

## KAREN I. STOCKS

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### EDUCATION

**Ph.D.** 2000. Biological Oceanography. Rutgers University, Graduate School of Oceanography, New Brunswick, NJ  
Dissertation title: *Factors Determining Macroinfaunal Community Structure in Salt Marshes*  
Advisor: J. Frederick Grassle.

**Bachelor of Science** cum laude with Honors, 1992. University of Massachusetts at Amherst, MA  
Major: Wildlife and Fisheries Biology. GPA 3.96

### EMPLOYMENT

3/2012 – pres. **Director**, Geological Data Center, SIO.  
6/10 – 8/13 **Specialist**, San Diego Supercomputer Center.  
6/03 – 6/10 **Assistant Research Scientist**, San Diego Supercomputer Center.  
8/04 – 10/09 **Lecturer**, Scripps Institution of Oceanography. Developed and taught "Data and Information Literacy for Marine Conservation and Biodiversity" a new graduate course.  
12/00 – 6/03 **Postgraduate Researcher**, San Diego Supercomputer Ctr./Scripps Inst. of Oceanography. "SeamountsOnline: an online database of seamount biology"

**Oceanographic Research Cruises:** 3 cruises, one to Antarctic.

### CURRENT PROJECTS

**Science Support Office (SSO) of the International Ocean Discovery Program.** The SSO supports the new International Ocean Discovery Program, the fourth generation of NSF-funded scientific ocean drilling programs of human inquiry into the ocean seafloor. Role: Director of Information Technology. Responsibilities: overall management of IT infrastructure supporting the management of IODP scientific drilling proposals. 2013–present.

**Site Survey Data Bank (SSDB; [ssdb.iodp.org](http://ssdb.iodp.org)).** SSDB is the data repository supporting the International Ocean Drilling Program's proposal system. Role: PI. Responsibilities: overall project management, system design. 2010–9/2013 (now subsumed within Science Support Office contract.)

**Rolling Deck to Repository (R2R; [rvdata.us](http://rvdata.us));** R2R is developing a comprehensive fleet-wide management pipeline for underway data to ensure preservation of and access to our national oceanographic research data resources. Responsibilities: general project management (co-PI); developing data management and documentation procedures. 2009–present.

### RECENT MAJOR PROJECTS

**Ocean Observatories Initiative Cyberinfrastructure (OOICI; [www.oceanobservatories.org](http://www.oceanobservatories.org)).** OOICI is developing the information system to manage and serve data from the developing network of OOI sensor networks. Role: Data Curator. Responsibilities: development of data management, science needs assessment, metadata definition, and liaison with science user communities. 6/2011–5/2013.

**A Global Census of Marine Life on Seamounts (CenSeam; [censeam.niwa.co.nz](http://censeam.niwa.co.nz)).** Role: PI. Funding \$2M. CenSeam is a global network of 500 scientists aiming to increase our knowledge of seamount ecosystems through: 1) coordinating and expanding seamount research; 2) fostering new field expeditions; 3) improving data management and data analysis; and 4) facilitating public education and

outreach. Responsibilities: overall project management (PI); design, development and management of SeamountsOnline (seamounts.sdsc.edu); data analysis working group. 2005–2011.

**Community Cyberinfrastructure for Advanced Microbial Ecology Research and Analysis (CAMERA; camera.calit2.net).** CAMERA is creating a resource to collect, maintain, and disseminate raw environmental sequence data, associated metadata, pre-computed search results, and associated tools in a high-performance cyberinfrastructure. Responsibilities: liaison to domain user community, requirements assessment, training, and developing outreach documents and presentations. 2008–2011

**Marine Metadata Interoperability (MMI; marinemetadata.org).** Role: PI on UCSD component. MMI is improving marine data management by providing the best guidance and resources for data management, and developing advanced metadata tools and services needed by the community. Responsibilities: lead on guidance document development; member of executive and steering bodies.

#### **SERVICE - 5 most relevant**

Advisory Committee Member, Ocean Biogeographic Information System (OBIS) USA. 2008 – present

Committee Member, NSF Marine Geology and Geosciences Data Management Committee. 2004–2010

Metadata Expert Team Member, Integrated Ocean Observing System (IOOS). 2005 – 2008

Vice-Chair, International Scientific Steering Committee, Ocean Biogeographic Information System. 2004 – 2006 (member from 2000)

Metadata and Data Discovery Working Group Member, Data and Communications Steering Committee, Integrated Sustained Ocean Observing System (ISOOS). 7/02 – 11/05

#### **PUBLICATIONS - 10 recent/relevant**

Stocks KI, Stout NJ, Shank TM (*In press*) Information Management Strategies for Deep-Sea Biology. M Clark and M Consalvey (eds) Biological Sampling in the Deep Sea. Wiley-Blackwell.

Zaslavsky I, Couch A, Richard SM, Valentine DW, Stocks K, Murphy P, Lehnert KA (2013) An EarthCube Roadmap for Cross-Domain Interoperability in the Geosciences: Governance Aspects. American Geophysical Union Fall Meeting

Stocks KI, Clark MR, Rowden AA, Consalvey M, Schlacher TA (2012) CenSeam, an International Program on Seamounts within the Census of Marine Life: Achievements and Lessons Learned. PLoS ONE 7: e32031.

Stocks KI, Neiswender C, Isenor AW, Graybeal J, Galbraith N, Montgomery ET, Alexander P, Watson S, Bermudez L, Gale A, Hogrefe K, Stuart C (2011) The MMI Guides: Navigating the World of Marine Metadata. Available: <https://marinemetadata.org/guides> via the Internet.

Lassoued Y, Pham TT, Bermudez L, Stocks KI, O'Grady E, Isenor AW, Alexander P (2010) Coastal Atlas Interoperability. In: Wright D, Dwyer N, Cummins V, editors. Coastal Informatics: Web Atlas Design and Implementation. Hershey: IGI-Global. pp. 53-79.

Stocks KI (2010) SeamountsOnline: A Desktop Window Into the Lives of Seamounts. *Oceanogr* 23: 145.

Sun S, Chen J, Li W, Altintas I, Lin A, Peltier S, Stocks K, Allen EE, Ellisman M, Grethe J, Wooley J (2010) Community cyberinfrastructure for Advanced Microbial Ecology Research and Analysis: the CAMERA resource. *Nucleic Acids Research* 39: D546-D551.

Vanden Berghe E, Stocks KI, Grassle JF (2010) Data Integration: The Ocean Biogeographic Information System. In: McIntyre AD, editor. *Life in the World's Oceans: Diversity, Distribution, and Abundance*. Oxford: Blackwell Publishing Ltd. pp. 333-353.

Stocks KI, Condit C, Qian X, Brewin PE, Gupta A (2009) Bringing together an ocean of information: An extensible data integration framework for biological oceanography. *Deep Sea Research Part II: Topical Studies in Oceanography* 56: 1804-1811.

Baker KS, Stocks KI (2007) Building Environmental Information Systems: Myths and Interdisciplinary Lessons. Proceedings of the 40th Annual Hawaii International Conference on System Sciences (HICSS'07)