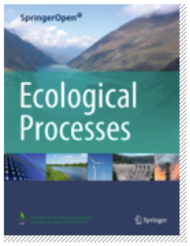

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``Wetlands In a Complex World'' Special Issue
Ecological Processes

Editor: Dr. X. Han
Executive Editor: Dr. Y. Wu
Guest Editor: Dr. Matteo Convertino

Call for Papers: Special Issue on "Wetlands In a Complex World"

The Editorial Board and Dr. Matteo Convertino, acting as Guest Editor of the new journal *Ecological Processes*, published by Springer in an open format (SpringerOpen), announces a special Call for Papers entitled "Wetlands in a Complex World" addressing the multifaceted challenges of wetlands. The topic is the main theme of the Society of Wetland Scientists and the Greater Everglades Ecosystem Restoration Conference - 9th INTECOL (International Association for Ecology) conference in Orlando, FL, June 3-8, 2012 (http://www.conference.ifas.ufl.edu/intecol/topics.html). *We expect to include in the special issue the most recognized scientific leaders in wetlands processes and ecological systems theory.*

The invitation is extended to scientists, stakeholders, students, and to anyone interested in wetlands, without restrictions on disciplines and professional societies. We anticipate publicity of the issue within the Society of Risk Analysis and other major societies and media.

Ecological Processes emphasize techniques, approaches, and concepts, including descriptive, comparative, experimental, mathematical, statistical, and interdisciplinary approaches. *Ecological Processes* is designed to provide better understanding of ecosystem and landscape processes, and therefore, better management of ecosystems and environments.

Topic Prospectus

The two billion acres of wetlands on Earth are spread throughout all climates except Antarctica. To name the most important wetlands: Camargue (France), Wasur National Park (New Guinea), iSimangaliso Wetland Park (South Africa), Mekong Delta (Vietnam), Kakadu Wetlands (Australia), Kerala backwaters (India), Everglades (Florida), Okavango (Botswana), Sundarbans (Bangladesh), and the Pantanal (Brasil and Bolivia) that is the world's largest wetland of any kind.

Wetlands are complex ecosystems because they are simultaneously driven by many natural processes, such as geological, hydrological, chemical, and biological processes. The complexity arises because all of these processes vastly overlap and the importance of each process is comparable to the other processes. Wetlands are also characterized by strong spatial heterogeneities in space and time. Disturbances, such as climate change, restorations, and introduction of new species rapidly change wetland patterns and processes. This complexity means that understanding wetland ecosystems requires an interdisciplinary approach that engages many specializations, including biology, chemistry, biogeochemistry, ecology, hydrology, pedology, and sociology, to mention a few. Given these complexities, a systems-approach to wetland patterns and processes is very promising to understand the fundamental drivers of these patterns and processes, and to solve real problems of wetlands. The interaction of natural processes with human processes in wetland ecosystems is more and more an urgent issue to solve. Thus, together with the understanding of basic wetland processes, the risks and decisions derived from human factors/dependencies on wetland processes is imperative to be understood.

Special Issue Invitation

The Guest Editor of the Special Issue, Dr. Matteo Convertino, together with the Editors-in-Chief of the journal, invites submissions in the area of Wetland Processes, and related topics. Papers are encouraged in, but not limited to, the following areas:

- Ecological processes that affect wetland metapopulations, metacommunities, ecosystems and landscapes at large where wetlands are present. Studies of any species, and of multiple species of any taxa and across trophic levels (e.g. from biofilm to large scales) are welcome.
- Ecological processes of wetlands that operate at landscape scales, regional scales and global scales. Comparative studies among wetlands are welcome.
- Ecological processes that impact spatial and temporal dynamics and patterns of wetlands. Linking ecological processes with other environmental processes (e.g. climate change) is welcome.
- Ecological processes of wetlands that influence the development of ecological sustainability. Studies that incorporate the concepts of resilience and adaptive capacity are welcome.
- Ecological processes of wetlands that support the maintenance or restoration of the ecological system composition, structure, and function over time and space. Studies that integrate economical, legal, and social factors are welcome.
- Ecological processes of wetlands that describe the ecohydrology, biohydrology, biogeochemistry, the flow of energy and biological diversity.
- Ecological processes of wetlands that integrate natural and human processes across time and space.
- Interdisciplinary studies of ecological processes of wetlands (analysis of case studies, theoretical study, computational techniques). Stochastic, game, and network-based models are welcome.
- Ecological processes inferred from satellite imagery analysis.
- Biologically inspired rules by ecological processes of wetlands.
- Ecological processes related to nanomaterials, invasive species, and pathogens in wetlands.
- Quantitative analysis and modeling of risk and decisions related to wetland ecological processes.
- Advanced graphical representation of wetland processes (3D video, art-style representations, etc.).

More details:
(1) *All invited papers do not need to pay any submission fee*. Dr. Matteo Convertino has the final decision on all the invited papers after a peer review process.
(2) *The number of papers accepted for the issue is from 5 to 15. The special issue is introduced by an editorial by the Guest Editor.*
(3) *The submission and review processes are the same as normal processes of other journals*; however the submitted papers need to have specified "Invited paper by Dr. Convertino for special issue of "**Wetlands in a Complex World**" to be able to obtain the waiver of the fee.

Contact Details & Schedule
Inquiries regarding this Call for Papers should be directed to the Guest Editor: Dr. Matteo Convertino, University of Florida, Gainesville: mconvertino@ufl.edu; and to the Executive Editor, Dr. Yegang Wu, ywu_mail@yahoo.com.
We welcome the submission of your papers starting from 1 May 2012 to 31 August 2012, leading to publication of the special issue **"Wetlands In a Complex World"** in the journal *Ecological Processes* in early 2013 or earlier. We strongly invite to contact early Dr. M. Convertino due to the limited number of papers allocated for the special issue. For more information about the journal please check these websites:
http://www.ecologicalprocesses.com/about
http://www.springer.com/environment/journal/13717

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