

Special Issue

Wetlands and Global Change: Mitigation and Adaptation — The 2024 SWS Annual Meeting in Taipei

Founded in 1980, the Society of Wetland Scientists (SWS) has, for the past 45 years, played a pivotal role in advancing the understanding, conservation, protection, and restoration of wetlands worldwide. With science-based wetland management at its core, SWS is committed to promoting the sustainability of wetlands and contributing to global biodiversity and ecological resilience. The 2024 SWS Annual Meeting marks a historic milestone: for the first time, this international conference will be held in Asia — hosted in Taipei, Taiwan. This event signifies SWS's expansion into the Asian region, opening new avenues for scientific exchange and regional collaboration in wetland conservation.

The central theme of the 2024 Annual Meeting, "Wetlands and Global Change: Mitigation and Adaptation," responds directly to the accelerating environmental and societal challenges brought on by climate change, biodiversity loss, and unsustainable development. The conference seeks to explore the multifaceted roles wetlands play in climate mitigation, adaptation, ecosystem services, and community resilience.

This theme is further reflected in the Special Issue of *Taiwania*, entitled "Wetlands and Global Change: Mitigation and Adaptation," edited by Wei-Ta Fang and Ben A. LePage. This Special Issue features a collection of peer-reviewed articles that explore the multifunctional roles of wetlands in addressing global change. Key topics include carbon sequestration, biodiversity conservation, policy integration, ecosystem-based adaptation, and social resilience. It highlights wetlands as nature-based solutions capable of enhancing ecological integrity and human wellbeing in the face of global environmental shifts. By bridging science, policy, and community engagement, the contributions emphasize both regional experiences and global frameworks, aiming to inform sustainable wetland governance and support the implementation of international targets such as the Ramsar Convention and the 30×30 goal. The 30×30 goal, adopted under the Kunming-Montreal Global Biodiversity Framework at the UN Convention on Biological Diversity COP15 in 2022, calls for the conservation of at least 30 percent of the world's lands and waters by 2030. Wetlands are vital ecosystems for achieving this target, whether through formal protected areas or through Other Effective Area-based Conservation Measures (OECMs) that incorporate local stewardship, community engagement, and nature-based solutions. This goal underscores the urgent need to integrate wetland conservation into national strategies and global biodiversity action plans.

The Special Issue compiles research from international scholars that underscores the ecological functions, carbon storage capacity, and socio-economic significance of wetlands as well as the 30×30 goal and OECMs. The full issue is available online at: https://taiwania.ntu.edu.tw/issue/70/3.

This Special Issue was made possible through partial support from the International Taiwan Studies Center, National Taiwan Normal University, and the National Science and Technology Council, ROC. Additional funding was provided by the Higher Education SPROUT Project (HESP) 2024–2025, Ministry of Education, ROC. We extend our sincere appreciation to the College of Life Science, National Taiwan University, the Biodiversity Association of Taiwan, and the National Park Service, Ministry of the Interior, ROC for their valuable collaboration and contributions to the success of this publication.

had, viato

Guest Editor, National Taiwan Normal University