1.2	0.5	1.7	0.6	0	0	0	0	0.9	0.9	2.1
Temporary standing water body	0	0	0	0	5.7	2.1	2.9	0.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5

Appendix 5b: Aquatic microhabitats in restored sections of the Ruhr river [%].

Samples are quoted with the sample code 'sample section_year of investigation'.

Aquatic microhabitat	Samples																					
	N1_2009	N1_2010	N1_2011	N1_2012	Y1_2008	Y1_2009	Y1_2010	Y1_2011	Y1_2012	Y2_2009	Y2_2010	Y2_2011	Y2_2012	Y3_2010	Y3_2011	Y3_2012	N2_2009	N2_2010	N2_2011	O1_2009	O1_2010	O1_2011
Technolithal	19.0	16.0	17.0	22.0	17.0	7.0	13.0	8.0	15.0	4.0	0.0	3.0	7.0	0.0	0.0	1.0	15.0	22.0	24.0	14.0	13.0	8.0
Mesolithal	77.0	81.0	66.0	64.0	74.0	81.0	70.0	77.0	71.0	63.0	65.0	72.0	60.0	78.0	79.0	63.0	81.0	65.0	58.0	64.0	63.0	67.0
Microlithal	0.0	3.0	0.0	2.0	4.0	9.0	15.0	0.0	8.0	23.0	19.0	0.0	9.0	17.0	2.0	5.0	1.0	13.0	1.0	7.0	19.0	10.0
Akal	0.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	1.0	0.0	0.0
Psammal	4.0	0.0	9.0	3.0	5.0	0.0	1.0	3.0	1.0	1.0	2.0	1.0	2.0	0.0	1.0	4.0	3.0	0.0	4.0	5.0	1.0	4.0
Argyllal	0.0	0.0	0.0	3.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	8.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
CPOM	0.0	0.0	0.0	3.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0
FPOM	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	8.0	14.0	1.0	2.0	3.0	1.0	0.0	0.0	0.0	2.0	4.0	4.0	5.0
LPTP	0.0	0.0	0.0	3.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	10.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
Submerged macrophytes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	10.0	0.0	1.0	22.0	0.0	0.0	2.0	1.0	0.0	2.0
Xylal	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	1.0	0.0	0.0
Algae	0.0	0.0	4.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0	3.0	0.0	0.0	15.0	0.0	0.0	0.0	9.0	0.0	0.0	4.0

Appendix 5c: Riparian mesohabitats in restored sections of the Ruhr river [%].

Samples are quoted with the sample code 'sample section_year of investigation'.

Riparian mesohabitat	Samples																						
	N1_2009	N1_2010	N1_2011	N1_2012	Y1_2008	Y1_2009	Y1_2010	Y1_2011	Y1_2012	Y2_2009	Y2_2010	Y2_2011	Y2_2012	Y3_2010	Y3_2011	Y3_2012	N2_2009	N2_2010	N2_2011	O1_2008	O1_2009	O1_2010	O1_2011
Artificial embankment	13.8	17.4	16.7	3.3	1.2	2.3	2.1	0.6	1.5	1	0.7	0.8	0.6	0	0	0	30.3	24.8	19.5	2.3	2.4	2.5	1.7
Herbaceous bank	29.5	43.5	24.4	26.9	27.7	23.8	32.5	26.8	19.4	18.1	15.3	19.5	13.1	7.7	48.6	33.7	0	5.8	25.1	2.2	8.4	6.2	15.2
Woody bank	15.9	7.1	22.1	2.1	2.6	1.1	0.8	9.5	11	0	0	0	0.8	6.4	6.5	15.4	3.1	0	14.2	0.0	0.3	0.4	3
Herbaceous embankment	9.5	14.9	16.3	40.9	23.1	18.1	22.6	11.1	11.9	20.5	22.6	6.7	13.7	6.2	11	21.4	44.5	43.3	31.2	2.4	2.3	3.1	3.6
Woody embankment	19.9	13.2	17.9	24.1	4	2.7	4.1	2.5	4.8	3.5	2.6	3.5	6.3	1.9	3.5	0	22.1	26.1	9	3.7	4.1	4.7	2.7
Floodplain	0	0	0	0	0	11.6	12.1	6.6	5.9	2.6	1.9	0.5	8.1	1.2	0.9	1.8	0	0	0	0.0	1.2	1.9	3
Herbaceous island	0	0	0	0	14.4	15.3	8.7	1.7	6.1	45.9	40.5	42.1	37.3	12.5	9.2	11.9	0	0	0	82.0	80.9	73.2	47.2
Woody island	0	0	0	0	8.4	3.9	4.6	9.2	7.5	2.4	1.6	4.2	4.2	0	2	1.4	0	0	0	0.0	0	5.1	8.1
Bar	11.3	2.4	2.3	2.7	15.7	20.4	10.1	31.0	30.6	4.2	9.6	15.7	10.2	64.0	16.3	14.0	0.0	0.0	0.0	6.3	0.4	1.4	14.3
Eroding cliff	0	1.5	0.2	0	2.8	0.9	2.5	1	1.5	1.8	5.2	7.1	5.7	0	2.1	0.4	0	0	1.1	1.0	0.1	1.6	1.2

Appendix 5d: Riparian microhabitats in restored sections of the Ruhr river [%].

Samples are quoted with the sample code 'sample section_year of investigation'.

Riparian microhabitat	Samples																						
	N1_2009	N1_2010	N1_2011	N1_2012	Y1_2008	Y1_2009	Y1_2010	Y1_2011	Y1_2012	Y2_2009	Y2_2010	Y2_2011	Y2_2012	Y3_2010	Y3_2011	Y3_2012	N2_2009	N2_2010	N2_2011	O1_2008	O1_2009	O1_2010	O1_2011
Technolithal	10.8	17.4	19.5	6.1	4.3	3	4.8	6.1	3.3	1.2	2.3	1.7	1.7	0	0	0	30.3	24.8	23.2	2.5	2.4	2.8	1.7
Mesolithal	15.8	14.5	7.8	2.4	60.1	56.4	72.2	61	55.7	60.2	63.2	70.6	56.3	84.1	84.8	56.7	0	10.8	0	27.2	26.2	28.0	42.9
Mikrolithal	0.8	0	0	0	15.2	13.9	4.7	8.6	5.2	4.2	3.6	1.6	7.7	4	4.4	5.6	0	0	0	1.6	1.4	3.5	7.5
Akal	0	0	0	4.7	1.8	2.3	0.4	0.3	0	0	0.2	0	0	0.8	1.1	0	0	0	0	0	0	0	0
Psammal	0	0.5	8.2	8.1	2.2	2.7	3.5	11.3	5.1	0	0	1.6	4.3	1.3	0	1.8	0	0	0	0.9	0	1.4	22.6
Argyllal	72.6	67.6	64.5	78.6	13.2	16.2	14.2	12.7	28.6	31.8	26.8	24.4	29.7	8	8.2	33.6	69.7	64.4	75.9	66.8	68.8	62.5	23.9
CPOM	0	0	0	0	0	0	0	0	1.8	0	0	0	0.3	0	0	0.9	0	0	0	0	0	0.0	0
FPOM	0	0	0	0	3.2	5.5	0.2	0	0.1	2.6	3.9	0	0	1.4	0.9	1	0	0	0	1	1.2	1.9	1.4
Xylal	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3	0.6	0.3	0	0	0.9	0	0	0	0

Appendix 6c (continued): Taxalists of aquatic macrophytes in the Ruhr river sections [abundance class according to Kohler].

Samples are quoted with the sample code 'sample section_year of investigation'. Descriptions of growth forms in Appendix 6d.

Taxonname	Growth form	Samples																				
		N1 2009	N1 2010	N1 2011	N1 2012	Y1 2009	Y1 2010	Y1 2011	Y1 2012	Y2 2009	Y2 2010	Y2 2011	Y2 2012	Y3 2010	Y3 2011	Y3 2012	N2 2009	N2 2010	N2 2011	O1 2009	O1 2010	O1 2011
<i>Persicaria amphibia</i>	Nymphaeids	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
<i>Persicaria hydropiper</i>	Helodids	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	0	0	0	1	0	0
<i>Phalaris arundinacea</i>	Helodids	0	2	1	2	2	2	1	2	2	2	2	2	2	2	2	0	0	0	2	2	2
<i>Platylhyssidium riparioides</i>	Haptophytes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
<i>Potamogeton bertholdii</i>	Parvopotamids	0	0	0	0	0	0	1	2	0	0	0	2	0	0	2	0	0	0	0	0	0
<i>Potamogeton crispus</i>	Parvopotamids	0	0	0	0	1	0	2	2	0	0	0	2	2	0	2	0	0	0	0	0	0
<i>Potamogeton pusillus</i>	Parvopotamids	0	0	0	0	0	0	0	0	1	2	1	0	2	0	0	0	0	0	0	1	0
<i>Ranunculus fluitans</i>	Myriophyllids	2	2	1	2	3	3	1	2	2	3	3	3	3	3	4	2	3	2	3	3	2
<i>Rorippa amphibia</i>	Helodids	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
<i>Rorippa palustris</i>	Helodids	0	0	0	0	2	1	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0
<i>Sparganium emersum</i>	Vallisnerids	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
<i>Spirodela polyrrhiza</i>	Lemnids	0	0	0	0	0	1	0	0	0	0	0	2	0	0	2	0	0	0	0	1	0
<i>Typha angustifolia</i>	Helodids	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Veronica beccabunga</i>	Helodids	0	0	0	0	2	0	1	1	1	1	1	2	1	1	2	0	0	0	1	1	0
<i>Elodea canadensis</i>	Elodeids	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0

Appendix 6d: Classification of macrophytes according to their growth forms (modified after Lorenz et al., 2012)

Growth form	Definition
Elodeids	Submerged plants with whorled stems
Haptophytes	Mosses, red and green algae, lichen
Helodids	Emergent plants, mainly Helophytes
Isoetids	Submerged plants (and filamentous algae) with short shoots/stems and a rosette of stiff radical leaves
Lemnids	Free-floating plants with small leaf-like thalli
Myriophyllids	Submerged plants with leafs at stem, feather-like leafs
Nymphaeids	Plants with longly petiolated floating leaves
Parvopotamids	Entirely submerged plants with linear to oblong leaves
Peplids	Plants with oblong and spatulate leaves, the upper ones forming floating rosettes
Vallisnerids	Submerged plants with a short stem and a rosette or bundle of long, linear, floating leaves, rooted in the soil

Appendix 7b: Taxalists of floodplain vegetation in the Ruhr river sections [habitat-weighted abundances per sample section].

Samples are quoted with the sample code 'sample section_year of investigation'.

Taxonname	Samples																
	N1 2009	N1 2010	N1 2011	Y1 2009	Y1 2010	Y1 2011	Y2 2009	Y2 2010	Y2 2011	Y3 2010	Y3 2011	N2 2009	N2 2010	N2 2011	O1 2009	O1 2010	O1 2011
<i>Acer campestre</i>	1.6	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	0.0	0.0	0.0
<i>Acer pseudoplatanus</i>	21.3	17.5	19.6	22.6	11.6	46.6	0.0	0.0	0.0	8.3	8.3	0.0	0.0	0.0	0.0	0.0	0.0
<i>Achillea millefolium</i>	0.0	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.0	0.0
<i>Aegopodium podagraria</i>	7.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.6	6.0	0.0	0.0	0.0	0.0
<i>Ajuga reptans</i>	0.0	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Alliaria petiolata</i>	39.5	0.4	3.0	0.0	3.6	6.5	0.0	1.3	1.1	0.0	0.0	3.9	0.0	4.0	0.0	1.6	1.6
<i>Alnus glutinosa</i>	90.8	66.1	70.8	13.3	60.8	62.7	0.0	6.2	2.5	4.2	7.0	0.0	0.0	0.0	6.2	7.6	17.3
<i>Alopecurus pratensis</i>	0.0	0.0	0.0	4.6	0.0	0.0	0.0	8.5	8.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Anthriscus sylvestris</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.8	0.7	0.7	3.9	0.0	0.0	1.8	0.0	0.0
<i>Arabis turrata</i>	0.0	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Arrhenatherum elatius</i>	0.0	0.0	0.0	0.9	8.7	0.0	3.4	17.5	24.0	0.0	0.7	4.9	4.0	4.0	2.2	7.5	7.5
<i>Artemisia vulgaris</i>	0.0	1.7	1.9	18.1	10.4	0.0	2.1	0.9	1.1	4.6	12.5	0.0	0.0	0.0	55.6	13.2	19.6
<i>Arum maculatum</i>	3.6	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Barbarea vulgaris</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	1.9	1.9
<i>Bromus sterilis</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	3.5	3.5
<i>Calystegia sepium</i>	0.2	1.4	1.2	0.0	0.0	0.0	9.0	1.4	2.9	0.7	0.7	6.4	16.0	12.0	3.6	11.3	21.0
<i>Capsella bursa-pastoris</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	0.0	0.0	0.0	0.0	0.0	0.0
<i>Chaerophyllum bulbosum</i>	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Chamomilla recutita</i>	0.0	0.0	0.0	14.1	0.0	0.0	0.0	0.0	0.0	0.0	2.6	0.0	0.0	0.0	0.0	0.0	0.0
<i>Chamomilla suaveolens</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0
<i>Chenopodium album</i>	0.0	1.4	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Chenopodium polyspermum</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	1.9
<i>Cirsium arvense</i>	0.0	0.0	0.0	0.9	1.7	0.0	1.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	1.9	2.1
<i>Cirsium palustre</i>	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Cirsium vulgare</i>	0.0	0.0	0.0	1.8	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.4	0.0	0.0
<i>Conium maculatum</i>	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Crataegus cf. monogyna</i>	1.6	1.7	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0
<i>Crepis biennis</i>	0.0	0.0	0.0	2.7	5.2	0.0	0.0	1.5	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Crucifata laevipes</i>	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Dactylis glomerata</i>	0.0	1.4	3.1	8.6	5.2	0.0	73.6	22.6	25.0	0.7	1.4	6.0	4.0	2.0	2.2	4.1	3.5
<i>Deschampsia cespitosa</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
<i>Dipsacus fullonum</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.0	0.0
<i>Elymus repens</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0
<i>Epilobium angustifolium</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.4	0.0	0.0
<i>Epilobium cf. tetragonum</i>	0.0	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0
<i>Epilobium hirsutum</i>	2.0	8.6	9.2	0.0	1.7	0.0	1.7	0.7	1.0	3.9	3.9	0.0	0.0	0.0	15.8	3.7	12.1
<i>Epilobium montanum</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.8	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Equisetum arvense</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8	0.0	0.0
<i>Erigeron annuus</i>	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0
<i>Euphorbia spec.</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	1.6	0.0
<i>Fagus sylvatica</i>	39.5	50.8	51.9	0.0	2.6	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Festuca gigantea</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.4	0.0	0.0	1.8	0.0	0.0
<i>Festuca pratensis</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0
<i>Filipendula ulmaria</i>	4.7	0.0	3.8	0.2	1.7	0.0	3.4	4.7	6.1	0.0	0.0	6.4	8.0	24.0	0.0	0.0	0.0
<i>Fragaria vesca</i>	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Fraxinus excelsior</i>	87.0	70.6	78.9	3.4	7.2	68.5	0.0	0.0	0.0	4.2	4.2	21.4	30.0	20.0	1.8	1.8	1.8
<i>Galium aparine</i>	47.4	24.3	26.3	0.9	1.7	2.7	1.1	0.0	4.1	2.1	4.8	20.1	70.0	30.0	4.6	8.7	11.9
<i>Galium mollugo</i>	0.0	0.0	0.0	0.9	1.7	0.0	0.0	6.0	1.8	0.0	0.0	0.0	0.0	0.0	3.6	3.5	3.5
<i>Galium palustre</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.0	0.0
<i>Galium verum</i>	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0
<i>Geranium molle</i>	0.0	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0
<i>Geranium robertianum</i>	5.5	1.4	1.2	0.0	2.0	0.3	1.1	0.0	0.0	0.0	0.0	0.0	0.0	6.0	1.8	1.6	1.7
<i>Geum urbanum</i>	37.7	27.7	27.7	0.0	0.5	3.0	0.0	0.0	0.0	2.1	2.1	4.9	4.0	2.0	0.0	1.6	1.6
<i>Glechoma hederacea</i>	12.6	27.3	27.4	0.9	3.3	17.7	1.0	3.6	4.8	0.0	0.0	0.0	6.0	4.0	9.0	7.4	7.6
<i>Heracleum mantegazzianum</i>	1.9	0.0	0.0	10.2	3.5	0.0	3.7	2.4	2.5	0.7	1.4	3.9	6.0	2.0	34.4	173.3	105.2
<i>Heracleum sphondylium</i>	0.0	0.0	0.0	0.0	0.0	0.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0
<i>Hesperis matronalis</i>	5.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5	3.5
<i>Holcus lanatus</i>	0.0	0.0	0.0	14.6	5.2	0.0	15.0	19.3	18.1	7.2	4.6	0.0	0.0	30.0	0.4	2.9	2.9
<i>Humulus lupulus</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.9	2.0	0.0	0.0	0.0	0.0
<i>Hypericum hirsutum</i>	0.0	0.0	0.0	3.7	3.5	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0	1.8	0.0	0.0

Appendix 7b (continued): Taxalists of floodplain vegetation in the Ruhr river sections [habitat-weighted abundances per sample section].

Samples are quoted with the sample code 'sample section_year of investigation'.

Taxonname	Samples																
	N1 2009	N1 2010	N1 2011	Y1 2009	Y1 2010	Y1 2011	Y2 2009	Y2 2010	Y2 2011	Y3 2010	Y3 2011	N2 2009	N2 2010	N2 2011	O1 2009	O1 2010	O1 2011
<i>Impatiens glandulifera</i>	6.1	5.2	14.0	4.1	8.9	37.1	19.0	23.2	25.9	11.4	16.8	88.9	60.0	12.0	56.2	26.6	50.9
<i>Iris pseudacorus</i>	0.0	0.0	0.0	0.0	0.0	0.0	26.3	15.6	14.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Juncus effusus</i>	0.0	0.0	0.0	2.3	0.0	0.0	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Lamium album</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.0	0.0	1.3	0.0	0.0	2.0	0.0	3.9	3.9
<i>Lamium maculatum</i>	34.3	1.7	1.9	0.0	1.7	0.0	0.0	0.0	0.0	0.0	2.0	0.0	2.0	4.0	0.0	1.6	3.7
<i>Lamium purpureum</i>	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.7	0.7	3.9	0.0	0.0	0.0	0.0	0.0
<i>Lapsana communis</i>	0.0	0.0	0.0	6.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.0	0.0
<i>Lathyrus pratensis</i>	0.0	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Linaria vulgaris</i>	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Lolium multiflorum</i>	0.0	0.0	0.0	1.8	12.2	0.0	0.0	17.3	15.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Lolium perenne</i>	0.0	0.0	0.0	0.0	0.0	0.0	62.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Lotus corniculatus</i>	0.0	0.0	0.0	0.9	3.5	0.0	3.4	8.0	7.6	0.0	2.6	0.0	0.0	0.0	0.0	0.0	0.0
<i>Lythrum salicaria</i>	0.0	0.0	0.0	0.9	0.0	0.0	1.1	2.2	4.1	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0
<i>Matricaria maritima</i>	0.0	0.0	0.0	0.0	3.5	0.0	0.0	1.5	1.4	3.9	3.9	0.0	0.0	0.0	1.8	0.0	0.0
<i>Melica uniflora</i>	2.0	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Melilotus officinalis</i>	0.0	0.0	0.0	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Mentha aquatica</i>	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Moehringia trinerva</i>	0.0	1.4	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Myosotis arvensis</i>	0.0	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2
<i>Myosotis palustris</i>	0.0	0.0	0.0	2.7	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.2	2.5
<i>Myosoton aquaticum</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	0.0	0.0	0.0	0.0
<i>Nasturtium officinale</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0
<i>Papaver ct. rhoeas</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0
<i>Phalaris arundinacea</i>	17.9	11.9	8.6	102.9	69.8	13.6	68.1	37.5	43.6	0.0	8.5	6.0	22.0	20.0	198.1	47.7	65.8
<i>Pheum pratense</i>	0.0	0.0	0.0	0.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0	1.0	0.2	0.0
<i>Phragmites australis</i>	0.0	0.0	0.0	0.0	0.0	0.0	5.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Plantago intermedia</i>	0.0	0.4	0.0	2.9	0.0	0.0	1.0	1.9	2.3	2.6	2.6	0.0	0.0	0.0	0.0	0.0	1.6
<i>Plantago lanceolata</i>	0.0	0.0	0.4	2.7	5.2	2.7	6.4	2.3	5.0	1.3	2.6	0.0	0.0	0.0	0.0	0.0	1.9
<i>Poa annua</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	6.0	0.0	0.0	0.0
<i>Poa nemoralis</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0
<i>Poa pratensis</i>	0.0	0.0	1.9	0.0	0.0	2.7	15.0	30.4	24.5	1.3	3.3	0.0	0.0	0.0	0.0	1.8	1.9
<i>Poa trivialis</i>	0.0	0.0	0.0	4.6	15.7	0.0	0.0	29.5	20.2	3.3	2.6	6.0	14.0	8.0	3.8	2.5	1.4
<i>Polygonum lapathifolium</i>	0.0	0.0	0.0	2.9	0.0	0.0	1.7	0.0	0.0	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0
<i>Quercus robur</i>	9.9	2.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Ranunculus fluitans</i>	0.0	0.0	0.0	1.8	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	0.0	0.0	0.0
<i>Ranunculus repens</i>	0.0	0.0	0.0	8.2	3.5	2.7	1.1	1.5	3.1	2.6	3.9	0.0	0.0	0.0	0.0	0.0	0.0
<i>Reynoutria japonica</i>	114.9	89.3	102.3	0.0	1.7	8.2	0.0	0.0	4.8	102.0	136.5	92.1	10.0	0.0	10.8	19.6	37.2
<i>Rorippa palustris</i>	0.0	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	1.3	1.3	0.0	0.0	0.0	1.8	1.9	1.9
<i>Rorippa sylvestris</i>	0.0	0.0	0.0	1.4	0.0	0.0	3.4	0.0	0.0	0.0	1.3	0.0	0.0	0.0	1.8	3.9	3.9
<i>Rubus caesius</i>	0.0	31.0	25.0	0.0	0.3	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	3.5	3.5
<i>Rubus fruticosus agg.</i>	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	3.6	0.0	0.0
<i>Rumex acetosella</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	2.6	0.0	0.0	10.0	0.0	0.0	0.0
<i>Rumex obtusifolius</i>	0.3	3.4	3.8	24.4	5.2	2.7	6.3	3.9	7.0	1.3	4.6	3.9	2.0	0.0	5.4	4.0	4.0
<i>Salix fragilis</i>	98.7	85.2	96.0	0.0	15.7	24.0	28.6	33.6	35.5	17.6	21.0	14.6	22.0	22.0	17.9	17.8	19.7
<i>Saponaria officinalis</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0	3.6	0.0	0.0
<i>Scirpus sylvaticus</i>	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Scrophularia nodosa</i>	0.0	0.0	0.0	9.1	4.0	3.3	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0	1.8	3.5	3.5
<i>Scutellaria galericulata</i>	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Silene alba</i>	0.0	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Silene dioica</i>	3.9	3.1	3.1	4.6	1.7	2.7	1.1	0.7	1.8	4.1	4.7	3.9	4.0	2.0	5.4	1.8	1.8
<i>Solidago canadensis</i>	0.0	0.0	0.0	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Stellaria media</i>	0.0	0.0	1.9	0.0	0.0	0.0	0.0	2.2	1.4	2.6	2.6	0.0	0.0	0.0	0.0	2.1	1.9
<i>Stellaria nemorum</i>	0.0	1.4	1.2	21.1	1.7	0.0	1.7	0.4	0.0	0.0	0.0	0.0	0.0	0.0	7.4	0.0	0.0
<i>Stellaria uliginosa</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.0	0.0
<i>Symphytum officinalis</i>	2.3	6.5	9.4	10.7	5.2	13.6	20.7	41.2	75.8	6.3	19.4	62.1	180.0	160.0	14.4	37.3	55.7
<i>Tanacetum vulgare</i>	0.0	0.0	0.0	0.0	3.5	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	1.8	3.5	3.5
<i>Taraxacum officinale agg.</i>	0.0	0.4	1.1	6.6	3.5	0.0	6.4	1.5	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Trifolium arvense</i>	0.0	0.0	0.0	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Trifolium dubium</i>	0.0	0.0	0.0	4.6	5.2	2.7	0.0	2.2	2.2	1.3	2.6	0.0	0.0	0.0	0.0	0.0	0.0
<i>Trifolium hybridum</i>	0.0	0.0	0.0	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	80.0	0.0	0.0	0.0

Appendix 7b (continued): Taxalists of floodplain vegetation in the Ruhr river sections [habitat-weighted abundances per sample section].

Samples are quoted with the sample code 'sample section_year of investigation'.

Taxonname	Samples																
	N1 2009	N1 2010	N1 2011	Y1 2009	Y1 2010	Y1 2011	Y2 2009	Y2 2010	Y2 2011	Y3 2010	Y3 2011	N2 2009	N2 2010	N2 2011	O1 2009	O1 2010	O1 2011
<i>Trifolium pratense</i>	0.0	0.0	0.0	3.7	5.2	2.7	1.0	1.5	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Trifolium repens</i>	0.0	0.0	0.0	29.3	8.7	0.0	68.6	13.9	7.4	2.6	3.9	0.0	0.0	0.0	1.8	0.0	0.0
<i>Urtica dioica</i>	28.3	31.3	36.9	5.9	10.0	45.3	10.6	3.7	6.5	6.2	16.5	211.1	150.0	70.0	52.3	60.2	93.5
<i>Verbascum densiflorum</i>	0.0	0.0	0.0	1.8	0.0	0.0	0.0	0.0	0.0	1.3	2.6	0.0	0.0	0.0	1.8	0.0	0.0
<i>Verbascum thapsus</i>	0.0	0.0	0.0	3.7	1.7	0.0	0.0	0.0	0.0	3.9	3.9	0.0	0.0	0.0	1.8	1.6	1.6
<i>Vicia cracca</i>	0.2	1.4	1.2	0.0	1.7	0.0	0.0	2.2	2.2	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0
<i>Vicia hirsuta</i>	0.0	0.0	0.0	0.9	1.7	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Vicia sepium</i>	0.0	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	1.9	1.9

Appendix 8a: Floodplain mesohabitats in the Lahn river sections [%].

Samples are quoted with the sample code 'sample section_status_year of investigation'. Sample sections: Co = Cölbe, Lu = Ludwigshütte, Wa = Wallau; status: nr = non-restored, re = restored.

Recorded mesohabitat	Mesohabitat name in analyses	Sample											
		Co_nr_05	Co_nr_09	Co_re_05	Co_re_09	Lu_nr_05	Lu_nr_09	Lu_re_05	Lu_re_09	Wa_nr_05	Wa_nr_09	Wa_re_05	Wa_re_09
Main channel	Main channel	59.5	59.3	20.5	21.5	61.6	63.4	14.7	17.0	65.7	66.9	16.8	21.7
Connected sidearm	Connected sidearm	0.0	0.0	1.7	0.7	0.0	0.0	2.2	1.0	0.0	0.0	5.3	0.0
Permanent standing water body	Standing water body and disconnected sidearm	0.0	0.0	0.3	1.0	0.0	0.0	4.8	1.1	0.0	0.0	0.0	0.0
Temporary standing water body		0.0	0.0	0.0	0.2	0.0	0.0	0.5	0.0	0.0	0.0	0.2	0.0
Disconnected sidearm		0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.5	0.0	0.0	0.0	0.7
Secondary channel	Secondary channel	0.0	0.0	20.8	9.7	0.0	0.0	9.9	0.0	0.0	0.0	7.6	13.1
Embankment	Embankment and bank	35.5	30.5	9.1	7.1	37.6	36.0	10.4	5.3	31.2	27.4	17.8	3.6
Bank		0.0	6.9	0.0	14.2	0.0	0.6	0.0	22.3	0.0	4.9	0.0	14.9
Floodplain area	Moist floodprone area	0.0	0.0	12.9	1.5	0.0	0.0	17.9	21.1	0.0	0.0	2.3	5.1
Vegetated island	Vegetated island	0.0	0.0	21.1	37.0	0.0	0.0	35.6	20.3	0.0	0.0	28.6	36.0
Unvegetated bar	Unvegetated bar	5.0	3.3	13.5	7.3	0.7	0.0	4.1	1.5	3.0	0.7	21.4	4.9

Appendix 8b: Aquatic microhabitats in the Lahn river sections [%]. Samples are quoted with the sample code 'sample section_status_year of investigation'.

Samples are quoted with the sample code 'sample section_status_year of investigation'. Sample sections: Co = Cölbe, Lu = Ludwigshütte, Wa = Wallau; status: nr = non-restored, re = restored.

Recorded microhabitat	Microhabitat name in analyses	Samples											
		Co_nr_05	Co_nr_09	Co_re_05	Co_re_09	Lu_nr_05	Lu_nr_09	Lu_re_05	Lu_re_09	Wa_nr_05	Wa_nr_09	Wa_re_05	Wa_re_09
Macro-/Technolithal	Cobbles and coarse gravel	11.0	8.0	5.0	5.0	16.0	37.0	2.0	8.0	21.0	12.0	14.0	14.0
Mesolithal		74.0	83.0	44.0	52.0	80.0	58.0	45.0	66.0	72.0	86.0	43.0	59.0
Mikrolithal		7.0	1.0	29.0	14.0	2.0	3.0	27.0	6.0	2.0	1.0	19.0	12.0
Psammal	Finer mineral sediments	2.0	0.0	2.0	1.0	2.0	0.0	2.0	0.0	0.0	0.0	8.0	3.0
Pelal		0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	0.0	1.0
Akal		1.0	0.0	3.0	6.0	0.0	2.0	4.0	12.0	0.0	0.0	6.0	8.0
Argyllal		1.0	0.0	10.0	8.0	0.0	0.0	5.0	0.0	1.0	0.0	2.0	0.0
CPOM		0.0	0.0	3.0	2.0	0.0	0.0	4.0	0.0	0.0	0.0	2.0	2.0
FPOM	Organic substrates	1.0	3.0	2.0	3.0	0.0	0.0	5.0	4.0	3.0	1.0	1.0	0.0
Living parts of terrestrial plants	Floating riparian vegetation	3.0	5.0	0.0	5.0	0.0	0.0	2.0	0.0	1.0	0.0	4.0	1.0
Submerse macrophytes	Submerse macrophytes	0.0	0.0	1.0	2.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
Xylal	Tree trunks and dead wood	0.0	0.0	1.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	1.0	0.0

Appendix 9a: Taxalists of benthic invertebrates in the Lahn river sections [individuals per m²].

Samples are quoted with the sample code 'sample section status year of investigation'. Sample sections: Co = Cölbe, Lu = Ludwigshütte, Wa = Wallau; status: nr = non-restored, re = restored.

Taxonname	Samples											
	Co nr 05	Co re 05	Wa nr 05	Wa re 05	Lu nr 05	Lu re 05	Co nr 09	Co re 09	Wa nr 09	Wa re 09	Lu nr 09	Lu re 09
<i>Allogamus auricollis</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	71.2	11.2	6.4
<i>Anabolia nervosa</i>	0.0	0.0	9.7	17.4	0.0	0.0	0.0	20.8	0.0	0.0	1.6	18.4
<i>Ancylus fluviatilis</i>	9.5	7.6	6.9	18.3	3.4	2.1	17.6	12.8	88.0	41.6	112.0	13.6
<i>Anomalopterygella chauviniana</i>	19.0	22.8	3.6	8.6	0.0	2.1	0.0	0.0	5.6	54.4	11.2	6.4
<i>Antocha</i> sp.	0.0	0.0	22.0	45.1	0.0	1.1	12.8	4.8	4.0	0.0	4.8	0.0
<i>Aphelocheirus aestivalis</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0
<i>Asellus aquaticus</i>	351.7	313.2	10.8	108.7	92.1	157.3	48.0	157.6	0.0	60.8	5.6	0.8
<i>Atherix/Ibisia</i> sp.	0.0	3.8	17.3	86.2	134.1	192.3	14.4	0.0	203.2	212.8	226.4	169.6
<i>Athripsodes albifrons</i>	95.4	104.8	0.0	0.0	0.0	0.0	148.8	54.4	0.0	8.0	1.6	0.0
<i>Athripsodes bilineatus</i> ssp.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.2	0.0	12.8	0.0	0.0
<i>Athripsodes cinereus</i>	101.0	171.0	0.0	3.5	5.0	17.7	9.6	153.6	0.0	12.8	0.0	11.2
<i>Baetis buceratus</i>	0.0	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Baetis fuscatus/scambus</i>	219.9	241.7	247.4	472.7	66.3	171.8	254.4	131.2	27.2	35.2	104.0	65.6
<i>Baetis lutheri</i>	0.0	0.0	24.2	13.2	20.7	6.4	0.0	0.0	0.0	0.0	0.0	0.0
<i>Baetis rhodani</i>	234.0	232.4	185.6	501.5	404.5	336.8	260.8	233.6	122.4	359.2	629.6	1223.2
<i>Baetis</i> sp.	97.0	111.3	124.3	252.4	229.1	298.6	43.2	124.8	11.2	92.8	116.0	280.0
<i>Baetis vernus</i>	2.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.8	25.6
<i>Brachycentrus subnubilus</i>	0.0	0.0	0.0	0.0	0.0	0.0	44.0	20.8	0.0	0.0	0.0	0.0
<i>Caenis beskidensis/pseudorivulorum</i>	0.0	0.0	3.4	10.7	0.0	13.5	0.0	0.0	0.0	0.0	0.0	0.0
<i>Caenis luctuosa</i>	2.0	72.1	4.2	9.7	0.0	24.1	40.0	100.8	13.6	99.2	116.0	92.8
<i>Centropilum luteolum</i>	5.6	3.8	0.0	0.0	3.0	9.1	0.0	0.0	0.0	0.0	0.0	0.0
<i>Ceraclea albimacula</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.8	4.8
<i>Ceraclea dissimilis</i>	0.0	0.0	0.0	0.0	0.0	0.0	4.8	0.0	0.0	0.0	0.0	0.0
<i>Ceratopogoninae</i> Gen. sp.	0.0	1.9	0.0	8.1	0.0	2.6	4.8	20.8	0.8	24.0	9.6	43.2
<i>Chaetopteryx villosa villosa</i>	0.0	0.0	0.0	3.6	0.0	0.0	0.0	4.8	0.8	27.2	0.0	6.4
<i>Chelifera</i> sp.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	3.2	0.0
<i>Cheumatopsyche lepida</i>	96.7	106.2	0.0	0.0	0.0	0.0	465.6	137.6	4.0	4.8	0.0	0.0
<i>Chironomidae</i> Gen. sp.	923.3	972.6	405.0	712.8	733.6	1266.4	163.2	476.8	58.4	419.2	128.0	388.0
<i>Chironominae</i> Gen. sp.	437.0	968.8	654.2	2027.1	614.8	1977.9	364.8	364.8	204.8	1287.2	601.6	883.2
<i>Chironomini</i> Gen. sp.	117.0	230.0	583.0	1305.1	278.8	1140.4	188.8	713.6	151.2	779.2	718.4	942.4
<i>Chrysops</i> sp.	0.0	0.0	0.0	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Cyrrnus trimaculatus</i>	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Dicranota</i> sp.	96.8	119.0	4.0	265.4	61.2	98.3	9.6	9.6	10.4	107.2	4.8	6.4
<i>Ecdyonurus venosus</i> -Gr.	56.9	60.7	7.4	35.0	0.0	0.0	16.0	13.6	38.4	122.4	35.2	36.0
<i>Eiseniella tetraedra</i>	0.0	0.0	0.0	15.4	29.3	39.7	0.0	17.6	8.8	3.2	0.0	0.0
<i>Elmis aenea/mauguetii/rietscheli/rioloides</i> Ad.	98.8	75.8	103.8	270.1	152.3	282.1	107.2	28.8	20.0	31.2	11.2	44.0
<i>Elmis</i> sp. Lv.	95.7	91.0	21.3	114.1	82.9	145.9	611.2	123.2	404.0	117.6	152.0	232.0
<i>Eloeophila</i> sp.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2	0.0	0.0	0.0
<i>Epeorus assimilis</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.8	0.0	0.0
<i>Ephemera danica</i>	0.0	1.9	0.0	7.7	0.0	23.9	26.4	0.8	15.2	14.4	0.8	30.4
<i>Erpobdella octoculata</i>	52.2	51.8	47.5	112.0	18.1	174.0	131.2	198.4	2.4	82.4	114.4	93.6

Appendix 9a (continued): Taxalists of benthic invertebrates in the Lahn river sections [individuals per m²].

Samples are quoted with the sample code 'sample section status year of investigation'. Sample sections: Co = Cölbe, Lu = Ludwigshütte, Wa = Wallau; status: nr = non-restored, re = restored.

Taxonname	Samples											
	Co nr 05	Co re 05	Wa nr 05	Wa re 05	Lu nr 05	Lu re 05	Co nr 09	Co re 09	Wa nr 09	Wa re 09	Lu nr 09	Lu re 09
<i>Mystacides azurea</i>	0.0	0.0	0.0	3.3	0.0	1.5	0.0	0.0	4.0	8.0	21.6	0.0
<i>Mystacides longicornis/nigra</i>	2.1	7.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.0	4.8	0.0
Naididae/Tubificidae Gen. sp.	21.2	70.5	0.0	4.4	20.4	52.7	35.2	92.0	0.0	0.0	0.8	0.0
<i>Nebrioporus</i> sp. Lv.	0.0	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Nemoura</i> sp.	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0
<i>Odontocerum albicorne</i>	0.0	0.0	0.0	12.6	0.0	0.0	4.8	0.0	0.0	0.0	0.0	0.0
<i>Oecetis testacea</i>	0.0	0.0	3.6	8.9	4.5	6.7	0.0	0.0	0.0	11.2	0.0	0.0
Oligochaeta Gen. sp.	0.0	5.7	0.8	17.2	201.4	337.3	25.6	5.6	4.0	5.6	19.2	0.8
<i>Orectochilus villosus</i> Ad.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.8	0.0	0.0	0.0	0.0
<i>Oulimnius tuberculatus</i> Ad.	150.7	80.3	51.7	124.7	52.8	104.1	88.0	76.8	45.6	25.6	12.8	25.6
<i>Oulimnius tuberculatus</i> Lv.	42.2	49.3	32.1	75.3	64.9	175.6	35.2	108.8	21.6	40.0	20.8	40.0
<i>Pedicia</i> sp.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.0	24.0	0.0	4.8
<i>Pilaria</i> sp.	0.0	0.0	0.0	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Pisidium</i> sp.	2.1	106.2	0.0	2.8	0.0	20.5	60.8	21.6	0.8	5.6	40.0	88.0
<i>Platynemis pennipes</i>	0.0	0.0	0.0	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Polycentropus flavomaculatus</i>	62.5	60.7	16.8	29.8	0.0	0.0	52.0	3.2	31.2	35.2	28.8	6.4
<i>Potamophylax cingulatus/latipennis/luctuosus</i>	0.0	0.0	39.1	79.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Potamopyrgus antipodarum</i>	0.0	0.0	6.6	36.4	0.0	1.1	0.0	0.8	3.2	6.4	6.4	4.8
<i>Proasellus coxalis</i>	0.0	0.0	0.0	0.0	0.0	2.6	6.4	0.0	0.0	0.8	0.0	4.8
<i>Proclleon</i> sp.	1.8	0.0	4.0	5.1	0.0	22.3	0.0	0.0	0.0	0.0	0.0	0.0
<i>Prodiamesa olivacea</i>	0.0	73.3	26.5	107.2	0.0	25.1	0.0	64.0	4.0	75.2	0.0	59.2
<i>Prosimulium</i> sp.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	38.4	0.0	0.0	8.0	38.4
Psychodidae Gen. sp.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	4.8	0.0	12.8	0.0
<i>Psychomyia pusilla</i>	7.8	0.0	26.6	54.4	0.0	0.0	91.2	12.8	38.4	24.0	19.2	12.8
<i>Radix balthica</i>	0.0	0.0	0.0	0.0	29.7	23.1	0.0	0.0	0.0	1.6	73.6	37.6
<i>Rhyacophila dorsalis/nubila</i>	0.0	0.0	41.3	101.4	141.5	154.2	17.6	3.2	2.4	48.0	16.0	58.4
<i>Sericostoma flavicorne/personatum</i>	0.0	0.0	19.2	51.8	0.0	18.5	0.0	0.0	27.2	36.8	4.8	11.2
<i>Serratella ignita</i>	903.5	802.7	65.2	185.9	160.3	320.0	1176.8	618.4	668.8	2488.0	832.0	2980.8
<i>Sialis</i> sp.	0.0	83.5	4.7	37.3	3.4	1.1	0.0	0.0	0.0	0.0	0.0	0.0
<i>Simulium</i> sp.	4.1	7.6	4.0	96.4	131.0	80.9	46.4	1792.0	5.6	468.8	104.8	956.8
<i>Siphonoperla</i> sp.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0
<i>Sphaerium corneum</i>	0.0	0.0	0.0	1.1	8.7	31.8	0.0	0.0	5.6	3.2	29.6	49.6
<i>Stylodrilus heringianus</i>	0.0	0.0	3.2	40.7	0.0	14.4	9.6	0.0	0.0	0.0	0.0	0.0
Tabanidae Gen. sp.	19.0	22.8	0.0	11.6	0.0	1.1	0.0	4.8	0.0	12.8	0.0	0.0
Tanypodinae Gen. sp.	78.8	99.7	92.5	240.1	97.3	239.7	20.8	0.0	81.6	177.6	33.6	65.6
Tipulidae Gen. sp.	0.0	0.0	0.0	3.3	8.3	12.8	0.0	0.0	0.0	0.0	0.0	0.0
<i>Torleya major</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.8	0.0	0.0	0.0	0.0
Turbellaria Gen. sp.	66.4	53.1	0.0	0.0	0.0	0.0	4.8	0.0	4.0	0.0	0.0	0.0

Appendix 9b (continued): Taxalists of floodplain vegetation in the Lahn river sections [habitat-weighted abundances per sample section].

Samples are quoted with the sample code 'sample section status year of investigation'. Sample sections: Co = Cölbe, Lu = Ludwigshütte, Wa = Wallau; status: nr = non-restored, re = restored.

Taxonname	Samples											
	Co nr 05	Co re 05	Wa nr 05	Wa re 05	Lu nr 05	Lu re 05	Co nr 09	Co re 09	Wa nr 09	Wa re 09	Lu nr 09	Lu re 09
<i>Cardamine flexuosa</i>	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.3
<i>Cardamine impatiens</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
<i>Cardamine pratensis</i>	0.0	0.2	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Carduus crispus</i>	0.0	0.0	0.0	1.2	0.0	6.6	0.0	0.0	0.0	6.1	0.0	0.0
<i>Carex c.f. acutiformis</i>	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0
<i>Carex remota</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.2
<i>Carpinus betulus</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
<i>Centaurea jacea</i>	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.9	0.0	0.0
<i>Cerastium holosteoides</i>	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
<i>Chaenorhinum minus</i>	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Chaerophyllum bulbosum</i>	29.2	8.8	0.0	3.5	2.8	4.5	22.9	7.5	1.7	6.1	3.8	5.3
<i>Chaerophyllum hirsutum</i>	0.0	0.0	0.0	0.2	20.7	0.0	0.0	0.0	0.0	0.3	5.4	0.0
<i>Chelidonium majus</i>	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Chenopodium album</i>	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Chenopodium polyspermum</i>	0.0	1.6	0.0	0.8	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0
<i>Chrysanthemum leucanthemum</i>	0.0	3.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
<i>Circaea lutetiana</i>	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Cirsium arvense</i>	0.0	3.4	0.8	3.4	5.4	8.4	0.0	24.0	1.0	0.9	0.0	0.0
<i>Cirsium oleraceum</i>	0.7	0.0	4.8	2.2	1.0	0.1	0.5	0.0	0.0	0.0	1.4	0.0
<i>Cirsium vulgare</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.5	0.0	0.0
<i>Colchicum autumnale</i>	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
<i>Conium maculatum</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.0
<i>Crataegus cf. monogyna</i>	0.0	0.0	0.8	0.0	0.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Crepis biennis</i>	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Cruciata laevipes</i>	0.0	0.0	0.0	0.8	0.0	0.1	0.0	0.0	0.0	0.4	0.0	0.0
<i>Cuscuta europaea</i>	0.0	0.0	0.0	0.0	0.0	0.0	1.5	2.1	0.0	0.0	0.0	0.9
<i>Cytisus scoparius</i>	0.0	0.0	0.0	0.8	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
<i>Dactylis glomerata</i>	3.3	2.7	0.0	8.2	14.0	4.4	17.9	7.8	11.4	24.1	0.0	1.8
<i>Daucus carota</i>	0.0	0.0	4.0	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
<i>Dentaria bulbifera</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.0
<i>Deschampsia cespitosa</i>	0.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
<i>Dryopteris filix-mas</i>	0.0	0.0	0.0	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Elodea canadensis</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	1.0
<i>Elymus repens</i>	0.0	0.0	0.0	0.0	0.0	0.0	1.9	1.9	1.7	1.4	0.4	11.0
<i>Epilobium adenocaulon</i>	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.3	0.0	1.7	0.0	0.3
<i>Epilobium c.f. roseum</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
<i>Epilobium c.f. tetragonum</i>	0.0	1.8	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0
<i>Epilobium hirsutum</i>	0.0	5.5	4.0	16.9	1.0	4.3	0.0	0.0	0.0	2.8	0.0	1.6
<i>Epilobium montanum</i>	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Epilobium parviflorum</i>	0.0	1.0	0.0	0.2	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Epilobium sp.</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	1.9	1.4	0.0

Appendix 9b (continued): Taxalists of floodplain vegetation in the Lahn river sections [habitat-weighted abundances per sample section].

Samples are quoted with the sample code 'sample section status year of investigation'. Sample sections: Co = Cölbe, Lu = Ludwigshütte, Wa = Wallau; status: nr = non-restored, re = restored.

Taxonname	Samples											
	Co nr 05	Co re 05	Wa nr 05	Wa re 05	Lu nr 05	Lu re 05	Co nr 09	Co re 09	Wa nr 09	Wa re 09	Lu nr 09	Lu re 09
<i>Leontodon autumnalis</i>	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
<i>Leucanthemum ircutianum</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
<i>Linaria vulgaris</i>	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Lolium perenne</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	2.2	0.0	0.0
<i>Lotus uliginosus</i>	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
<i>Lycopus europaeus</i>	1.5	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Lysimachia vulgaris</i>	10.6	0.9	0.8	0.0	7.2	7.1	23.2	0.0	0.0	0.6	1.0	0.7
<i>Lythrum salicaria</i>	0.0	0.0	0.0	0.0	0.8	0.8	0.3	1.9	0.0	1.0	0.0	0.0
<i>Malus sylvestris</i>	0.0	0.0	0.0	0.0	0.0	11.9	0.0	0.0	0.0	0.0	0.0	0.0
<i>Matricaria inodora</i>	0.0	0.2	0.0	0.2	0.0	0.1	0.0	0.3	0.0	0.0	0.0	0.0
<i>Medicago lupulina</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.7
<i>Melilotus altissima</i>	0.0	0.5	0.0	0.8	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0
<i>Mentha aquatica</i>	0.0	0.0	0.0	0.0	0.0	0.1	0.0	2.6	0.0	0.0	0.0	0.0
<i>Mentha arvensis</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0
<i>Moehringia trinerva</i>	0.7	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Myosotis palustris</i>	0.0	1.8	0.8	1.1	0.0	0.7	0.0	0.0	0.0	0.4	0.0	1.3
<i>Myosoton aquaticum</i>	0.0	1.3	0.0	0.0	0.0	1.5	0.0	3.4	0.0	8.0	4.6	4.5
<i>Origanum vulgare</i>	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
<i>Petasites hybridus</i>	0.0	8.2	16.1	1.1	29.6	3.6	0.0	0.0	0.0	6.3	30.7	5.0
<i>Phalaris arundinacea</i>	81.6	142.8	28.7	115.2	50.6	138.6	55.2	70.4	78.7	42.1	49.2	119.1
<i>Phleum pratense</i>	0.0	0.0	0.0	0.2	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
<i>Pimpinella saxifraga</i>	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
<i>Plantago intermedia</i>	1.5	0.0	0.0	0.4	0.0	0.1	0.0	0.3	0.0	1.3	0.0	0.7
<i>Plantago lanceolata</i>	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0
<i>Poa annua</i>	0.7	0.7	0.0	0.4	0.0	0.0	0.0	0.9	0.0	0.6	0.0	0.0
<i>Poa compressa</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
<i>Poa nemoralis</i>	8.8	0.7	24.1	0.2	30.8	13.4	22.7	0.0	85.7	0.9	40.2	7.1
<i>Poa palustris</i>	1.5	9.8	6.0	8.3	1.0	17.2	6.7	7.7	2.7	5.8	2.0	6.4
<i>Poa pratensis</i>	0.0	0.0	0.0	0.1	0.0	2.9	0.0	0.2	0.0	0.0	0.0	0.0
<i>Poa trivialis</i>	3.2	5.7	2.0	3.1	13.2	16.1	9.6	6.8	9.8	18.7	4.3	8.7
<i>Polygonum bistorta</i>	0.0	0.0	4.0	0.0	16.0	0.3	0.0	0.0	0.0	0.3	0.0	0.0
<i>Polygonum hydropiper</i>	0.0	4.1	0.0	5.0	0.0	2.6	0.3	14.2	0.0	1.2	0.0	1.9
<i>Polygonum lapathifolium</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.4	0.0	0.3
<i>Polygonum persicaria</i>	0.0	2.5	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.4	0.0
<i>Populus spec.</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	83.3	0.0	0.0	0.0
<i>Potentilla anserina</i>	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0
<i>Prunus spinosa</i>	0.0	0.0	0.0	0.5	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.1
<i>Ranunculus acris</i>	0.0	0.8	0.0	0.2	5.1	0.3	0.0	0.0	0.0	0.0	0.0	0.7
<i>Ranunculus ficaria</i>	8.9	6.9	9.6	12.9	1.1	1.8	0.0	0.0	0.0	0.0	0.0	0.0
<i>Ranunculus flammula</i>	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0
<i>Ranunculus repens</i>	0.0	2.1	0.0	2.2	0.0	3.2	0.0	0.1	0.0	10.4	1.1	1.2

Appendix 9b (continued): Taxalists of floodplain vegetation in the Lahn river sections [habitat-weighted abundances per sample section].

Samples are quoted with the sample code 'sample section status year of investigation'. Sample sections: Co = Cölbe, Lu = Ludwigshütte, Wa = Wallau; status: nr = non-restored, re = restored.

Taxonname	Samples											
	Co nr 05	Co re 05	Wa nr 05	Wa re 05	Lu nr 05	Lu re 05	Co nr 09	Co re 09	Wa nr 09	Wa re 09	Lu nr 09	Lu re 09
<i>Reynoutria japonica</i>	0.0	0.0	0.0	0.0	10.1	0.0	0.0	0.0	0.0	0.0	41.1	1.6
<i>Ribes rubrum</i>	0.0	0.0	8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.2
<i>Rorippa palustris</i>	13.1	2.1	0.0	0.8	1.1	0.0	0.0	1.3	0.0	0.0	0.0	0.0
<i>Rorippa sylvestris</i>	0.0	0.0	0.0	0.4	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
<i>Rosa canina</i> agg.	0.0	0.0	0.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Rubus caesius</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.8	0.0	0.0
<i>Rubus fruticosus</i> agg.	0.0	0.0	0.0	2.8	38.1	3.0	0.0	3.2	31.4	6.0	0.0	2.0
<i>Rubus idaeus</i>	0.0	0.0	0.0	0.2	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0
<i>Rumex acetosa</i>	0.0	0.1	0.8	0.2	0.0	1.4	0.0	0.0	0.0	0.3	0.0	0.0
<i>Rumex crispus</i>	0.0	0.8	0.0	1.9	0.0	0.3	0.0	0.3	0.0	0.1	0.0	0.0
<i>Rumex hydrolapathum</i>	0.0	0.0	0.0	0.8	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
<i>Rumex obtusifolius</i>	0.0	2.7	0.0	5.4	0.0	0.0	1.6	0.8	0.0	0.3	0.0	0.3
<i>Rumex sanguineus</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.0	0.3	0.0	0.0
<i>Salix caprea</i>	0.0	0.2	0.0	0.0	30.4	0.0	0.0	0.0	0.0	0.4	0.0	0.0
<i>Salix fragilis</i>	272.2	58.9	16.1	136.1	134.7	43.3	136.6	17.8	90.0	59.6	20.6	63.1
<i>Salix purpurea</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
<i>Salix triandra</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.9	0.0	43.1	0.0	0.0
<i>Salix viminalis</i>	4.9	36.1	0.0	12.9	42.1	32.9	0.0	10.2	0.0	15.2	0.0	0.0
<i>Salix x rubens</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.8	0.0	13.3	0.0	1.6
<i>Sambucus nigra</i>	0.0	0.0	0.0	0.0	0.0	0.0	21.6	0.0	0.0	16.6	0.0	0.3
<i>Sambucus racemosa</i>	24.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Sanguisorba major</i>	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Saponaria officinalis</i>	0.0	5.0	0.0	10.5	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
<i>Scheuchzeria palustris</i>	0.0	0.0	0.0	0.2	0.0	3.1	0.0	0.0	0.0	0.0	0.0	0.0
<i>Scirpus sylvaticus</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
<i>Scrophularia nodosa</i>	0.0	0.9	0.0	0.4	0.0	0.6	0.0	0.0	0.0	0.9	0.0	0.0
<i>Scrophularia umbrosa</i>	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.2	0.0	0.0	0.0	0.0
<i>Scutellaria galericulata</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.3
<i>Senecio fuchsii</i>	0.0	0.0	4.0	0.3	0.0	2.6	0.0	0.0	0.0	0.0	0.0	0.7
<i>Silene dioica</i>	11.4	2.8	13.7	7.1	13.3	4.7	1.9	1.7	2.8	4.9	6.9	2.1
<i>Sinapis arvensis</i>	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Sisymbrium officinale</i>	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
<i>Solanum dulcamara</i>	0.0	0.2	0.0	4.1	0.0	1.2	0.0	0.2	0.0	0.1	0.0	0.5
<i>Solanum nigrum</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
<i>Sonchus oleraceus</i>	0.0	0.0	0.8	0.4	14.4	1.1	0.0	0.0	0.0	0.0	0.0	0.7
<i>Sorbus aucuparia</i>	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Stachys palustris</i>	4.4	0.0	0.0	9.5	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0
<i>Stachys sylvatica</i>	0.7	0.0	8.8	4.0	3.1	1.9	0.0	0.0	12.3	6.5	8.2	4.0
<i>Stellaria graminea</i>	0.0	0.0	0.0	0.4	0.0	1.2	0.0	1.7	0.0	0.0	0.0	0.2
<i>Stellaria holostea</i>	11.0	0.1	0.0	0.0	0.0	1.5	1.9	0.0	4.2	0.0	0.0	0.2
<i>Stellaria media</i>	0.0	0.7	0.0	2.5	0.0	1.2	2.6	0.2	0.3	3.1	0.0	0.3

Appendix 9b (continued): Taxalists of floodplain vegetation in the Lahn river sections [habitat-weighted abundances per sample section].

Samples are quoted with the sample code 'sample section status year of investigation'. Sample sections: Co = Cölbe, Lu = Ludwigshütte, Wa = Wallau; status: nr = non-restored, re = restored.

Taxonname	Samples											
	Co nr 05	Co re 05	Wa nr 05	Wa re 05	Lu nr 05	Lu re 05	Co nr 09	Co re 09	Wa nr 09	Wa re 09	Lu nr 09	Lu re 09
<i>Stellaria nemorum</i>	17.1	5.3	28.1	10.3	47.2	17.9	26.0	11.3	108.6	29.5	31.5	6.0
<i>Stellaria uliginosa</i>	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0
<i>Symphytum officinalis</i>	7.3	17.0	8.0	1.0	3.9	9.5	0.2	1.4	1.4	1.2	0.0	2.2
<i>Tanacetum vulgare</i>	0.0	0.9	0.0	11.3	5.4	4.6	0.0	0.0	0.0	7.3	0.0	2.5
<i>Taraxacum officinale</i> agg.	0.7	0.0	0.0	0.8	0.0	0.1	0.7	0.0	0.0	2.2	0.0	1.3
<i>Thlaspi arvense</i>	0.0	0.7	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Torilis japonica</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.2
<i>Trifolium dubium</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
<i>Trifolium pratense</i>	0.0	0.0	0.0	0.1	0.0	1.5	0.0	0.0	0.0	1.4	0.0	0.0
<i>Trifolium repens</i>	0.0	0.9	0.0	0.0	0.0	0.8	0.0	0.0	0.0	5.2	0.0	0.8
<i>Trisetum flavescens</i>	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0
<i>Tussilago farfara</i>	0.0	0.3	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0
<i>Typha latifolia</i>	0.0	0.8	0.0	0.0	0.0	3.1	0.0	7.8	0.0	0.0	0.0	0.0
<i>Urtica dioica</i>	155.6	78.0	111.9	88.0	87.6	77.3	277.0	210.9	196.4	189.1	154.5	182.3
<i>Valeriana officinalis</i> agg.	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	1.2
<i>Valerianella locusta</i>	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Verbascum nigrum</i>	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
<i>Veronica arvensis</i>	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
<i>Veronica beccabunga</i>	0.0	0.0	0.0	0.4	0.0	0.9	0.0	0.0	0.0	0.6	0.0	0.7
<i>Veronica chamaedrys</i>	0.0	0.0	0.8	0.2	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
<i>Vicia cracca</i>	0.0	0.4	0.0	0.1	0.0	0.0	0.2	0.0	1.0	4.0	0.0	1.1
<i>Vicia hirsuta</i>	0.0	0.3	0.0	0.8	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.3
<i>Vicia sepium</i>	0.0	0.0	0.0	1.8	2.1	0.3	0.0	0.0	0.0	1.1	0.0	0.0
<i>Vicia tetrasperma</i>	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0

Appendix 9c: Taxalists of carabid beetles in the Lahn river sections [habitat-weighted abundances per sample section].

Samples are quoted with the sample code 'sample section status year of investigation'. Sample sections: Co = Cölbe, Lu = Ludwigshütte, Wa = Wallau; status: nr = non-restored, re = restored.

Taxonname	Samples											
	Co nr 05	Co re 05	Wa nr 05	Wa re 05	Lu nr 05	Lu re 05	Co nr 09	Co re 09	Wa nr 09	Wa re 09	Lu nr 09	Lu re 09
<i>Abax parallelepipedus</i>	0.0	3.2	59.9	16.2	58.8	7.6	0.0	10.6	4.9	0.0	24.6	0.0
<i>Agonum emarginatum</i>	0.0	10.2	0.0	0.0	0.0	10.5	0.0	1.7	0.0	2.5	0.0	15.5
<i>Agonum fuliginosum</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.6	0.0	0.0
<i>Agonum micans</i>	29.2	0.0	0.0	0.0	0.0	42.0	32.1	55.2	0.0	0.0	0.0	35.7
<i>Agonum thoreyi</i>	14.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Agonum viduum</i>	0.0	6.7	0.0	0.0	0.0	5.3	0.0	0.0	0.0	0.0	0.0	0.5
<i>Amara eurynota</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	61.4	0.0
<i>Amara similata</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.6	0.0	0.0	0.0	28.8
<i>Anchomenus dorsalis</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.0	0.0	0.0	0.0	0.0
<i>Anisodactylus binotatus</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.8
<i>Bembidion articulatum</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.8	0.0	6.3	0.0	0.0
<i>Bembidion atrocaeruleum</i>	0.0	39.5	0.0	252.9	0.0	68.4	0.0	30.8	0.0	52.7	0.0	444.2

Appendix 9c (continued): Taxalists of carabid beetles in the Lahn river sections [habitat-weighted abundances per sample section].

Samples are quoted with the sample code 'sample section status year of investigation'. Sample sections: Co = Cölbe, Lu = Ludwigshütte, Wa = Wallau; status: nr = non-restored, re = restored.

Taxonname	Samples											
	Co nr 05	Co re 05	Wa nr 05	Wa re 05	Lu nr 05	Lu re 05	Co nr 09	Co re 09	Wa nr 09	Wa re 09	Lu nr 09	Lu re 09
<i>Bembidion decorum</i>	0.0	149.3	0.0	198.1	0.0	23.5	0.0	51.4	0.0	127.9	0.0	21.8
<i>Bembidion dentellum</i>	0.0	0.0	0.0	0.0	0.0	21.0	0.0	12.0	0.0	0.0	0.0	90.3
<i>Bembidion guttula</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Bembidion lampros</i>	0.0	0.0	0.0	0.0	0.0	5.3	0.0	14.1	0.0	18.6	0.0	0.0
<i>Bembidion obliquum</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	0.0	1.3	0.0	0.0
<i>Bembidion quadrimaculatum</i>	0.0	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
<i>Bembidion semipunctatum</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Bembidion tetracolum</i>	14.6	20.8	0.0	66.8	39.2	91.6	42.8	88.3	0.0	26.2	0.0	7.8
<i>Bembidion tibiale</i>	0.0	115.5	0.0	9.7	0.0	20.6	0.0	6.8	0.0	13.8	0.0	15.2
<i>Carabus auratus</i>	0.0	11.4	32.0	9.7	0.0	21.0	32.1	0.0	0.0	0.0	0.0	0.0
<i>Carabus granulatus</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	37.2	0.0	35.2
<i>Carabus nemoralis</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.6	2.5	0.0	0.0	0.0
<i>Carabus problematicus</i>	14.6	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Clivina collaris</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.0	0.0	0.0	0.0	0.0
<i>Clivina fossor</i>	0.0	0.0	0.0	0.0	19.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Dyschirius aeneus</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.0
<i>Dyschirius globosus</i>	0.0	0.0	63.9	0.0	0.0	21.0	0.0	7.0	0.0	93.1	0.0	6.3
<i>Elaphropus parvulus</i>	0.0	35.2	0.0	6.5	0.0	226.8	0.0	0.0	0.0	0.0	0.0	0.0
<i>Elaphrus cupreus</i>	0.0	0.0	0.0	0.0	0.0	15.8	0.0	0.0	0.0	0.0	0.0	15.0
<i>Elaphrus riparius</i>	0.0	0.0	0.0	0.0	0.0	5.3	0.0	0.0	0.0	0.0	0.0	0.0
<i>Harpalus rufipes</i>	0.0	0.0	0.0	0.0	0.0	0.0	10.7	0.0	0.0	0.0	0.0	0.0
<i>Limodromus assimilis</i>	87.7	0.0	0.0	3.2	0.0	10.5	0.0	21.1	2.5	0.0	0.0	0.0
<i>Loricera pilicornis</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.6	18.6	0.0	0.0
<i>Nebria brevicollis</i>	0.0	0.0	0.0	0.0	0.0	0.0	10.7	0.0	0.0	6.8	0.0	0.0
<i>Notiophilus biguttatus</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.6	0.0
<i>Notiophilus palustris</i>	0.0	0.0	0.0	0.0	0.0	7.6	0.0	7.0	0.0	0.0	0.0	0.0
<i>Paranchus albipes</i>	14.6	59.4	0.0	22.6	117.7	0.0	0.0	20.8	0.0	18.8	0.0	14.7
<i>Patrobus atrorufus</i>	14.6	0.0	0.0	0.0	0.0	0.0	10.7	10.6	0.0	0.0	0.0	0.0
<i>Poecilus cupreus</i>	29.2	0.0	0.0	19.5	0.0	10.5	0.0	55.2	0.0	0.0	0.0	0.0
<i>Poecilus versicolor</i>	0.0	0.0	0.0	19.5	0.0	62.9	0.0	276.0	0.0	34.7	0.0	173.1
<i>Pterostichus anthracinus</i>	0.0	0.0	32.0	0.0	0.0	0.0	0.0	7.0	0.0	0.0	0.0	0.0
<i>Pterostichus melanarius</i>	73.1	0.0	32.0	19.5	0.0	10.5	32.1	21.1	0.0	0.0	0.0	0.0
<i>Pterostichus niger</i>	0.0	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Pterostichus nigrita</i>	29.2	3.2	0.0	16.2	0.0	47.3	0.0	0.0	0.0	18.6	0.0	7.3
<i>Pterostichus oblongopunctatus</i>	0.0	0.0	0.0	0.0	0.0	0.0	21.4	7.0	0.0	0.0	0.0	0.0
<i>Pterostichus strenuus</i>	0.0	0.0	0.0	0.0	0.0	10.5	0.0	17.6	0.0	0.0	49.1	12.6