Sadie J. Ryan
Department of Geography & Emerging Pathogens Institute
University of Florida, Gainesville, FL
Email: sjryan@ufl.edu

ASSISTANT PROFESSOR OF MEDICAL GEOGRAPHY, UNIVERSITY OF FLORIDA
Department of Geography
Emerging Pathogens Institute (EPI)
Graduate Faculty, SNRE (Interdisciplinary Ecology) Program 2014-
Graduate Faculty, Center for Latin American Studies 2016-
Affiliate Faculty, Center for African Studies 2015-

HONORARY SENIOR LECTURER, UNIVERSITY OF KWAZULU-NATAL, SOUTH AFRICA
School of Life Sciences, College of Agriculture, Engineering, and Science 2012-

RESEARCH ASSISTANT PROFESSOR, SUNY Upstate Medical University
Department of Microbiology and Immunology, Center for Global Health and Translational Science 2012-

EDUCATION
PhD, University of California at Berkeley 2006
Department of Environmental Science, Policy and Management (ESPM)
Museum of Vertebrate Zoology (MVZ)

BA, Princeton University 1998
Department of Ecology and Evolutionary Biology (EEB)

PREVIOUS POSITIONS
ASSISTANT PROFESSOR, SUNY College of Environmental Science and Forestry
Department of Environmental and Forest Biology (EFB) 2011-2014
Graduate Program in Environmental Science (GPES) 2011-2014
Program Coordinator, Environmental Health, Division of Environmental Science (ESC) 2011-2014
POSTDOCTORAL VISITOR, Department of Geography, University of California Santa Barbara 2010-2011
POSTDOCTORAL FELLOW, National Center for Ecological Analysis and Synthesis (NCEAS) 2009-2011
POSTDOCTORAL FELLOW, NSF Biological Informatics, Stanford University and McGill University 2006-2009
LECTURER, Department of Anthropology, Stanford University 2008

AWARDS/FUNDING/ FELLOWSHIPS
Wellcome Trust: Our planet, our health: "Farming, food, and forecasting: developing outbreak resilience and sustainability in global agricultural systems" (Planning grant) £29,000. PI: Chris Gilligan; **Ryan, S.J.**, key collaborator
WASH (World Bank): "WASH poverty diagnostics" (Phase 1), PI: Richard Rheingans; co-PI: **Ryan, S.J.** 2016-2017
NSF EEID RAPID: "In-situ Zika-vector-climate dynamics in a high burden region in Ecuador", $199, 583.00 PI: Stewart-Ibarra, A.M, co-PI: **Ryan, S.J.**, Neira, M.V. 2016-2017
NIH EEID R01: "Spatio-temporally explicit estimation of R_0 for pathogens with environmentally-mediated transmission", $ 1,560,629.00, PI: J. Blackburn, Co-PIs: **Ryan, S.J.**, Getz, W.M., Holt, R., Ponciano, J. 2015-2019
NSF EEID: "Effects of temperature on vector-borne disease transmission: integrating theory with empirical data" $ 1,846,842, PI: E. Mordecai, Co-PIs: **Ryan, S.J.**, Johnson, L.R., Savage, V., Thomas, M. 2015-2020
NSF AOE Polar: "Quantifying how Bioenergetics and Foraging Determine Population Dynamics in Threatened Antarctic Albatrosses", $552,327, PI: Johnson, L.R. Co-PI: **Ryan, S.J.** 2014-2017
USDA McIntire-Stennis: "Assessing Use of Newly-Restored Early Successional Forest by the Imperiled New England Cottontail, Using Genetic Dispersal Analysis"**,** $52k, PI: Cohen, J., Co-PI: Whipps, C.M., **Ryan, S.J.** 2015-2017
NYSDEC: "Factors Limiting New England Cottontail Populations in New York" $860,000, PI: J. Cohen, Co-PIs: **Ryan, S.J.**, Whipps, C.M. 2013-2018
Escuela Superior Politecnica del Litoral (ESPOL): "Interactions among climate variability and the occurrence of harmful algal blooms (HABs) and their impact on human health in an estuarine-coastal gradient (Guayaquil-Santa Elena)", $100,000 (*investigator*) 2014-*present*

UF Informatics Institute Seed Fund: "Death, disease and distribution: challenging current approaches and methodologies to the study of zoonotic diseases." 2014, $36k, PI: Southworth, J., Co-PIs: Blackburn, J.K., Muñoz Carpena, R., Glass, G.G., Kiker, G., **Ryan, S.J.**, Waylen, P. 2014-2015

DOD GEIS: "Evaluating the potential use of oceanographic information and remotely sensed algal blooms to predict risk of cholera and other climate and water-sensitive diseases.", $294K/year - PI: Polhemus, M. Co-PI: **Ryan, S.J.**, Stewart-Ibarra, A., Finkelstein, J. 2014-2015

USDA McIntire-Stennis: "Modeling Super Spreading in an Emerging Emerald Ash Borer (*Agrilus planipennis*) Infestation"**,** $55,029 – PI: **Ryan, S.J.**, Co-PI: Fierke, M. 2013-2015

DOD- GEIS: "Capacity Building in Ecuador: Partnering to develop predictive models of infectious disease vulnerability." $300K/year. (*investigator*) 2013-2015

SUNY RF Conversations in the Disciplines Program: "From the lab to the landscape: Integrated Infectious Disease Research", $4,900 PI: **Ryan, S.J.**, Co-PI: Stewart, A.M., Polhemus, M. 2013

NSF CHANS-NET 2013 Fellowship Award - $1,000 2013

National Geographic: "Parks, People, and Climate Change: Assessing Household Vulnerability in Equatorial Africa" $20,000 – Co-PIs: Hartter, J., **Ryan, S.J.** 2012

INECOL/SUNY-ESF Seed Grant: "Emerging diseases and health of black howler monkeys in degraded habitat in Balancan, Tabasco, Mexico" $5,000 – PI: **Ryan, S.J.,** Co-PI: Serio-Silva, J.C. 2012

NSF-CNH-Ex: "Hotter Hotspots: Land-Use Intensification and Protected-Area Vulnerability in Africa's Albertine Rift" $249,995 – PI: Hartter, J., Co-PIs: **Ryan, S.J.**, Palace, M., Chapman, C., Diem, J. 2011-2014

NSF ECTMB travel grant - $1,000 2011

SMB (Society for Mathematical Biology) Landahl Award - $500 2011

NIMBioS short-term visitor award "Can we build Foot-and-Mouth disease (FMD) management models for the US, and would they be used?" 2011

NIMBioS short-term visitor award "Using GIS to inform spatial epidemic models" 2010

NCEAS (National Center for Ecological Analysis and Synthesis) Postdoctoral Fellowship - $135,000 2008-2011

NSF Postdoctoral Research Fellowship in Biological Informatics - $120,000 2006-2008

EPA STAR (Science to Achieve Results) Fellowship - $98,772 2004-2007

FLAS (Foreign Language and Area Studies) Fellowship (x2) - $38,169 2002-2004

COURSES TAUGHT:

University of Florida

GEOG 3454: Peoples and Plagues, 3hrs, Spring 2015-

SUNY-ESF

EFB 496/796: Emerging Infectious Diseases, 3 cr, Fall 2011-2014

EFB 360: Introduction to Epidemiology, 3 cr, Spring 2011-2014

EFB 496/796: Parameter Estimation and Modeling in Population Biology Studies, 3 cr, Spring *(odd yrs)* 2011-2014

EFB 497: Conservation in Ecuador, 1 cr, Spring 2011-2014

EFB 497/797: Emerging Diseases of Humans and Wildlife Seminar, 1 cr, Spring *(alternate yrs)* 2011-2014

EFB 797: Vertebrate Conservation Conversation Seminar, 1 cr, Fall, Spring *(as needed)* 2011

EFB 797: Adaptive Peaks Seminar, Fall, Spring 2011, 2012

Stanford University

ANSCI 178/278: Past and Present Pestilence: an interdisciplinary examination of zoonotic diseases 2008

UC Berkeley

ESPM 298: Foundations of Ecology, Seminar co-facilitator 2003

ESPM 114: Wildlife Ecology, Graduate Student Instructor, Lecturer 2003, 2006

ESPM 104: Modeling and Management of Biological Resources, Reader, Instructor 2004, 2005

Workshops/Institutes (Instructor)

Quantitative Landscape Ecology and Environmental Science (QLEES), DIMACS/MBI, UKZN 2012

Institute and workshop on Conservation Biology, DIMACS/MBI, S. Africa, Kenya 2010, 2011

Workshop: Introduction to GIS for Habitat Analysis and Home Range Estimation. SCB/SCGIS 2006

ADVISING

POSTDOCTORAL

Phillip Boersch-Supan, PhD, (co-mentor with L. Johnson), Department of Integrative Biology, USF 2014-2017
"Quantifying how Bioenergetics and Foraging Determine Population Dynamics in Threatened Antarctic Albatrosses"

GRADUATE

Catherine Lippi, PhD track, Geography, UF; Nick Dowhaniuk, PhD track, Geography, UF; Tess Youker, MSc track, SUNY ESF; Emily Gavard, MSc track, SUNY ESF

Committee:

Lili Morris, PhD track, Geography, UF; Audrey Smith, MS track, Geography, UF; Dawn Nekorchuk, PhD track, Geography, UF; Ian Kraclik, Geography, UF; Stephanie Cinkovich, PhD track, Biology, UF; Amanda Cheeseman, PhD track, SUNY ESF; Nicholas Dowhaniuk, MS track, Geography, UNH

UNDERGRADUATE

Tyler James, BSc Psychology, Geography minor, U Florida, UF Scholar

COMPLETED

Rebecca Fuda, MSc, 2015. *"A park under pressure: human disturbance and its impact in Murchison Falls Conservation Area, Uganda" MS Thesis, Fish and Wildlife Biology and Management, SUNY ESF, Syracuse, NY*

Andrea Thomen, MSc, 2014. *"Evaluating avian assemblages in Dominican cacao farms: implications for management and conservation" MS Thesis, Conservation Biology, SUNY ESF, Syracuse, NY*

Luis Escobar, DVM (PhD), Postdoc, 2014-2015. *"Evaluating the potential use of oceanographic information and remotely sensed algal blooms to predict risk of cholera and other climate and water-sensitive diseases." Center for Global Health and Translational Science (CGHATS), SUNY Upstate*

Lindsay Scales, MPS, 2014. *Conservation Biology, SUNY ESF, Syracuse, NY*

COMMITTEE/ EXAMINER

Sarah Wilkinson, MS, 2013. *"Dynamics of Un-hunted White-tailed Deer at Eastern National Park Service Sites", MS Thesis, SUNY ESF, Syracuse, NY*

Anna Stewart-Ibarra, PhD, 2012. *"A Social-Ecological Analysis of Vulnerability to Dengue Fever in Southern Coastal Ecuador", Doctoral Dissertation. SUNY ESF, Syracuse, NY*

Frank Sylvester, MS/JD, 2013. *"The Continuing Problem of the Non-Consenting Owner: How States Balance Natural Resource Development and Landowner Rights", MS Thesis, SUNY ESF, Syracuse, NY.*

Emily Byrne, MS, 2012. *The Role of Politics in the Allocation of Funds from the American Recovery and Reinvestment Act for Renewable Energy." MS Thesis, SUNY ESF, Syracuse, NY.*

Scott Warsen, MS, 2012. *"Coyotes in the Central Adirondack Mountains of New York State: Evolving Dietary Niche and Interspecific Competition" MS Thesis, SUNY ESF, Syracuse, NY.*

UNDERGRADUATE (RESEARCH PROJECTS)

Rachel Brubaker, SUNY-ESF, 2014. *Cacao Project research: a meta-analysis of avian conservation – tropical agroforestry perceptions and conflicts.*

Logan Osterhoud, SUNY-ESF, 2014. *Ranavirus Project research: field based data collection at vernal pools, and sample preparation for genetic analyses*

Katie Luukkonen**,** SUNY-ESF, 2013. *Researching published studies of parasites of cottontail rabbits in the continental US, to establish lab ID protocols, optimal fecal sample preparation and parasite recovery*

Heather Holmes**,** SUNY-ESF, 2013. *2013: Conducting phlebotomy based research in conjunction with Dengue vaccine trials; 2012: Investigating the potential for horticultural therapy in Syracuse*

Dennis Chan, Honors Program, SUNY-ESF, 2012. *Investigating ecological correlates in colobine monkey evolution*

Tom Ryan, SUNY-ESF, 2012. *Collecting and collating data for phylogenetic construction; phylogenetic methods*

Sadie J. Ryan

SYNERGISTIC ACTIVITIES

Working Groups (participant)

NCEAS/LUCE Foundation: "Malaria and Climate Change" 2011-
DHS/Fogarty: Research and Policy for Infectious Disease Dynamics (RAPIDD) "Foot and Mouth Disease" 2011-
NIMBioS: "Modeling the Impact of Cattle Movements on Transmission Dynamics of Bovine TB in the US" 2009
NCEAS**: "**Efficient wildlife disease control: From social network self-organization to optimal vaccination" 2008
Conservation International: "Parasite Diversity and Mammalian Conservation" 2006

Software and Tools development and dissemination

With J. Ladau, developing software tools for community ecologists: *MPower*, *CoOccur* and *FixIt*

Service to Scientific Community

Associate Editor, *Remote Sensing in Ecology and Conservation* 2015-
Associate Editor, *Animal Conservation* 2011-
Academic Editor, *PLOS ONE* 2012-
Society for Conservation Biology (SCB) – Chair of Education and Student Affairs, Board of Governors 2012-2015
SUNY-ESF, EFB Graduate Program Advisory Committee (GPAC), Member 2012-2014
SUNY-ESF Institutional Animal Care and Use Committee (IACUC), Member 2011-2014
SUNY-ESF Committee on Geospatial Modeling and Analysis (CGMA), Member 2011-2014
SUNY-ESF Conservation Biology Club, Faculty Advisor 2013

Professional Societies

American Association of Geographers (AAG), Sigma Xi, Society for Conservation Biology (SCB), Ecological Society of America (ESA), Society for Mathematical Biology (SMB), Wildlife Society (TWS), World Lagomorph Society (WLS)

Reviewer

Journals: *J Remote Sens & Ecol (Assoc Ed), PLOS ONE (Academic Ed), Anim Cons (Assoc Ed), J Afr Ecol (Intl Rev Panel), Ecology, J Appl Geog, Koedoe, J Appl Ecol, J Anim Ecol, Phil Trans Roy Soc, Proc Roy Soc B, Ecol Mod, J Zool, Cons Letters, Am J Primatol, J Mamm, J Env Mod and Assmt, J Am Stat Assoc, Oikos, Polar Biol, Biol Cons, J Trop Ecol, Biol J Linnean Soc, Primates*

Grants: *NSF DEB, NSF POLAR Program, SCB Smith Fellows, NSRC, EPA STAR, American Association of University Women (AAUW), Graduate Women in Science (GWIS), National Geographic, ESEI Consortia (UK MRC),*

WORK HISTORY

Conservation & Research Associate, *Department of Conservation and Science, Lincoln Park Zoo* 1998-2002
Conducted research on risk of herpes transmission in Asian and African elephants
Participated in team development of stage based demographic models for AZA
Web site and web survey for TB (contract of the AAZV and the Audubon Society)

Researcher, *Environmental and Conservation Program, Chicago Field Museum* 1998
Field research and data collection, Yasuni National Park, Ecuador
Amazonian woody plant classification, identification and documentation, Chicago Field Museum

PUBLICATIONS *(pdfs and press at http://www.sadieryan.net)*

ARTICLES

2016

Ryan, S.J., Gavard, E.J., Cheeseman, A.E., Cohen, J.B., Whipps, C.W. *in press.* Reference and baseline hematocrit measures for the threatened New England cottontail (*Sylvilagus transitionalis*) and comparison with sympatric Eastern cottontail (*Sylvilagus floridanus*) rabbits. *Journal of Zoo and Wildlife Medicine.*

Cameron, E.Z., and **Ryan, S.J.** *accepted.* Welfare at multiple scales: importance of zoo elephant population welfare in a world of declining wild populations. *PLOS ONE*.

Handel A., Beltran, E., Borbor Cordova M.J., Fessler A., Finkelstein J., Robalino, R., **Ryan S.J.**, Stewart Ibarra A.M. 2016. Knowledge, attitudes, and practices regarding dengue infection among healthcare providers in Machala, Ecuador. *BMC Tropical Diseases, Travel Medicine and Vaccines* (2):8 Online: **DOI:** 10.1186/s40794-016-0024-y.

Taylor, R., **Ryan, S.J.**, Brashares, J., Johnson, L.R. 2016. Hunting, food subsidies, and mesopredator release: the dynamics of crop-raiding baboons in a managed landscape. *Ecology* 97(4): 951-960

Hartter, J., Dowhaniuk, N., MacKenzie, C.A., **Ryan, S.J.**, Diem, J.E., Palace, M.W., Chapman, C.A. 2016. Perceptions of Risk in Communities near Parks in an African Biodiversity Hotspot. *Ambio.*

Southworth, J., Zhu, L., Bunting, E., **Ryan, S.J.**, Herrero, H., Waylen, P.R., Hill, M.J. 2016. Changes in vegetation persistence across global savanna landscapes, 1982-2010. *Journal of Land Use Science*, 11(1): 7-32

2015

Ryan, S.J., McNally, A., Johnson, L.R., Mordecai, E.A., Ben-Horin, T., Paaijmans, K.P., Lafferty, K.D. 2015. Mapping physiological suitability limits of malaria in Africa under climate change. *Vector Borne and Zoonotic Diseases*, 15(12): 718-725.

Ryan, S.J., Ben-Horin, T., Johnson, L.R. 2015. Malaria control and senescence: the importance of accounting for the pace and shape of ageing in wild mosquitoes. *Ecosphere* 6(9):170.

Escobar, L.E., **Ryan, S.J.**, Stewart-Ibarra, A.M., Finkelstein, J.L., King, C.A., Qiao, H., Polhemus, M.E. 2015. A Global Map of Suitability for Coastal *Vibrio cholerae* Under Current and Future Climate Conditions. *Acta Tropica* 149: 202-211.

Ryan, S.J., Southworth, J., Hartter, J., Dowhaniuk, N., Fuda, R., Diem, J. 2015. Household level influences on fragmentation in an African park landscape. *Applied Geography* 58: 18-31.

Johnson, L.R. Ben-Horin, T., Lafferty, K.D., McNally, A., Mordecai, E., Paaijmans, K.P., Pawar, S., **Ryan, S.J.** 2015. Understanding uncertainty in temperature effects on vector-borne disease: A Bayesian approach. *Ecology* 96(1): 203-213.

Hartter, J., **Ryan, S.J.**, Mackenzie, C.A., Goldman, A., Dowhaniuk, N., Palace, M.W., Diem, J.E., Chapman, C.A. 2015. Now there is no land: A story of ethnic migration in a protected area landscape in western Uganda. *Population and Environment* 36(4): 452-479.

2014

Stewart Ibarra, A.M Muñoz, A.G., **Ryan, S.J.**, Borbor Cordova, M.J., Beltran Ayala, E., Finkelstein, J.L., Mejía, R., Ordoñez, T, Recalde Coronel, G.C, Rivero, K. 2014. Spatiotemporal clustering, climate periodicity, and social-ecological risk factors for dengue during an outbreak in Machala, Ecuador, in 2010. *BMC Infectious Diseases* 14:610

Stewart Ibarra, A.M., Luzadis, V.A., Borbor Cordova, M.J., Silva, M., Ordoñez, T., Beltran Ayala, E., **Ryan, S.J.** 2014. Community perceptions of dengue fever and *Aedes aegypti* in central and peripheral urban areas in Machala, Ecuador *BMC Public Health 14:1135*

Diem, J.E., **Ryan, S.J.**, Hartter, J., Palace, M. 2014. A drying trend in central equatorial Africa over the past three decades. *Climatic Change.* 126(1-2): 263-272.

Dowhaniuk, N., Hartter, J., **Ryan, S.J.** 2014. Discrepancies in geographic data cause challenges for managing protected areas. *Environmental Management.* 54(3): 596-605.

Diem, J.E. Hartter, J., **Ryan, S.J.**, Palace, M. 2014. Validation of satellite rainfall products for central equatorial Africa. *Journal of Hydrometerology.* 15(5): 2030-2038.

Hartter, J., Solomon, J., **Ryan, S.J.**, Jacobson, S.K., Goldman, A. 2014. Contrasting perceptions of ecosystem services of an African forest park. *Environmental Conservation* 41(4): 330-340

2013

Ryan, S.J., Jones, J.H., Dobson, A.P. 2013. Interactions between social structure, demography, and transmission determine disease persistence in primates. *PLOS ONE* 8(10): e7686

Stewart Ibarra, A.M., **Ryan, S.J.**, Beltran, E. Mejía, R., Silva, M., Muñoz, A. 2013. Dengue vector dynamics *(Aedes aegypti)* influenced by climatic and social factors in Ecuador: implications for targeted control. *PLOS ONE* 8(11): e78263

Hartter, J.*, **Ryan, S.J.***, MacKenzie, C.A., Parker, J.N., Strasser, C. 2013. Spatially explicit data: stewardship and ethical challenges in science. *PLOS Biology* 11(9): e1001364

Mordecai, E.A., Paaijmans, K.P., Johnson, L.R., Balzer, C.H., Ben-Horin, T., deMoor, E., McNally, A., Pawar, S., **Ryan, S.J.**, Smith, T.C., Lafferty, K.D., 2013. Physiological constraints dramatically lower the expected temperature for peak malaria transmission. *Ecology Letters* 16(1):22-30

2012

Ryan, S.J. and Hartter, J. 2012. Beyond ecological success of corridors: integrating land use history and demographic change to provide a whole landscape perspective. *Ecological Restoration* 30(4): 320-328. *Invited paper.* Special Issue on Design Approaches to Ecological Restoration

M.J. Tildesley and **Ryan, S.J.** 2012. Disease prevention versus data privacy: using landcover maps to inform spatial epidemic models. *PLOS Computational Biology* 8(11): e1002723

Rudnick, D., **Ryan, S.J.**, Preziosi, D., Epps, C., Deiffenbach, F.,Kintsch, J., Beier, P., Jenness, J., Perkl., R., Trombulak, S., Hartter, J., Gerber, L., Merenlender, A., Austen, D., Cushman, S. 2012. Emerging principles in understanding landscape connectivity: practical tools for conservation decision-making. *Issues in Ecology* 16 (Fall 2012)

Ryan, S.J., Brashares, J. S, Walsh, C., Milbers, K., Kilroy, C., Chapman, C.A. 2012. A survey of gastrointestinal parasites of olive baboons (*Papio anubis*) in human settlement areas of Mole National Park, Ghana. *Journal of Parasitology* 98:885-888

Ryan, S.J., Cross, P.C., Winnie, J, Jr, Hay, C., Bowers, J., Getz, W.M. 2012. The utility of NDVI for predicting African buffalo forage quality. *Journal of Wildlife Management* 76(7):1499-1508

Hartter, J., Stampone, M.D., **Ryan, S.J.,** Kirner, K., Chapman, C.A., Goldman, A. 2012. Patterns and perceptions of climate change around a biodiversity hotspot. *PLOS ONE* 7(2) e32408

2011

Ryan, S.J. and Walsh, P.D. 2011. Consequences of non-intervention for infectious disease in African great apes**.** *PLoS ONE* 6(12): e29030

Wolf, A., Anderegg, W., **Ryan, S.J.,** Christensen, J. 2011. Robust detection of plant species range shifts under biased sampling regimes. *Ecosphere* 2(10):115

Hartter, J.*, **Ryan, S.J.***, Southworth, J., and Chapman, C.A. 2011. Landscapes as continuous entities: forest disturbance and recovery in the Albertine Rift Landscape. *Landscape Ecology* 26(6):877-890

Stampone, M.D., Hartter, J., Chapman, C.A., **Ryan, S.J.** 2011. Localized Precipitation Trends in and around a Forest Park in Equatorial East Africa. *Research Journal of Environmental and Earth Sciences* 3(1):14-23

Petorelli, N., **Ryan, S.J.,** Mueller, T., Bunnefeld, N., Jedrzejewska, B., Lima, M., Kausrud, K. 2011. The Normalized Difference Vegetation Index (NDVI) in ecology: a decade of unforseen successes. *Climate Research* 46:15-27

2006-2010

Hartter, J. and **Ryan, S.J.** 2010. Top-down or bottom-up? Decentralization, natural resource management and usufruct rights in the forests and wetlands of Western Uganda. *Land Use Policy* 27(3): 815-826

Ladau, J. and **Ryan, S.J.** 2010. MPowering ecologists: community assembly tools for community assembly rules. *Oikos* 119(7): 1064-1069

Bar-David, S, Bar-David, I, Cross, P.C. **Ryan, S.J.**, Knechtel, C.U., Getz, W.M. 2009. Methods for assessing movement path recursion with application to African buffalo in South Africa. *Ecology* 90(9) 2467–2479

Sánchez, M.S., Lloyd-Smith, J.O., Williams, B.G., Porco, T.C., **Ryan, S.J.**, Borgdorff, M.W., Mansoer, J., Dye, C. and Getz, W.M. 2009. Incongruent HIV and tuberculosis co-dynamics in Kenya: Interacting epidemics monitor each other. *Epidemics* 1(1):14-20

Ryan, S.J., Starks, P.T., Milton, K. and Getz, W.M. 2008. Intersexual conflict and group size in mantled howler monkeys: a 23-year evaluation. *International Journal of Primatology* 29:405-420

Gusset, M*. and **Ryan, S.J.***, Hofmeyr, M., Van Dyk, G., Davies-Mostert, H.T., Graf, J.A., Owen, C., Szykman, M., Macdonald, D.W., Monfort, S.L., Wildt, D.E., Maddock, A.H., Mills, M.G.L., Slotow, R., Somers, M.J. 2008. Efforts going to the dogs? Evaluating attempts to re-introduce endangered wild dogs in South Africa. *Journal of Applied Ecology* 45:100-108

Ryan, S.J., Knechtel, C.U. and Getz, W.M. 2007. Ecological cues, gestation length and birth timing in African Buffalo (*Syncerus caffer*). *Behavioral Ecology* 18:635-644.

Getz W.M., Fortmann-Roe S, Cross P.C., Lyons A.J. **Ryan, S.J**., and Wilmers, C.C. 2007. LoCoH: Nonparametric kernel methods for constructing home ranges and utilization distributions. PLoS ONE 2: e207

Ryan, S.J. 2006. The role of culture in conservation of small or endangered populations. *Conservation Biology* 20:1321-1324.

Ryan, S.J., Knechtel, C.U. and Getz, W.M. 2006. Range and habitat selection of African buffalo in South Africa. *Journal of Wildlife Management* 70: 764-776

Redfern, J.V., **Ryan, S.J.** and Getz, W.M. 2006. Defining herbivore assemblages in the Kruger National Park: a correlative coherence approach. *Oecologia* 146:632-640

2000-2005

Ryan, S.J. and Getz, W.M. 2005. A spatial location allocation GIS framework for managing water sources in a savanna nature reserve. *South African Journal of Wildlife Research* 35(2):153-178

Ryan, S.J. and Jordaan, W. 2005. Activity patterns of African Buffalo *Syncerus caffer* in the Lower Sabie region, Kruger National Park, South Africa. *Koedoe* 48: 117-124

Faust, L.J., Thompson, S.D., Earnhardt, J.M., Brown, E., **Ryan, S.J.**, Sherman, M. and Yurenka, M. 2003. Using stage-based system dynamics modeling for demographic management of captive populations. *Zoo Biology*, 22:45-64

Ryan, S.J., Roth, A.M., Thompson, S.D. and Gold, K.C. 2002. Effects of hand rearing on the reproductive success of Western Lowland Gorillas in North America. *Zoo Biology* 21:389-401

Ryan, S.J. and Thompson, S.D. 2001. Disease risk and inter-institutional transfer of specimens in cooperative breeding programs: herpes and the elephant Species Survival Plans. *Zoo Biology* 20:89-101

CHAPTERS/PROCEEDINGS/BOOK REVIEWS

Borbor-Cordova, M., Ayala, E., Cardenas, W., Endy, T., Finkelstein, J., Leon, R., Muñoz, Á., Mejía, R., Polhemus, M., Recalde Coronel, G., **Ryan, S.**, Stewart-Ibarra, A. *in press.* "Chapter 5: Developing and delivering health-tailored climate products and services: Case study 5.C Vector-virus microclimate surveillance system for dengue control in Machala, Ecuador", Climate Services for Health: Global case studies of enhancing decision support for climate risk management and adaptation, WHO/WMO, Geneva

Johnson, L.R., Lafferty, K.D., McNally, A., Mordecai, E., Paaijmans, K., Pawar, S., **Ryan, S.J.** 2014. "Mapping the distribution of malaria: current methods and considerations", in Spatial and temporal dynamics of infectious diseases, Chen, D. ed., John Wiley & Sons. pp.109-209

Prins, H.T., Melletti, M., Korte, L., Cornelis, D., Mirabile, M., **Ryan, S.J.** 2014. "Species Account: African Buffalo (*Syncerus caffer*)", in Ecology, Evolution and Behaviour of Wild Cattle: Implications for Conservation. Burton, J. and Melletti, M., eds. Cambridge University Press

Ryan, S.J., 2011. *Invited Book Review*. "Governing Africa's Forests in a Globalized World Laura A German, Alain Karsenty and Anne-Marie Tiani (Editors)". *Natural Resources Forum* 35(2): 146-147

Hartter, J., **Ryan, S.J.**, Southworth, J., and Chapman, C.A. 2010. "Fortresses and Fragments: Impacts of Fragmentation in a Forest Park Landscape". In *Proceedings of IUFRO Landscape Ecology International Conference. Braganca, Portugal.*

Chapman, C.A., Huffman, M.A. **Ryan, S.J.**, Sengupta, R. and Goldberg, T. 2009. "Ways forward in the study of primate parasite ecology". In Primate parasite ecology: the dynamics and study of host-parasite relationships. Huffman, M.A.

and Chapman, C.A., eds. Cambridge Studies in Biological and Evolutionary Anthropology. Cambridge University Press. pp. 487-505

Getz, W.M, Cross, P.C., Jolles, A.E., Lloyd-Smith, J.O., **Ryan, S.J.**, Baxter, P.W.J., Bowers, J., Hay, C.T., Knechtel, C. , Tambling, C.J., Turner, W.C., duToit, J.T. 2005. "Bovine Tuberculosis in the African Buffalo: The Role of Population Models". In Conservation and development interventions at the wildlife/livestock interface: implications for wildlife, livestock and human health. Osofsky, S. A., S. Cleaveland, et al., Eds. Gland, Switzerland and Cambridge, UK, IUCN pp.xxiii

Ryan, S., Roth, A.M., Thompson, S.D. and Gold, K.C. 2001. "Effects of hand rearing on the reproductive success of Western Lowland Gorillas in North America". pp. 99 In The Apes: Challenges for the 21st Century *Brookfield Zoo, May 10-13, 2000. Conference Proceedings*, Chicago Zoological Society, Brookfield, Illinois, U.S.A. viii + 376 pp. ISBN 0-913934-28-3.

Faust, L. J., Thompson, S.D., Earnhardt, J.E., Sherman, M., Brown, E. and **Ryan, S. J.** 2001. "Innovative techniques in population demography to improve captive management of western lowland gorillas". pp.207 In The Apes: Challenges for the 21st Century *Brookfield Zoo, May 10-13, 2000. Conference Proceedings*, Chicago Zoological Society, Brookfield, Illinois, U.S.A. viii + 376 pp. ISBN 0-913934-28-3.

Dobson, A., Ralls. K., Foster, M., Soule, M., Simberloff, D., Doak, D., Estes, J., Mills, S., Mattson, D., Dirzo, R., Arita, H., **Ryan, S.**, Norse, E., Noss, R., Johns, D. 1999. "Corridors: Reconnecting Fragmented Landscapes", pp.121-179 in Continental Conservation. Michael E. Soule & John Terborgh, eds. The Wildlands Project, Island Press.

REPORTS

Ryan, S.J., (ed.). 1999. North American Regional Studbook for Sunbittern (*Eurypyga helias*). AZA /Lincoln Park Zoo
Ryan, S.J., (ed.). 1999. North American Regional Studbook for Pygmy Hippos (*Hexaprotodon liberiensis*). AZA/LPZ
Ryan, S.J., (ed.). 2000. North American Regional Studbook for Snow Leopards (*Pantera uncia*). AZA /LPZ
Ryan, S.J., (ed.). 2000. AZA Research Coordinators Directory. AZA/LPZ

THESES

Ryan, S.J. 2006. Spatial Ecology of African Buffalo and their Resources in a Savanna Ecosystem. PhD Dissertation, Department of Environmental Science, Policy and Management, UC Berkeley, 65p.
Ryan, S.J. 1998. Primate Concerns: Development of a Rapid Censusing Technique, Social Effects on Pathogen Transmission and an Examination of Primate Conservation. BA Thesis, Department of Ecology and Evolutionary Biology, Princeton University, 155p.

SELECTED TALKS/PANELS

Invited:

Ryan, S.J. 2016. "The usual suspects". Panel discussant, Global health and the environment I: Research (Sponsored by Human Dimensions of Global Change Specialty Group, Population Specialty Group, Health and Medical Geography Specialty Group). Organizers: Lopez-Carr, D., Kwan, M. *Annual Meeting of the American Association of Geographers, March 29-April 2nd, 2016, San Francisco, CA.*
Ryan, S.J. 2016. "Reflections on the Ebola Response". Panel discussant, *NSF Workshop: Mathematical Modeling of Infectious Diseases*, March 8-10, 2016, Dakar, Senegal.
Ryan, S.J., Gavard, E., Cohen, J., Cheeseman, A., Whipps, C. 2015. "The Effect of an Introduced Competitor and Non-Native Forage Plants on Parasites and Body Condition of the New England Cottontail in Fragmented Habitat." Symposium: International and Collaborative Approaches to Lagomorph Conservation in a Changing World*. Vth International Wildlife Management Congress 2015. July 26-30, 2015. Sapporo, Japan*
Ryan, S.J. 2014. "Cape buffalo and savanna seasonality: feeding, breeding, and some notes on the future". *1st Symposium on African Buffalo*, IUCN Antelope SSC, International Foundation for Wildlife Management (Fondation IGF), CIRAD Research Center, hosted by the Fondation François Sommer. November 5-6, 2014, Paris, France.
Ryan, S.J. 2014. "Clash of the Titans: People, Environment, and Climate in the Albertine Rift." *Integrative Biology Departmental Seminar Series*, University of Southern Florida (USF), Tampa, FL.

Ryan, S.J. 2013. "Shifting ecologies of vector-borne diseases: novel emergence, recent resurgence, and the usual suspects." *Tipping Points for Action: 5th annual invasive species workshop*. Alverna Heights, Fayetteville, NY.

Ryan, S.J., Hartter, J., Palace, M., Diem, J., and C. Chapman. 2013. "Parks, People, and Fragments: Remedying De-coupled Research into Natural-Human Systems." Session: New Frontiers for Research and Engagement in African Conservation Landscapes *Association of American Geographers (AAG) Annual Meeting*. April 9-13, 2013. Los Angeles, CA. *Sponsored by Human Dimensions of Global Change Specialty Group, Cultural and Political Ecology Specialty Group and the Hazards, Risks, and Disasters Specialty Group.*

Ryan, S.J. 2013. "Clash of the Titans: People, Environment, and Climate in the Albertine Rift." *Ecology & Evolution Graduate Program Seminar Series*, Rutgers University, NJ.

Ryan, S.J. 2013. "Climate change and Malaria: a hot topic that is cooler than you think". *Conversations in Global Health*, Upstate Medical University, Department of Immunology and Microbiology.

Ryan, S.J. 2012. "Extreme Conservation: The Consequences of Non-Intervention for Infectious Disease in Great Apes" *Fall Environmental Sciences Seminar Series*, NRESS Program, the Institute for the Study of Earth Oceans and Space (EOS), the UNH Sustainability Academy, the Department of Natural Resources and the Environment, and the Department of Earth Sciences. University of New Hampshire, Durham, NH.

Ryan, S.J. and Hartter, J. 2012. "Population, Environment, and Climate In the Albertine Rift: Local Impacts of Regional Change". Symposium: Making sense of climate change: global and local discourses. *American Association of Anthropology (AAA) Annual Meeting*, San Francisco, CA.

Ryan, S.J. and Hartter, J. 2012. "Living locally in the larger landscape: People, Environment and Climate in the Albertine Rift", Wildlife Conservation Society, Bronx Zoo, NY

Ryan, S.J. 2011. "From satellites to parasites: measuring health in African parks landscapes", *Department of Biology Seminar,* Syracuse University.

Ryan, S.J. 2010. *Guest Lecture*, "Agent and individual based models for ecology", ESM 232, Bren School, USCB.

Ryan, S.J. 2010. "From politics to parasites: assessing health in African parks landscapes". *Department of Geography Colloquium*, UC Santa Barbara.

Ryan, S.J. 2010. **"**The consequences of non-intervention for infectious disease in African great apes." DIMACS/MBI US–*African BioMathematics Initiative: Workshop on Conservation Biology*. August 11-13, 2010. South African Wildlife College, Limpopo, South Africa.

Ryan, S.J. 2009. "A Zoonotic Buffet: a survey of the diseases we share with animals". *Ecolunch*, NCEAS.

Ryan, S.J. 2009. "NDVI, forage quality and variation in reproductive patterns of African Buffalo (*Syncerus caffer)* in South Africa." Symposium: The use of satellite-based data in assessing ecological responses to environmental change. *International Mammal Congress*, Mendoza, Argentina

Ryan, S.J. 2009. "The effects of contact structure, demography and movement on disease transmission within a primate metapopulation" *Spring Ecology and Evolution Colloquium*, Dept of Biology at San Francisco State Univ.

Ryan, S.J. 2008. "A structured model for disease transmission in primate populations". *Environmental Seminar Series*, Santa Clara University.

Conference:

Ryan, S.J., Stewart Ibarra, A.M., Chu, W., Finkelstein, J.L., Escobar, L.E., King, C.A., Ordonez, E., Heras, F., Waggoner, E., Tauzer, E., Enriquez, K., James, T., Polhemus, M. 2016. "Spatial and seasonal dynamics of *Vibrio spp*. in an estuary in southern coastal Ecuador" Special Session 2562: Spatial and eco-epidemiological modeling (Sponsored by International Geography, GIScience, and Urban Health Theme, Health and Medical Geography Specialty Group). *Annual Meeting of the American Association of Geographers*, March 29-April 2nd, 2016, San Francisco, CA.

Ervin, D., Lopez-Carr, D., Riosmena, F., **Ryan, S.J.** 2015. "The relationship between land- use and land-cover change and migration processes in Mexico." *The International Geographic Union Regional Geographic Conference*, Moscow, Russia, August 19, 2015.

Ryan, S.J., Southworth J., Hartter J., Fuda R., Dowhaniuk N., Diem J. 2015. "Household level influences on fragmentation in an African park landscape." *27th International Congress for Conservation Biology and 4th European Congress for Conservation Biology.* August 2-6th, 2015. Montpellier, France.

Dowhaniuk, N., Hartter, J., Congalton, R.G., Palace, M.W., **Ryan, S.J.** 2015. "Landscape change, human population growth and oil development in Murchison Falls Conservation Area, Uganda." *27th International Congress for Conservation Biology and 4th European Congress for Conservation Biology.* August 2-6th, 2015. Montpellier, France.

Cheeseman, A., Cohen, J., Whipps, C., Ryan, S.J. "The influence of invasive species on habitat use and dispersal of the New England cottontail, an imperiled endemic lagomorph in a human-dominated landscape." Symposium: International and Collaborative Approaches to Lagomorph Conservation in a Changing World. *Vth International Wildlife Management Congress 2015. July 26-30, 2015. Sapporo, Japan*

Ryan, S.J., Southworth, J., Hartter, J., Dowhaniuk, N., Fuda, R., Diem, J. 2015. "Household level influences on fragmentation in an African park landscape." Association of American Geographers (AAG) Annual Meeting, April 21-25, 2015, Chicago, IL.

Jones, M.I., Ryan, S.J., Fierke, M.K. 2014. "Factors influencing spread of emerald ash borer in an urban forest: a case study in Syracuse, New York." Entomological Society of America Annual Meeting, November 15-19, 2014, Portland, OR.

Ryan, S.J., McNally, A., Johnson, L.R., Ben-Horin, T., Mordecai, E., Paaijmans, K.P., Lafferty, K.D. 2014. "Rising suitability, declining severity: climate change and shifting malaria transmissibility in Africa." III Encuentro Nacional de Investigación en Enfermedades Infecciosas y Medicina Tropical; II Latin-American Network of Molecular Epidemiology and Evolutionary Genetics of Infectious Diseases (LAN MEEGID), July 21-23, 2014, Quito, Ecuador.

Ryan, S.J., McNally, A., Johnson, L.R., Ben-Horin, T., Mordecai, E., Paaijmans, K.P., Lafferty, K.D. 2014. "Rising suitability, declining severity: climate change and shifting malaria transmissibility in Africa."Association of American Geographers (AAG) Annual Meeting, April 8-12th, 2014, Tampa, FL

Ryan, S.J., Hartter, J. 2013 "Beyond Ecological Success of Corridors: Integrating Land Use History and Demographic Change to Provide a Whole Landscape Perspective". Ecological Society of America (ESA) Annual Meeting. August 4-9th, 2013. Minneapolis, MN. *Supported by NSF CHANS-net fellowship.*

López-Carr, D., **Ryan, S.J.**, Clark, M.J. 2013. Population, Health, and Land Transitions at Multiple Scales: Evidence from Latin America. National Academies of Science, Kavli Frontiers of Science symposium. June 15-19, 2013. Irvine, CA.

Hartter, J., Palace, M., **Ryan, S.J.**, Diem, J., and C.A. Chapman. 2013. Forest Loss, Agricultural Intensification, and the Islandization of Protected Areas in the African Albertine Rift. Association of American Geographers (AAG) Annual Meeting. April 9-13, 2013. Los Angeles, CA.

Ryan, S.J. and J. Hartter. 2012. Assessing Conservation Success: People, Wildlife, and Parks in the Albertine Rift. Society of Conservation Biology. North American Congress for Conservation Biology (NACCB). July 15-18, 2012. Oakland, CA.

Ryan, S.J. and Tildesley, M. 2012. Disease prevention or data privacy? Research and Policy for Infectious Disease Dynamics (RAPIDD) "Foot and Mouth Disease" Meeting. September 19-21, 2012. Washington, D.C. *Supported by Fogarty Institute, NIH and the Department of Homeland Security (DHS) RAPIDD program*

Hartter, J. and **Ryan, S.J.** 2012. "The island fortress: people, wildlife and parks landscapes in the Albertine Rift" American Association of Geography (AAG) Annual Meeting, New York, NY

Ryan, S.J. and Hartter, J. 2011. "The value of fragments: extending park boundaries, dwindling resources, or sourcing crop raiders?", Symposium: *Healthy Ecosystems, Healthy Communities?: Links between Conservation and Food Security*, International Congress on Conservation Biology (ICCB), Auckland, New Zealand

Ryan, S.J. and Gaff, H.C., 2011 "Looking to the future: how to progress to success from the US-Africa Biomathematics Initiative" *MiniSymposium (Gaff and Ryan): Reports from US - African BioMathematics Initiative: Conservation Biology*, 8th European Conference on Mathematical and Theoretical Biology, and Annual Meeting of The Society for Mathematical Biology, Krakow, Poland, June 28 - July 2, 2011.

Hartter, J., **Ryan, S.J.**, Southworth, J., Goldman, A.C., Binford, M.W., and C.A. Chapman. 2010. "Fortresses and Fragments: Impacts of Fragmentation in a Forest Park Landscape." IUFRO Landscape Ecology International Conference. September 21-27, 2010. Bragança, Portugal.

Ryan, S.J. and Hartter, J. 2009. "The Social Impacts of landscape change around a fortress park in Uganda" American Association of Geographers (AAG) Annual Meeting, Las Vegas.

Other:

Cohen, J.B., Cheeseman, A., Gavard, E., **Ryan, S.J.**, Whipps, C.M. 2014. New England cottontail. *New York Fish and Wildlife Advisory Board meeting*, Pulaski, NY.

Cohen, J.B., Cheeseman, A., Gavard, E., **Ryan, S.J.**, Whipps, C.M. 2014. New England cottontail. *New York Forest Owner's Association meeting*, Syracuse, NY.

Palace, M., J. Harter, **S. Ryan**, J. Diem, 2013, Remote sensing and tropical ecology in Africa. A talk given to visiting Rotary Group from Niger, at UNH 2013.

Hartter, J, **Ryan, S**, Palace, M, Diem, J, MacKenzie, C, Goldman, A. 2014. *Invited.* "Parks in Peril?" Center for African Studies, University of Florida. April 25, 2014. Gainesville, FL

Ryan, S.J. "Human-Animal Interactions in Africa", Museum of Cultural Zoology, hosted by: Multicultural Affairs & the Roosevelt Wildlife Collection, Nifkin Lounge, SUNY ESF, April 11th, 2012

RECENT POSTERS

James, T. G.** & **Ryan S. J.** 2015. STI knowledge accuracy in college students: Identifying targets for safer sex education. 3rd Annual Fall Undergraduate Research Symposium, October 26, 2015, Gainesville, FL

Fessler, A.G., Mehta, S., Beltra-Ayala, E., Arichabala Wilches, A.L., Endy, T.P., Polhemus, M., Stewart-Ibarra, A.M., **Ryan, S.J.**, Finkelstein, J.L. 2015. Burden of Tropical Diseases in Machala, Ecuador. American Society for Tropical Medicine and Hygiene 64th Annual Meeting, October 25-29, 2015, Philadelphia, PA

McMahon, E., Stewart-Ibarra, A.M., Barbachano-Guerro, A., Kirchhoff, L., Beltrán-Ayala, E., Borbor-Cordova, M.J., Cueva-Aponte, C.K., Finkelstein, J.L., King, C.A., Lupone, C.D., Mehta, S., **Ryan, S.J.**, Silva, M., Endy, T.P. 2015. The prevalence of Chagas disease and co-infections with dengue from a dengue surveillance study in Machala, Ecuador. American Society for Tropical Medicine and Hygiene 64th Annual Meeting, October 25-29, 2015, Philadelphia, PA

Chu, W., **Ryan, S.J.**, Freire, W.B., Stewart-Ibarra, A.M., Cardenas, W.B, Finkelstein, J.L. 2015. Burden and Distribution of Malnutrition in Guayaquil, Ecuador: Results from the Ecuadorian National Health and Nutrition Survey (ENSANUT-ECU). American Society for Tropical Medicine and Hygiene 64th Annual Meeting, October 25-29, 2015, Philadelphia, PA

Stewart-Ibarra, A.M., King, C.A., Barbachano, A., Beltrán-Ayala, E., Borbor-Cordova, M.J., Cárdenas, W.B., Cueva, C., Finkelstein, J.L., Lupone, C.D., Mehta, S., **Ryan, S.J**., Silva, M., Endy, T.P. 2015. High Burden of Dengue Fever in Southern Coastal Ecuador: Epidemiology from a prospective study in Machala in 2014. American Society for Tropical Medicine and Hygiene 64th Annual Meeting, October 25-29, 2015, Philadelphia, PA

Handel, A., Beltran, E., Borbor Cordova, M.J., Espinoza, R.X.R., **Ryan, S.J.**, Stewart-Ibarra, A.M. 2015. Knowledge, Attitudes, and Practices Regarding Dengue Infection Among Healthcare Providers in Machala, Ecuador. IDWeek 2015, October 7-11, 2015, San Diego, CA.

Borbor-Cordova, M.J., Torres, G., Bayot, B., Bermudez, R., Escobar, L.E., Hamilton, S., Pozo, M., Recalde, C., **Ryan, S.J.,** Stewart-Ibarra, A.M. 2015. Exploring the impact of Harmful Algal Blooms (HABs) on the health of coastal communities in the Gulf of Guayaquil, Ecuador. American Society for Tropical Medicine and Hygiene 64th Annual Meeting, October 25-29, 2015, Philadelphia, PA

Ryan, S.J., McNally, A., Johnson, L.R., Ben-Horin, T., Mordecai, E., Paaijmans, K.P., Lafferty, K.D. 2015. Changing physiological suitability limits of malaria transmission in Africa under climate change. Ecology and Evolution of Infectious Diseases (EEID) meeting, May 26-29, 2015, Athens, GA.

Ryan, S.J., McNally, A., Johnson, L.R., Ben-Horin, T., Mordecai, E., Paaijmans, K.P., Lafferty, K.D. 2015. Changing physiological suitability limits of malaria transmission in Africa under climate change. Emerging Pathogens Institute Research Day 2015, February 26th, 2015, Gainesville, FL.

Escobar, L.E., **Ryan, S.J.**, Stewart Ibarra, A.M., Finkelstein, J.K., King, C.A., Qiao, H., Polhemus, M.E. 2014. A global map of suitability for coastal cholera under current and future climate conditions. American Society for Tropical Medicine and Hygiene Annual Meeting, November 2-6, 2014, New Orleans, LA

Stewart Ibarra, A.M., Luzadis, V.A., Borbor Cordova, M.J., Silva, M., Ordonez, T., Beltran, E., **Ryan, S.J.** 2014. Community perceptions of emerging dengue in urban areas in southern coastal Ecuador. American Society for Tropical Medicine and Hygiene Annual Meeting, November 2-6, 2014, New Orleans, LA

Cheesman, A.E.*, Cohen J., **Ryan, S.J.**, Whipps, C.M. 2014. Survival and home range of New England Cottontail (*Sylvilagus transitionalis*) in response to hunting, competition, and habitat composition. American Society of Mammalogists Annual Meeting, Okalahoma City, OK. **Winner: student poster competition**

Youker, T. E.* & **Ryan, S. J.** 2014. Environmental factors affecting ranavirus prevalence among aquatic-breeding amphibians in natural and constructed ponds. SUNY-ESF Spotlight on Student Research and Outreach, April 15, 2014, Syracuse, NY

Brubaker R.**, Thomen A.P.*, **Ryan, S.J.** 2014. A quantitative research synthesis of human-avian conflict in agriculture systems. SUNY-ESF Spotlight on Student Research and Outreach, April 16, 2014, Syracuse, NY

Scales LN*, **Ryan S.J.** 2014. Exploring the influence of migration temperature thresholds on captive migratory bird behavior. SUNY-ESF Spotlight on Student Research and Outreach, April 15, 2014, Syracuse, NY

Gavard, E.G.*, Cohen, J., **Ryan, S.J.**, and Whipps, C.M. 2014. Exploring the potential for parasite-mediated competition: New England and Eastern cottontails, invasive vegetation, and parasites in the Hudson Valley, NY. SUNY-ESF Spotlight on Student Research and Outreach, April 15, 2014, Syracuse, NY. ***3rd place prize award: $75***

Youker, T. E.* & **Ryan, S. J.** 2014. Environmental factors affecting ranavirus prevalence among aquatic-breeding amphibians in natural and constructed ponds. Northeast Fish & Wildlife Association Conference, April 10, Portland, ME

Youker, T. E.* & **Ryan, S. J.** 2014. Environmental factors affecting ranavirus prevalence among aquatic-breeding amphibians in natural and constructed ponds. SUNY CID: From Lab to Landscape: Integrated Infectious Disease Research Symposium, January 24, 2014, Syracuse, NY. ***1st place prize: $500***

Jones, M.I.*, M.K. Fierke, and **S.J. Ryan**. Understanding the emerging emerald ash borer infestation in New York. Poster Presentation. New York Society of American Foresters Annual Meeting, Syracuse, NY. January 2014.

Jones, M.I.*, M.K. Fierke, and **S.J. Ryan**. Detecting superspreader trees in the emerging emerald ash borer infestation in New York. Poster Presentation. SUNY CID: From Lab to Landscape: Integrated Infectious Disease Research Symposium, January 24, 2014, Syracuse, NY. ***3rd place prize: $250***

Ibarra Stewart, A.M., Luzadis, V.A., Borbor Cordova, M.J., Silva, M., Ordoñez, T., Beltran, E., **Ryan, S.J.** 2013. Community perceptions of emerging dengue in urban areas in southern coastal Ecuador. Society for Tropical Medicine and Hygiene (ASTMH) 62st Annual Meeting, November 13-17, Washington, D.C.

Thomen, A.P.* and **Ryan, S.J.** Evaluating avian communities in Dominican cacao farms: Management and Conservation. Student Conference on Conservation Science-New York. October 8-11, 2013. New York, NY.

Fuda, B.*, **Ryan, S.J.**, Hartter, J. and C.A. MacKenzie. 2013. Carnivore Conservation in Northwest Uganda: Assessing Human Impacts and Attitudes. Student Conference on Conservation Science-New York. October 8-11, 2013. New York, NY.

Johnson, L.R., Ben-Horin, T., Mordecai, E., Paaijmans, K.P., Pawar, S., **Ryan, S.J.**, McNally, A., Lafferty, K.D. 2013. Effects of uncertainty in temperature dependencies in physiological responses on predictions of R0 for malaria: a Bayesian approach. Ecology and Evolution of Infectious Disease (EEID), 11th Annual Workshop and Conference. May 20-23, 2013. Penn State University, PA.

Breytenbach, E., Diem, J.E., Hartter, J., **Ryan, S.J.,** and C.A. Chapman. 2013. Following the rains: Perceptions of climate change around Kibale National Park, Uganda. Association of American Geographers (AAG) Annual Meeting. April 9-13, 2013. Los Angeles, CA.

Diem, J.E., Hartter, J., Palace, M.W., and **S.J. Ryan.** 2013. Validation of Satellite-Based Rainfall Products for Western Uganda. Association of American Geographers (AAG) Annual Meeting. April 9-13, 2013. Los Angeles, CA.

Hartter, J., **Ryan, S.J**., Palace, M., Diem, J., and C.A. Chapman. 2012. Population, Environment, and Climate in the Albertine Rift: Understanding Local Impacts of Regional Change. American Geophysical Union (AGU) Fall Meeting. December 3-7, 2012. San Francisco, CA.

Ibarra Stewart, A.M.*, **Ryan, S.J.,** Beltran, E., Meija, R., Silva, M. 2012. Dengue Vector Dynamics Influenced by Interacting Climatic and Social Factors in Ecuador: Implications for Targeted Control. American Society for Tropical Medicine and Hygiene (ASTMH) 61st Annual Meeting, November 11-15, 2012. Atlanta, GA

Ryan, S.J. and Tildesley, M. 2011 "Utility of landcover maps for spatial epidemic models of disease transmission in UK livestock". Epidemics3, November, 2011. ***Poster Pitch:*** *http://www.youtube.com/watch?v=yAlwChrlvfw*

**Graduate student presenter **Undergraduate student presenter*

Workshops/ Field Courses:

IV Curso Internacional de Primatología de Campo: **Ecología, Comportamiento y Conservación en la Interfase humano – ambiente.** 2013 Estación de Investigación Primatológica y Vida Silvestre, INECOL, Balancán, Tabasco, México

Emerging Diseases, Climate change and how we (could) approach them together

- Session 1: EIDs, Epidemiology, Disease Ecology; contexts and complications
- Session 2: Climate Change and Ecology of EIDs; climate models, multiscalar anthropogenic impacts
- Session 3: Spatial methods for ID management; top down and bottom up modeling

Malaria and Climate Change

Too few primates, too many primates, and disease

Siyacabanga Workshop: **Complexity and Biology: Tick-borne disease dynamics for wildlife, livestock and humans.** 12 - 14 March 2013. University of KwaZulu Natal, Pietermaritzburg, South Africa *(Co-coordinator)*
Session: Coupled natural-human systems research and disease ecology on landscapes

DIMACS/MBI Workshop: **Quantitative Landscape Ecology and Environmental Sustainability.** 2 - 7 July 2012.
University of KwaZulu Natal, Durban, South Africa. *(Workshop co-coordinator)*
Didactic Talk: If we know what sustainability is (theory), how do we take the next step (applied)?
Home range and habitat selection: ArcGIS Morning Hands-on Workshop
Thinking in Systems: Morning Hands-on Workshop

US-Africa initiative on Conservation Biology at the Naivasha Research Insitute, Kenya, January 2011
Funded through NSF, Society for Mathematical Biology, DIMACS at Rutgers
Introduction to GIS for Wildlife
Global Change and GIS
Introduction to Agent-based Models
Reserve Design

US-Africa initiative on Conservation Biology at the South African Wildlife College (SAWC), July-August 2010
Funded through NSF, Society for Mathematical Biology, DIMACS at Rutgers
Introduction to GIS for Wildlife
Global Change and GIS
Introduction to Agent-based Models
Harvesting Models for Conservation

OCCASIONALLY USEFUL SKILLS
Languages: Intermediate French, Spanish, Afrikaans

Software:
GIS/Remote Sensing: ArcView, ArcGIS, ArcINFO, QGIS, DIVA-GIS, ERDAS Imagine, R;
S*tatistical:* R, Matlab; *Programming:* rudimentary Java, Netlogo, HTML
Collections/data management: ARKS/SPARKS, ISIS, Paradox, MS Access, MySQL, Morpho (EML)

Certifications:
CITI training for human subjects research (international and internet additional modules) (current: 2015-)
AALAC training for ethical use of animals in research (2015)
EH&S certification for IACUC (UF)
Human Subjects Payments training (UF)
Laboratory environmental health and safety at SUNY ESF (2013)
Dry Ice Packaging, Blood Sample, and Pathogenic Biohazard Sample Packaging STAR training (Stanford, 2008)