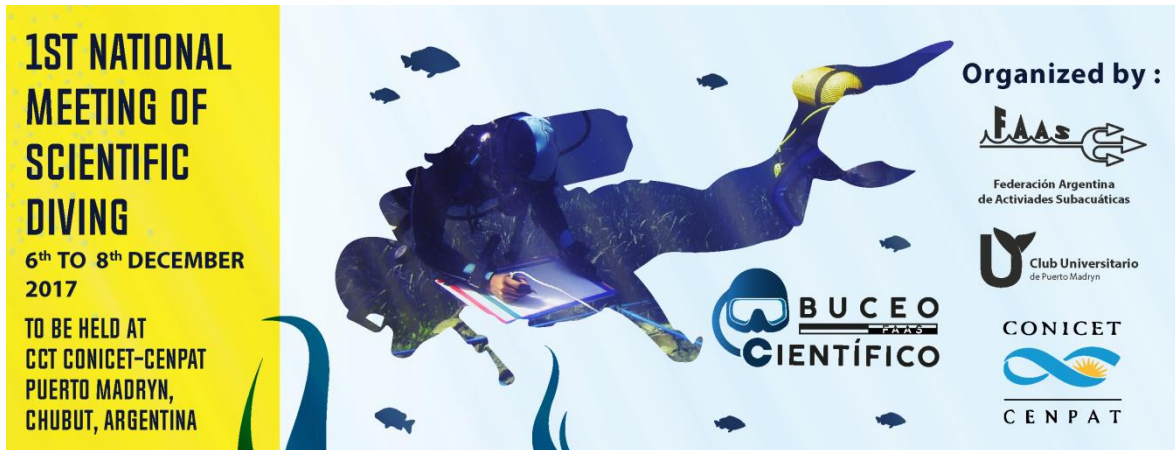


First National Meeting of Scientific Diving

Primer Encuentro Nacional de Buceo Científico

December 6th to 8th - 2017, Puerto Madryn, Argentina



A BRIEF REVIEW

Scientific diving is nowadays an activity of great relevance for the research, preservation and dissemination of underwater natural and cultural heritage, both nationally and internationally. This called for a meeting that brought together researchers and students in archaeology, biology, geology, oceanography, palaeontology and related fields, as well as divers that work in close collaboration with these specialists, to expose the foundations of theory and practice of scientific diving in Argentina.

The First National Meeting of Scientific Diving (*Primer Encuentro Nacional de Buceo Científico*) took place from December 6th to 8th 2017 at the city of Puerto Madryn, recognized as the national diving capital, Argentina. This meeting was organized by the Argentinean Federation of Underwater Activities (*Federación Argentina de Actividades Subacuáticas - FAAS*), the University Club of Puerto Madryn (*Club Universitario de Puerto Madryn*) and the Scientific and Technological Center of the National Scientific and Technical Research Council - CENPAT (CCT CONICET - CENPAT).

The meeting was declared of interest by the National Senate, the Legislature of the Province of Chubut, and the Deliberative Council of Puerto Madryn. Furthermore, it was given institutional endorsement by the Secretariat of Science, Technology and Productive Innovation of the Province of Chubut and the University of Chubut, and was sponsored by numerous institutions and national and provincial companies.

The opening of the meeting was presided by Néstor Basso (biologist, Researcher at CONICET and Chair of the Austral Evolution and Diversity Institute), Mauro Carrasco (biologist, Subsecretary of Scientific and Technological Articulation at the Secretariat of Science, Technology and Productive Innovation of the Province of Chubut), Ramiro Neyro (biologist, Chair of the University Club of Puerto Madryn), Francisco Lacase (Chair of the Argentinean Federation of Underwater Activities and General Secretary of CMAS Zona América), and Nicolás C. Ciarlo (archaeologist, Researcher at CONICET and Chair of the Meeting).

The event was conceived as a space for dialogue, in which a total of seventy professionals and students from all over the country participated. Over the course of three days, the exhibitors –some of them true pioneers of Argentinean scientific diving– accounted for the dense trajectory of the specialties linked to scientific work in aquatic environments. They also emphasized on the importance of interdisciplinary work, and on the practice of scientific diving as the axis from which different fields of knowledge can be articulated. In this sense, the meeting served the purpose of exchanging knowledge and experiences, and strengthening the links between different teams and institutions dedicated to the study of the sea. The amplitude of the call, on the other hand, was intended to provide the general public with an overview of the main topics developed in the framework of scientific diving, in pursuit of knowledge and the preservation of the natural and cultural underwater heritage.

The following thirty papers were presented at the meeting, and they reflect the diversity of topics addressed related to the history of scientific diving, marine biology, shipwreck archaeology, geology, hyperbaric medicine, diving operations planning, national regulations for professional practice, the use of new technologies, research in extreme environments, and dissemination of knowledge on submerged heritage: Utilización de fotocuadrantes y dispositivo tipo *air-lift* para caracterizar el ambiente de reclutamiento de estadios tempranos de centolla *Lithodes santolla* en el Canal Beagle (C. Alonso et al.); Desarrollo de colectores pasivos para promover el reclutamiento de larvas y juveniles tempranos de centolla *Lithodes santolla* (C. Alonso & F. Tapella); El ejercicio profesional de la arqueología en contextos sumergidos (A. Argüeso); Los inicios del buceo científico en Argentina (R. Bastida); Del fondo del mar a las escuelas: divulgación científica con Proyectosub (G. Bravo et al.); Determinación de la velocidad de crecimiento del karst en yeso de Poti Malal, Malargüe, Mendoza, Argentina (J. M. Casal); ROVs submarinos: descripción, usos y aplicaciones (J. M. Casal); Determinación de patrones comportamentales de actividad y demanda energética en peces de arrecifes templados (J. Ciancio et al.); Prolegómenos y epílogo de la práctica del buceo científico en arqueología: algunas experiencias en investigación de naufragios históricos (N. C. Ciarlo); Estudio de la diversidad del Canal Beagle mediante video submarino (D. Fernández); Proyecto Patagonia Documental (A. Fioramonti et al.); Turismo científico subacuático (D. R. González

Zevallos); Arqueología subacuática en sitios de naufragio históricos en la región patagónica: reflexión sobre requerimientos metodológicos y técnicos (G. Gutiérrez); Buceo y *snorkeling* con lobos marinos: Interacción directa con la vida salvaje como una herramienta para la conservación y generación de una conciencia ambiental (J. P. Laclau y M. A. Coscarella); Torciendo las estadísticas de la enfermedad descompresiva (G. Mauvecin); Los comienzos del buceo científico en el CENPAT (M. Medina & A. Sosa); Buceo científico en Mar del Plata: limitaciones y posibilidades (P. E. Meretta et al.); Planificación y seguridad en el buceo científico (N. Ortiz); Técnica de análisis LIBS aplicada a las actividades de investigación subacuática para caracterización de materiales (E. Previtali et al.); Aportes del buceo profesional a las actividades científicas (F. Requelme); Buceo adaptado: investigación y experiencias en torno al espectro autista y otros trastornos (C. Riolfi); Modelos 3D de estructuras subacuáticas: fácil y barato (M. F. Ríos et al.); Arqueología subacuática en alta montaña: los retos de un buceo científico en lagunas de altura y los desafíos de una logística casi-imposible (D. Sberna); Experimentos y trabajos en la Antártida (J. E. A. Sarmiento); Red de Observadores de Exóticas Marinas (E. Schwindt); Diecisiete años de buceo científico en Uruguay. La experiencia del Programa de Arqueología Subacuática y Centro de Investigaciones del Patrimonio Costero de la Universidad de la República de Uruguay (R. Torres & E. Keldjian); Método de geo-referenciación subaqua: técnica de bajo costo y aplicaciones (G. Trobbiani et al.); Algunas experiencias de buceo aplicadas al estudio de peces de arrecife en los golfos norpatagónicos (L. Venerus); Reglamentación del buceo profesional científico (M. P. Weiss); and El buceo científico a través de CMAS Zona América (C. Zeckua).

Within this framework and considering the particularities of the investigations and the current regulations for the exercise of scientific diving in Argentina, a workshop took place on the last day, in which attendees analysed the fundamentals and potential of the CMAS scientific diving program. The contributions made of the meeting will be essential to lay the foundations for the implementation of a scientific diver category within the Scientific Committee of the FAAS. Regarding the latter, the creation of a National Network of Scientific Diving is envisaged, which will join researchers, recreational and professionals divers linked to the exercise of scientific diving in the country.

1ST NATIONAL MEETING OF SCIENTIFIC DIVING

6th TO 8th DECEMBER
2017



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