

KATHERINE E. COMER SANTOS

CURRICULUM VITAE

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EDUCATION

San Diego State University, Master of Arts, Geography, December 2002

University of California, San Diego, B.A., Psychology and Spanish Literature, June 1994

PROFESSIONAL EXPERIENCE

San Diego State University

Adjunct Research Associate, 2010 to present

- Develops customized international internships for university students that meet academic standards for biology credit
- Writes syllabi, gives lectures, creates research plans, assigns homework, grades papers
- Coordinates with University faculty and staff

The Science Exchange

Director, 2006 to present

- Manages the operations of the non-profit and technical advisory board
- Places interns with international sea turtle research and conservation specialists
- Makes on-site visits to the interns' locations throughout Latin America
- Helps interns present research results at conferences and in journals

City of San Diego

Biologist III and Associate Planner, 2006 to 2017

- Performs biological surveys and field monitoring for capital improvement projects
- Writes biological and other technical reports
- Obtains resource agency permits and CEQA/NEPA clearance
- Uses GIS to analyze environmental impacts and mitigation strategies
- Manages consultants, contractors, and budgets for mitigation and restoration projects

Institute for Regional Studies of the Californias, San Diego State University

Research Coordinator, 2002-2006

- Coordinated the U.S.-Mexican Binational Watershed Advisory Council and the EPA Border 2012 Water Task Force for the Tijuana River Watershed
- Received a grant for a rapid biological assessment on private land in Tijuana in collaboration with the SD Natural History Museum, UABC in Ensenada, and Rancho La Puerta in Tecate
- Published a proposal for a sea turtle refuge for the Loreto Monograph in collaboration with UABCS in La Paz
- Wrote grant proposals, managed awards, budgets, and subcontractors

TEACHING EXPERIENCE

Bridge the Border Instructor, Montgomery Middle School, 2013

- Taught sea turtle experimental labs to 7th graders
- Supervised college interns who participated in the program as 7th grade mentors

Teaching Assistant, SDSU Geography Department 2000-2003

- Taught eight Geography 101 Labs and issued grades
- Supervised independent research projects for 160 students
- Participated in Teaching of College Geography Class at SDSU

Instructor, UC San Diego, 1994

- Co-taught English as a Second Language (ESL) for the Summer Bridge Program
- Taught a section of “Racism in the University” for the Summer Bridge Program
- Received training in adult education methods and diversity in the classroom from UCSD

Educator Guide, Zoological Society of San Diego, 2000

- Led tours and classroom projects on biology and conservation

Peace Corps, Honduras, 1995-1998

- Created workshops for adults and children on organic agriculture practices

PUBLICATIONS

1. Hiebert, K., J. Shaker, I. Llamas, M. Fish, **K. Comer Santos**. 2017. “A Methodological Framework for Assessing Sea Level Rise Effects on a Marine Turtle Nesting Beach: A Case study at Mayto, Jalisco, Mexico” *Journal of Global Ecology and Environment* 6(3): 93-100.
2. **Comer Santos, K.**, M. Livesey, M. Fish, A. Camargo Lorences. 2015. “Climate change implications for the nest site selection process and subsequent hatching success of a green turtle Population” *Mitig. Adapt. Strateg. Glob. Change*. DOI 10.1007/s11027-015-9668-6, June.
3. López-Castro, M., F. Villegas-Nava, E. González, **K. Comer Santos**, and W.J. Nichols. 2012. “Living on the Edge: Sea Turtles in the Waters off Los Cabos, Baja California Sur” in *Los Cabos Monograph*, Eds. Paul Ganster, Oscar Arizpe, and Antonina Ivanova Publ. SDSU and IRSC, San Diego, CA 522 pp.
4. Ramos, J., C. Pincetich, L. Adams, **K. Comer Santos**, J. Hage, R. Arauz. 2012 “Quantification and Recommended Management of Man-Made Debris Along the Sea Turtle Nesting Beach at Playa Caletas, Guanacaste, Costa Rica” *Marine Turtle Newsletter*. eds. Stewart, Kelly, Godfrey, Michael, Coyne, Michael. No. 134, 12-17 pp.
5. **Santos, K.**, J. Pino, F. Roda, M. Guirado, J. Ribas. 2008. “Beyond the reserves: the role of non-protected rural areas for avifauna conservation in the area of Barcelona (NE of Spain).” *Landscape and Urban Planning*, Vol (84) 2, 140-151 pp.
6. **Comer, K.** and W. Nichols. 2007. “Loreto Bay National Marine Park: A refuge for sea turtles” in *Loreto: The First Capital of the Californias*. Eds. Paul Ganster, Oscar Arizpe, and Antonina Ivanova Publ. SDSU and IRSC, San Diego, Ca., 704 pp.
7. **Santos, K.C.**, C. Tague, A. Alberts, J. Franklin. 2006. “A comparison of habitat suitability index model building approaches for nesting sea turtles on the U.S. Naval Station, Guantanamo Bay, Cuba.” *Chelonian Conservation and Biology* Vol (5) 2: 175–187.
8. **Comer, K.** 2006. “Case study of a Potential Trinational Protected Area: the Campo-Tecate Creek Kumiai Corridor” Ed. Kelly Hoffman, Southwest Center for Environmental Research and Policy (SCERP), Monograph Series, No. 15, Dec.
9. White, M, J. Stallcup, **K. Comer**, M.A. Vargas, J. Beltrán-Abaunza, F. Ochoa, and S. Morrison. 2006. “Designing and establishing conservation areas in the Baja California—Southern California border region”. Ed. Kelly Hoffman, Southwest Center for Environmental Research and Policy (SCERP), Monograph Series, No. 15, Dec.

10. **Comer, K.** 2002. Habitat suitability index models for nesting sea turtles at the U.S. Naval Base, Guantanamo Bay, Cuba. Master's thesis, Department of Geography, SDSU. 91 pp.
11. Alberts, A.C., T.D. Grant, G.P. Gerber, **K.E. Comer**, P.J. Tolson, J.M. Lemm, and D. Boyer. 2001. Critical reptile species management on the U.S. Naval Base, Guantanamo Bay, Cuba. Report to the United States Navy for Project No. 62470-00-5219. 101 pp.

CONFERENCE PRESENTATIONS

1. **Santos, K.C.**, Blattman, K., Ramirez Guillen, A., Hart, C.E. 2019. "Comparison of *in situ*, beach hatchery and box nursery incubation methods at Boca de Tomates beach, Jalisco, Mexico". Oral presentation at the 39th International Sea Turtle Symposium, Charleston, S.C., Feb.
2. Hendricks, S., **K.C Santos**, W. J. Nichols. 2018 "Measuring the Effectiveness of an International Sea Turtle Internship Program in developing future leaders" oral presentation at the International Sea Turtle Symposium, Kobe, Japan. 18-23, Feb.
3. Thornton, L. R. Parent, A. Bogdanoff, **K.C. Santos**, M. Heithaus, E. Whitman. 2017. "Factors affecting the foraging behavior of the variegated urchin" Poster presented at the Biology Research Symposium Florida International University Biscayne Bay Campus. 4, Feb.
4. Zaida, J., J.M. Santana, R. Troissou, C. Hart, V. Peña, **K.C. Santos**. 2016. "Contaminación de la orilla de playa de anidación El Naranjo, Nayarit" oral presentation to the Sea Turtle Network of the Californias Conference. Mazatlan, Sinola. 29-31, Jan.
5. Santana-Godínez, J.M., A. Maldonado-Gasca, C. Hart, J. Zaida, **K.C. Santos**. 2016. "Contaminación por residuos sólidos en playas de anidación de Tortugas Marinas en Nayarit y Jalisco" oral presentation to the Sea Turtle Network of the Californias Conference. Mazatlan, Sinola. 29-31, Jan.
6. Malone, M. S. Najera, **K. C. Santos**. 2015. "Characterization of E. coli in recreational waters of the Riviera Nayarit, Mexico and possible implications for human health". Poster presentation at the Annual Biomedical Research Conference for Minority Students. Seattle, WA. 11-14 Nov.
7. Martin, M., C. Cramer, M. Beange, H. Buckley, L. Adams, C. Pincetich, R. Arauz, R. Lewison, J. Ramos and **K.C. Santos**. 2014. "Pollution survey results on nesting beaches in Guanacaste, Costa Rica 2011-2013". Belskis, L., Frey, A., Jenson, M., LeRoux, R., and Stewart, K. compilers. 2016. Proceedings of the Thirty-Fourth Annual Symposium on Sea Turtle Biology and Conservation. NOAA Technical Memorandum NOAA NMFS-SEFSC-701: 262p.

8. **Santos, K.C.**, B. Birdwell, J. Rodríguez Murillo, E. Samaniego V, S. Peres Valdes, D. Valdes Castro, L. Agrazal Melendez, A. Hines, K. Moy and R. Valverde. 2014. "State of the Isla Canas arribada beach in Panama" Poster presented at the 35th International Sea Turtle Symposium in New Orleans, LA, 14-17 Apr.
9. Guzman-Zaragoza, L., A. Giffin, K. Zemaitis, **K. Comer Santos**, C. Gonzalez, M. Sanchez, L. Adams, E. Harrison, R. Arauz, M. MPB Fuentes, M. Fish, B. Whitman, R. Lewison. 2013. "Predicting the Effects of Sea Level Rise on Three Sea Turtle Nesting Beaches in Costa Rica" poster presented to San Diego State Student Research Symposium, San Diego, CA, 8-9 March.
10. Gehrke, K., E. Kuzmick, L. Piorkowski, **K. Comer Santos**, C. Pincetich, C. Gonzalez, M. Sanchez, L. Adams, E. Harrison, R. Arauz, B. Whitman. 2013. "Trashing Turtles: Quantifying Garbage on Three Sea Turtle Nesting Beaches in Costa Rica" oral presentation to the 33rd Annual International Sea Turtle Symposium, Baltimore, Maryland, 2-8 Feb.
11. Guzman-Zaragoza, L. A. Giffin, K. Zemaitis, **K. Comer Santos**, C. Gonzalez, M. Sanchez, L. Adams, E. Harrison, R. Arauz, M. MPB Fuentes, M. Fish, B. Whitman, R. Lewison. 2013. "Predicting the Effects of Sea Level Rise on Three Sea Turtle Nesting Beaches in Costa Rica" poster presented to the 33rd Annual International Sea Turtle Symposium, Baltimore, Maryland, 2-8 Feb.
12. **Santos, K.C.**, F. Kinney, M. Livesey, V. Pollan, G. Ponce, K. Valma, L. Adams, A. Lorences, M.A. Maldonado, M. Rubio. 2012. "Bridge the Border: A Virtual Sea Turtle Research Journey for K-12 Students" oral presentation to the International Sea Turtle Symposium, Huatulco, Oaxaca, Mexico, 11 – 16 March.
13. Gabriel, N., M. Rosquillas, A. Baxter, A.M. Lorences Camargo, **K. Comer Santos**. "Differences in knowledge regarding sea turtle protection in Akumal, Mexico based on 234 random intercept interviews" in Proceedings of the 31st Annual Symposium on Sea Turtle Biology and Conservation. Jones, T Todd Wallace, Bryan P. compilers. NOAA Technical Memorandum NOAA NMFS-SEFSC-631: 306 pp.
14. Furst, N., A. Baxter, A.M. Lorences Camargo, C.C. Sanchez Salazar, **K. Comer Santos**. 2012. "Analysis of nest temperatures and future global warming effects on two coasts of Mexico" in Proceedings of the 31st Annual Symposium on Sea Turtle Biology and Conservation. Jones, T Todd Wallace, Bryan P. compilers. NOAA Technical Memorandum NOAA NMFS-SEFSC-631: 306 pp.
15. Baxter, A., N. Furst, A.M. Lorences Camargo, C.C. Sanchez Salazar, **K. Comer Santos**. 2012. "Analysis of nest temperatures and future global warming effects on two coasts of Mexico" poster presented at the San Diego State Student Research Symposium, San Diego, CA, 4-5 March.

16. Rosquillas, M., A. Lorences Camargo, M.A. Maldonado Cuevas, **K.C. Santos**. 2010. "Sea Turtles in Akumal, México: finding a balance between ecotourism and harassment," poster presentation at the International Sea Turtle Symposium, Goa India. April, 2010. NOAA technical memorandum.
17. Soares, D., S. Maxey, G. Tiburcio Pintos, E. Acevedo Ruiz, V. Castillo Leggs, P. Marquez Almanza, J.C. Marron Fiol, D. Soares, **K.C. Santos**. "Predicted sea level rise impacts on the nesting beaches of olive ridley turtles in Los Cabos, Mexico" poster presentation at the International Sea Turtle Symposium, Goa India. April, 2010. NOAA technical memorandum.
18. **Santos, K.C.**, S. Siren, A. Nouri, T. Demer, K. Randall. 2010. Paleontological Sentivity Map for San Diego County: a Categorical Risk Analysis. Poster presented at the ESRI User Conference 7/2010. San Diego, CA. 15-22 Aug.
19. Soares, D., G. Tiburcio Pintos, E. Acevedo Ruiz, V. Castillo Leggs, P. Marquez Almanza, J.C. Marron Fiol, S. Maxey, **K.C. Santos**. 2009. "Predicted sea level rise impacts on the nesting beaches of olive ridley turtles in Los Cabos, Mexico" in Proceedings of the 11th Annual Sea Turtle Network of the Californias Conference. Loreto, B.C.S., Mexico, 29-30, Jan.
20. Maxey, S., G. Tiburcio Pintos, E. Acevedo Ruiz, V. Castillo Leggs, P. Marquez Almanza, J.C. Marron Fiol, D. Soares, **K.C. Santos**. 2009. "Investigating the empirical relationships between sand temperatures, air temperatures and humidity as a predictor of climate change impacts to olive ridley nesting habitats" in Proceedings of the 11th Annual Sea Turtle Network of the Californias Conference. Loreto, B.C.S., Mexico, 29-30, Jan.
21. **Santos, K.C.**, C. Tague, A. Alberts, J. Franklin. 2009. "A comparison of habitat suitability index model building approaches for nesting sea turtles on the U.S. Naval Station, Guantanamo Bay, Cuba." in Proceedings of the 28th Annual Symposium on Sea Turtle Biology and Conservation. Dean, Kama, Lopez Castro, Melania C. compilers. NOAA NMFS-SEFSC-602: 272 pp.
22. Castro-Ruiz, J.L, Ganster, P., Wright, R., **Comer, K.**, Silvan, L., Saxod, E., Zuñiga, W. 2006. "Beyond the Generation of Data for Watershed Management: The Experience of the Tijuana River Bi-national Watershed Advisory Council" oral presentation at the Border Institute VIII Cooperation on Planning and Operation of Trans-boundary Watersheds: Sharing Data across Borders. Rio Rico, Arizona, May 22-24., 31 pp.
23. Wright, R., **Comer, K.** 2006. "GIS-based decision Support Tools for Water Resource Management in the Ambos Tecates Region" in session Innovative Uses of GIS to Explore Water Resource Issues on the U.S.-Mexico Border. Presented at the Association of American Geographers Annual Meeting, Chicago, Illinois. 9 March.
24. **Comer, K.**, W. Nichols. 2005. "Loreto, Baja California Sur community attitudes survey"

in in Proceedings of the 25th Annual Symposium on Sea Turtle Biology and Conservation. Kalb, H., A.S. Rodhe, K. Gayheart, K. Shanker compilers. NOAA Technical Memorandum NOAA NMFS-SEFSC-582: 204 pp.

PROFESSIONAL AFFILIATIONS

Member, Audubon Society, 2013

LEED Green Associate, 2012

Member, International Sea Turtle Society, 2005-present

Member, Sea Turtle Network of the Californias, 2005-present