





## **16th International Symposium on Aquatic Plants**

	Sessions
Session 1	Lessons learned by Mediterranean ecosystems: aquatic plants research and conservation in freshwaters affected by climate change
Session 2	The macroecology of aquatic plants in freshwaters
Session 3	Plant-animal interactions in aquatic plant beds (Zoogeochemistry session)
Session 4	Genetic diversity and structure in aquatic plants (continental and coastal habitats)
Session 5	Causes and patterns of macrophyte decline and recovery
Session 6	Friends or foes: Wanted and unwanted effects of herbicides on aquatic plants facing multiple stressors
Session 7	Macrophytes as Nature Based Solutions in urban ecosystems (BiNatUr session)
Session 8	Macrophyte monitoring (Biomonitoring based on macrophytes/Environmental monitoring based on macrophytes)
Session 9	Management of macrophytes

Session 9	Management of macrophytes						
		Programme					
<b>Monday No</b>	Monday November 13th 2023						
Location: University of Antwerp (Stadscampus), Hof van Liere, Prinsstraat 13, 2000 Antwerp							
<b>Location Rec</b>	eption: University of Antwerp (Stadsca	ampus), Klooster van de Grauwzusters, Building S, Lange Sint-Annestraat 7, 2000 Antwerp					
Poster prese	ntations are shown during Coffee & Br	reaks					
08:30 - 09:00	-						
09:00 - 10:00	) -						
10:00 - 11:00	-						
11:00 - 12:00	-						
12:00 - 13:00	) Lunch						
13:00 - 13:30	Official opening						
13:30 - 14:30	Keynote Lecture: Ludwig Triest	t ender the control of the control o					
	Session 1: Lessons learned by	Mediterranean ecosystems: aquatic plants research and conservation in freshwaters affected by climate change					
	14:30 Alice Dalla Vecchia	Incorporating intraspecific trait variability into functional diversity indices of freshwater macrophyte communities to open new perspectives on the analysis of their dynamics					
	14:45 Konstantinos Stefanidis	Exploring patterns of aquatic plant functional diversity in riparian corridors of Eastern Mediterranean rivers					
	15:00 Joanna Rosińska	Effects of increased temperature and intra- and interspecific competition on the performance of submerged plants: the case of Myriophyllum spicatum L. and Ceratophyllum demersum L.					
	15:15 Francisca Aguiar	Macrophytes in uncertain freshwater futures: effects of climate change in a Mediterranean regulated river					
15:30 - 16:00	Coffee & Tea Break						
	Session 1: Lessons learned by	Mediterranean ecosystems: aquatic plants research and conservation in freshwaters affected by climate change					
	16:00 Blanca Gallego Tévar	Ecophysiological seasonal responses of native Spartina maritima, invasive S. densiflora and their reciprocal hybrids from SW Iberian Peninsula					
	16:15 Daniel Gebler	Improving the predictive assessment of biological quality using macrophytes: empirical testing and method selection					
	16:30 Zhong Wang	Decouples of plant nitrogen-sulfur correlation under saline stress in alpine and arid wetlands					
	16:45 Rossano Bolpagni	Towards the measuring of Characeae functional traits: A compelling challenge for aquatic ecology					
	Session 3: Plant-animal intera	ctions in aquatic plant beds (Zoogeochemistry session)					
	17:00 Heleen Keirsebelik	Chinese mitten crabs (Eriocheir sinensis) damage macrophytes (demonstration)					
17:15 - 18:00							
18:00 - 19:00							
19:00 - 20:00	Opening Reception at Klooster	van de Grauwzusters					
20:00 - 21:00	Opening Reception at Klooster	van de Grauwzusters					

Tuesday No	Tuesday November 14th 2023		
Location: Uni	iversity of Antwerp (Stadscampus), Hof van Liere, Prinsstraat	t 13, 2000 Antwerp	
Poster preser	ntations are shown during Coffee & Breaks		
08:30 - 09:00	Coffee & Tea		
	Session 2: The macroecology of aquatic plants in fres	shwaters	
	9:00 Daniel Larkin	Thin lines between native and invasive aquatic plants and their implications for management	
	9:15 Nompumelelo Catherine Baso	Investigating the Enemy Release Hypothesis on the invasiveness of Lagarosiphon major in New Zealand: Implications for management	
	9:30 Janne Alahuhta	Climate, geodiversity and land use associated with beta diversity of river plant communities in Europe	
	9:45 Lars Baastrup Spohr	Global drivers of aquatic plant height	
	10:00 Lindsay Trottier	The Macroecology of Aquatic Plant Functions (MAP) Project: How it started, progress to date, and next steps	
	10:15 Richard Lansdown	Aquatic Plant Conservation: Priorities and plans	
	10:30 Zarah Pattison	The freshwater biodiversity crisis: what role do plant invasions play?	
10:45 - 11:15			
	Session 3: Plant-animal interactions in aquatic plant		
	11:15 Kirstine Thiemer	True love? Aquatic plants in relationship with fish	
	11:30 Kerstin Bouma	The impact of grazing by red deer (Cervus elaphus) on vegetation development during a wetland restoration project	
	11:45 Balázs A. Lukács	Traits for transport: do alien wetland plants have advantage?	
	12:00 Emily Strange	Mosquitoes & Macrophytes: a dangerous mix?	
	12:15 Michał Brzozowski	Biotic and abiotic factors potentially responsible for charophyte decline in temperate hardwater lakes	
12:30 - 13:30			
	Session 4: Genetic diversity and structure in aquatic	· ·	
	13:30 Petr Koutecký	Molecular and genome size data allow delimitation of Ranunculus sect. Batrachium taxa and reveal unexpected hybridization and cryptic diversity	
	13:45 Nigel Willby	Birds, boats and buoyancy: effects of connectivity on lake macrophyte communities	
	14:00 Junyao Sun	Response of macrophyte species community to the pond connectivity in an agricultural multi-pond system	
	14:15 Jasper Dierick	The importance of clonal and sexual reproduction for the maintenance, persistence and resilience of seagrass meadows under disturbance	
	14:30 Laura Bossaer	Salinization as a driver of genetic differentiation in lowland populations of Stuckenia pectinata	
	14:45 Estelle-Marie Blanquart	Genetic and taxonomic diversity of isoetid communities in Aquitaine shallow lakes	
15:00 - 15:30		· · · · · · · · · · · · · · · · · · ·	
15:30 - 17:45		·	
	15:30 Sandor Szabo	Sustaining stable states between submerged and free-floating vegetation	
	15:45 Fan Lui	Enzymes related to carbon metabolism in the leaves of submerged macrophytes play a crucial role in ammonium detoxification	
	16:00 Ling Xian	Exploring ammonium utilization strategy of submerged macrophytes using whole plants	
	16:15 Sabine Hilt	Feedback between changes in submerged macrophytes and phosphorus concentrations propel rapid eutrophication of a mesotrophic lake	
	16:30 Antonella Petruzzella	Achieving the goal "more natives, less invasives": Priority effects as a potential tool for restoration	
	16:45 Lucas Van der Cruysse	Investigating the (Re)introduction of Submerged Macrophytes in River Systems in Flanders (Belgium)	
	17:00 Anne Lewerentz	Macrophyte diversity in a changing world: lessons from deep lakes in Bavaria	
	17:15 Yexin Yu	Integrating depth and nutrient to illustrate regime shifts of deep lakes	
	17:30 Lei Li	Within-lake resource gradients modify periphyton shading effects on macrophytes	

Made and and	Navambar 15th 2022	
	November 15th 2023 versity of Antwerp (Stadscampus), Hof van Liere, Prinsstraat 13, 2	1000 Anturers
	rersity of Antwerp (Stadscampus), Hor van Liere, Prinsstraat 15, 2 ference dinner: Horta Grand Café, Hopland 2, 2000 Antwerp	2000 Antwerp
	ntations are shown during Coffee & Breaks	
08:30 - 09:00	Coffee & Tea	
09:00 - 10:00	Keynote lecture by Julie Coetzee	
03.00 - 10.00	Session 5: Causes and patterns of macrophyte decline and	Terry Pri
	10:00 Sabiha Akter	Interactive effects of nitrate and heatwaves on submerged and floating plants of a freshwater ecosystem
	10:15 Deborah Hofstra	Accelerating the re-establishment of macrophytes
	10:30 Riccardo Pieraccini	Seagrass restoration, every seed counts: increasing restoration success by improved germination
	10:45 Michał Rybak	Multi-element stoichiometry transformation and homeostasis disturbances among Myriophyllum spicatum organs in response to accelerated eutrophication
11:00 - 11:30	Coffee & Tea Break	8,
11.00	Session 6: Friends or foes: Wanted and unwanted effects	of herbicides on aquatic plants facing multiple stressors
	11:30 Gertie Arts	Effects of the fungicide tebuconazole on macrophytes in a mesocosm study
	11:45 Elisabeth Maria Gross	The chemical fingerprint of Myriophyllum spicatum: A harbinger of regime change in shallow lakes exposed to nitrate, pesticide and warming?
	12:00 Arie Vonk	Herbicide exposure and toxicity to aquatic primary producers
	12:15 Gray Turnage	Ecology and Management of Cuban bulrush in the United States
12:30 - 13:30	Lunch	
	Session 7: Macrophytes as Nature Based Solutions in urba	n ecosystems (BiNatUr session)
	13:30 Silvia Martín Muñoz	Aquatic-Nature-based Solutions: designing cities for biodiversity.
	13:45 Seppo Hellsten	Invasion of Elodea canadensis in northeastern Finland – nuisance or useful biomass?
	14:00 Jan Köhler	The impounding effect of aquatic vegetation in the lowland river Spree and its management by mowing
	14:15 Louis Skovsholt	Riverine plant community changes on a gradient of land use in lowland New Zealand streams
	14:30 Susanne Schneider	Mass development of aquatic macrophytes - causes and consequences of macrophyte removal for ecosystem structure, function, and services
	14:45 Liesbeth Bakker	Top-down and bottom-up effects on the establishment of aquatic plants in ecosystem restoration project Marker Wadden, The Netherlands
15:00 - 15:30	Coffee & Tea Break	
	Session 8: Macrophyte monitoring (Biomonitoring based	on macrophytes/Environmental monitoring based on macrophytes)
	15:30 Amritha Nair	Mapping stress in submerged aquatic vegetation using multispectral imagery and Structure from Motion(SfM) photogrammetry
	15:45 Takashi Asaeda	The application of hydrogen peroxide concentration to elucidate the submerged macrophyte distribution in a lake
	16:00 Paolo Villa	Assessing Spectral Metrics to Estimate Aquatic Plant Diversity from Hyperspectral Imaging: Preliminary Results
	16:15 Teresa Ferreira	Assemblage-based monitoring of freshwater ecosystem using similar macrophyte indices: how difficult can it get
	16:30 Morgan Botrel	Changing submerged aquatic vegetation in inland waters: new tools for high frequency monitoring at broad spatial scales
<b>,</b>	16:45 Maarten De Jonge	Macrophyte monitoring by the Flanders Environment Agency (VMM): Status, trends and relations with environmental variables
	17:00 Krzysztof Szoszkiewicz	How to estimate efficient sampling effort and the accuracy of river macrophyte monitoring
	17:15 Daria Sikorska	Ecohydrological Assessment of Aquatic Vegetation in Biebrza's Oxbow Lakes Using TerraSAR-X Radar Data
17:30 - 19:00	-	
19:00 - 20:00	Conference dinner at Horta Grand Café: Welcome receptio	
20:00 - 23:00	Conference dinner at Horta Grand Café: Seated dinner	

Thursday November 16th 2023		
Location: University of Antwerp (Stadscampus), Hof van Liere, Prinsstraat 13, 2000 Antwerp		
No sessions held!		
08:00 - 17:30	Excursion to Kruibeke CRT, Mesodrome and Meise Botanic Garden	
17:30 - 19:30		
19:30 - 21:30	Excursion to KMSKA Museum	

riday November 17th 2023					
Location: University of Antwerp (Stadscampus), Hof van Liere, Prinsstraat 13, 2000 Antwerp					
Poster presentations are shown during Coffee & Breaks					
08:30 - 09:00	Coffee & Tea				
	Session 9: Management of macrophytes				
	9:00 Jeffrey Hutchinson	Evaluating the suppression of Hydrilla verticillata by manual removal and planting native aquatic plants			
	9:15 Colin Burke	Unravelling the consequences of extreme floods and dam-induced river fragmentation on macrophyte populations: A case study of the Mid-Brisbane River, Australia			
	9:30 Roelf Pot	Removing nuisance aquatic macrophytes with a rakeboat			
	9:45 Hélène Groffier	Alkalinity and nitrogen: drivers of Myriophyllum heterophyllum invasion success?			
	10:00 Iris Stiers	Bugs 2 the Rescue: a citizen science project			
	10:15 Olga Delange	Towards assessing post-management recovery of native flora by comparing seed banks composition in Ludwigia spp. – invaded; – managed and non – invaded ponds in Belgium			
	10:30 Nguyen Nguyen	Regeneration of macrophytes from a lake propagule bank after removal of the invasive Cabomba caroliniana using herbicide and manual control			
10:45 - 11:15	Coffee & Tea Break				
	Session 9: Management of macrophytes				
	11:15 Eva Rekkers	Early phytoplankton responses to invasive floating plant control in subtropical freshwater systems			
	11:30 Tressia Chikodza	The effect of biological control on the population dynamics of Pontederia crassipes (C. Mart) Solms (Pontederiaceae) and Salvinia minima Baker (Salviniaceae)			
	11:45 Darren Reidy	Does Myriophyllum aquaticum, a freshwater invasive species, have capacity to invade brackish waters in Ireland?			
	12:00 Gabrielle Thiébaut	Is removal a solution for management of the alien aquatic plant species Egeria densa? A mesocosm approach			
	12:15 Brittany Chesser	Information and Education: Texas A&M AgriLife Extension Service Models Used to Combat Aquatic Vegetation Issues			
12:30 - 13:00	Final words by the organisers, awards for best pre	Final words by the organisers, awards for best presentation and poster			
13:00 - 14:00	Lunch				





