

Editorial

BioInvasions Records: A new international journal on biological invasions

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Abstract

BioInvasions Records is a new open access peer-reviewed international journal focusing on the rapid publication of applied research on invasive species and biological invasions in aquatic and terrestrial ecosystems around the world. *BioInvasions Records* is a continuation of the former *Aquatic Invasions Records*, an electronic supplement of the open access international journal *Aquatic Invasions*. *BioInvasions Records* is devoted to bridging the gap between scientific research and the use of science in decision-making, regulation, and management as it pertains to the introduction of invasive alien species (IAS) and biodiversity conservation. Thus, this new journal provides a forum for professionals involved in research and management of IAS. *BioInvasions Records* contributes to rapid information dissemination, risk assessment procedures, and early detection and rapid response on IAS. The incorporation of open access journals into the REABIC information system represents an innovative approach to IAS-related information management and ensures sustainability of REABIC-based information management tools.

Key words: alien and invasive species, early warning, information management, data publishing, geo-referencing, open access journals

BioInvasions Records is a new open access, peer-reviewed international journal focusing on the rapid publication of applied research on alien species and biological invasions in aquatic and terrestrial ecosystems around the world (please visit the journal web site at <http://www.reabic.net/journals/bir/>). It was established in November 2011 as a continuation of the former *Aquatic Invasions Records*, an electronic supplement of the open access international journal *Aquatic Invasions* (<http://www.aquaticinvasions.net>), with start-up funding provided by the European Commission Seventh Framework Programme for Research and Technological Development Collaborative Project *enviroGRIDS* (<http://www.envirogrids.net>).

Initially, *Aquatic Invasions*, the mother journal of *BioInvasions Records*, was established in 2006 as a European electronic applied journal on bioinvasions in aquatic ecosystems with early warning functions (Panov and Gollasch 2006; Panov et al. 2011). The *Aquatic Invasions* journal was so successful that since its establishment the number of published research

articles gradually increased and achieved a mean citation per article for the 2006 volume averaging 7.67 (Figure 1). In addition, a rather constant number of descriptive papers on new non-native species records were published. These developments resulted in the natural transformation of *Aquatic Invasions* into a regular academic international journal, with the concurrent publication of descriptive species records papers, released during 2010–2011, in the electronic supplement *Aquatic Invasions Records*. This has now lead us to the establishment of a new applied international journal *BioInvasions Records*, focusing on publication of accounts of new records of both aquatic and terrestrial non-native species and other applied papers in the area of biological invasions, whereas *Aquatic Invasions* will continue to focus on more academic research on aquatic invasive species.

Our new journal, *BioInvasions Records* provides authors with their rights protection concerning primary geo-referenced records, biological monitoring and surveys as well as

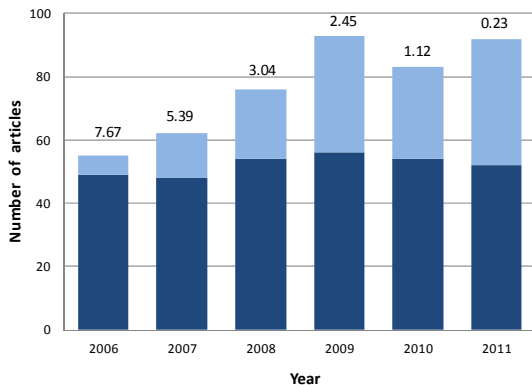


Figure 1. The number of papers published in *Aquatic Invasions* per year (2006–2011): deep blue indicates descriptive papers on new records of non-native species, numbers above bars indicate mean number of citations per article according to ISI Web of Science (21 March 2012).

timely publication of reports concerning first invasive species records. This contributes to rapid information dissemination, risk assessment procedures, and early warning systems, and successful or failed rapid response activities on invasive alien species (IAS). Furthermore, *BioInvasions Records* publishes technical reports on new management technologies for invasive species and also the proceedings of relevant international conferences/meetings.

One of the key benefits of the open access journal *BioInvasions Records* is the timely and readily available publication of essential primary scientific information, which feeds into IAS management efforts and informs both decision and policy making processes. This journal also may contribute to timely and coordinated eradication efforts of newly-found IAS. The fast and comprehensive peer-review process of manuscripts serves as an effective quality control mechanism.

BioInvasions Records also is devoted to bridging the gap between scientific research and the use of science in decision-making, regulation, and management in the area of introduction of invasive species and biodiversity conservation. The journal provides a forum for professionals involved in research and management of invasive alien species, including a focus on the following:

- New records of non-native species
- Early detection, early warning and rapid response activities

- Ecological risk assessment

- Advances in management of invasive species

BioInvasions Records will serve as a platform for the online publication of primary datasets on species records, thereby providing solutions to the growing issues of (1) environmental- and biodiversity-related data sharing (Costello 2009) and (2) the support of online databases of IAS with geo-referenced species records data (Vandekerkhove and Cardoso 2011). Through publication of experts' data in *BioInvasions Records*, we will encourage sharing of expert knowledge on IAS introductions and promote regular updates of online databases, primarily those available in the Regional Euro-Asian Biological Invasions Centre information system (REABIC, <http://www.reabic.net>).

The official publisher of *BioInvasions Records*, REABIC is an independent regional data centre for invasive alien species (IAS) serving as an international repository for geo-referenced record data on IAS and currently focused on providing effective mechanisms of online open access to the datasets of geo-referenced IAS monitoring programmes. Specifically, REABIC provides services for data holders in terms of protection of their author rights on IAS related information via timely publication of their papers in the international open access thematic journals *Aquatic Invasions* and *BioInvasions Records*, both established by REABIC (<http://www.reabic.net/journals/>). Both thematic journals include a peer-review system as the primary mechanism for quality control of IAS data, available after their publication in the online information system of REABIC. These scientific journals, as part of the information system of REABIC, serve to provide a unique opportunity to develop early warning systems, based on the most recent geo-referenced records of IAS (Panov et al. 2011). The incorporation of open access journals into the REABIC information system represents an innovative approach to IAS-related information management and ensures sustainability of REABIC-based information management tools. In combination with other REABIC-based online services, including the European Research and Management Network on Aquatic Invasive Species (ERNAIS) experts database (<http://www.reabic.net/ZnExp.aspx>), REABIC also provides a virtual platform for linking the international research community to the general public, managers, decision-makers, and all relevant

stakeholders. Currently we are working on mechanisms for the more effective transfer of scientific information from publications in open access journals upwards to the level of decision-making, by focusing on the Black Sea basin area as a model region (Panov et al. 2012).

The Open Access policy of *BioInvasions Records* means that authors retain the copyright of their articles, which can be copied, downloaded, and freely distributed. The primary advantage of open access journals is that the entire content is freely available to users everywhere. Open access gives a worldwide audience larger than that of any subscription-based journal and thus increases the visibility and impact of published papers, and their citations, respectively. This widespread accessibility also can increase efficiency for risk assessment and rapid response to bioinvasions. Moreover, publication of primary research data via open access increases citation rates of research articles (Piwowar et al. 2007).

In adherence to the general funding model for open access journals, *BioInvasions Records* is charging authors for processing of their manuscripts. Also, the journal currently is seeking additional funding from relevant organizations in order to support students, retired scientists, those from low-income countries, and to support the submission of datasets with species records. During 2012, publication of papers submitted to *BioInvasions Records* by scientists from the Black Sea basin countries will be supported by the European Commission FP7 project *enviroGRIDS*.

The journal is supported by a strong international editorial team, including recognized experts in the area of biological invasions. Associate editors of BIR include: Dr. Kestutis Arbaciauskas (Nature Research Centre, Lithuania), Dr. Ernesto Azzurro (ISPRA, Institute for Environmental Protection and Research, Italy), Dr. Sarah A. Bailey (Fisheries and Oceans Canada, Canada), Dr. Kathleen Beyer (Flinders University, Australia), Dr. Demetrio Boltovskoy (University of Buenos Aires, Argentina), Dr. Elisabeth J. Cook (The Scottish Association for Marine Science, UK), Prof. Gordon Copp (Cefas-Lowestoft, UK and Bournemouth University, UK), Dr. Philippe Gouletquer (IFREMER, France), Prof. Rodolphe Gozlan (Bournemouth University, UK), Dr. Michal Grabowski (University of Lodz, Poland), Dr. John Mark Hanson (Fisheries and Oceans

Canada, Canada), Dr. Andrea Locke (Fisheries and Oceans Canada, Canada), Dr. Maiju Lehtiniemi (SYKE, Finland), Dr. Sergey E. Mastitsky (BASF, Ludwigshafen, Germany), Dr. Thomas Therriault (Fisheries and Oceans Canada, Canada) and Dr. David Wong (University of Nevada Las Vegas, USA). In addition, we have a strong Advisory Board, including such outstanding international experts as Prof. Ferdinando Boero (University of Salento, Italy), Dr. Paul F. Clark (The Natural History Museum, UK), Dr. Mark J. Costello (University of Auckland, New Zealand), Prof. Henri J. Dumont (Ghent University, Belgium), Dr. Bella Galil (National Institute of Oceanography, Israel), Dr. Francesca Gherardi (University of Florence, Italy), and Dr. Argyro Zenetos (Hellenic Centre for Marine Research, Greece).

This first issue of *BioInvasions Records* comprises 14 research articles, describing new records of non-native species in marine and freshwater ecosystems around the world: in the Wadden Sea (Nehring et al. 2012), British coastal waters (Stebbing et al. 2012), Mediterranean Sea (Azzurro et al. 2012; Bariche 2012; Bogi and Galil 2012; Gülşahin and Tarkan 2012; Jribi and Bradai 2012), western Atlantic coast (Meretta et al. 2012; Sant'Anna et al. 2012), eastern Pacific coast (Galland and Pennebaker 2012), and inland waters of Europe and Asia (Gophen and Shealtiel 2012; Kvach 2012; Naser et al. 2012; Sánchez-Hernández et al. 2012).

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