

Curriculum Vitae

Jorista van der Merwe

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CURRENT POSITION:

Postdoctoral Research Scientist

Natural Resource Management, Sul Ross State University, Alpine, TX

Supervisor: Dr. Bonnie Warnock

Faculty Advisor:	Online Masters of Agriculture Degree Program
Teaching:	Ecology and Conservation of Natural Resources (online) Advanced Conservation Biology (online) Principles of Conservation Biology
Manager:	Soil and Nutrition lab

PREVIOUS POSITION:

Postdoctoral Research Fellow 2014/2015

Cooperative Wildlife Research Lab, Southern Illinois University, Carbondale, USA.

Hosts: Drs. Eric Schaubert & Clayton Nielsen

Lecturer: **Conservation and Management of Wildlife** (registered course name: *Natural Resources Inventory - Spring 2015; 4.6 out of 5 for student evaluations*)

Lecturer: **Forest management for Wildlife** (Fall 2014; 4.3 out of 5 for student evaluations)

EDUCATION:

2014 PhD in Zoology

Cooperative Wildlife Research Laboratory & Center for Ecology, Southern Illinois University, Carbondale, USA.

Dissertation: Ecology of the marsh rice rat (*Oryzomys palustris*) in southern Illinois: wetland dynamics, metapopulations, and trophic position.

2010 MSc in Animal, Plant & Environmental Sciences

School of Animal, Plant & Environmental Science, University of the Witwatersrand, South Africa

Thesis: Seasonal variation in fine scale resource selection, foraging ecology and habitat selection of impala (*Aepyceros melampus*) in savanna systems, South Africa.

2005 BSc Honours in Zoology

Department of Zoology and Entomology, University of Pretoria, South Africa:

Thesis: The impact of invasive silver wattle (*Acacia dealbata*) trees on small mammal assemblages in the Sani Pass region of the Drakensberg, South Africa.

2004 BSc in Zoology

Department of Zoology and Entomology, University of Pretoria, South Africa

PEER REVIEWED PUBLICATIONS (*indicates in review):

- ***Van der Merwe, J.** and Hellgren, E.C. Spatial variation in trophic position of small mammals in wetlands: Support for hydrological drivers. *Ecosphere*.
- Van der Merwe, J.** and Marshal, J.P. 2014. Grass attributes and seasonal changes in foraging by a preferentially grazing savanna mixed feeder. *Journal of Arid Environments* 102: 34-39.
- Van der Merwe, J.** and Marshal, J.P. 2012. Hierarchical resource selection by impala in a savanna environment. *Austral Ecology* 37: 401-412.

NON-PEER REVIEWED PUBLICATIONS:

- Van der Merwe, J.** 2011. Marsh rice rat. *Outdoor Illinois*, June: 10-11
- Hoal, K.O., Stammer, J.G., Appleby, S.K., **Van der Merwe, J.**, Ross, J.K and Botha, P.W. 2009. Research in quantitative mineralogy: Examples from a diverse applications. *Minerals Engineering* 22: 402-408.

VOLUNTEER ENVIRONMENTAL EDUCATION AND OUTREACH:

- 2014** Environmental Education for Boy Scout troops- Carbondale IL
- 2014** Environmental Education at Illinois Junior Science and Humanities Symposium- SIUC
- 2014** **Invited workshop presenter – Science in the South, 18th regional conference on science education- Carbondale, IL**
- 2013** Teaching at DuQuoin Conservation Fair- DuQuoin, IL
- 2013** “Scouting for wildlife” environmental education at Girl Scouts - Carbondale, IL
- 2013** Environmental Education at Stewardship Week – Illinois Forest Resource Center
- 2013** Environmental Education at Illinois Junior Science and Humanities Symposium, SIUC
- 2013** Mentor for elementary school teachers in the Robert Noyce Program
- 2013** **Director for GRASS (Graduate Research Assistants Supporting Science)**
- 2013** Teaching at Du Quoin Middle School, IL
- 2012** **Co-chair for GRASS (Graduate Research Assistants Supporting Science)**
- 2012** Environmental Education at Stewardship Week - Illinois Forest Resource Center
- 2012** Assisting at the Sustainable Living Expo - Illinois Forest Resource Center
- 2012** Teaching at youth summer camp - Carbondale, IL
- 2012** “Scouting for wildlife” environmental education at Girl Scouts - Carbondale, IL
- 2012** Teaching at Goreville Elementary School, IL
- 2012** Guest Lecturer for *Saluki Science Ambassadors*, SIU, IL
- 2011** Environmental Education at Stewardship Week – Illinois Forest Resource Center
- 2011** Assisting at the Sustainable Living Expo, Illinois Forest Resource Center

AWARDS

2014	University Women's Professional Advancement Travel Grant	\$	100.00
2014	SIU-Dissertation Research Award	\$	10,000.00
2014	Janice Lee Fenske Memorial Award finalist – MidWest Fish & Wildlife Conference		
2013	Illinois Federation for Outdoor Resources Award	\$	1,000.00
2013	The Wildlife Society Student Travel Grant	\$	400.00
2012	University Women's Professional Advancement Travel Grant	\$	100.00

TEACHING EXPERIENCE:

- 2015 Lecturer: *Natural Resource Inventory***
Department of Forestry, Southern Illinois, University, Carbondale, USA. Upper-level course covering conservation and management of wildlife
- 2014 Lecturer: *Forest Management for Wildlife***
Department of Forestry, Southern Illinois University, Carbondale, USA.
Teaching undergraduate and graduate students
- 2013 Teaching assistant: *Game Mammals***
Department of Zoology, Southern Illinois University-Carbondale
- 2005 Teaching assistant: *Molecular and Cell Biology***
Department of Zoology and Entomology, University of Pretoria, South Africa
- 2005 Teaching assistant: *Animal Diversity***
Department of Zoology and Entomology, University of Pretoria, South Africa

REVIEWED MANUSCRIPTS FOR:

Journal of Wildlife Management
International Journal of Biodiversity
Southeastern Naturalist

WORK EXPERIENCE:

- 2006-07** Scanning electron microscope operations, SGS Minerals, Brisbane, Australia
- 2007-08** Sample preparation technician and lab manager, SGS Minerals, Brisbane, Australia
- 2008** Research Associate- Colorado School of Mines, Colorado, USA
- 2006** Volunteer research assistant, The Ecology Centre, University of Queensland, Brisbane, Australia
- 2004** Research Assistant, Department of Zoology and Entomology, University of Pretoria, South Africa

PRESENTATIONS AND POSTERS:

- 2015** **Van der Merwe, J.**, Hellgren, E.C. and Schaubert, E.M. Die another day: persistence of a wetland mammal in a changing environment. 51st Annual Meeting of the Illinois Chapter of The Wildlife Society, Urbana-Champaign, IL
- 2015** Shew, J.J., **Van der Merwe, J.**, Caldwell, B.K., Nielsen, C.K, and Schaubert, E.M. An old question revisited: assessing multiple predictors of red-winged blackbird nest defense aggression. 75th MidWest Fish and Wildlife Conference, Indianapolis, IN.
- 2014** **Van der Merwe, J.**, Hellgren, E.C. and Schaubert, E.M. Variation in metapopulation dynamics of a wetland mammal: The effects of hydrology and habitat. 21st Annual Conference of The Wildlife Society, Pittsburgh, PA
- 2014** **Van der Merwe, J.** and Hellgren, E.C. Spatial variation in trophic position of small mammals between 2 wetland complexes. 99th Annual Meeting of the Ecological Society of America, Sacramento, CA.
- 2014** **Van der Merwe, J.** and Crawford, J.C. G.R.A.S.S, bringing wildlife, ecology and ecologists into the classroom. **Workshop** presented at: Science in the South, 18th Annual Regional Conference on Science Education. Carbondale, IL.
- 2014** **Van der Merwe, J.** Crawford, J.C., Delahunt, K., Jackson, A.M., Springer, M. and Nielsen, C. G.R.A.S.S. bringing wildlife ecology into the classroom. 74th MidWest Fish and Wildlife Conference, Kansas City, MO.
- 2013** **Van der Merwe, J.** and Hellgren, E.C. Metapopulation dynamics of the marsh rice rat at 2 hydrologically distinct wetland complexes. 20th Annual Conference of The Wildlife Society, Milwaukee, WI.
- 2012** **Van der Merwe, J.** and Hellgren, E.C. Impact of the invasive wetland plant *Phragmites australis*, on small-mammal food webs. 19th Annual Conference of The Wildlife Society, Portland, OR.
- 2012** **Van der Merwe, J.** and Hellgren, E.C. Mississippi rising: Acute flooding effects on small-mammals. 2012 Illinois Water Conference, Urbana, IL.
- 2012** **Van der Merwe, J.** and Hellgren E.C. The impact of catastrophic flooding on small mammal assemblages on the middle Mississippi River floodplain – 1 year later. 48th Annual Meeting of the Illinois Chapter of The Wildlife Society, Makanda, IL.
- 2011** **Van der Merwe, J.** and Hellgren, E.C. The impact of catastrophic flooding on small mammal assemblages on the middle Mississippi River floodplain. 72nd Midwest Fish and Wildlife Conference, Des Moines, IA.
- 2011** **Van der Merwe, J.** and Hellgren, E.C. Rice rats on the Middle Mississippi River Floodplain. Middle Mississippi River Wetland Field Station Open House, IL.
- 2011** **Van der Merwe, J.** and Marshal J.P. Resource selection in a mixed feeder: which factors drive switching between diets? Ecological Society of America 96th Annual Meeting, Austin, TX.
- 2011** **Van der Merwe, J.** and Marshal, J.P. Grazing or browsing: Impala's dilemma. Midwest, Ecology and Evolution Conference, Southern Illinois University-Carbondale, IL.
- 2011** Hoogenboom, C., **Van der Merwe, J.** and Hellgren, E.C. Isoflurane induction and recovery rates of deer mice (*Peromyscus* spp.) and southern bog lemming (*Synaptomys cooperi*). 8th Annual McNair Summer Research

- Symposium, Southern Illinois University, Carbondale, IL.
- 2010** **Van der Merwe, J.** and Marshal, J.P. How does impala decide what and where to eat? 8th Annual Savanna Science Networking Meeting, Skukuza, South Africa.
- 2008** **Van der Merwe, J.**, Skinner, H.C.W., Botha, P.W. and Hoal, K.O. Biological and environmental applications of quantitative mineralogy. Automated Mineralogy Conference, Brisbane, Australia.
- 2005** **Van der Merwe, J.**, Robertson, M.P. and Van Rensburg, B. The impact of invasive silver wattle (*Acacia dealbata*) on small mammal assemblages in the Sani Pass region of the Drakensberg, South Africa. 15th Biennial Conference of the Zoological Society of South Africa, Rhodes University, South Africa.
- 2005** Mawela, K.V., Douglas, N., **Van der Merwe, J.** and Krüger, K. Temperature-dependent development of the long-tailed mealybug *Pseudococcus longispinus* Targionioni-Tozzetti (Hemiptera: Pseudococcidae) on grapevine. Proceedings of the 15th Entomological Congress of the Entomological Society of Southern Africa, Grahamstown, South Africa.

WORKSHOPS/TRAINING:

- 2013** Class 1 prescribed wildfire training
- 2013** Behind the scenes of scientific publication and critical review, TWS conference
- 2013** Bayesian Population Analysis using WinBugs and R, Patuxent Wildl. Res. Center
- 2013** Environmental Education Workshop, Crab Orchard National Wildlife Refuge, IL
- 2012** Flying Wild Educator Training Workshop, Cache River Wetlands Center
- 2012** Furbearer trapper's Education, Southern Illinois University
- 2011** Conservation leaders for tomorrow- Arkansas, USA
- 2011** Hunter's Education – Arkansas, USA
- 2011** Program MARK workshop, MidWest Fish and Wildlife Conference
- 2008** Scanning Electron Microscopy and EDS X-ray analysis- Brisbane, Australia