

CURRICULUM VITAE: JOHN DANIEL PARKER

Ecologist, Senior Scientist
Smithsonian Environmental Research Center
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RESEARCH INTERESTS

Biological invasions; Biodiversity and ecosystem function; Climate change and biotic interactions; Community ecology; Consumer-prey interactions; Chemical ecology

PROFESSIONAL PREPARATION

University of Virginia, *Environmental Science, B.A.*, 1993
College of William and Mary/Virginia Institute of Marine Science, *Marine Science, M.S.*, 1998
Georgia Institute of Technology, *Biology, Ph.D.*, 2005
Cornell University, Postdoctoral Associate, 2006-2007

APPOINTMENTS

2007-present *Ecologist, Senior Scientist*, Smithsonian Environmental Research Center
2009-present *Adjunct Faculty*, Graduate Program in Behavior, Ecology, Evolution, and Systematics, University of Maryland College Park
2006-2007 *Postdoctoral Associate*, Dept. Ecology & Evolutionary Biology, Cornell University
2001-2005 *IGERT Fellow*, National Science Foundation IGERT Program in Aquatic Chemical Signaling, Georgia Institute of Technology
2000-2001 *Teaching Assistant*, Georgia Institute of Technology
1998-2000 *Biological Technician*, National Oceanic and Atmospheric Administration
1995-1998 *Research Assistant/Fellow*, College of William and Mary/Virginia Institute of Marine Science
1993-1995 *Environmental Scientist*, Apex Environmental, Inc.

PUBLICATIONS

38. Lemoine NP, DE Burkepile, **JD Parker** (in press) Quantifying differences between native and introduced species. **Trends in Ecology and Evolution**
37. Verheyen k, M Vanhellemont, H Auge, L Baeten, C Baraloto, N Barsoum, S Bilodeau-Gauthier, H Bruelheide, B Castagneyrol, D Godbold, J Haase, A Hector, H Jactel, J Koricheva, M Loreau, S Mereu, C Messier, B Muys, P Nolet, A Paquette, **JD Parker**, M Perring, Q Ponette, C Potvin, P Reich, A Smith, M Weih, M Scherer-Lorenzen (2016) Contributions of a global network of tree diversity experiments to sustainable forest plantations. **Ambio** 45:29-41
36. Pei N, DL Erickson, B Chen, X Ge, X Mi, NG Swenson, J Zhang, FA Jones, C Huang, W Ye, Z Hao, C Hsieh, S Lum, NA Bourg, **JD Parker**, JK Zimmerman, WJ McShea, IC Lopez, I Sun, SJ Davies, K Ma, WJ Kress (2015) Closely-related taxa influence woody species discrimination via DNA barcoding: evidence from global forest dynamics plots. **Scientific Reports** 5:15127
35. Lemoine NP, JN Capdevielle, **JD Parker** (2015) Effects of in situ climate warming on monarch caterpillar (*Danaus plexippus*) development. **PeerJ**, e1293

34. Lemoine NP, J Shue, B Verraco, D Erickson, WJ Kress, **JD Parker** (2015) Phylogenetic relatedness and leaf functional traits, not introduced status, influence community assembly. **Ecology** **96:2605-2612**
33. Cook-Patton SC, Lehmann M, **JD Parker** (2015) Convergence of three mangrove species towards freeze-tolerant phenotypes at an expanding range edge. **Functional Ecology** **10:1332-1340**
32. Cavanaugh KC, JR Kellner, Cook-Patton SC, I Feller, A Williams, **JD Parker** (2015) Integrating physiological threshold experiments with climate modeling to project mangrove species' range limits. **Global Change Biology** **21:1928-1938**
31. Erickson DL, FA Jones, NG Swenson, N Pei, NA Bourg, W Chen, SJ Davies, X Ge, Z Hao, C Huang, RW Howe, SKY Lum, J Lutz, K Ma, X Mi, M Meegaskumbura, **JD Parker**, IF Sun, SJ Wright, AT Wolf, D Xing, JK Zimmerman, WJ Kress (2014) Comparative evolutionary diversity and phylogenetic structure across multiple forest dynamics plots: a mega-phylogeny approach. **Frontiers in Genetics** **5:358**
30. Cook-Patton SC, L Maynard, NP Lemoine, J Shue, **JD Parker** (2014) Cascading effects of a highly-specialized beech-aphid-fungus interaction on forest regeneration. **PeerJ** **2:e442**, <http://dx.doi.org/10.7717/peerj.442>
29. Lemoine NP, DE Burkepille, **JD Parker** (2014) Variable effects of temperature on insect herbivory. **PeerJ** **2:e376**, <http://dx.doi.org/10.7717/peerj.376>
28. Cook-Patton SC, D Weller, TC Rick, **JD Parker** (2014) Ancient experiments: forest biodiversity enhanced by Native American nutrient amendments. **Landscape Ecology** **29:979-987**
27. Cook-Patton SC, M LaForgia, **JD Parker** (2014) Positive interactions between herbivores and plant diversity shape forest regeneration. **Proceedings of the Royal Society of London B** **281:20140261**
26. Cavanaugh KC, JR Kellner, AJ Forde, DS Gruner, **JD Parker**, W Rodriguez, IC Feller (2014) Reply to Giri and Long: Freeze-mediated expansion of mangroves does not depend on whether expansion is emergence or reemergence. **Proceedings of the National Academy of Sciences**, doi/10.1073/pnas.1401809111
25. DiTommaso A, SH Morris, **JD Parker**, CL Cone, AA Agrawal (2014) Deer browsing delays succession by altering aboveground vegetation and belowground seed banks. **PlosOne** **9(3)**, e91155, doi:10.1371/journal.pone.0091155
24. Williams A, S Eastman, W Eash-Loucks, M Kimball, M Lehmann, **JD Parker** (2014) Record northernmost endemic mangroves of the United States Atlantic coast with a note on latitudinal migration. **Southeastern Naturalist** **13:56-63**
23. Cavanaugh KC, JR Kellner, AJ Forde, DS Gruner, **JD Parker**, W Rodriguez, IC Feller (2014) Poleward expansion of mangroves is a threshold response to decreased frequency of extreme cold events. **Proceedings of the National Academy of Sciences** **111:723-727**, DOI: 10.1073/pnas.1315800111
22. Colautti RI, **JD Parker**, MW Cadotte, P Pyšek, CS Brown, DF Sax, DM Richardson. (2014) Quantifying the invasiveness of species. **NeoBiota** **21:7-27**.
[Recommended by Faculty of 1000 Prime, <http://f1000.com/prime/718547663>]
21. **Parker JD**, ME Torchin, RA Hufbauer, NP Lemoine, C Alba, DM Blumenthal, O Bossdorf, J Byers, AM Dunn, RW Heckman, M Hejda, V Jarošik, A Kanarek, M Martin, S Perkins, P Pyšek, K Schierenbeck, C Schloeder, R van Klinken, K Vaughn, W Williams, L Wolfe. (2013). Do invasive species perform better in their new ranges? **Ecology** **94:984-994**

[Recommended by Faculty of 1000, <http://f1000.com/prime/718046893>]

20. Lemoine NP, W Drews, DE Burkepille, **JD Parker** (2013) Increased temperature alters feeding behavior of a generalist herbivore. **Oikos** 122:1669-1678, DOI: 10.1111/j.1600-0706.2013.00457.x
19. Lind EM, EP Myron, J Giaccai, **JD Parker** (2012) White-tailed deer alter specialist and generalist insect herbivory through plant traits. **Environmental Entomology** 41:1409-1416. DOI: 10.1603/EN12094
18. **Parker JD**, JP Salminen, AA Agrawal (2012) Evolutionary potential of root chemical defense: genetic correlations with shoot chemistry and plant growth. **Journal of Chemical Ecology** 38:992-995. DOI: 10.1007/s10886-012-0163-1
17. **Parker JD**, DE Burkepille, MJ Lajeunesse, EM Lind (2012) Phylogenetic isolation increases plant success despite increasing susceptibility to generalist herbivores. **Diversity and Distributions** 18:1-9. DOI: 10.1111/j.1472-4642.2011.00806.x
16. Karonen M, **JD Parker**, AA Agrawal, J-P Salminen (2010) First evidence of hexameric and heptameric ellagitannins in plants detected by liquid chromatography/electrospray ionization mass spectrometry. **Rapid Communications in Mass Spectrometry** 24: 3151-3156
15. **Parker JD**, LJ Richie, EM Lind, KO Maloney (2010) Land use history alters the relationship between native and exotic plants: the rich don't always get richer. **Biological Invasions** 12:1557-1571, DOI 10.1007/s10530-009-9568-3
14. **Parker JD** (2010) Ecology for Martians, a review of "Laws, theories, and patterns in ecology". **Quarterly Review of Biology** 85:490-491
13. Lind EM, **JD Parker** (2010) Novel weapons testing: Are invasive plants more chemically defended than native plants? **PLoS ONE** 5(5): e10429.doi:10.1371/journal.pone.0010429
12. **Parker JD**, JP Salminen, AA Agrawal (2010) Herbivory enhances the positive effects of plant genotypic diversity. **Ecology Letters** 13:553-563. doi: 10.1111/j.1461-0248.2010.01452.x
11. **Parker JD**, JP Montoya, ME Hay. (2008) A specialist detritivore links *Spartina alterniflora* to salt marsh food webs. **Marine Ecology Progress Series** 364:87-95
10. **Parker JD**, DE Burkepille, D Collins, J Kubanek, ME Hay. (2007) Stream mosses as chemically defended refugia for freshwater macroinvertebrates. **Oikos** 116:302-312
9. **Parker JD**, CC Caudill, ME Hay. (2007) Beaver herbivory on aquatic plants. **Oecologia** 151:616-625
8. DE Burkepille, **JD Parker**, CB Woodson, HJ Mills, J Kubanek, PA Sobecky, and ME Hay. (2006) Chemically-mediated competition between microbes and animals: microbes as consumers in food webs. **Ecology** 87:2821-2831
7. **Parker JD**, DE Burkepille, ME Hay. (2006) Response to Comment on "Opposing effects of native and exotic herbivores on plant invasions". **Science** 313:298b
6. **Parker JD**, DE Burkepille, ME Hay. (2006) Opposing effects of native and exotic herbivores on plant invasions. **Science** 311:1459-1461
[rated "Exceptional: A landmark paper representing the top 1% of publications" by Faculty of 1000, <http://f1000biology.com/article/id/1033239/evaluation>]
5. **Parker JD**, D Collins, J Kubanek, C Sullards, D Bostwick, ME Hay. (2006) Chemical defense promotes persistence of the aquatic plant *Micranthemum umbrosum*. **Journal of Chemical Ecology** 32:815-833
4. **Parker JD**, ME Hay. 2005. Biotic resistance to plant invasions? Native herbivores prefer non-native plants. **Ecology Letters** 8:959-967

3. Hay ME, **JD Parker**, DE Burkepile, CC Caudill, AE Wilson, ZP Hallinan, AD Chequer. 2004. Mutualisms and aquatic community structure: the enemy of my enemy is my friend. **Annual Review of Ecology, Evolution, and Systematics** 35:175-197
2. **Parker JD**, JE Duffy, RJ Orth. 2001. Plant species diversity and composition: experimental effects on marine epifaunal assemblages. **Marine Ecology Progress Series** 224:55-67
1. Duffy JE, KS Macdonald, JM Rhode, **JD Parker**. 2001. Grazer diversity, functional redundancy, and productivity in seagrass beds: an experimental test. **Ecology** 82:2417-2434

GRANTS/AWARDS

Submitted: 58 grant applications totaling \$18.7m

Awarded: 23 totaling \$4.08m

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| 2014 | Smithsonian Institution: The chemical composition of forest tree communities, Level 2 Grand Challenge Grant (\$100,000, co-PI) |
| 2013 | Smithsonian Institution: The chemical composition of forest tree communities, Level 1 Grand Challenge Grant (\$20,000, co-PI) |
| 2013 | Smithsonian Institution: BiodiversiTREE @ the Smithsonian, Level 2 Grand Challenge Grant Supplement (\$16,000, PI) |
| 2013 | Smithsonian Institution: BiodiversiTREE @ the Smithsonian, Level 2 Grand Challenge Grant (\$100,000, PI) |
| 2012 | NSF REU Supplement: Mangroves and coastal ecosystems (\$16,000, PI) |
| 2012 | Georgetown University: Testing for ecological impacts on intraspecific variation in tulip poplar in a forest regeneration experiment (\$15,000, co-PI) |
| 2012 | USDA: Measuring and modeling the impacts of tribal and conventional forestry strategies in the face of global change (\$200,000, co-PI) |
| 2012 | Smithsonian Institution: BiodiversiTREE @ the Smithsonian, Level 1 Grand Challenge Grant (\$20,000, PI) |
| 2011 | Smithsonian Institution: IndiGEO: Long-term monitoring of cultural and biological diversity on tribal lands, Level 1 Grand Challenge Grant (\$19,621, co-PI) |
| 2011 | NSF REU Site: Global Change Ecology at the Smithsonian Environmental Research Center (\$519,735, PI) |
| 2010 | NSF Macrosystems: Collaborative Research: Multi-scale drivers and effects of biotic change in the global mangrove-salt marsh ecotone (\$1,364,286, co-PI) |
| 2010 | NASA BioClim: Sensitivity of Coastal Ecosystems to Climate Change (\$1,232,213, co-PI) |
| 2009 | Smithsonian Tropical Research Institute, Center for Tropical Forest Science: Impacts of alien plant invasions and overabundant deer on forest regeneration and community dynamics in a temperate deciduous forest (\$17,250, PI) |
| 2009 | National Science Foundation: Research Experiences for Undergraduates (\$268,650, PI) |
| 2008 | Smithsonian Institution: Do vertebrate consumers (birds, bats, and lizards) limit arthropods and herbivory in mangrove forests? (\$30,700, PI) |
| 2008 | Smithsonian Institution: Will toxic exotic-plant invasions lead to food-web collapse? (\$10,000, PI) |
| 2008 | Earthwatch Institute: Separate and interactive effects of invasive plants and deer on forest health (\$18,022, PI) |

- 2005 Georgia Institute of Technology Mini-grant (\$1000, PI)
 2004 Mid-South Aquatic Plant Management Society Scholarship (\$1600, PI)
 2004 Georgia Institute of Technology Mini-grant (\$1000, PI)
 2003 National Park Service: An Inventory of Aquatic Plants in the Chattahoochee River National Recreation Area, Georgia, USA (\$10,000, PI)
 2001-05 National Science Foundation, Integrative Graduate Education and Research Traineeship (IGERT) (\$69,000)
 2000-04 Harry and Linda Teasley Fellowship in Chemical Ecology, Georgia Institute of Technology (\$45,000)
 1997 Research Mini-grant (\$400, PI), Virginia Institute of Marine Science
 1996-98 Fellowship for Academic Excellence, College of William and Mary/Virginia Institute of Marine Science (\$25,000)
 1993 Dean's List, University of Virginia

SYNERGISTIC ACTIVITIES

Group Leader and Participant: “TreeDivNet”: international network of tree diversity experiments; and “Global Invasive Species Network”: an international NSF Research Coordination Network synthesizing data on the ecology and evolution of invasive species

Citizen Science: Mentored over 200 participants for ‘BiodiversiTREE’, the only large-scale, tree diversity-ecosystem function experiment in North America; and over 200 participants in Earthwatch Institute/HSBC, Inc. study of forest response to global change

Symposium and Meeting Organizer:

-2013 Coastal and Estuarine Research Federation: “Mangrove expansion into salt marsh habitats: Causes and consequences”

-2007 Ecological Society of America Symposium: “The Yin and Yang of ecology: understanding the combined influences of positive and negative interactions for the function and restoration of ecological communities”

-2004 Inaugural Southeastern Ecology & Evolution Conference

Peer Review, Publications: >100 reviewed publications for >30 journals, including *Science*, *Nature*, *Proceedings of the National Academy of Sciences*, *Trends in Ecology and Evolution*, *Frontiers in Ecology and the Environment*, *Ecology Letters*, *Ecology*, *Ecological Monographs*, *Ecological Applications*, *Biological Invasions* (and >25 others)

Grant Panels: DOD SERDP (2013), NSF Doctoral Dissertation Improvement Grants (2010), 11 NSF ad hoc reviews (2006 to present), Smithsonian Institution (2008, 2012, 2013, 2014, 2015)

Mentoring, Undergraduate: Lead PI for SERC’s NSF-REU Program (2008-present); 29 interns specifically under my guidance: Marcelle Barreto†*, Jake Bodart, Elizabeth Bosak†, Taylor Bronikowski, Lauren Bronikowski, Jillian Capdevielle*, Caitlyn Cecil, Christine Cochrane, Joshua Culberson, Willem Drews†, Dejeanne Doublet†, Emily DuBois, Kiel Edson†, Drew Hoover, Free Kashon, Lisa Koetke, Marina LaForgia†, Christian Latimer†*, Lauren Maynard*; Chelsea McGlynn, Jeff Miguel†*, Emily Myron†, Megan Palmer, Lauren Richie†, Nancy Shipley, Graham Sivak, Alex Smith†, Lauren Stefaniak†, Brittany Verrico†, Daniel Weller†, Damon Yeh*†

† students accepted to graduate school, * minority students

INVITED SEMINARS, CONFERENCE PRESENTATIONS, & WORKSHOPS

- 2016 Workshop: TreeDivNet, Uppsala, Sweden
- 2016 Seminar: Penn State University (by invitation of graduate students in Department of Ecosystem Science and Management curriculum)
- 2015 Conference: “Ignite” talk, Coastal and Estuarine Research Federation, Portland, OR
- 2015 Conference: Coastal and Estuarine Research Federation, Portland, OR
- 2015 Workshop: Virginia Working Landscapes, Front Royal, VA
- 2015 Workshop: Federal Agency Networking Session, Ecological Society of America Meeting, Baltimore, MD
- 2015 Workshop, WildTeam, Dhaka, Bangladesh
- 2015 Workshop, Khulna University, Khulna, Bangladesh
- 2015 Workshop, Forest Service, Khulna, Bangladesh
- 2015 Workshop, Dhaka University, Dhaka, Bangladesh
- 2015 Conference: Guana Tolomato Matanzas Research Reserve, St. Augustine, FL
- 2014 Conference: Natural Areas Conference, Dayton, OH
- 2014 Workshop: sDiv, “Using Tree Diversity as an Insurance for the Stable Functioning of Forest Ecosystems”, iDiv, Leipzig, Germany
- 2014 Seminar: Florida International University-Modesto A. Maidique Campus (by invitation of graduate students in Biology curriculum)
- 2014 Seminar: Florida International University-Biscayne Bay Campus (by invitation of graduate students in Biology curriculum)
- 2014 Seminar: University of North Carolina Chapel Hill (by invitation of graduate students in Ecology curriculum)
- 2013 Conference: Smithsonian Institution (Grand Challenge Award Recipients)
- 2013 Seminar: Secretary of Smithsonian and SERC PI’s
- 2013 Conference: Coastal and Estuarine Research Federation, San Diego, CA
- 2013 Conference: Ecological Society of America, Minneapolis, MN
- 2012 Seminar: Smithsonian Environmental Research Center, Evening Lecture Series
- 2012 Seminar: Smithsonian Environmental Research Center (Marine Invasions Workshop)
- 2012 Conference: NASA BIOCLIM PI meeting, Seattle, WA
- 2012 Seminar: Smithsonian Marine Science Station, Fort Pierce, FL
- 2012 Conference & Workshop: Global Invasive Species Research Coordination Network, Spain
- 2011 Seminar: Earthwatch, Inc. Board of Advisors, Boston, MS
- 2011 Conference & Workshop: HSBC Climate Partnership Research Meeting, Smithsonian Tropical Research Institute, Panama
- 2011 Seminar: Smithsonian Environmental Research Center (visiting group from 4th National Conference on Ecological Restoration)
- 2011 Conference: Ecological Society of America, Austin, TX
- 2010 Conference & Workshop: Global Invasive Species Research Coordination Network, Panama
- 2010 Conference & Workshop: Taking Stock: HSBC Climate Partnership Research Meeting, Smithsonian Tropical Research Institute, Panama
- 2010 Two workshops: SERC/Georgetown University Collaborative Meetings
- 2009 Seminar: Georgetown University
- 2009 Seminar: University of Maryland, Maryland
- 2009 Conference: Ecological Society of America, Albuquerque, NM

- 2009 Conference & Workshop: Ecological Society of America – Are invasive species different? Albuquerque, NM
- 2008 Seminar: Smithsonian Environmental Research Center, Evening Lecture Series
- 2008 Seminar: George Washington University, Washington DC
- 2008 Seminar: National Museum of Natural History, Washington DC
- 2008 Seminar: Smithsonian Tropical Research Institute, Panama
- 2008 Seminar: Barro Colorado Island, Panama
- 2008 Seminar: Umeå University, Umeå, Sweden
- 2008 Workshop: National Ecological Observatory Network (NEON) Meeting, Front Royal, VA
- 2008 Workshop: Marine Science Network (MSN): Latitudinal gradients of invasive species in marine and terrestrial systems, Edgewater, MD
- 2008 Workshop: Global Invasive Species Research Coordination Network, Prague, Czech Republic
- 2007 Conference: Ecological Society of America Symposium - Beyond single mechanisms: the relative and interactive importance of bottom-up and top-down processes in plant invasion, San Jose, CA
- 2007 Seminar: Smithsonian Environmental Research Center
- 2007 Seminar: University of California Irvine
- 2007 Workshop: Smithsonian Institution Global Earth Observatory (SIGEO): Monitoring vertebrate-ecosystem interactions, Front Royal, VA
- 2006 Conference & Workshop: Cornell University Invasive Species Symposium
- 2006 Seminar: Cornell University
- 2006 Seminar: Smithsonian Environmental Research Center
- 2006 Seminar: Texas Tech University
- 2006 Seminar: University of Rhode Island
- 2005 Conference: Ecological Society of America, Montréal, Canada
- 2005 Conference: Georgia Institute of Technology Biology Symposium
- 2004 Conference: Ecological Society of America, Portland, Oregon
- 2004 Seminar: Yale University
- 2004 Conference: Georgia Institute of Technology Biology Symposium
- 2004 Conference: 23rd Mid-South Aquatic Plant Management Society Meeting, Mobile, AL
- 2004 Conference: Southeastern Ecology and Evolution Conference, Atlanta, GA
- 2003 Conference: Georgia Institute of Technology Biology Symposium
- 2002 Conference: 7th International Conference on the Ecology and Management of Alien Plant Invasions
- 2002 Conference: Marine Benthic Ecology Meeting, Orlando, FL
- 2002 Conference: Georgia Institute of Technology Biology Symposium
- 2001 Conference: Georgia Institute of Technology Biology Symposium
- 1999 Seminar: NOAA National Ocean Service, Beaufort, NC
- 1998 Seminar: College of William and Mary/Virginia Institute of Marine Science (1998)
- 1998 Conference: Marine Benthic Ecology Meeting, Melbourne, FL

HOME INSTITUTION SERVICE

- 2012-present Lead PI, BiodiversiTREE (large-scale, long-term tree diversity-ecosystem function experiment)

- 2011-2015 co-PI, IndiGEO (initiative to form collaborations between western science and practitioners of traditional ecological knowledge)
- 2008-present Lead PI, NSF REU program at SERC
- 2008-present Fellowship Review Committee: Smithsonian Institution
- 2008-present Web Committee: Smithsonian Environmental Research Center
- 2008-present Land Use Committee: Smithsonian Environmental Research Center
- 2007-present Institutional Animal Care and Use Committee: Smithsonian Environmental Research Center
- 2005 Chairperson: IGERT Seminar Series in Chemical Ecology, Georgia Institute of Technology
- 2004 Student representative: job search committee, Georgia Institute of Technology School of Biology

SCIENCE COMMUNITY SERVICE

- 2013 Symposium co-organizer and session moderator: *Coastal and Estuarine Research Federation Meeting*, San Diego, CA
- 2008 Dissertation opponent: Johan Stenberg, Umeå University, Umeå, Sweden
- 2007 Symposium co-organizer: *Ecological Society of America Meeting*, San Jose, CA
- 2007 Session moderator: *Ecological Society of America Meeting*, San Jose, CA
- 2004 Conference co-organizer: *Inaugural Southeastern Ecology & Evolution Conference*, Atlanta, GA
- 2004 Session moderator: *Southeastern Ecology & Evolution Conference*, Atlanta, GA
- 2002 Session moderator: *Marine Benthic Ecology Meeting*, Orlando, FL

PUBLIC OUTREACH

- 2014 Presentation on BiodiversiTREE for Anne Arundel County Lions Club
- 2013 Various media interviews for BiodiversiTREE project, including National Public Radio, Voice of America, Chesapeake Quarterly, Smithsonian Institution, etc.
- 2013 Mentored over 130 Citizen Scientists for planting of BiodiversiTREE, including numerous research presentations
- 2012 Evening Lecture on Deer-Plant Interactions, Smithsonian Environmental Research Center
- 2012 Presentations for Smithsonian “Ecosystems on the Edge” educational film series
- 2011 Hosted tribal leaders from Menominee Nation as part of IndiGEO project (several visits)
- 2011 Research overview for Austrian invasion biologists
- 2011 Hosted scientists from Jug Bay Wildlife Refuge
- 2011 Hosted several K-12 students as part of invasive species outreach
- 2011 Research overview for Anne Arundel County Economic Council
- 2011 Tour for SERC Board of Advisors
- 2011 Two separate tours of Tudor Farm with SERC board member
- 2011 Television interview for Key High School seniors about “Being a Scientist”
- 2011 Conducted six 30-minute lectures and fossil demonstrations for local elementary school
- 2010 Visited College of Menominee and Menominee Nation in Wisconsin as part of IndiGEO project (numerous visits)

2009-11 Mentored over 200 Citizen Scientists from Earthwatch Institute/HSBC, Inc., including numerous research presentations

2008-present Multiple presentations at Annual SERC Open House

2009 Tour and research overview for Russian scientists

2009 Evening Lecture on Cascading Trophic Degradation, Smithsonian Environmental Research Center

2009 Tour for University of Virginia undergraduates (25 students)

2009 Tour for SERC Board of Visitors

2009 Research Expedition for Earthwatch International Board of Visitors

2008 Evening Lecture on Invasive Species, Smithsonian Environmental Research Center

2008 Tour for Thomas Jefferson High School Science and Technology (16 students)

2007 Tour for Thomas Jefferson High School Science and Technology (15 students)

2007 Lecture for SERC docents

TRAINING (*co-author on a publication, †minorities)

Name	Role	Year	Where they are now
Emily Myron*	Intern	2008	Project Coordinator at Chesapeake Conservancy
Lauren Richie*	Intern	2008	Director, California Wolf Recovery at California Wolf Center
Christian Latimer†	Intern	2008	Doctor of Veterinary Medicine
Christine Cochran	Intern	2009	Undergraduate, Wildlife and Conservation Biology at <i>Warren Wilson College</i>
Damon Yeh†	Intern	2009	Intern, The Wildlife Society
Marcelle Muñiz†	Intern	2009	Master of Science graduate student, Marine Biodiversity and Conservation candidate at <i>Ghent University</i> (Belgium)
Daniel Weller*	Intern	2010	Ph.D. graduate student, Epidemiology of Food Borne Disease, <i>Ithaca College</i>
Graham Sivak	Intern	2010	Biological Technician, US Forest Service
Chelsea McGlynn	Intern	2011	Study Support Specialist, Charles River Laboratories
Jeffrey Miguel	Intern	2011	Ph.D. graduate student, <i>University of Iowa</i>
Kiel Edson	Intern	2011	Master's student, Conservation and Public Policy, <i>University of Maryland</i>
Marina LaForgia*	Intern	2011	Ph.D. graduate student, Plant Ecology, <i>UC Davis</i>
Brittany Verrico*	Intern	2012	Master's graduate student, Ecological Genomics, University of Vermont
Jake Bodart	Intern	2012	Biological Technician, <i>University of Maryland</i>
Nancy Shipley	Intern	2012	Undergraduate, <i>Indian River State College</i>
Willem Drews*	Intern	2012	The Workforce
Andrew Hoover	Intern	2013	Undergraduate, <i>Montana State University</i>
Caitlyn Cecil	Intern	2013	Undergraduate, <i>University of Maryland Eastern Shore</i> , US Army Reserve
Emily DuBois	Intern	2013	Energy Efficiency Specialist Opower Washington DC

Lauren Maynard†*	Intern	2013	Biological Technician, State of North Carolina
Micah Miles†	Intern	2013	Undergraduate, <i>University of Maryland</i>
Eric Lind*	Postdoctoral Fellow	2008-2010	Postdoctoral Associate and Coordinator of the Nutrient Network, <i>University of Minnesota</i>
Alex Forde*	Graduate student	2010	Ph.D. graduate student, Behavior, Ecology, Evolution, and Systematics at <i>University of Maryland</i>
Jessica Shue*	Technician	2011-present	Technician for Forest Ecology, Quantitative Ecology, and Terrestrial Ecology Laboratories
Nate Lemoine*	Graduate student	2012-present	Postdoctoral Fellow, Colorado State University
Mike Lehmann*	Technician	2012-2014	The workforce
Susan Cook-Patton*	Postdoctoral Fellow	2013-2014	AAAS Fellow at US Fish & Wildlife

Interns trained prior to Smithsonian appointment

2007	Alex Smith, Cornell University
2006	Brandon White, Cornell University
2004	Lauren Stefaniak, Georgia Institute of Technology
2003	Lauren Bronikowski, Georgia Institute of Technology
2002	Taylor Bronikowski, Georgia Institute of Technology
2001	Elizabeth Bosak, Penn State University
2000	Erica Kinard, Georgia Institute of Technology

Teaching Assistantships and Classroom Lectures

2010	Lectures (2): Invasion Biology, University of Maryland (graduates)
2005	Lecture: Chemical Ecology, Georgia Institute of Technology (graduates)
2004	Lecture: Aquatic Ecology, Georgia Institute of Technology (graduates)
2001-02	Teaching Assistant: Organismal Biology, Georgia Institute of Technology (undergraduates)

Graduate Advisors: J. Emmett Duffy & Robert J. Orth (College of William and Mary/Virginia Institute of Marine Science), Mark E. Hay (Georgia Institute of Technology)

Postdoctoral Advisor: Anurag Agrawal (Cornell University)

Postdocs Advised: Eric Lind (currently at University of Minnesota), Susan Cook-Patton (Smithsonian Institution)

Graduate Student Committees: Alex Forde (University Maryland), Clare Fieseler (University of North Carolina Chapel Hill), Ricardo Gutierrez (Georgetown University), Nathan Lemoine (Florida International University), Amy Norris (University of Maryland)

MEDIA COVERAGE

General Coverage

Multiple interviews for BiodiversiTREE project,

- Voice of America, <http://www.voanews.com/media/photogallery/biodiversitree-project-in-maryland-smithsonian/1778591.html>
- WYPR 88.1 FM radio <http://www.wypr.org/stationprogram/environment-focus-tom-pelton-2>
- Chesapeake Quarterly, <http://www.chesapeakequarterly.net/V12N2/online1/>
- Smithsonian Institution <http://smithsonianscience.org/2013/04/smithsonian-scientists-launch-100-year-project-to-examine-the-future-of-forests/>

Interview on invasive species research: Bay Journal, 2010

<http://www.bayjournal.com/article.cfm?article=3882>

Promotional video on Citizen Science and forest research produced by the Smithsonian

Institution, 2010, <http://www.youtube.com/watch?v=w4ea977cO94>

Article-Specific Coverage

Cook-Patton SC, M LaForgia, **JD Parker** (in press) Consumer-dependency of diversity effects in tree seedling communities. **Proceedings of the Royal Society of London B**

-Web article in Wired.com, <http://www.wired.com/2014/04/deer-biodiversity/>

Cavanaugh KC, JR Kellner, AJ Forde, DS Gruner, **JD Parker**, W Rodriguez, IC Feller (2014) Poleward expansion of mangroves is a threshold response to decreased frequency of extreme cold events. **Proceedings of the National Academy of Sciences**, DOI:

10.1073/pnas.1315800111

-Subject of numerous articles, most notably the New York Times,

http://www.nytimes.com/2013/12/31/science/without-winter-freezes-mangroves-are-marching-north-scientists-say.html?_r=0

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- Featured on *National Public Radio* in “Science Out of the Box” by John Nielson (Sept 2007)

- Subject of “Research Highlights: Journal Club” in *Nature* (Apr 2007)

- Subject of an article in *ScienceDaily* (Microbes compete with animals for food by making it stink, 11/10/2006)
- Subject of an article in *Pittsburgh Post-Gazette* (Wildlife: Decomposers nature's garbage man, 11/12/2006)
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- Reviewed by *Faculty of 1000*, rated "Exceptional: A landmark paper representing the top 1% of publications", <http://f1000biology.com/article/id/1033239/evaluation>
- Subject of an article in the *Baltimore Sun* (Invasive plants get help from enemies, 3/10/06)
- Subject of an article in the *St. Louis Post-Dispatch* (Mar 2006)
- Subject of an article in *Conservation in Practice* (Exotic herbivores promote plant invasions, Sept 2006)
- Featured on *Earthwatch Radio* in a segment by Adam Hinterthuer (Dec 2006)