

Ivan Mateo, PhD

(Mobile)

Email:

WORK EXPERIENCE

NOAA NMFS Alaska Fisheries Science Center
Ted Stevens Marine Research Institute
17109 Pt. Lena Loop Road
Juneau, AK 99801
(907) 789-6000

Dates employed: 07/2012 - 07/2013

NRC Postdoctoral Research Associate

Developing statistical models (GLM, GAM, Boosted regression trees) for CPUE standardization for the sablefish longline fishery. Supervisor: Dr. Dana Hanselman - (907) 789-6626

Environmental Defense Fund
123 Mission Street, 28th floor
San Francisco, California 94105

Dates employed: 02/2012 - 07/2012

Fisheries Stock Assessment Consultant

Developed data poor stocks stock assessment models for some reef fish stocks for El Corredor Region, Gulf of California. Wrote comprehensive reports. Supervisor: Dr. Rod Fujita - (415) 293-6050

Vicente and Associates Environmental Resources Consultants
#1335 Carr 19 Garden Hills Plaza
Guaynabo, PR 00966-2700

Dates employed: 02/2002 - 12/2011

Fisheries Biologist Independent Contractor

Team leader of environmental research projects related to the assessment of environmental impact of coastal zone development on marine fish communities. Performed field research on nearshore fish communities surrounding a co-generic natural gas power plant in Guayanilla Bay, Puerto Rico. Collected information on fish species richness and abundance by visual census, fish traps and seine nets. Created, organized and maintained data in a database format. Performed statistical analysis to determined differences in species diversity and abundance in the intake and discharge stations of the power plant, to assess any impact on fish community's health condition by the discharge of the natural gas power plant and make recommendations on conservation and enhancement of fisheries habitats. Wrote comprehensive technical and final reports and scientific papers. Supervisor: Dr. Vance P. Vicente - (787) 781-6501.

National Marine Fisheries Services Northeast Regional Office
Protected Resources Division
55 Great Republic Driveway, Gloucester, MA 09139
Dates employed: 09/2010 - 09/2011

Fisheries Biologist

Team leader of population dynamics modeling projects for species of special concern. Assisted NMFS Northeast Regional Office Division of Protected Resources in determining population viability status for species of special concern such as Atlantic sturgeon. Conducted population

viability analysis by age structured Bayesian population dynamics modeling for Atlantic sturgeon, cusk, and river herring. Conducted habitat suitability index analysis for Atlantic sturgeon in the Hudson River. Wrote comprehensive technical and final scientific reports.

Rhode Island Sea Grant Fisheries Extension
Kingston, Rhode Island 02881

Dates employed: 05/2009 - 09/2009

Fisheries Biologist Contractor

Created, organized and maintained data in a database format of a study of the performance of an experimental trawl on its ability to reduce the catches of butterfish and scup in the *Loligo* sp. squid fishery in Southern New England. Performed statistical analysis on the evaluation of the quantity and catch composition of bycatch, particularly butterfish and scup, between the control net and the experimental net. Supervisor: Dr. Kathleen Castro

University of Miami RSMAS/CIMAS
4600 Rickenbacker Causeway, Miami, Florida

Dates employed: 07/2002 - 09/2002

Visiting Scientist Research Fellow

Assisted NMFS Southeast Fishery Science Center in the evaluation of the US Caribbean commercial fishery databases. Conducted stock assessment analysis of the Puerto Rico Spiny Lobster *Panulirus argus*. Wrote comprehensive technical and final scientific reports. Supervisor: Dr. David Die - (305) 361-4607.

Department of Planning and Natural Resources
Division of Fish and Wildlife
45 Mars Hills, Fredericksted, St. Croix, VI 00840

Dates employed: 05/1998 - 02/2002

Fisheries Resources Biologist I

Principal investigator of the recreational fisheries assessment program of the USVI. Collected information of recreational anglers, conducted creel fish surveys and collected biological data on sportfish in creel census; created, organized and maintained all data in a database format. Conducted studies on stock status of the important commercial species. Performed statistical analysis of all recreational fisheries to identify variables or seasonal trends on angler's success rates and efforts. Coordinated meetings with technical and scientific personnel and fishermen regarding fishery resources studies and management plans. Worked as a database manager of the commercial biostatistical sampling program. Wrote technical and scientific reports, and publications in scientific journals. Interpreted rules and regulations regarding marine recreational fishery programs of the USVI.

Principal investigator of the recreational fisheries habitat enhancement program on St. Croix, USVI. Performed research on fish recruitment in backreef lagoons, collected information on fish species richness, abundance and habitat structure by visual census. Created, organized and maintained data in a database format. Performed statistical analysis to determine species diversity, to identify which habitats are suitable for fish productivity, correlated fish community status with environmental variables and made recommendations on conservation and enhancement of fisheries habitats. Wrote comprehensive technical and final scientific reports, including publications in scientific journals. Evaluated environmental impacts and made assessment reports and recommendations. Supervisor: William J. Tobias. Phone: (340) 773-3450.

Caribbean Fishery Management Council
268 Muñoz Rivera Avenue Suite 1108
San Juan, PR 00918-2577

Dates Employed: 07/1997 - 01/1998

American Fisheries Society-Sea Grant Essential Fish Habitat Intern

Made literature research and a compilation of information of reef fish/habitat associations with the purpose to define essential fish habitats for species under management. Supervisor: Graciela García-Moliner - (787) 766-5926.

UPR-Sea Grant

University of Puerto Rico-Mayagüez Campus

PO Box 5000

Mayagüez, PR 00681

Dates Employed: 03/1997 - 12/1997

Assistant Marine Advisor

Made field observations, interviews to fishermen and technical reports on the recreational and commercial fisheries activities within the proposed area for the Marine Reserve at Cayo Turrumote, La Parguera, Puerto Rico. Operated small vessels. Supervisor: Dr. Manuel Valdez Pizzini - (787) 832-3585.

Grupo Jaragua, INC

Calle El Vergel #33

Santo Domingo, Dominican Republic

Dates Employed: 03/1997 - 03/1997

Visiting Research Scientist

Co-Investigator of the Jaragua National Park underwater queen conch survey. Performed research on abundance estimation of adult and juvenile queen conch in the shallow waters of Jaragua National Park Dominican Republic, collected information on age class, habitat utilization and depth distribution for juveniles and adults by visual census. Created, organized and maintained data in a database format. Performed statistical analysis to determine differences in habitat utilization and depth distribution by age class. Wrote comprehensive technical and final scientific reports, including publications in scientific journals. Sponsored by Grupo Jaragua Southeast Area Monitoring Program-Caribbean Region. Supervisor: Dr. Juan Posada - (212) 906-3947.

UPR-Sea Grant

University of Puerto Rico-Mayagüez Campus

Box 5000

Mayagüez, PR 00681

Dates Employed: 06/1996 - 12/1996

Research assistant

Made interviews to recreational fishermen at public ramps, fish and conch measurements and identification, data entry and database management, and made technical reports for the Queen Conch Recreational Fishery Survey on Puerto Rico. Sponsored by Sea Grant and Caribbean Fishery Management Council. Supervisor: Dr. Manuel Valdez Pizzini - (787) 832-3585.

UPR-Department of Marine Sciences

University of Puerto Rico-Mayagüez Campus

Box 5000

Mayagüez, PR 00681

Dates Employed: 06/1995 - 03/1996

Research Assistant

Principal Investigator of the Puerto Rico underwater queen conch survey. Performed research on abundance estimation of adult and juvenile queen conch in the east and west coasts of Puerto Rico, collected information on age class, habitat utilization and depth distribution for juveniles and adults

by visual census. Created, organized and maintained data in a database format. Performed statistical analysis to determine differences in habitat utilization and depth distribution by age class. Wrote comprehensive technical and final scientific reports, including publications in scientific journals. Sponsored by Southeast Area Monitoring Program-Caribbean Region. Supervisor: Dr. Richard Appeldoorn - (787) 899-4048.

EDUCATION

University of Rhode Island

Department of Fisheries, Animal and Veterinary Sciences

PhD May 2009

Major: Environmental Sciences- Fisheries

Advisor: Dr. David A. Bengtson

University of Puerto Rico-Mayagüez Campus

MS 1997

Major: Biological Oceanography

Honors: magna cum laude

University of Puerto Rico-Río Piedras Campus

BS 1993

Major: General Biology

JOB-RELATED SKILLS

Computer literate on programs such as Windows, Word, Corel Draw; database programs like Paradox, Access, and statistical programs like Systat, S Plus, SPSS, Excel, SAS, MATLAB, R, PRIMER and Sigma Stat. Knowledge of AD-Model Builder, ECOPATH, ATLANTIS, FISH BIOENERGETICS 3, MSVPA-X NMFS toolbox (Stock Synthesis, Adapt, DA/CD, STATCAM, AGEPRO), WINBUGS, FISAT, ELEFAN, ASPIC, BAYES SR, BIODYN, RAMAS-GIS, AD MODEL BUILDER, VORTEX and FSAS fishery software programs. Knowledge of geographic information system software such as Arc-GIS 10 and ARC GIS Spatial analysis tool. Fully bilingual (English-Spanish). Excellent communication skills (written and orally). PADI Advance diver. Experience on small craft motorboat navigation.

AWARDS

Quebec Labrador Foundation Conservation Awards (2008)

The Nature Conservancy Global Marine Initiative Student Research Award (2007)

Sigma Grants in Aid Graduate Student Award (2006)

PADI Aware Award (2006)

Discovery Bay Marine Lab/Association Marine Laboratories of the Caribbean Student Award (2006)

New England Higher Board of Education Doctoral Fellow (2005-2006)

Alfred Sloan PhD Fellow (2004-2005)

FUNDING HISTORY

2007-2008 Caribbean Coral Reef Institution: \$5000

2007-2008 Puerto Rico Sea Grant \$1500

2006-2008 Puerto Rico Sea Grant \$170000

2006- 2007 Rhode Island Sea Grant \$6000

MEMBERSHIPS

American Fisheries Society

Gulf and Caribbean Fisheries Institute

Sigma XI Society

International Coral Reef Society

SCIENTIFIC JOURNAL REVIEWER

Journal Applied Ichthyology
Coral Reefs Journal
Gulf and Caribbean Research
Revista Biología Tropical
Marine Ecology Progress Series
Plos-One
Marine Freshwater Research
Estuarine Coastal Shelf Science

ACTIVITIES

- Invited lecturer presenting *Comparison of statistical methods to standardize CPUE of the sablefish longline fishery* at NOAA Alaska Fisheries Science Center annual stock assessment meeting Juneau AK (March 2013).
- Invited lecturer presenting *Otolith chemistry as natural tags for marine fish conservation* at University Southeast Alaska, Fisheries and Oceanography Department, Juneau AK (October 2012).
- Presented paper on *Population dynamic modeling of Atlantic Sturgeon* at the First Atlantic and Shortnose workshop meeting at Alexandria Virginia (February 2011).
- Presented paper on *Spatial Variations in Otolith Microchemistry for two reef fish in St Croix USVI and Puerto Rico* at the American Association of Ichthyologists and Herpetologist meeting, Providence RI (July 2010).
- Invited lecturer presenting *Modeling of Bioenergetics for Atlantic Cod in Georges Bank and Gulf of Maine* at NOAA Southeast Fisheries Science center Miami (July 2010).
- Presented paper on *Spatial Variations in Otolith Microchemistry for two reef fish in St Croix USVI and Puerto Rico*, at the American Association of Ichthyologist and Herpetologist meeting, Providence RI (July 2010).
- Presented paper on *Spatial Variations in Otolith Microchemistry for two reef fish in St Croix USVI and Puerto Rico* at the American Fisheries Society-Southern New England Chapter meeting, Kingston RI (June 2010).
- Invited lecturer presenting *Otolith chemistry as natural tags for marine fish conservation* at NOAA Living Marine Resources Center, University Maryland Eastern Shore (May 2010).
- Invited lecturer presenting *Otolith chemistry as natural tags for marine fish conservation* at Florida Marine Research Institute, St. Petersburg FL (February 2010).
- Invited lecturer presenting *Otolith chemistry as natural tags for marine fish conservation* at Institute of Ocean Conservation School of Marine and Atmospheric Sciences, Stony Brook SUNY (November 2009).
- Presented paper on *Spatial Variations in Otolith Microchemistry for two reef fish in St Croix USVI and Puerto Rico* at American Fisheries Society Annual meeting, Nashville TN (September 2009).
- Presented paper on *Spatial Variations in Otolith Microchemistry for two reef fish in St Croix USVI and Puerto Rico* at 4th International Otolith Symposium, Monterey CA (August 2009).
- Presented paper on *Spatial Variations in Otolith Microchemistry for Tautoga onitis in Narragansett Bay* at American Fisheries Society Annual meeting, at Ottawa Canada (August 2008).
- Presented paper on *Spatial Variations in Otolith Microchemistry for Tautoga onitis in Narragansett Bay* at American Fisheries Society-Southern New England Chapter meeting, Leominster MA (January 2008).
- Presented paper on *Monitoring of Tropical Shallow Water Fish Communities around the EcoEléctrica Liquefied Natural Gas Import Terminal and Cogeneration Plant in Guayanilla Bay, Puerto Rico*, at the Gulf and Caribbean Fisheries Institute 56 Meeting in Tortola, BVI (November 2003).
- Consultant and research assistant for the socioeconomic study of the trap fishery in the US Caribbean sponsored by NMFS, RSMAS and the University of Puerto Rico (March - October 2003).

- Presented paper on *USVI Resident Participation in Recreational Fisheries Activities* at the Gulf and Caribbean Fisheries Institute 54 Meeting in Providenciales, Turks and Caicos (November 2001).
- Consultant for the Caribbean Fishery Management Council's Habitat Advisory Committee (September 2000 to 2004).
- Presented paper on *Preliminary Estimates of Growth Mortality and Yield per recruit of Spiny Lobster *Panulirus argus* in St Croix USVI* at the Gulf and Caribbean Fisheries Institute 53 in Biloxi, MS (November 2000).
- Presented paper on *The Role of Nearshore Habitats as Nursery Grounds for Juvenile Fishes on the Northeast Coast of St. Croix USVI* at the Gulf and Caribbean Fisheries Institute 52 Meeting, Key West FL (November 1999).
- Presented paper on *Spatial Variations in Stock Abundance of Queen Conch*; Speaker on the XVI Symposium of Flora and Fauna of the Caribbean, on Humacao College, University Puerto Rico Puerto Rico (May 1997).

PUBLICATIONS

- Mateo, I., and D. H. Hanselman. 2014. A comparison of statistical methods to standardize catch-per-unit-effort of the Alaska longline sablefish. U.S. Dep. Commer., NOAA Tech. Memo. NMFS-AFSC-269, 71p.
- Hare, J.A., J. Manderson, J. Nye, M. Alexander, P.J. Auster, D. Borggaard, A. Capotondi, K. Damon-Randall, E. Heupel, I. Mateo, L. O'Brien, D. Richardson, C. Stock and S.T. Biegel. 2012. Cusk (*Brosme brosme*) and climate change: assessing the threat to a candidate species under the Endangered Species Act. ICES J. Mar. Sci. 69(10):1753-1768.
- Mateo, I., D. Bengtson, E. Durbin, R. Kingsley, P. Swart, and D. Durant. 2012. Spatial variations in otolith chemistry in tautog *Tautoga onitis* in the US Coast. Northeast. Nat. 19(2) 201-216.
- Mcmahon, K., M. Berumen, I. Mateo, S. Thorrold. 2011. Stable isotope signatures in otolith amino acids of juvenile snapper (Family Lutjanidae) record habitat-specific isoscapes from coastal nurseries. Coral Reefs 30(4):1135-1145.
- Mateo, I., D. Bengtson, E. Durbin, and D. Durant. 2011. Spatial variations in growth rates of tautog *Tautoga onitis* in Narragansett Bay and Rhode Island coastal ponds. Mar. Coastal Fish. J. 3:271-278.
- Mateo, I., E. Durbin, R. Appeldoorn, A. Adams, F. Juanes, and D. Durant. 2011. Inferred Growth in Juvenile French grunt *Haemulon flavolineatum* and Schoolmaster *Lutjanus apodus* in seagrass and mangrove habitats. Bull. Mar. Sci. 87(3) 339-350.
- Mateo, I., D. Bengtson, E. Durbin, R. Kingsley, P. Swart, and D. Durant. 2010. Spatial variations in otolith chemistry in tautog *Tautoga onitis* in Rhode Island. US Fish. Bull. 108:155-161.
- Mateo, I., E. Durbin, R. Appeldoorn, A. Adams, F. Juanes, R. Kingsley, P. Swart, and D. Durant. 2010. Role of mangroves as nurseries for French grunt *Haemulon flavolineatum* and Schoolmaster *Lutjanus apodus* assessed by otolith elemental fingerprints. Mar. Ecol. Prog. Ser. 402:197-212.
- Mateo, I., and W.J. Tobias. 2008. Seasonal patterns of juvenile fish abundance in seagrass meadows in Teague Bay, St. Croix U.S. Virgin Islands. Gulf Carib. Res. 20:59-65.
- Mateo, I. 2007. A bioenergetics based comparison of growth conversion efficiency of Atlantic cod populations in Gulf of Maine and Georges Bank. North Atlantic Fisheries Organization Journal. 38:23-35.
- Mateo, I. and W.J. Tobias. 2007. A comparison of fish assemblages among five habitat types within a Caribbean lagoon. Gulf Carib. Res. 19:21-37.
- Mateo, I., I. Laborde, and V.P. Vicente. 2006. Monitoring of Tropical Shallow Water Fish Communities around the EcoEléctrica Liquefied Natural Gas Import Terminal and Cogeneration Plant in Guayanilla Bay, Puerto Rico. Proc. Gulf Carib. Fish. Inst. 57:633-652.
- Mateo, I., and W.J. Tobias. 2004. Survey of Nearshore Fish Communities on Tropical Backreef Lagoons on the Southeastern Coast of St. Croix. Carib. J. Sci. 40:327-342.
- Mateo, I. 2004. Population dynamics of Puerto Rico Spiny Lobster: Progress Report. Proc. Gulf. Carib. Fish Inst. 55:506-520.

- Mateo, I. 2004. Survey of Resident Participation in Recreational Fishing Activities in the US Virgin Islands. *Proc. Gulf Carib. Fish. Inst.* 55:205-222.
- Mateo, I., and W.J. Tobias. 2002. Preliminary estimations of growth, mortality and yield per recruit for the Spiny lobster *Panulirus argus* in St. Croix, USVI. *Proc. Gulf Carib. Fish. Inst.* 53:117-124.
- Mateo, I., and W.J. Tobias. 2001. Distribution of Shallow Water Coral Reef Fishes on the Northeast Coast of St. Croix, USVI. *Carib. J. Sci.* 37(3-4):210-226.
- Mateo, I., and W.J. Tobias. 2001. The Role of Nearshore Habitats as Nursery Grounds for Juvenile Fishes on the Northeast Coast of St. Croix USVI. *Proc. Gulf Carib. Fish. Inst.* 52:512-530.
- Posada, J., I. Mateo, and M. Nemeth. 2000. Distribution and Abundance of Queen Conch, *Strombus gigas*, (Gastropoda:Strombidae) on the Shallow Waters of the Jaragua National Park, Dominican Republic. *Proc. Gulf Carib. Fish. Inst.* 51:1-15.
- Posada, J., I. Mateo, and M. Nemeth. 1999. Occurrence, Abundance, and Length Frequency Distribution of Queen Conch, *Strombus gigas* (Gastropoda) in Shallow Waters of the Jaragua National Park, Dominican Republic. *Carib. J. Sci.* 35(1-2):70-82.
- Mateo, I., R. Appeldoorn, and W. Rolke. 1998. Spatial Variations in Stock Abundance of Queen Conch, *Strombus gigas*, (Gastropoda:Stromidae) in the West and East Coast of Puerto Rico. *Proc. Gulf Carib. Fish. Inst.* 50:32-48.