



CURRENT RESEARCH INTERESTS

Regeneration dynamics of tropical forests, plant-animal interactions, effects of hunting-induced defaunation on forest plant communities, DNA barcoding and phylogenetic analyses, demographic modeling, interdisciplinary strategies for maintaining ecological integrity of tropical forests.

APPOINTMENTS

2012- : Research Fellow, San Diego Zoo Institute for Conservation Research, Escondido, CA.
2013-16: Research Associate, Nicholas School of the Environment, Duke University, Durham NC, USA.
2012-13: Charles Bullard Fellow in Forest Research, Harvard University, Cambridge, MA, USA.
2008-12: Postdoctoral Associate, Nicholas School of the Environment, Duke University, Durham NC, USA.

EDUCATION

2008. Ph.D. Nicholas School of the Environment, Duke University, Durham NC, USA.
Dissertation: "Fruit to sapling: an ontogenetically integrated study of tree recruitment in an Amazonian rainforest". Committee: John Terborgh, Norman Christensen, Gary Hartshorn, Dean Urban.

2001. B.A. Environmental Studies, *magna cum laude*, Connecticut College, New London CT, USA.

Specialized courses and workshops

2013. Likelihood Methods in Forest Ecology, Cary Institute of Ecosystem Studies, Millbrook, NY.
2004. Tropical Plant Systematics summer field course, Organization for Tropical Studies, Costa Rica.

SIGNIFICANT PUBLICATIONS

Swamy, V. 2016 (in press). Forest composition & spatial patterns across a western Amazonian river basin: the influence of plant-animal interactions. In Myster, R.W. (ed) *Forest structure, function, and dynamics in Western Amazonia*. Wiley-Blackwell, Hoboken, NJ.

Swamy, V. & Pinedo-Vasquez M. 2014. Bushmeat harvest in tropical forests: Knowledge base, gaps and research priorities. Occasional Paper 114. Center for International Forestry Research, Bogor, Indonesia.

Diaz-Martin, Z., **V. Swamy**, J. Terborgh, P. Alvarez, F. Cornejo. 2014. Identifying keystone plant resources in an Amazonian forest using a long-term fruit-fall record. *Journal of Tropical Ecology*. 30: 291-301.

Rosin, C. and **V. Swamy**. 2013. Variable density responses of primate communities to hunting pressure in a western Amazonian river basin. *Neotropical Primates* 20(1): 25-31.

Swamy, V., J. Terborgh, P. Álvarez-Loayza, F. Cornejo-Valverde, J.P. Latorre Farfan, C.I. Vela Apaza, J.J. Chillihuani. 2013. El impacto de defaunación sobre la regeneración del bosque en la cuenca del Río Madre de Dios: resultados preliminares de un estudio de largo plazo. pp 138-153 In: Groenendijk, J., Tovar, P., & Wust, W. (Eds). 2013. *Reporte Manu 2013: Pasión por la Investigación en la Amazonía Peruana*. San Diego Zoo Global Peru y SERNANP.

Swamy, V., J. Terborgh, K.G. Dexter, B.D. Best, P. Alvarez, F. Cornejo. 2011. Are all seeds equal? Spatially explicit comparisons of seed fall and sapling recruitment in a tropical forest. *Ecology Letters* 14:195-201.

Swamy, V. & J. Terborgh. 2010. Distance-responsive natural enemies strongly influence seedling establishment patterns of multiple species in an Amazonian rainforest. *Journal of Ecology* 98:1096-1107.

Terborgh, J., G. Nuñez-Ituri, N. Pitman, F.H. Cornejo Valverde, P. Alvarez, **V. Swamy**, B. Pringle, C. E.T. Paine. 2008. Tree recruitment in an empty forest. *Ecology* 89(6): 1757-68.

Warren, R. S., P. E. Fell, R. Rozsa, A. H. Brawley, A. C. Orsted, E. T. Olson, **V. Swamy**, W. A. Niering. 2002. Salt marsh restoration in Connecticut: 20 years of science and management. *Restoration Ecology* 10(3): 497-513.

Swamy, V., P.E. Fell, M. Body, M.B. Keaney, M.K. Nyaku, E.C. McIlvain, A.L. Keen. 2002. Macroinvertebrate and fish populations in a restored impounded salt marsh 21 years after the re-establishment of tidal flooding. *Environmental Management* 29(4): 516-530.

GRANTS & FELLOWSHIPS

- Conservation, Food and Health Foundation Research Grant – 2009-2016 (\$110,016 total)
- National Geographic Committee for Research and Exploration – 2013-14 (\$25,013)
- Charles Bullard Fellowship in Forest Research, Harvard University – 2012-2013.
- National Science Foundation DEB 0742830 (co-authored with Dr. John Terborgh) 2008-11. (\$400,000)
- Wildlife Conservation Society Research Fellowship Program - 2008-09. (\$20,000)
- Amazon Conservation Association (ACA) Postdoctoral Seed Grant - 2008-09. (\$10,000)
- Lewis & Clark Fund for Exploration and Field Research, American Philosophical Society - 2007. (\$2700)
- Amazon Conservation Association (ACA) Graduate Research Grant - 2005-06. (\$4765)
- Francis Bossuyt Fellowship, Organization for Tropical Studies - 2004. (\$3000)
- Duke University Graduate School Research Travel Grants - 2006, 2003-04. (\$6600 total)
- Mellon Travel Grant, Duke Center for Latin American & Caribbean Studies - 2006, 2002-04. (\$4750 total)
- Sigma Xi Grants-in-Aid of Research Award - 2006. (\$700)
- Mellon Science Foundation Grant for Undergraduate Research - 1999. (\$3000)

TEACHING AND MENTORING EXPERIENCE

Teaching:

2010, 2012. Co-Instructor, ENV 217: Tropical Ecology, Duke University.

2008. Invited Lecturer, Amazonian Ecosystems & Global Change field course, Organization for Tropical Studies, Peru.

2007. Co-Instructor, Amazonian Forest Ecology & Ethnobotany field course, Connecticut College in Peru study abroad program.

2007. Instructor, ENV 298.77: Topics in Tropical Forest Ecology & Conservation, Duke University.

2006-07. Teaching Assistant, ENV 201: Forest Resources Field Skills, Duke University (Instructor: Dr. Daniel Richter).

2002-06. Teaching Assistant, ENV 217: Tropical Ecology, Duke University (Instructor: J. Terborgh).

Mentoring:

- Duke University (2008-12): 3 Master's in Environmental Management projects
- Connecticut College (2011-12): 1 undergraduate honors thesis.
- Universidad Nacional San Antonio Abad Cusco, Peru (2011-): 3 undergraduate thesis projects.

PROFESSIONAL EXPERIENCE

- 2012-** Consultant, Center for International Forestry Research, Bogor, Indonesia.
- produced white paper on status of research on wild meat harvest in tropical forests.
 - compiled digital library and bibliographic database of existing literature.
 - created Google Fusion Tables-based maps showing geographic & thematic distribution of research.
- 2008-09.** Station manager, Cocha Cashu Biological Station (CCBS), Peru; Member, CCBS Advisory Board.
- coordinated and oversaw operational logistics and financial accounting.
 - participated in strategic planning meetings on the field station's administrative and financial future.

PRESENTATIONS AND SYMPOSIA ORGANIZATION

- 2015.** *Short- and long-term consequences of defaunation on western Amazonian floodplain forests.* Annual Meeting of the Association for Tropical Biology & Conservation (ATBC-AM), Honolulu, Hawaii.
- 2012.** *Community-level effects of vertebrate defaunation on forest composition and regeneration dynamics across a western Amazonian river basin.* ATBC-AM, Bonito, Brazil.
- 2011.** Symposium organizer: "*Regeneration dynamics in defaunated tropical forests - a pantropical survey*" ATBC-AM, Arusha, Tanzania.
- 2011.** *Intra- and inter-cohort spatial organization in western Amazonian forests confirm the predictions of the Janzen-Connell hypothesis.* ATBC-AM, Arusha, Tanzania.
- 2010.** *Tree recruitment patterns across a western Amazonian river basin.* ATBC-AM, Bali, Indonesia.
- 2010.** *A basin-wide study of seed rain patterns in lowland western Amazonia.* 5th International Symposium-Workshop on Frugivores and Seed Dispersal, Montpellier, France.
- 2008.** *Tropical tree recruitment: dispersal is critical, density is a red herring, distance is the key.* ATBC-AM, Paramaribo, Suriname.
- 2007.** *Pervasive distance effects control early-stage tree recruitment in an Amazonian rainforest.* Annual Meeting of the Ecological Society of America (ESA), San Jose, California.
- 2007.** *Community-level distance effects are pervasive through multiple stages of tree recruitment in an Amazonian rainforest.* ATBC-AM, Morelia, Mexico.
- 2005.** *From fruit to sapling: constructing an integrated picture of tropical tree recruitment.* ATBC-AM, Uberlandia, Brazil.
- 2000.** *Macroinvertebrates and fish populations in a restored impounded salt marsh 21 years after the re-establishment of tidal flooding.* New England Estuarine Research Society (NEERS) Spring Conference, Portland, Maine.

INVITED TALKS AND SEMINARS (English)

- Department of Biology, Connecticut College, New London CT, USA. 09/2015 and 04/2010.
- Department of BioSciences, Rice University, Houston TX, USA. 04/2015.
- Department of Biology, University of Florida, Gainesville FL, USA. 11/2014.
- Committee for Exploration & Research, National Geographic Society, Washington D.C., USA. 05/2014.
- Department of Biology, Boston University, Boston MA, USA. 11/2013.
- Institute for Conservation Research, San Diego Zoo Global, San Diego CA, USA. 10/2013
- Harvard University Herbarium, Cambridge MA, USA. 04/2013.
- Harvard Forest, Petersham MA, USA. 12/2012.
- University Program in Ecology, Duke University, Durham NC, USA. 09/2010.
- Ashoka Trust for Research in Ecology & Environment, Bangalore, India. 01/2010.
- Center for Ecological Studies, Indian Institute of Sciences, Bangalore, India. 01/2010.

CURRICULUM VITAE - VARUN SWAMY, Ph.D. (updated 2016 Sep)
Web: mddforydynamics.org **E-mail:** varunswamy@gmail.com

- National Museum of Natural History, Smithsonian Institution, Washington D.C., USA. 05/2008.
- Dept. of Environmental Science, Policy & Management, University of California, Berkeley CA. 05/2006.

INVITED LECTURES & PRESENTATIONS IN OTHER LANGUAGES

- *Plenary speaker*, 3ro Simposio de Primatología en el Perú, Puerto Maldonado – 10/2015 (Spanish)
- Universidad Nacional San Antonio Abad, Cusco, Peru – 08/2008, 09/2013, 12/2014. (Spanish)
- Universidad Nacional Amazónica de Madre de Dios, Peru – 10/2014. (Spanish)
- Universidad Peruana Cayetano Heredia, Lima, Peru – 02/2011. (Spanish)
- Asociación para la investigación y Desarrollo Integral (AIDER), Peru – 02/2011. (Spanish)
- Instituto Nacional de Pesquisas da Amazônia (INPA), Manaus, Brazil. 03/2011. (Portuguese)

REVIEWER SERVICES

Biological Conservation; Biotropica; Journal of Ecology; PLoS ONE; Proceedings of the Royal Society: Biological Sciences; National Science Foundation, Division of Environmental Biology.

OTHER RESEARCH EXPERIENCE

1999-2001 *Salt Marsh Restoration, Stonington, CT, USA.*

- examined recovery of invertebrate and fish populations on formerly impounded salt marshes in CT, USA.
- received Rankin Award for Best Undergraduate Student Presentation, New England Estuarine Research Society (NEERS) Spring 2000 conference, Portland, Maine.

2000 *Center for Science and Environment, New Delhi, India.*

- conducted field interviews of farmers, administrators and agricultural scientists in Uttaranchal State, India.
- produced report on the ecological & socio-economic implications of decline in traditional agroecosystems.

LANGUAGES

English (native), Spanish (fluent in reading, writing, conversation), Portuguese (basic), Hindi & Tamil (basic).

PROFESSIONAL REFERENCES

Dr. Mercedes Foster - Research Zoologist, Smithsonian Institution, USA. E-mail: FOSTERM@si.edu

Dr. Robert Askins - Katharine Blunt Professor of Biology, Connecticut College, USA.
E-mail: raask@conncoll.edu

Dr. Jordan Karubian - Associate Professor, Department of Ecology and Evolutionary Biology, Tulane University, USA. E-mail: jk@tulane.edu

Dr. Patricia Wright – Distinguished Service Professor, Stony Brook University, USA.
Founder and Executive Director, Institute for the Conservation of Tropical Environments.
E-mail: patchapplewright@gmail.com

Dr. Ronald R. Swaisgood - Brown Chair/Director of Applied Animal Ecology, Institute for Conservation Research, San Diego Zoo Global, USA. E-mail: rswaisgood@sandiegozoo.org

Mr. Kurt Holle – Co-founder and CEO, Rainforest Expeditions, Inc., Peru.
E-mail: kholle@rainforest.com.pe