

FBA Conferences in Aquatic Biology

The Inaugural *Freshwater Biology* Summit

Multiple Stressors in Freshwater Ecosystems

1–4 September 2008, FBA Windermere, Cumbria, UK



Freshwater Biology

PROGRAMME



Monday 1 September

- 1700–1930 Registration, Tea/Coffee
1800–1830 Introduction to the FBA (*Michael Dobson, FBA Director*)
1830–1930 Opening Reception, Posters

Tuesday 2 September

- 0915–0945 Registration
0945–1000 Welcome (*Sir Martin Holdgate, FBA President*)
1000–1030 Opening address by the Chief Scientific Adviser to HM Government, *Prof. John Beddington* – Freshwater ecosystems in a changing world!

SESSION 1: An Ecosystem View

(Chair: *Michael Dobson*)

- 1030–1110 *Nancy B. Grimm (Arizona State University, USA)* – Combined influences of climatic and anthropogenic drivers on nitrogen transport and retention in aridland stream–riparian ecosystems
1110–1140 **Coffee**
1140–1220 *Jenny Davis (Murdoch University, Australia)* – Multiple stressors and regime shifts in shallow freshwater ecosystems
1220–1300 *Bob E. Hecky (University of Minnesota Duluth, USA)* – Interactions of multiple stressors cause rapid ecosystem change in Lake Victoria

1300–1400 **Lunch**

SESSION 2: Scale, Design and Detection

(Guest Chair: *Steve Killeen*)

- 1400–1440 *John P. Smol (PEARL, Queen's University, Ontario, Canada)* – The power of the past: using sediments to track the effects of multiple stressors on lake ecosystems
1440–1520 *Stephen C. Maberly, Stephen J. Thackeray, Ian D. Jones & Ian J. Winfield (Centre for Ecology and Hydrology, UK)* – Top-down and bottom-up effects of multiple stressors on lakes: analysis of long-term records from Windermere
1520–1600 *Louise Heathwaite (Lancaster Environment Centre/NERC, UK)* – Challenges for land and water systems science in a changing environment
1600–1630 **Tea**
1630–1800 Discussion (Chair: *Steve Ormerod*) & Posters

The support of the Environment Agency is gratefully acknowledged



Wednesday 3 September

SESSION 2: Scale, Design and Detection, continued...

(Guest Chair: Steve Killeen)

- 0930–1010 *Bernhard Statzner & Leah A. Bêche (CNRS, France)* – Biological traits to resolve multiple stressors on stream and river ecosystems
- 1010–1050 *Barbara J. Downes (University of Melbourne, Australia)* – Back to the future: little-used tools and principles of scientific inference can help disentangle effects of multiple stressors on freshwater ecosystems
- 1050–1120 **Coffee**

SESSION 3: Maintaining Riparian and Floodplain Functions

(Chair: Richard Johnson)

- 1120–1200 *Kurt D. Fausch (Colorado State University, USA), Colden V. Baxter & Masashi Murakami* – Multiple stressors in north temperate streams: lessons from linked forest-stream ecosystems in northern Japan
- 1200–1240 *Klement Tockner (IGB, Germany)* – Multiple stressors on river–floodplain linkages
- 1240–1340 **Lunch**

SESSION 4: Emerging Challenges: Climate and Invasive Organisms

(Chair: John Quinn)

- 1340–1420 *David L. Strayer (Cary Institute of Ecosystem Studies, USA)* – Freshwater ecosystems in the Holocene: the challenge of alien species
- 1420–1500 *Brian Moss (University of Liverpool, UK)* – Climate change, nutrient pollution and the bargain of Dr Faustus
- 1500–1540 *Vincent H. Resh, Ted Grantham & Adina Merenlander (University of California, Berkeley, USA)* – Climatic influences and anthropogenic stressors: invertebrate response, restoration, and water management in Mediterranean streams
- 1540–1610 **Tea**

SESSION 5: A Future Vision

(Chair: Stewart Clarke)

- 1610–1650 *Margaret A. Palmer (University of Maryland, USA)* – Dealing with stress: does heterogeneity enhance restoration or resilience in streams?
- 1650–1745 General discussion: towards a final statement (Chair: Alan Hildrew)
- 1930 for 2000 **Conference Dinner**, Belsfield Hotel, Bowness-on-Windermere

Thursday 4 September

- 0930–1010 *Stuart E. Bunn (Australian Rivers Institute, Griffith University, Australia)* – Integration of science and monitoring ecosystem health to identify potential causal factors of degradation and guide investments in catchment protection and rehabilitation
- 1010–1050 *John Quinn (NIWA, New Zealand)* – Interactions among land-use, water quality and hydrological pressures
- 1050–1120 **Coffee**
- 1120–1200 *David Hart & Aram J.K. Calhoun (University of Maine, USA)* – Rethinking the role of ecological research in the sustainable management of freshwater ecosystems
- 1200–1300 Discussion, agreeing final statement (Chair: Colin Townsend)
- 1300 **Lunch and departure**