



Matthew D. Levey
Principal SeaSpatial Consulting
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Education

Moss Landing Marine Laboratories, Moss Landing, CA
M.S., Marine Science
May 2005

San Diego State University, San Diego, CA
B.S., Biology; B.A., Political Science
May 1995

Professional Experience

- 01/01/09 – Present **Principal: SeaSpatial Consulting, Santa Cruz, CA**
Plan and implement seafloor mapping surveys worldwide using multibeam, sidescan sonar, and subbottom profiler systems. At sea, oversee the operation of seafloor mapping surveys to ensure data accuracy and consistency, and to facilitate communication between clients and contractors. Design, create, and maintain large-scale GIS projects and databases for subsea field management and pipeline routing, including links to external databases and documents. Create, process, manage, and analyze marine spatial data sets in GIS for interpretation and display, including the production of charts, maps, and videos.
- 02/15/03 – 12/31/08 **Project Manager: AOA Geophysics Inc., Moss Landing, CA**
Oversee and lead staff scientists in planning and implementing seafloor mapping surveys worldwide using multibeam, sidescan sonar, and subbottom profiler systems. At sea, oversee the operation of seafloor mapping surveys to ensure data accuracy and consistency, and to facilitate communication between clients and contractors. Create, process, manage, and analyze marine spatial data sets in GIS for interpretation and display, including the production of charts and maps.
- 01/03/02 – 02/14/03 **Research Technician: Center for Habitat Studies, Moss Landing Marine Labs**
Use various GIS applications for the interpretation of remote sensing data for the creation of habitat maps. Assist with the planning, implementation, processing, and display of seafloor mapping projects. Digital video editing and production. Deploy and troubleshoot computer systems. Maintain network connectivity and productivity.
- 05/27/02 – 09/30/02 **Research Assistant: Habitat Ecology Group, NOAA Fisheries, Santa Cruz, CA**
Conducted age and growth study on flag rockfish. Analyzed and interpreted laser-line scan data. Assisted with subtidal collection of juvenile rockfish. Summer only position.



- 06/01/01 – Research Technician: Seafloor Mapping Lab, California State University,
8/31/01 Monterey Bay
Assist in the collection and processing of bathymetric data using multibeam and sidescan sonar systems for the purpose of marine habitat mapping. Troubleshoot computer/seafloor mapping systems at sea. Summer only position.
- 11/12/96 – Fisheries Technician: Pacific States Marine Fisheries Commission, La Jolla / Monterey, CA
07/15/01 Fishery data collection and analysis. Otolith reading. Report writing. Participation in fisheries research cruises. Database creation and management. Computer upkeep, software and hardware installation.
- 04/15/96 – Scientific Aid: California Department of Fish and Game, Long Beach, CA
11/10/96 Field identification and data collection of marine fish and invertebrates. Otolith extraction and preparation. Fish sex and maturity determination. Data entry and analysis. Present oral and written reports to supervisor.

Awards and Honors

- 2000 Sonia Linnik Hamilton Memorial Scholarship recipient.
- 2000 \$500 Dr. Earl Myers and Ethel Myers Oceanographic and Marine Biology Trust Grant recipient.
- 2000 \$1,000 Project AWARE Grant recipient.
- 2001 \$6,800 PADI Foundation Grant recipient.
- 2004 Honorable Mention for poster presented at CCJDC GIS Day

Presentations and Posters

- Levey, M.D. July 2002. Reef fish habitat associations in the Gulf of California. Poster presented and abstract printed in Abstracts of the 2002 meeting of the American Society of Ichthyologists and Herpetologists.
- Levey, M.D. November 2002. "Reef fish distribution and abundance among selected locations in the Gulf of California". Presentation at the 83rd meeting of the Western Society of Naturalists. Seattle, Washington, USA.
- Levey, M.D., D. Orange, A. García-García, M. Todd, J. Fabres, and A. Gardner. 2005. "High resolution Seafloor Mapping off the Cap de Creus Canyon Head, West Gulf of Lion". AAPG 2005 Annual Convention: Exploring Energy Systems, 19-22 June, Calgary, Canada, A81.
- Levey, M.D. November 2006. "Patterns of reef fish distribution and abundance among selected locations in the Gulf of California" at the 87th meeting of the Western Society of Naturalists, November 2006.
- Levey, M.D., A. García-García, D. L. Orange, M. Mulrey, G. Shipton, I. Herbert, and RV Pelican field party. October 2008. "Preliminary results and QC of a shallow-water, high-resolution acoustic survey near Panama City, Florida" Presentation at Shallow Survey 2008, Portsmouth, New Hampshire, USA.
- Orange, D. L., P.A. Teas, J. Decker, P. Baillie, P. Gilleran, and M. D. Levey. December 2008 "The Utilisation of SeaSeep Surveys (a Defense / Hydrography Spin-Off) to Identify and Sample Hydrocarbon Seeps in Offshore Frontier Basins". Presentation to International Petroleum Technology Conference, Kuala Lumpur, Malaysia.



Moore, C., A. Colyer, T. O'Donnell, J. Ellis, M. Levey, and D. Greene. February 2009. "ArcGIS and 3D Simulation – Life of Field Planning Tool". Presentation at the 2009 ESRI Petroleum Users Group Conference. Houston, Texas, USA.

Levey, M.D., A. García-García, and D. L. Orange. December 2009. "Evidence of hurricane-induced mudflows and their characteristics near the West Delta, Gulf of Mexico". Poster presented at AGU Fall Meeting, San Francisco, California, USA.

Sandoval, E. and M. Levey. February 2010. "Predicting Marine Species Occurrence Utilizing GIS and Habitat Preference Models". Poster presented at AGU Ocean Sciences Meeting. Portland, Oregon, USA.

Levey, M.D., A. García-García, and E. B. Watson. December 2011. Mapping Modern and Historical Geological Changes to the Upper Elkhorn Slough Estuary, Moss Landing, California. Poster presented at AGU Fall Meeting, San Francisco, California, USA.

Publications

Hill, K.T., M.D. Levey, and M. Dege, 1999. Status of the Pacific mackerel resource and fishery in 1999. California Department of Fish & Game Marine Region Report to the Legislature. 36 p.

Hill, K.T., J.L. Butler, and M.D. Levey. 2000. Coast-wide age and growth of Pacific sardine. Proceedings of the Sardine Symposium 2000, 23 – 25 May 2000, La Jolla, CA. pp. 35-38.

Schoolmeester, T., Grossman, E., Garcia-Garcia, A., Canals, M., Field, M.E., Levey, M., Fabres, J., Orange, D.L. 2005. Shallow Sediment Structure revealed from High Resolution Surveys in the Upper Cap de Creus Canyon. Abstracts Volume of Final EuroSTRATAFORM Meeting, 24-27 October 2005, Salamanca, Spain.

García-García, A., T. Schoolmeester, D. Orange, A. Calafat, J. Fabres, E. Grossman, M. Field, T. Lorenson, M. Levey, and M. Sansoucy. *In Press*. Recent sedimentary processes in the Cap de Creus canyon head and adjacent continental shelf, NE Spain: evidence from Multibeam Bathymetry, Sub-bottom Profiles and Coring. *Sedimentology*.

Technical Skills

ESRI ArcGIS certified

NAUI Scientific Diver

Multibeam acquisition using Simrad Merlin and SIS

Sidescan sonar acquisition using SonarPRO and Triton Imaging's ISIS

Multibeam and sidescan sonar data processing using Caris HIPS & SIPS, and Triton ISIS

Fledermaus, Adobe Illustrator, and Adobe Photoshop proficient

Non-linear digital video editing using Adobe Premier

SPSS, Canoco, and Systat statistical and multivariate statistical analysis software