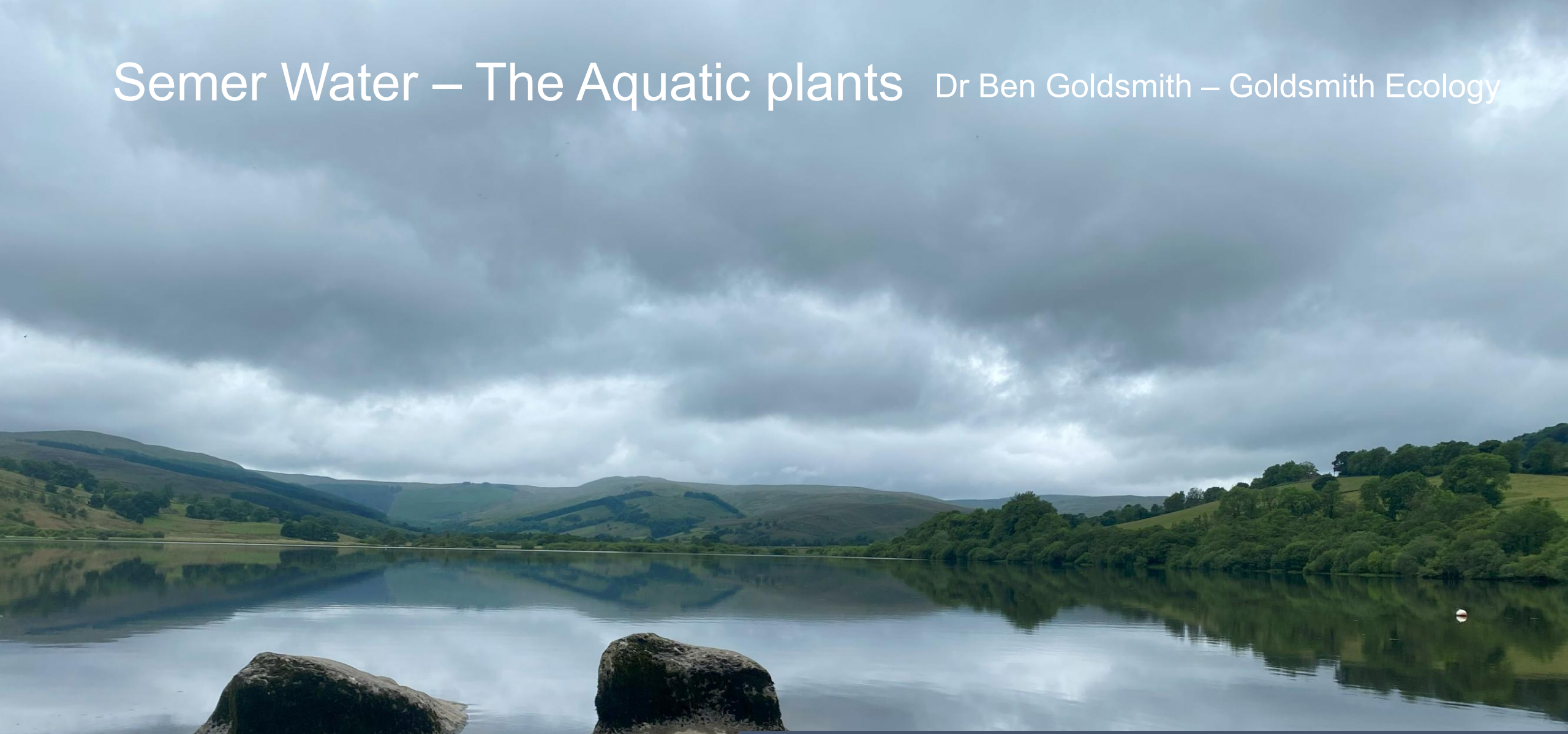
Semer Water – The Aquatic plants

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Semer Water – A protected lake – notified for what?

Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoëto-Nanojuncetea.????

WFD Type: Marl / Shallow?????

What does this mean?

We expect to see a good quality lake with extensive beds of submerged aquatic plants

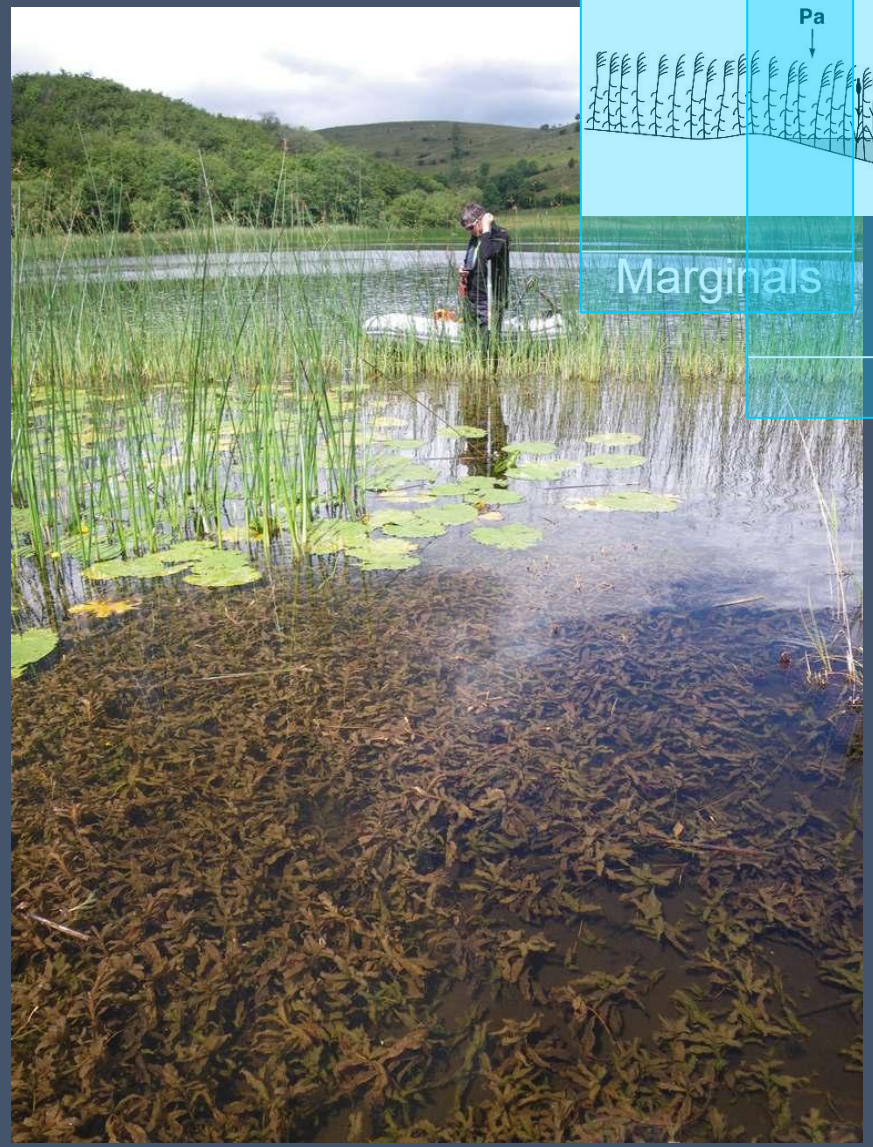
“Aquatic plants provide the basis of natural habitats in good quality lakes”

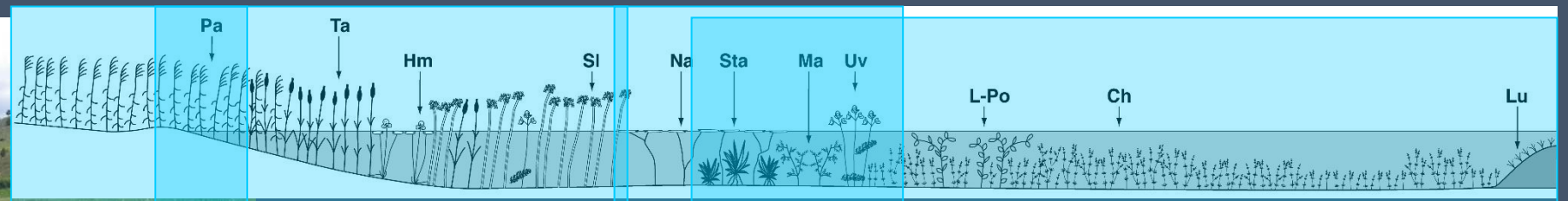


A “mesotrophic” lake with high alkalinity – What might we expect??



Aquatic macrophytes





Marginals

Emergents

Floating leaved: rooted & Free floating

Submerged

Broad leaved

Fine leaved

Isoetids

Finely divided

Stoneworts

Semer water – survey results:

Submerged and floating vegetation	DAFOR	% Frequency				
	1995	2005 (n = 54)	2010 (n = 58)	2013 (n = 120)	2016 (n = 125)	2016 (n = 125)
Callitriche hamulata			22	1	1	1
Callitriche sp.	R	20	7			1
Chara sp. (globularis)	**O**					**3**
Eleocharis acicularis	O	46	24	11	3	12
Elodea canadensis	R	2		1		
Elodea nuttallii			2			
Fontinalis antipyretica	F		5	1	1	
Limosella aquatica		7	3	1	1	3
***Nitella flexilis* agg.**		**2**			**2**	**1**
Nuphar lutea	R	37	29	13	13	
Potamogeton alpinus			**+**		**1**	
Potamogeton berchtoldii		2		1		
Potamogeton crispus		+		1		
Potamogeton pectinatus	F	6		1		1
Zannichellia palustris		7				
Species richness	**7**	**10**	**8**	**9**	**7**	**7**

The highlights:

Potamogeton alpinus – reddish pondweed



Limosella aquatica - Mudwort





The highlights:

Eleocharis acicularis
Needle spike-rush





What's missing??

No "*Isoetids*" – the typical species from mesotrophic lakes

No deep water species – plants to only < 1.0 m





No stonewort beds

(Present, but rare)



What's changing?

Yellow Water lilies – Where have they gone?

In 2016, we had extensive beds in the SE bay

2024 – No water lilies!!!



The current situation?

The lake is in “unfavourable condition” – in accordance to SSSI status

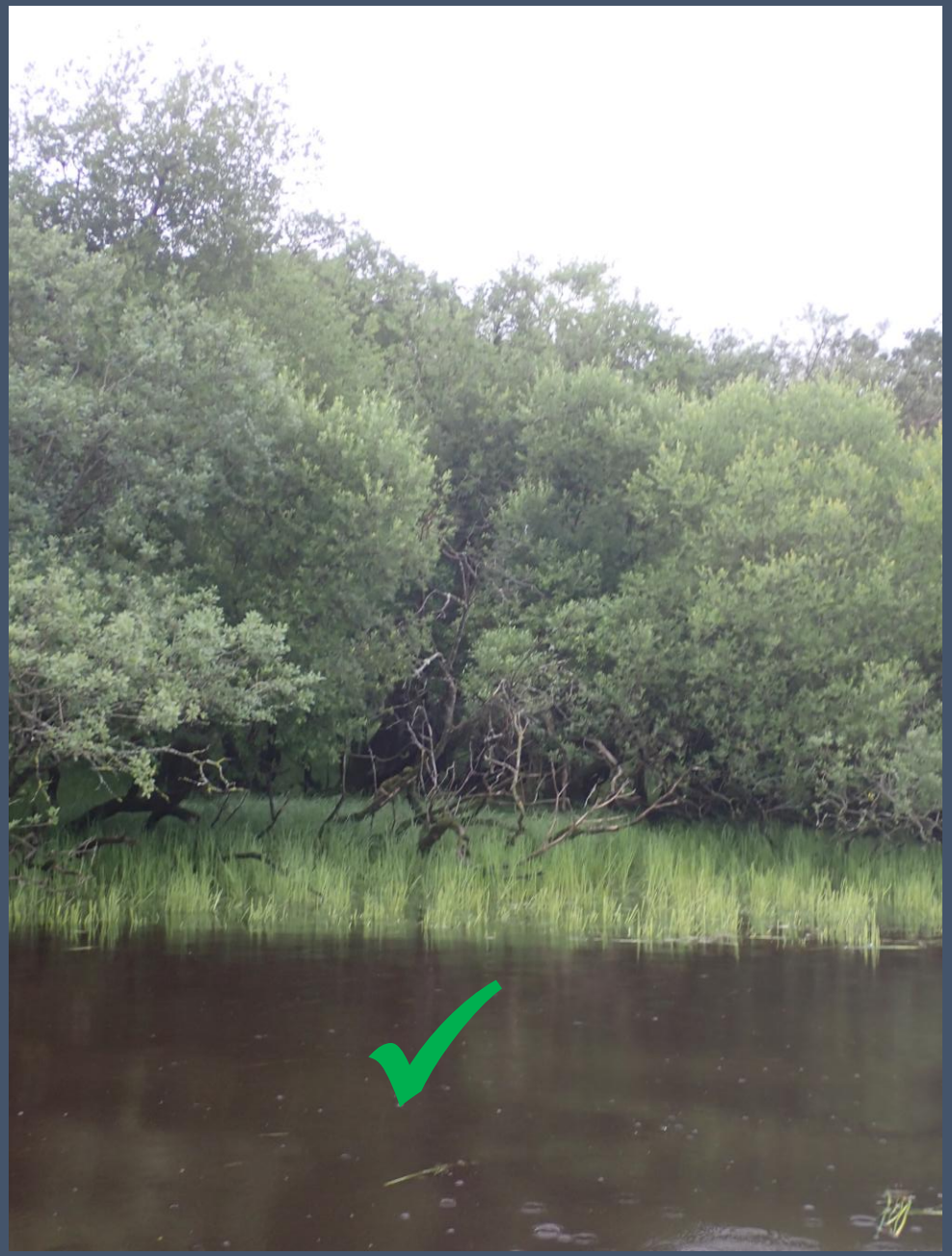
- The lake is turbid with brown humic water – restricting light for plants
- The loss of species – e.g. Yellow water lily, is a concern
- Very poor aquatic plant community relative to lake type

On the plus side

- No non-native invasive species were recorded – let’s ensure it stays this way ☺
  - But noting the amenity access
- Rare species “cling on” – within the margins and seed bank (?)
- Marginal wetlands are extensive and give resilience to the lake
- We must look to the catchment management will help to maintain and improve the water quality and maintain the lake as a valuable conservation resource withing the wider landscape.












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