

NA2RE Project—The new atlas of amphibians and reptiles: new compilation and online system

Nefalí SILLERO¹, João CAMPOS¹, Marco Amafo OLIVEIRA², Luís GONÇALVES-SECO^{1,3}, Anna BONARDI⁴, Claudia CORTI⁵, RAYMOND CREEMERS⁶, Pierre-André CROCHET⁷, Jelka CRNOBRNJA-ISAILOVIĆ^{8,9}, Mathieu DENOËL¹⁰, Gentile Francesco FICETOLA⁴, João GONÇALVES¹¹, Sergei KUZMIN¹², Petros LYMBERAKIS¹³, Philip DE POUS^{14,15}, Ariel RODRÍGUEZ¹⁶, Roberto SINDACO¹⁷, Jeroen SPEYBROECK¹⁸, Pedro SOUSA³, Fátima SOUSA³, Bert TOXOPEUS¹⁹, David R. VIEITES^{20,21}, Miguel VENCES¹⁶

¹ Centro de Investigação em Ciências Geo-Espaciais, Universidade do Porto, Observatório Astronómico Prof. Manuel de Barros, Alameda do Monte da Virgem, 4430-146 Vila Nova de Gaia, Portugal; nefali.pablos@fc.up.pt

² INESC Technology and Science (formerly INESC Porto), Rua Dr. Roberto Frias 378, 4200-465 Porto, Portugal

³ Instituto Superior da Maia, Av. Carlos Oliveira Campos, 4475-690 Avioso S. Pedro, Portugal

⁴ Department of Earth and Environmental Sciences, Università di Milano-Bicocca, Piazza della Scienza 1, 20126 Milano, Italy

⁵ Museo di Storia Naturale dell'Università di Firenze, Sezione di Zoologia "La Specola", Via Romana 17, 50125 Firenze, Italia

⁶ RAVON, Postbus 1413, 6501BK Nijmegen, The Netherlands

⁷ CNRS-UMR5175 CEFE, Centre d'Ecologie Fonctionnelle et Evolutive, 1919 route de Mende, 34293 Montpellier, France

⁸ Department of Biology and Ecology, Faculty of Sciences and Mathematics University of Niš, Višegradska 33, 18000 Niš, Serbia

⁹ Department of Evolutionary Biology, Institute for Biological Research "S. Stanković" University of Belgrade, Despota Stefana 142, 11000 Beograd, Serbia

¹⁰ F. R. S.—FNRS Research Associate, Behavioural Biology Unit, University of Liège, 22 Quai van Beneden, 4020 Liège, Belgium

¹¹ CIBIO, University of Porto, R. Campo Alegre 687, 4169-007 Porto, Portugal

¹² Institute of Ecology and Evolution, Russian Academy of Sciences, 117071 Moscow, Russia

¹³ Natural History Museum of Crete, University of Crete, Knossou Ave, P. O. Box 2208, 71409 Heraklion, Crete, Greece

¹⁴ Faculty of Life Sciences and Engineering, University of Lleida, Av. Rovira Roura 191, 25197 Lleida, Spain

¹⁵ Institut de Biologia Evolutiva (CSIC-UPF), Animal Phylogeny and Systematics, Passeig Marítim de la Barceloneta 37-49, 08003 Barcelona, Spain

¹⁶ Technische Universität Braunschweig, Division of Evolutionary Biology, Zoological Institute, Mendelssohnstraße 4, 38108 Braunschweig, Germany

¹⁷ Museo Civico di Storia Naturale, via San Francesco di Sales 88, 10022 Carmagnola, Italy

¹⁸ Research Institute for Nature and Forest, Kliniekstraat 25, 1070 Brussels, Belgium

¹⁹ University of Twente, Faculty of Geo-Information Science and Earth Observation (ITC), P. O. Box 217, 7500AA Enschede, The Netherlands

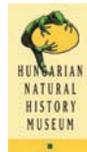
²⁰ Museo Nacional de Ciencias Naturales, Consejo Superior de Investigaciones Científicas, José Gutiérrez Abascal 2, 28006 Madrid, Spain

²¹ REFER Biodiversity Chair, University of Porto, CIBIO, Campus Agrário de Vairão, R. Padre Armando Quintas, 4485-661 Vairão, Portugal

The first Atlas of Amphibians and Reptiles in Europe was published in 1997, and since then, numerous regional and national organisations have collected new chorological data from large parts of Europe. Furthermore, the taxonomic progress have contributed to multiple changes and new species descriptions. The Mapping Committee of the SEH presents here the New Atlas of Amphibians and Reptiles in Europe (NA2RE), a system of distributed databases. Each distributed database has a national focus and is implemented in an online network, accessible through standard interfaces, thus sharing spatial-temporal data. A Web interface facilitates the access to distributed data as if it was one virtual integrated database. Upon user request, the Web interface searches all distributed databases for the requested data, integrating the answers in an interactive map. This methodology can easily actualise the records, as well as the taxonomy and systematics. Under this approach, data duplication is avoided and national databases are maintained in its own country. This system is implemented using only open source software, for this purpose: (a) PostgreSQL database (with PostGIS extension to support spatial data and operations) to store observation data, (b) the Geoserver tool for accessing data, and (c) the OpenLayers framework to present dynamic and interactive maps in NA2RE web page (<http://atlas.ismai.pt>). The data on the NA2RE website is based in a compilation from different data sources, namely published (in books or websites) or ongoing national atlases, personal data kindly provided to the SEH, the 1997 European Atlas, and the Global Information Facility. Databases were homogenised, projected to the same coordinate system (WGS84) and transformed into a 50×50 km grid. Species richness maps were also calculated by the addition of all group species present in each square. The obtained database comprises more than 380,000 records distributed across 40 countries.



PROGRAMME & ABSTRACTS



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