

Supplementary Material for the Manuscript:

Vegetation of temperate inland salt marshes on their northwestern border (North German Plain)

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Supplementary Data S2. List of localities of phytosociological relevés recorded in inland salt marshes in Germany (Binnensalzstellen) with a brief description of the site. The header data are listed in the following order: relevé number, short description of the locality, latitude, longitude, altitude, relevé surface (m²) and the sampling date.

Cluster 1, *Salicornietum europaeae*, 21 relevés:

1. Sülldorf, Sülze river valley, flat saline depression on the rangeland, N 52°01'37.4", E 11°34'08.2", 65 m a.s.l., 16 m², 22. 7. 2018.
2. Kleinwirsleben, seasonally flooded bottom at the kaolin heap, N 51°44'46.0", E 11°48'03.5", 62 m asl., 16 m², 12. 8. 2020.
3. Langenbogen, edge of the seasonally drying salt marsh, N 51°29'03.4", E 11°45'38.0", 85 m a.s.l., 16 m², 23. 7. 2018.
4. Zielitz, the lowest lying parts of the salt depression at the slag heap, N 52°17'50.6", E 11°41'32.9", 45 m asl., 16 m², 15. 8. 2019.
5. Dippach, large, salt-affected depression in the recultivated meadows at the Werra river, N 50°55'48.9", E 10°02'58.5", 211 m a.s.l., 16 m², 13. 8. 2019.
6. Dippach, large, salt-affected depression in the recultivated meadows at the Werra river, N 50°55'49.5", E 10°03'00.1", 211 m a.s.l., 16 m², 13. 8. 2019.
7. Teutschenthal, potash heap, on the edge of the sludge bed, periodically flooded, N 51°28'23.4", E 11°46'05.7", 90 m a.s.l., 16 m², 14. 8. 2019.
8. Kleinwirsleben, near the slug of the kaolin heap mine, periodically flooded, N 51°44'36.8", E 11°48'13.9", 62 m asl., 16 m², 12. 8. 2020.
9. Kleinwirsleben, near the slug heap of the kaolin mine, periodically flooded, N 51°44'36.8", E 11°48'14.8", 62 m asl., 16 m², 12. 8. 2020.
10. Wormsdorf, initial vegetation of the strongly salinized depression, flooded, N 52°08'27.1", E 11°11'28.4", 126 m a.s.l., 16 m², 15. 8. 2019.
11. Langenbogen, edges of the periodically flooded salt marsh, N 51°29'01.7", E 11°45'41.4", 85 m a.s.l., 16 m², 23. 7. 2018.
12. Sülldorf, Sülze river valley, initial vegetation on strongly salinized soil at the emerging salt spring, N 52°01'27.9", E 11°33'21.1", 66 m a.s.l., 16 m², 24. 7. 2018.
13. Langenbogen, edge of the seasonally drying salt marsh, N 51°29'03.4", E 11°45'38.2", 85 m a.s.l., 16 m², 23. 7. 2018.
14. Sülldorf, Sülze, seasonally flooded salt depression, N 52°01'34.6", E 11°33'57.5", 64 m a.s.l., 16 m², 16. 8. 2019.
15. Sülldorf, Sülze river valley, strongly salinized soil trampled by cattle, N 52°01'23.3", E 11°33'12.1", 66 m a.s.l., 16 m², 11. 8. 2020.

16. Sülldorf, initial vegetation on strongly salinized soil at the emerging salt spring, N 52°01'26.1", E 11°33'18.5", 66 m a.s.l., 16 m², 16. 8. 2019.
17. Dippach, large field depression with high salt accumulation, on the edges of recultivated meadows of the Werra river, N 50°55'47.1", E 10°02'55.1", 211 m a.s.l., 16 m², 13. 8. 2019.
18. Dippach, large field depression with high salt accumulation, on the edges of recultivated meadows of the Werra river, N 50°55'46.5", E 10°02'54.9", 211 m a.s.l., 16 m², 13. 8. 2019.
19. Dippach large field depression with high salt accumulation, on the edges of recultivated meadows of the Werra river, N 50°55'49.2", E 10°02'59.9", 211 m a.s.l., 16 m², 13. 8. 2019.
20. Zielitz, salt marshes along the muddy banks of the brook, N 52°17'47.0", E 11°42'24.5", 40 m asl., 16 m², 15. 8. 2019.
21. Dodendorf, salt meadows along the Sülze river, shallow depression disturbed by the passing heavy machinery, N 52°02'36.5", E 11°37'15.1", 57 m asl., 16 m², 15. 8. 2019.

Cluster 2, *Halimioni pedunculatae-Puccinellietum distantis*, 28 relevés:

22. Wormsdorf, initial vegetation in the flat depression with strongly saline soil, flooded, N 52°08'26.1", E 11°11'26.8", 126 m a.s.l., 16 m², 24. 7. 2018.
23. Sülldorf, Sülze river valley, saline soil trampled by cattle, N 52°01'44.5", E 11°33'53.1", 65 m a.s.l., 16 m², 16. 8. 2019.
24. Dodendorf, salt habitat at the Sülze river, shallow depression, N 52°02'39.0", E 11°37'27.1", 57 m asl., 16 m², 15. 8. 2019.
25. Artern, remnants of drained salt habitat at the town cemetery, flooded lower lying areas, N 51°22'14.1", E 11°17'02.2", 123 m asl., 16 m², 13. 8. 2019.
26. Artern, remnants of drained salt habitat at the town cemetery, flooded lower lying areas, N 51°22'07.8", E 11°16'58.6", 123 m asl., 16 m², 13. 8. 2019.
27. Artern, remnants of drained salt habitat at the town cemetery, flooded lower lying areas, N 51°22'07.8", E 11°16'58.4", 123 m asl., 16 m², 13. 8. 2019.
28. Wormsdorf, initial vegetation in the flat depression with strongly saline soil, flooded, N 52°08'27.0", E 11°11'27.3", 126 m a.s.l., 16 m², 24. 7. 2018.
29. Wormsdorf, moderately higher elevated area of the salt habitat, shorter inundation, N 52°08'27.0", E 11°11'27.5", 126 m a.s.l., 16 m², 15. 8. 2019.
30. Sülldorf, Sülze river valley, edges of the salt habitat, N 52°01'27.9", E 11°33'21.1", 66 m a.s.l., 16 m², 24. 7. 2018.
31. Sülldorf, Sülze river valley, flat depression in the salt habitat, N 52°01'37.3", E 11°34'09.0", 63 m a.s.l., 16 m², 22. 7. 2018.
32. Sülldorf, Sülze river valley, central part of the salt habitat, trampled by cattle, N 52°01'22.7", E 11°33'09.7", 66 m a.s.l., 16 m², 11. 8. 2020.
33. Langenbogen, periodically flooded, moderately elevated parts of the salt marsh, N 51°29'08.8", E 11°45'43.7", 85 m a.s.l., 16 m², 23. 7. 2018.

34. Teutschenthal, potash heap, on the higher elevated edge of the large sludge bed, periodically short-time flooded, N 51°28'12.1", E 11°46'09.3", 90 m a.s.l., 16 m², 14. 8. 2019.
35. Sülldorf, Sülze river valley, salt habitat in the settlement, periodically flooded depression, light disturbance, N 52°01'34.9", E 11°33'55.8", 64 m a.s.l., 16 m², 16. 8. 2019.
36. Sülldorf, Sülze river valley, salt habitat in the settlement, periodically flooded depression,, N 52°01'34.9", E 11°33'58.3", 64 m a.s.l., 16 m², 16. 8. 2019.
37. Kleinwirsleben, salt habitat under the kaolin heap, N 51°44'46.8", E 11°48'02.6", 62 m asl., 16 m², 12. 8. 2020.
38. Dankmarshausen; exposed edges of the quarry pond, 16 x 1 m, N 50°55'41.0", E 10°01'37.1", 211 m asl., 16 m², 13. 8. 2019.
39. Kaiserroda, remnants of salt habitat on the most salinized soils, N 50°49'32.1", E 10°10'23.5", 235 m asl., 16 m², 13. 8. 2020.
40. Zielitz, outer belt of large salty depression near the slug heap, N 52°17'52.7", E 11°41'33.9", 45 m asl., 16 m², 15. 8. 2019.
41. Kleinwirsleben, salt habitat under the kaolin heap, N 51°44'36.7", E 11°48'14.9", 62 m asl., 16 m², 12. 8. 2020.
42. Zielitz, outer belt of large salty depression near the slug heap, N 52°17'52.2", E 11°41'34.7", 45 m asl., 16 m², 15. 8. 2019.
43. Sülldorf, Sülze river valley, central part of the salt habitat, trampled by cattle, N 52°01'22.4", E 11°33'09.8", 66 m a.s.l., 16 m², 11. 8. 2020.
44. Merkers, Brühl von Merker, shallow, periodically flooded depriensions within the large, drained mesic meadows, N 50°49'55.9", E 10°08'03.3", 231 m a.s.l., 16 m², 13. 8. 2020.
45. Merkers, Brühl von Merker, shallow, periodically flooded depriensions within the large, drained mesic meadows, N 50°50'00.0", E 10°08'10.6", 231 m a.s.l., 16 m², 13. 8. 2020.
46. Röblingen am See, flooded depression in the salt marsh, N 51°28'09.9", E 11°39'27.6", 94 m a.s.l., 16 m², 23. 7. 2018.
47. Langenbogen, higher elevated areas of the periodically flooded salt marsh, N 51°29'11.1", E 11°45'42.0", 85 m a.s.l., 16 m², 23. 7. 2018.
48. Teutschenthal, potash heap, on the higher elevated edges of the large sludge bed disturbed by game, short-time periodical inundation, N 51°28'12.4", E 11°46'09.3", 90 m a.s.l., 16 m², 14. 8. 2019.
49. Dippach, large, salt-affected depression in the recultivated meadows at the Werra river, N 50°55'48.6", E 10°02'58.9", 211 m a.s.l., 16 m², 13. 8. 2019.

Cluster 3, *Suaedetum maritimae*, 8 relevés:

50. Teutschenthal, potash heap, on the most elevated parts of the large sludge bed, with the shortest duration of flooding, disturbed by game, N 51°28'17.2", E 11°46'03.2", 90 m a.s.l., 16 m², 14. 8. 2019.

51. Teutschenthal, potash heap, on the most elevated parts of the large sludge bed, not affected by inundation, N 51°28'21.9", E 11°46'04.6", 90 m a.s.l., 16 m², 14. 8. 2019.
52. Zielitz, large salty depression near the slug heap, N 52°17'52.4", E 11°41'34.1", 45 m asl., 16 m², 15. 8. 2019.
53. Zielitz, salt marshes along the brook. Discrete zone with *Suaeda maritima* on the steep slope between reed and *Salicornia*-stands, N 52°17'46.8", E 11°42'24.0", 40 m asl., 16 m², 15. 8. 2019.
54. Zielitz, edges of large salty depression near the slug heap, N 52°17'52.9", E 11°41'33.5", 45 m asl., 16 m², 15. 8. 2019.
55. Zielitz, salt marshes along the brook. N 52°17'48.3", E 11°42'40.0", 40 m asl., 16 m², 15. 8. 2019.
56. Zielitz, salt marshes along the brook, lower elevated zone, N 52°17'48.5", E 11°42'40.6", 40 m asl., 16 m², 15. 8. 2019.
57. Zielitz, edges of large salty depression near the slug heap, higher elevated, not affected by flooding, N 52°17'50.9", E 11°41'28.0", 45 m asl., 16 m², 15. 8. 2019.

Cluster 4, *Triglochino maritimae-Glaucetum maritimae*, 18 relevés:

58. Osterweddingen, Sülze river valley, lower part of the salt marsh, N 52°02'19.5", E 11°35'50.4", 61 m asl., 16 m², 16. 8. 2019.
59. Dippach, Rohrlache bei Dippach, shallow periodically flooded depression with brackish vegetation in the Werra river valley, N 50°54'39.6", E 10°01'45.3", 213 m a.s.l., 16 m², 13. 8. 2019.
60. Osterweddingen, Sülze river valley, lower part of the salt marsh, N 52°02'19.7", E 11°35'51.2", 61 m asl., 16 m², 16. 8. 2019.
61. Dippach, Rohrlache bei Dippach, shallow periodically flooded depression with brackish vegetation in the Werra river valley, N 50°54'38.2", E 10°01'42.5", 213 m a.s.l., 16 m², 13. 8. 2019.
62. Dorndorf, Salzstelle "Dürre Wiese", shallow periodically flooded depression, N 50°50'20.9", E 10°05'32.7", 229 m a.s.l., 16 m², 12. 8. 2019.
63. Dippach, Rohrlache bei Dippach, shallow periodically flooded depression with brackish vegetation in the Werra river valley, N 50°54'42.2", E 10°01'46.8", 213 m a.s.l., 16 m², 13. 8. 2019.
64. Kaiserroda; fragments of salt marshes in the recultivated meadows dominated by *Elytrigia repens*, N 50°49'35.4", E 10°10'45.2", 235 m a.s.l., 16 m², 12. 8. 2019.
65. Kaiserroda; fragments of salt marshes in the recultivated meadows dominated by *Elytrigia repens*, N 50°49'34.9", E 10°10'45.8", 235 m a.s.l., 16 m², 12. 8. 2019.
66. Dorndorf, Salzstelle "Dürre Wiese" shallow periodically flooded depression, N 50°50'22.2", E 10°05'30.8", 235 m a.s.l., 16 m², 12. 8. 2019.
67. Dorndorf, Salzstelle "Dürre Wiese" shallow periodically flooded depression, N 50°50'22.2", E 10°05'30.6", 235 m a.s.l., 16 m², 12. 8. 2019.
68. Sülldorf, Sülze river valley, salt marsh higher elevated banks of the pond, N 52°01'27.6", E 11°33'23.0", 66 m a.s.l., 16 m², 22. 7. 2018.

69. Sülldorf, river valley, edges of the salt marsh, N 52°01'25.7", E 11°33'18.0", 66 m a.s.l., 16 m², 24. 7. 2018.
70. Sülldorf, údolie Sülze, southern edges of the salt marsh, N 52°01'22.7", E 11°33'10.6", 63 m a.s.l., 16 m², 11. 8. 2020.
71. Röblingen am See; salt marsh on the heavy salt spring surrounded by reed, N 52°28'10.3", E 11°39'39.4", 90 m a.s.l., 16 m², 23. 7. 2018.
72. Dodendorf, left bank of the Sülze river, salt meadows, N 52°02'36.2", E 11°37'13.3", 57 m a.s.l., 16 m², 15. 8. 2019.
73. Wormsdorf, periodically flooded salty depression, N 52°08'28.8", E 11°11'29.6", 126 m a.s.l., 16 m², 24. 7. 2018.
74. Aseleben, southern shore of the lake Süßer See, salt marsh in the depression, N 51°29'25.4", E 11°40'47.9", 93 m a.s.l., 16 m², 23. 7. 2018.
75. Esperstedt; large, salt habitat damaged by drainage channels, mown and grazed saline vegetation in the flat depression, N 51°20'37.1", E 11°10'12.1", 122 m a.s.l., 16 m², 13. 8. 2019.

Cluster 5, *Scorzonero parviflorae-Juncetum gerardi* variant with *Glaux maritima*, 7 relevés:

76. Aseleben, southern shore of the lake Süßer See, salt marsh, N 51°29'34.8", E 11°40'09.8", 93 m a.s.l., 16 m², 23. 7. 2018.
77. Aseleben, southern shore of the lake Süßer See, salt marsh, N 51°29'34.6", E 11°40'09.6", 93 m a.s.l., 16 m², 23. 7. 2018.
78. Sülldorf, Sülze river valley, southern part of the site on the nature trail, N 52°01'27.5", E 11°33'23.1", 66 m a.s.l., 16 m², 24. 7. 2018.
79. Merseburg; Geiselniederung westlich Merseburg, salt meadow at the SW part of the town, N 51°20'09.1", E 11°58'24.5", 93 m a.s.l., 16 m², 14. 8. 2019.
80. Merseburg; Geiselniederung westlich Merseburg, salt meadow at the SW part of the town, N 51°20'07.7", E 11°58'23.1", 93 m a.s.l., 16 m², 14. 8. 2019.
81. Merseburg; Geiselniederung westlich Merseburg, salt meadow at the SW part of the town, N 51°20'09.4", E 11°58'25.2", 93 m a.s.l., 16 m², 14. 8. 2019.
82. Merseburg; Geiselniederung westlich Merseburg, salt meadow at the SW part of the town, N 51°20'08.3", E 11°58'23.4", 93 m a.s.l., 16 m², 14. 8. 2019.

Cluster 6, *Puccinellietum limosae*, 12 relevés:

83. Sülldorf, Sülze river valley, grazed salt meadows in the village, N 52°01'37.3", E 11°34'09.8", 65 m a.s.l., 16 m², 22. 7. 2018.
84. Merkers, Brühl von Merker, shallow, periodically flooded depressions within the large, drained mesic grassland, N 50°49'56.0", E 10°08'03.5", 231 m a.s.l., 16 m², 13. 8. 2020.
85. Merkers, Brühl von Merker, shallow, periodically flooded depressions within the large, drained mesic grassland, N 50°49'55.6", E 10°08'02.5", 231 m a.s.l., 16 m², 13. 8. 2020.

86. Merkers, Brühl von Merker, shallow, periodically flooded depressions within the large, drained mesic grassland, N 50°49'55.9", E 10°08'04.1", 231 m a.s.l., 16 m², 13. 8. 2020.
87. Esperstedt; drained, intensively grazed grassland, N 51°20'23.2", E 11°10'08.3", 122 m a.s.l., 16 m², 13. 8. 2019.
88. Staßfurt, salt meadows near the Bode river, edge of the shallow depression, N 51°51'41.2", E 11°37'33.5", 63 m a.s.l., 16 m², 10. 8. 2020.
89. Staßfurt, large meadows at the left bank of the Bode river, edge of the periodically flooded shallow depression with halophytic vegetation, N 51°51'32.7", E 11°37'18.2", 63 m a.s.l., 16 m², 10. 8. 2020.
90. Remkersleben, intensively grazed, trampled salt meadow, N 52°05'39.0", E 11°21'30.4", 101 m a.s.l., 16 m², 11. 8. 2020.
91. Kleinwirschleben, under the kaolin heap, N 51°44'47.6", E 11°48'05.3", 62 m a.s.l., 16 m², 12. 8. 2020.
92. Staßfurt, large meadows at the left bank of the Bode river, edge of the periodically flooded shallow depression with halophytic vegetation, N 51°51'36.2", E 11°37'27.0", 63 m a.s.l., 16 m², 10. 8. 2020.
93. Staßfurt, large meadows at the left bank of the Bode river, edge of the periodically flooded shallow depression with halophytic vegetation, N 51°51'37.6", E 11°37'37.9", 63 m a.s.l., 16 m², 10. 8. 2020.
94. Staßfurt, large meadows at the left bank of the Bode river, edge of the periodically flooded shallow depression with halophytic vegetation, N 51°51'22.6", E 11°36'46.5", 63 m a.s.l., 16 m², 10. 8. 2020.

Cluster 7, *Atriplex prostrata* community, 11 relevés:

95. Osterweddingen, subhalophytic vegetation on the pasture, N 52°02'14.3", E 11°35'34.8", 63 m a.s.l., 16 m², 11. 8. 2020.
96. Sülldorf, halophytic vegetation on the right bank of the Sülze river, N 52°01'35.0", E 11°33'58.7", 64 m a.s.l., 16 m², 22. 7. 2018.
97. Sülldorf, halophytic vegetation on the right bank of the Sülze river, N 52°01'34.1", E 11°33'57.6", 64 m a.s.l., 16 m², 22. 7. 2018.
98. Sülldorf, halophytic vegetation on the right bank of the Sülze river, N 52°01'34.9", E 11°33'59.4", 64 m a.s.l., 16 m², 16. 8. 2019.
99. Dippach, fragments of subhalophytic vegetation on the edges of the recultivated meadows in the Werra river valley, N 50°55'47.8", E 10°02'55.5", 211 m a.s.l., 16 m², 13. 8. 2019.
100. Merkers, Brühl von Merker, shallow, periodically flooded depression in the large, drained meadows, N 50°49'51.6", E 10°08'01.1", 231 m a.s.l., 16 m², 13. 8. 2020.
101. Kaiseroda; fragments of halophytic vegetation in the large, drained meadows dominated by *Elytrigia repens*, N 50°49'34.4", E 10°10'47.6", 235 m a.s.l., 16 m², 12. 8. 2019.

102. Tiefenort, fragments of halophytic vegetation in the large, recultivated meadows on the right side of the Werra river, N 50°50'14.8", E 10°09'30.3", 233 m a.s.l., 16 m², 12. 8. 2019.
103. Esperstedt; vast salt habitat damaged by drainage channels, mown and partly grazed saline vegetation in the large flat depression, N 51°20'17.1", E 11°09'07.4", 122 m a.s.l., 16 m², 13. 8. 2019.
104. Esperstedt; vast salt habitat damaged by drainage channels, mown and partly grazed saline vegetation in the large flat depression, N 51°20'18.2", E 11°09'09.4", 122 m a.s.l., 16 m², 13. 8. 2019.
105. Teutschenthal, under the slug heap, slightly elevated part of the salt habitat, N 51°28'23.6", E 11°46'00.0", 90 m a.s.l., 16 m², 14. 8. 2019.