

1 Supplementary Information

2 Table S1. Overview of the physical parameters quantified in the Danish Habitat Index with appurtenant scaling values and the parameter-specific multiplication factors used for weighting the parameters in DHI.

| Scale | Parameter | Scaling values | Multiplication factor |
|---------|---|--|-----------------------|
| Reach | Pool-riffle sequences (% compared with reference) | 0: None, 1: 1-25%, 2: 26-75%, 3: >75% | +2 |
| | Sinuosity (based on sinuosity index, SI) | 0: SI < 1.05, 1: 1.05 < SI < 1.25, 2: 1.25 < SI < 1.50, 3: SI > 1.5 | +1 |
| | Cross-sectional profile | 0: Rectangular and deeply incised, 1: slightly rectangular and deeply incised, 2: slightly rectangular but not incised, 3: natural | +2 |
| | Width variation (Coefficient of Variance, CV) | 0: 0-10%, 1: 11-25%, 2: 26-50%, 3: >50% | +2 |
| | Undercut banks (% of reach) | 0: None, 1: 1-25%, 2: 26-50%, 3: >50% | +1 |
| | Width of undisturbed riparian buffer (m) | 0: 0-2m, 1: 2-5m, 2: 5-10m, 3: >10m | +1 |
| Local | Drooping vegetation (% of bank) | 0: None, 1: 1-25%, 2: 26-50%, >50% | +1 |
| | High-energy flow types (% of surface area) | 0: None, 1: 1-10%, 2: 11-25%, 3: >25% | +1 |
| | Submerged roots (% of bank) | 0: None, 1: 1-10%, 2: 11-25%, 3: >25% | +1 |
| | Emergent vegetation (% of cross sectional area) | 0: 0-10%, 1: >60%, 2: 31-60%, 3: 11-30% | +1 |
| | Submerged vegetation (% of surface area) | 0: 0-10%, 1: >80%, 2: 11-40%, 3: 41-80% | +1 |
| | Alternative physical variation (e.g. large woody debris) (% reach length) | 0: None, 1: 1-10%, 2: 11-20%, 3: >20% | +2 |
| | Ochre pollution | 0: None, 1: Weak, 2: Strong | -2 |
| Habitat | % Coverage of boulders (60-300 mm) | 0: None, 1: 1-10%, 2: 11-25%, 3: >25% | +2 |
| | % Coverage of gravel (10-60 mm) | 0: None, 1: 1-10%, 2: 11-25%, 3: >25% | +2 |
| | % Coverage of sand (0.25-3 mm) | 0: >75%, 1: 51-75%, 2: 25-50%, 3: <25% | +1 |
| | % Coverage of silt (<0.25 mm) | 0: None, 1: 1-10%, 2: 11-25%, 3: >25% | -2 |

3 ing values and the parameter-specific multiplication factors used for weighting the parameters in DHI.

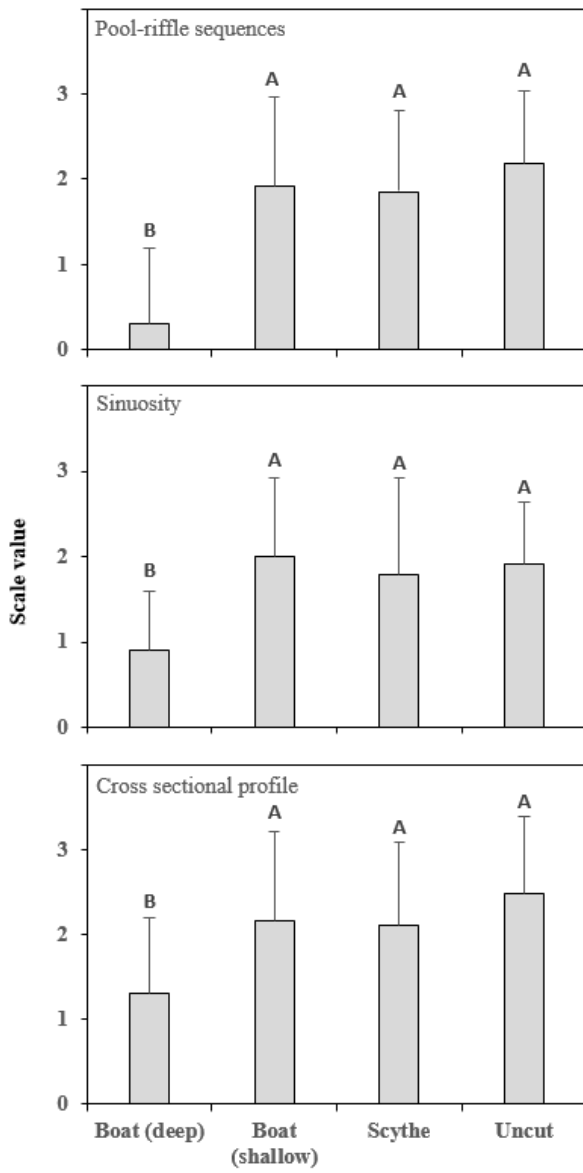
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6 Table S2. Sedimentation of suspended sediment during weed cutting with boat (deep) in Dybvad stream.
7 Sediment traps were positioned downstream of the stream reach subjected to weed cutting, and the total
8 sampling period was 1 h.

| Sediment trap ID | Location | Weight of deposited sediment (g DW m ⁻²) |
|---------------------|------------------------|--|
| 1 | 50 cm from left bank | 1,408 |
| 2 | 100 cm from left bank | 963 |
| 3 | 150 cm from left bank | 2,584 |
| 4 | 50 cm from right bank | 780 |
| 5 | 100 cm from right bank | 560 |
| 6 | 150 cm from right bank | 602 |
| Average (\pm SE) | | 1,149 (\pm 313) |

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10 Figure S1. Mean value and standard error of pool-riffle sequences, sinuosity, and cross-sectional profile for
11 the stream groups boat (deep), boat (shallow), scythe, and uncut. For intervals corresponding to scale values
12 see table 1. Letters indicate significant differences between groups (Student's t-test, < 0.05).



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