

ANDREA RIVERA-SOSA

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EDUCATION

PhD Candidate, Marine Science **01/15-Present**
Doctoral program at the Marine Resources Department Centro de Investigación y Estudios Avanzados del Instituto Politécnico Nacional (CINVESTAV), Mérida, Mexico. Thesis title: Stressors and condition of coral reef systems in the Tela Bay Wildlife Refuge.

European Masters in Water and Coastal Management **09/07-04/09**
Erasmus Mundus Studentship. Thesis title: Exploring the influences of livelihood capitals on the resilience of coastal communities to hydro-meteorological events in northern Honduras. University of Cadiz, Spain and University of Plymouth, UK.

B.A. Environmental Studies and Marine Science **09/02-05/06**
Title of thesis: Physical interactions between the brown alga *Turbinaria ornata* and Pocillopora juvenile corals in Moorea, French Polynesia, University of Hawaii at Manoa (UHM), Honolulu, Hawaii **USA**

WORK EXPERIENCE

Marine Scientist/Conceptos Arkipelago S. A. de C. V **07/16-Present**
Co-founder of a company guided under three main pillars: environmental and marine assessments, sustainable tourism and community development based in Quintana Roo, with regional vision of the Mesoamerican Reef Region. **Mexico**

Consultant Kalanbio, A. C **11/18-19**
Participatory development of the Gulf of Mexico Coral Reef Report Card with key stakeholders Trinational Initiative (Mexico, USA, Cuba). **Mexico**

Marine Scientist Consultant/PRAWANKA **06/19-12/19**
Conducted a baseline study of coral reefs, sea grass and mangrove ecosystems in the Miskito Cays, Honduras with a team of scientists for the NGO PRAWANKA, Action Aid, Swiss Agency for Development and Cooperation. **Honduras**

Consultant **04/19**
Program for Early-stage Grants Advancing Sustainability Science (PEGASuS)
Workshop and interviews facilitation on participatory governance, ecosystem services drug trafficking and protected areas in Central America. **Honduras**

Marine Scientist Consultant/Puertos Marítimos de Honduras **05/17-11/17**
Developed proposal with work team and obtained licitation to conduct environmental assessments on water quality parameters, sediment, and benthic surveys (coral and fish), for Port of Bulk Cargo, Puerto Cortés. **Honduras**

Meso America Development Group, LLC 01/19- 06/21
Insurance Director in New Jersey with the National Producer number: 19023391 and
NJ Reference: 1694048 for the Property/Casualty/Surplus Lines Insurance USA

Permanent professor/Biology Department 01/12-12/14
National Autonomous University of Honduras (UNAH)
Taught courses in Environmental Education at the Regional University Center of the
Atlantic Coast (CURLA-UNAH), La Ceiba. Honduras

Coordinator Climate Resilience and Food Security Project 05/12-3/14
International Institute for Sustainable Development (IISD)
Project management (CURLA-UNAH), strategic planning and supervision of
accounting. Development of food security indicators at community and national level
in Nicaragua, Guatemala and Honduras. Honduras

Marine Scientist Consultant/The Coral Reef Alliance 09/13-10/13
Prepared documentation and justification along side key stakeholders to declare the
Tela Bay as a site of ecological importance. Honduras

Marine Scientist Consultant/ CURLA-UNAH) 04/11-12/11
Development of a master's program curriculum titled Integrated Management of
Coastal and Marine Resources. La Ceiba. Honduras

Consultant 09/10- 04/11
International Institute for Sustainable Development (IISD)
Lead assessments at the community level. Organized and facilitated national
workshops to include community participation and adaptation to climate change
assessments in national level meetings. Tegucigalpa. Honduras

Program Director 09/09-02/11
School of Life (SOL) International Foundation, Roatán, Honduras. Development of
education programs and health assistance, sports and arts programs for youth in the
community of Sandy Bay.

Consultant Risk and Early Recovery Program 01/10-06/10
United Nations Development Program
Manual to evaluate the needs of rural communities in early recovery after extreme
events and climate change impacts. Tegucigalpa. Honduras

Director of Research and Development 04/07-09/07
Roatan Marine Park
Co-management of a Marine Protected Area known as Sandy Bay-West End Marine
Park. Environmental education in public schools, water quality monitoring, marine
infrastructure and enforcement. Roatán. Honduras

Environmental Services Trainee 03/07-05/07
New Jersey Department of Environmental Protection
Revision of environmental impact statements from environmental consulting firms
to assess levels of contaminants and remediation procedures. Newark, NJ. USA

WORK EXPERIENCE

Assessor, Coral Specialist Group, Red List of Caribbean spp, IUCN Present

Multiple stressors, Tela Bay Wildlife Refuge 15-Present
Regional and local assessments as part of doctoral thesis in CINVESTAV. Research on sedimentation, sea surface temperatures, reef health and coral bleaching in Tela Bay and the Mesoamerican Region. **Honduras & Mexico**

Coral and benthos Trainer 09-Present
Atlantic and Gulf Rapid Reef Assessment/Healthy Reefs Initiative
Colaboration to train coral reef monitors with AGRRA methods and also monitor health of reefs in the Mesoamerican Region. **Honduras & Mexico**

Water Quality Monitoring 08/12-10/14
Jumpstarted the first water quality laboratory in CURLA-UNAH, as part of a grant from Dirección de Investigación Científica Universitaria. Water quality research in watershed Quebrada Grande, Sub Cuenca Rio Bonito, La Ceiba. **Honduras**

Research Scientist 06/06-8/06
Berkeley Research Station, Long Term Ecological Research Site (LTER)
SEED'S Undergraduate Research Fellowship, Ecological Society of America
Investigated coral and algal interactions through manipulative experiments in a shallow lagoon sites for undergraduate thesis. **Moorea, French Polynesia**

Research Specialist 07/06-10/06
Coral Reef Ecosystem Division/ National Oceanic Atmospheric Administration
Algal taxonomy identification, data entry, and proper storage of algal species in the Northwestern Hawaiian Islands aboard the R/V H'iialakai. Honolulu, Hawaii. **USA**

Landscapes in transformations in Central America (LITCA), OSU, USA 15-16
Oceanographic monitoring of using drifter buoys (NOAA), HND 11/12-10/13
Fisheries Assistant, Macro International, New Jersey, USA 04/07-07/07
Field & Lab. Assistant, Tropical Plant & Soil Sci. (UHM), HI, USA 12/04-10/05
Research Assistant, (NMFS- NOAA) Hawaii, USA 06/04-12/04
Teachers Assistant, Div. of Sci. and Math, USVI, St. Thomas, USA 01/03-05/03

100% Bilingual: Spanish (native language), English (academic language)
Workshop facilitation (Participatory assessments/Stakeholders) 5 yrs. experience
Project Management tools, Reedbooth, Slack, Miradi Software, R project, GSUITE
Zoom, Skype, Doodle, Google Meet, SurveyMonkey.
Microsoft office 365. PPT, Word, XLS. Mac OX
NAUI SCUBA Rescue Diver 2006

Doctoral Fellowship CINVESTAV, CONACYT, \$42,748.24 01/15-12/18
Beca Sustantiva, \$25,000. (DICU-UNAH) 08/12
New International Collaboration Grant, \$45,000 (NSF-LSU) 04/12
Erasmus Mundus Studentship Award, €35,000 (European Union) 09/07
World Wildlife Foundation, Scholarship, Prince Benhard, £8,000 06/09
SEED'S Undergraduate Research Fellowship, \$12,000, (ESA) 07/05-07/06

RESEARCH EXPERIENCE

ADDITIONAL SKILLS

AWARDS/ GRANTS

RELEVANT COURSES AND WORKSHOPS

Assessing Species's Extinction Risk using IUCN Red List Methodology International Union for Conservation of Nature, The Nature Conservancy.	2019
Women in Nature Network (WINN) India 2019: Empowering Women for Nature Conservation, Guwahati, Assam, India	2019
Course: How to make an Ecosystem Health Report Card Integration and Application Network, UMCES. Online.	2019
Workshop: International Marine and Coastal Management in the GoM, (SWIMM) Harte Research Institute For Gulf of Mexico Studies, Cuba	2018
The Resilience Academy, Munich, Germany	2014
The Resilience Academy, Dhaka, Bangladesh	2013
PCR Molecular Techniques to identify pathogens in coastal waters (Louisiana State University, USA & CURLA-UNAH, La Ceiba Honduras)	2013
Workshop: Coastal dynamics and geomorphology (Universidad de Cádiz, CEIMAR-UNAH, Tegucigalpa, Honduras)	2012
Physical oceanography course. Centro de Investigación Científica y de Educación Superior de la Ensenada (CICESE, Mexico-UNAH, Honduras)	2012
Spiny Lobster Initiative, Symposium: Building the lobster fishery through better management, governance, management and a healthier environment. La Ceiba, Honduras	2011
Training on the reef monitoring protocol "Atlantic and Gulf Rapid Reef Assessment" (AGRRA). Healthy Reefs & ICF. Tela, Honduras.	2011
From the Ground Up Adaptation: Designing community projects with sustainable solutions, Centre for Sustainable Development. Online. 341.	2010
UNDP, Workshops on Early Recovery and Risk Management. Tegucigalpa, Honduras.	2010
Coral Reef Alliance (CORAL) Leadership Network of Coral Reef Training workshop on marine ecology and sustainable tourism. Roatán, Honduras.	2009
Institute of Marine Sciences and Limnology, UNAM. Marine Areas Protected in the region of South Florida and the Caribbean. Puerto Morelos, Mexico (06/25/09 - 07/02/09)	2009
Sun Mountain International (SMIC), USAID Environmental Management Workshop for Socio-Economic Development Programs. La Ceiba, Honduras. 05/11/09- 05/15/09	2009

Wrathall, D.J., Devine, J., Aguilar-González, B., Benessaiah, K., Tellman, E., Sesnie, S., Nielsen, E., Magliocca, N., McSweeney, K., Pearson, Z., Ponstingel, J., Rivera-Sosa, A., Dávila, A. (2020). The impacts of cocaine-trafficking on conservation governance in Central America, *Global Environmental Change*, 63, 102098

Ibarra Madrigal, S.M., Osorio Miranda, Y., Rivera-Sosa, A. Kuch, K. (2020). Programa (PROTUR) para la Laguna de Bacalar. Reporte Técnico. Programa de gestión común para el uso turístico en la Laguna de Bacalar. pp 142

Rivera-Sosa, A., Randazzo-Eisseman, A.M., Carrasco Navas Parejo, J.C. (2019). Análisis de la situación actual de los recursos marinos en los Cayos Miskitos de Honduras. Proyecto PRAWANKA. DOI:10.13140/RG.2.2.11600.33282

Carrasco Navas Parejo, J.C., Randazzo-Eisseman, A.M., Rivera-Sosa, A., (2019) Caracterización ecológica de Cayos Miskitos Honduras. Proyecto PRAWANKA. DOI: 10.13140/RG.2.2.12858.62400

Muñiz-Castillo, A.I, Rivera-Sosa, A., Chollet, I., Eakin, C. M., Andrade-Gomez, L. McField, M., Arias-González J.E. (2019) Three decades of heat stress exposure in Caribbean coral reefs: a new regional delineation to enhance conservation. *Scientific Reports* 9, 11013.

Rivera-Sosa, A., Muñiz-Castillo A.I., McField M., Arias-González, J.E. (2018) Unusual “Knob-Like Chimney” Growth Forms on *Acropora* Species in the Caribbean. *Front. Mar. Sci.* 5:41.

Keller, M. Zamudio, A.N, Bizikova, L. Rivera-Sosa, A., Murillo Gough A. (2018) Food security and climate change from a systems perspective: community case studies from Honduras. *Climate and Development*.

Arias-González J.E., Rivera-Sosa A., Zaldívar-Rae J., Alva-Basurto, C., Cortés-Useche C. (2016) The animal forest and its socio-ecological connections to land and coastal ecosystems. Book chapter in *Marine Animal Forest*. Springer

Tellman, B., Alaniz, R., Rivera-Sosa, A. and Contreras, D. (2014). Violence as an obstacle to livelihood resilience in the context of climate change. *UNU-EHS Working Paper Series, No.3*. Bonn: United Nations University Institute of Environment and Human Security (UNU-EHS)

Tyler, S. et al. (2013). *Climate Resilience and Food Security A framework for planning and monitoring*. The International Institute for Sustainable Development.

Rivera-Sosa, A. (2011). *Consultas comunitarias sobre Gestión de Riesgos Climáticos en Honduras*. Working paper. Winnipeg: IISD y Tegucigalpa: PNUD

Rivera-Sosa, A. (2011). *Informe: Taller de Generación Participativa de Escenarios. Énfasis en el Sector Agrícola en Honduras*. Working Paper. Winnipeg: IISD y Tegucigalpa: PNUD.

Rivera-Sosa, A., Delgado, M. (2010). Exploring the influences of livelihood capitals on the resilience of communities to hydro-meteorological events in northern Honduras. *European Joint Master in Water and Coastal Management*. University of Plymouth. England. University of Cadiz, Spain.

TECHNICAL REPORTS/

PUBLICATIONS

REFERENCES

1. PhD. Melanie McField, Healthy Reefs Initiative, Smithsonian Institution, Museum of Natural History, Florida, USA. mcfield@healthyreefs.org

2. Fernando Nuno Dias Marques Simoes, Professor, Universidad Nacional Autónoma de Mexico, Mérida, Mexico. ns@ciencias.unam.mx