

## Preface: wetland research in China

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### Introduction

This special issue of the journal *Marine and Freshwater Research* contains a collection of manuscripts describing wetland-related research that has been undertaken in China in recent times. The impetus to produce the special issue came from the successful hosting of the 10th INTECOL International Wetlands Conference in Changshu, China, held during 19–24 September 2016, hosted by Nanjing University. The Conference also produced the Changshu Declaration on Wetlands (Turner *et al.* 2017).

As outlined in an online welcoming address to the Conference by the co-Chairs of the Organising Committee, Professor Jun Chen (President of Nanjing University, China) and Professor R. Eugene Turner (Louisiana State University, USA, & Co-Chair of INTECOL Wetlands Working Group) the conference was an ‘excellent opportunity to learn and share recent advances in our understanding of wetland biodiversity and ecosystem management, the functional roles of wetlands in wastewater treatment, wetland restoration, ecosystem services, and the ‘wise use’ of natural resources for sustainable development.’ It was anticipated that the conference would have ‘profound and historically significant effects on the wetlands research and management of China and the world’ (welcoming address accessible at <http://intecol-10iwc.com/EN/HelpCenter/HelpInfo.aspx?nid=14>, accessed 10 February 2018).

This special issue on wetland research in China contains 22 manuscripts covering wetland processes and functions, wetland techniques and methods, and wetland restoration and creation. The special issue builds on a Virtual Issue on ‘Research Into Chinese Wetlands’ comprising manuscripts previously published in *Marine and Freshwater Research* (see <http://www.publish.csiro.au/mf/virtualissue/1782>, accessed 10 February 2018) that was compiled on the occasion of the INTECOL International Wetland Conference being held in China.

### INTECOL international wetland conferences

The Changshu conference was the 10th in a series organised under the auspices of the INTECOL Wetland Working Group, which was formed in 1978 at the International Congress of

Ecology in Jerusalem. The first International Wetlands Conference was held in New Delhi, India in 1980, and subsequently in Trebon (Czechoslovakia) 1984, Rennes (France) 1988, Columbus (USA) 1992, Perth (Australia) 1996, Quebec City (Canada) 2000, Utrecht (Netherlands) 2004, Cuiaba (Brazil) 2008, and Orlando (USA) 2012. Maintaining this sequence of conferences is a remarkable achievement and has involved the active support of many dedicated wetland experts and their colleagues in the host cities and countries in addition to that provided by the Wetland Working Group.

The conferences have resulted in many publications, such as the following books that had their origins from the New Delhi conference (Gopal *et al.* 1982a, 1982b), Trebon (Mitsch *et al.* 1988; Whigham *et al.* 1990; Whigham *et al.* 1993), Columbus (Mitsch 1994; Finlayson and van der Valk 1995), and Perth (McComb and Davis 1998), as well as special issues of journals. These efforts bear witness to the interest in wetland research and the sharing of research information through these publications. This effort shows that the INTECOL International Wetlands Conferences are important – they provide invaluable networking opportunities with key researchers and decision makers throughout the globe. Over the past three decades, the INTECOL International Wetlands Conference has grown in importance to become the world’s leading forum for wetland scientists and managers and decision-makers.

### Changshu Declaration

In the final session of the conference the more than 800 participants at the conference agreed The Changshu Declaration on Wetlands, which is accessible at the following website in Chinese and English ([http://intecol-10iwc.com/Content/Annex/201610/湿地常熟宣言\(中英文文字版\).pdf](http://intecol-10iwc.com/Content/Annex/201610/湿地常熟宣言(中英文文字版).pdf), accessed 22 March 2018) with an English-language version published separately (Turner *et al.* 2017). The declaration had been displayed throughout the conference and participants given the opportunity to personally add their signatures to an accompanying panel (Fig. 1).

The Declaration contained five calls to different sectors that could influence the management and restoration of wetlands that



**Fig. 1.** The Changshu Declaration was signed by individual participants at the 10th INTECOL International Wetlands Conference, Changshu, China, and adopted by acclamation on 24 September 2016.

provided many benefits to people. These calls are paraphrased below:

1. The farming communities and the agricultural sector were called upon to acknowledge that wetlands must be conserved and restored within agricultural landscapes.
2. Land use planners were called upon to recognise wetlands as a valuable global public good, and to ensure they were protected and embedded within urban and rural landscapes;
3. River basin managers and catchment committees concerned with water allocation were called upon to recognise upstream wetlands as valuable water providers, and downstream wetlands as essential for water and for biodiversity within the basin, catchment or watershed;
4. Coastal development planners and authorities were called upon to recognise the critical importance of coastal wetlands, particularly intertidal areas, for the conservation of migratory waterbird species and ecosystem services and to ensure their protection and sustainable management;
5. Urban managers were called upon to enhance the beauty of their cities by restoring and valuing their wetlands, and to seek accreditation as a Wetland City under the Ramsar Convention (see <https://www.ramsar.org/news/wca-applications>).

The Declaration also thanked the Government of the People's Republic of China, Nanjing University, the Ramsar Administrative Authority of China, the Changshu Government

and Nanjing University Ecological Research Institute of Changshu, and the other organisations for hosting, sponsoring and contributing to the Conference. It acknowledged the success of the conference and was accepted by acclamation by the conference participants. A key part of the success of the conference were the plentiful opportunities for exchanging information and knowledge about wetlands, which has been continued with the production of this special issue.

### Acknowledgements

We thank all the authors who have contributed to this special issue and shared their research into wetlands in China. This effort extends that which led to the successful hosting of the 10th INTECOL International Wetland Conference in Changshu. We also acknowledge all those who contributed to the conference and to the Changshu Declaration. A special thank you is extended to Ms Leanne Hamilton from CSIRO Publishing who has assisted us and help guide the production of the special issue, and to Yiyi Xiong, a consultant with the Department of International Cooperation, Nanjing University Ecological Research Institute of Changshu, who has coordinated the effort to produce the special issue. We thank them enormously – it has been a tremendous effort.

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