



# Freshwater Animal Diversity Assessment (FADA)

Aaïke De Wever, Koen Martens





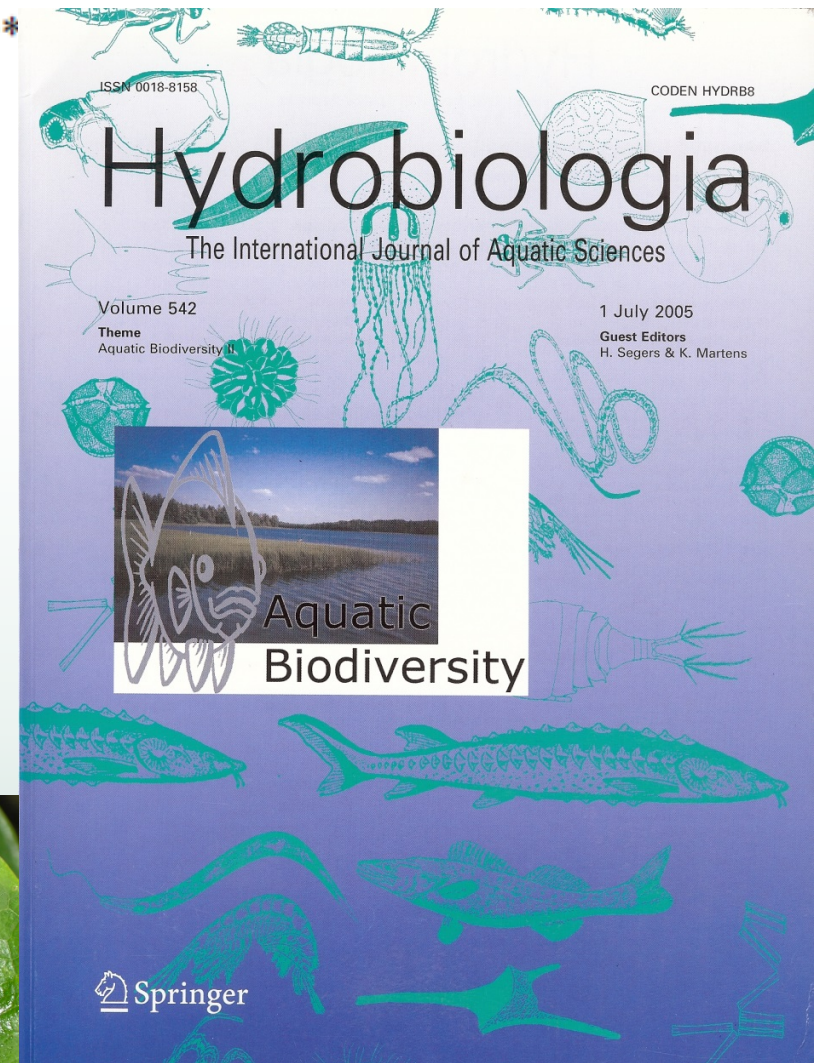
Hydrobiologia (2005) 542:39–67  
H. Segers & K. Martens (eds), Aquatic Biodiversity II  
DOI 10.1007/s10750-004-5522-7

*Review Paper*

## An assessment of animal species diversity in continental waters

C. Lévêque<sup>1</sup>, E.V. Balian<sup>2</sup> & K. Martens<sup>3,4,\*</sup>

- Estimate based on literature study and contacts with experts; ca. 100'000 freshwater species
- Need for assessing the status of inland water biodiversity





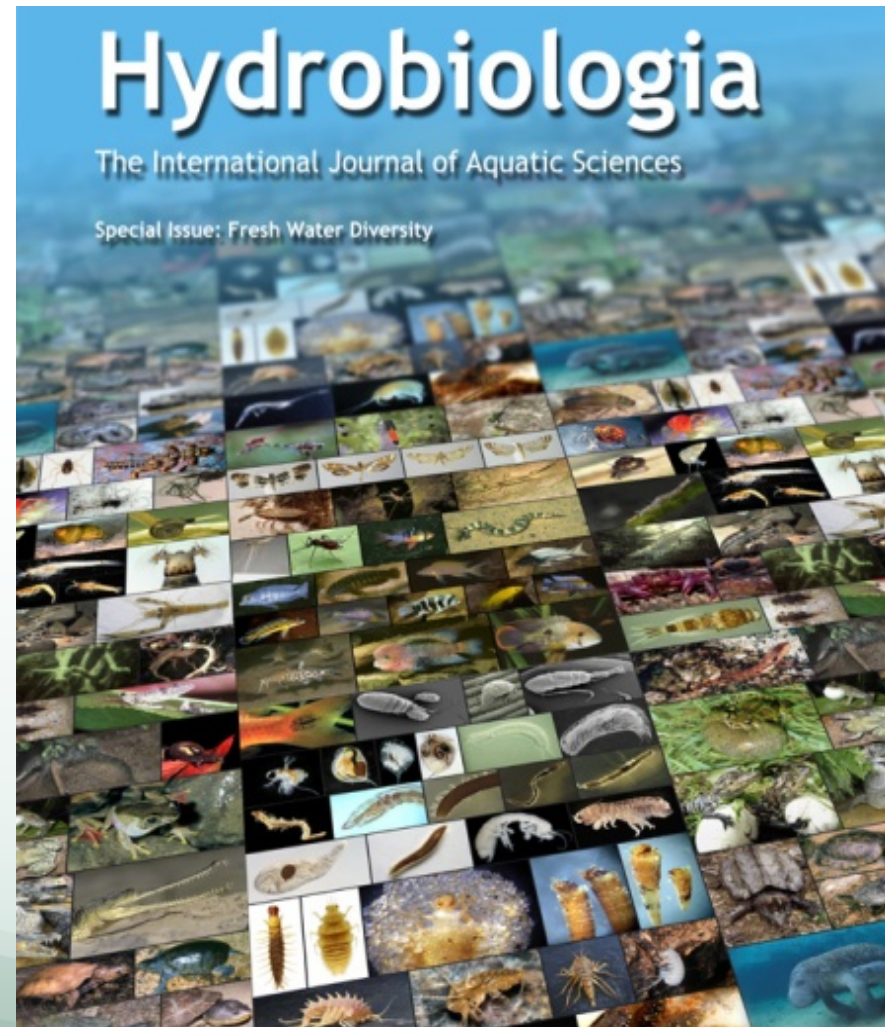
# Freshwater Animal Diversity Assessment: rationale

- Freshwater biodiversity: overlooked in global conservation initiatives and publications (Dudgeon, et al.2006)
- A need to provide quantitative estimates of FW biological diversity for conservation purposes: you cannot adequately protect what you don't know
- A global assessment of FW biodiversity: a real challenge (complexity of FW ecosystems, multiple uses..)



# FADA objectives

- Compile existing information on animal species and generic diversity in the continental waters of the world in online databases.
- Focus on taxonomic and biogeographic diversity:
  - give current numbers of known global species and generic diversity
  - identify current biogeographic distribution
  - highlight main areas of endemism



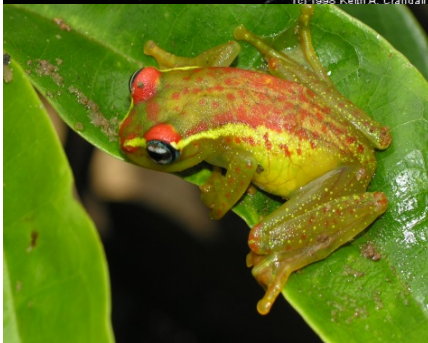
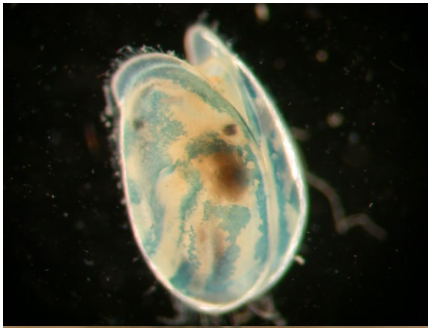
Published January 2008



Biodiversity.be

# FADA – phase 1

- October 13-16, 2005, Elewijt Centre, Mechelen, Belgium
- Expert assessment - ca. 50 world experts of freshwater animal groups provide an assessment of their groups





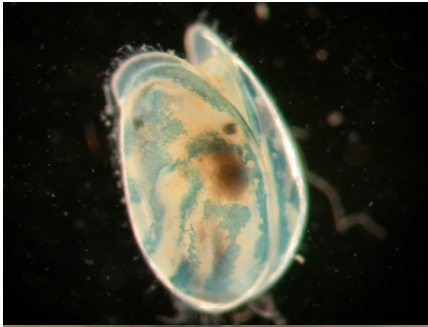
Biodiversity.be

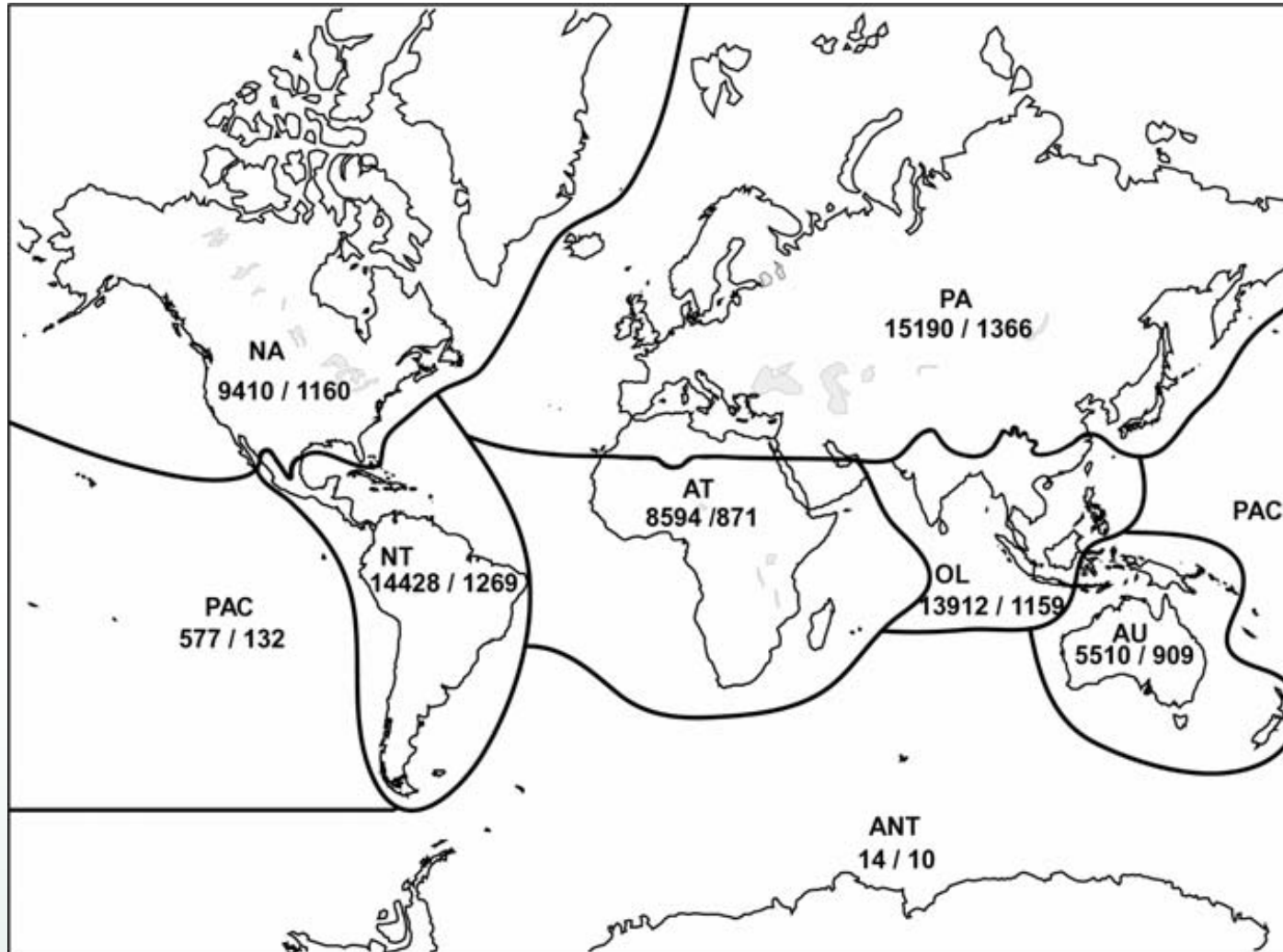
# FADA – phase 2

- Special issue of Hydrobiologia published January 2008

**BALIAN, E., C. LÉVÊQUE, H. SEGERS & K. MARTENS, 2008. Freshwater Animal Diversity Assessment. Hydrobiologia 595: 637 pp.**

**Reprinted as Developments in Hydrobiology 198.**





Distribution of total insect species and genus diversity by zoogeographic regions (number of species/ number of genera). Numbers do not include some dipteran families (i.e. Tabanidae) that are not addressed in the specific contributions.



Biodiversity.be

# FADA – phase 3

Valorisation of FADA 1 results and data :

- Online database of species level and distributional data
- Biogeographic meta-analyses
- Endemicity and Richness comparisons amongst groups

