Brad Gentner President, Gentner Consulting Group 6645 N Waycross Road Tucson, AZ 85743 <u>Brad@gentnergroup.com</u> 202.455.4424

QUALIFICATIONS

Over 22 years' experience conducting economic analysis in natural resources fields including: political affairs, catch shares, individual transferable quotas, rights based fishery management, incentive compatible policy tools, Fishery Performance Indicator (FPI) rapid assessments, supply/value chain analysis, seafood demand analysis, conjoint/SPCE analysis, commercial and recreational fisheries cash flow models, market and non-market valuation, custom economic impact modeling, ecolabeling and certification. Strong skills in rights-based management with a strong publication history for the design and implementation of catch share programs. Strong skills in rapid assessments of global fisheries and analysis of fishery supply chains. Strong skills in all phases of data collection including design of valuation surveys, industry surveys, design of consumer surveys, implementation of surveys statistical analysis of survey data, focus group moderation, and outreach. Excellent oral and written communications skills for technical and lay audiences.

PROFESSIONAL EXPERIENCE

Partner and Chief Economist. ¹skip LLC. Seattle, WA. 2018 to present.

- ¹skip, LLC is an innovative fishery development firm born from over 50 years of collective supply chain, finance and fishery innovation experience. Through a collection of resources, assets and know-how 1skip provides a full suite of fishery development services.
- Fishery rapid assessment using FPI-DEV
- Supply chain mapping and cash flow modeling
- Data architecture
- Supply chain intervention strategy
- Supply chain improvement projects
- Fishery Improvement Project assessment, design and management
- Recent projects include:
 - Grenada tuna longline fishery: rapid assessment, cash flow modeling, business case development and fishery and supply chain improvement implementation
 - St. Helena pole and line tuna fishery: rapid assessment and fishery rescue plan
 - Barbados tuna longline fishery: rapid assessment
 - St. Vincent and the Grenadines small scale tuna fishery: rapid assessment

President and Chief Economist. Gentner Consulting Group. Tucson, AZ. 2007 to present.

- Gentner Consulting Group is a full-service consultancy in natural resource economics research specializing in all aspects of commercial and recreational fishing.
- Recent projects include:
 - Global Think Tank (GloTT) Peer reviewed publication editor.
 - World Bank/FAO project to develop alternative billfish management strategies in the Caribbean.
 - FPI assessments of the Grenadian longline, FAD and recreational fisheries
 - FPI assessments of the Dominican Republic FAD and recreational fisheries
 - Construction of value chain models for pelagic commercial and recreational fisheries in Grenada and the Dominican Republic
 - Valuation and expenditure Survey of recreational billfish anglers
 - Evaluation of tenure-based (market based) strategies for fishery reform in the region
 - Review of market and tenure-based management (catch shares) in use in global tuna fisheries with recommendation for future use.
 - Assisted in the development and testing of the recreational FPI tool. Field tested the tool in Costa Rica and Mexico.
 - Creation of a custom economic impact model for the entire seafood supply chain in the Gulf of Mexico to analyze the impacts of oil spills on the seafood industry.
 - Bioeconomic model of North Carolina commercial and recreational fisheries developed to demonstrate the value lost to overfishing

- Developed a vessel buyback and fishing gear change program in the Gulf of Mexico longline fishery.
- Exploring policy instruments that maximize national benefits of tuna fishing in the Eastern Tropical Pacific including addressing purse seine bycatch using catch shares.
- Examination of international markets for billfish including the domestic production and importation of billfish into the United States.

Senior Research Economist. National Marine Fisheries Service (NMFS). Silver Spring, MD. 1999 to 2007.

- Chaired National Economic Impact Working Group
 - Developed the current custom fisheries economic impact model/fishery supply chain model still in use by NMFS today.
 - Developed national standards for economic impact/supply chain modeling involving guidelines for custom model creation.
 - Produced the commercial fisheries price index and the commercial fishing value added table annually for Fisheries of the United States.
- Responsible for the recreational economic data collection and analysis program.
 - Designed and administered expenditure, cost and earnings, revealed and stated preference valuation, and recreational demand surveys.
 - Conducted research on economic impacts of natural resource policy, bio-economic modeling, natural resource valuation, recreational demand analysis, sample design efficiency, and stated preference choice experiments.
- Responsible for strategic planning, budgeting, procurement and all other phases of project management.
- Coordinated multidisciplinary teams to assist NMFS and its state, local, and federal partners.
- Regularly presented research to scientific, management council, and lay audiences.
- Initiated outreach campaign aimed at academics, agency personnel, state cooperators, and agency constituents.

District Manager. James M. Vardaman & Co., Inc., Forest Management Specialists. Raleigh, NC. 1994 – 1997.

- Responsible for all phases of non-industrial private forest management including forestland appraisals, timber sales, land sales, timber management plans, economic analysis and regeneration management.
- Brokered over \$7 million in timber and recognized as a leading income generating manager.

EDUCATION

No Degree Sought. Agricultural and Natural Resource Economics, University of Maryland, Fall 2001 and Spring 2002. 20 semester credits.

M.S. in Agricultural and Natural Resource Economics. Oregon State University, Corvallis, Oregon. 1999.

B.S. in Forestry. Northern Arizona University, Flagstaff, Arizona 1993.

SELECTED PUBLICATIONS

- Gentner, B., R. Bealey, K. Flett, R. van Anrooy and P. Obregon. 2019. Fishery Performance Indicators, Cash Flow Models and Fishery Project Development: A Case Study of the Pelagic Fisheries in Grenada and the Dominican Republic. FAO Fisheries and Aquaculture Circular. In Press. Rome, Italy.
- James Anderson, Frank Asche, Richard Barnes, Simon Bush, Brad Gentner, Charles Hufflett, Gary Libecap, Vishwanie Maharaj, Lindie Nelson, Wez Norris, Giansandro Perotti, Uwe Tietze, Kelly Wachowicz. 2018. Principles for Fisheries Management in Areas Beyond National Jurisdiction – the Essential Role of Incentive-Based Approaches. World Wildlife Fund, Inc. Washington, DC. Available at: <u>https://c402277.ssl.cfl.rackcdn.com/publications/1219/files/original/08818_WWF_WB_Report_GloTT_fin</u> al.pdf?1555943000
- Gentner, Brad. 2018. Innovative and Incentive-Based Tools in Reform of Highly Migratory Fisheries at Project Development and Regional Scales. World Wildlife Fund, Inc. Washington, DC. Available at: <u>https://c402277.ssl.cfl.rackcdn.com/publications/1220/files/original/08818_WWF_WB_Innovations_Local</u> <u>-Reg_Final-pxp.pdf?1555943228</u>
- Gentner, B. 2018. Assessing the application of innovative incentive based tools to reform highly migratory fisheries at the project development and regional scales. Report prepared for the World Wildlife Fund, Washington, DC, USA.

- Gentner, Brad and John Whitehead. (2018). Expenditures and Willingness-To-Pay Survey of Caribbean Billfish Anglers: Summary Report. FAO Fisheries and Aquaculture Circular No. C1168. Rome, Italy.
- Gentner, Brad, Freddy Arocha, Chris Anderson, Keith Flett, Pablo Obregon, Raymon van Anrooy. (2018). Fishery Performance Indicator Studies for the Commercial and Recreational Pelagic Fleets of the Dominican Republic and Grenada. FAO Fisheries and Aquaculture Circular No. 1162. Rome, Italy. <u>http://www.fao.org/3/I8833EN/i8833en.pdf</u>
- Anderson, J.L., T. Garlock, C.M. Anderson, F. Asche, C. Crandell and B. Gentner. 2017. "Introduction to the Sport Fishery Performance Indicators: A New Instrument in the FPI Toolbox". Report prepared for the Environmental Defense Fund.
- M. Carroll, B. Gentner, S. Larkin, K.Quigley, N. Perlot, et al. 2016. An Analysis of the Impacts of the Deepwater Horizon Oil Spill on the Gulf of Mexico Seafood Industry.U.S. Dept. of the Interior, Bureau of Ocean Energy Management, Gulf of Mexico OCS Region, New Orleans, LA, p. 2020CS Study BOEM 2016-020
- Gentner, Brad. (2016). The value of billfish resources to both commercial and recreational sectors in the Caribbean. FAO Fisheries and Aquaculture Circular No. 1125. Rome, Italy. <u>http://www.fao.org/3/a-i6178e.pdf</u>
- Gentner, Brad. (2016). The use and design of rights and tenure based management systems for transboundary stocks in the Caribbean. FAO Fisheries and Aquaculture Circular No. 1126. Rome, Italy. <u>http://www.fao.org/3/a-i6071e.pdf</u>
- Southwick, R., B. Gentner, D. Maycock and M. Bouaziz. (2016). Recreational fisheries economic impact assessment manuals and its application in two study cases in the Caribbean: Martinique and the Bahamas. FAO Fisheries and Aquaculture Circular No. 1128. Rome, Italy. <u>http://www.fao.org/3/a-i6148e.pdf</u>
- Duffield, J., C. Neher, S. Allen, D. Patterson and B. Gentner. (2012). Modeling the Behavior of Marlin Anglers in the Western Pacific. Marine Resource Economics. 27(4):343-357.
- Fenichel, E., B. Gentner and R. Arlinghaus. (2012). Normative Considerations for Recreational Fishery Management: A Bioeconomic Framework for Linking Positive Science and Normative Fisheries Policy Decisions. Fisheries Management and Ecology. 20(2-3):223-233
- Gentner, Brad (2011). Exploring Survey Methodologies for Collecting Recreational Angler Expenditure Data.Proceedings of the 5th World Recreational Fishing Congress. American Fisheries Society book series.
- Hindsley, PR, CE Landry, and B Gentner. 2011. Addressing Onsite Sampling in Recreation Site Choice Models. Journal of Environmental Economics and Management. 62(1):95-110
- Gentner, B, J. Kirkley, P.R. Hindsley, and Scott Steinback. 2010. Summer Flounder Allocation Analysis. U.S. Dep. Commerce, NOAA Tech. Memo. NMFSF/SPO-111, 93 p. <u>http://spo.nwr.noaa.gov/tm/TMSPO111.pdf</u>
- Parkkila, K., Arlinghaus, R., Artell, J., Gentner, B., Haider, W., Aas, Ø., Barton, D., Roth, E. and Sipponen, M. (2010).
 Guidelines for assessing social and economic benefits of European inland recreational fisheries. Technical Editor:
 B. Gentner. European Inland Fisheries Advisory Commission Occasional Paper No. 45. pp106.
- Gentner, Brad and Scott Steinback (2008). The Economic Contribution of Marine Angler Expenditures in the United States, 2006. U.S. Department of Commerce, NOAA Tech. Memo. NMFS F/SPO-94, 301p.<u>http://www.st.nmfs.noaa.gov/st5/publication/AnglerExpenditureReport/AnglerExpendituresReport_ALL.p_df</u>
- Wallmo, Kristy and Brad Gentner. (2008). Catch-and-Release Fishing: A Comparison of Intended and Actual Behavior of Marine Anglers. North American Journal of Fisheries Management. 28:1459-1471.
- Gentner, Brad (2008). Do Angler's Tell the Truth? Examining Revealed and State Preferences for Conservation. Proceedings of the 4th World Fisheries Congress. May 2004. Vancouver, B.C., Canada.

- Gentner, Brad and Stephen Sutton. (2007). "Substitution in Recreational Fishing." In: Global Challenges in Recreational Fisheries. Øystein Aas editor. Blackwell Science, Oxford.
- Gentner, Brad. (2007). Sensitivity of anger benefit estimates from a model of recreational demand to the definition of the substitute sites considered by the angler. Fishery Bulletin. 105:161-167.
- Massey, Matt, Steve Newbold, and Brad Gentner. (2006). Valuing water quality changes using a bioeconomic model of a coastal recreational fishery. Journal of Environmental Economics and Managment. Volume 52 Issue 1. pp 482-500.
- Massey, Matt, Steve Newbold, and Brad Gentner. (2005). The Effects of Water Quality on Coastal Recreation Flounder Fishing. EPA National Center for Environmental Economics Working Paper Series. Working paper number 05-03. March 2005.
- Oh, Chi-Ok, Robert Ditton, Brad Gentner, and Robin Reichers. (2005). A Stated Preference Choice Approach to Understanding Angler Preferences for Management Options. Human Dimensions of Wildlife. Volume 10 Number 3. pp173-186.
- Kirkley, James E., John Duberg, and Brad Gentner (2004). The Economic Contributions of the Commercial Fisheries of the United States: A User's Guide to the National Input/Output Model. Final report, contract DG133F-02-SE-0908.
- Steinback, Scott, Brad Gentner, and Jeremy Castle. (2004) Economic Impacts of Marine Recreational Angling in the United States. NOAA Professional Paper NMFS 2, 169 p.
- Gentner, Brad and John Tanaka. (2002). Classifying Federal Public Land Grazing Permittees. Journal of Range Management. Vol. 55. No.1. pp. 2-12.
- Gentner, Brad and Alan Lowther (2002). "Evaluating Marine Sport Fisheries in the USA." In Recreational Fisheries: Ecological, and Economic, and Social Evaluation. T.J. Pitcher and C.E. Hollingsworth eds. Blackwell Science, Oxford. Pp. 186-206.
- Hicks, R.L., A.B. Gautam, D. Van Voorhees, M. Osborn, and B. Gentner (2000). Thalassorama: An Introduction to the NMFS Marine Recreational Fisheries Statistics Survey with an Emphasis on Economic Valuation. Marine Resource Economics. Vol. 14 pp.375-385.
- Gentner, Brad, Scott Steinback, and Michael Price (2001). Marine Angler Expenditures in the Pacific Coast Region, 2000. U.S. Department of Commerce, NOAA Technical Memorandum NMFS-F/SPO-49.
- Gentner, Brad, Scott Steinback, and Michael Price (2001). Marine Angler Expenditures in the Southeast Region, 1999. U.S. Department of Commerce, NOAA Technical Memorandum NMFS-F/SPO-48.
- Steinback, Scott, and Brad Gentner (2001). Marine Angler Expenditures in the Northeast Region, 1998. U.S. Department of Commerce, NOAA Technical Memorandum NMFS-F/SPO-47.

PROFESSIONAL AFFILIATIONS

- International Institute of Fisheries Economics and Trade.
- North American Association of Fisheries Economists.
- Reviewer for:
 - Marine Resource Economics
 - North American Journal of Fisheries Management
 - Human Dimensions of Wildlife Management
 - Fisheries Research
 - Journal of Environmental Management
 - Marine Policy
 - Ecological Economics