

CHRISTINE C. SHEPARD

533 Bal Harbor Boulevard, Punta Gorda, FL 33950

Phone: 941.347.7086 • Email: cshepard@tnc.org

EDUCATION

Ph.D Ocean Sciences, University of California, Santa Cruz 2010
B.S. Psychology and Zoology with Honors, University of Florida 2002

PROFESSIONAL EXPERIENCE

Director of Science, Gulf of Mexico Program The Nature Conservancy 2013-present

- Oversee activities related to the science and management of restoration projects for The Nature Conservancy’s Gulf of Mexico Program
- Coordinate scientific research program focused on increasing social, economic and ecological resilience across the Gulf of Mexico
- Serve as principal point of contact to Conservancy state chapters, and serve as liaison to government agencies, other conservation NGOs, foundations and the academic community for the Gulf Program’s restoration activities
- Develop innovative scientific methods, analyses, tools and frameworks to address restoration needs in the Gulf
- Provide scientific and technical guidance and support to Conservancy field staff
- Lead and assist with peer-reviewed publications, presentations, grant proposals and project reporting

Scientist/Postdoctoral Fellow The Nature Conservancy/UC- Santa Cruz 2011- 2013

- Lead social and economic climate change and hazard vulnerability assessments
- Lead and assist with scientific analyses of the role of natural systems in disaster risk reduction
- Manage two site-based *Coastal Resilience* projects in Texas and Florida
- Develop innovative methods and techniques for integrating ecological, socioeconomic, natural hazards and climate change data to analyze geographic patterns of ecological and human community vulnerability and potential restoration and conservation strategies at local, regional and national scales
- Develop and implement restoration and conservation planning decision support tools and capacity building approaches for diverse audiences such as government, donors, NGOs and local communities
- Coordinate and facilitate workshops, meetings, and field work with a wide range of partners in multicultural and international settings
- Collect, synthesize and interpret quantitative and qualitative data, review scientific literature and contribute to Conservancy and partner strategic planning activities
- Lead and assist with peer-reviewed publications, presentations, grant proposals and project reporting

Graduate Student Researcher, UC- Santa Cruz fall 2006-2010

Teaching Assistant, Geographic Information Systems, UC-Santa Cruz 2005-2006

Graduate Student Researcher, Mote Marine Laboratory, Sarasota, Florida 2005

Research Technician, Mote Marine Laboratory, Sarasota, Florida 2002-2004

REVIEW AND ADVISORY PANELS

Reviewer *Ecosphere, Environmental Evidence, and Phil. Trans. Roy. Soc. B.*

Proposal Referee *Northeast Sea Grant Consortium*

Council Member, Monterey Bay National Marine Sanctuary Advisory Council- Conservation Seat (Alt.)

Expert Member, U.S. Department of the Interior Strategic Sciences Group- "Operational Group Sandy"

AWARDS AND HONORS

Hammett Fund Award on Climate Change	2009
Center for the Dynamics and Evolution of the Land-Sea Interface (CDELSI) Research Award	2008
Society for Conservation GIS Scholar- Received over \$8000 in training and software from ESRI	2006
Friends of Long Marine Laboratory Student Research Award	2006
Graduate Assistance in Areas of National Need (GAANN) Doctoral Fellowship	2005-2006
ESRI Conservation Grant	2005
University of California Regents Fellowship	2004
Mote Marine Laboratory's L.S. Gilbert College Intern Scholarship	2002

PROFESSIONAL SKILLS AND TRAINING

Workshop facilitation, strategic planning, project development and implementation

Advanced GIS and analytical skills and Society for Conservation GIS Scholar

Natural Capital Project InVEST ecosystem services valuation software training April 2012, Stanford

Ocean Optics Remote Sensing May 2007, UC-Santa Cruz, California

Marxan Best Practices Workshop April 2007, UBC, Vancouver, Canada

Certified Florida Boating Safety ID Card

Field experience including extensive small boat handling and field data collection

SELECTED PUBLICATIONS

Ferrario, F., M. W. Beck, C. Storlazzi, F. Micheli, **C. Shepard**, L. Airoidi. In Review. Coral reefs are effective for coastal hazard risk reduction. *Nature Communications*.

Spalding, M. D., S. Ruffo, C. Lacambra, I. Meliane, L. Z. Hale, **C. C. Shepard**, M. W. Beck. In press. The role of ecosystems in coastal protection: adapting to climate change and coastal hazards. *Ocean & Coastal Management*.

Bassos-Hull, K., R. Perrtree, **C. Shepard**, S. Schilling, A. Barleycorn, J. Allen, B. Balmer, W. Pine and R. Wells. 2013. Long-term site fidelity and seasonal abundance estimates of common bottlenose dolphins (*Tursiops truncatus*) along the southwest coast of Florida and responses to natural perturbations. *Journal of Cetacean Research and Management*.

M. W. Beck, B. Gilmer, A. W. Whelchel, Z. Ferdaña, J. Stone, G. Raber, **C. Shepard** and I. Meliane. 2013. Using interactive decision support to integrate coast hazard mitigation and ecosystem services in Long

Island Sound, New York and Connecticut USA. In Renaud, F. (Ed). *Linkages between Ecosystems, Livelihoods and Disaster Risk Reduction*, United Nations University Press, Bonn.

Beck, M. W., **C. Shepard**. 2012. Coastal habitats and risk reduction. *In* Mucke, P. World Risk Report 2012. Alliance Development Works, Berlin.

Shepard, C., V. N. Agostini, B. Gilmer, T. Allen, J. Stone, W. Brooks, M. W. Beck. 2012. Assessing risk associated with sea-level rise and storm surge—redux. *Natural Hazards* DOI 10.1007/s11069-012-0368-1.

Shepard, C., V. N. Agostini, B. Gilmer, T. Allen, J. Stone, W. Brooks, M. W. Beck. 2012. Evaluating alternative future sea-level rise scenarios. *Natural Hazards* 63:1223–1224.

Shepard, C., V. N. Agostini, B. Gilmer, T. Allen, J. Stone, W. Brooks, M. W. Beck. 2011. Assessing future risk: quantifying the effects of sea level rise on storm surge risk for the southern shores of Long Island, New York. *Natural Hazards*. DOI: 10.1007/s11069-011-0046-8.

Shepard, C., Crain, C., Beck, M.W. 2011. The protective role of coastal marshes: a systematic review and meta-analysis. *PLoS ONE* 6(11): e27374. <http://bit.ly/vfAHvT>

SELECTED PRESENTATIONS

C. Shepard. Invited Panelist, Sharing Perspectives on Social Science Best Practices for Gulf Coast Restoration, New Orleans, LA. July 2013.

Shepard, C., M.W. Beck, B. Gilmer, Z. Ferdana, G. Raber, V. Agostini, A. Whelchel, and J. Stone. Building Coastal Resilience to sea-level rise and storm hazards: Supporting decisions in the NE USA, Gulf of Mexico and eastern Caribbean. Presentation at 2012 American Geophysical Union’s Fall Meeting, San Francisco, CA.

C. Shepard. Invited Speaker and Co-Author, International Launch of the World Risk Report 2012 and Press Conference held at the United Nations Regional Information Center in Brussels, Belgium.

Shepard, C., Ferdaña, Z., Beck, M. and L. Geselbracht . TNC’s Gulf of Mexico Restoration Decision Support Tool. Presentation at the 2012 Gulf of Mexico Climate Community of Practice, New Orleans, Louisiana.

Shepard, C., Ferdaña, Z., Beck, M. and L. Geselbracht. The Oyster Restoration Dashboard: Multi-factor decision support to maximize ecological, social and economic benefits. Presentation at 2012 Inaugural Social Coast Forum, Charleston, South Carolina.

Shepard, C. Gilmer, B. Ferdaña, Z. and M. Beck. 2011. Multi-objective priority setting: Identifying salt marsh areas important for biodiversity conservation and coastal protection. Presentation at 2011 Coastal GeoTools Conference, Myrtle Beach, South Carolina.

Shepard, C., Beck, M., Calderon, R., Dorfman, D. 2007. Ecosystem-based approaches to coastal hazard assessment and mitigation planning: an analysis of risk, vulnerability, and the mitigation values provided by functioning ecosystems. Presentation at the Coastal Zone '07 Conference, Portland, OR.

Shepard, C. 2007. Using MARXAN and GIS to meet planning objectives for both coastal hazard mitigation and marine conservation. Invited presentation at the Ecosystem-based Management Tools Network training workshop, Portland, OR.

Shepard, C., Beck, M., Dorfman, D., Liman, A. 2006. Establishing priorities for marine and coastal management efforts in the North Atlantic Temperate Realm. Presentation at the Society for Conservation GIS '06 Conference, San Jose, CA.