

BETH A. POLIDORO

School of Mathematics and Natural Sciences
 New College of Interdisciplinary Arts and Sciences, Arizona State University – West Campus
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POSITIONS HELD

2012-present	Associate Professor, Arizona State University (ASU)-West, Phoenix, AZ Deputy Director, Center for Biodiversity Outcomes, ASU-Tempe Senior Sustainability Scientist, Global Institute of Sustainability, ASU-Tempe
2009-2012	Senior Research Associate, IUCN Marine Biodiversity Unit, Norfolk, VA.
2007-2009	Post-Doctoral Research Associate, Old Dominion University, Norfolk, VA.
2004-2008	Director of Aquatic Resource Conservation, ProCAT Costa Rica.
2003-2007	NSF IGERT Doctoral Fellow, University of Idaho and CATIE (Costa Rica).
1998-1999, 2002	Graduate Teaching Assistant in Environmental Science, Washington State University, Pullman, WA.
1999-2001	Natural Resources Conservation Extension Agent, U.S. Peace Corps Masters International, Togo, West Africa.
1996-1997	Biology & Geology Field Instructor, Oregon Museum of Science & Industry, Portland, OR.
1994-1995	Watershed Restoration Project Leader, Envirocorps, Portland, OR.
1990-1993	Environmental Education Coordinator, Greater Newark Conservancy, NJ.

EDUCATION

2007	Ph.D., University of Idaho, Moscow, ID & CATIE, Costa Rica
2002	M.S., Washington State University, Pullman, WA
1997	B.S., Portland State University, Portland, OR
1991	B.A., Rutgers University, New Brunswick, NJ

ACADEMIC AWARDS/HONORS/FELLOWSHIPS

2017	Arizona State University Leadership Academy	Arizona State University
2016	New College Award for T/TT Research Excellence	Arizona State University
2006	Phi Sigma: National Biological Sciences Honor Society	University of Idaho
2005	National Science Foundation EPSCoR Fellowship	University of Idaho
2003	National Science Foundation IGERT Fellowship	University of Idaho
1999	Robert and Wendi Lane Fellowship in Environmental Science	Washington State Univ.
1997	Edith Rockie Geology Departmental Award	Portland State Univ.
1991	Times Mirror Undergraduate Research Fellow	Rutgers University
1987-1991	Rutgers University Scholar Athlete Recognition	Rutgers University

PUBLICATIONS

* Indicates author is undergraduate student

Indicates author is a graduate student

† Indicates author is IUCN Specialist Group Chair

Polidoro contributions to publications:

- 1 – Wrote paper, designed/performed research, and analyzed data (>80%)
- 2 – Designed/performed research and analyzed data (60-80%)
- 3 – Contributed data and/or analyzed data (40-60%)
- 4 – Contributed data (20-40%)

REFEREED JOURNAL ARTICLES (37): Total Citations = 5835, H-index = 21

1. Lucas D*, **Polidoro B.** 2019. Urban recreational fisheries: implications for public health in metro-Phoenix. *Chemosphere* 225: 451-459
2. Hardesty BD, **Polidoro B**², Compa M, Shim WJ, Widianarko B, Wilcox C. 2019. Approaches to assessing the risk posed by anthropogenic debris. *Marine Pollution Bulletin Impact Factor: 3.767*
3. Linardich C[#], Ralph GM, Robertson DR, Harwell H, **Polidoro BA**, Lindeman KC, Carpenter KE. 2018. Extinction risk and conservation of marine bony shorefishes of the Greater Caribbean and Gulf of Mexico. *Aquatic Conservation: Marine and Freshwater Ecosystems*. DOI: 10.1002/aqc2959
4. **Polidoro B**¹, Clement C. 2018. Beyond Citizen Science: Multigenerational education and mentoring in environmental monitoring – a case study. *Integrated Environmental Assessment and Management* 14: 521-522.
5. Noziglia AJ[#], Abbot JK, **Polidoro BA**, Gerber LR. 2018. Flame retardant contamination and seafood sustainability. *Sustainability – Seafood Special Edition* doi:10.3390/su10041070.
6. Allen T*, Farley S*, Draper J*, Clement C, **Polidoro BA**. 2018. Variations in sorption of organochlorine pesticides and PCBs across six different plastic polymers. *Journal of Environmental and Toxicological Studies* 2: 1-6.
7. Pulford E[#], **Polidoro BA**, Nation M. 2017. Understanding relationships between water quality, recreational fishing practices and human health in Phoenix, Arizona. *Journal of Environmental Management* 199: 242-250.
8. Fernandes PG, Ralph GM, Nieto A, Garcia Criago M, Vasilakopoulos V, Maravelias CD, Cook R, Dulvy N, Pollom RA, Kovacic M, Pollard D, Farrell E, Florin AB, **Polidoro BA**², Lawson JM, Lorange P, Uiblein F, Craig M, Allen DJ, Fowler S, Walls R, Comeros-Raynal M[#], Harvey MS[#], Dureuil M, Conceicao Bischoito MJ, Pollock C, Nielsen J, McCully Phillips SR, Ellis JR, Papaconstantinou C, Soldo A, Keskin C, Clo S, Knudsen SW, Gil de Sola L, Serena F, Collette B, Nedreaas K, Stump E, Abella A, Chao N, Russell BC, Garcia S, Afonso P, Armelle J, Alvarez H, Mendes JM, Delgado H, Carpenter KE. 2017. Coherent assessments of Europe's marine fishes show regional divergence and megafauna loss. *Nature Ecology & Evolution* 1: s41559-017.
9. **Polidoro BA**¹, Ralph G, Strongin K[#], Harvey M[#], Carpenter K, Arnold R, Buchanan J, Camara KM, Collette B, Comeros-Raynal M[#], de Bruyne G, Gon O, Harold A, Harwell H, Hulley P, Iwamoto T, Knudsen S, Lewembe JD, Linardich C[#], Lindeman K, Montiero V, Munroe T, Nunoo F, Pollock C, Poss S, Russell B, Sayer C, Sidibe A, Smith-Vaniz W, Stump E, Sylla M, Tito de Morais L, Vie JC, Williams A. 2017. The status of marine biodiversity in the Eastern Central Atlantic (West and Central Africa). *Aquatic Conservation: Marine and Freshwater Ecosystems*. DOI 10.1002/aqc.2744.
10. **Polidoro BA**¹, Comeros-Raynal MT[#], Cahill T, Clement C*. 2017. Land-based sources of marine pollution: pesticides, PAHs and phthalates in coastal stream water, and heavy metals in coastal stream sediments in American Samoa. *Marine Pollution Bulletin* 116: 501-507.
11. Comeros-Raynal M[#], **Polidoro BA**, Broatch J, Mann BQ, Gorman C, Buxton CD, Goodpaster AM, Iwatsuki Y, McDonald TC, Pollard D, Russell B, Carpenter KE. 2016. Key predictors of extinction risk in sea breams and porgies (Family: Sparidae). *Biological Conservation* 202: 88-98.
12. Altabtabae R*, Chaudbury O*, Clement C*, **Polidoro, B.** 2016. Loss of chlorpyrifos from plastic bags used in commercial banana production. *International Journal of Environmental Science and Toxicology Research* 4: 19-24.
13. **Polidoro BA**¹, Morra MJ. 2016. An ecological risk assessment of pesticides and fish kills in the Sixaola watershed, Costa Rica. *Environmental Science and Pollution Research* 23: 5983-5991.
14. Joppa LN, Butchart SHM, Hoffmann M, Bachman S, Akcakay R, Moat J, Bohm M, Holland R, Newton A, **Polidoro B**⁴, Hughes A. 2015. The impact of alternative metrics on estimates of Extent of Occurrence for extinction risk assessment. *Conservation Biology* 30: 362-370.

15. Chao† NL, Lucena Frédou F, Haimovici F, Brick Peres M, **Polidoro B²**, Raseira M, Rosana Subirá R, Carpenter K. 2015. A popular and potentially sustainable fishery resource under pressure—extinction risk and conservation of Brazilian Sciaenidae. *Global Ecology and Conservation* 4: 117-126.
16. Butchart† SH, Clarke M, Smith RJ, Sykes RE, Scharlemann JP, Harfoot M, Buchanan GM, Angulo A, Balmford A, Bertzky B, Brooks TM, Carpenter KE, Comeros-Raynal MT[#], Cornell J, Ficetola GF, Fishpool LDC, Fuller RA, Geldmann J, Harwell H, Hilton-Taylor C, Hoffmann M, Joolia A, Joppa L, Kingston N, May I, Milam A, **Polidoro B³**, Ralph G, Richman N, Rondinini C, Segan D, Skolnik B, Spalding M, Stuart SN, Symes A, Talyor J, Visconti V, Watson J, Wood L, Burgess ND. 2015. Shortfalls and solutions for meeting national and global conservation area targets. *Conservation Letters* 8: 329-337.
17. Purcell S†, **Polidoro B¹**, Hamel J-F, Gamboa R, Mercier A. 2014. The cost of being valuable: predictors of extinction risk in marine invertebrates exploited as luxury seafood. *Proceedings of the Royal Society B*. 281: 20133296.
18. Conand C, **Polidoro B²**, Mercier A, Gamboa R, Hamel J-F, Purcell S. 2014. The IUCN Red List assessment of aspidochirotid sea cucumbers and its implications. *SPC Beche-de-Mer Bulletin* 34: 3-7.
19. **Polidoro B¹**, Carpenter K. 2013. Dynamics of Coral Reef Recovery. *Science* 340: 34.
20. Collette B†, **Polidoro B¹**, Carpenter K. 2013. Corrected numbers for fish on Red List. *Nature* 495: 47.
21. Comeros-Raynal MT[#], Choat JH†, **Polidoro BA²**, Clements KD, Abesamis R, Craig MT, Lazuardi ME, McIlwain J, Muljadi A, Myers RF, Nanola CL, Pardede S, Rocha LA, Russell B, Sanciangco JC[#], Stockwell B, Harwell H, Carpenter KE. 2012. The likelihood of extinction of iconic and dominant components of coral reefs: the Parrotfishes and Surgeonfishes. *PLoS ONE* 7(7): e39825. doi:10.1371/journal.pone.0039825.
22. González-Maya JF[#], Schipper J, **Polidoro B³**, Hoepker A, Zárrate-Charry D, Belant JL. 2012. Baird's tapir density in high elevation forests of Talamanca region of Costa Rica. *Integrative Zoology* 7: 381-388.
23. **Polidoro BA¹**, Brooks T, Carpenter KE, Edgar GJ, Henderson S, Sanciangco J, Robertson DR. 2012. Patterns of extinction risk and threat for marine vertebrates and habitat species in the Tropical Eastern Pacific. *Marine Ecology Progress Series*: 448 93-104.
24. Collette BB†, Carpenter KE, Polidoro **BA¹**, Juan-Jorda MJ, Boustany A, Die DJ, Elfes C, Fox W, Graves J, Harrison L, McManus R, Minte-Vera CV, Nelson R, Restrepo V, Schratwieser J, Sun CL, Amorim A, Brick Peres M, Canales C, Cardenas G, Chang SK, Chiang WC, de Oliveira Leite Jr. N, Harwell H, Lessa R, Fredou FL, Oxenford HA, Serra R, Shao KT, Sumalia R, Wang SP, Watson R, Yáñez E. 2011. High Value and Long Life—Double Jeopardy for Tunas and Billfishes. *Science* 333: 291-192.
25. Knapp L*, Mincarone, M, Harwell H, **Polidoro B²**, Sanciangco J, Carpenter K. 2011. Conservation Status of the World's Hagfish Species and the Loss of Phylogenetic Diversity and Ecosystem Function. *Aquatic Conservation: Marine and Freshwater Ecosystems* 21: 401-411.
26. Campagna C, Short FT, **Polidoro BA¹**, McManus R, Collette B, Pilcher NJ, Sadovy Y, Stuart S, and Carpenter K. 2011. Gulf of Mexico Oil Blowout Increases Risk to Globally Threatened Species. *BioScience* 61: 393-397.
27. Short FT†, **Polidoro B²**, Livingstone SR, Carpenter KE, Bandeira S, Bujang JS, Calumpong HP, Carruthers TJB, Coles RG, Dennison WC, Erftemeijer PLA, Fortes MD, AS, Jagtap TG, Kamal AHM, Kendrick GA, Kenworthy WJ, La Nafie YA, Nasution IM, Orth RJ, Prathep A, Sanciangco JC[#], van Tussenbroed B, Vergara SG, Waycott M, Zieman JC. 2011. Extinction Risk Assessment of the World's Seagrass Species. *Biological Conservation* 144: 1961-1971.

28. **Polidoro BA¹**, Elfes CT, Sanciangco JC[#], Pippard H, and Carpenter KE. 2010. Conservation status of marine biodiversity in Oceania: an analysis of marine species on the IUCN Red List of Threatened Species. *Journal of Marine Biology* Volume 2011, Article ID 247030.
29. Hoffmann M et al. (+ **Polidoro BA³** and 180 authors) 2010. The Impact of Conservation on the Status of the World's Vertebrates. *Science* 330:1503-1509.
30. González-Maya JF[#], Cepeda AA, Zárrate-Charry D, Balaguera-Reina SA, Escobedo-Galván A, Wyatt SA, Arroyo-Pena VB, Schipper J, Belant JL, González M, **Polidoro B³**. 2010. Revistas científicas para la conservación en Latinoamérica: una necesidad, un compromiso y una oportunidad para la región. *Revista Latinoamericana de Conservación*: 1:5-8.
31. **Polidoro BA¹**, Carpenter KE, Collins L, Duke NC, Ellison AM, Ellison JC, Farnsworth EJ, Fernando ES, Kathiresan, K, Koedam NE, Livingstone SR, Miyagi T, Moore GE, Nam VN, Ong JE, Primavera JH, Salmo III SG, Sanciangco J[#], Sukardjo S, Wang Y, Hong Yong JW. 2010. The loss of species: mangrove extinction risk and geographic areas of global concern *PLoS ONE* 5(4) 1-10.
32. **Polidoro BA¹**, Morra MJ, Ruepert CR, Castillo LE. 2009. Pesticide sequestration in passive samplers (SPMDs): considerations for deployment time, biofouling, and stream flow in a tropical watershed. *Journal of Environmental Monitoring* 11:1866-1874.
33. Schipper J et al. (+ **Polidoro BA³** and 130 authors) 2008. The Status of the World's Land and Marine Mammals: Diversity, Threat, and Knowledge. *Science* 322: 225-230.
34. Carpenter KE[†], Muhammad A, Aeby G, Aronson RB, Banks S, Bruckner A, Chiriboga A, Cortés J, Delbeek JC, DeVantier L, Edgar GJ, Edwards AJ, Fenner D, Guzmán HM, Hoeksema BW, Hodgson G, Johan O, Licuanan WY, Livingstone SR, Lovell ER, Moore JA, Obura DO, Ochavillo D, **Polidoro BA²**, Precht WF, Quibilan MC, Reboton C, Richards ZT, Rogers AD, Sanciangco J[#], Sheppard A, Sheppard C, Smith J, Stuart S, Turak E, Veron JEN, Wallace CC, Weil E, Wood E. 2008. One third of reef building corals face extinction from climate change and local impacts. *Science*. 321: 560-563.
35. **Polidoro BA¹**, Dahlquist R, Castillo LE, Morra M, Somarriba E, Bosque-Pérez NA. 2008. Pesticide Application Practices, Pest Knowledge, and Cost-Benefits of Plantain Production in the Bribri-Cabecar Indigenous Territories, Costa Rica. *Environmental Research* 108: 98-106.
36. **Polidoro B¹**, Winowiecki L, Johnson-Maynard J, McDaniel P, Morra M. 2008. Suelos del valle y del piedemonte en Talamanca: un paisaje dinámico para el almacenamiento de carbono. *Agroforestería en las Américas* 46: 40-44.
37. Dahlquist RM, Whelan MP, Winowiecki L, **Polidoro B²**, Candela S, Harvey CA, Wulforst JD, McDaniel PA, Bosque-Peréz NA. 2007. Incorporating livelihoods in biodiversity conservation: a case study of cacao agroforestry systems in Talamanca, Costa Rica. *Biodiversity and Conservation* 16: 2311-2333.

BOOKS & PUBLISHED GLOBAL REPORTS (7)

1. Linardich C[#], Ralph G, Carpenter K, Cox N, Robertson DR, Harwell H, Aiken K, Anderson W, Barthelat F, Bouchereau J, Brown J, Buchanan J, Bustamante G, Collette B, Comerros-Raynal M[#], Craig M, Curtis M, Defex T, Dooley J, Elfes C, Eschmeyer W, Fraser T, Gilmore R, Grijalba Bendeck L, Hines A, Kishore R, Lindeman K, Marechal J, McEachran J, Moore J, Munroe T, Oxenford H, Pezold F, Pina Amargós F, Acero A, Polanco Fernandez PA, **Polidoro B**, Pollock C, Robins R, Russell B, Russell D, Sayer C, Singh-Renton S, Smith-Vaniz W, Tassell J, Tornabene L, Vié JC, Williams J, Zane B. 2016. *The Conservation Status of Marine Bony Shorefishes of the Greater Caribbean*. Gland, IUCN. 75 pp.
2. Langhammer PF, Brooks T, Bennet C, Bruford MW, Bull JW, Butchart SHM, Carr J, Cooney R, Cutajar S, Foden W, Geldmann J, Benovesi P, Hoffmann M, Howard-Mccombe J, Lewis T[#], Macfarlane N, Melvin Z, Merizalde R, Pagad S, **Polidoro B**, Segelbacher G, Smith K, Steadman JE, Strongin K[#], Williams J, Woodley S. 2016. *The Impact of Conservation Action*. Gland, Global Environment Facility and IUCN. 131 pp.

3. **Polidoro B**, Ralph G, Strongin K[#], Harvey M[#], Carpenter K, Adeofe TA, Arnold R, Bannerman P, Po Ngueba JNB, Buchanan J, Camara K, Camara YH, Cissoko K, Collette B, Comeros-Raynal M[#], de Bruyne G, Diouf M, Djiman R, Ducrocq M, Gon O, Harold A, Harwell H, Hines A, Hilton-Taylor H, Hulley P, Iwamoto T, Knudsen S, Lewembe JD, Linardich C[#], Lindeman K, Mbye EM, Miolo JE, Montiero V, Mougoussi JB, Munroe T, Mve Beh JH, Nunoo F, Pollock C, Poss S, Quartey R, Rodrigues A, Russell B, Sayer C, Sagna A, Sidibe A, Smith-Vaniz W, Stump E, Sylla M, Tito de Morais L, Vie JC, Williams A. 2016. *Status of Marine Bony Fishes of the Eastern Central Atlantic*. Gland, Switzerland, IUCN. 80 pp.
4. Carr J, Adeleke A, Angu Angu K, Belle E, Burgess N, Carrizo S, Choimes A, Coulthard N, Darwall W, Foden W, Garreau J-M, Gatarabirwa W, Hicks C, Kapijimpanga DR, King E, Koenig K, Martinez S, Meng H, Nyame SK, **Polidoro B**, Regnaut S, Shennan-Farpon Y, Shepherd G, Smith K, van Soesbergen A, Somda J, Walters G. 2015. *Ecosystem Profile: Guinean Forests of West Africa Biodiversity Hotspot*. Cambridge and Gland, Critical Ecosystem Partnership Fund, UNEP-IUCN 393 pp. [[Available in English and French]].
5. Nieto A, Ralph GM, Comeros-Raynal MT[#], Kemp J, García Criado M, Allen DJ, Dulvy NK, Walls RHL, Russell B, Pollard D, García S, Craig M, Collette BB, Pollom R, Biscoito M, Labbish Chao N, Abella A, Afonso P, Álvarez H, Carpenter KE, Clò S, Cook R, Costa MJ, Delgado J, Dureuil M, Ellis JR, Farrell ED, Fernandes P, Florin A-B, Fordham S, Fowler S, Gil de Sola L, Gil Herrera J, Goodpaster A, Harvey M[#], Heessen H, Herler J, Jung A, Karmovskaya E, Keskin C, Knudsen SW, Kobylansky S, Kovačić M, Lawson JM, Lorange, P, McCully Phillips S, Munroe T, Nedreaas K, Nielsen J, Papaconstantinou C, **Polidoro B**, Pollock CM, Rijnsdorp AD, Sayer C, Scott J, Serena F, Smith-Vaniz WF, Soldo A, Stump E, Williams JT. 2015. *European Red List of Marine Fishes*. Gland, Switzerland and Brussels, Belgium. IUCN and European Commission. 87 pp.
6. Abdul Malak D, Livingstone SR, Pollard D, **Polidoro BA**, Cuttelod A, Bariche M, Bilecenoglu M, Carpenter KE, Collette BB, Francour P, Goren M, Hichem Kara M, Massuti E, Papaconstantinou C, Tunesi L. 2011. *Overview of the Conservation Status of the Marine Fishes of the Mediterranean Sea*. Gland, Switzerland and Malaga, Spain: IUCN. viii + 56pp.
7. Alava MNR, Carpenter KE, Palomar MJS, Quicho RFN, **Polidoro B**. (Eds). 2009. *Red List Status of Marine Endemic Teleosts (Bony Fishes) of the Philippines*. Global Marine Species Assessment for the Coral Triangle - First Philippine Conservation Incorporated 108 pp.

CHAPTERS IN BOOKS (6)

1. **Polidoro BA**. 2017. Taxa and habitat conservation. In: Jaafar, Z. and Murdy, E.O. (Eds). *Fishes Out of Water: Biology and Ecology of Mudskippers*. CRC Press: Marine Science Series, Boca Raton, FL.
2. **Polidoro BA**, Carpenter KE, Dahdouh-Guebas F, Ellison JC, Koedam NE, Yong JWH. 2014. Global Patterns of Mangrove Extinctions and Implications for Coastal Biodiversity Loss. In: Lockwood, J.L. and Maslo, B. (Eds). *Coastal Conservation*. Cambridge University Press, Rutgers University, NJ.
3. Kemp R, Peters H, Allcock L, Carpenter K, Obura D, **Polidoro B**, Richman N. 2012. Marine Invertebrate Life, In: Collen B, Bohm M, Kemp R and Baille JFM (Eds). *Spineless: Status and Trends of the World's Invertebrates*. Zoological Society of London, UK.
4. Carpenter KE, **Polidoro BA**, Harwell H, Sanciangco J. 2011. Ocean Biodiversity. In: Stone, G. (Ed) *Ocean Biomes*. CEMEX and Conservation International, Arlington, VA.
5. **Polidoro BA**, Livingstone SR, Carpenter KE, Hutchinson B, Mast RB, Pilcher N, Sadovy de Mitcheson Y, Valenti S. 2009. Status of the world's marine species. In: J.-C. Vié, C., Hilton-Taylor, and S.N. Stuart (Eds.). *Wildlife in a Changing World*, Island Press, IUCN Gland. Switzerland.
6. **Polidoro B**, Franz EH. 2005. Sustainable agriculture in the West African savannah: Considerations for modern crop promotion in indigenous farming systems. In E. Tiezzi, C.A. Brebbia, S. Jorgensen, and D. Gomar (Eds) *Ecosystems and Sustainable Development V*, WIT Press, UK, 776 pp.

GRANTS AND RESEARCH CONTRACTS RECEIVEDEXTERNAL GRANTS

- 2018-2019 **J. William Fulbright Award:** Marine Pollution and Extinction Risk: Capacity Building and Assessment of Contaminant Impacts for the Development of the Philippine National Red List. **PI:** B. Polidoro (~\$25,000).
- 2019-2020 **BioDiversa:** The Futures of Reef Services in the Anthropocene **PI:** J. Kittinger (\$89,967).
- 2019-2023 **NSF IUOE Building Capacity:** Reinventing the Common CURE at two-year HSIs: Integrating Research, Mentoring, and Industry Collaborations to Improve STEM Student Recruitment, Retention and Success (STEM-CUREs). **PI:** P. Marshall (\$88,826).
- 2018-2020 **Gulf of Mexico Research Institute:** A Comprehensive Petrochemical Vulnerability Index for Improved Decision-making and Marine Biodiversity Risk Assessment in the Gulf of Mexico Large Marine Ecosystem. **PI:** B. Polidoro (\$626,097).
- 2017-2022 **NSF PIRE:** Centennial Genetic and Species Transformations in the Epicenter of Marine Biodiversity. **PI:** K. Carpenter, **co-PI:** B. Polidoro (\$4.2 million, \$121,948 – ASU component).
- 2017-2019 **NOAA Marine Debris Program:** A Screening-Level Ecological Risk Assessment for Microplastics in Seafood in American Samoa. **PI:** B. Polidoro (\$195,837).
- 2016-2018 **Environmental Protection Agency (EPA) Urban Waters:** Community Monitoring of Pollutants in Urban Waterways and Recreational Fisheries in metro-Phoenix. **PI:** B. Polidoro (\$58,227).
- 2016-2018 **National Fish and Wildlife Foundation (NFWF):** What's the Catch: Monitoring and Conservation of Urban Waterways and Recreational Lakes for Native Fishes, Migratory Birds and Local Communities in metro-Phoenix, AZ. **PI:** B. Polidoro (\$50,422).

INTERNAL ASU GRANTS

- 2019-2020 **Global Consortium of Sustainability Organizations (GCSO):** Protecting the Thread of Life: Enhancing watershed health for communities, coffee agroforestry, and conservation. **PI:** B. Polidoro (\$94,587)
- 2018 **ASU-Smithsonian Tropical Research Institute:** A screening-level ecological risk assessment for microplastics and organic contaminants in conches in Panama. **PI:** K. Dudek (\$50,000).
- 2017 **ASU-USAID Global Development Research Program:** Anthropogenic Pollutants and Their Influence on Microbial Communities in Surface Waters. **PI:** K. Dudek and B. Cruz (\$16,150).
- 2017 **PLuS Alliance (ASU, Kings College of London, UNSW):** Red-listing the World's Ecosystems – Leading the Globe. **PI:** D. Keith (\$25,000).
- 2015 **ASU OKED and New College of Interdisciplinary Arts and Sciences:** An Interactive Biodiversity Risk Assessment for Marine Species in the Gulf of Mexico. **PI:** B. Polidoro (\$82,500).
- 2014 **ASU Center for Biodiversity Outcomes:** Development of an IUCN and ASU Red List Partnership. **PI:** B. Polidoro and A. Smith (\$7,500).

EXTERNAL SUBAWARDS AND CONTRACTS

- 2019-2020 **National Geographic Species Recovery:** Updating global policy with the extinction status of reef-building corals. **PI:** D. Obura (\$39,000).
- 2017-2018 **Government of American Samoa Environmental Protection Agency:** Land-based sources of Marine Pollution in American Samoa. **PI:** B. Polidoro (\$35,720).
- 2017-2019 **Total Foundation grant to IUCN:** Improving Marine Biodiversity Conservation in the Western Indian Ocean through the IUCN Red List. **PI:** J-C Vié (\$215,000).
- 2012-2014 **MAVA Foundation grant to IUCN:** Status of Marine Species and Biodiversity in West Africa: Safeguarding Marine Resources for Food Security. **PI:** J-C Vié (\$278,900).
- 2012-2013 **Mikelberg Foundation grant to Sierra to Sea Institute:** Setting Conservation Priorities for Species Recovery in Santa Marta, Colombia and Talamanca, Costa Rica. **PI:** J. Schipper (\$100,000).

PROFESSIONAL CREDENTIALS OR CERTIFICATIONS

ASU Center for Biodiversity Outcomes

Associate Director of Research
Founding Board Member

ASU Global Institute of Sustainability (GIOS)

Graduate Faculty in Sustainability PhD and MS/MA
Senior Sustainability Scientist
Soil Brain Trust: Walton Sustainability Solutions Initiatives

ASU School of Life Sciences (SoLS)

Graduate Faculty in Environmental Life Sciences
Graduate Faculty in Biology in Society

University of Hawaii-Hilo

Affiliate Faculty in Tropical Conservation Biology and Environmental Science

Old Dominion University

Graduate Faculty in Marine Biology

IUCN SSC Marine Conservation Committee

North American Representative

IUCN SSC Marine Fishes Specialist Group

Co-Chair

IUCN SSC Tuna and Billfish Specialist Group

Member and Red List Authority

IUCN SSC Sciaenid Red List Authority

Member

IUCN SSC Reef-Building Corals Specialist Group

Member and Red List Authority

IUCN Red List Technical Working Group

Marine Species and Commercial Fisheries Technical Representative

IUCN Red List Committee

ASU Representative to IUCN Red List Partnership

Sierra to Sea Institute/ProCAT International

Founding Member, Secretary of the Board

Friends of the Sonoran Desert

Founding Member, Scientific Advisory Board Member

ASU SERVICE BY TYPE

Professional: Reviewer for *Science Magazine*, *BioScience*, *PloSONE*, *Environmental Research*, *Environmental Assessment*, *Human and Ecological Risk Assessment*, *Environmental Development and Sustainability*, *Conservation Biology*, *Global Ecology and Biogeography*, *Journal of Coastal Research*, *Journal of Fish Biology*, *Wetland*, *Oryx*, *Xerces Society for Invertebrate Conservation*, *Biodiversity*, *Ecosphere*, *Conservation Leadership Programme*, among others.

Peer J, Editorial Board

NSF Geography and Geospatial Proposal Reviewer

National Geographic Species Recovery Program Proposal Reviewer

External community: Senior Advisor, Sierra to Sea Institute
Senior Advisor, IUCN Marine Biodiversity Unit
Panel Member, NOAA ESA Recovery Planning Process Review
Advisory Group, Natural Capital Protocol Toolkit
Project Lead, Phoenix College Metro-Phoenix Contaminant Mapping

University: WAESO Student Fellowship Proposal Reviewer
Lead Faculty, ASU-IUCN Red List Partnership Agreement
Lead Faculty, ASU CHM 101 Adaptive Course Redesign
Advisory Board, ASU/GIOS Center for Biodiversity Outcomes
Advisory Board, Institute for Global Learning and Education

New College: Degree Development Committee, Environmental Science BS/BA
Hiring Committees, Chemistry/Physics Lecturer, Lab Manager
Faculty Advisor, Conservation Chemistry Club
University Senate Representative, Spring 2017

MEDIA EVENTS SINCE 2016

1. Phoenix New Times (March 2019) [Should you eat fish from community ponds around Phoenix? Maybe not, study says.](#)
2. NOAA News Feature (December 2018) [Marine Debris Program Grantee Illustrates Microplastics Risk Assessment Research.](#)
3. Cronkite News Interview on Great Pacific Garbage Patch (October 2018) <https://cronkitenews.azpbs.org/2018/10/04/great-pacific-garbage-patch-california-pollution/>
4. Television Interview on Plastic Straw Ban, Channel 12 Arizona (*aired in August 2018*)
5. Commentary, Why Mangroves Matter, July 2018 (<http://www.eco-business.com/news/why-mangroves-matter-experts-reply-on-international-mangrove-day/>)
6. National Public Radio (KJZZ) Interview on Great Pacific Garbage Patch, March 2018 (<https://kjzz.org/content/632869/research-says-great-pacific-garbage-patch-growing>)
7. Video Interview, Souls of the Vermillion Sea, March 2018 (<https://www.youtube.com/watch?v=FvpCyBCIG-k>)

8. NewsWise Interview, Is it Possible to Remove Plastics from the World's Oceans? March 2018. (<https://www.newswise.com/articles/is-it-possible-to-remove-plastics-from-earth%27s-oceans%3F->)
9. Course developer and Lecturer for marine module in an open enrollment, online course (MOOC) on Species Conservation, produced by IUCN. <http://papaco.org/mooc-on-species-conservation/> (released January 2018).
10. ASU News Article on Work in American Samoa, August 2017 (<https://sustainability.asu.edu/news/archive/microplastics-risk-assessment-american-samoa/>)
11. Featured Panel speaker, "Why Businesses Should Care About Biodiversity," Security and Sustainability Forum Webinar, ASU School of Sustainability, January 2016. (<https://ssfonline.org/why-companies-should-care-about-biodiversity-7881>)

PROFESSIONAL ORGANIZATIONS MEMBERSHIP

American Fisheries Society
National Association of Environmental Professionals
Society for Conservation Biology – Marine Section
Society for Environmental Toxicology and Chemistry

PROFESSIONAL IUCN WORKSHOPS/MEETINGS PRESENTED SINCE 2012

1. Lead Facilitator/Organizer, IUCN Red List Assessment Workshop for Deep Sea Fishes of the Gulf of Mexico, Veracruz, Mexico, October 8-13, 2018.
2. Lead Facilitator and Trainer, IUCN Red List Assessment and Training Workshop for Sciaenidae Fishes of the Indo-West Pacific, Terengganu, Malaysia, September 24-28, 2018.
3. Lead Facilitator/Organizer, Philippines Aquatic Red List Committee Training Workshop, Dumaguete, Philippines, July 30-August 2, 2018.
4. Lead Facilitator/Organizer, IUCN Red List Assessment Workshop for Marine Fishes of the Western Indian Ocean II, Muscat Oman, June 24-29, 2018.
5. Lead Organizer, North and South American Red List Trainer of Trainers and Assessor Training Workshops, Arizona State University, Tempe, AZ, USA, 13-20 October 2017.
6. IUCN Facilitator, Red List Assessment for Sharks and Rays of Patagonia Sea, Buenos Aires, Argentina August 26-29, 2017
7. Lead Facilitator/Organizer, IUCN Red List Assessment Workshop for Marine Fishes of the Western Indian Ocean, Zanzibar July 17-21, 2017
8. Marine Typology Classification Lead, IUCN Red List of Ecosystems Typology Development Workshop. London, UK April 24-26, 2017.
9. IUCN Red List Training Course Instructor, Colombian National Red List Assessment for Marine Invertebrates. Santa Marta, Colombia Oct 10-13, 2016.
10. IUCN Facilitator, Red List Assessment for Marine Mammals of Patagonia Sea, Buenos Aires, Argentina May 30-June 3, 2016.
11. Marine Representative to the IUCN Red List Technical Working Group Meeting, Cambridge, UK, March 6-8 2016.
12. IUCN Facilitator, Forum for the Conservation of the Patagonian Sea, La Paloma, Uruguay November 4-6, 2015.
13. Marine Fishes Representative to the IUCN Species Survival Commission Leadership Meeting, Abu Dhabi, United Arab Emirates, September 11-18, 2015.
14. IUCN Facilitator, Red List Assessment for Marine Fishes of the Gulf of Mexico II, Merida, Mexico, April 20-24, 2015.

15. IUCN Facilitator, Forum for the Conservation of the Patagonian Sea, Puerto Varas, Chile, October 25-26, 2014.
16. Lead Facilitator/Organizer, IUCN-Marine Fisheries Data Integration Summit, Vancouver, BC, Canada, October 15-18, 2014.
17. Lead Facilitator/Organizer, IUCN Red List Assessment Workshop for Marine Fishes of the Eastern Central Atlantic III, Libreville, Gabon July 6-12, 2014.
18. Lead Facilitator/Organizer, IUCN Red List Assessment Workshop for Marine Fishes of the Persian Gulf, Doha, Qatar, February 21-28, 2014.
19. Lead Facilitator/Organizer, IUCN Red List Assessment Workshop for Marine Fishes of the Gulf of Mexico, Corpus Christi, Texas, January 6-10, 2014.
20. Marine Representative to the IUCN Red List Technical Working Group Meeting, Cambridge, UK, December 4-6, 2013.
21. Lead Facilitator/Organizer, IUCN Red List Assessment Workshop for Commercial Marine Fishes of the European Union, Malaga, Spain October 14-18, 2013.
22. Lead Facilitator/Organizer, IUCN Red List Assessment Workshop for Marine Fishes of the Eastern Central Atlantic II, Accra, Ghana, May 3-8, 2013.
23. Lead Facilitator/Organizer, IUCN Red List Assessment Workshop for Marine Fishes of the Eastern Central Atlantic I, Dakar, Senegal, July 9-14, 2012.

INVITED TALKS AND CONFERENCE PRESENTATIONS SINCE 2012

1. **Polidoro B.** 2019. Preliminary Risk Assessment of Microplastics and Associated Contaminants in Marine Resources of Negros Oriental, Philippines. Invited seminar speaker, Marine Sciences Institute, University of the Philippines, Dilliman. 7 June 2019, Manila, Philippines.
2. **Polidoro B,** Matson C, Carpenter K, Bruns P, Linardich C, Strongin K, Woodyard M. 2019. Towards a Petrochemical Vulnerability Index for Gulf of Mexico Marine Species: Comprehensive Collection of Body Burden and Toxicity Data. Poster presentation: Gulf of Mexico Oil Spill and Ecosystem Science Conference, 4-8 February 2019, New Orleans, LA.
3. King R and Polidoro B. 2019. Troubled waters: Addressing environmental justice issues in fish consumption. Poster presentation: AAAS Annual Meeting, 16-18 February 2019, Washington DC.
4. **Polidoro B.** 2018. Risk Assessment of Microplastics and Associated Contaminants in Coastal Environments and Seafood in American Samoa, Invited Seminar Speaker, Department of Wildlife and Fisheries, Texas A&M University, 14 November 2018, College Station, TX.
5. **Polidoro B,** Asalele F, Lewis T, Clement C. 2018. Ecological risk assessment of microplastics and associated contaminants in American Samoa. Poster presentation: Society for Environmental Toxicology and Chemistry Annual Meeting, 5-8 November 2018, Sacramento CA, USA.
6. Clement C, Lucas D, Bellows F, **Polidoro B.** 2018. Public health concerns for urban recreational fisheries in metro-Phoenix. Poster presentation: Society for Environmental Toxicology and Chemistry Annual Meeting, 5-8 November 2018, Sacramento CA, USA.
7. **Polidoro, B.** 2018: Stakeholder Engagement, Invited Seminar Speaker, Biodiversity Series, ASU Center for Biodiversity Outcomes, 21 March 2018, Tempe, AZ.
8. Astudillo-Scalia Y, **Polidoro B,** Albuquerque F. 2018. Global geographic patterns of sites conservation values for marine mammal diversity. Poster presentation: Ecological Society of America Annual Meeting, August 2018, New Orleans, USA.
9. Dudek K, **Polidoro B,** Neuer S. 2018. Polymer-specific plastisphere – How the chemical composition of microplastics impact its microbiome, degradation and deposition. Poster presentation: Gordon Research Conference on Ocean Biogeochemistry, 8-13 July 2018, Hong Kong.
10. Dudek K, Cruz BN, Neuer S, **Polidoro B.** 2018. The role of microbes in the degradation and removal of microplastics from the ocean's surface. Poster presentation: Ocean Sciences Meeting 11-16 February 2018, Portland, OR, USA.

11. **Polidoro B.** 2018. IUCN Red List: A comprehensive global biodiversity initiative. Panel Member, McDowell Sonoran Conservancy Arid Lands Symposium, 4-5 May 2018, Scottsdale, AZ, USA.
12. Hardesty D, **Polidoro B**, Wilcox C. 2018. Approaches to Microplastic Ecological Risk Assessment. Co-Chair of Session, International Marine Debris Conference, 11-15 March 2018, San Diego, USA.
13. Strongin K, **Polidoro B**, Linardich C, Ralph GM, Carpenter K. 2018. Using IUCN data to prioritize conservation needs in the Gulf of Mexico. Poster presentation: Gulf of Mexico Oil Spill and Ecosystem Science Conference, 6-9 February 2018, New Orleans, USA.
14. Keith D, Kingsford RT, **Polidoro B**, Nicholson E. 2017. Towards a Global Typological Framework for Ecosystems. Oral Presentation: EcoTAS, November 26-December 1, 2017, Hunter Valley, New South Wales, Australia.
15. Cruz BN, Dudek K, **Polidoro B**, Neuer S. 2017 Anthropogenic Pollutants and Their Influence on Microbial Communities in Surface Waters, Poster Presentation: USAID Global Development Lab, April 17, 2017, Tempe, AZ, USA.
16. Clement C, Bellows F, Fernandez C, Lopez S, **Polidoro B.** 2017. Community Monitoring of Organic Contaminants in Urban Recreational Fisheries. Poster Presentation: Society for Environmental Toxicology and Chemistry, November 12-16, 2017, Minneapolis, MN, USA.
17. **Polidoro B**, Ralph G, Carpenter K. 2017. A Spatial Decision-Support Tool for Marine Biodiversity and Petrochemical Vulnerability in the Gulf of Mexico Large Marine Ecosystem. Oral Presentation: Gulf of Mexico Oil Spill and Ecosystem Science Conference, February 6-9, 2017, New Orleans, LA, USA.
18. Clement C, Carpenter R, Back V, Esqueda Serna J, Sanchez D, **Polidoro B.** 2016. Should Metro-Phoenix Residents Be Concerned with the Water in Community Recreational Ponds? Poster Presentation: Society for Environmental Toxicology and Chemistry World Congress, November 6-10, 2016, Orlando, FL, USA.
19. **Polidoro B.** 2016. IUCN and Academic Partnerships: Added value and collaborative opportunities. Knowledge Café: IUCN World Conservation Congress September 2-5, 2016, Honolulu, HI, USA.
20. **Polidoro B.** 2016. River Deltas at the Crossroads: Transformative change for people and ecosystems. Oral Presentation: IUCN World Conservation Congress September 2-5, 2016, Honolulu, HI, USA.
21. Allen T, Farley S, Clement C, Back V, Carpenter R, **Polidoro BA.** 2016. Is There Poison in the Plastic? Poster Presentation: New College Undergraduate Research Symposium, April 20, 2016, Glendale, AZ.
22. **Polidoro B**, McManus R. 2016. Priority Concerns for Sonoran Desert Species. Oral Presentation: Tri-National Sonoran Desert Symposium. March 7-10, 2016. Ajo, AZ, USA.
23. **Polidoro B**, Ralph G, Strongin K, Harvey M, Carpenter K. 2015. Safeguarding Marine Resources for Food Security: A Comprehensive Assessment of Extinction Risk for Marine Bony Fishes of the Eastern Central Atlantic. Poster presentation: 8th Forum Régional Marin et Côtier du PRCM, November 2-5, 2015. Praia, Cape Verde.
24. Altabtabae R, Chaudhary O, Clement C, Back V, Esqueda-Serna J, Thuan T, Sanchez D, **Polidoro B.** 2015 Determination of Evaporation Rates and Environmental Emissions of the Pesticide Chlorpyrifos from Plastic Bags used in Commercial Banana Production. Poster Presentation: Arizona-Nevada Academy of Sciences, April 18, 2015, Glendale, AZ.
25. Smith, S., Bubnash, A., Corley, B., Muniz, N., Pogue, B., **Santa Cruz, A.**, Soto, S., Strongin, K., Weller, S., and Polidoro, B. 2015. Safeguarding Marine Resources for Food Security: Comprehensive Assessment of Extinction Risk for Marine Fishes of the Eastern Central Atlantic. Proceedings of AZ NV Academy of Science 50: 36.
26. Mc Carroll J, Blumenfeld J, **Polidoro B**, Curtis M, Matagi R, Talouli A. 2015. Panel member on Ocean Health. Oral Presentation: Pacific Islands Environmental Conference, June 15-18, 2015. Pago Pago, American Samoa.

27. **Polidoro B**, Williams J, Smith-Vaniz W, Carpenter KE. 2014. Potential Impact of Climate Change on the World's Blennioids. Poster Presentation: International Marine Conservation Congress, August 14-19, 2014. Glasgow, Scotland.
28. **Polidoro, B.**, Soto, S., McManus, R., Bubnash, A., Corley, B. 2014. Prioritizing Species for Conservation in the Sonoran Desert Ecoregion. Oral Presentation: Tri-National Sonoran Desert Symposium. March 18-22, 2014. Ajo, AZ, USA.
29. Moretzsohn F, McManus R, **Polidoro B**, Harwell H, Comeros-Raynal M, Carpenter K, Linardich C, Wood J, Ralph G, Lacher T. 2014. Building Capacity and Decision Support for Risk Assessment and Marine Biodiversity Conservation in the Gulf of Mexico. Poster Presentation: Gulf of Mexico Oil Spill and Ecosystem Science Conference, Mobile, AL, USA January 26-29, 2014.
30. DuCrocq, M, **Polidoro, B.**, Carpenter, K. 2013. Status of Marine Species and Biodiversity in West Africa: Safeguarding Marine Resources for Food Security. Poster Presentation: Forum Régional Marin et Côtier du PRCM, November 25-29, 2013. Dakar, Senegal.
31. Comeros-Raynal, M., **Polidoro, B**, Broatch, J, Buxton, C., Mann, B, Russell, B, Carpenter, K. 2013. Predictors, Patterns and Processes of Extinction risk in Porgies (Family Sparidae). Oral Presentation: International Congress for Conservation Biology, Baltimore, MD, USA July 21-25, 2013.
32. Ning Labbish Chao, N-L, Liu, M, Sadovy de Mitcheson, Y, **Polidoro, B**, Carpenter, K, Chang, C-W. 2013. Diversity and risk of extinction in Indo-West Pacific Sciaenidae. Oral Presentation: Indo-Pacific Fish Conference, Okinawa, Japan, July 24-27, 2013.
33. McManus R, **Polidoro B**, Harwell H, Moretzsohn F, Lacher T, Comeros-Raynal M, Carpenter K. 2013. Incorporating comprehensive species data in ecosystem science and recovery initiatives. Poster Presentation: Gulf of Mexico Oil Spill and Ecosystem Science Conference, New Orleans, LA, USA January 21-23, 2013.
34. Knapp L, **Polidoro B**, Alvarado JJ, Benavides M, Carpenter K, Conand C, Gamboa R, Hamel J-F, Harwell H, Mercier A, Ortiz EP, Purcell S, Toral-Granda MV. 2012. Extinction Risk of the World's Sea Cucumber Species (Order Aspidochirotida). Oral Presentation: Benthic Ecology Meeting, Norfolk, VA, USA March 22-24, 2012.