

Thomas A. Morrison

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EDUCATION

- 2004-2011 Ph.D., Dartmouth College (Hanover NH), Ecology and Evolutionary Biology, Department of Biology. Dissertation title: *Where the wildebeest roam: demography and movement of a declining migratory population in Northern Tanzania*. Advisor: Douglas T. Bolger
- 1998-2002 B.Sc. Biology, Duke University (Durham NC)
Organization for Tropical Studies, Costa Rica (Fall 2000)
Senior project: *Simulated wildlife predator-prey dynamics in a corridor system*
Advisors: Nick Haddad (NCSU) & Bill Morris (Duke)

PROFESSIONAL EXPERIENCE

- 11/10-Present Postdoctoral research scientist, Wyoming Cooperative Fish and Wildlife Research Unit, Laramie, WY.
- 2002-2004 Research technician, Amboseli Elephant Project, Amboseli National Park (Kenya) & Duke University (Durham NC). With: Susan Alberts and Beth Archie
- 2001, 2003 Research technician, Duke University (Durham NC); With: Bill Morris (Duke) and Dan Doak (UCSC)
- 2001 Field assistant, Duke University (Durham NC), Willamette Nat'l Forest (OR); With: John Willis and Megan Hall
- 2000 REU and Research Intern, Cedar Creek Natural History Area (Cedar Creek MN) Advisors: Sarah Hobbie and David Tilman
- 1998 Field assistant, US Forest Service, Pike National Forest, (Buffalo Creek CO)

RESEARCH INTERESTS: Behavioral ecology, Demography, Modeling, Population biology

PUBLICATIONS

Sawyer, H, Kauffman, MJ, Middleton, AD, **Morrison, TA**, Nielson, RM, Wyckoff, TB. A framework for understanding semi-permeable barrier effects on migratory ungulates. *Journal of Applied Ecology*. Accepted

Morrison, TA & Bolger, DT. 2012. Wet season range fidelity in a tropical migratory ungulate. *Journal of Animal Ecology*. 81, 543-552.

Bolger, DT, **Morrison, TA**, Vance, B, Lee, D & Farid, H. 2012. Development and Application of a Computer-Assisted System for Photographic Mark-Recapture Analysis. *Methods in Ecology and Evolution*, 3, 813-822.

Morrison, TA, Yoshizaki, J, Bolger, DT & Nichols, JD. 2011 Estimating survival with computer-assisted identification and mark-recapture: the problem of misidentification error. *Methods in Ecology and Evolution*. 2, 454-463. *Journal cover image*

Morrison, TA. 2010. Speaking out: weighing advocacy and objectivity as a junior scientist. *Frontiers in Ecology and the Environment*, 1:50-51.

Bolger, DT, Newmark, W, **Morrison, TA** & Doak, D. 2008. The need for integrative approaches to understand and conserve migratory ungulates. *Ecology Letters*. 11:63-77 *Journal cover image*

Archie, E, **Morrison, TA**, Foley, C, Moss, C & Alberts, S. 2006. Rank relationships among wild female African elephants (*Loxodonta africana*). *Animal Behaviour*. 71: 117-127.

Morrison, TA, Chiyo, P, Moss, C & Alberts, S. 2005. Measures of dung bolus size for known age African elephants: implications for age estimation. *Journal of Zoology, (London)*. 266: 89-94.

MANUSCRIPTS (available upon request)

Morrison, TA, Bolger, DT. Photographic identification documents connectivity and bottlenecks in a migratory wildebeest population. *Oryx*, in review.

Bendik NF, **Morrison, TA**, Gluesenkamp, AG, O'Donnell, LO, Sander, M. Computer-aided photo identification outperforms visible implant elastomers in a threatened *Eurycea* salamander. *PlosOne*, submitted.

Morrison TA, Middleton AD, Kauffman MJ, McWhirter DE. Heading for a cliff? Transient demography in elk following the restoration of a large carnivore community. In prep for: *Ecological Applications*.

Middleton AD, **Morrison TA**, Fortin JK, Kauffman MJ, Robbins CT, Proffitt KM, White PJ, McWhirter DE, Koel TM, Brimeyer D, Fairbanks WS. Grizzly bears link non-native trout to migratory elk in Yellowstone. In prep for: *Proceedings of the National Academy of Sciences*

PROFESSIONAL PRESENTATIONS

2012 Ecological Society of America
2012 The Wildlife Society, Central Plains Region meeting
2011 The Wildlife Society, Wyoming Chapter meeting
2011 The Wildlife Society
2011 Association for Tropical Biology and Conservation
2010 The Wildlife Society, Wyoming Chapter meeting
2010 Ecological Society of America
2009 Swarthmore College, Mathematical Biology Course (*guest lecture*)
2009 Ecological Society of America
2008 Society for Conservation Biology annual meeting (*student award finalist*)
2008 Colby-Sawyer College, Research seminar series (*invited*)
2007 Tanzanian Wildlife Research Institute (TAWIRI) conference

POPULAR MEDIA

2011 BBC Documentary, *The Wildebeest Migration*, Scientific advisor
2008 Discovery Channel: *Raging Nature: Stampedes and Swarms*, Interviewee, Oct 2008
2008 Sunday Observer, UK: *Saved by their stripes: Africa's vanishing herds*. p16-17. Nov 9

GRANTS and AWARDS

2012 Excellence in Wildlife Conservation Award 2012, Wyoming Game and Fish Department
2009 Switzer Fellowship, Robert and Patricia Switzer Foundation, \$15,000
2009 Wildebeat Interactive Digital Art (co-creator), Neukom Institute, \$8000
<http://neukominstitute.com/>
2009 Tarangire migration corridor research; GPS collars funded by WCS-Tarangire Elephant Project, Tembo Foundation and Dartmouth College, \$14,000
2008 Earthwatch Institute; *Saving the Tarangire Migration*, \$104,000
2008 National Science Foundation, Biological Instruments grant (\$211,000)
Software development for an individual identification system of species with variable natural markings. Co-written with Drs. DT Bolger and H Farid
2008 Dartmouth Arts and Sciences Graduate Alumni Research Award, \$1000
2008 Gilman Fellowship Award, \$1500
2008 Dartmouth NASA Space Grant, student award, \$2000
2008 Conservation Leadership Programme, Travel Award, SCB conference 2008, \$800
2007 Ecological Society of America, Graduate Student Policy Award
2006 Wildlife Conservation Society (WCS) Research Fellowship Program, \$14,500
2006 Arts and Sciences Graduate Alumni Research Award, \$450
2002 Duke Undergraduate Research Support (URS) award, \$250

TEACHING AND MENTORING

Dartmouth College, Graduate Teaching Assistant

2010	Field Methods in Ecology
2009	Tropical Biology, 2.5-month field-based Foreign Studies Program
2008	Animal Behavior
2007 & 2008	Conservation of Biodiversity
2005 & 2006	Vertebrate Zoology
2005	Introductory Ecology and Evolution

Duke University Teaching Assistantships

2004	Forest ecology (Duke Talent Identification Program)
2003	Ecology

Mentorships

2009	N. Brown ('11), Presidential Scholar, Dartmouth College
2007	C. Biggs ('09), Women in Science Program (WISP), Dartmouth College
2007, 2008	Mentor for independent projects, School for International Studies, Tanzania

PROFESSIONAL SERVICE:

- Developed *Spreadsheet Population Modeling User Manual* for the Wyoming Game and Fish Department (WGFD)
- Modified the Colorado Spreadsheet Model for use by WGFD biologists in modeling survey data for pronghorn, mule deer, white-tailed deer, and elk
- Referee for: *Journal of Animal Ecology*, *Biological Conservation*, *Southwestern Naturalist*, *Wildlife Research*, *Wildlife Society Bulletin*

JOB RELATED WORKSHOPS

- Geo-Spatial Modeling workshop, October 5, 2011
- Likelihood/Bayesian workshop, May 29-June 2, 2012

PROFESSIONAL MEMBERSHIPS

IUCN SSC Antelope Specialist Group
Ecological Society of America
Tanzanian Natural Resource Forum
The Wildlife Society

SOFTWARE COMPETENCY

ArcGIS, ENVI, MARK, MS Access, NetLogo, POP-II, R, Stella, WILD-ID

LANGUAGES

Conversational Swahili and Spanish

REFERENCES

Douglas T. Bolger (PhD advisor)
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