

# ERIC D. JOHNSON

School of Life Sciences | Arizona State University  
PO Box 874601 | Tempe, AZ 85287-4601  
Email: eric.d.johnson@asu.edu | Phone: 763.350.5068

## EDUCATION

2017 (expected) PhD, Arizona State University, Tempe; **Environmental Life Sciences**  
2009 B.S. University of Wisconsin-Superior, **Biology** and Minors, Chemistry and Mathematics  
*magna cum laude*

## HONORS & AWARDS

2005-2009 Emma Oexemann Scholarship  
2005-2009 Spooner Scholarship  
2005-2009 Dean's Honor Roll  
2006, 2008 Edward L. Bolender Memorial Scholarship  
2007 Oluf Haugrud Scholarship  
2006 Mabelle Gates Scholarship  
2004 UW-Superior Foundation High Honor Scholarship

## RESEARCH INTERESTS/AREAS OF SPECIALIZATION

Environmental decision analysis; operations research in marine conservation; resource management; ecological bifurcation points; signals of critical transitions; uncertainty analysis; ecosystem services; human dimensions of sustainability; information management

## RESEARCH EXPERIENCE

2011 **Research Assistant**, Leibniz-Center for Tropical Marine Ecology (ZMT), Bremen, Germany *Advisor*: Hannah Brocke (PhD student) *Projects*: As a visiting researcher to the CARMABI research station, investigated the benthic ecology of cyanobacterial mats on coral reefs on the southern coast of Curaçao. SCUBA was used to collect data in the field and lab work consisted of preparing and analyzing nutrient samples. Additional effort was also spent managing dive logistics as well as driving and maintaining research watercraft.

2009-2011 **Student Services Contractor**, U.S.EPA/ORD/NHEERL/Gulf Ecology Division *Advisor*: Dr. Susan H. Yee *Projects*: Developed decision support tools to inform coral reef stakeholders and evaluate trade-offs through conceptual and Bayesian models, quantified linkages between condition and function of coral reefs which culminated in a case study of the US Virgin Islands; and designed, programmed, and managed databases. Additional effort was spent on aquaculture and field work.

2006-2009 **Research Assistant**, Dept. of Biology & Earth Sciences, University of Wisconsin-Superior *Advisor*: Dr. Edward Burkett *Project*: Studied coral reef recovery after natural and anthropogenic disturbances through the long-term monitoring of Caye Caulker Marine Reserve, Belize. SCUBA was used to collect data in the field, and lab work consisted of processing and analyzing benthic true census, fish population dynamics, and disease prevalence. Additional effort was also spent on international travel logistics.

Summer 2008 **Biological Science Technician**, USDA Forest Service, Northern Research Station *Advisor*: Dr. Randall Kolka *Project*: Conducted lab and field work on processing macroinvertebrate and water samples for studying impacts of riparian harvest on ecosystems in northern Minnesota; undertook independent project on stone fly gut content analysis.

2005-2008 **Research Assistant**, Dept. of Biology & Earth Sciences, University of Wisconsin-Superior  
*Advisor: Dr. William Bajjali Project: Conducted lab and field work on processing water samples for examining industrial (oil refinery) and residential impacts on water quality of small streams in Superior, Wisconsin.*

### TEACHING EXPERIENCE

Spring 2013 **Guest Lecturer**, School of Life Sciences, Arizona State University

- Quantitative Methods in Conservation and Ecology

2012-Present **Teaching Assistant**, School of Life Sciences, Arizona State University

- Human Anatomy & Physiology I (2 lab sections)

2008-2009 **Teaching Assistant**, Dept. of Biology & Earth Sciences, University of Wisconsin-Superior

- Principles of Biology I & II (2 lab sections & 1 lecture section)

2005-2006 **Biology Tutor**, Dept. of Biology & Earth Sciences, University of Wisconsin-Superior

- All biology and chemistry courses

### PEER REVIEWED PUBLICATIONS

Yee, S.H., P. Bradley, W.S. Fisher, S.D. Perreault, J. Quackenboss, **E.D. Johnson**, J.J. Bousquin, P. Murphy. 2012. Integrating Human Health and Environmental Health into the DPSIR Framework: A Tool to Identify Research Opportunities for Sustainable and Healthy Communities. *EcoHealth*. DOI: 10.1007/s10393-012-0805-3

### TECHNICAL REPORTS

Principe, P.P., P. Bradley, S.H. Yee, W.S. Fisher, **E.D. Johnson**, P. Allen, and D. Campbell. 2012. Quantifying Coral Reef Ecosystem Services. U.S. Environmental Protection Agency, Office of Research and Development, Research Triangle Park, NC. EPA/600/R-11/206. January 2012.

**Johnson, E.D.**, S.H. Yee, and D. Vivian. 2011. The Complete Guide to the US EPA DSPIR Database: A User's Manual and Overview of the Database. US EPA White Paper.

Principe, P.P., P. Bradley, S.H. Yee, W.S. Fisher, **E.D. Johnson**, P. Allen, and D. Campbell. 2010. State of the Science on Linkages among Coral Reef Condition, Functions, and Ecosystem Services. US EPA White Paper.

### ORAL PRESENTATIONS

**Johnson, E.D.** and S.H. Yee. 2011. Coral Reef Ecosystem Services & Decision Support Database. US EPA Coral Retreat II

**Johnson, E.D.**, W.S. Fisher, S.H. Yee, P. Bradley, J.J. Bousquin, S. Darney, M. Firestone, D. Lobdell, P. Murphy, and J. Quackenboss. Eco-Human Conceptual Framework. 2011. US EPA ORD, NHEERL, Gulf Ecology Division Coral Task Meeting

**Johnson, E.D.** 2011. The Coral DPSIR Database and Library: Update & Tutorial. US EPA ORD, NHEERL, Gulf Ecology Division Coral Task Meeting

Yee, S.H. and **E.D. Johnson**. 2010. Coral Reef Ecosystem Services Decision Support Website. US EPA Coral Retreat I

**Johnson, E.D.** and S.H. Yee. 2009. Conceptual Mapping for Decision Support Tools. US EPA ORD, NHEERL, Gulf Ecology Division Coral Task Meeting

**Johnson, E.D.**, S.F. Wroblewski, and E.W. Burkett. 2009. Ecotone Delineation of a Caribbean Coral Patch Reef, Caye Caulker, Belize. UW-Superior Dept. of Biology and Earth Sciences 11<sup>th</sup> Annual Undergraduate Research Symposium

**Johnson, E.D.** and E.W. Burkett. 2008. Non-typical Algal Succession of the Caye Caulker Marine Reserve, Belize. UW-Superior Dept. of Biology and Earth Sciences 10<sup>th</sup> Annual Undergraduate Research Symposium

**Johnson, E.D.**, D.C. Levings, and E.W. Burkett. 2008. Discriminant Function Analysis of Coral Reef Energy Zones. University of Wisconsin-System Undergraduate Research Symposium

Levings, D.C., **E.D. Johnson**, and E.W. Burkett. 2007. Discriminant Function Analysis of Coral Reef Energy Zones. UW-Superior Dept. of Biology and Earth Sciences 9<sup>th</sup> Annual Undergraduate Research Symposium

**Johnson, E.D.**, N.S. Sandstrom, and W. Bajjali. 2006. Newton Creek Water Quality Assessment. UW-Superior Dept. of Biology and Earth Sciences 8<sup>th</sup> Annual Undergraduate Research Symposium

Ahrens, T.J., **E.D. Johnson**, D.C. Levings, A.K. Toth, and E.W. Burkett. 2006. Coral Reef Ecology Sampling Methods Analysis. UW-Superior Dept. of Biology and Earth Sciences 8<sup>th</sup> Annual Undergraduate Research Symposium

### **POSTER PRESENTATIONS**

**Johnson, E.D.**, D.C. Levings, and E.W. Burkett. 2008. Community Composition Analysis of Multiple Flow Regimes. Posters in the Rotunda, Madison, WI.

### **WEBSITE DEVELOPMENT**

Yee, S.H., **E.D. Johnson**, P. Bradley, J. Bousquin, and D. Vivian. 2011. ReefLink Database: A Decision Support Tool for Linking Coral Reefs and Society through Systems Thinking.  
<http://www.epa.gov/ged/coralreef/>

### **PROFESSIONAL MEMBERSHIPS & SYNERGISTIC ACTIVITIES**

2013-Present National Center for Ecological Analysis and Syntheses Working Group on Management Models for Marine Mammals, *Working Group member*

2013-Present American Academy of Underwater Sciences, *Member*

- ASU AAUS Diving Control Board Member

2013-Present ASU Ask a Biologist, *Contributor*

2012-Present International Society for Reef Studies, *Member*

2012-Present ASU Graduate and Professional Student Association, *Grant Reviewer*

2012-Present ASU Graduate Partners in Science Education,

2002-Present National Eagle Scout Association, Boy Scouts of America

### **SPECIAL SKILLS AND CERTIFICATIONS**

ArcGIS; SPSS; Microsoft Office: Access, Word, Excel, PowerPoint

Programming languages: Java, SQL, VBA, OpenBUGS, R

Relational database development

Website development and design

AAUS Scientific Diver/PADI Rescue Diver (200+ logged dives)

American Red Cross First Responder

Extensive Boat Driving

International Radio License

Proficient in field and laboratory techniques

- Coral reef, estuarine, & riparian field sampling
- Coral & fish aquaculture
- Stable isotope analysis
- Live-aboard sediment hypoxia sampling
- Gut content analysis

## REFERENCES

**Dr. Leah Gerber**, Associate Professor  
Ecology, Evolution and Environmental Science  
School of Life Sciences, Arizona State University  
Box 874501 Tempe, AZ 85287 USA  
Leah.Gerber@asu.edu  
480.727.3109  
*Relation:* PhD advisor

**Dr. William Fisher**, Research Biologist  
Gulf Ecology Division  
U.S.EPA/ORD/NHEERL  
1 Sabine Island Drive, Gulf Breeze, FL 32561 USA  
fisher.william@epa.gov  
850.934.9394  
*Relation:* task leader

**Dr. Jeffrey Schuldt**, Professor  
Dept. of Biology & Earth Sciences  
University of Wisconsin-Superior  
P.O. Box 2000, Superior, WI 54880 USA  
jschuldt@uwsuper.edu  
715.394.8524  
*Relation:* undergraduate advisor

**Dr. Susan Yee**, Ecologist  
Gulf Ecology Division  
U.S.EPA/ORD/NHEERL  
1 Sabine Island Drive, Gulf Breeze, FL 32561 USA  
yee.susan@epa.gov  
850.934.9397  
*Relation:* mentor

**Dr. Edward Burkett**, Professor  
Dept. of Biology & Earth Sciences  
University of Wisconsin-Superior  
P.O. Box 2000, Superior, WI 54880 USA  
eburkett@uwsuper.edu  
715.394.8253  
*Relation:* research program director

**Hannah Brocke**, PhD Student  
Department of Biogeochemistry  
Max-Planck-Institut für Marine Mikrobiologie  
Celsiusstr. 1 D-28359 Bremen, Germany  
hbrockempi-bremen.de  
+49.421.2028.836  
*Relation:* supervisor