
SARAH M. GLASER

Josef Korbel School of International Studies
University of Denver
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EDUCATION

Scripps Institution of Oceanography, UC San Diego

PhD, Oceanography. 2009. Advisor: Dr. David Checkley

Foraging habits of North Pacific albacore in the California Current System.

Kansas State University

BS (honors), Biology, Environmental Science, and Women's Studies (minor). 2000

PROFESSIONAL EXPERIENCE

Josef Korbel School of International Studies, University of Denver

Research Scientist. 2013–present

Co-Director, Geographic Information Systems Center at Lake Victoria

National Fisheries Resources Research Institute. Jinja, Uganda. 2012–present

The College of William & Mary and the Virginia Institute of Marine Science

Visiting Assistant Professor of Biology and Marine Science. 2011–2013

University of Kansas

Postdoctoral Researcher with Dr. Ford Ballantyne. 2010–2011

Northeast Fisheries Science Center, NOAA

Fisheries Oceanographer. Woods Hole, MA. 2010 (invited one month appointment)

Scripps Institution of Oceanography

Postdoctoral Researcher with Dr. George Sugihara. 2009–2010

University of North Texas, Adjunct Faculty, Department of Biology. 2008

The Women's Debate Institute, Director of Finances. 2006–present

RESEARCH GRANTS

NSF, Coupled Natural and Human Systems. \$229,881. 2012–2014. *Conflict & Fisheries in the Lake Victoria Basin*. S. Glaser (PI), C. Hendrix, L. Kaufman (co-PIs)

Reves Center for International Studies Grant. \$18,000. 2012–2014. *The William & Mary GIS Center at Lake Victoria: supporting student learning, faculty research and resource stewardship at the source of the Nile*. S. Glaser (PI), C. Hendrix, S. Hamilton (co-PIs).

Women in Scientific Education (WISE) NSF-ADVANCE grant, William & Mary. \$5000. 2012. *Fisheries in the Lake Victoria Basin: Links between Fish Catch & Market Price*. S. Glaser (PI).

William & Mary Reves Center for International Studies Research Grant. \$6000. 2012

William & Mary Charles Center Research Grant. \$1800. 2012

W&M Institute for the Theory & Practice of International Relations Grant. \$5000. 2012

William & Mary Travel Grant. \$500. 2012

American Society of Limnology & Oceanography Travel Grant. \$500. 2012

Sea Grant Population Dynamics Fellowship and Research Grant. \$95,000. 2005–2008

Mia Tegner Research Grant, Scripps Institution of Oceanography. \$2000. 2007

Scripps Institution of Oceanography Graduate Department Research Grant. \$2000. 2007

American Fisherman's Research Foundation Research Grant. \$5500. 2005–2006

Mullin Research Grant, Scripps Institution of Oceanography. \$2000. 2002

Sigma Xi Grant in Aid of Research. \$1000. 1999

PUBLICATIONS

SM Glaser, MJ Fogarty, H Liu, I Altman, L Kaufman, AD MacCall, AA Rosenberg, H Ye, G Sugihara. (in press) Dynamic complexity and limits to prediction in marine fisheries. *Fish and Fisheries*.

SM Glaser, H Ye, and G Sugihara. (in press) A nonlinear, low data requirement model for producing spatially-explicit fishery forecasts. *Fisheries Oceanography*.

H Liu, MJ Fogarty, **SM Glaser**, I Altman, L Kaufman, AA Rosenberg, G Sugihara. (2012) Nonlinear dynamic features and co-predictability of the Georges Bank fish community. *Marine Ecology Progress Series*. 464: 195-207.

G Sugihara, JR Beddington, C Hsieh, E Deyle, MJ Fogarty, **SM Glaser**, R Hewitt, A Hollowed, RM May, SB Munch, C Perretti, AA Rosenberg, SA Sandin, H Ye. (2011) Are exploited fish populations stable? *Proceedings of the National Academy of Sciences*. 108: E1224-E1225.

SM Glaser (2011) Do albacore exert top-down pressure on Northern anchovy? Estimating anchovy mortality as a result of predation by North Pacific albacore in the California Current System. *Fisheries Oceanography*. 20: 242-257.

SM Glaser, H Ye, MN Maunder, AD MacCall, MJ Fogarty, G Sugihara. (2011) Detecting and forecasting complex nonlinear dynamics in spatially-structured catch-per-unit-effort time series for North Pacific albacore. *Canadian Journal of Fisheries & Aquatic Sciences*. 68: 400–412.

CS Hendrix and **SM Glaser**. (2011) Civil conflict and world fisheries, 1952-2004. *Journal of Peace Research*. 48: 481-495. **JPR Paper of the Year Award**.

SM Glaser (2010) Interdecadal variability in predator-prey interactions of North Pacific albacore in the California Current System. *Marine Ecology Progress Series* 414: 209–221.

CS Hendrix and **SM Glaser** (2007) Trends and triggers: climate, climate change and civil conflict in Sub-Saharan Africa. *Political Geography* 26(6): 695–715.

C Hsieh, **SM Glaser**, AJ Lucas, G Sugihara (2005) Distinguishing random environmental fluctuations from ecological catastrophes for the North Pacific Ocean. *Nature* 435: 336–340.

MANUSCRIPTS IN PROGRESS

AR Reed, **SM Glaser**, FM Stephen, SA Billings. Examining patterns of tree growth through nonlinear forecasting models to understand tree resilience or susceptibility to disturbance. (draft available)

H Liu, MJ Fogarty, JA Hare, C Hsieh, **SM Glaser**, G Sugihara. Dynamic interactions and coherence between marine copepods and fish populations linked to environmental variability. (draft available)

SM Glaser and F Ballantyne. Strategic time delays in predator foraging behavior and consequences for invasive species. (draft available)

SM Glaser. The role of North Pacific albacore as predators in the California Current System: reconceptualizing generalism in the context of habitat specialization. (draft available)

COURSES TAUGHT	<p><i>Fundamentals of Statistical Methods and Data Analysis</i> (graduate level, 2013) Virginia Institute of Marine Science</p> <p><i>Introduction to Biostatistics</i> (undergraduate level, 2013) <i>Global Fisheries Conservation</i> (undergraduate level, 2011 & 2012) <i>Critical Transitions in Aquatic Ecosystems</i> (undergraduate level, 2012) College of William and Mary</p> <p><i>Principles of Biology II</i> (undergraduate level, 2008) University of North Texas</p> <p><i>Introduction to Biological Oceanography</i> (TA, undergraduate level, 2007) <i>Introduction to Marine Biodiversity and Conservation</i> (TA, graduate level, 2004, 2005, 2006) University of California, San Diego</p> <p><i>Basic Argumentation</i> (high school level, 2005) <i>Critical Feminist Theory</i> (high school level, 2005, 2006, 2007) <i>Global Climate Change</i> (high school level, 2006) The Women's Debate Institute</p> <p><i>Ecology of Environmental Problems</i> (TA, undergraduate level, 2000) Kansas State University</p>
UNDERGRADUATE MENTORSHIP	<p>Erin Spencer, research advisor, William & Mary. <i>Invasive lionfish in the Florida Keys: management on a local level.</i> 2013</p> <p>Marni Robins, research advisor, William & Mary. <i>Seafood trends in fish markets and restaurants in Mediterranean ports.</i> 2013</p> <p>Seth Theuerkauf, honors thesis committee, William & Mary. <i>Development of a Sanctuary Oyster Reef Network in the Great Wicomico River, Virginia.</i> 2012</p> <p>Catherine Mahoney, research co-advisor, William & Mary. <i>Wages and fishing contracts in Lake Victoria fisheries.</i> 2012</p> <p>Andrea McBeth, honors thesis co-advisor, University of San Diego. <i>Trophic status of albacore prey from stable isotope analysis.</i> 2007–2008</p> <p>Nicole Mehaffie, research advisor, UC San Diego. <i>Genetic analysis of <i>Sebastes</i> spp. and other prey items of albacore tuna.</i> 2007 <i>Genetic analysis of cephalopod prey items of albacore tuna.</i> 2008</p> <p>Michael Fox, internship co-advisor, University of San Diego. 2008</p> <p>Robert Combs, research advisor, UC San Diego. <i>Comparison of fishing effort variability based on price fluctuation in diesel fuel.</i> 2007</p> <p>Clinton Moran, internship advisor, Willamette University. 2007</p> <p>Mitch DeGeus, research co-advisor, UC San Diego. <i>Using genetic sequencing to identify specimens found in tuna stomachs.</i> 2006</p>
FELLOWSHIPS & AWARDS	<p><i>Journal of Peace Research</i> Paper of the Year Award. 2012</p> <p>Outstanding Student Presentation, GLOBEC-CLIOTOP Symposium. Mexico. 2007</p>

Manual Caboz Memorial Fellowship, International Tuna Conference. California. 2006
 NSF-IGERT Fellowship, Center for Marine Biodiversity & Conservation at Scripps. 2004
 Haymaker Excellence in Biology Award (top student in dept.), Kansas State University. 2000
 Harry S. Truman Public Policy Fellowship (\$30,000). 2000
 Dept. of Women's Studies Outstanding Paper of the Year. Kansas State. 2000
 Morris K. Udall Excellence in National Environmental Policy Fellowship. 1999
 Kansas State University Presidential Scholarship (full tuition). 1995–1999
 Sherrid Biology Research Scholarship, Kansas State University. 1997–1999
 Chitty Intercollegiate Debate Scholarship, Kansas State University. 1997–1999
 Division of Biology Most Promising Student Award, Kansas State University. 1998
 Intercollegiate Debate Academic All-American. 1997–1999
 Kansas State University Honors Program. 1995–1999
 Brown Mathematics Scholarship. 1995
 National Merit Finalist. 1995

RESEARCH ACTIVITIES Biomath Initiative journal club, The College of William & Mary. 2011–2013
 Advisor, **California Sustainable Seafood Initiative**, Ocean Protection Council. 2010–2011
 Complex Systems journal club, Scripps Institution of Oceanography.
 National Sea Grant Trainee in Marine Acoustic Analysis, Scripps. 2002–2004
 Research Assistant in Marine Coastal Ecology, James Cook University, Australia. 2001
 Research Assistant in Plant Ecology with Dr. Loretta Johnson
 Konza Prairie Research Station, Kansas State University. 1997–2000
 Toolik Field Station, Institute of Arctic Biology, Toolik, Alaska. 1997
 Marine ecology field course, School for Field Studies, Turks & Caicos Islands. 1997

SELECTED PRESENTATIONS

2013 National Fisheries Resources Research Institute, Jinja, Uganda
 Kenya Marine and Fisheries Research Institute, Kisumu, Kenya
 Tanzania Fisheries Research Institute, Mwanza, Tanzania
 American Society of Limnology and Oceanography, New Orleans, LA
 California Current System Forage Fishes workshop, Petaluma, CA
 2012 American Fisheries Society, Minneapolis, MN
 American Fisheries Society Tidewater Chapter, Beaufort, NC
 Ocean Sciences ASLO/AGU, Salt Lake City, UT
 Scripps Institution of Oceanography, La Jolla, CA (statistics workshop participant, presenter)
 Alaska Fisheries Science Center, Seattle, WA (ecological modeling workshop leader)
 2011 The College of William & Mary, Williamsburg, VA (biomath seminar)
 Virginia Institute of Marine Science, Gloucester Point, VA
 Kansas State University, Manhattan, KS
 University of Kansas, Lawrence, KS

- 2010 American Fisheries Society, Pittsburgh, PA
 Conservation International, Washington, DC
 Eldgenössische Technische Hochschule (ETH-Zürich), Zürich, Switzerland
 Northeast Fisheries Science Center, Woods Hole, MA
 University of Kansas, Lawrence, KS
- 2009 Scripps Institution of Oceanography, *Fisheries Oceanography* course (guest lecture)
 Sacred Heart Elementary School, Emporia, KS (K-12 outreach)
- 2008 GLOBEC/FAO Coping with Change in Marine Socio-Ecological Systems, Rome, Italy
 Pacific Islands Fisheries Science Center, Honolulu, HI
- 2007 GLOBEC Climate Impacts on Top Ocean Predators Symposium, La Paz, Mexico
 International Tuna Conference, Lake Arrowhead, CA
 American Society of Limnology & Oceanography, Santa Fe, NM
 Risks to Marine Biodiversity Symposium, Scripps, La Jolla, CA (panel organizer, presenter)
 Southeast Fisheries Science Center, Miami, FL
 Expanding Your Horizons workshop, San Diego, CA (K-12 outreach)
- 2006 Feedback and Dynamics in Nature Workshop, San Diego, CA
 International Tuna Conference, Lake Arrowhead, CA
 Humboldt Current System Conference, Lima, Peru (invited plenary)
 Human Security and Climate Change Conference, Oslo, Norway
 Southwest Fisheries Science Center, La Jolla, CA
 Women's Debate Institute, Port Townsend, WA (keynote speaker)
 San Diego Rod and Reel Club, San Diego, CA (public outreach lecture)
 American Fisherman's Research Foundation, La Jolla, CA
- 2005 Explorations in Marine and Ocean Sciences Symposium, La Jolla, CA (K-12 outreach)

PROFESSIONAL
 SERVICE

- Peer review for *Canadian Journal of Aquatic and Fisheries Science*, *Fisheries Oceanography*, *Ecological Applications*, *Blue Ocean Institute*, *Quaternary International*
- American Fisheries Society Publications Overview Committee
- American Fisheries Society External Affairs Committee
- American Fisheries Society Science Communications Committee
- Member, American Society of Limnology & Oceanography
- Member, American Fisheries Society
- Panel to improve Scripps-NOAA collaboration
- Founding member, Grassroots Diversity Action Working Group, Scripps
- Birch Aquarium at Scripps, volunteer kelp tank diver and educational outreach
- Curriculum development, Center for Marine Biodiversity & Conservation, Scripps
- Committee to evaluate teaching performance, Scripps
- Students for Political Action list serve manager, Scripps
- Student representative to faculty academic committee, Scripps
- Passionfish*, sustainable seafood outreach, La Jolla, CA
- Member, Presidential Commission on the Status of Women, Kansas State University