Supplementary Figures S1: Soil sampling locations. Fotos by M. Mętrak, M. Wilk, B. Aichner.

#1 sparse alpine meadow with *C. pseudofoetida*







#2 small sedge meadow / alluvial plain





#3 small sedge meadow / alluvial plain







#4 saline marsh





#5: saline marsh





#6 grassland / alluvial plain



Supplementary Table S1

Contents of n-alkanes in soil and sediment samples before and after prepGC as determined by comparing GC-FID peak areas (standard vs. sample).

| Sample name | Compound | Alkane content [µg] | After prepGC [µg] | Recovery [%] |
|----------------|----------|------------------------|----------------------|-----------------|
| Soil 1 | C29 | 12.6 | 6.0 | 47.6 |
| Soil 1 | C31 | 15.4 | 7.2 | 46.8 |
| Soil 2 | C29 | 61.0 | 18.1 | 29.7 |
| Soil 2 | C31 | 73.0 | 22.1 | 30.3 |
| Soil 3 | C29 | 64.0 | 19.4 | 30.3 |
| Soil 3 | C31 | 70.0 | 4.7 | 6.7 |
| Soil 4 | C29 | 66.0 | 23.2 | 35.0 |
| Soil 4 | C31 | 80.0 | 18.8 | 24.0 |
| Soil 5 | C29 | 22.0 | 4.6 | 20.9 |
| Soil 5 | C31 | 32.0 | 8.2 | 25.6 |
| Soil 6 | C29 | 230.9 | 20.0 | 9.0 |
| Soil 6 | C31 | 123.6 | 16.6 | 13.0 |
| Core A | C29 | 92.1 | 21.8 | 24.0 |
| Core A | C31 | 66.9 | 9.8 | 15.0 |
| Core B | C29 | 88.6 | 18.6 | 21.0 |
| Core B | C31 | 62.0 | 4.1 | 7.0 |