

EXERCISE: Assessment of the ecological quality of river ecosystems.

Assume that you want to assess a small stream for which you have collected information on the aquatic flora according to the table below, and you have also conducted a River Habitat Survey.

Macrophytes			
Channel			
Taxon	Abundance	Taxon	Abundance
<i>Ranunculus trichophyllus</i>	3		
<i>Callitriche stagnalis</i>	1		
<i>Scirpus lacustris</i>	1		
<i>Chara vulgaris</i>	2		
Right bank and margins			
Taxon	Abundance	Taxon	Abundance
<i>Phragmites australis</i>	3		
<i>Berula erecta</i>	2		
<i>Mentha aquatica</i>	1		
Left bank and margins			
Taxon	Abundance	Taxon	Abundance
<i>Phragmites australis</i>	2		
<i>Berula erecta</i>	1		
<i>Mentha aquatica</i>	1		
<i>Alisma lanceolatum</i>	1		

1. Calculate the IBMR index and the ecological quality class
2. Based on the data you collected in the RHS protocol, calculate the HMS (Habitat Modification Score) index. For the calculation of the index, use the file "Habitat-Modification-Score-Rules-2003-Version-1" available in the documents section on eclass. How modified is the river habitat?

3. What is the final ecological status considering the two quality elements: aquatic plants and hydromorphology?