

NEOBIOTA 2010, Copenhagen: Corrections to book of abstracts

- p. VI: Wednesday, Oral Session 4, chaired by Tamara van Mólken; the first talk 14:00–14:20 will be substituted by H. Zimmermann, H. von Wehrden, H. Hirsch, M. Damascos, D. Bran, E. Welk, K. Wesche, C. Ritz, V. Wissemann, D. Renison & I. Hensen: *The invasion success of Rosa rubiginosa across diverse ecosystems and climates despite its highly reduced genetic diversity* (abstract p. 210)
- p. VI: Wednesday, Oral Session 4, 16:20–16:40, Caron *et al.* substituted by C. Lambertini, I.A. Mendelsshon, B. Olesen, B.K. Sorrell, T. Riis & H. Brix: *Tracing the origin and introduction history of Phragmites australis in the Gulf Coast of America using phylogenetic analysis* (abstract p. 203)
- p. VII: Thursday, Oral Session 7, 14:20–14:40, Humair *et al.* substituted by T. Heger: *A qualitative approach to the analysis of biological invasions* (abstract below)
- p. VII: Thursday, Oral Session 7, 14:40–15:00, Nehring *et al.* substituted by A. Zaiko, M. Lehtiniemi, A. Naršćius, & S. Olenin: *Bioinvasion impact assessment: the Baltic Sea case* (abstract p. 185)
- p. 28: contribution cancelled
- p. 34: contribution cancelled
- p. 48: to be presented by E. Tricarico
- p. 51: contribution cancelled; substituted by T. Heger: *A qualitative approach to the analysis of biological invasions* (abstract below)
- p. 52: contribution cancelled
- p. 114: contribution cancelled
- p. 116: author names S. Casellato & L. Masiero (not ‘C. Sandra & M. Luciano’)
- p. 119: contribution cancelled
- p. 135: contribution cancelled
- p. 158: author names A. Monty & G. Mahy (not ‘M. Arnaud & M. Grégory’)
- p. 165: contribution cancelled
- p. 182: contribution cancelled
- p. 185: oral presentation in Session 7
- p. 203: oral presentation in Session 4
- p. 210: Poster 5.21 will be (also) presented in oral session 4
- p. 222: title and authors revised: *Brine shrimp biodiversity threatened in Urmia Lake (Iran)*. M. Maccari¹, A. Gómez², E. Redón¹, F. Hontoria¹ & F. Amat¹ – ¹Instituto de Acuicultura de Torre de la Sal (CSIC), Ribera de Cabanes, Spain; ²Department of Biological Sciences, University of Hull, Hull, UK
- p. 238: Changed poster title “Preserving endangered amphibians by chemical eradication of introduced fish species”
- p. 236: contribution cancelled
- p. 243: contribution cancelled
- p. 246: Changes poster title “Tritrophic approach to plant preference on an exotic and a native plant”
- p. 248: contribution cancelled
- p. 251: contribution cancelled
- p. 258: contribution cancelled
- p. 263: contribution cancelled

A qualitative approach to the analysis of biological invasions

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Biological invasions are processes influenced by many different interacting factors. Invasion research today faces the challenge to take this complexity into account. Several approaches exist synthesizing the existing knowledge in an integrative way, each having its specific scope and certain constraints. The presentation will introduce an integrative framework that systematically summarizes factors influencing invasion processes: the model of invasion steps and stages (INVASS model). Based on a chronological dissection of an idealized invasion process, the key factors which influence species invasions have been analyzed. For each of four invasion steps, potential problems have been identified which may arise for an invading organism, and favorable species characteristics as well as environmental conditions are named which can contribute to the avoidance or solution of these problems. The main factors influencing invasions thus are assigned to specific steps of the invasion process. Four tables summarize these factors.

The model in its original version is applicable to invasions of terrestrial vascular plants, and it has been modulated for an application to mammals and freshwater fish. The INVASS model's tables can be used as checklists guiding in-depth analyses of invasion cases. They allow checking systematically which of the various factors influencing invasion processes have been important during the respective case. As will be highlighted with the example of Nutria (*Myocastor coypus*) invading Europe, such an analysis can build the basis for an assessment of the risk of further range expansions. The tables can moreover deliver a systematic basis for those studies that search for patterns in the factors determining invasion processes. This also will be indicated with an example.