

Jeffrey Robert Muntifering

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Date of Birth: 6 December 1976

Citizenship: United States; Permanent Residency: Namibia

ACADEMIC BACKGROUND

- 2016** **Ph.D. Conservation Ecology & Entomology, University of Stellenbosch, South Africa**
Thesis: *A Quantitative Model to Fine-tune Tourism as a Rhino Conservation Tool in north-west Namibia*. Advisors: Dr. Andrew Knight (Imperial College of London, UK), Dr. Wayne Linklater (University of Wellington, New Zealand), Dr. Robin Naidoo (University of British Columbia, Canada), Dr. Shayne Jacobs (Stellenbosch University, RSA)
- 2004** **M.Sc. Conservation Biology: Percy FitzPatrick Institute, University of Cape Town, South Africa**
Thesis: *Managing the matrix for large carnivores: a novel approach and perspective from cheetah habitat suitability modeling*. Advisors: Dr. Peter Ryan, Dr. Richard Jeo; Committee: Dr. Laurie Marker, Dr. Luke Hunter
- 1999** **B.A. Biology (Minor: Environmental Studies) St. John's University, Collegeville, MN**
- Short Courses** Planning and Monitoring the Effectiveness of Conservation Programs (December 2011)
Ranger Guide Training School - diploma (April 1998)
Wildlife Handling and Chemical Immobilization - diploma (April 1999)
Intermediate Spanish-speaking skills
Beginner Chinese-speaking skills

COMPUTER LITERACY

Advanced: Microsoft Office (Word, Excel, Powerpoint, Access), ArcGIS 9.x, 3.x, ArcExplorer, PDF Map (application for iPad), DNR Garmin, SPSS Statistical Analysis, Miradi Adaptive Management, SMART Conservation Software

Intermediate: R, Lightroom 3.x, Google Earth, ArcReader, EDraw Mind Map

APPOINTMENTS & ASSOCIATIONS

IUCN SSC Conservation Breeding Specialist Group (November 2009 – present)

IUCN SSC Equid Specialist Group (December 2009 – present)

Save the Rhino Trust, Namibia: Science Advisor (December 2006 – present)

South China Tiger Advisory Office (2001 – present)

Game Rangers Association (2009 – present)

Natural Resource Working Group, Namibia (2009 – 2013)

PROFESSIONAL EXPERIENCE

2017 **Rhino Pride Campaign – adviser and founding co-director**

Designed and delivered behavior change research to inform a series of awareness and outreach activities to improve the value people attach to saving black rhinos in north-west Namibia. We specifically target rural farmers, unemployed youth through music and sport, Traditional Authorities, school learners and our rangers.

Collaborative partners: Minnesota Zoo (USA), Save the Rhino Trust (Namibia), Integrated Rural Development and Nature Conservation (Namibia), Ministry of Environment and Tourism (Namibia), 13 Local Communal Conservancies (Namibia), Houston Zoo

Research components: Behaviour change, evaluation

2011 – present **Rhino Ranger Incentive Program – technical adviser and founding director**

Designed and implemented a new community-based rhino monitoring program based upon maintaining and/or restoring values through the provision of incentives that seeks to link local-level rhino monitoring with tourism activities

Collaborative partners: Minnesota Zoo (USA), Save the Rhino Trust (Namibia), Integrated Rural Development and Nature Conservation (Namibia), Ministry of Environment and Tourism (Namibia), 13 Local Communal Conservancies (Namibia)

Research components: species monitoring, demographics, and behavior change

2010 – present **Przewalski's Horse Recovery Program, Xinjiang, China – International Advisor**

Provide targeted training and development for a community-based monitoring program together with China's State Forestry Administration, Smithsonian Institute and Princeton University.

Collaborative partners: Smithsonian Conservation Biology Institute (China), Beijing Forestry University (China), Princeton University (USA), State Forestry Administration (China), Minnesota Zoo (USA)

2009 - present **Minnesota Zoo & Save the Rhino Trust, Namibia – Desert Black Rhino Program Coordinator**

To design and carry out applied research to inform conservation and restoration practice and policy for black rhinos in northwestern Namibia.

Collaborative partners: Minnesota Zoo (USA), Save the Rhino Trust (Namibia), Ministry of Environment and Tourism (Namibia)

Research components: population monitoring and modeling, local expert interviews, technical training (GPS, mapping), GIS-based habitat assessment, tourism impacts

2009 - 2012

Hartmann's Mountain Zebra Project co-Principle Investigator

Identifying key conservation management areas and measures for Hartmann's mountain zebras (*Equus zebra hartmannae*) in the Kunene Region, Namibia

Collaborative partners: Minnesota Zoo (USA), Ministry of Environment and Tourism (Namibia), University of Minnesota (USA)

Research components: local expert knowledge interviews, population field surveys and demographic analysis, GIS-based habitat assessment, fecal-based genetic assessment

2006 – 2008

Round River Conservation Studies – Namibia Program Director

Kunene Regional Conservation Assessment: Science Lead

Research components: local expert knowledge interviews, GIS-based habitat, connectivity, land use modeling, conservation area optimization modeling and synthesis

2002 - 2007

Round River Conservation Studies - Namibian Program: Student Research

Program Coordinator: Cheetah Conservation Project (assistant 2002) and Desert Black Rhino Conservation Program (Program Director 2003 – 2007). Save the Rhino Trust, Cheetah Conservation Fund. Advisors: Mike Hearn, Dr. Laurie Marker, Dennis Sizemore, Dr. Richard Jeo

Research components: Rhino reintroduction feasibility (local PRA interviews, planning meetings, habitat modeling), rhino-human disturbance modeling, cheetah habitat modeling, small mammal censusing, mammal count surveys, avian census techniques

2001 – present

South China Tiger Protection Program: U.S. Field Advisor. PR China. Minnesota Zoo, State Forestry Administration of China. Supervisors: Dr. Ron Tilson, Dr. Philip Nyhus, Wang Weisheng, Gui Xiaojia

Research components: Local informant interviews, ground surveys, remote infrared-activated camera trapping, GIS tiger habitat suitability modeling and potential recovery site evaluation.

2004 (Feb-May)

Round River Conservation Studies - Ecuador Andean Conservation Program: project coordinator. Fundacion Cordillera Tropical and Round River Conservation Studies. Advisors: Dr. Stuart White, Dennis Sizemore

Research components: Amphibian surveys, large mammal surveys

2002 (August)

Wildlife Conservation Society - Jaguar Conservation Program: research associate Honduras Survey. Wildlife Conservation Society: Advisors: Dr. Alan Rabinowitz, Dr. Scott Silver

Research components: Jaguar / prey ground surveys and local interviews

- 2002 (Feb-Mar)** **Round River Conservation Studies - Taku River Conservation Area Design:** research associate. British Columbia, Canada.. Advisors: Dennis Sizemore, Dr. Kimberly Heinemeyer
Research components: Local informant interviews / mapping wildlife distribution
- 2000 (June-Sept)** **U.S. Parks Service / Student Conservation Association - Brooks Camp Grizzly Bear Research and Monitoring Program:** research assistant. Alaska, U.S. Advisors: Tom Smith, Dr. Terry DeBryun, Kelly Profitt
Research components: Grizzly bear behavior and human impact observations, salmon surveys
- 2000 (Jan-June)** **Cheetah Conservation Fund:** research associate. Namibia. Advisor: Dr. Laurie Marker
Research components: Cheetah fecal analysis, feeding trials, cheetah biomedical processing, aerial radio telemetry
- 1999 (July-Dec)** **U.S. Fish and Wildlife Service - Agassiz Wolf Research Team:** research assistant. Minnesota, U.S. Advisors: Dr. Eric Gese, Andreas Chavez
Research components: Wolf fecal analysis, radio telemetry, prey surveys, farm survey
- 1999 (May-July)** **Wildlife Science Center:** intern. Minnesota, U.S. Advisors: Margaret Callahan
Research components: Wolf camp counselor, wolf biomedical processing, animal care
- 1999 (May-July)** **Conservation Breeding Specialist Group:** intern. Minnesota, U.S. Advisors: Dr. Ulysses Seal, Dr. Onnie Byers, Dr. Phil Miller
Research components: data entry

PUBLICATIONS

Peer-Review

Muntifering J.R., W. L. Linklater, R. Naidoo, S. !Uri-≠Khob, P. Du Preez, P. Beytell, S. Jacobs and A. T. Knight. 2017 (Submitted). Close Encounters of the Sustainable Kind: integrating animal and human behavior to build tourism viewing protocols. *Conservation Letters*

Muntifering J.R., W. L. Linklater, R. Naidoo, S. !Uri-≠Khob, P. Du Preez, P. Beytell, S. Jacobs and A. T. Knight. 2017 (Submitted). Black rhinoceros avoidance of tourist infra structure and activity: planning and managing for coexistence. *Animal Conservation*

Muntifering J.R., S. G. Clark, W. L. Linklater, S. !Uri-≠Khob, S. Jacobs and A. T. Knight. 2017 (in prep). Lessons from a Wildlife Tourism Cooperative in Namibia. *Ecology and Society*.

Muntifering J.R., W. L. Linklater, S. G. Clark, S. !Uri-≠Khob, J. K. Kasaona, K. /Uiseb, P. Du Preez, K. Kasaona, P. Beytell, J. Ketji, B. Hambo, M. A. Brown, C.Thouless, S. Jacobs and A. T. Knight. 2015. Harnessing values to save the rhinoceros: insights from Namibia. *Oryx*, available on CJO2015. doi:10.1017/S0030605315000769.

Qin Yiyuan, P. J. Nyhus, C. L. Larson, C. J.W. Carroll, J.R. Muntifering, T. D. Dahmer, Lu Jun, and R. L. Tilson. 2015. An assessment of South China tiger reintroduction potential in Hupingshan and Houhe National Nature Reserves, China. *Biological Conservation* 182: 72-86.

Brodie, J.F., J.R. Muntifering, M. E. Hearn, B. Loutit, R. Loutit, B. Brell, S.Uri-Khob, N. Leader-Williams, P. du Preez. 2011. Population recovery of black rhinoceros in northwest Namibia following poaching. *Animal Conservation* 1-9.

Muntifering, J.R., A.J. Dickmann, L.M. Perlow, T. Hruska, P.G. Ryan, L.L. Marker, and R.M. Jeo. 2006. Managing the matrix for large carnivores: a novel approach and perspective from cheetah habitat suitability modeling. *Animal Conservation* 9: 103-112.

Tilson, R., H. Defu, J. R. Muntifering and P.J. Nyhus. 2003. Dramatic decline of wild South China tigers: Field survey of priority tiger reserves. *Oryx* 38: 40-47.

Marker, L.L., J. R. Muntifering, A.J. Dickman, M.G.L. Mills and D.W. Macdonald. 2003. Quantifying prey preferences of free-ranging Namibian cheetahs. *South African Journal of Wildlife Research* 33(1): 43-53.

Book Chapters

Muntifering, J.R., B. Hambo, K. /Uiseb and P. du Preez. 2015. The Rhino Ranger Incentive Programme, Namibia. in *Conservation, Crime and Communities: case studies of efforts to*

engage local communities in tackling illegal wildlife trade (ed D. Roe), pp. 26–29. iied, London.

Muntifering, J.R., R. Tilson, P. Nyhus, M.E. Soulé. 2009. Tiger restoration and biodiversity refugia in Asia: picking up the pieces. In *Tigers of the World: The science, politics and conservation of Panthera tigris*, 2nd Edition, eds. Ronald Tilson and Philip Nyhus.

Tilson, R., Nyhus, P., and J.R. Muntifering. 2009. Yin and Yang of Tiger Conservation in China. In *Tigers of the World: The science, politics and conservation of Panthera tigris*, 2nd Edition, eds. Ronald Tilson and Philip Nyhus.

Technical Reports

Muntifering, J.R. Lockhart, and Tingey, R. 2008. Kunene Regional Ecological Assessment. Report submitted to the Kunene People's Park Technical Committee and the Ministry of Environment and Tourism, Namibia. Pp 105.

Muntifering, J.R. 2007. Counting game in the Kunene: exploring relationships between sampling effort, precision and statistical power. Report submitted to the Ministry of Environment and Tourism, Namibia.

Muntifering J.R. 2007. Consumptive and non-consumptive tourism compatibility in the Kunene: preliminary insights from observed wildlife behavior in the Torra Conservancy and Palmwag Concession. Report submitted to the Ministry of Environment and Tourism, Namibia.

Muntifering, J.R. 2002. Rapid Survey Assessment of Jaguar (*Panthera onca*) Status: La Moquitia and Rio Platano Biosphere Reserve, Honduras, C.A. Report submitted to the Jaguar Conservation Program, Wildlife Conservation Society, Bronx, New York.

Tilson, R., and J.R. Muntifering. 2002. Field Survey Final Report. South China Tiger Protection Program. Report to State Forestry Administration, PR of China.

Tilson, R., and J.R. Muntifering. 2001. Basic Guidelines for Tiger Field Surveys in South China. Survey manual.

Tilson, R., and J.R. Muntifering. 2001. Field Survey Final Report. South China Tiger Protection Program. Report to U.S. Fish and Wildlife Service's Rhinoceros and Tiger Conservation Fund.

Tilson, R., P. Nyhus and J.R. Muntifering. 2001. Trip Report: South China Tiger Field Methods Workshop, Provincial Tiger Status Updates, and Field Activities.

Conference Presentations and Papers

Muntifering, J.R. 2014. Tourism as a Bio-Cultural Conservation Tool. *International Aboriginal Tourism Conference. Whistler, B.C. Canada.* (Oral presentation)

Muntifering, J.R., R. Loutit, S. Uri-Khob, K. Kasaona, C. Bakkes, P. Beytell & P. du Preez. 2012. Evidence-based Management of Rhino Conservation and Tourism in Namibia's Northwest Communal Lands. *Royal Society of South Africa: Gobabeb Symposium, Namibia.* (Oral presentation)

Muntifering, J.R. Lockhart, and Tingey, R. 2012. Kunene Regional Ecological Assessment. *Royal Society of South Africa: Gobabeb Symposium, Namibia.* (Oral presentation)

Muntifering, J.R., R. Loutit, S. Uri-Khob, K. Kasaona, C. Bakkes, P. Beytell & P. du Preez. 2011. Evidence-based Management of Rhino Conservation and Tourism in Namibia's Northwest Communal Lands. *Society for Conservation Biology Annual Meeting, Auckland, New Zealand.* (Poster presentation)

Nyhus, P.J., R. Tilson, J.R. Muntifering, T. Dahmer, L. Jun, W. Bin, C. Qing, C. Larson, C. Carroll. 2009. Restoring wild south China tigers: implications for large carnivore conservation in Asia. *Society for Conservation Biology Annual Meeting, Beijing, China.* (Oral presentation)

Muntifering, J.R., B.A. Shivute, R. Tingey, & M.E. Hearn. 2007. Characterizing and mapping suitable black rhino habitat in the deserts of northwestern Namibia. *Society for Conservation Biology Annual Meeting, Port Elizabeth, South Africa.* (Poster presentation)

Muntifering, J.R., M. Sibalatani, K. Kasaona, C. Bakkes, S. Uri-Khob, R. Loutit, & M. E. Hearn. 2007. Integrating Rhino Conservation and Responsible Tourism Practices. *Society for Conservation Biology Annual Meeting, Port Elizabeth, South Africa.* (Poster presentation)

Nyhus, P.J., R. Tilson, J.R. Muntifering, and T. Dahmer. 2007. Beyond Conservation: The Tiger as Driver to Restore Biodiversity in China. *Felid Biology and Conservation Conference, Oxford, U.K.* (Oral presentation)

Nyhus, P.J., J.R. Muntifering, T. Dahmer, and R. Tilson. 2005. South China Tiger Status and Recovery Options. *IUCN World Commission on Protected Areas 5th Conference on Protected Areas in East Asia, Hong Kong.* (Oral Presentation)

Nyhus, P.J., R. Tilson, J.R. Muntifering, and C. Qing. 2005. South China Tiger Program: rapid habitat assessment preliminary results July-August, 2005. *International workshop for the Chinese tiger reintroduction, Beijing, China.* (Oral Presentation)

Tilson, R., P.J. Nyhus, and **J.R. Muntifering.** 2004. Status of South China Tigers and Recovery Options. *XIXth International Congress of Zoology, Beijing, China.* 'Conservation and Biodiversity – Tiger Conservation Biology'. (Oral presentation)

Muntifering, J.R., A.J. Dickman, L. Perlow, T. Hruska, R. Jeo, L.L. Marker. 2003. Habitat characteristics of cheetah on north-central Namibian farmlands. *Society of Conservation Biology Conference Annual Meeting*, Duluth, Minnesota. (Oral presentation)

Traylor-Holzer, K., R. Tilson and J.R. Muntifering. 2003. Fading Stripes: The South China tiger crisis. *Society of Conservation Biology Conference Annual Meeting*, Duluth, Minnesota. (Oral presentation)

Fundraising Efforts (grants co-written and/or implemented greater than US\$10,000)

Minnesota Zoo Fundraiser (2014). Rhino Ranger Incentive Program. \$36,295
The Nature Conservancy (2014). Rhino Ranger Incentive Program. \$50,000
Minnesota Zoo Fundraiser (2013). Rhino Ranger Incentive Program. \$28,770
Minnesota Zoo Fundraiser (2012). Rhino Ranger Incentive Program. \$37,245
The Nature Conservancy (2012). Save the Rhino Trust. \$131,253
The Nature Conservancy (2011). Save the Rhino Trust: Science Advisor for SRT. \$49,000
The Nature Conservancy (2011). Save the Rhino Trust: \$100,000
The Nature Conservancy (2010). Save the Rhino Trust: Science Advisor for SRT. \$49,000
The Nature Conservancy (2010). Save the Rhino Trust: \$100,000
The Nature Conservancy (2009). Minnesota Zoo: Science Advisor for SRT. \$45,000
The Nature Conservancy (2009). Save the Rhino Trust: \$100,000
The Nature Conservancy (2008). Save the Rhino Trust: \$100,000
The Nature Conservancy (2007). Save the Rhino Trust: \$25,000
The Nature Conservancy (2006). Kunene Regional Conservation Assessment. \$325,000
US Fish and Wildlife Service (2000). South China Tiger Survey. \$26,900

ACTIVITIES, HONORS, and HOBBIES

Game Ranger Association of Africa Annual Ranger Awards – 1st Runner Up for Best Conservation Practitioner (2017), Association of Zoos and Aquariums International Conservation Award (2013), Ranger Guide Training School Diploma (1998), Chemical Immobilization and Wildlife Handling Course Diploma (1999), Shotgun / Dangerous Game Certified, Katmai National Park, AK (2000), Hemker Wildlife Explorer Club (1997-1999), Biology Club (1995-1999), Alpine Ski Club- President (1996-1999), St. John's University Varsity Football-Co captain (1995-1999), St. John's University Junior Varsity Baseball (1996), Athletes for Academics (1997-1999), Summer Amateur Baseball (1995-1999) (1997 player/manager), Intramural basketball-captain, softball (1996-1999), Presidential Scholarship, International Studies Scholarship, wildlife photography student exhibit winner (1999), PADI open water, advanced and rescue SCUBA diver certified (1998-present), Defensive Driver Certified, CPR-basic first aid certified.

Hiking, backpacking, mountain biking, snow and water skiing, wildlife literature and photography, SCUBA diving, all athletics, and traveling.

References available upon request