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and

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EDUCATION:

Ph.D. Biological Oceanography, 2000

Scripps Institution of Oceanography, University of California San Diego
Advisor: Lisa A. Levin

B.Sc. Biology, San Diego State University, San Diego, California. 1994

RESEARCH INTERESTS:

The influence of habitat connectivity on ecosystems; coastal community structure and function.

RESEARCH EXPERIENCE:

Research Coordinator. San Francisco Bay National Estuarine Research Reserve. SFSU – Romberg Tiburon Center. Aug 2004 – Present.

Science Director. Aquatic Adventures Science Education Foundation. Jun 2003 – Present.

Associate Ecologist. University of California, Davis. Host – Dr. Marcel Holyoak. October 2001 - Present

Post-graduate Researcher. University of South Florida. Supervisor – Dr. Gary Huxel. Cross-habitat fluxes at the marine-terrestrial interface. December 2000-July 2004.

Dissertation. The role of resident fishes in linking habitats of a southern California salt marsh.

Staff Research Assistant I. Scripps Institution of Oceanography, University of California at San Diego, La Jolla, CA. Supervisor - Dr. Lisa Levin. Salt marsh ecology, fate of algal carbon in deep-sea sediments. October 1992 to September 1994.

Research Assistant. Marine Earth and Atmospheric Sciences, North Carolina State University. Raleigh, NC. Supervisor - Dr. Lisa Levin. Salt marsh infaunal response to disturbance. March 1992 to August 1992.

Research Assistant. Pacific Estuarine Research Laboratory, San Diego State University. San Diego, CA. Supervisor - Dr. Joy Zedler. Wetland restoration monitoring. January 1992 to March

1992.

AWARDS:

Principal Investigator/Mentor with Christine Whitcraft. The genetic structure of an invasion – using spatially and temporally explicit genetic information to inform invasion science and management.. CalFed Science Postdoctoral Fellows Program. The role of exotics as ecosystem engineers affecting estuarine food webs in Suisun Marsh. \$123,285. 2007-2008.

Co-Principal Investigator with Tom Parker, John Callaway, and others. Climate change impacts to San Francisco Bay-Delta wetlands: links to pelagic food webs and predictive responses based on landscape modeling. CalFed Science Program. \$646,848. 2007-2010

Co-Principal Investigator with Jeff Crooks, Tijuana River NERR. The genetic structure of an invasion – using spatially and temporally explicit genetic information to inform invasion science and management. California Sea Grant Rapid Response. \$9,702. 2005-2006

Principal Investigator. The Invasion and Impacts of Tamarisk in Tijuana Estuary Salt Marshes, and Ecosystem Recovery After its Removal. California Sea Grant. \$194,350. 2004-2006

Co-Principal Investigator with Eric Mellink, CICESE. Relative importance of wetland and nearby estuarine habitats to the feeding of fishes macroinvertebrates and their bird predators in San Quintín Bay: An integrated approach. UC MEXUS – CONACYT Grants for Collaborative Projects. \$24,529. 2004-2005

Co-Principal Investigator with Eric Mellink, CICESE. Trophic Structure of the Food Web Supporting Birds Nesting on Isla Montague, Delta of the Río Colorado. UC MEXUS – CONACYT Grants for Collaborative Projects. \$26,260. 2002-2003

Invited Participant Dissertations Symposium for the Advancement of Coastal, Estuarine and Great Lakes Science, sponsored by NOAA 2002

Visiting Scientist Award, National Institute of Water & Atmospheric Research, New Zealand. 1999.

Mildred E. Mathias Graduate Research Award. \$2,430. 1996-1997.

Bob Davey Memorial Scholarship (North County Chapter of the Sierra Club). \$1,200. 1996

PUBLICATIONS:

Talley, D.M. In Prep. The role of utilization patterns of fishes in linking habitats within a wetland mosaic. For submission to *Oecologia*.

Whitcraft, C.R., **Talley, D.M.**, Crooks, J.A., Boland, J., and Gaskin, J. Invasion of tamarisk (*Tamarix* spp.) in a southern California salt marsh. In Press. *Biological Invasions*.

Fisler, S. and **Talley, D.M.** 2006. “Sea” the future of science: combining research, education, and outreach in Baja California. *Current: The Journal of Marine Education* 22(1): 2-8.

Talley, D.M., Huxel, G.R., and Holyoak, M. In Press. Habitat Connectivity at the Land-Water Interface. *In: Sanjayan, M. and Crooks, K. [Eds], Connectivity in Conservation.* Cambridge University Press.

Talley, D.M., North, E.W., Juhl, A.R., Timothy, D.A., Conde, D., deBrouwer, J.F.C., Brown, C.A., Campbell, L.M., Garstecki, T., Hall, C.J., Meysman, F.J.R., Nemerson, D.M., Filho, P.W.S., and Wood, R.J. 2003. Research challenges at the land/sea interface. *Estuarine, Coastal, and Shelf Science* 58(4) 699-702.

Thrush, S.A., Schultz, D., Hewitt, J.E., and **Talley, D.M.** 2002. Habitat structure in soft-sediment environments and abundance of juvenile snapper *Pagrus auratus*. *Marine Ecology Progress Series* 245:273-280.

Thrush, S.A., Hewitt, J.E., Funnell, G.A., Cummings, V.J., Ellis, J., Schultz, D., **Talley, D.M.**, Norkko, A. 2001. Fishing disturbance and marine biodiversity: The role of habitat structure in simple soft-sediment systems. *Marine Ecology Progress Series* 223: 277-286.

Bernardi, G. and **Talley, D.M.** 2000. Genetic evidence for limited dispersal in the coastal California killifish, *Fundulus parvipinnis*. *Journal of Experimental Marine Biology and Ecology* 255(2): 187-199.

Talley, D.M. 2000. Ichthyofaunal utilization of newly-created versus natural salt-marsh creeks in Mission Bay, CA. *Wetlands Ecology and Management* 8: 117-132.

Levin, L.A., **Talley, D.M.**, Talley, T.S., Larson, A.A., Thayer, G., Currin, C., and C. Lund. 1997. Restoration of *Spartina* marsh function: an infaunal perspective. In: Macdonald, K.B. and F. Weinmann (eds.) *Wetland and Riparian Restoration: Taking a Broader View*. Contributed Papers and Selected Abstracts, Society for Ecological Restoration, 1995 International Conference, September 14-16, 1995, University of Washington, Seattle, Washington, USA.

Levin, L.A., Thayer, G. and **D.M. Talley**. 1996. Succession of macrobenthos in a created salt marsh. *Marine Ecology Progress Series* 141: 67-82.

PRESENTATIONS (Professional):

Talley, D.M., Huxel, G.R., and Piñero, F.S. The form of allochthonous input and recipient community structure affect the spatial and temporal scale of response in island ecosystems. United States Regional Chapter of the International Association for Landscape Ecology, March 2006.

Goodwin, L., Talley, T.S., Pierotti, L., Lewis, D., Nguyen, K-C., Ocampo, J., Soria, A., Singleton, T., Fisler, S. and **Talley, D.M.** A Description of Community Structure of Wetlands in Bahía de los Angeles, Baja California, Mexico. Western Society of Naturalists, November 2005.

Talley, D.M. Habitat linkages at the land-sea interface. Special Session, Western Society of Naturalists, November 2005.

Whitcraft, C.R., Crooks, J.A., Demopoulos, A., Levin, L.A., and **Talley, D.M.** Invasive tamarisk alters the physical environment and sediment food web in a salt marsh ecosystem. Western Society of Naturalists, November 2005.

Talley, D.M., Crooks, J., Levin, L., and Whitcraft, C. The effects of tamarisk on native floral and faunal community structure in a southern California salt marsh. Ecological Society Of America, August 2005 (Poster).

Bell, S.S., Cavender-Bares, K., O'Malley, R., Burkett, V., Collins, J., Dixon, J., Ewing, L., Grober-Dunsmore, R., Johnston, J., Lathrop, R., Minello, T., Niemi, G., Roman, C., Simenstad, C., Stewart, R., **Talley, D.M.**, Zajac, R., and Zedler, J. Pattern of the landscape at the sea-land interface. United States Regional Chapter of the International Association for Landscape

Ecology, March 2005.

Talley, D.M. Habitat connectivity: beyond corridors and reserves. University of New Hampshire. November 2004.

Talley, D.M., Crooks, J., Levin, L., Ritchie, C., Cody, K.C., Antcliffe, S., and Whitcraft, C. An exotic tree invades a southern California salt marsh – history, impacts, and recovery following eradication. Ecological Society Of America, August 2004 (Poster).

Talley, D.M. Connectivity in natural (and unnatural) systems. Centro De Investigación Científica y de Educación Superior de Ensenada, B.C., Mexico. May 2004.

Talley, D.M., Crooks, J., Levin, L., Ritchie, C., Cody, K.C., Antcliffe, S., and Whitcraft, C. An exotic tree invades a southern California salt marsh – history, impacts, and recovery following eradication. California Estuarine Research Society Meeting, March 2004.

Talley, D.M., Mellink, E., Herzka, S., Huxel, G.R., and Dayton, P.K. Trophic structure of the food web supporting birds nesting in the delta of the Colorado River. Western Society of Naturalists, November 2003.

Chin, Y., **Talley, D.M.**, and Huxel, G.R. the effect of boundary type on permeability and penetrance of marine subsidy to terrestrial island ecosystems. Western Society of Naturalists, November 2003 (Poster).

Kravitz, T., **Talley, D.M.**, and Huxel, G.R. The effects of guano input on rocky intertidal communities in the archipelago of Bahia de los Angeles, Baja California, Mexico. Western Society of Naturalists, November 2003 (Poster).

Talley, D.M. Connectivity: habitat linkages at the land-sea interface. Society for Conservation Biology, June 2003.

Talley, D.M., Huxel, G.R., and Sanchez-Pinero, F. La forma del subsidio espacial tiene una profunda influencia en la escala temporal y espacial del efecto sobre la comunidad receptora. IX Congress of the Asociación de Investigadores del Mar de Cortés, May 2003.

Talley, D.M. and L.A. Levin. Advances in salt marsh ecology: Lessons from Mission Bay, CA. California Estuarine Research Society Meeting, April 2003.

Talley, D.M., Huxel, G.R., and Sanchez-Pinero, F. The effects of trophic subsidy on an adjacent ecosystem – an experimental test in the Gulf of California. Ecological Society of America, August 2002.

Talley, D.M., Huxel, G.R., and Sanchez-Pinero, F. Experimentally testing the mechanisms of marine influence on island communities in the Gulf of California. Western Society of Naturalists, November 2001.

Talley, D.M. The role of small resident fishes in linking habitats within a southern California wetland mosaic. 30th Annual Benthic Ecology Meeting. March 2001, Portsmouth, NH.

Thrush, S.A., Hewitt, J.E., Funnell, G.A., Cummings, V.J., Ellis, J., Schultz, D., **Talley, D.M.**,

Norkko, A. Fishing disturbance and marine biodiversity: The role of habitat structure in simple soft-sediment systems. 30th Annual Benthic Ecology Meeting. March 2001, Portsmouth, NH.

Talley, D.M. Microhabitat Utilization by juvenile California Killifish, *Fundulus parvipinnis*, in Mission Bay, California. 29th Annual Benthic Ecology Meeting. March 2000, Wilmington, NC.

Levin, L.A., T.S. Talley, **D.M. Talley**, C. Currin, and R. Michener. 1999. Trophic interactions in a created and natural salt marsh inferred from stable isotope analyses. 28th Annual Benthic Ecology Meetings, March 1999, Baton Rouge, LA.

Talley, D.M., L.A. Levin, C. Currin, T. Talley. 1998. Ichthyofaunal community structure and trophic interactions in a created and adjacent natural salt marsh in Mission Bay, California. Presented as a poster at: Concepts and Controversies in Tidal Marsh Ecology, 5-9 April, 1998, Vineland, N.J.

Talley, T.S., **D.M. Talley**, L.A. Levin, C. Currin and P.K. Dayton. 1998. The ecology of the California hornsnail, *Cerithidea californica*, in a created salt marsh in Mission Bay, southern California. Presented at the Western Society of Naturalists, December 1998, San Diego, CA.

Talley, D.M., L. A. Levin, G. Thayer, and C. Currin . 1996. Restoration of *Spartina* marsh function: an infaunal perspective. Paper presented at the Western Society of Naturalists Meeting, Fort Worden, Washington. Honorarium awarded.

Levin, L., J. Crooks, T. Sinicrope, **D.M. Talley**, M. Woo, G. Thayer, C. Currin, and C. Lund. 1995. Comparison of infauna in Pacific and Atlantic coast *Spartina* marshes. Presented as a poster at the Benthic Ecology Meetings, 16-19 March 1995, New Brunswick, NJ.

Talley, D.M., L. Levin, G. Thayer, C. Currin, and C. Lund. 1995. Restoration of *Spartina* marsh function: an infaunal perspective. Paper presented at the Society for Ecological Restoration International Conference, 14-16 September, 1995, Seattle, Washington.

PRESENTATIONS (Public Outreach):

Talley, D.M. 2002. Los impactos del mar en las plantas y animales que viven en las islas de Bahía de los Angeles. Presented to residents of Bahía de los Angeles.

Talley, D.M. 1999. The fishes and research of San Diego's Mission Bay. Presented to the San Diego City Parks Department as part of their Coastal Wetlands Workshop.

Talley, D.M. 1998. Wetland fishes of Famosa Slough. Presented to the Friends of Famosa Slough.

Talley, D.M. 1996. Habitat linkages in southern and Baja California marshes. Presented to the December meeting of the North County Chapter of the Sierra Club.

TEACHING EXPERIENCE:

Instructor (2004) UC Davis, Introduction to Evolution (EVE 100)

Guest Lecturer (1999) Scripps Institution of Oceanography, Wetlands Ecology and Conservation: "The Ecology of Wetland Fishes"

Guest Lecturer (1999) UC San Diego, Marine Ecology: "Coastal wetlands"

Teaching Assistant (1999) UC San Diego, Marine Ecology

PROFESSIONAL SERVICE:

Science Director. Aquatic Adventures BAHIA program, outreach to engage underrepresented youth in the sciences. 2003 – Present.

Session Chair. Third International Conference on Invasive *Spartina*. November 2004.

Associate Editor, Journal of Environment and Development, 1996-2002

Reviewed manuscripts for: Marine Ecology Progress Series, Estuaries, Wetlands Ecology and Management, CalCOFI Reports, Journal of Environment and Development

Reviewed management plans for: Instituto Nacional de Ecología, Mexico.

Invited Workshop Participant: Conservation and Research Status of Gulf of California Estuaries/Esteros – Sponsored by the Davis and Lucille Packard Foundation and the Arizona-Sonora Desert Museum

Invited Workshop Participant: State of the Nation's Ecosystems – Landscape Pattern in the Coastal Zone – sponsored by the Heinz Center 2005 and 2006

PROFESSIONAL MEMBERSHIPS:

American Society of Ichthyologists and Herpetologists

American Society of Limnology and Oceanography

Asociación de Investigadores del Mar de Cortés

Ecological Society of America

Society for Conservation Biology

Society of Wetland Scientists

Western Society of Naturalists

REFERENCES:

Lisa A. Levin, Professor, Scripps Institution of Oceanography, University of California, San Diego, La Jolla, CA. (619) 534-3579, (Ph.D. supervisor) llevin@ucsd.edu

Paul K. Dayton, Professor, Scripps Institution of Oceanography, University of California, San Diego, La Jolla, CA. (619)-534-6740 pdayton@ucsd.edu

Simon Thrush, National Institute of Water and Atmospheric Research, Hamilton, New Zealand. Phone 64 7 856 1705 s.thrush@niwa.cri.nz

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