Abstracts

Fundación UADY

TOPIC: ECOSYSTEM PROTECTION AND EDUCATION

Mon 9 November 2015 - "Manuel Cepeda Peraza" Auditorium *14:30 – 14:55*

World Register of Marine Cave Species (WoRCS): establishing a new thematic species database for marine cave biodiversity

Gerovasileiou, Vasilis[1]*#; Bailly, Nicolas[1,2]#; Boxshall, Geoff[3]; Iliffe, Thomas M.[4]; Martínez, Alejandro[5]; Álvarez, Fernando[6]; Humphreys, William F.[7]; Jaume, Damià[8]

[1] Institute of Marine Biology, Biotechnology and Aquaculture, Hellenic Centre for Marine Research (HCMR), 71003 Heraklion, Crete, Greece. [2] FishBase Information and Research Group, Los Baños, Laguna 4031, Philippines. [3] Department of Life Sciences, The Natural History Museum, Cromwell Road, London SW7 5BD, United Kingdom. [4] Department of Marine Biology, Texas A&M University at Galveston, 200 Seawolf Parkway, OCSB #251, Galveston, Texas 77553, United States of America [5] Marine Biology Section, University of Copenhagen, Universitetsparken, 4, 2100, Copenhagen, Denmark. [6] Colección Nacional de Crustáceos, Instituto de Biología, Universidad Nacional Autónoma de México, Apartado Postal 70-153, México 04510 Distrito Federal, México. [7] Western Australian Museum, Collections and Research, 49 Kew Street, Welshpool, Western Australia 6106, Australia [8] Instituto Mediterráneo de Estudios Avanzados (IMEDEA), C/ Miquel Marquès 21, 07190 Esporles (Balears), Spain.

* Presenting author. E-mail: vgerovas@hcmr.gr ; # LifeWatchGreece (www.lifewatchgreece.eu)

Scientific exploration of underwater cave environments (including anchialine caves) over recent decades has led to outstanding discoveries of novel taxa, increasing our knowledge on marine biodiversity. Nevertheless, biological research on marine caves has taken place only in a few areas of the world and relevant information remains fragmented in isolated publications and databases. This fragmentation makes assessing the conservation status of marine cave species especially problematic, and this issue should be addressed urgently given the stresses resulting from rampant development in the coastal zone worldwide. The goal of the World Register of Marine Cave Species (WoRCS) initiative is to create a comprehensive taxonomic and ecological database of known marine cave species worldwide and to present this as a Thematic Species Database (TSD) of the World Register of Marine Species (WoRMS). WoRCS will incorporate ecological data (e.g., type of cave environment, salinity regimes, and cave zone) as well as geographical information on the distribution of species in cave environments. Biodiversity data will be progressively assembled from individual database sources of regional, national or local levels, as well as from literature sources (estimation: >20,000 existing records of cave-dwelling species scattered in several databases). Information will be organized in the WoRCS database following a standard glossary based on existing terminology. Cave-related information will be managed by the WoRCS thematic editors with all data dynamically linked to WoRMS and its team of taxonomic editors. In order to mobilize data into global biogeographic databases, a gazetteer for the marine caves of the world will be established. The presence records of species could be eventually georeferenced for submission to the Ocean Biogeographic Information System (OBIS) and constitute an important dataset for biogeographical and climate change studies on marine caves.

Keywords: marine caves, anchialine caves, biodiversity, global species databases, biodiversity management