MARIA PANUCCIO BROWN

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EDUCATION			
Stony Brook University	Stony Brook, NY		
Advanced Graduate Certificate in Geospatial Science	2015		
Long Island University	Brookville, NY		
MS - Environmental Science	2005		
Queens, NY			
BS - Geology & BA - Biology	1991		
PROFESSIONAL CERTIFICATIONS			
GIS Professional Certification (GISP)	2015		
New York State Permanent Teaching Certification (General Science, Earth Science, Barth Science,	iology)		
	1999		
Professional Wetland Scientist Certification (PWS)	1996		
AWARDS/HONORS			
• State University of New York – Chancellor's Award for Excellence in Adjunct Tea	aching 2019		
• New York State GIS Association – GIS Champion Award	2017		
Sayville Public Schools - Excellence in Teaching Award	2016		
Sierra Club Long Island – Long Island Environmentalist of the Year Award	2014		
• Coca-Cola Scholars Foundation – Educator of Distinction Award	2014		
• Long Island University – Long Island Secondary School Teacher of the Year Awar			
• Science Museum of Long Island – Advocates for Science & Technology Award	2013		
• The Academy of Applied Science – Junior Science & Humanities Symposium Teach	cher Award 2013		
South Shore Estuary Reserve - Citizens Advisory Committee Stewardship Award	2011		
• Claes Nobel Educator of Distinction Award – National Society of High School Sch	olars		
, , , , , , , , , , , , , , , , , , ,	2010		
National Science Foundation - Noyce Scholars Teaching Award	2010		
• Brookhaven National Laboratory: Open Space Stewardship Program - Outstanding	g Teacher		
Award	2010		
Phi Delta Kappa Professional Education Association - Leadership, Research, Servi			
	2010		
• Central Pine Barrens Joint Planning & Policy Commission – <i>Educational Leadersh</i>	-		
	2010		
South Shore Estuary Reserve Program - Stewardship and Action Award	2008		
• Great South Bay Audubon - Fran File Educator Award Society	2007 & 2012		

•	Science Teachers of New York State (STANYS) - Service Award	2006
•	Environmental Protection Agency - Environmental Science Teaching Award	2006
•	Dowling College/News 12 - Educator of the Month Award	2006
•	STANYS, Suffolk Section - High School Science Teacher of the Year Award	2004
•	Terri Peters Mini Grant Award: Forensic Analysis of Ancient Egyptian Artifacts from An	rchaeological
	Dig	2004
•	Who's Who Among American Teachers	2002-2019
•	Sayville High School – Teacher Who Made a Difference	2011- 2019

RESEARCH FELLOWSHIPS

Sierra Club Long Island. Molecular Ecology of Limulus Polyphemus

2014-2015

The American Society for Biochemistry and Molecular Biology. Molecular Ecology and Landscape Genetics of the Atlantic Horseshoe Crab (*L. polyphemus*) as a mechanism to enhance inquiry-based STEM education at Sayville High School 2012-2014

Department of Energy at Brookhaven National Laboratory. Academies Creating Teacher Scientists: Wildlife Genetics 2010-2012

WORK EXPERIENCE

Stony Brook University - School of Marine & Atmospheric Sciences / Sustainability Studies *Lecturer* 2011-present

Courses: GIS Design & Application I - GSS 313/314, GSS 513, GEO 513

GIS Design & Application II – GSS 325, GSS 525 Independent Research in Geospatial Science – GSS 487

Dowling College

Adjunct Faculty 2011-2012

Courses: Science and the Concept of Evolution

Sayville High School

Science Teacher 1999 – present

Courses:

Science Research

Advanced Placement Environmental Science

Regents Earth Science

Regents Chemistry

Inclusion Earth Science

Inclusion Chemistry

Math, Science & Technology

GIS: Design & Application (GSS 313/314) and Geology 121 (Stony Brook University

Accelerated College Education Program).

Club Advisor 1999 – present

High School Clubs:

Science National Honor Society

2018-2019

High School Science Study Abroad Enrichment Program (Costa Rica, Peruvian Amazon, Peruvian Andes, Galapagos Islands, Baja, Mexico)

Students Working for Enhanced Environmental Protection

1999-present

Middle School Club:

Explorer's Club 2013-present

Elementary School Club:

SOAR (Aeronautical Engineering) 2010

EEA, Inc.

Senior Environmental Scientist/ Restoration Ecologist (PWS), Geospatial Analyst 1997 – 2000

Stone & Webster Engineering Corporation

Environmental Scientist II/ Restoration Ecologist (PWS), Geospatial Analyst 1992-1997

TAMS Consultants, Inc.

Field Ecologist/Geologist / Environmental Scientist I

1987-1989

PUBLICATIONS

Cole, K.,et al (2013). A linear relationship between crystal size and fragment binding time observed crystallographically: Implications for fragment library screening using acoustic droplet ejection. *PLOS ONE*.

Bronson, S., Jones, K.W., & Brown, M. (2013). **Bringing the tools of big science to bear on local environmental challenges.** *International Electronic Journal of Environmental Education 3* (1), 89-100.

Jones, K.W., Bronson, S. Brink, P., Gordon, C., Moshier-Smith, K. & Brown, M. (2009). **Bivalve characterization using synchrotron micro x-ray fluorescence**. *Acta Physica Polonica A* 115: 477-481.

Greller, A.M., Panuccio, M.K., and Durando, C.M. (1991). A vascular flora of the forested portion of Cunningham Park, Queens County, New York: Corrections and additions – III. Bull. Torrey Bot. Club 118:330-332.

STUDENT POSTER/PRESENTATIONS (CO-AUTHOR)[TR1]

Stony Brook University Students

Aljarrah, M. & Brown, M. Traffic Crash Assessment in Franklin County, Ohio. ESRI International User Conference, San Diego, California (July, 2019). Long Island GIS Conference Farmingdale State College (April, 2019).

Beri, D. & Brown, M. Tourism and Pollution Effects Associated with Caribbean Coral. ESRI International User Conference, San Diego, California (July, 2019). Long Island GIS Conference

Farmingdale State College (April, 2019). Society for Conservation GIS Conference, Hunter College (April, 2019).

Davidson, K. & Brown, M. Predictors of Canopy Cover and Invasive Species Status on the Big Island of Hawai'i. ESRI International User Conference, San Diego, California (July, 2019)[1st Place Award in the Category of ArcGIS Analytic Methods & Results. Long Island GIS Conference Farmingdale State College (April, 2019). Society for Conservation GIS Conference, Hunter College (April, 2019).

Delucia, C. & Brown, M. Geospatial Analysis of Water Pollution in Estuaries & Rivers in Coastal Oregon. ESRI International User Conference, San Diego, California (July, 2019). Long Island GIS Conference Farmingdale State College (April, 2019).

Einhorn, E. & Brown, M. The Future of a Climate-Endangered Species: Conservation of the Eastern Brown Pelican (*Pelicanus occidentalis carolinensis*. ESRI International User Conference, San Diego, California (July, 2019). Long Island GIS Conference Farmingdale State College (April, 2019).

Karali, Y. & Brown, M. Loss of Permafrost on Community and Ecosystems in the State of Alaska. ESRI International User Conference, San Diego, California (July, 2019). Long Island GIS Conference Farmingdale State College (April, 2019). Society for Conservation GIS Conference, Hunter College (April, 2019).

Loglisci, J. & Brown, M. Geospatial Analysis of Proposed Wastewater Diversion in Nassau County, New York. ESRI International User Conference, San Diego, California (July, 2019). Long Island Natural History Conference (March, 2019. Long Island GIS Conference Farmingdale State College (April, 2019). Society for Conservation GIS Conference, Hunter College (April, 2019).

McKeown, K. E. & Brown, M. A Geospatial Analysis of Oklahoma Tornadoes and Emergency Management Preparedness. ESRI International User Conference, San Diego, California (July, 2019). Long Island GIS Conference Farmingdale State College (April, 2019). Society for Conservation GIS Conference, Hunter College (April, 2019).

McPherran, A. & Brown, M. Geospatial Analysis of Pollution in and Around Newtown, Creek, NY. ESRI International User Conference, San Diego, California (July, 2019). Long Island Natural History Conference, (March, 2019). Long Island GIS Conference Farmingdale State College (April, 2019). Society for Conservation GIS Conference, Hunter College (April, 2019).

Mikolatis, C. & Brown, M. Dissolved Oxygen and Total Nitrogen in the Chesapeake Bay (1998-2018). ESRI International User Conference, San Diego, California (July, 2019). Long Island GIS Conference Farmingdale State College (April, 2019).

Murphy, J. & Brown, M. Geospatial Safety Analysis of California Wildfires. ESRI International User Conference, San Diego, California (July, 2019). Long Island GIS Conference Farmingdale State College (April, 2019).

- Murphy, S. & Brown, M. A Geospatial Analysis of Suitable Locations for Wind Farms within Massachusetts. ESRI International User Conference, San Diego, California (July, 2019). Long Island GIS Conference Farmingdale State College (April, 2019).
- Sai, P. & Brown, M. Habitat Range, Mortality Risk and Future Plans for Black Bear, Florida, USA. ESRI International User Conference, San Diego, California (July, 2019). Long Island GIS Conference Farmingdale State College (April, 2019).
- Tyska, D. & Brown, M. Habitat Assessment for Conserving *Danaus plexippus* in New York. ESRI International User Conference, San Diego, California (July, 2019). Long Island GIS Conference Farmingdale State College (April, 2019).
- Walter, K. & Brown, M. A Geospatial Analysis of Potential Impacts the Great pacific Garbage Patch has on Layson Albatross and Bluefin Tuna. ESRI International User Conference, San Diego, California (July, 2019). Long Island GIS Conference Farmingdale State College (April, 2019). Society for Conservation GIS Conference, Hunter College (April, 2019).
- Amador, F. & Brown, M. A Geospatial Analysis of Hacienda Distribution in the Valley of Atlixco during the 16th and 17th Centuries. ESRI International User Conference, San Diego, California (July, 2018). Long Island GIS Conference, Farmingdale State College (April, 2018).
- Bell, C. & Brown, M. Geospatial Analysis of Human Impacts on Sea Turtles, Eastern Florida, USA. ESRI International User Conference, San Diego, California (July, 2018). Long Island GIS Conference Farmingdale State College (April, 2018).
- DiBennedetto, L. & Brown, M. A Geospatial Analysis of Quantuck Bay, New York: Making Decisions for Remediation. ESRI International User Conference, San Diego, California (July, 2018). Long Island GIS Conference Farmingdale State College (April, 2018). 2nd Place People's Choice Award.
- Larios, P. & Brown, M. Distribution of Juvenile Great White Sharks and Bottlenose and Short Beaked Common Dolphins off Long Island, New York. ESRI International User Conference, San Diego, California (July, 2018). Long Island GIS Conference Farmingdale State College (April, 2018).
- Lusty, M. & Brown, M. Defining Long Island's Watersheds: Addressing Population for Managing Coastal Eutrophication. ESRI International User Conference, San Diego, California (July, 2018). Long Island GIS Conference Farmingdale State College (April, 2018).
- McDermott, M. & Brown, M. Geospatial Analysis of Tornadic Tropical Cyclones in Florida from 1995 2015. ESRI International User Conference, San Diego, California (July, 2018). Long Island GIS Conference Farmingdale State College (April, 2018).

Morrell, B. & Brown, M. Tracking water quality conditions associated with brown tide (*Aurecoccus anophagefferens*) blooms in Great South Bay (New York) during summer 2015. ESRI International User Conference, San Diego, California (July, 2018). Long Island GIS Conference Farmingdale State College (April, 2018).

Schatz, H. & Brown, M. California Wildfire Risk Analysis. ESRI International User Conference, San Diego, California (July, 2018). Long Island GIS Conference Farmingdale State College (April, 2018).

Schwarz, I. & Brown, M. Geospatial Analysis of Natural Resources and Potential Water Contamination in the Former Bears Ears National Monument. ESRI International User Conference, San Diego, California (July, 2018). Long Island GIS Conference Farmingdale State College (April, 2018).

Stuart, C, & Brown, M. Geospatial Analysis of Tiger Shark Distribution and Habitat Utilization Related to Depth and Potential Ontogenetic Diet Shifts Along the Subtidal Eastern Coastline, USA. ESRI International User Conference, San Diego, California (July, 2018). Long Island GIS Conference Farmingdale State College (April, 2018). 3rd Place – People's Choice Award.

Alkon, D. & Brown, M. Geospatial Analysis of Drug Related Crime and its Effect on Public Schools in Suffolk County, New York. ESRI International User Conference, San Diego, California (July, 2017).

Castillo, K. & Brown, M.. Hazards of the Cascadia Subduction Zone. ESRI International User Conference, San Diego, California (July, 2017). Long Island GIS Conference Stony Brook University (November, 2017).

Grima, M. & Brown, M. Geospatial Trends Analysis of Cetaceans, Sharks, and Turtles in New York. ESRI International User Conference, San Diego, California (July, 2017). Long Island GIS Conference Stony Brook University (November, 2017).

Keeling, S. & Brown, M. Geospatial Analysis of Fish Kills Related to Water Quality in Chesapeake Bay. ESRI International User Conference, San Diego, California (July, 2017). Long Island GIS Conference Stony Brook University (November, 2017).

Kohlmann, T. & Brown, M. Risk Assessment for White-nose Syndrome in Washington State Using Geospatial Tools. ESRI International User Conference, San Diego, California (July, 2017). Long Island GIS Conference Stony Brook University (November, 2017).

McCarty-Glenn, M. & Brown, M. Socioeconomic Status on American Indian Reservations in New Mexico Using Geospatial Tools. ESRI International User Conference, San Diego, California (July, 2017). Long Island GIS Conference Stony Brook University (November, 2017).

O'Connor, E. & Brown, M. Shinnecock Bay Restoration Program (ShiRP):Using GIS to Inform Restoration Efforts. ESRI International User Conference, San Diego, California (July, 2017). Long Island GIS Conference Stony Brook University (November, 2017).

Theofeld, R.J. & Brown M. The Good Ground Ecological-Historical Corridor. ESRI International User Conference, San Diego, California (July, 2017). Long Island GIS Conference Farmingdale State College (April, 2017).

Cahill, B. & Brown, M. Factors Influencing Locations of Manatees Within Waters Surrounding Florida. ESRI International User Conference, San Diego, California (July, 2016). Long Island GIS Conference, Stony Brook University (Fall, 2016).

Heck, S. & Brown, M. Water Quality Monitoring in Jamaica Bay, New York. ESRI International User Conference, San Diego, California (July, 2018). Long Island Natural History Conference Brookhaven National Laboratory (March, 2016). Long Island GIS Conference, Stony Brook University (Fall, 2016).

Sayville High School/ Stony Brook University ACE Students

Bench, H. & Brown, M. Geospatial Analysis of Five Invasive Freshwater Fish Species within New York State Using Environmental -DNA Techniques. ESRI International User Conference, San Diego, California (July, 2019). Long Island Natural History Conference (March, 2019). Long Island GIS Conference Farmingdale State College (April, 2019). Society for Conservation GIS Conference, Hunter College (April, 2019).

Dolan, B. & Brown, M. Geospatial Analysis of Predicted Natural Range Expansion and Potential Economic Imapets of the Spotted Lanternfly (*Lycorma delicata*) in the USA. ESRI International User Conference, San Diego, California (July, 2019). Long Island GIS Conference Farmingdale State College (April, 2019).

Golio, J. & Brown, M. Geospatial Analysis of Cetacean Migration Patterns in Relation to New Offshore Wind Turbine Leasing Areas & Oil Exploration. ESRI International User Conference, San Diego, California (July, 2019). Long Island GIS Conference Farmingdale State College (April, 2019).

Yoder, L. & Brown, M. Geospatial Analysis of MTBE Spills in Suffolk County, New York. ESRI International User Conference, San Diego, California (July, 2019). Long Island GIS Conference Farmingdale State College (April, 2019).

Bonfiglio, B. & Brown, M. (July, 2018). A Comparative Analysis of Preterm Birth Rates in the United States Related to Demographics and Environmental Quality. ESRI International User Conference, San Diego, California (July, 2018). 3rd Place Award in High School Category. Long Island GIS Conference Farmingdale State College (April, 2018). Long Island GIS Conference, Stony Brook University (November, 2018).

Byrne, I. & Brown, M. (July, 2018). Geospatial Analysis of Air Pollutants and Respiratory Diseases in New York, New Jersey, and Pennsylvania. ESRI International User Conference, San Diego, California. Long Island GIS Conference Farmingdale State College (April, 2018). Long Island GIS Conference, Stony Brook University (November, 2018).

George, N. & Brown, M. (July, 2018). Geospatial Analysis of Pitch Pine (*Pinus rigida*) Distribution Infected with Southern Pine Bark Beetle (*Dendroctonus frontalis*), Sans Souci County Park, New York. ESRI International User Conference, San Diego, California. 3rd Place Long Island Science & Engineering Fair (Intel Level). 3rd Place New York State Science & Engineering Fair (Intel Division). Long Island GIS Conference Farmingdale State College (April, 2018).

Gibbons, Nicholas & Brown, M. Geospatial Analysis of Flood Tide Delta at New Inlet, Bellport, New York. ESRI International User Conference, San Diego, California (July, 2018). Long Island GIS Conference, Stony Brook University (November 2018). Long Island Natural History Conference (March, 2019). Society for Conservation GIS Conference, Hunter College (April, 2019). Long Island GIS Conference Farmingdale State College (April, 2019).

Sheth, S. & Brown, M. Geospatial Analysis of the Distribution of Sea Turtles and Sharks off the Coast of Long Island, New York. Long Island GIS Conference Farmingdale State College (April, 2018). ESRI International User Conference, San Diego, California.1st Place Award in High School Category. 2nd Place Long Island Science & Engineering Fair (Intel Division). Long Island GIS Conference Stony Brook University (November, 2018). Society for Conservation GIS Conference, Hunter College (April, 2019).

Urmaza, G. & Brown, M. Geospatial Analysis of Shoal Configuration at New Inlet (2012-2017), Brookhaven, New York. ESRI International User Conference, San Diego, California (July, 2018). Long Island GIS Conference, Stony Brook University (November 2018). Long Island Natural History Conference (March, 2019). Society for Conservation GIS Conference, Hunter College (April, 2019). Long Island GIS Conference Farmingdale State College (April, 2019).

Bergen, J. & Brown, M. Geospatial Analysis of Cetacean Distribution and Habitat Utilization Related to Prey Density and Sea-Surface Temperature off the Long Island, New York Coastline. ESRI International User Conference, San Diego, California (July, 2016). Long Island GIS Conference (Fall, 2016) 1st Place – People's Choice Awards. Awarded 2nd Place in Animal Sciences Category at the Intel International Science & Engineering Fair (Phoenix, AZ, May 2016).

Boyce, S. & Brown, M. The Effect of Latitude on the Expression of Single Nucleotide Polymorphisms in the mtDNA of the Loggerhead Sea Turtle (*Caretta caretta*). ESRI International User Conference, San Diego, California (July, 2016).

Faughnan, T. & Brown, M. Geospatial Analysis of Evacuation Efficiency for Three Mile Island, PA. ESRI International User Conference, San Diego, California (July, 2016).

Gormley, C. & Brown, M. Geospatial Analysis of Hydrofracturing Activities Related to Human Health Outcomes in the Marcellus Shale Region. ESRI International User Conference, San Diego, California (July, 2016). 1st Place Award in High School Category. URISA Conference, Washington, DC (May, 2016). Regeneron Semifinalist – Science Talent Search (January, 2016).

Cowan, N. & Brown, M. Geospatial Modeling to Predict Potential Natural Range Expansion of the Eastern Coyote, *Canis latrans*, in Suffolk County, New York. ESRI International User Conference, San Diego, California (July, 2015). 2nd Place Award in High School Category. Intel Semi-finalist, Science Talent Search. New York State Science & Engineering Fair (Intel Division) 1st Place Animal Sciences, New York Hall of Science, Queens, New York (April, 2015). Long Island GIS Conference, Stony Brook University (Fall, 2015) 1st Place People's Choice Awards.

Faughnan, E. & Brown, M. A Geospatial Trends Analysis on Missing and Exploited Children in the New England and New York Metropolitan Region, USA. ESRI International User Conference, San Diego, California (July, 2015). 1st Place Award in High School Category. Intel Semi-finalist, Science Talent Search. Long Island Science & Engineering Fair (Intel Division) 2nd Place Social Sciences, Syosset, New York (March, 2015). Long Island GIS Conference, Stony Brook University (Fall, 2015) 2nd Place People's Choice Awards.

PROFESSIONAL PRESENTATIONS

International Bat Research Conference (August, 2019): BatMap Long Island – Citizen Science Paving the Way for Bat Distribution and Landscape Ecology Research.

Esri International User Conference (July, 2019): BatMap Long Island – Citizen Science Paving the Way for Bat Distribution and Landscape Ecology Research.

Stony Brook University, School of Marine & Atmospheric Sciences (March, 2019): It Takes a Small Army...Conducting Bat Research in the Peruvian Amazon.

Society for Conservation GIS (July, 2018): Trials and Tribulations of Bat Netting in the Neotropics: Mapping Resolutions Using .gbif, IUCN, and molecular data sets.

OceansWide (October, 2018) – Keynote Speaker: Exploration Drives STEAM Education.

Seatuck Environmental (October, 2018) – Keynote Speaker: Trials and Tribulations of Bat Netting in the Neotropics: A Mother-Daughter Story.

Greater Sayville Civic Association (August, 2018) – Spatial Analysis & Water Quality Trends in Green's Creek: Implications for Improved Land Management.

Plant & Animal Genome Conference (January, 2017) Microbiome Studies in the Sayville High School Research Program: A Primer in Workforce Development.

Long Island GIS Fall Conference (November, 2017) Establishment of a GIS Working Group within the IUCN Bat Specialist Group for the Global Conservation of Bats.

Suffolk County Science Teachers Association Fall Conference (November, 2017) How to Implement Geospatial Technology into Your Classroom: Using ArcGIS Online for Inquiry-Based Investigations.

Long Island GIS Fall Conference (November, 2016) Using ArcGIS Online to Analyze Student-Collected Environmental Data.

Suffolk County Science Teachers Association Fall Conference (2016) How to Implement Geospatial Technology into Your Classroom Using ArcGIS Online for Inquiry-Based Investigations.

ESRI International User Conference (2016) Using ArcGIS Online to Analyze Student-Collected Environmental Data with 5th Graders.

ESRI International User Conference (2015) Bringing GIS into the High School Classroom: Lessons Learned with GIS.

NSF Teacher Research Experience (2010) – Molecular Ecology of Odonates. Washington DC.

Pine Barrens Joint Planning & Policy Commission Pine Barrens Forum (2010 & 2009) – Landscape Genetics of the Three-spined Stickleback of the Peconic River, New York.

SF Noyce Science & Mathematics Symposium (2010) – Dowling College. Conducting Authentic Research with High School Students in Costa Rica: An Enrichment Program.

Brookhaven National Laboratory (2010). National Synchrotron Light Source & Center for Functional Nanotechnology Joint Users Meeting. Using Big Tools to Assess Heavy Metal Uptake in Bivalves with High School Students.

Brookhaven National Laboratory (2010). Co-presented with Bruce Alberts

on Leveraging the National Laboratory to Bring Big Science into the Classroom.

Science Teachers of New York State Annual Conference Presentations (2000, 2001, 2002, 2003, 2006, 2008, 2009). Various Presentations on integrating bioinformatics, geospatial science, and field methodology into the high school science curriculums (Regents and Advanced Placement Levels).

Water Environment Research Foundation Conference (1997) - New York City. Eelgrass Restoration in the Peconic Estuary.

Long Island Conference on the Environment (1997) - Port Jefferson, New York. New Techniques for Tidal Wetland Restoration: How to Outsmart *Phragmites australis*.

EPA Wetlands & Watersheds (1997) – Atlantic City, New Jersey. Eelgrass Restoration in the Peconic Estuary.

WORKSHOPS

University of California – Davis ASLE Conference (June, 2019) - Using Maps in Scholarship and Creative Projects: Integrating ArcGIS Online, Story Map Apps and Story Map Journals.

Brookhaven National Laboratory (September, 2018) – Introduction to ArcGIS Online, Survey 1-2-3 and Story Maps Training Workshop – Three-hour hands-on training for K-12 Educators and Agency Personnel associated with the New York State Pine Barrens Commission's Day in the Life of the River Program.

Stony Brook University (2017) – Open Street Maps: Mapping Puerto Rico in the Aftermath of Hurricane Maria.

Brookhaven National Laboratory (November, 2017) – Superintendents Conference Day Science Workshop – Introduction to Geospatial Thinking & Implementation of ArcGIS Online Into the K-12 Curriculum.

Stony Brook University (November, 2017) – GIS Day Workshop – Using ArcGIS Online to analyze and Visualize Field Collected Data.

Stony Brook University (March, 2017) – New York State Master Teachers Workshop - Using Geospatial Science to Analyze Microhabitat Changes Over Time in a Salt Marsh.

Brookhaven National Laboratory (September and March for years 2013-present) ArcGIS Online Teacher Training Workshops – Trained over 500 teachers (K-12) on how to implement ArcGIS Online into their classroom and research programs, including Survey 1-2-3 and Story Maps. This has been done in collaboration with the New York State Pine Barrens Commission "Day in the Life of a River" Program and Brookhaven National Laboratory's "Open Space Stewardship" Program. Two workshops each year before and after field collections are presented to prepare teachers on data collection techniques using Survey 1-2-3 and to prepare teachers to analyze and visualize their collected data spatially using ArcGIS Online.

Amazonia Expeditions, Peru – (February of 2012, 2013, 2016, 2017). **Field Workshop -** Collection Methods and Population Dynamics of Chiroptera in the Peruvian Amazon.

Brookhaven National Laboratory/Brookhaven Science Associates/Liceo Scientifico, Pisa, Italy (Spring 2009, Fall 2010, Spring 2010). Molecular Ecology of Odonates Workshop.

Proyecto Campanario, Costa Rica (July, 2010). Workshop on ectoparasite infestation of four species of mustached bats and collection methods. [TR2]

OUTREACH/COMMUNITY SERVICE

Greater Sayville Civic Association	2018
West Sayville Civic Association	2002-2010

PROFESSIONAL AFFILIATIONS

OceansWide	Board of Trustees 2018-Present
Society for Conservation GIS (NY-NJ Chapter)	Conference Committee & member 2018-Present
Society for Conservation GIS (National)	Member 2018-Present
Coastal Research & Education Society of Long Island	Vice President 2007 - Present
	Geospatial Analyst

Global Bat Taxonomy Working Group:

(IUCN Red List Bat Specialist Working Group) Geospatial Analyst 2017-Present Volunteer Geospatial Analyst, Member 2017-Present American Museum of Natural History New York State GIS Association **Education Committee** Long Island GIS Association Member Association of American Geographers Member American Society of Naturalist Member Urban and Regional Information Systems Association Member Science Teachers of New York State Board Member for 19 years

Subject Area Representative 2000-2009 Awards Dinner Co-Chair 2006-2017

Annual Conference Chair 2010-2012

Member
Member
Member
Member
Member

New York Botanical Garden

Great South Bay Audubon Society

Member

Past Conservation Chair, Member

Society of Wetland Scientists

Geologic Society of America

National Association of Biology Teachers

Long Island Botanical Society

Member