

ANNICK CROS

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808 393 8258
US Citizen

Consultant – Coastal Management and Education

Marine conservationist with a strong background in science and adaptive management. 16 years' experience of on-the-ground management efforts internationally. Expertise in spatial planning, climate change, strategic planning, and fostering collaborative projects. Possess strong communication and networking skills, work well with a wide range of stakeholders and bridge gaps between scientists, communities and managers. Speak English, French and Spanish fluently.

PROFESSIONAL EXPERIENCE

THE NATURE CONSERVANCY

Dec 2019 – present

Contractor

- Developing an online course on remote sensing and mapping mangroves for the Global Mangrove Watch platform in collaboration with the Global Mangrove Alliance.
- Developed a mentored course on remote sensing and mapping for the Reef Resilience Network.
- Developed an online course on remote sensing, mapping and the Allen Coral Atlas for the Reef Resilience Network.
- Worked in collaboration with Vulcan, the National Geographic Society and the University of Queensland.

WOODS HOLE OCEANOGRAPHIC INSTITUTION, Massachusetts

Sept 2017 – Dec 2018

Post-Doctoral Scholar

- Designed, developed and managed the research project to study the connectivity of Southern California marine protected areas using population genetics of barnacles.
- Developed policy material to support management policies of California's marine protected areas.

HAWAII INSTITUTE OF MARINE BIOLOGY, Hawaii

Sept 2016 – Sept 2017

Post-Doctoral Fellow, ToBo laboratory

- Developed genetic markers to study the response of coral zooxanthellae after bleaching and changes in resilience.
- Responsible for budget and hiring and supervising undergraduate students.

UNIVERSITY OF HAWAII, Hawaii

Sept 2014 – Sept 2016

Climate Science Workshop Institute Coordinator

- Designed and led workshops for high school teachers in the Pacific on climate science and climate change.
- Partnered with the department of education to review the science curriculum and identify gaps in training for climate science.
- Built partnerships with local stakeholders and scientists involved in climate change adaptation.
- Organized and oversaw all logistics. Completed three successful workshops in Hawaii (2014), Marshall Islands (2015) and American Samoa (2016).

THE NATURE CONSERVANCY, Asia Pacific**Sept 2007 – Sept 2014****Marine Biologist**, Marine Regional Science team for Asia Pacific

- Led strategic planning of conservation programs and management plans (Conservation Action Planning) for coral reef conservation and fisheries management.
- Developed and leveraged innovative scientific approaches and tools to address conservation challenges, in particular building resilience to climate change.
- Spearheaded the development of a central database to enable spatial planning and gap analysis of marine resources at a multi-national level in the Coral Triangle.
- Supervised Coral Triangle Atlas team, including hiring and team building.
- Build in-country GIS capacity and directed multi non-governmental teams in the creation of the Coral Triangle Atlas.
- Facilitated and co-wrote the strategic plan for TNC Marine Asia Pacific Program, working with the directors of strategic programs including science, policy, fundraising and education to build a common vision.

USAID, Asia Pacific**Jan 2012 – Sept 2013****Contractor**, developed indicators of success for the Coral Triangle Initiative

- Established and led groups of government representatives of the six countries of the Coral Triangle through the development of a monitoring and evaluation plan across 5 goals of the Coral Triangle Initiative, capturing the attention and unilateral endorsement of 6 countries in 2013.
- Created innovative solutions to data management for the Coral Triangle Initiative.

WILDLIFE CONSERVATION SOCIETY (WCS), New York**Jan 2006 – Dec 2007****Consultant**, Glover's Reef Marine Research Station

Jan 2007 – Dec 2007

- Identified and recommended a new business plan for the station, increasing number of visiting researchers and profits.

Manager, Glover's Reef Marine Research Station

Jan 2006 – Jan 2007

- Oversaw station's research activities, allocation of research permits and field operations.
- Supervised staff of 10, ran logistics, budget and fundraising.
- Coordinated research projects taking place at Glover's Reef.
- Integrated Glover's Reef atoll into the Meso-American Atlantic and Gulf Rapid Assessment by leading and completing field surveys.
- Supervised construction of a classroom and wet laboratory, improving facility and attendance of educational groups and scientists.
- Developed field classes for local middle and high schools and increased visibility and use of station.

WORLD WILDLIFE FUND (WWF) FRANCE / CRISP, New Caledonia**Jan 2005 – Sept 2005****Contractor**, Ecoregional Analysis of the lagoon of New Caledonia

- Published the Ecoregional Analysis of the lagoon of New Caledonia, supporting its ratification to the list of UNESCO's World Heritage Sites.
- Led data collection and analysis, collaborating with main coral reef agencies in the South Pacific and France.
- Coordinated Expert Workshop, creating Geographical Information System layers for spatial planning and decision making on the areas needing priority for conservation.

INSTITUT DE RECHERCHE POUR LE DEVELOPPEMENT (IRD), New Caledonia

Sept 2004 – Jan 2005

Marine Biologist / Remote Sensing

- Led field survey team for groundtruthing Aore Reef using SCUBA.
- Co-published findings, mapping Aore Reef using high resolution IKONOS and Quickbird images, including groundtruthing.

THE SOCIETY FOR ENVIRONMENTAL EXPLORATION, Madagascar

Jan 2003 – Jan 2004

Research Coordinator for the Frontier-Madagascar Marine Research Program

- Oversaw the operations of the research station, including volunteers and international and local staff.
- Responsible for science training and research program, data analysis and report production.
- Collaborated with researchers from the Institute de Recherche pour le Development (IRD) and the University of Tulear to collect field data on red tail tropicbirds and endemic radiated turtles.
- Trained students from the University of Tulear to carry out underwater surveys.

EDUCATION AND TRAINING

Doctorate (PhD)

2011 – 2016

Biology, Hawaii Institute of Marine Biology, University of Hawaii

- Dissertation: *Connecting Palau's MPAs: a population genetic approach to marine conservation.*
- Supervisor: Dr. Stephen Karl

Master of Science

2001 – 2002

Tropical Coastal Management (merit), University of Newcastle upon Tyne, England

- Thesis: *The effect of predation and beach seining on coral transplants in 3 different areas of Mombasa, Kenya.*

Master of Science

2000 – 2001

Marine Biology (distinction), Paul Sabatier Université, Toulouse, France

- Exchange programme (TASSEP) at McGill University, Montréal, Canada

Bachelor of Science Honors

1997 – 2000

Biological Sciences: Biology of Organisms and Populations (merit), Paul Sabatier Université, Toulouse, France

OTHER QUALIFICATIONS

Other Qualifications:

- Scientific Diver and Technical Diver (400+ dives), Diving CMAS 4 stars, PADI Rescue Diver
- Small boat permit (2000+ hours)
- Conservation Action Planning (CAP) coach

Computer Skills:

- Remote Sensing: ENVI
- GIS: ArcGIS 10.4
- Programming: Python, R
- Microsoft Suite (Word, Excel, PowerPoint)

Languages:

- English and French: fluent
- Spanish: excellent, both written and oral

PEER-REVIEWED PUBLICATIONS

- **Cros, A.**, G. Anderson, S. Canfield, E. Johnston, N. Reyns, J. Penida. In prep. Can the barnacle *Chthamalus fissus* indicate connectivity between two MPAs in Southern California?
- **Cros, A.**, R.J. Toonen, and S. A. Karl. 2020 Is post-bleaching recovery of *Acropora hyacinthus* on Palau via spread of local kin groups? *Coral Reefs*. 39: 687-99.
- **Cros, A.**, Toonen, R. J., Donahue, M. J., and Karl, S. A. 2017. Connecting Palau's marine protected areas: A population genetic approach to conservation. *Coral Reefs*. doi:10.1007/s00338-017-1565-x
- **Cros, A.**, Toonen, R. J., Davies, S. W., and Karl, S. A. 2016. Population genetic structure between Yap and Palau for the coral *Acropora hyacinthus*. *PeerJ*, 4, e2330.
- Venegas-Li R., **A. Cros**, A. White and C. Mora. 2016. Measuring conservation success with missing Marine Protected Area boundaries: A case study in the Coral Triangle. *Ecological Indicators*, 60: 119-124.
- **Cros, A.**, N. A. Fatan, A. White, S.J. Teoh, S. Tan, C. Handayani, et al. 2014. The Coral Triangle Atlas: An Integrated Online Spatial Database System for Improving Coral Reef Management. *Plos one*, 9(6) e96332.
- **Cros A.**, R. Venegas-Li, S.J. Teoh, N. Peterson, W. Wen and N.A. Fatan. 2014. Spatial Data Quality Control for the Coral Triangle Atlas, *Coastal Management*. 42: 128-142.
- White A., P. M. Aliño, **A. Cros**, N.A. Fatan, A. L. Green, S.J. Teoh, L. Laroya, N. Peterson, S. Tan, S. Tighe, R. Venegas-Li, A. Walton and W. Wen. 2014. Marine Protected Areas in the Coral Triangle: Progress, Issues, and Options, *Coastal Management*. 42: 87-106.
- Scopélitis J., S. Andréfouët, S. Phinn, L. Arroyo, M. Dalleau, **A. Cros** and P. Chabanet. 2010. The next step in shallow coral reef monitoring: Combining remote sensing and in situ approaches. *Mar. Poll. Bull.* 60: 1956-1968.
- McLeod E., R. Salm, K. Anthony, B. Causey, E. Conklin, **A. Cros**, R. Feely, J. Guinotte, G. Hofmann, J. Hoffman, P. Jokiel, J. Kleypas, P. Marshall, and C. Veron. 2008. The Honolulu Declaration on Ocean Acidification and Reef Management. The Nature Conservancy, U.S.A., and IUCN, Gland, Switzerland.
- Gabrié C., **A. Cros**, C. Chevillon and A. Downer (eds). 2005. Analyse écorégionale marine de Nouvelle-Calédonie. Atelier d'identification des aires de conservation prioritaires. IFRECOR Nouvelle-Calédonie, Nouméa.
- **Cros A.**, T. McClanahan. 2003. Coral transplant damage under various management conditions in the Mombasa Marine National Park, Kenya. *Western Indian Ocean J. Mar. Sci.* 2: 127-136.