# Beth A. Kaplin

Curriculum vitae

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### Education

Ph.D. Dept of Zoology, University of Wisconsin-Madison, USA 1998
M.Sc., Dept of Zoology, University of Wisconsin-Madison, USA 1994
B.Sc., Wildlife Biology, Colorado State University, Fort Collins, 1986
Undergraduate courses, Biological Sciences, Purdue University, W. Lafayette, IN, 1981-1983

#### **Professional Positions**

2018-	Research Professor of Biodiversity, School for the Environment, Univ of Mass-Boston, USA	
2016-	Acting Director, Center of Excellence for Biodiversity, University of Rwanda	
Jun-Dec 2016	Acting Vice Dean, School of Science, College of Sci & Techn., Univ of Rwanda	
2013-	Professor, Dept. of Biology, College of Sci & Technology, Univ of Rwanda	
2013-2016	Coordinator, Center of Excellence for Biodiversity, University of Rwanda	
2012-2015		
	the Albertine Rift (MacArthur Foundation), Department of Biology, College of	
	Science and Technology, University of Rwanda	
2007-2012	Part-time Lecturer, Biology Dept, National University of Rwanda.	
2006-2014	Technical Advisor, Conservation Biology Education Project, Biology Dept, National	
	University of Rwanda. Grant writing; design and run capacity building programs,	
	teacher trainings, and workshops; design and evaluate curricula in conservation	
	science at BSc and MSc level; liaise with government and NGO's. Developed a	
	Master's in Biodiversity Conservation & Natural Resources Management at	
	National University of Rwanda (now Univ of Rwanda) launched in January 2011;	
	involved writing curriculum, modules, managing stakeholder workshops, validation,	
0000 0010	teaching, evaluation, and hiring instructors; MacArthur Foundation funding.	
2000-2018	Founding Director, Center for Tropical Ecology & Conservation, AUNE	
1998-2018	Professor, Environmental Studies Dept., Antioch University New England (AUNE);	
	supervise MSc & PhD students (AUNE Environmental Studies PhD Program	
1000 1000	Director from 2000-2006)	
1990-1992	Field Project Coordinator, ' <i>Projet Frugivore</i> ', Nyungwe Forest Reserve, Rwanda.	
	Developed field site for 5 year tropical forest research project funded by USAID and	
	NSF; trained field assistants; conducted phenology, frugivory and seed dispersal	
	research; served as project liaison with Rwandan government officials, 1/90-9/92.	

### **Professional and Research Interests**

Role of higher ed in conservation science & natural resource management research, innovation and education, capacity building in developing countries for conservation & SDGs achievement.

Tropical ecology, forest dynamics and conservation; plant phenological patterns and global environmental change; edge and matrix effects; ecology of plant-animal interactions particularly seed dispersal; tropical forest restoration; ecology and conservation of African tropical systems, particularly the Albertine Rift

Primate behavioral ecology, evolutionary history, and conservation

Intersection of socio-political & ecological systems and maintenance of biological diversity and ecological integrity, particularly in protected areas; human-wildlife interactions

# **Professional Service**

- Working Group member to develop the Technical Guidelines for Biosphere Reserves (TGBR) of the MAB International Coordinating Council in cooperation with the MAB Secretariat; June 2018 present.
- Associate Editor, Biotropica journal, 2014 to present
- Invited by US Embassy in Central African Republic to host workshops and meetings supporting conservation in national parks for peace and stability, role of higher education, February 2018
- Organized and facilitated training in research capacity building for early career African researchers, invited by ATBC, Entebbe, Uganda, February 2018
- Invited panel member for 2018 Gender Summit, Next Einstein Forum, March, Kigali, Rwanda
- Facilitated panel discussion at University of Rwanda's Science Week conference on the theme of biodiversity conservation in Rwanda, June 2017
- Developed and delivered active teaching workshop to instructors in sciences at University of Rwanda to promote student-centered teaching approaches; November 2017
- Served on the team to develop the Concept note for the University of Rwanda for the 'University we want', submitted to the Swedish Embassy for next round of funding from Sida for Research capacity development; November 2016-June 2017
- Served on Technical committee for the African Great Lakes Summit and the theme Ecosystem Services and Biodiversity Benefits, held in Entebbe, Uganda, May 2017
- Served on scientific committee and organized symposium: New Initiatives in Africa's Albertine Rift for Biodiversity Conservation for the 3<sup>rd</sup> African Congress of the Society for Conservation Biology Africa Section in El Jadida, Morocco, September 2016.
- Conducted training: Project Development & Management at 7<sup>th</sup> annual meeting of the Regional Network for Conserv Educators in the Albertine Rift, Univ Dar es Salaam, 21-26 Aug 2014
- Vice Chair, Albertine Rift Conservation Society, Nov 2012 present, arcosnetwork.org
- Mentor for BSc & MSc student research, Biology Dept, Natl Univ of Rwanda, 2007-current
- Invited reviewer: National Science Foundation (NSF) Experimental Program to Stimulate Competitive Research (EPSCoR) merit review panel, Washington, DC, Nov 18-20, 2013
- Invited workshop participant: Identifying the Top Ten Questions in Conservation That Can be Answered Through Remote Sensing Technologies Workshop, National Conservation Training Center January 7-11 2013, sponsored by NASA and WCS
- Organized multiple workshops in capacity building for members of the Regional Network for Conservation Educators in the Albertine Rift in a collaborative learning community approach; topics: Advanced and Introductory GIS (Rwanda, DRCongo), Statistics using R software (Uganda, Rwanda), Active teaching methods (Rwanda), and Social science research methods for biodiversity conservation (Burundi), 2006 – 2013
- Elected Board of Governors, Society for Conservation Biology Member at Large (July 2011-2013); member Education Committee
- Editorial Board Member (Subject editor), Biotropica, May 2006 2014
- External reviewer for PhD candidate at University of Minnesota, Muséum National d'Histoire Naturelle, Paris, France, and University of Gottenburg, Sweden; external advisor for MSc candidate at University of WI-Madison; external reviewer BSc candidate Marlboro College
- Academic Committee Member (invited), Association for Tropical Biology and Conservation (ATBC) and the Society for Conservation Biology (SCB) Africa Section joint meeting in Arusha, Tanzania (June 12-16, 2011)
- Association for Tropical Biology & Conservation (ATBC) elected councilor, 2009-2012
- Program Advisory Committee for START, the global change SysTem for Analysis, Research and Training, a non-governmental research organization working to assist developing countries in building expertise and knowledge to explore drivers of and solutions to global and regional environmental change, February 2010-present

- Program Director, Doctoral Program in Environmental Studies, Antioch University New England, 2003-2005, 2007-2010
- Co-Organized and co-hosted *Women in Science* Workshops for the Association for Tropical Biology & Conservation Annual Meetings (Surinam 2008, Germany 2009, Brazil 2012)

### **Teaching Experience**

Various graduate level courses at Antioch University New England (AUNE):

- -Conservation Biology ES563 -Dissertation Proposal Seminar ES774
- -Doctoral Dissertation Seminar ES899 -Research Strategies I ES 727
- -Comparative Ecological Analysis ES702 (lectures & field labs)
- -Tropical Ecology & Conservation field course, Monteverde, Costa Rica, AUNE
- -Coral reef ecology field study course, Florida keys, AUNE
- Various course taught at University of Rwanda: BSc and MSc current:
  - Tropical Ecology & Landscape Change, Professional Skills, Research Design MSc
  - Animal Behavior, Ecology and Evolution, Research Methods BSc
- University of Wisconsin-Madison:
- 1997 Extinction of Spp, Zool/Wildlife Ecol 360, Teaching Asst.
- 1997 Human/Anim Relations, Zool 335, Teaching Asst.
- 1996 Ecology Lab, Botany/Zool 460, Teaching Asst.

**Publications** (\* = students from my lab)

- Taremwa, N.K., M.C. Gasingirwa, D. Nsabimana and B.A. Kaplin. In review. Leveraging Traditional Ecological Knowledge for Biodiversity Conservation and Resilience to Climate Change in Rwanda. ASEAN Journal on Science & Technology for Development.
- Clark, A. and **B.A. Kaplin**. In prep. Activity Budget, Foraging Behaviour and Habitat Use of Dent's Monkey (*Cercopithecus Denti*) in the Cyamudongo Forest Fragment, Nyungwe National Park, Rwanda. for American Journal of Primatology
- Wengerd, N.\* and **B.A. Kaplin**. In prep. Protected Area Planning and Management: Supporting Local Stakeholder Participation with an Asset-Based, Biocultural Approach TBD.
- Nsengimana, V.\*, D. Nsabimana, F. Francis, And **B.A. Kaplin**. In prep. Use of the community composition of soil litter arthropods as biological indicators of soil quality under different land uses in southern Rwanda. for Applied Soil Ecology
- Nsengimana V.\*, B.A. Kaplin, F. Francis, M.M.L. Kouakou, W. Dekoninck, D. Nsabimana. 2018. Use of Soil and Litter Ants (Hymenoptera: Formicidae) as Biological Indicators of Soil Quality Under Different Land Uses in Southern Rwanda . Environmental Entomology, <u>https://doi.org/10.1093/ee/nvy144</u>
- Muhirwa, F.\*, A. Maniragaba and **B.A. Kaplin**. 2018. Dung beetle distribution, abundance, and diversity along an elevation gradient in Nyungwe National Park, Rwanda: A preliminary survey. Journal of Entomology and Zoology Studies 6(2):2637-2640.
- Nsengimana, V.\* **B.A. Kaplin**, F. Francis, and D. Nsabimana. 2017. A comparative study of sampling methods for soil litter arthropods in conserved tree plots and banana crop plantations in Rwanda. International Journal of Development and Sustainability 6(8):900-913.
- Nsengimana, V.\*, S. Weihler, and **B.A. Kaplin**. 2017. Perceptions of Local People on the Use of Nyabarongo river wetland and its Conservation in Rwanda. Society and Natural Resources 30(1):1-13.
- Chapman, H., N.J. Cordeiro, P. Dutton, D. Wenny, S. Kitamura, B. Kaplin, F. Melo and M. Lawes. 2016. Seed dispersal ecology of tropical montane forests. Journal of Tropical Ecology 32(5):437-454.
- Bruna, E., M. Peña-Claros, B. Finegan, and **B.A. Kaplin**. 2016. Editorial: A New Data Archiving Policy for *Biotropica*. Biotropica 48(2):139-140.

- Seburanga, J.L.\*, E. Bizuru, E.N. Mwavu, K.G. Kampungu T. Gatesire, and **B.A. Kaplin**. 2015. A new method for post-introduction risk assessment of biological invasions among introduced shrubs in developing countries. Environmental Management 57(3):572–584.
- Rose, R. et al. 2014. Ten Ways Remote Sensing Can Contribute to Conservation. Conservation Biology. Conservation Biology 29(2):350-359.
- Seburanga J.L.\*, **B.A. Kaplin**, Q.-X. Zhang, T. Gatesire. 2014. Amenity trees and green space structure in urban settlements of Kigali, Rwanda Urban For & Urban Greening 13:84-93.
- Seburanga, J.L.\*, **B.A. Kaplin**, E. Bizuru and E.N. Mwavu. 2013. The folk biology of South American-native shrub, *Mimosa pigra* L. [Leguminosae] and its invasive success in Rwanda Intl J Biodiversity and Conservation 5(8):486-497.
- **Kaplin, B.A.** and A. William\*. *2013*. Within-Group Primate Behavior. In N. Bynum, E. Sterling and M. Blair, editors. Primate Ecology and Conservation: A Handbook of Techniques. Oxford University Press.
- Keel, B.G.\*, L.W. Zettler, and **B.A. Kaplin**. 2011. Seed Germination of *Habenaria repens* (Orchidaceae) in situ beyond its range, and its potential for Assisted Migration imposed by Climate Change. Castanea 76(1): 43-54.
- Gross-Camp, N.\* and **B.A. Kaplin.** 2011. Differential seed handling by two African primates affects: seed fate and establishment of large-seeded trees. Acta Oecologica 37:578-586.
- Nyiramana, A., I. Mendoza, **B.A. Kaplin**, and P.-M. Forget. 2011. Evidence for seed dispersal by rodents in tropical montane forest in Africa. Biotropica 43(6):654-657.
- Scholte, P., L. Rugyerinyange, F. Bizimungu, F. Ruzigandekwe, N. Chao, F. Mulindahabi, N. Ntare, D. Babaasa, R Fimbel, E. Fischer, J. Gapusi and B. A. Kaplin. 2010. Reaching consensus: impact of the liana *Sericostachys scandens* on forest dynamics in Nyungwe National Park, Rwanda. Oryx 44(3):325-326.
- Margles\*, S.W., M. Masozera, L. Rugyerinyange, and B.A. Kaplin. 2010. Participatory Planning: Using SWOT-AHP Analysis in Buffer Zone Management Planning. Journal of Sustainable Forestry 29 (6): 613 – 637.
- Margles\*, S.W., R.B. Peterson, J. Ervin, and B.A. Kaplin. 2010. Conservation without borders: Building Communication and Action across Disciplinary Boundaries for Effective Conservation. Environmental Management 45:1-4.
- Gross-Camp\*, N.D., M. Masozera, and **B. A. Kaplin**. 2009. Chimpanzee Seed Dispersal Quantity in a Tropical Montane Forest of Rwanda. American J of Primatology 71:901–911.
- Gross-Camp\*, N., F. Mulindahabi, and **B.A. Kaplin**. 2009. Comparing the dispersal of largeseeded tree species by frugivore assemblages in tropical montane forest. Biotropica 41(4):442-451.
- Nsabimana, D., L. Klemedtson, **B.A. Kaplin**, and G. Wallin. 2009. Soil CO<sub>2</sub> flux in six monospecific forest plantations in Southern Rwanda. Soil Biol and Biochem 41(2):396-402.
- Nsabimana, D., L. Klemedtson, **B.A. Kaplin**, and G. Wallin. 2008. Soil carbon and nutrient accumulation under forest plantations in southern Rwanda. African Journal of Environmental Science and Technology 2(6):142-149.
- Gross-Camp\*, N, N. Barakabuye, F. Bizimungu, M. Masozera, and **B.A. Kaplin**. 2007. Linking research with education outreach to improve conservation efforts in protected areas. Informal Learning Review No. 85: 11-13.
- Cordeiro, N.J., N.D. Burgess, D.B.K. Dovie, B.A. Kaplin, A.J. Plumptre and R. Marrs. 2006. Conservation in areas of high population density in sub-Saharan Africa. Biological Conservation 134(2):155-163.
- Gross-Camp\*, N. and **B.A. Kaplin**. 2005. Chimpanzee (*Pan troglodytes*) seed dispersal in an afromontane forest: Microhabitat influences on the postdispersal fate of large seeds. Biotropica 37(4):641-649.
- Ormsby\*, A. and **B.A. Kaplin**. 2005. A Framework for Understanding Community Resident Perceptions of Masoala National Park, Madagascar. Environ Conservation 32(2):156-164.

- Ganas\*, J., M. M. Robbins, J.B. Nkurunungi, **B.A. Kaplin**, and A. McNeilage. 2004. Dietary variability of mountain gorillas in Bwindi Impenetrable National Park, Uganda. American Journal of Primatology 25(5): 1043-1072.
- Zjhra, M.L. and **B.A. Kaplin**. 2004. Reproductive Biology and Genetics of Tropical Trees from a Canopy Perspective. *In* M.D. Lowman and H.B. Rinker\*, editors. Forest Canopies, 2<sup>nd</sup> ed. Academic Press.
- Santiago, M.L., Bibollet-Ruche, F., Gross-Camp\*, N., Majewski, A.C., Masozera, M., Munanura, I., Kaplin, B.A., Sharp, P.M., Shaw, G.M., and B.A. Hahn. 2003. Noninvasive detection of simian immunodeficiency virus infection in a wild-living l'hoest's monkey (*Cercopithecus lhoesti*). Aids Research and Human Retroviruses 19(12): 1163-1166.
- **Kaplin, B.A**. 2002. Terrestriality and the maintenance of the disjunct geographical distribution in the *lhoesti* group *In* M. Glenn, M. Cords, and A. Gautier-Hion, editors. The Guenons: Diversity and Adaptation in African Monkeys. Kluwer Academic Publishers, New York.
- Kaplin, B.A. and J.E. Lambert. 2002. Seed dispersal effectiveness by *Cercopithecus* monkeys: Implications for seed input into degraded areas. *In* Levey, D.J., Silva, W.R., and M. Galetti, editors. Seed Dispersal and Frugivory: Ecology, Evolution and Conservation. CABI Publishing, Wallingford, Oxfordshire, UK.
- Lambert, J.E. and **B.A. Kaplin**. 2001. New horizons in the ecology of primate seed dispersal. Evolutionary Anthropology 10(3):77-78.
- Kaplin, B.A. 2001. Ranging behavior of two species of forest guenons (*Cercopithecus mitis doggetti* and *C. lhoesti*) in the Nyungwe Forest Reserve, Rwanda. International Journal of Primatology 22(4): 521-548.
- Flaspohler, D.J., B.R. Bub, and **B.A. Kaplin**. 2000. The application of Conservation Biology research in management: An assessment. Conservation Biology 14(6): 1898-1902.
- **Kaplin, B.A.** and T.C. Moermond. 2000. Foraging ecology of the mountain monkey: implications for its evolutionary history and use of disturbed forest. American Journal of Primatology 50(4):227-246.
- **Kaplin, B.A.** and T.C. Moermond. 1998. Variation in seed handling by two species of forest monkeys in Rwanda. American Journal of Primatology 45:83-101.
- Kaplin, B.A., V. Munyaligoga, and T.C. Moermond. 1998. The influence of temporal changes in fruit availability on fruit eating and seed handling in blue monkeys (*Cercopithecus mitis doggetti*). Biotropica 30:56-71.
- Sun, C., B.A. Kaplin, K.A. Kristensen, V. Munyaligoga, J. Mvukiyumwami, K. Kajonda, and T.C. Moermond. 1996. Tree phenology in a tropical montane forest of Rwanda. Biotropica 28:668-681.

#### **Conference Publications**

- Umurungi Y., Kanyamibwa S., Gashakamba F., Kaplin B. 2018. African Biodiversity Challenge: Integrating Freshwater Biodiversity Information to Guide Informed Decision-Making in Rwanda. Biodiversity Information Science & Standards 2:e26367.doi.org/10.3897/biss.2.26367
- Detwiler, K.M., J. Gray, and B.A. Kaplin. 2013. A Case of Hybridization in Guenons at Nyungwe Forest National Park, Rwanda: Cercopithecus ascanius Schmidti x C. pogonias denti. 36th Annual Meeting of the American-Society-of-Primatologists. American Journal of Primatology 75 (Suppl 1): 78-78
- Sun, C., B.A. Kaplin, and T.C. Moermond. 1996. Are fig keystone food sources for frugivorous turacos and guenons in an afro-montaine forest? Annual Combined Meeting of the Ecological Society of America on Ecologists/Biologists as Problem Solvers, Providence, Rhode Island, USA. Bulletin of the Ecological Society of America 77(3):431.
- Kaplin, B., V. Munyaligoga, and T.C. Moermond. 1993. Seed dispersal by two species of African monkeys: Potential for regeneration of human-disturbed forest. Annual Meeting of the Ecological Society of America: Ecology and Global Sustainability, Madison, Wisconsin, USA. Bulletin of the Ecological Society of America 74(2):301.

Moermond, T.C., K. Ka Kajondo, C. Sun, K. Kristensen, Munyaligoga, V., B.A. Kaplin, C. Graham, and J. Mvukiyumwami. 1993. Avian frugivory in a Montane rain forest: Tree visitation patterns. Koninklijk Museum Midden-Afrika Tervuren Belgie Annalen Zool Wetenschappen; Birds and the African environment, Proceedings of the eighth Pan-African Ornithological Congress, Bujumbura (Burundi), 30 Sep - 5 Oct 1992. Vol 268, p. 421-429.

#### **Book Reviews**

Kaplin, B.A. 2007. Primates and Predators. Ecology, Vol. 88, No. 9, pp. 2410-2411.

- Kaplin, B.A. 2004. A Primer on Social Research for the Ecologist and Conservation Biologists. Ecology: Vol. 85, No. 9, pp. 2642–2643.
- Kaplin, B.A. 2002. Doing science for biodiversity conservation. Ecology 83(6):1770-1771.

### **Popular Publications & Articles**

- Rowe, N., editor. 2002. All the world's primates (contributing author to chapters on *Cercopithecus mitis doggetti, C. hamlyni,* and *C. lhoesti*). Pogonius Press, R.I., USA
- Kaplin, B.A. 2010. Women and the impact of the Global Conservation Act. Op Ed published in Keene Sentinel, New Hampshire Business Review, Concord Monitor, Brattleboro Reformer, and The Huffington Post. November 2010. Written upon request by the Pew Charitable Foundation.
- Kaplin, B.A. 2003. Shared Lives: New England's Connection with the Tropics. Musings from The Nature Museum at Grafton. Fall '03 issue.
- Kaplin, B.A. 1998. An update on research and conservation in the Nyungwe Forest Reserve, Rwanda. Backbone, Newsletter of the Albertine Rift Conservation Society 3:3-4.

#### **Technical Reports & Papers**

- Kaplin, B.A. 2014. Chimpanzee Conservation in Nyungwe National Park, Rwanda: The impacts of buffer zone type and land use change. Report to USFWS, Division of International Conservation Wildlife Without Borders Programs, Great Ape Conservation Fund, Grant and Cooperative Agreement Number: F12AP00411
- Kaplin, B.A. and A. William. 2008. Building Capacity for Rwanda's Great Ape: Training in Ecology and Conservation, for ORTPN Chimpanzee Tourist Guides and Wardens Tourism, Unpublished report for The Wildlife Conservation Society and ORTPN, Rwanda
- Kaplin, B.A. and T. Martz. 2008. *Sericostachys scandens*: An Annotated Bibliography, Unpublished report prepared for the PAB-GEF Project, Kigali, Rwanda
- William, A. and B.A. Kaplin. 2006. Women in Science Workshop: Women Making a Difference in Science and Development. Unpublished report for CBEP, MacArthur Foundation funded project, National University of Rwanda
- Kaplin, B.A. 2005. Enhancement of Tourism though the Conservation of Nyungwe Forest Chimpanzees. Unpublished report to the U.S. Fish & Wildlife Service.
- Kaplin, B.A. 2005. Feasibility of habitat restoration in Bwindi Impenetrable and Mgahinga Gorilla National Park. Unpublished report to African Wildlife Society, Kampala, Uganda.
- Kaplin, B.A. 2002. Monkeys make do *in* K. Grubbs, editor. <u>Whole Terrain</u>, Special issue: Surplus and scarcity. Antioch New England, Keene, NH.
- Plumptre, A.J., M. Masozera, P. Fashing, A. McNeilage, C. Ewango, B.A. Kaplin, and I. Liengola. 2002. Biodiversity Surveys of the Nyungwe Forest Reserve in S.W. Rwanda. WCS Working Paper No. 19. <u>www.wcs.org/science</u>
- Numerous reports from 9 yrs (2006-2014) MacArthur Foundation project funding at University of Rwanda (workshops, final reports) available on request; also from recent CoEB workshops.

#### **GRANTS RECEIVED**

JRS Foundation, Planning grant: Developing biodiversity information system for the Mukungwa Watershed, Rwanda; October 2018 – June 2019; \$64,500.

- Royal Belgian Institute of Natural Sciences (RBINS), Project entitled: Development of Biodiversity Indicators for Buffer Zones of Rwanda's Protected Areas: Nyungwe National Park; April-Sept 2018; 3,020 Euros
- Sud Expert Plantes/Développement durable (SEP2D) to Upgrade and Digitize the National Herbarium of Rwanda, 2 yrs starting February 2018; \$30,000.
- African Biodiversity Challenge, South African National Biodiversity Institute (SANBI), Integrating Freshwater Biodiversity Information to guide informed decision-making in Rwanda, 2017; \$10,000.
- UNESCO: support to host capacity building trainings for nodes and partners of the Center of Excellence for Biodiversity and Natural Resources Management, Part of Support to the Development and Implementation of a Green Growth and Economy Approach to Rwanda's Economic Transformation, 2017, \$15,000.
- START: Enhancing capacity for biodiversity conservation and climate change research in the Albertine Rift Region through a series of training sessions: GIS, statistics and social science research methods, support for trainings for Regional Network, May 2013, \$34,977.
- Gordon Family Foundation: Nocturnal primate research, Nyungwe National Park, Center for Tropical Ecology & Conservation, AUNE; \$1000.
- US Fish & Wildlife Service, Great Apes Conservation Fund: Chimpanzee Conservation in Nyungwe National Park, Rwanda: Impacts of buffer zone and land use change: 2012-2013, \$47,696.
- MacArthur Foundation: Enhancing the Capacity of Academic Institutions in the Albertine Rift for Biodiversity Conservation and Climate Change Research through a regional network; to National University of Rwanda & Antioch University New England; 2011-2013, \$250,000.
- Private donor, support for the Center for Tropical Ecology & Conservation, Antioch University New England; \$10,000.
- MacArthur Foundation: Supporting biodiversity conservation in the Albertine Rift by strengthening graduate-level conservation science education in Rwanda; to National University of Rwanda; Technical Advisor, 2009-2011, \$420,025.
- Antioch University New England Innovation Grant: Exploring capacity building symposium in Bonito, Brazil, ATBC meetings; \$2000.

Private donors & Foundations: Operating costs and support for Center for Tropical Ecology & Conservation, ANE; current. Includes \$47,000 raised for intl. student scholarships to date.

- Professional Development Funds from Antioch University New England
- MacArthur Foundation: Building academic capacity to deliver conservation biology education in Rwanda; to National University of Rwanda; Technical Advisor; 2006-2008, \$390,000.

Royal Zoological Society of Scotland: Guenon ecology conservation project; 2006-2008, \$40,000.

- USFWS Great Ape Conservation Fund: Enhancement of Tourism through the Conservation of Nyungwe Forest Chimpanzees, PI: Beth Kaplin; Africa Program, Wildlife Conservation Society; 2004. \$45,000.
- WCS: Associate Scientist support for annual research trips to Rwanda, Conservation Project of the Nyungwe Forest Reserve, Rwanda, 1998-2005.
- NSF: Interactive Learning Modules to Facilitate Conservation Biology Education; PI's: Sterling, Hunter, and Gibbs; managed by CBC, American Museum of Natural History, NYC. Co-PI:
   B.A. Kaplin; Evaluation of modules with an interdisciplinary team of graduate students at Antioch New England Graduate School; 2001-2004.
- Women's International Science Collaboration (WISC) Program, NSF/AAAS, Project initiation for research on forest dynamics in the Masoala Penninsula, Madagascar; co-author; Dr. Michelle Zjhra, May 2002; \$9500.

Philanthropic Educational Organization Scholar Award Fellowship, 8/97-5/98, \$7000.

The Wellcome Trust Research Training Fellowship in Biodiversity to T. Ukizimtambara for research and study leading to the M.Sc. at University of East Anglia, UK.

International Primatological Society Conservation Grant to T. Ukizimtambara, Rwandan Biology student for research on chimpanzees in Nyungwe Forest, Rwanda., 1994, \$1000.

- U.S.A.I.D. Program for Science & Technology: Animal Seed Dispersers as Key Elements for Conservation of Tropical Forests (T.C. Moermond, P.I.). 1989-1992, \$150,000.
- U.S.A.I.D. Natural Resources Management Project, AID Mission to Rwanda. Research bridging grant. 1992-1993, \$72,000.

NSF Conservation Research (NSF 90-66): Tropical Forest Regeneration: Influence of Animal Seed-Dispersers. (T.C. Moermond, P.I.). 1993-1996, \$200,000.

# **GRADUATE STUDENTS ADVISED**

Doctoral Advisees completed:

Dr. Apollinaire William, (PhD Antioch Univ New England, 2018): Smallholder Farmers, Environmental Change and Adaptation in a Human-Dominated Landscape in the Northern Highlands of Rwanda.

Dr. Joseph Mlotha, (PhD, Antioch Univ New England, 2018): Analysis of Land Use/Land Cover Change Impacts Upon Ecosystem Services in Montane Tropical Forest of Rwanda: Forest Carbon Assessment and REDD++ Preparedness.

Dr. Nicole Wengerd (PhD, Antioch Univ New England, 2018): Protected Area Planning and Management: Supporting Local Stakeholder Participation with an Asset-based, Biocultural Approach.

Dr Robin Martino, (PhD Antioch Univ New England, 2014): *Matrix and edge effects on the maintenance of ecological function in an afromontane protected area.* 

Dr Gabriela Shuster, (PhD Antioch Univ New England, 2012): The management of feral pig socioecological systems in far north Queensland, Australia.

Dr. Susan Leopold, (PhD Antioch Univ New England, Apr 2011): Dormant ethnobotany: a case study of decline in regional plant knowledge in the Bull Run Mountains of Virginia.

Dr. Meagan Jones, (PhD Antioch Univ New England, Apr 2011): *Female humpback whale* (*Megaptera novaeangliae*) reproductive class & male-female interactions during breeding season. Dr. Tharcisse Ukizintambara, (PhD Antioch Univ New England, Apr 2010): Forest edge effects on the behavioral ecology of the L'Hoest's monkey in Bwindi Impenetrable National Park, Uganda. Dr. Nicole Gross-Camp, (PhD Antioch University New England, April 2009): Dispersion of large-seeded tree species by two forest primates: primate seed handling, microhabitat variability, and post-dispersal seed fate.

Dr. MaryJeanne Raleigh, (PhD Antioch University New England, July 2009): *Childhood nature contact and its effect on adult coping skills*.

Dr. Leon Malan, (PhD Antioch University New England, July 2008): Beyond the debate: exploring the underlying values and assumptions of biodiversity conservation in protected areas.

Dr. Brian Keel, (PhD Antioch University New England, July 2007): Assisted migration as a conservation strategy for rapid climate change: Investigating extended photoperiod and mycobiant distributions for <u>Habenaria repens nutall</u> as a case study.

Dr. Bruce Rinker, (PhD Antioch University New England, 2004): The effects of canopy herbivory on soil microarthropods in a tropical rainforest.

Dr. Alison Ormsby, (PhD Antioch University New England, 2003): Perceptions on the park periphery: resident, staff and natural resource relationships at Masoala Natl Park, Madagascar.

Doctoral Advisees Current (Antioch University New England):

Samuel Werikhe	Erasme Uyizeye	Kimberly Craighead
Yves Gakunde	Evan Craig	Christina Wesolek
Diana Temple	Phil Dugger	

Doctoral Advisees Current (University of Rwanda): Deogratias Tuyisingize Master's Student Advisees Completed (Conservation Biology at Antioch Univ New England):

Jessica Mathon, MSc Nov 2007Jeff BroRachel McShane, MSc July 2008BrigitteTamarra Martz, MSc Nov 2009ShawnJessica Ganas, MSc Nov 2003WillianJames Ayala, MSc Nov 2005ElizabeSarah Stoner Duncan, Sept MSc 2010RachelAmber Kleiman, MSc July 2012Laurie IMelissa Gaydos, MSc May 2013BernadeEmily Dark, MSc May 2014AdriennAdrianna (Rocky) Casillas, MSc Apr 2016Benoit ITiffanie Meekens, MSc Mar 2016KatelyrNicole Beaupre, MSc Mar 2017AyshahPhoebe Gooding, MSc, Aug 2017Lizzy SAlysa Hansen May 2018EnatheSamantha Lyon Dec 2018Samantha Lyon Dec 2018

Jeff Brown, MSc April 2007 Brigitte Antonocci, MSc Nov 2005 Shawn Margles, MSc Nov 2006 William O'Neill, MSc July 2010 Elizabeth Oriel, MSc July 2010 Rachel Laurie, MSc July 2010 Rachel Laurie, MSc Nov 2011 Laurie Brewster, MSc Dec 2013 Bernadette Arakwiye, MSc Jun 2014 Adrienne Chitayat, MSc Sep 2015 Benoit Kamuene, MSc Dec 2016 Katelynn Frei, MSc Jan 2017 Ayshah Kassamali-Fox Aug 2017 Lizzy Sgambelluri May 2018 Enathe Hasabwamariya Jul 2018

Master's student Advisees Completed (Biodiversity Conservation at University of Rwanda):Abel Musana, MSc Aug 2012Jean Paul Kubwimana, MSc Jun 2013Jean de Dieu Uwizelimana, MSc Aug 2012Jean Paul Ndayisabye, MSc Aug 2012Erasme Uyizeye, MSc May 2014Felix Niyonzima, MSc July 2014Protais Niyigaba, MSc Jul 2014Ange Imanishimwe, MSc Sept 2015Christella Iradukunda, MSc Jun 2015Venuste Nsengimana, MSc Jun 2015JeanPierre Hategekimana, MSc Jan 2016Yvette Umurungi, MSc Feb 2016

Master's Student Advisees Current (Conservation Biology at Antioch Univ New England): Jahdiel Torres-Caba Lynn Kimmel

Master's Student Advisees Current (University of Rwanda): Claudine Tuyishimire Jeannette Batamuliza

#### Committee member for PhD student:

Fidele Ruzikandekwe, PhD candidate, Amsterdam Vrije University, current Parfait Yongabo, PhD candidate, University of Rwanda, current Venuste Nsengimana, PhD candidate, University of Rwanda, current Samantha Green, PhD candidate, Western Australia University, current Jaya Matthews, PhD candidate, Western Australia University, current Natasha Coutts, PhD candidate, Western Australia University, current Alexandra Miller, PhD candidate, Western Australia University, current Tammy Cloutier, PhD candidate, Antioch University New England, current Dr. Kayla Cranston, PhD Antioch University New England, 2016 Dr. Erin Rodger, PhD Antioch University New England, Dec 2014 Dr Melissa Laser, PhD Antioch University New England, Dec 2017 Dr. Brian Hagenbuch, PhD Antioch University New England, 2006 Dr. LeeAnn Woolery, PhD Antioch University New England, 2006 Dr. Amber Pairis, PhD Antioch University New England, 2005 Dr. Jen Wilhoit, PhD Antioch University New England, 2005 Dr. Elin Torell, PhD Antioch University New England, 2003 Dr. Dave Wiley, PhD Antioch University New England, 2001

*Committee member for MSc students:* Ambrosine Clark, University of Gothenburg, Sweden, December 2017 Kira Mitchell, Yale University, USA, May 2017 Julie Krajewski, MSc University of Wisconsin-Madison, USA, 2007

Committee member external reviewer for the following students who have graduated: Dr. Sainge Cape Peninsula University of Technology (CPUT), South Africa, Oct 2017 Dr. Asmita Sengupta, National Inst of Advanced Studies, Bangalore, India, Oct 2015 Dr. Aeron Lee Jacob, McGill University, Canada May 2014 Dr. Callixte Gatali, PhD, University of Gothenberg, Sweden, 2013 Dr. Aisha Nyiramana, PhD <u>Muséum National d'Histoire Naturelle</u>, Paris, France, 2012 Dr. Donat Nsabimana, PhD University of Gothenburg, Sweden 2009 Dr. Barbara Martinez, PhD University of Minnesota, 2009

### **Manuscript & Proposal Reviewer**

Biotropica, Ecography, Journal of Tropical Ecology, Journal of Animal Ecology, Intl. Journal of Primatology, Oecologia, Am. Journal of Primatology, Biological Conservation, Biotropica, AAAS-WISC Grant Program, Leaky Foundation, WCS Grants program, National Science Foundation DEB, Center for Field Research-Earthwatch Institute grants program, Primate Conservation International grants program, National Geographic Society.