

DETAILED CURRICULUM VITAE

REINETTE (OONSIE) BIGGS

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DATE OF BIRTH: 19 August 1979
PLACE OF BIRTH: Windhoek, Namibia
CITIZENSHIP: South Africa
PERMANENT RESIDENCE: Sweden

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WORK ADDRESS (SWEDEN):
Stockholm Resilience Centre
Stockholm University
10691 Stockholm
Sweden

EDUCATION

- ◆ **DOCTOR OF PHILOSOPHY (LIMNOLOGY AND MARINE SCIENCE)**
University of Wisconsin-Madison, United States of America (2005-2008)
Graduated August 2008

Thesis Title: *Uncertainty, learning and adaptation in ecosystem management*
Advisor: Prof S.R. Carpenter
Advisory Committee: Prof W.A. Brock, Prof J.A. Foley, Prof N.E. Langston, Prof F.R. Westley
- ◆ **MASTER OF SCIENCE (ENVIRONMENTAL SCIENCE)**
University of the Witwatersrand, Johannesburg, Gauteng, South Africa (2003-2004)
Graduated with distinction, June 2005

Thesis Title: *Assessing biodiversity intactness*
Advisors: Dr R.J. Scholes and Prof C.H. Vogel
- ◆ **BACHELOR OF SCIENCE HONOURS (APPLIED ENVIRONMENTAL SCIENCE)**
University of Natal, Pietermaritzburg, KwaZulu-Natal, South Africa (2001)
Graduated *cum laude*, April 2002

Thesis Title: *Agricultural Land-Cover Change in South Africa: An eighty-year dataset*
Advisors: Dr R.J. Scholes and Dr G.A. Kiker
- ◆ **BACHELOR OF SCIENCE (GEOGRAPHY)**
University of South Africa, Pretoria, Gauteng, South Africa (1998-2000)
Graduated with distinction, April 2001
Obtained by distance education
Minors in Statistics and Applied Mathematics

BACHELOR OF SCIENCE (BSc) COURSES

Course	Grade (%)
GEOGRAPHY (MAJOR)	
GGE100-B Paper 1: Geographical perspective and analysis I	95
GGE100-B Paper 2: The human ecosystem	95
GGE201-F Geographical perspective and analysis II	94
GGE202-G People and environmental degradation in Africa	75
GGE204-J Landscape ecology	81
GGE301-J Geographical perspective and analysis III	94
GGE304-M Land evaluation and environmental impact analysis	88
GGE305-N Population and environmental degradation in South Africa	94

STATISTICS (MINOR)	
STA101-H Probability and statistics	100
STA102-J Applied statistics 1	100
STA111-K Distribution theory 1A	93
STA112-L Distribution theory 1B	97
STA202-M Distribution theory 2	85
STA203-N Applied statistics 2	95
STA211-N Matrix methods in statistics	100
STA303-R Inference	95
STA305-T Analysis of variance and regression	99
STA312-S Forecasting	82
APPLIED MATHEMATICS (MINOR)	
APM211-V Differential equations	72
APM214-Y Applied dynamical systems	75
APM301-W Partial differential equations	85
MATHEMATICS	
MAT111-N Precalculus mathematics B	100
MAT101-L Differential calculus	86
MAT102-M Integral calculus	99
MAT103-N Linear algebra	86
COMPUTER SCIENCE	
COS111-U Introduction to programming 1(Pascal)	88
COS113-W Computer systems: Fundamental concepts	91
PHYSICS	
PHY104-9 Modern physics: waves, relativity, quantum mechanics, nuclear physics	81

BACHELOR OF SCIENCE HONOURS (BSCHONS) COURSES

<i>Course</i>	<i>Credits</i>	<i>Grade (%)</i>
ENVIRONMENT & DEVELOPMENT (MASTERS LEVEL)		
EDEL867 Water Resource Management	16	80
EDEL827 Decision Making and Systems Modelling	4	82
EDEL815 Resource and Environmental Economics	4	78
GEOGRAPHY (HONOURS LEVEL)		
GEOG735 Rural development and land reform	16	76
GEOG725 Soil erosion and land degradation	16	80
HYDROLOGY (3RD YEAR BACHELORS LEVEL)		
HYDR311 Agrohydrological simulation modelling	8	91
APPLIED ENVIRONMENTAL SCIENCE (HONOURS LEVEL)		
ESCI790 Environmental science research project	64	78

NON-DEGREE RELATED COURSES

LEADERSHIP & MANAGEMENT

- ◆ Building teams one meeting at a time. Course on workshop design and management. Presented by Eugenio Molini. Stockholm, Sweden, April 2012 (2 full days).
- ◆ Change management and conflict resolution. Presented by Eugenio Molini. Stockholm, Sweden, April 2012 (2 full days).
- ◆ Supervision of Research: Theory and Practice. Presented by Prof Michael Christie, Stockholm University. Stockholm, Sweden, May 2011 (meet one full day per week for a month).
- ◆ SEED Leadership seminar. Presented by the Equity and Diversity Center, University of Wisconsin. Madison, Wisconsin, September – December 2007, (meet once per month for 3 hours).
- ◆ Sometimes and aspiring supervisor series. Presented by the Office of Human Resource Development, University of Wisconsin-Madison. Madison, Wisconsin, March – May 2007, 8 week series (meet once per week for 2 hours).

RESEARCHER SKILLS

- ◆ Grant Writing Fundamentals. Presented by Dr Riana Coetsee, Division for Research Development, Stellenbosch University, South Africa. 13 August 2014 (1 day)

- ◆ Research Orientation Seminar. Presented by the Division for Research Development, Stellenbosch University, Stellenbosch, South Africa. 4 March 2014 (1/2 day).
- ◆ Personal Effectiveness and Efficiency. Presented by Ulf Gustavsson, Mooretime consulting. 27 October 2010 (1 day).
- ◆ Presentation Skills Programme. Presented by the Human Resource Division, Stockholm Environmental Institute, Stockholm, Sweden. 2 December 2008 (1 day).

ENVIRONMENTAL SCIENCE

- ◆ Ecology of African Savannas. Resource Conservation Biology Masters course. Presented by Dr. R.J. Scholes (CSIR). University of the Witwatersrand, Johannesburg, May 2002, 2 weeks (½ day each).
- ◆ Understanding Institutional Diversity – Challenges in Governing the Commons. Masterclass presented by Prof Elinor Ostrom (Indiana University, USA). CSIRO, Canberra, Australia, 7 March 2005 (1 day).

NARRATIVE ANALYSIS

- ◆ Complexity and Narrative in the co-evolution of knowledge. Presented by Dave Snowden and Zhen Goh from Cognitive Edge. Introduced the Cynefin framework and the SenseMaker software. 18-20 August 2015 (3 days).

NETWORK ANALYSIS

- ◆ Introducing network analysis as a cross-disciplinary conceptual and analytical framework for studying complex systems. Presented by Dr Örjan Bodin & Dr Beatrice Crona. Stockholm, Sweden, April/May 2011. 2 days.

ENVIRONMENTAL MODELLING

- ◆ Overview of running the *ACRU* Agrohydrological model. Presented by Dr. G.A. Kiker (University of Natal). Skukuza, September 1999, 1 day.
- ◆ Overview of running *SAVANNA* – Landscape and Regional Ecosystem Model. Presented by Dr. G.A. Kiker (University of Natal). Skukuza, October 1998, 2 days.
- ◆ Elementary modelling course for managers: Population & ecosystem models and expert systems. Presented by Prof. T. Starfield (University of Minnesota). Skukuza, September 1998, 2 days.

STATISTICS

- ◆ Applied Statistics: Practical course. Presented by the Department of Statistics, UNISA. *SPSS*. Pretoria, August 1999, 4 days.
- ◆ Overview of using *CANOCO* to analyse multivariate vegetation data. Presented by Mike Peel. Nelspruit, March 1999, 1 day.
- ◆ Overview of the 4th *Applied Statistics week – Statistics in Environmental Sciences*. Presented by Prof. M. Greenacre (University of Pompeu Fabra, Spain). Skukuza, March 1999, 2 days.
- ◆ Introduction to Generalized Linear Modelling - *GLIM*. Presented by Dr. H.C. Biggs. Skukuza, November 1998, 2 days.
- ◆ Elementary Statistics Course for Scientists – *Statgraphics*. Presented by Dr. H.C. Biggs. Skukuza, March 1998, 2 days.

GEOGRAPHICAL INFORMATION SYSTEMS (GIS)

- ◆ Introductory GIS course: Digitising and spatial analysis - *IDRISI*. Presented by Naledi Maré. Skukuza, September 1998, 4 days.
- ◆ Spatial Analytical Skills Course (Intermediate Level) - *IDRISI*. Presented by David Woods. Skukuza, January 1998, 3 days.

DATABASE DESIGN AND MANIPULATION

- ◆ Introductory database design course - *Microsoft Access*. Presented by Dr. Stefanie Freitag & Judith Wrench. Skukuza, March 1998, 3 days.

OCCUPATIONAL EXPERIENCE

- ◆ **CENTRE FOR COMPLEX SYSTEMS IN TRANSITION (FORMERLY CENTRE FOR STUDIES IN COMPLEXITY), STELLENBOSCH UNIVERSITY. Stellenbosch, South Africa (Feb 2013 – Present)**

DST/NRF South African Research Chair (SARChI): Social-Ecological Systems & Resilience (Jan 2016 - present). Joint appointment at Stockholm Resilience Centre (see below).

Research Associate (Mar 2013 – Feb 2016). Lead and coordinate the Southern African Program on Ecosystem Change and Society (SAPECS) www.sapecs.org

- ◆ **STOCKHOLM RESILIENCE CENTRE, STOCKHOLM UNIVERSITY
Stockholm, Sweden (Sep 2008 – Present)**

Researcher & Theme Leader (Sep 2010 - present). My research focuses on the detection and management of regime shifts in social-ecological systems. Coordinating development of the Regime Shifts Database www.regimeshifts.org, and co-lead the Regime Shifts Theme (2010-2016) and the Transformations theme (2016-2018).

Postdoctoral researcher (Sep 2008 – Sep 2010). My research focused on the detection and management of regime shifts in social-ecological systems. Initiated the development of the Regime Shifts Database.

- ◆ **CENTER FOR LIMNOLOGY, UNIVERSITY OF WISCONSIN-MADISON
Madison, Wisconsin, USA (Jul 2005 - Aug 2008)**

Graduate Research Assistant. My research focused on how society or ecosystem managers can learn about and manage ecosystems that may contain unknown ecological thresholds. The work was conducted as part of the North Temperate Lakes Long Term Ecological Research (LTER) project.

- ◆ **NATURAL RESOURCES AND ENVIRONMENT DIVISION, COUNCIL FOR SCIENTIFIC AND INDUSTRIAL RESEARCH (CSIR). Pretoria, South Africa (Jul 2001 – Jun 2005, three consecutive contracts)**

Part-time research assistant for the Southern African Millennium Ecosystem Assessment (SAfMA) regional scale project (Jan 2003 - Jun 2005). My primary focus was on assessing biodiversity, which formed part of my MSc project. I was also responsible for the scenarios component and contributed to the overall coordination and management of the SAfMA reports.

Full-time junior researcher for the SAfMA pilot project (Jan 2002 - Dec 2002). My work involved data collation, analytical GIS modeling and coordination of pilot brochure product. Project focused on three ecosystem services: water, food and fuelwood, and their relation to human well-being.

Part-time research intern (Jul 2001 - Dec 2001). Worked on historical land-cover change in South Africa as part of my BSc Honours project.

WHILE COMPLETING MY UNDERGRADUATE STUDIES I WORKED PART-TIME FOR:

- ◆ **SCIENTIFIC SERVICES, SOUTH AFRICAN NATIONAL PARKS
Skukuza, Kruger National Park, South Africa (Jan 1998 - Dec 2000)**

Statistics and GIS consulting. My statistical contribution led to co-authorship of several publications. Also presented a short statistics course and digitizing training to technicians.

- ◆ **MPUMALANGA PARKS BOARD
Lydenburg and Nelspruit offices, South Africa (Jan 1998 - Dec 2000)**

GIS and field-work technician. Contributed to development of a wetland mapping system for the province, assisted with design of a wetland database, and acted as a team leader for wetland surveys.

- ◆ **SOUTH AFRICAN WEATHER BUREAU
Pretoria, South Africa (Jan 1998 - Dec 2000)**
Relief observer at the Skukuza (Kruger Park) first-order weather station.
- ◆ **ASSOCIATION FOR WATER & RURAL DEVELOPMENT (AWARD)
Hoedspruit, South Africa (Jun 1998 - Jul 1998)**
GIS technician. Digitized maps for the catchment management plan of the Sand River Catchment.
- ◆ **JACANA EDUCATION
Houghton, Johannesburg, South Africa (Mar 1998 - Aug 1998)**
Collated information on medicinal and other uses of trees for the SAPPI Tree-Spotting books.
- ◆ **TOURISM DIVISION, SOUTH AFRICAN NATIONAL PARKS
Skukuza, Kruger National Park, South Africa (Jan 1998 - Dec 1998)**
Night Drive tour-guide. Three-hour guided drives with 20 tourists from the Skukuza Rest Camp in the Kruger National Park.

EXTENDED INTERNATIONAL SCIENTIFIC VISITS & TRAINEESHIPS

- ◆ **STELLENBOSCH INSTITUTE FOR ADVANCED STUDY (STIAS) & COUNCIL FOR SCIENTIFIC AND INDUSTRIAL RESEARCH (CSIR), NATURAL RESOURCES & ENVIRONMENT
Stellenbosch, South Africa (Oct 2012 – Jan 2013, 4 months)**
Follow-up research fellowship and collaborative visit to work Dr Belinda Reyers and the CSIR Biodiversity & Ecosystem Services group, as well as Prof Jannie Hofmyer at the Centre for Complexity Studies, Stellenbosch University, South Africa (undertaken while based at the Stockholm Resilience Centre, Stockholm University, Sweden).
- ◆ **STELLENBOSCH INSTITUTE FOR ADVANCED STUDY (STIAS) & COUNCIL FOR SCIENTIFIC AND INDUSTRIAL RESEARCH (CSIR), NATURAL RESOURCES & ENVIRONMENT
Stellenbosch, South Africa (Dec 2011 – Mar 2012, 4 months)**
Research fellowship and collaborative visit to work Dr Belinda Reyers and the CSIR Biodiversity & Ecosystem Services group, as well as Prof Jannie Hofmyer at the Centre for Complexity Studies, Stellenbosch University, South Africa (undertaken while based at the Stockholm Resilience Centre, Stockholm University, Sweden).
- ◆ **COUNCIL FOR SCIENTIFIC AND INDUSTRIAL RESEARCH (CSIR), NATURAL RESOURCES & ENVIRONMENT
Stellenbosch, South Africa (Nov-Dec 2010, 4 weeks)**
Collaborative visit to work Dr Belinda Reyers and the Biodiversity & Ecosystem Services group (undertaken while based at the Stockholm Resilience Centre, Stockholm University, Sweden).
- ◆ **THE WORKSHOP IN POLITICAL THEORY AND POLICY ANALYSIS
Indiana University, USA (Oct 2007, 2 weeks)**
Visit and interaction with Prof Elinor Ostrom's group, and joined 2 weeks of her graduate level class on *Institutional Analysis and Development* (undertaken while based at University of Wisconsin-Madison, USA).
- ◆ **SUSTAINABLE ECOSYSTEMS, COMMONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANIZATION (CSIRO), Canberra, Australia (February- April 2005, 3 months)**
Research assistantship under Dr Brian Walker and Dr Leonie Pearson, working on a pilot project to assess sustainability in the Goulburn-Broken catchment using the Inclusive Wealth framework (undertaken while based at the Council for Scientific and Industrial Research (CSIR), South Africa).

◆ **DEPARTMENT OF SYSTEMS ECOLOGY**

Stockholm University, Sweden (May 2004, 1 week)

A visit to the systems ecology group of Prof Carl Folke in Stockholm and the Kristianstad research site in southern Sweden. Joined a three-day postgraduate course “Resilience and Complex Adaptive Systems Research” presented by J. Norberg (undertaken while based at the Council for Scientific and Industrial Research (CSIR), South Africa).

◆ **NATIONAL INSTITUTE OF PUBLIC HEALTH AND THE ENVIRONMENT (RIVM)
Bilthoven, The Netherlands (3 visits)**

(undertaken while based at the Council for Scientific and Industrial Research (CSIR), South Africa)

May 2004 (3 days): Scientific visit to work on collaborative SAfMA-related publications

May 2003 (1 week): Return visit, specifically to learn more about the land-cover change module of the IMAGE biosphere-climate-society model. Assessed land-cover scenario outputs for the southern African region, and explored possibilities for future modelling collaboration.

July 2001 (1 week): Learn about the IMAGE climate-society-biosphere model from Dr. R. Leemans, and global historical land-use/land-cover databases from Ir. C.G.M. Klein-Goldewijk (HYDE database) and Dr. N. Ramankutty (SAGE database).

◆ **DIVISION OF WILDLIFE AND ECOLOGY (NOW SUSTAINABLE ECOSYSTEMS), COMMONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANISATION (CSIRO)
Canberra, Australia Nov/Dec 1999 (5 weeks)**

Traineeship under Dr Chris Margules and Dr Kendi Davies, working on surrogates for predicting beetle diversity. Attended several research seminars and field trips, particularly focused on land-use planning (undertaken while an undergraduate student at the University of South Africa, based in Skukuza).

SUPERVISION OF STUDENTS & RESEARCH STAFF

RESEARCH STAFF

1. Dr Kristi Maciejewski, Researcher (Jan 2018 – present), 100% on GRAID project
2. Ass Prof. Scott Drimie, Chief Researcher (Nov 2015 – present), 20 - 50% on GRAID project
3. Dr Laura Pereira, Researcher (Dec 2015 – Dec 2017), 100% on GRAID project
4. Dr Rika Preiser, Senior Researcher (Oct 2014 - present), 80% on SwedBio project (Oct 2014 – Oct 2015), 75-100% on GRAID project (Nov 2015 - present)
5. Dr Joy Waddell (Jan 2019 -)
6. Dr Odi Selomane (Jan 2019 -)
7. Dr Nadia Sitas (Feb 2019 -)

POSTDOCS

1. Dr Haley Clements (Jan 2018 -)
2. Dr Joy Waddell (Oct 2018 – Dec 2018)
3. Dr Kristi Maciejewski (Dec 2016 – Dec 2017)
4. Dr Maike Hamann (May 2016 - April 2017)

PHD

Ongoing

1. Amanda Thubelihle Manyani (Stellenbosch University, South Africa; main supervisor, 2019-present)
2. Catherine Britt Pringle (Stellenbosch University, South Africa; main supervisor, 2017-present)
Social Cohesion and Water Governance
3. Linda Luvuno (Stellenbosch University, South Africa; main supervisor, 2014-present)
Quantifying resilience to bush encroachment

Completed

4. Susara Elizabeth (Liza) van der Merwe (Stellenbosch University, South Africa; main supervisor, 2016-2018) *Advancing resilience assessments: the social dimensions of electricity supply in South Africa*
5. Luke Metelerkamp (Stellenbosch University, South Africa; co-supervisor, 2016-2018) *Learning for change: youth and niche environments in food system transitions*
6. Odirilwe Selomane (Stellenbosch University, South Africa; co-supervisor, 2012–2017) *Monitoring for sustainability: A social-ecological systems approach to indicators and measurement*
7. Maïke Hamann (Stockholm University, Sweden; main supervisor, 2011 – 2016) *Exploring connections in Social-Ecological Systems: The links between biodiversity, ecosystem services, and human well-being in South Africa*
8. Juan Rocha (Stockholm University, Sweden; co-supervisor, 2010 – 2015) *Regime Shifts in the Anthropocene*

MASTERS

Ongoing

1. Nontsikelelo Mngqibisa (Stellenbosch University, South Africa; co-supervisor, 2018-present)
2. Andisiwe Mnkani (Stellenbosch University, South Africa; co-supervisor, 2018-present)
3. Tafadzwa Shumba (Stellenbosch University, South Africa; co-supervisor, 2018-present)
4. Danai Matowanyika (Stellenbosch University, South Africa; co-supervisor, 2018-present)

Completed

5. Siraj Jardine (Stellenbosch University, South Africa; co-supervisor, 2018-2019)
6. Therezah Achieng (Stellenbosch University, South Africa; co-supervisor, 2018-2019)
7. Olive Zgambo (Stellenbosch University, South Africa; co-supervisor, 2016-2018) *Exploring food system transformation in the greater Cape Town area*
8. Megan Lindow (Stellenbosch University, South Africa; co-supervisor, 2016-2017) *Exploring resilience capacities through the art of storymaking: The case of food innovators in the Western Cape*
9. Daniel Ospina-Medina (Stockholm University, Sweden; main co-supervisor, 2011 – 2012) *Is cropland-dominance in landscapes an alternate social-ecological regime? An empirical exploration of patterns in global cropland cover data*
10. Johnny Musumbu Tshimpanga (Uppsala University, Sweden; main co-supervisor, 2011 – 2012) *A regime shift analysis of poverty traps in sub-Saharan Africa: Identifying key feedbacks and leverage points for change*
11. Christine Hammond (Stockholm University, Sweden; main co-supervisor, 2010 – 2012) *Impacts of Agriculturally-driven Regime Shifts on Ecosystem Services and Human Well-being*
12. Rolands Sadauskis (Stockholm University, Sweden; main co-supervisor, 2010 – 2011) *Building resilience to climate-driven regime shifts*
13. Juan Carlos Rocha (Stockholm University, Sweden; main co-supervisor, 2009 – 2010) *Global change drivers of regime shifts in social-ecological systems*

HONOURS

Ongoing

Completed

1. Milisa Rala (Rhodes University, South Africa; co-supervisor, 2018)
2. Kim Parker (Rhodes University, South Africa; co-supervisor, 2018)
3. Sinetemba Xoxo (Rhodes University, South Africa; co-supervisor, 2017). *A systematic review of combinations of methods used in social-ecological systems research*

INTERNS

1. Linda Luvuno, MS student, University of KwaZulu-Natal, South Africa (Apr 2013 – May 2013)
Developed an example of bush encroachment in wetlands for the RSDB
2. Johanna Yletyinen, Volunteer (Apr 2011 – Jun 2011)
Collated numerous examples and case studies of marine regime shifts for the RSDB
3. Daniel Ospina, MS student, Stockholm University, Sweden (Nov 2010 – Jun 2011)
Developed examples on peatlands for RSDB
4. Henning Nolzen, MS student, University of Osnabrück, Germany (Feb 2011 – Apr 2011)
Developed examples for RSDB, focusing on river management
5. Johnny Musumbu, MS student, Uppsala University, Sweden (Oct 2010 – Dec 2010)
Developed examples for RSDB focusing on social-ecological poverty traps
6. Christine Hammond, MS student, Stockholm University, Sweden (Apr 2010 – Jul 2010)
RSDB examples focusing on regime shifts related to agriculture
7. Rolands Sadauskis, MS student, Stockholm University (May 2010 – Jun 2010)
RSDB examples focusing on climate-driven regime shifts
8. Chas Jones, PhD student, University of Alaska Fairbanks, USA (May 2010 – Jul 2010)
RSDB examples focusing on large dams
9. Juan Rocha, MS student, Stockholm University, Sweden (Mar 2009 – Jul 2009)
RSDB examples focusing on well-established regime shifts
10. Matteo Giusti, MS student, Stockholm University, Sweden (Mar 2009 – Jun 2010)
Development of the Regime Shifts Database (RSDB) website
11. Freya Rowland, University of Wisconsin-Madison, USA (Mar 2006 – Jun 2007)
Undergraduate research assistant for Zooplankton project

TEACHING EXPERIENCE

COORDINATION AND PRESENTATION OF GRADUATE COURSES AND TRAINING

- ◆ *Participatory Action Research in Social-Ecological Systems: Principles and Practice when Working with Communities*. Supported organization of 1.5 day SAPECS learning event hosted in conjunction with PECS 2015 conference. 1-2 November 2015, Stellenbosch Institute for Advanced Studies (STIAS), Stellenbosch, South Africa. 30 participants from southern Africa and around the world.
- ◆ *Regime Shifts Module* of the “Social-Ecological Resilience for Sustainable Development” Masters program at Stockholm University, Stockholm, Sweden. Support organizer and lecturer, 19 November – 3 December 2014.
- ◆ *SAPECS Ecosystems & Society Winter School*. Lecturer and support organizer for 1 week course. 30 June – 4 July 2014. Nelson Mandela Metropolitan University, Saasveld campus, George, South Africa.
- ◆ *Regime Shifts PhD course*, part of the Doctoral Resilience Research School at Stockholm University, Stockholm, Sweden. Course leader and organizer, 5-week course, 6 November – 13 December 2013.
- ◆ *Regime Shifts Module* of the “Social-Ecological Resilience for Sustainable Development” Masters program at Stockholm University, Stockholm, Sweden. Course leader, 3 week module, 18 November – 10 December 2013.
- ◆ *Regime Shifts Module* of the “Social-Ecological Resilience for Sustainable Development” Masters program at Stockholm University, Stockholm, Sweden. Course leader, 2.5 week module, 22 November – 7 December 2012.
- ◆ *Running effective meetings to facilitate scientific collaborations*, part of the “How 2B a scientist” PhD seminar series at the Resilience Research School, Stockholm Resilience Centre, Stockholm University, Sweden. Organized and taught a 2-hour interactive seminar on 6 September 2012.
- ◆ *Regime Shifts half-day course*, part of a 2-day course on “Economics of Environmental Regime Shifts” organized by the Swedish International Development Cooperation Agency (SIDA) and The Beijer Institute of Ecological Economics in conjunction with the 19th Annual Conference of

the European Association of Environmental and Resource Economists. Prague, Czech Republic, 26-27 June 2012.

- ◆ *Regime Shifts Module* of the “Social-Ecological Resilience for Sustainable Development” Masters program at Stockholm University, Stockholm, Sweden. Course leader, 2 week module, 16 November – 1 December 2011.
- ◆ *Applications Course* of the “Ecosystems, Governance and Globalization” Masters program at Stockholm University, Stockholm, Sweden. Co-taught and co-led 1 month course, 18 January – 17 February 2010.
- ◆ *Statistics practical using SAS*. Developed and presented a one-week course to 15 BSc Honours students in the Department of Animal, Plant and Environmental Science, University of the Witwatersrand, Johannesburg, South Africa, February/March 2004.
- ◆ *Zoology modelling lab*. Provided teaching assistance in the lab class at the University of the Witwatersrand, Johannesburg, South Africa, September 2003.
- ◆ *Introductory statistics course*. Developed and presented a one-day course to a small group of scientists and students. August 2000, Skukuza, Kruger National Park.
- ◆ *Digitizing course*. Contracted by South African National Parks for three days to train a research technician to digitise historical aerial census data using CARTALINKS. October 1999, Skukuza, Kruger National Park.
- ◆ *Extra maths classes*. Presented extra matriculation mathematics lessons to fellow high school scholars (1.5 hour sessions). Nelspruit, South Africa, 1997.

GUEST LECTURES ON GRADUATE COURSES

- ◆ *Tackling the Anthropocene Challenge: The Resilience Thinking approach*, ½ day guest lecture in the Masters course on “Managing complex human-ecological systems” offered by the Department of Environmental and Geographical Sciences, University of Cape Town, South Africa, 1 September 2017.
- ◆ *Social-Ecological Regime Shifts & the Regime Shifts Database*, ½ day guest lecture in the Masters degree in Conservation Biology offered by University of Cape Town, South Africa, 3 April 2017.
- ◆ *Tackling the Anthropocene Challenge: The Resilience Thinking approach*, 1.5-hour guest lecture in the PGD/MPhil Module on “Complexity and Systems Thinking” offered by the School of Public Leadership (SPL) at the Sustainability Institute, Stellenbosch University, South Africa, 15 March 2017.
- ◆ *Social-Ecological Systems, Resilience and Regime Shifts*, 1.5-hour guest lecture in the PGD/MPhil Module on Biodiversity and Ecosystem Services offered by the School of Public Leadership (SPL) at the Sustainability Institute, Stellenbosch University, South Africa, 7 June 2016.
- ◆ *The Anthropocene, Social-Ecological Systems and Resilience*, 1.5-hour guest lecture in the PGD/MPhil Module on Biodiversity and Ecosystem Services offered by the School of Public Leadership (SPL) at the Sustainability Institute, Stellenbosch University, South Africa, 7 July 2015.
- ◆ *Biodiversity, Ecosystem Services and Human Well-being in South Africa*, 1.5-hour guest lecture in the PGD/MPhil Module on Biodiversity and Ecosystem Services offered by the Sustainability Institute, Stellenbosch University, South Africa, 7 July 2015.
- ◆ *Tackling the Anthropocene Challenge: The Resilience Thinking Approach*, 1.5 hour guest lecture in the PGD/MPhil Introductory Module on Sustainable Development offered by the School of Public Leadership (SPL) at the Sustainability Institute, Stellenbosch University, South Africa, 12 February 2015.
- ◆ *The Anthropocene, Social-Ecological Systems and Resilience*, 1.5-hour guest lecture in the PGD/MPhil Module on Biodiversity and Ecosystem Services offered by the School of Public Leadership (SPL) at the Sustainability Institute, Stellenbosch University, South Africa, 10 June 2014.
- ◆ *Biodiversity, Ecosystem Services and Human Well-being in South Africa*, 1.5-hour guest lecture in the PGD/MPhil Module on Biodiversity and Ecosystem Services offered by the School of Public Leadership (SPL) at the Sustainability Institute, Stellenbosch University, South Africa, 10 June 2014.

- ◆ *Ecosystem Services in the Anthropocene: Anticipating and Managing Regime Shifts*, 2.5-hour guest lecture as part of the “Social-Ecological Landscape Analysis” PhD course offered by School of Public Leadership (SPL) at the Stockholm University, Stockholm, Sweden, 11 October 2010.
- ◆ *Tipping Over The Edge: Understanding and managing regime shifts in social-ecological systems*, 2.5-hour guest lecture as part of the “Resilience, Adaptability and Transformability” ERG Masters course offered by Stockholm University, Stockholm, Sweden, 10 September 2010.
- ◆ *Turning back from the brink: Can an impending regime shift be detected in time to avert it?* 2-hour guest lecture as part of the “Natural Resource Management” course offered by Stockholm University, Stockholm, Sweden, 25 March 2010.
- ◆ *The Southern African Millennium Ecosystem Assessment*, 1 –hour lecture as part of an undergraduate Environmental Studies class at the University of Wisconsin, Madison, USA, January 2008.
- ◆ *The Southern African Millennium Ecosystem Assessment*, 2-hour session as part of a graduate level class “Ecosystem Concepts” at the University of Wisconsin, Madison, USA, April 2007.
- ◆ *Assessing ecosystem services*, guest lecture as part of an honours-level “Global Change” course in the School of Animal, Plant and Environmental Sciences at the University of the Witwatersrand, Johannesburg, South Africa, April 2004.
- ◆ *Historical land-cover change in South Africa*, guest lecture for an honours-level course on global change in the School of Geography, Archaeology, and Environmental Studies at the University of the Witwatersrand, Johannesburg, South Africa, October 2002.

THESIS EXAMINATION

I have served as an examiner for the following theses:

- ◆ Katja Malmborg. 2015. Identifying ecotopes on a regional scale in Burkina Faso. Masters thesis, Stockholm Resilience Centre, Stockholm University, Sweden.
- ◆ Caroline Schill. 2012. Identifying factors influencing exploitation strategies and cooperation in commons dilemmas under threshold uncertainty: Evidence from a laboratory experiment. Masters thesis, Stockholm Resilience Centre, Stockholm University, Sweden.
- ◆ Jeff Ranara. 2011. Linking social and ecological values in urban landscape studies. Licentiate thesis, Stockholm University.
- ◆ Julia Wesely. 2010. *Policy outcomes on water-related ecosystem services in an agricultural landscape in South Africa*. Masters thesis, Stockholm Resilience Centre, Stockholm University, Sweden.
- ◆ Thomas Bergendorff. 2009. *Barriers to transformation from conventional to organic agriculture: A case from the tropical island of Bali*. Masters thesis, Stockholm Resilience Centre, Stockholm University, Sweden.

PEER-REVIEWING

SUBJECT EDITOR

I serve as subject editor/on the editorial board of the following journals:

- ◆ Anthropocene (2017-)
- ◆ BioScience (2014-)
- ◆ Ecology and Society (2011-)
- ◆ Koedoe (2013-)

JOURNAL REVIEWER

I have served as a reviewer for articles in the following journals

- ◆ Ambio (2014)
- ◆ Anthropocene (2017)
- ◆ Biological Reviews (2016)

- ◆ BioScience (2013)
- ◆ Conservation Biology (2009)
- ◆ Conservation Letters (2011)
- ◆ Ecological Applications (2007, 2017)
- ◆ Ecology (2011)
- ◆ Ecology and Society (2006, 2008, 2012)
- ◆ Ecology Letters (2010)
- ◆ Environmental Management (2011)
- ◆ Environmental Modelling & Software (2015)
- ◆ Forest Policy & Economics (2011)
- ◆ Global Environmental Change (2009, 2010, 2016)
- ◆ Journal of Arid Environments (2006)
- ◆ Koedoe (2010)
- ◆ Landscape Ecology (2009, 2011)
- ◆ Nature Climate Change (2011)
- ◆ Natural Hazards (2016)
- ◆ Proceedings of the National Academy of Sciences (PNAS) (2014)
- ◆ Proceedings of the Royal Society B (2009)
- ◆ Science (2016)
- ◆ South African Journal of Wildlife Research (2005)
- ◆ South African Journal of Science (2003, 2004)
- ◆ Theoretical Ecology (2008)
- ◆ Urban Ecosystems (2016)

BOOK CHAPTERS

I have served as a formal reviewer for chapters in the following books

- ◆ Ash, N., H. Blanco, C. Brown, K. Garcia, T. Henrichs, N. Lucas, C. Raudsepp-Hearne, R.D. Simpson, R.J. Scholes, T. Tomich, B. Vira, and M. Zurek (eds). 2010. *Ecosystems and Human Well-being: A manual for assessment practitioners*. Island Press, Washington DC.
- ◆ Chapin, F.S., G.P. Kofinas and C. Folke (eds). 2009. *Principles of ecosystem stewardship: Resilience-based natural resource management in a changing world*. Springer, New York.
- ◆ Aronson, J., S. Milton and J. Blignaut (eds). 2007. *Restoring Natural Capital: Science, Business and Practice*. Island Press, Washington DC, USA.
- ◆ Moldan, B., T. Hak and A. Dahl (eds). 2007. *Sustainable development: How to measure progress through indicators*. SCOPE Report Series, Island Press, Washington DC, USA.
- ◆ MA 2005. *Ecosystems and human well-being: Current state and trends*. R. Hassan, R.J. Scholes and N. Ash (eds). Volume 1: Findings of the Condition and Trends Working Group of the Millennium Ecosystem Assessment. Island Press, Washington DC.
- ◆ MA 2005. *Ecosystems and human well-being: Multiscale assessments*. D. Capistrano, C.K. Samper, M.J. Lee and C. Raudsepp-Hearne (eds). Volume 4: Findings of the Sub-Global Assessments Working Group of the Millennium Ecosystem Assessment. Island Press, Washington DC.

BOOK PROPOSALS

I have served as a reviewer for the following book proposals:

- ◆ Longstaff, PH. Key Concepts in the Social Sciences: Resilience. Book proposal for Polity Books (2013).

PROJECTS AND PROJECT GRANTS

I have served as a reviewer for proposals from the following funding agencies:

- ◆ South African National Research Foundation (NRF), rating application evaluator (2014, 2015).
- ◆ South African National Research Foundation (NRF), grant proposal evaluator (2018).

- ◆ German Federal Ministry of Education and Research, for Research and Development Projects on Tipping points, Dynamics and Interactions of Social and Ecological Systems (2016)
- ◆ Project progress reviewer for the German Federal Ministry of Education and Research (BMBF), for the project "The Future Okavango" (TFO, funding 8.4m €, 01/09/2010 – 31/08/2015) (2013, 2014).
- ◆ Project proposals for the Netherlands Organisation of Scientific Research (NOW), Earth and Life Sciences, Innovational Research Incentives Scheme (2009, 2011).
- ◆ Served as a member of the Scientific Evaluation Committee (SEC) for the EU's 7th Framework Programme BiodivERsA call Biodiversity Dynamics: Developing Scenarios, Identifying Tipping Points and Improving Resilience. The SEC comprised prominent researchers across Europe and was responsible for appointing external reviewers, discussing proposals and external evaluations, agreeing on a final scientific score, compiling an evaluation summary report, and deciding on a final ranking of proposals in a joint meeting with Policy Evaluation Committee. January-June 2012.

OTHER

I have also served as a reviewer for:

- ◆ The Collaboration for Environmental Evidence – review of a protocol for a systematic review of land use effects on biodiversity (2010).
- ◆ Yahara 2070 project – Yahara Watershed Scenarios, led by the University of Wisconsin-Madison (2014).

LEADERSHIP POSITIONS & BOARD MEMBERSHIPS

- ◆ Appointed to the Board of Directors of the Beijer Institute of Ecological Economics in Sweden (2018- present)
- ◆ Serve on the Board of the international Resilience Alliance, the founding and leading academic network in the field of social-ecological resilience (2018- present).
- ◆ Co-chair of the Scientific Committee of the International Program on Ecosystem Change and Society (PECS) (2018- present). Served as a member of the Scientific Committee of the International Program on Ecosystem Change and Society (PECS) (2016- 2018).
- ◆ Appointed to South Africa's National Global Change Science Committee (GSCSC), with the task of advising South Africa's National Department of Science and Technology (DST) and National Research Foundation (NRF) on the achievement of South Africa's Global Change Research Plan (2018- present)
- ◆ Nominated and selected as an expert for the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES) Africa regional assessment (2015-2018) by the South African Government. Served as coordinating Lead Author (CLA) for Chapter 5 (Current and future interactions between nature and society) of the Africa regional assessment (2016-2018).
- ◆ Member of the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES) expert group on scoping a set of regional/subregional assessments on biodiversity and ecosystem services (2014-2015)
- ◆ Initiated and lead the Southern African Program on Ecosystem Change and Society (SAPECS), one of 20 regional projects worldwide links to the Program on Ecosystem Change and Society (PECS) (2012– present)
- ◆ Initiator and Coordinator of Akili Young Scientists (AYS) network (2010 – 2012)
- ◆ Served on Advisory Board of the Akili Complexity and Integration Initiative (2009 – 2012)
- ◆ Served on the first Facilitatory Committee (2007 – 2009) and as the second Coordinator (2009 - 2011) of the Resilience Alliance Young Scholars (RAYs) network
- ◆ Served on the Technical User Committee of the Gariep Basin component of the Southern African Millennium Ecosystem Assessment (SAfMA) (2002-2004)

MEMBERSHIP OF PROFESSIONAL SOCIETIES/ NETWORKS

- ◆ Southern African Program on Ecosystem Change and Society (SAPECS) (2012–present)
- ◆ International Program on Ecosystem Change and Society (PECS) (2011 – present)
- ◆ Resilience Alliance (2008 – present)
- ◆ Akili Young Scientists (AYS) network (2010 – 2012)
- ◆ Akili Complexity and Integration Initiative (2009 – 2012)
- ◆ Resilience Alliance Young Scholars (RAYS) network (2007 – 2013)
- ◆ Resilience Alliance Postgrad Network (2007 – 2012)
- ◆ Global Environmental Change and Food Systems forum (2006 – 2008)
- ◆ University of Wisconsin Global Environmental Research Circle (2005)
- ◆ US Long Term Ecological Research Network (2005 – 2008)
- ◆ Society of South African Geographers (2000 - 2005)

PROFESSIONAL DEVELOPMENT

- ◆ Earth Science Women’s Network (2007 – 2008)
- ◆ Wisconsin Women on Leadership (2006 – 2008)
- ◆ Managing people reading and discussion club (2006)
- ◆ Delta Research, Teaching and Learning community (2005 – 2008)

MEDIA & OUTREACH EXPERIENCE

- ◆ Participated in Stellenbosch University’s 1st Science Café event on “*Klimaatsverandering: die gebruik en misbruik van die wetenskap*”. One hour question-and-answer discussion held as part of the Woordfees 2015 festival, 10 March 2015, Stellenbosch, South Africa.
- ◆ Interviewed by *Science Careers* on 30 Aug 2010, leading to an article published on 10 September 2010 at:
http://sciencecareers.sciencemag.org/career_magazine/previous_issues/articles/2010_09_10/caredit.a1000088
- ◆ Interviewed on national television (Morning Live show), as well as by several newspapers and radio stations in South Africa during the public outreach phase of the Southern African Millennium Assessment, to highlight the key findings from the project.

RESEARCH VISITORS HOSTED/ CO-HOSTED

HOSTED IN SOUTH AFRICA

1. **PROF MARGUERITE DANIEL** (University of Bergen, Norway). Visit to Centre for Complex Systems in Transition (CST) to build collaborations around climate change, child health and resilience in southern Africa. 5 June – 28 July 2017, Stellenbosch, South Africa.
2. **MS MY SELLBERG** (PhD student, Stockholm Resilience Centre, Stockholm University, Sweden). Visit to Centre for Complex Systems in Transition (CST) to attend introductory course on complexity and collaborate on GRAID project regarding resilience assessment approaches. 8-20 March 2017, Stellenbosch, South Africa.
3. **PROF MICHELE-LEE MOORE & DR PER OLSSON** (Stockholm Resilience Centre, Stockholm University, Sweden). Visit to Centre for Complex Systems in Transition (CST) to further collaborations on transformative spaces and social-ecological transformations. 26-27 September 2016, Stellenbosch, South Africa.
4. **DR LISA DEUTSCH & DR MIRIAM HUITRIC** (Stockholm Resilience Centre, Stockholm University, Sweden). Visit to Centre for Complex Systems in Transition (CST) to explore the potential for developing a postgraduate exchange program between South Africa and Sweden. 28-29 March 2016, Stellenbosch, South Africa.

5. **PROF CARL FOLKE** (Beijer Institute of Ecological Economics & Stockholm Resilience Centre, Stockholm University, Sweden). Visit to Stellenbosch Institute for Advanced Studies (STIAS) to advance collaborations related to the Southern African Program on Ecosystem Change and Society (SAPECS). 8 October – 10 December 2014, Stellenbosch, South Africa.
6. **PROF STEVE POLASKY** (Department of Applied Economics, University of Minnesota, USA). Visit to Stellenbosch Institute for Advanced Studies (STIAS) to advance collaborations related to the Southern African Program on Ecosystem Change and Society (SAPECS). 1-26 April 2014, Stellenbosch, South Africa.
7. **DR HEATHER TALLIS** (The Nature Conservancy, USA). Visit to Stellenbosch Institute for Advanced Studies (STIAS) to advance collaborations related to the Southern African Program on Ecosystem Change and Society (SAPECS). 1-30 April 2014, Stellenbosch, South Africa.
8. **PROF GARRY PETERSON, DR LINE GORDON, DR MARIA TENGÖ** (Stockholm Resilience Centre, Sweden) and **DR BELINDA REYERS AND DR LUTHANDO DZIBA** (Council for Scientific and Industrial Research, South Africa). While based at the Stellenbosch Institute for Advanced Study (STIAS), I arranged and found funding to facilitate a 1-month group visit. The goal of the visit was to foster collaborations between our institutes in terms of developing a Southern African Program on Ecosystem Change and Society (SAPECS), linked to the international PECS coordinated by the Stockholm Resilience Centre. 1 February – 2 March 2012 (1 month), Stellenbosch, South Africa.

HOSTED IN SWEDEN

9. **DR RIKA PREISER** (Centre for Complex Systems in Transition, Stellenbosch University, South Africa). Collaborative visit to plan a social-ecological systems methods handbook, as well as postgraduate exchange programs between Stockholm and Stellenbosch. 20-29 October 2016, Stockholm, Sweden.
10. **DR ALTA DE VOS** (Rhodes University, South Africa). Collaborative visit to plan a social-ecological systems methods handbook. 16-25 October 2016, Stockholm, Sweden.
11. **MS JESS SCHULSCHENK** (Director of the Sustainability Institute, South Africa). Collaborative visit to plan postgraduate exchange programs between Stockholm and Stellenbosch. 26 October – 3 November 2016, Stockholm, Sweden.
12. **DR RIKA PREISER** (Centre for Studies in Complexity, Stellenbosch University, South Africa). Collaborative visit in relation to the Southern African Program on Ecosystem Change and Society (SAPECS). 22-26 September 2014, Stockholm, Sweden.
13. **MS LINDA LUVUNO** (PhD student, Stellenbosch University, Stellenbosch, South Africa). Collaborative student exchange to Stockholm Resilience Centre. 12 September – 11 October 2014 (4 weeks), Stockholm, Sweden.
14. **DR BELINDA REYERS** (Natural Resources & Environment, CSIR, South Africa). Collaborative visit in relation to the Southern African Program on Ecosystem Change and Society (SAPECS). 1 August – 30 September 2013, Stockholm, Sweden.
15. **PROF SHEONA SHACKLETON** (Department of Environmental Science, Rhodes University, Grahamstown, South Africa). Collaborative visit in relation to the Southern African Program on Ecosystem Change and Society (SAPECS). 1-8 June 2013, Stockholm, Sweden.
16. **PROF MARK NEW** (Pro-VC & Director, African Climate and Development Initiative, University of Cape Town, South Africa; School of Geography and Environment, University of Oxford, UK) & **MS MEGAN COLE** (PhD student, University of Oxford, UK). Scoping visit around collaboration in relation to the Southern African Program on Ecosystem Change and Society (SAPECS) and work on national-level planetary boundaries. 18-19 February 2013, Stockholm, Sweden.
17. **DR BELINDA REYERS** (Group Leader: Biodiversity & Ecosystem Services Group, Council for Scientific and Industrial Research, Stellenbosch, South Africa). Sabbatical and collaborative research visit to SRC in relation to developing SAPECS, 6 August - 30 September 2012 (2 months), Stockholm, Sweden.
18. **DR MICHAEL SCHOON** (Arizona State University, USA). Collaborative visit to work on various Resilience Alliance Young Scientists Projects. 1-31 August 2012 (1 month), Stockholm, Sweden.
19. **PROF CHRISTO FABRICIUS** (Vice-Chancellor, Nelson Mandela Metropolitan University, Saasveld Campus, South Africa). Visit to explore research collaborations. 3-18 June 2012 (2 weeks), Stockholm, Sweden.
20. **PROF PETER CHEN** (Director of Society in Science Fellowship at ETH, Zurich, Switzerland). 1-day site visit and fellowship assessment. 29 May 2012 (1 day), Stockholm, Sweden.

21. **MR ODIRILWE SELOMANE** (PhD student from the Council for Scientific and Industrial Research & Stellenbosch University, Stellenbosch, South Africa). Initial research visit to SRC in relation to developing his PhD project, which I am co-supervising. 8-15 April 2012 (1 week), Stockholm, Sweden.
22. **MS ILSE KOTZEE** (PhD student, Council for Scientific and Industrial Research & Stellenbosch University, Stellenbosch, South Africa). Collaborative student exchange with students working with Belinda Reyers. 24 September – 3 November 2011 (6 weeks), Stockholm, Sweden.
23. **MS NADIA SITAS** (PhD student, Council for Scientific and Industrial Research & Stellenbosch University, Stellenbosch, South Africa). Collaborative student exchange with students working with Belinda Reyers. 16-30 October 2011 (2 weeks), Stockholm, Sweden.
24. **DR MICHAEL SCHOON** (Arizona State University, USA). Collaborative visit to work on various Resilience Alliance Young Scientists Projects. 2-31 August 2011 (1 month), Stockholm, Sweden.
25. **MR DIRK VAN APELDOORN** (PhD student working with Prof Kasper Kok at Wageningen University, Netherlands). Visited the Stockholm Resilience Centre to work with Garry Peterson and I on regime shifts. 24-31 May 2011 (1 week), Stockholm, Sweden.
26. **MR HENNING NOLZEN** (Masters student at University of Osnabrück, Germany, working with Prof Claudia Pahl-Wostl). Came to do a 2-month internship with me and Garry Peterson on regime shifts. 14 February – 15 April 2011 (2 months), Stockholm, Sweden.
27. **DR LUTHANDO DZIBA** (Biodiversity & Ecosystem Services Group, Council for Scientific and Industrial Research, Pretoria, South Africa). Collaborative research visit. 10-30 May 2011 (3 weeks), Stockholm, Sweden.
28. **DR BELINDA REYERS** (Group Leader, Biodiversity & Ecosystem Services Group, Council for Scientific and Industrial Research, Pretoria, South Africa). Collaborative research visit and sabbatical. 30 April – 1 July 2011 (2 months), Stockholm, Sweden.
29. **MR CHAS JONES** (PhD student, University of Alaska Fairbanks, USA). Came to do a 2-month internship on regime shifts with me and Garry Peterson. 18 May 2010 – 14 July 2010 (2 months), Stockholm, Sweden.

AWARDS AND FELLOWSHIPS

STELLENBOSCH UNIVERSITY (2013 - PRESENT)

- ◆ Awarded a Vice-Rector's Research Publication award for outstanding contributions to Stellenbosch University's research publication output for 2015 (awarded November 2017).
- ◆ South African Research Chair (SARChI) in Social-Ecological Systems and Resilience funded by the National Research Foundation (NRF), South Africa (awarded September 2015).
- ◆ P-Rating by the South African National Research Foundation in December 2014. The research rating process is a system of national benchmarking (A – international leader, B - internationally recognized, C – nationally recognized). The P-rating is the top rating for young scientists under 35 years old, awarded on the basis of exceptional potential demonstrated by an applicant's published research outputs to those considered likely to become internationally recognized leaders in their field (i.e., future A-rated scientists). Typically fewer than 5 young researchers receive a P-rating annually across all research fields in South Africa.

STOCKHOLM RESILIENCE CENTRE (2008 - PRESENT)

- ◆ Stockholm Resilience Centre's Networking Superhero Award in April 2013. This award celebrates heroic feats of collaboration; persons that have triggered and/or worked hard for collaborations, used unconventional methods for making people work together.
- ◆ Stellenbosch Institute for Advanced Study (STIAS) Young Scholars Fellowship, to spend two 4-month fellowships at STIAS in South Africa, working on Regime Shifts in Social-Ecological Systems (Dec 2011-Mar 2012 & Oct 2012-Jan 2013). Fellowship includes travel and accommodation expenses and a small stipend. I was the first STIAS Young Fellow.
- ◆ Profile featured in *Science Careers* section of the journal *Science* in September 2010.
http://sciencecareers.sciencemag.org/career_magazine/previous_issues/articles/2010_09_10/caredit.a1000088

- ◆ Branco Weiss Society in Science Fellowship, 2010-2015 (one of 3 fellowships awarded worldwide in 2010) (CHF 96,000 p.a. ≈ US\$ 100,000 p.a.)

UNIVERSITY OF WISCONSIN-MADISON (2005 - 2008)

- ◆ Fulbright Scholarship for doctoral studies in the USA, 2005-2007 (one of ~15 scholarships awarded by the Fulbright South Africa programme) (US\$ 14,000 p.a.)
- ◆ Graduate Research Assistantship, 2005-2006 (US\$ 12,000 p.a.)
- ◆ Anna Grant Birge Memorial Award, Center for Limnology, 2006 (US\$ 850)
- ◆ John Jefferson Davis Travel Award, Department of Zoology, 2006 (US\$ 600)
- ◆ Graduate Research Assistantship, 2006-2007 (US\$ 12,318 p.a.)
- ◆ Carl A. Bunde Fellowship to support scientific visits, Department of Zoology, 2007 (US\$ 890)
- ◆ Graduate Research Assistantship, 2007-2008 (US\$ 22,102 p.a.)
- ◆ John Jefferson Davis Travel Award, Department of Zoology, 2008 (US\$ 600)
- ◆ Vilas Travel Grant Award, University of Wisconsin, 2008 (US\$ 600)
- ◆ Anna Grant Birge Memorial Award, Center for Limnology, 2008 (US\$ 1000)

COUNCIL FOR SCIENTIFIC AND INDUSTRIAL RESEARCH (CSIR) (2001-2005)

- ◆ Received the most “Promising Young Researcher” Award at the CSIR Natural Resources and Environment Excellence Awards in 2005. The award was “*for showing exceptional promise of developing into a world leader in the field of society and the environment, as evidenced by her high-profile scientific output*”.
- ◆ Received the “Best Publication” Award for 2005 in the Natural Resources and Environment Division of the CSIR, along with Dr Bob Scholes, for our joint paper on the Biodiversity Intactness Index published in the journal *Nature* in March 2005.
- ◆ Zayed International Prize for the Environment awarded collectively to all authors of the Millennium Ecosystem Assessment on 6 February 2006 for “Scientific and Technological achievements in Environment” (US\$ 300,000).

UNIVERSITY OF THE WITWATERSRAND (2003 - 2004)

- ◆ Awarded a South African National Research Foundation Prestigious Masters Scholarship for 2003 (one of 22 scholarships awarded nationally), and re-awarded for 2004 (ZAR 33,000 p.a.)
- ◆ University Postgraduate Merit Award for 2004 (ZAR 12,840)
- ◆ University Postgraduate Merit Award for 2003 (ZAR 12,100)

UNIVERSITY OF NATAL (2001)

- ◆ University Special Honours Award based on academic merit (ZAR 7,000)
- ◆ Received Dean’s commendation for outstanding academic performance in 2001
- ◆ Received certificates of merit for HYDR311 and GEOG725
- ◆ Invited to join the Golden Key International Honour Society. Membership by invitation only, with top 15% of undergraduate students in each faculty of participating universities qualifying for membership.

UNIVERSITY OF SOUTH AFRICA (1998-2000)

- ◆ Faculty Medal for the best performance in the degree Bachelor of Science at the University of South Africa (Unisa) in the academic year 2000
- ◆ Honours Exhibition Award for post-graduate study at Unisa in 2001 (ZAR 2,520)
- ◆ Charles Stephens Educational Trust Bursary (merit-based) in 2000 (ZAR 1,500)
- ◆ Awarded one of 300 Unisa merit bursaries in 1999 (ZAR 1,680)
- ◆ Awarded one of 10 Barlows merit-based bursaries for SANP staff in 1999 (ZAR 1,000)

RESEARCH GRANTS

- ◆ **Resilient Waters.** 1.2m USD (~13.5m ZAR) funded by USAID, October 2017-December 2023 (co-PI).

- ◆ **Resilience for Development Colloquium.** 300,000 SEK (~426,000 ZAR) contribution by Swedbio to facilitate attendance of African policy-makers and practitioners. March-June 2017 (PI).
- ◆ **Guidance for Resilience in the Anthropocene: Investments for Development (GRAID).** Total grant of 107,000,000 SEK funded by the Swedish International Development Agency (SIDA), to be split between Stockholm Resilience Centre (75%) and Stellenbosch Hub (CSIR and CST, 25%). Approx 8,000,000 SEK (13,000,000 ZAR) to come to CST, September 2015 – December 2018 (PI for CST).
- ◆ **South African Research Chair (SARChI) in Social-Ecological Systems and Resilience.** 7,500,000 ZAR funded by the National Research Foundation (NRF), South Africa. January 2016 – December 2020 (PI).
- ◆ **Regime Shifts in the Anthropocene: Assessing risks and building resilience.** 4,792,000 SEK (approx. 7,700,000 ZAR) Junior Researcher Grant funded by The Swedish Research Council Vetenskapsrådet, Sweden. January 2015 –December 2018 (PI).
- ◆ **Ecosystem service based strategies to alleviate poverty in southern Africa: The importance of cross-scale synergies and cultural services in addressing multiple dimensions of human well-being.** 3,900,000 SEK (approx. 6,250,000 ZAR) Development Research Grant funded by The Swedish Research Council Vetenskapsrådet, Sweden. January 2015 –December 2017 (co-PI).
- ◆ **Generating and disseminating scientific-, policy-, and regionally-relevant knowledge of social-ecological dynamics and transformations to enable stewardship toward sustainable development.** 2,500,000 SEK (approx. 4,000,000 ZAR) funded by the Resilience and Development Program (ResDev, SwedBio), Sweden. 1 October 2014 – 31 December 2015 (PI).
- ◆ **Seeds of the Good Anthropocene.** 75,000 USD (~800,000 ZAR), funded by the Future Earth Fast Track Initiative. 1 August 2014 - 31 July 2016 (Co-PI).
- ◆ **Anticipatory governance and societal feedbacks in socio-environmental transitions: multi-continental acacia invasions as a model system.** Series of 5 international workshops funded by the national socio-environmental synthesis centre (SESYNC). 1 January 2014 – 31 December 2015 (Co-applicant).
- ◆ **Resilience Alliance Young Scientists Workshop.** 35,000 SEK funded by Formas, additional local costs funded by the Stockholm Resilience Centre. 21-24 August 2012, Askö Marine Laboratory, Sweden (Co-I).
- ◆ **Biodiversity Planetary Boundary Workshop.** 3,000 GBP funded by UK Global Environmental Research Committee (GERC). 30-31 March 2012 at Chicheley Hall, London, UK (Co-I).
- ◆ **Ecosystem services and poverty alleviation in sub-Saharan Africa.** 75,000 SEK funded by Wallenberg Foundation for Swedish-South Africa group visit at the Stellenbosch Institute for Advanced Studies to advance research collaborations, 1-29 February 2012 (PI).
- ◆ **Frontiers in Ecosystem Service Science Colloquium.** 7,750 ZAR contributed to a 1-day colloquium on 7 February 2012 by the Stellenbosch Institute for Advanced Studies, and 7,000 ZAR contributed by the South African National Research Foundation (PI).
- ◆ **Governance of ecosystem services under scenarios of change in southern and eastern Africa.** 4,500,000 SEK (~4,400,000 ZAR) funded by the Swedish International Development Agency (SIDA), Jan 2011 – Dec 2013 (Co-PI).
- ◆ **Ecosystem Services in the Anthropocene: Anticipating and managing regime shifts.** 549,500 CHF Branco Weiss Society in Science Fellowship, managed by ETH Zurich, Switzerland. 1 September 2010 – 30 November 2015.

CONFERENCES AND WORKSHOPS

INTERNATIONAL CONFERENCES & SYMPOSIA (involving attendees from multiple countries)

1. **Colloquium on Resilience for Development: Assessment Methods and Transformation Practices.** Organized as part of the GRAID project, with 150 practitioners from across Africa and leading resilience scientists from around the world. Designed in an innovative dialogue format. 8-10 May 2017, Johannesburg, South Africa.
 - ↘ **Colloquium organizer and local host**
 - ↘ **Opening keynote presentation:** Biggs, R. 2017. Tackling the Anthropocene Challenge: The Resilience Thinking approach. *Colloquium on Resilience for Development: Assessment Methods and Transformation Practices*. 8-10 May 2017, Johannesburg, South Africa. 20 min.
 - ↘ **Session Co-convenor:** Social-Ecological Regime Shifts: Implications for Development. 1.5 hour dialogue session.
 - ↘ **Oral presentation:** Biggs, R. 2017. Social-Ecological Regime Shifts. Oral presentation in the session “Social-Ecological Regime Shifts: Implications for Development” at the *Colloquium on Resilience for Development: Assessment Methods and Transformation Practices*. 8-10 May 2017, Johannesburg, South Africa.
 - ↘ **Oral presentation and group facilitator:** Biggs, R. 2017. Understanding thresholds and traps. Oral presentation in the session “What insights can social-ecological resilience research offer the challenges of development in the Anthropocene?” at the *Colloquium on Resilience for Development: Assessment Methods and Transformation Practices*. 8-10 May 2017, Johannesburg, South Africa.
 - ↘ **Session Co-convenor:** Using scenarios to inform decision-making. 1.5 hour dialogue session.
 - ↘ **Session Co-convenor:** Conceptualising, measuring and monitoring resilience: an emerging agenda for the SADC regional vulnerability assessment committee. 1.5 hour dialogue session.
 - ↘ **Oral presentation:** Biggs, R. 2017. Conceptualizing, Measuring and Monitoring Resilience: An emerging Agenda for SADC RVAC. Oral presentation in the session “Conceptualising, measuring and monitoring resilience: an emerging agenda for the SADC regional vulnerability assessment committee.” at the *Colloquium on Resilience for Development: Assessment Methods and Transformation Practices*. 8-10 May 2017, Johannesburg, South Africa.
2. **6th International Conference on Sustainability Science: Sustainability Science for Meeting Africa’s Challenges.** 2-3 March 2016, Stellenbosch, South Africa.
3. **15th International Winelands Conference.** 30 March – 1 April 2016, Stellenbosch, South Africa.
 - ↘ **Session convenor & Oral presentation:** Biggs R. 2016. Seeds of Good Anthropocenes. *15th International Winelands Conference*. 30 March – 1 April 2016, Stellenbosch, South Africa.
4. **Society in Science Fellowship Annual Symposium.** 21-24 November 2015, Zurich, Switzerland.
 - ↘ **Invited presentation:** Biggs R. 2015. Ecosystem Services in the Anthropocene: Anticipating and managing regime shifts. *Branco Weiss Society in Science Annual Symposium*. 24-25 November 2015, Zurich, Switzerland.
5. **Program on Ecosystem Change and Society (PECS) 2015 Conference: Social-Ecological dynamics in the Anthropocene.** 2-5 November 2015, Stellenbosch, South Africa.
 - ↘ **Local chair, host, and organizer of the conference**
 - ↘ **Session convenor and Chair:** Interrogating a third space: what methods are appropriate for understanding social-ecological systems? 2015. *Program on Ecosystem Change and Society (PECS) 2015 Conference: Social-Ecological dynamics in the Anthropocene*. 2-5 November 2015, Stellenbosch, South Africa. [1.5 hours session, 4 speakers, 4 panellists]
 - ↘ **Session convenor and panellist:** Seeds of Good Anthropocenes. 2015. *Program on Ecosystem Change and Society (PECS) 2015 Conference: Social-Ecological dynamics in the Anthropocene*. 2-5 November 2015, Stellenbosch, South Africa. [1.5 hours, 4 speakers, 3 panellists]
 - ↘ **Poster presentation:** Peterson, GD, E Bennett, R Biggs, A Norström, C Raudsepp-Hearne, L Pereira. 2015. Seeds of Good Anthropocenes. *Program on Ecosystem Change and*

Society (PECS) 2015 Conference: Social-Ecological dynamics in the Anthropocene. 2-5 November 2015, Stellenbosch, South Africa.

- **Poster presentation: Biggs R**, M Schlüter, ML Schoon. 2015. Principles for Building Resilience: Sustaining Ecosystem Services in Social-Ecological Systems. *Program on Ecosystem Change and Society (PECS) 2015 Conference: Social-Ecological dynamics in the Anthropocene.* 2-5 November 2015, Stellenbosch, South Africa.
 - **Poster presentation: Biggs R**, B Reyers, G Cundill, D Roux, J Nel, M Hamann, N Sitas. 2015. The Southern African Program on Ecosystem Change and Society (SAPECS): Supporting Social-Ecological Stewardship and finding Pathways out of Poverty. *Program on Ecosystem Change and Society (PECS) 2015 Conference: Social-Ecological dynamics in the Anthropocene.* 3-5 November 2015, Stellenbosch, South Africa.
 - **Poster presentation: Biggs R**, GD Peterson, J Rocha. 2015. The Regime Shifts Database: A global comparison of drivers and ecosystem service impacts of regime shifts. *Program on Ecosystem Change and Society (PECS) 2015 Conference: Social-Ecological dynamics in the Anthropocene.* 3-5 November 2015, Stellenbosch, South Africa.
6. **PECS Science-Policy-Practice Dialogue: Opportunities for Creating a Good Anthropocene in Southern Africa.** 1-2 November 2015, Cape Town, South Africa.
- **Organizer:** A science-policy-practice dialogue with 40 participants from government, business and civil society organizations based in South Africa and the wider African region, together with 20 participants from the PECS science community in South Africa and internationally. 1.5 day professionally facilitated dialogue.
 - **Keynote presentation: Biggs R.** 2015. Seeds of Good Anthropocenes. *PECS Science-Policy-Practice Dialogue: Opportunities for Creating a Good Anthropocene in Southern Africa.* 1-2 November 2015, Cape Town, South Africa.
7. **Transformations 2015 Conference: People and the Planet in the Anthropocene.** 5-7 October 2015, Stockholm, Sweden.
- **Oral presentation: Biggs R**, EM Bennett, A Norstrom, GD Peterson. 2015. Seeds of Good Anthropocenes: Exploring pathways to a better future. *Transformations 2015 Conference: People and the Planet in the Anthropocene.* 5-7 October 2015, Stockholm, Sweden.
8. **Society in Science Fellowship Annual Symposium.** 24-25 November 2014, Zurich, Switzerland.
- **Invited presentation: Biggs R.** 2014. Principles for building resilience: Sustaining ecosystem services in social-ecological systems. *Branco Weiss Society in Science Annual Symposium.* 24-25 November 2014, Zurich, Switzerland.
9. **Resilience 2014: Resilience and Development – Mobilizing for Transformation International Conference.** 4-8 May 2014, Montpellier, France.
- **Co-organizer and chair of panel session:** A science-policy dialogue on ecosystem services based interventions for poverty alleviation – broadening perspectives to address complexity [1 hour session, 4 speakers & panel participants]
 - **Co-organizer of panel session:** Principles for Building Resilience: Sustaining Ecosystem Services in Social-Ecological Systems [1 hour session, 9 speakers & panel participants]
 - **Oral presentation: Biggs R. 2014.** Principles for Building Resilience: Sustaining Ecosystem Services in Social-Ecological Systems. Resilience 2014: Resilience and Development – Mobilizing for Transformation International Conference. 4-8 May 2014, Montpellier, France.
 - **Co-organizer of panel session:** A global comparison of drivers and ecosystem service impacts of regime shifts [1 hour session, 5 speakers & panel participants]
 - **Oral presentation: Biggs R**, G Peterson, JC Rocha. 2014. The Regime Shifts Database: Analytical Framework. Resilience 2014: Resilience and Development – Mobilizing for Transformation International Conference. 4-8 May 2014, Montpellier, France.
 - **Co-organizer of panel session:** Supporting social-ecological stewardship and finding pathways out of poverty: The Southern African Program on Ecosystem Change and Society (SAPECS) [1 hour session, 6 speakers & panel participants]
 - **Oral presentation: Biggs R.** 2014. The Southern African Program on Ecosystem Change and Society (SAPECS). Resilience 2014: Resilience and Development – Mobilizing for Transformation International Conference. 4-8 May 2014, Montpellier, France.

- **Oral presentation: Biggs R.** 2014. Identifying social-ecological regime shifts: Challenges and insights from the Regime Shifts Database. Presentation in session: Analysing and managing social-ecological regime shifts. Resilience 2014: Resilience and Development – Mobilizing for Transformation International Conference. 4-8 May 2014, Montpellier, France.
- 10. **Savanna Science Network Meeting.** 9-13 March 2014, Skukuza, Kruger National Park, South Africa
 - **Oral presentation: Biggs R.** 2014. Drivers and Ecosystem Service Impacts of Regime Shifts: Global patterns and exploring insights in savannas. Savanna Science Network Meeting. 9-13 March 2014, Skukuza, Kruger National Park, South Africa.
- 11. **Society in Science Fellowship Annual Symposium.** 25-26 November 2013, Zurich, Switzerland.
 - **Invited presentation: Biggs R.** 2013. Global Change Drivers and Impacts of Environmental Regime Shifts. *Branco Weiss Society in Science Annual Symposium.* 25-26 November 2013, Zurich, Switzerland.
- 12. **SAPECS Frontiers in Social-Ecological Research Colloquium.** 15-16 April 2013, Cape Town, South Africa.
 - **Organizer & facilitator:** I initiated, planned, organized and led this mini-conference together with Dr Belinda Reyers. It involved 6 international keynote speakers, 48 other speakers, and 100 participants in total.
 - **Oral presentation: Biggs R.** 2013. The Southern African Program on Ecosystem Change and Society (SAPECS). *SAPECS Frontiers in Social-Ecological Research Colloquium.* 15-16 April 2013, Cape Town, South Africa.
 - **Oral presentation: Biggs R.** 2013. Social-ecological regime shifts: drivers and impacts on ecosystem services. *SAPECS Frontiers in Social-Ecological Research Colloquium.* 15-16 April 2013, Cape Town, South Africa.
- 13. **Society in Science Fellowship Annual Symposium.** 19-20 November 2012, Luzern, Switzerland.
 - **Invited presentation: Biggs R.** 2012. Tipping points in social-ecological systems: Emerging Insights from the Regime Shifts Database. *Branco Weiss Society in Science Annual Symposium.* 19-20 November 2012, Luzern, Switzerland.
- 14. **Planet under Pressure: New knowledge towards solutions conference.** 26-29 March 2012, London, UK.
 - **Invited presentation: Biggs R.** 2012. Southern African Program on Ecosystem Change and Society (SAPECS). Invited oral presentation in the Program on Ecosystem Change and Society (PECS) session of the *Planet under Pressure: New Knowledge towards Solutions Conference.* 25-29 March 2012, London, UK. 15 min.
 - **Oral Presentation: Biggs R.** 2012. A social-ecological synthesis of large, abrupt, persistent changes in ecosystem services: Introducing the Regime Shifts Database. Oral presentation in the *Staying away from the edge: avoiding biophysical, ecological and social tipping points* session of the *Planet under Pressure: New Knowledge towards Solutions Conference.* 25-29 March 2012, London, UK.
 - **Poster Presentation: Biggs R,** GD Peterson, C Hammond, R Sadauskis, J Rocha, J Musumbu, D Ospina. 2012. Regime Shifts in Ecosystem Services. Poster presentation at the *Planet under Pressure: New Knowledge towards Solutions Conference.* 25-29 March 2012, London, UK.
 - **Poster Presentation:** Rocha J, **R Biggs,** GD Peterson. 2012. Dynamic Tipping Points: Which Ones Are More Likely to Interact? Poster presentation at the *Planet under Pressure: New Knowledge towards Solutions Conference.* 25-29 March 2012, London, UK.
 - **Poster Presentation:** Hamann, M, V Masterson, M Tengö, **R Biggs,** L Dziba, T Elmqvist, GD Peterson, B Reyers, M Spierenburg. Ecosystem services and poverty alleviation. Poster presentation at the *Planet under Pressure: New Knowledge towards Solutions Conference.* 25-29 March 2012, London, UK.
- 15. **Frontiers in Ecosystem Services Colloquium.** 7 February 2012. Stellenbosch, South Africa.
 - **Co-organizer & Facilitator:** Co-initiated, arranged and facilitated a 1-day colloquium with 35 regional and international participants and 15 students, in conjunction with the SAPECS Scoping workshop.

- **Poster presentation:** Biggs, R.*, S.R. Carpenter and W.A. Brock. 2006. Potential impacts of measurement error on science-based decision-making. Poster presentation at the *2006 LTER All Scientists Meeting*, 19-23 September 2006, Estes Park, Colorado, USA.
- 26. **Ecological Society of America 90th Annual Meeting.** 7-12 August 2005, Montreal, Canada.
 - **Invited presentation:** Biggs R, PV Desanker, C Fabricius, T Lynam, RJ Scholes, AS van Jaarsveld. *Case study: Multi-scale assessment of ecosystem services in Southern Africa.* Invited presentation at the *90th Annual Meeting of the Ecological Society of America*. 7-12 August 2005, Montreal, Canada.
- 27. **Bridging Scales and Epistemologies Conference.** 17–20 March 2004, Alexandria, Egypt.
 - **Invited panel presentation:** Biggs R*, E Bohensky*, C Fabricius*, M Lee*, T Lynam*, C Musvoto*, RJ Scholes*. *The Southern African Millennium Ecosystem Assessment.* Invited joint panel presentation at the *Bridging Scales and Epistemologies Conference*. 17-20 March 2004, Alexandria, Egypt.
 - **Oral presentation:** Biggs, R., Scholes, R.J. and B. Reyers. 2004. Assessing biodiversity intactness at multiple scales. Oral presentation at the *Bridging Scales and Epistemologies Conference*, 17-20 March 2004, Alexandria, Egypt.
- 28. **Praia +9 Regional Forum.** 17-21 November 2003, Bamako, Mali.
 - **Invited presentation:** Biggs R. *The Southern African Millennium Ecosystem Assessment.* Invited presentation at the *Praia +9 Regional Forum*. 17-21 November 2003, Bamako, Mali.
- 29. **Conference on Theoretical Topics in Ecological Economics.** Organised by the Beijer Institute for Ecological Economics and the Fondazione ENI Enrico Mattei. Hosted by the Abdus Salam International Centre for Theoretical Physics. 10-21 February 2003, Trieste, Italy.
- 30. **Science at the Summit & Science Forum, World Summit on Sustainable Development.** 26 August – 4 September 2002, Pretoria and Johannesburg, South Africa.
 - **Poster presentation:** Biggs, R.* and R.J. Scholes. 2002. Ecosystem services in southern Africa: The Southern African Millennium Assessment regional scale study. Poster presentation at the *Science at the Summit & Science Forum, World Summit on Sustainable Development*, 26 August – 4 September 2002, Pretoria and Johannesburg, South Africa.
- 31. **Regional Conference of the International Geographical Union (IGU): Geographical Renaissance at the Dawn of the Millennium.** 4-7 August 2002, Durban, South Africa.
 - **Poster presentation:** Biggs, R.* and R.J. Scholes. 2002. Land cover changes in South Africa 1911-1993. Poster presentation at the *Regional Conference of the International Geographical Union (IGU)*, 4-7 August 2002, Durban, South Africa.
- 32. **Africa Evaluation Association Conference.** 10-14 June 2002, Nairobi, Kenya.
 - **Invited presentation:** Biggs R. *The Millennium Ecosystem Assessment.* Invited oral presentation at the *African Evaluation Association Conference*. 10-14 June 2002, Nairobi, Kenya.
- 33. **Global Change Open Science Conference: Challenges of a Changing Earth.** 10-13 July 2001, Amsterdam, the Netherlands.

LOCAL CONFERENCES & SYMPOSIA (involving only nationally-based attendees)

1. **There is no Planet B/Daar is geen Planeet B nie. Colloquium hosted by the Afrikaans and Dutch Department at the University of Stellenbosch, South Africa.** 11 August 2016, Stellenbosch, South Africa.
 - **Invited keynote presentation:** Biggs R. 2016. Tackling the Anthropocene Challenge. Invited presentation at “There is no Planet B/Daar is geen Planeet B nie” colloquium of the Afrikaans and Dutch Department at the University of Stellenbosch, South Africa. 11 August 2016, Stellenbosch, South Africa.
2. **Seeds of Good Anthropocenes: A Southern African Perspective – Urban Futures Dialogue.** 12 August 2015, Cape Town.
 - **Co-organizer:** 1-day dialogue colloquium co-hosted by SAPECS and the Centre for complex systems in Transition (CST) at Stellenbosch University, with 2 keynote speakers and 30 participants from academia, government, business and the NGO sector.
 - **Opening plenary presentation:** Biggs, R. 2015. Seeds of Good Anthropocenes: A Southern African Perspective. Opening plenary presentation at *Seeds of Good Anthropocenes: A Southern African Perspective – Urban Futures Dialogue*. 12 August 2015, Cape Town.

3. **Seeds of Good Anthropocenes: A Southern African Perspective Open Science Dialogue.** 3-4 November 2014, Stellenbosch, South Africa.
 - ↘ **Lead organizer:** 2-day dialogue colloquium co-hosted by SAPECS and the Centre for Studies in Complexity (CSC) at Stellenbosch University, with 6 high-level keynote speakers and 70 participants.
 - ↘ **Opening plenary presentation:** Biggs, R. 2014. Seeds of Good Anthropocenes: A Southern African Perspective. Opening plenary presentation at *Seeds of Good Anthropocenes: A Southern African Perspective Open Science Dialogue*. 3-4 November 2014, Stellenbosch, South Africa.
4. **Anticipation: Complexity and the Future colloquium.** 18 March 2014, Stellenbosch, South Africa.
 - ↘ **Served on organizing committee:** Contributed to design of the colloquium, 70 participants.
 - ↘ **Invited speaker:** Biggs, R. 2014. Scenario planning as a tool for exploring sustainability transitions. Invited seminar at the Anticipation: Complexity and the Future colloquium. 18 March 2014, Stellenbosch, South Africa.
5. **Southern African Complexity Forum.** 22-24 October 2012, Stellenbosch, South Africa.
 - ↘ **Served on organizing committee:** Contributed to design and facilitation of the first meeting of this forum, chaired a session, 80 participants.
 - ↘ **Invited keynote speaker:** Biggs, R. 2012. Ecosystem services in the Anthropocene: Anticipating and managing regime shifts. Invited seminar at the Southern African Complexity Forum. 22-24 October 2012, Stellenbosch, South Africa.
6. **Complexity: The Philosophical and Human Legacy of Paul Cilliers.** Akili Young Scientists Colloquium. 8 December 2011, Stellenbosch, South Africa.
 - ↘ **Co-organizer and facilitator:** 1-day colloquium arranged by the Akili Young Scientists; I facilitated and chaired the event, 50 participants.
7. **The Akili Complexity and Integration Initiative Colloquium.** 30 Nov – 4 Dec 2009, Saasveld, George, South Africa.
8. **The engaged citizen and civic participation in the environment.** 2006 Fulbright Graduate Student Enrichment Seminar. 9-12 February 2006, Tempe, Arizona, USA.
9. **Annual Environmentek Research Seminar.** 1 November 2004, Centurion Lake Hotel, Gauteng, South Africa
 - ↘ **Invited keynote presentation.** R. Biggs. 2004. Biodiversity impact in the Millennium Ecosystem Assessment. 1 November 2004, Centurion Lake Hotel, Gauteng, South Africa.
10. **Water resources as ecosystems: Scientists, government and society at the crossroads.** Southern African Society of Aquatic Ecologists Conference. 5-8 July 2004, Midrand, South Africa.
11. **Global Change and Regional Sustainability in South Africa.** 27-29 October 2003, Cape Town, South Africa.
12. **South African Wetland Action Group Conference.** 2 days, September 2000, Vryheid, South Africa.
13. **Long Term Ecological Research mini-Symposium.** 15-17 April 2000, Skukuza, Kruger National Park.
 - ↘ **Oral presentation: Biggs, R.** 2000. Design and inference implications of the Experimental Burn Plot trial in the Kruger National Park. Oral presentation at the *Long Term Ecological Research mini-Symposium*, 15-17 April 2000, Skukuza, Kruger National Park.
 - ↘ **Oral presentation (non-presenting co-author):** Jacobs, O.S. and Biggs, R. 2000. Summary of results of structural change in Marula trees on the Satara Experimental Burn Plots. Oral presentation at the *Long Term Ecological Research mini-Symposium*, 15-17 April 2000, Skukuza, Kruger National Park.
 - ↘ **Poster presentation (non-presenting, non-attending co-author):** Enslin, B.W.*, A.L.F. Potgieter, H.C. Biggs and R. Biggs. 1999. Long term effects of fire frequency and season on the woody vegetation dynamics of the *Sclerocarya birrea/Acacia nigrescens* savanna of the Kruger National Park. Poster presentation at the *Natural Forests and Woodlands Symposium*, 5 – 9 September 1999, Knysna, South Africa.
14. **Integrated Rivers Management Congress.** 2 days, August 1999, Pretoriuskop, Kruger National Park, South Africa.
15. **Kruger National Park Research Symposium.** 2 days, August 1998, Skukuza, Kruger National Park, South Africa.

INTERNATIONAL WORKSHOPS (involving participants from multiple countries)

1. **Social-Ecological Systems Methods Handbook Development workshop.** 18-20 October 2017, 5 participants who will be part of editorial team.
 - ✎ **Organizer:** Workshop to outline and develop timeline for the development of a handbook on methods for analysing social-ecological systems.
2. **Futures Thinking Workshop.** 16-18 October 2017, STIAS, Stellenbosch, South Africa. 25 participants.
 - ✎ **Organizer:** Training workshop on approaches and tools for exploring future trajectories of change. Run as part of the GRAID project.
 - ✎ **Presentation:** Tackling the Anthropocene Challenge: Resilience Thinking & Transformations. Invited 1-hour lecture at *Futures Thinking Workshop*. 16-18 October 2017, STIAS, Stellenbosch, South Africa.
3. **Towards a relational & process ontology for understanding complex adaptive system dynamics.** 10-12 October 2017, Stellenbosch, South Africa.
4. **Envisaging and Creating a Good Anthropocene Workshop.** 6-9 June 2017, Djurönäset, Stockholm, Sweden.
 - ✎ **Co-organizer.** 3 day workshop to develop scenarios of a Good Anthropocene for Northern Europe, building on methodology developed in the southern African workshop.
5. **Intergovernmental Platform on Biodiversity and Ecosystem Services, Summary for policymakers (SPM) capacity development writing workshop.** 27 February – 2 March 2017, Oslo, Norway.
6. **Intergovernmental Platform on Biodiversity and Ecosystem Services, Africa Regional Assessment Writing Workshop.** 12-18 February 2017, Golden Gate National Park, South Africa.
7. **Transformative spaces workshop.** 30 November – 2 December 2016, Pringle Bay, South Africa.
 - ✎ **Co-organizer:** 3 day workshop with 30 participants from around the world.
8. **Anthropocene Visioning Workshop.** 15-18 November 2016, Cape Town, South Africa.
 - ✎ **Organizer:** 3.5-day workshop to generate radically alternative positive future visions for southern Africa. 32 participants.
 - ✎ **Keynote presentation: Biggs R.** 2016. Seeds of Good Anthropocenes. Opening keynote presentation at the *Anthropocene Visioning Workshop*. 15-18 November 2016, Cape Town, South Africa.
9. **Social-Ecological Systems Methods Workshop.** 24-25 October 2016, Stockholm, Sweden.
 - ✎ **Organizer & facilitator:** 2 day workshop with international collaborators to plan collaborative handbook.
10. **ARTHropocene - Re-imagining the Anthropocene: Conversations between art and science.** 4 October 2016. Sustainability Institute, Stellenbosch, South Africa. 25 participants, including artists, scientists and sustainability practitioners.
 - ✎ **Co-organizer:** Run as part of the *Guidance for Resilience in the Anthropocene: Investments for Development (GRAID)* project.
11. **Principles for building resilience in agricultural systems writing workshop.** 15-17 June 2016, Asko, Sweden.
12. **Workshop on “Bright Spots: Seeds of ‘Good’ Anthropocenes”.** 6-7th November 2015, Spier Wine Farm, Stellenbosch, South Africa. Hosted in conjunction with PECS 2015 conference.
 - ✎ **Co-organizer:** 2-day workshop with 25 participants from around the world linked to the Seeds of Good Anthropocenes Future Earth Fast Track Initiative project. Hosted in conjunction with PECS 2015 conference.
13. **Using the future to make better decisions in the present – Linking poverty alleviation and sustainable coastal ecosystems in Coastal Mozambique.** 15-17 September 2015, Pemba, Mozambique,
 - ✎ **Co-organizer:** 3-day workshop with 35 participants from East Africa, Sweden and South Africa, linked to Seeds of Good Anthropocene: A southern African perspective project.
14. **Using the future to make better decisions in the present – Linking poverty alleviation and sustainable coastal ecosystems in Coastal Kenya.** 7-9 September 2015, Diani Beach, Kenya.

- ↘ **Co-organizer:** 3-day workshop with 35 participants from East Africa, Sweden and South Africa, linked to Seeds of Good Anthropocene: A southern African perspective project.
- 15. **Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES): Africa assessment.** First author meeting. 3-7 August 2015, Kievits Kroon, Pretoria, South Africa.
- 16. **Southern African Program on Ecosystem Change and Society (SAPECS) Working Group Meeting.** 6-8 May 2015, Monkey Valley Resort, Cape Town, South Africa.
 - 1. **Organizer & Facilitator:** 3-day meeting to advance the SAPECS working groups, and touch base on the future development directions of SAPECS.
- 17. **STIAS Roundtable Forum on Strategic Directions for Agricultural Transformation in Southern Africa.** Organized by the Stellenbosch Institute for Advanced Studies (STIAS). 23-24 February 2015, Stellenbosch, South Africa.
- 18. **Ecosystem service trade-offs and synergies: synthesizing and learning across case-studies.** 28-30 January 2015, Stockholm, Sweden
- 19. **Bright Spots: Seeds of a Good Anthropocene workshop.** 26-28 January 2015, Stockholm, Sweden.
 - ↘ **Co-organizer and facilitator:** 2-day workshop with 25 participants from around the world.
- 20. **Future Earth Regional Workshop for Africa.** 23 – 24 June 2014, Pretoria, South Africa.
- 21. **Ocean Tipping Point Workshop.** 12-13 May 2014, Stockholm, Sweden
- 22. **Resilience Alliance (RA) Science Meeting.** 9-11 May 2014, Chateau Hermitage de Combas, France.
 - ↘ **Speed presentation:** Biggs R. 2014. Principles for Building Resilience: Sustaining Ecosystem Services in Social-Ecological Systems. Speed presentation at Resilience Alliance (RA) Science Meeting. 9-11 May 2014, Chateau Hermitage de Combas, France.
- 23. **Resilience Alliance Young Scientists (RAYS) Meeting.** 2-4 May 2014, Moureze, France.
- 24. **Program on Ecosystem Change and Society (PECS) workshop.** 2-3 May 2014, Moureze, France.
 - ↘ **Speed presentation:** Biggs R. 2014. The Southern African Program on Ecosystem Change and Society (SAPECS). Program on Ecosystem Change and Society (PECS) workshop. 2-3 May 2014, Moureze, France.
- 25. **Natural Capital & Resilience: Frontiers in Research, Tools, Policy and Practice workshop.** 3-6 February 2014, Stockholm, Sweden.
 - ↘ **Speed presentation:** Biggs R & B Reyers. 2014. Southern African Program on Ecosystem Change and Society. *Natural Capital & Resilience: Frontiers in Research, Tools, Policy and Practice* workshop. 3-6 February 2014, Stockholm, Sweden.
- 26. **Southern African Program on Ecosystem Change and Society (SAPECS) Working Group Meeting.** 27-30 January 2014, Rhodes University, Grahamstown, South Africa. South Africa.
 - ↘ **Organizer and Facilitator:** 4-day workshop with 30 participants.
- 27. **International Program on Ecosystem Change and Society (PECS) Workshop.** 9-11 September 2013, Stockholm, Sweden.
- 28. **From Planetary Boundaries to Global System Transitions for a Sustainable Planet: Towards the identification of transformational leverage points.** A Stockholm Resilience Centre and WWF collaborative workshop. 5 September 2013, Stockholm Resilience Centre, Sweden.
 - ↘ **Co-organizer:** 1-day workshop with 18 participants.
 - ↘ **Presentation:** Biggs R*, J Rocha, Peterson GD. 2013. Global Change Drivers of Regime Shifts. *From Planetary Boundaries to Global System Transitions for a Sustainable Planet: Towards the identification of transformational leverage points.* A Stockholm Resilience Centre and WWF collaborative workshop. 5 September 2013, Stockholm Resilience Centre, Sweden.
- 29. **Global Dynamics Workshop.** 27-29 May 2013, Stockholm, Sweden.
- 30. **Working Group meeting of the Southern African Program on Ecosystem Change and Society (SAPECS).** 17 April 2013. Cape Town, South Africa.
 - ↘ **Co-organizer and co-facilitator:** 1-day workshop with 25 participants.
- 31. **Resilience Alliance Science Meeting.** 7-13 April 2013. Didima, Drakensberg, South Africa.
 - ↘ **Speed presentation:** Biggs R. 2013. Southern African Program on Ecosystem Change and Society. Resilience Alliance Science meeting. 7-13 April 2013. Didima, Drakensberg, South Africa.

- ↘ **Co-organizer:** 3 day workshop, 40 international participants. Organized in conjunction with the Resilience 2011 Conference, Tempe, Arizona.
- 48. **2nd International Workshop on global dynamics and social-ecological resilience in the face of multiple shocks.** 14-15 September 2010, Stockholm, Sweden.
- 49. **Annual Askö Meeting of the Beijer Institute of Ecological Economics: Fat-tail generating mechanisms and their implications for planetary stewardship.** 11-13 September 2010, Askö Island, Stockholm, Sweden.
- 50. **Ecosystem service indicators: linking the dynamics of ecosystems to human well-being.** Hosted by bioSustainability/Diversitas. 19-21 August 2010, Grinda, Stockholm Archipelago, Sweden.
- 51. **Meeting of the Resilience Alliance Surprises Group.** 15-17 April 2010, Stockholm, Sweden.
- 52. **Interactions among the Planetary Boundaries: Scoping Workshop.** 14-15 April 2010, Stockholm, Sweden.
- 53. **Global dynamics and social-ecological resilience in the face of multiple shocks.** 12-14 April 2010, Stockholm, Sweden.
- 54. **Resilience and Adaptation Workshop.** 16-19 February 2010, Southwold, UK.
- 55. **Regime shifts - the New Paradigm.** 12 February 2010. Stockholm, Sweden.
- 56. **Science Meeting of the Resilience Alliance.** 28 September – 2 October 2009, Gabriola Island, British Columbia, Canada.
- 57. **RAYS (Resilience Alliance Young Scientists) workshop.** 25-27 September 2009, Gabriola Island, British Columbia, Canada.
 - ↘ **Organizer & Facilitator:** Organized and facilitated a 1.5 day “Mock Court” workshop on Propositions for enhancing the resilience of ecosystem services. Gabriola Island, Vancouver, Canada, 26-27 September 2009.
- 58. **Annual Askö Meeting of the Beijer Institute of Ecological Economics: Uncertainty.** 12-14 September 2009, Askö Island, Stockholm, Sweden.
- 59. **Brainstorming session of the EU Environment Advisory Group on "Managing resilience in social-ecological systems".** 15 June 2009, Brussels, Belgium.
 - ↘ **Invited presentation:** Biggs R. *Managing resilience in Social-Ecological Systems (SES): Research priorities.* Invited presentation at a Brainstorming session of the EU Environment Advisory Group on *Managing resilience in social-ecological systems.* 15 June 2009, Brussels, Belgium.
- 60. **Global Biodiversity Outlook 3, Models and Scenarios Workshop.** Hosted by DIVERSITAS and UNEP-WCMC. 4-5 June 2009, Cambridge, UK.
- 61. **Governance and Management of Ecosystem Services in Africa under Scenarios of Change.** Hosted by the DIVERSITAS-bioSUSTAINABILITY Project. 25-27 May 2009, Nairobi, Kenya.
- 62. **Meeting of the Resilience Alliance Surprises Group.** 7-9 January 2009, Montevideo, Uruguay.
- 63. **Science Meeting of the Resilience Alliance.** 22-28 April 2006, Shingwedzi, Kruger National Park, South Africa.
- 64. **Restoring Natural Capital: Strategies and Tactics.** 30 October – 2 November 2005, St Louis, Missouri, USA.
- 65. **Global Environmental Change and Food Systems (GECAFS) Scenarios Development Workshop.** 21-22 April 2005, Rome, Italy.
- 66. **Inclusive Wealth and Accounting Prices Meeting.** 13-15 April 2005, Trieste, Italy.
- 67. **Ecosystems and Tourism in Southern Africa: Economic and Ecological Resilience.** 6-8 January 2005, Kasane, Botswana.
- 68. **Millennium Ecosystem Assessment Combined Working Groups Meeting.** 26-30 September 2004, Kuala Lumpur, Malaysia.
- 69. **Restoring Natural Capital: Emerging Countries of the South.** 12-18 September 2004, Prince Albert, Western Cape, South Africa.
 - ↘ **Oral presentation:** Biggs, R. and R.J. Scholes. 2004. The Biodiversity Intactness Index: A Measure of Natural Capital. Oral presentation at the *Restoring Natural Capital Workshop*, 12-18 September 2004, Prince Albert, South Africa.
- 70. **SAfMA – RIVM Collaborative Biodiversity Assessment Wrap-up Workshop.** 14-16 June 2004, Glen Afric, South Africa.

71. **Assessment of Sustainability Indicators Meeting.** 10-14 May 2004, Prague, Czech Republic.
72. **Global Environmental Change and Food Systems (GECAFS) Scenarios Research Scoping Workshop.** 3-4 May 2004, Rome, Italy.
73. **Millennium Ecosystem Assessment Sub-Global Working Group Meeting.** 22-25 March 2004, Alexandria, Egypt.
74. **Millennium Ecosystem Assessment Combined Working Groups Meeting.** 13-17 October 2003, Prague, Czech Republic.
75. **Integrated Land Use Change Analysis in Southern Africa: Process Modelling, Impacts and Implications for Sustained Development.** Jointly organised by the Zambezi River Basin Millennium Assessment, the Miombo AIACC, and Miombo Network. 26-29 May 2003, University of Malawi, Lilongwe, Malawi.
 - ✎ **Invited presentation:** Biggs R. The Southern African Millennium Ecosystem Assessment. Invited presentation at the Integrated Land Use Change Analysis in Southern Africa: Process Modelling, Impacts and Implications for Sustainable Development workshop. 26-29 May 2003, University of Malawi, Lilongwe, Malawi.
76. **Trajectories of Land Change in Sub-Saharan Africa Workshop. Organised by the Land Use and Land Cover Change (LUCC) program of the IGBP and IHDP.** 17-19 May 2003, Wageningen, The Netherlands.
77. **SAfMA – RIVM Collaborative Biodiversity Assessment Workshop.** 8-9 May 2003, Stellenbosch, South Africa.
78. **Assessment of Impacts and Adaptations to Climate Change (AIACC) Africa Region Open Meeting.** 10 March 2003, Mount Amanzi Lodge, Harteboospoortdam, South Africa.
79. **Millennium Ecosystem Assessment 2nd Technical Design Workshop.** 8-11 October 2001, Cape Town, South Africa.

LOCAL WORKSHOPS (involving nationally-based participants only)

1. **CST-GRAID Writing retreat.** 19-21 September 2017, Wedgeview, Stellenbosch, South Africa.
 - ✎ **Organizer.** Retreat to advance GRAID project papers.
2. **USAID Resilience Works-shop.** 29-30 August 2017, Kievits Kroon, Pretoria, South Africa.
3. **Transformations in the Anthropocene Writeshop.** 19-21 June 2017, Saltsjöbaden, Stockholm, Sweden.
4. **Intergovernmental Platform on Biodiversity and Ecosystem Services, Africa Assessment Chapter 5 writing workshop.** 28-29 March 2017, Stellenbosch, South Africa.
 - ✎ **Organizer & Facilitator.** Writing workshop to advance chapter 5.
5. **Food & Nutrition Design Lab.** Organized by the Western Cape Government & Southern African Food Lab. 8-9 March & 23 March 2017, Sustainability Institute, Stellenbosch, South Africa.
6. **Ideas Lab Scoping Workshop: African Biodiversity and Sustainable Development.** 3 October 2016. Pretoria, South Africa. 30 participants.
7. **Resilience thinking and practice for development: Supporting sustainability transformations in southern Africa.** Scoping Dialogue. 4-5 August 2016, Stellenbosch, South Africa.
 - ✎ **Co-organizer:** 2-day meeting to scope interest in establishing a regional community of practice around resilience thinking and practice, run as part of the *Guidance for Resilience in the Anthropocene: Investments for Development (GRAID)* project. 40 participants.
 - ✎ **Keynote presentation: Biggs R.** 2016. Tackling the Anthropocene Challenge: The Resilience Thinking approach. Keynote presentation at the *Resilience thinking and practice for development: Supporting sustainability transformations in southern Africa* Scoping Dialogue. 4-5 August 2016, Stellenbosch, South Africa.
8. **Food Access Domains Learning Journey.** 21 July 2016, Stellenbosch, South Africa.
9. **South African Research Chair Initiative (SARChI) Stellenbosch University Regional Workshop.** 10 June 2016, Stellenbosch, South Africa.
 - ✎ **Invited presentation:** Biggs R. 2016. Social-Ecological Systems and Resilience Research Program. Invited presentation at the *South African Research Chair Initiative (SARChI) Stellenbosch University Regional Workshop*. 10 June 2016, Stellenbosch, South Africa.
10. **Regime shifts workshop.** 22 January 2016, Stellenbosch, South Africa.
 - ✎ **Co-organizer:** Small follow-up workshop to discuss regime shift analyses. Involved 6 participants from Stellenbosch and Rhodes Universities.

11. **2015 National Research Foundation Awards.** 26-27 August 2015, Durban, South Africa.
 - ✎ **Award recipient:** Received a prestigious P-rating award, the only one in this category awarded in 2015 across all disciplines.
12. **Quantifying risk of regime shifts.** 20 February 2015, Stellenbosch, South Africa.
 - ✎ **Organizer & Facilitator:** Small half-day workshop to explore different ways of quantifying risk to regime shifts. Involved 5 participants actively engaged in quantitative regime shift work from Stellenbosch and Rhodes Universities.
13. **Organisational Responses to Social-Ecological Complexity.** 12 February 2015, University of Cape Town (UCT), Graduate School of Business, Cape Town, South Africa.
 - ✎ **Invited Facilitator:** Facilitated one of two sessions at the colloquium, which involved around 70 participants.
14. **Mazeppa Bay & Rhodes University Field Trip with Prof Carl Folke.** Visit to field sites and colleagues in the Eastern Cape involved in the Southern African Program on Ecosystem Change and Society (SAPECS), to discuss ongoing research with Prof Carl Folke, scientific director of the international Program on Ecosystem Change and Society (PECS). 29 November – 2 December 2014, Eastern Cape, South Africa.
 - ✎ **Organizer & Local host** for the trip
15. **Seeds of Good Anthropocenes: A Southern African Perspective, Synthesis Workshop.** 5 November 2014, Stellenbosch, South Africa.
 - ✎ **Organizer & Facilitator:** Organized and facilitated a 1-day workshop to synthesize insights from the open science dialogue on “Seeds of Good Anthropocenes: A Southern African Perspective”. Participants were 15 leading social-ecological researchers in the southern African region.
16. **Exploratory Meeting for an Interdisciplinary Forum on Natural Resources.** 31 March – 1 April 2014. Noordhoek, Cape Town, South Africa.
17. **Royal Dialogue with the Swedish Crown Princess Victoria.** 21 November 2013. Stockholm, Sweden.
 - ✎ **Invited presentation:** Biggs, R. 2013. Social-Ecological Regime Shifts. Invited presentation at the Royal Dialogue with the Swedish Crown Princess Victoria. 21 November 2013, Stockholm, Sweden.
18. **SAPECS, GCRP, and DST's broader environmental work - sharing information and establishing synergies.** Workshop with Department of Science and Technology (DST) to discuss potential collaborations around South Africa's Global change Research Plan (GCRP). 17 October 2013, Pretoria, South Africa.
 - ✎ **Invited presentation:** Biggs, R. 2013. Southern African Program on Ecosystem Change and Society. Invited Presentation: *SAPECS, GCRP, and DST's broader environmental work - sharing information and establishing synergies.* Workshop with Department of Science and Technology. 17 October 2013, Pretoria, South Africa.
19. **Launch of the 2012 State of the Future Report.** Organized by the South African node of the Millennium Project. 29 November 2012, Stellenbosch, South Africa.
 - ✎ **Invited keynote presentation:** Biggs, R. 2012. Ecosystem Services in the Anthropocene: Anticipating and Managing Regime Shifts. Invited keynote presentation at the Launch of the 2012 State of the Future Report. Organized by the South African node of the Millennium Project. 29 November 2012.
20. **Funding meeting between Sony Ericsson and Prof Kåre Bremer, Vice Chancellor of Stockholm University.** 13 September 2011, Stockholm, Sweden.
 - ✎ **Invited keynote presentation:** Biggs, R. 2011. Tipping points in social-ecological systems: Implications for ecosystem services and human well-being. Invited presentation to Sony Ericsson funders, as part of a small meeting between Sony Ericsson and Prof Kåre Bremer, Vice Chancellor of Stockholm University. 13 September 2011, Stockholm, Sweden.
21. **Regime Shifts & Transformations Workshop.** 1 June 2011, Stockholm Resilience Centre, Stockholm, Sweden.
22. **Akili Young Scientists (AYS) paper preparation workshop.** 13-14 January 2011, Kwalata Lodge, Pretoria, South Africa.
 - ✎ **Organizer & Facilitator:** Organized and facilitated a 2 day “Paper Development” workshop involving 30 Akili Young Scientists to further develop 4 papers.
23. **Akili leadership paper development workshop.** 17-19 November 2010, Komati Gorge Lodge, South Africa.

24. **Akili Young Scientists (AYS) paper preparation workshop.** 12-13 August 2010, Stellenbosch, South Africa.
 - ↘ **Organizer & Facilitator:** Organized and facilitated a 2 day “Paper Preparation” workshop involving 30 Akili Young Scientists to decide on topics and outlines for 3 papers.
25. **The Akili Complexity and Integration Initiative Networking Workshop.** 28 April 2010, Emperor’s Palace, Johannesburg, South Africa.
26. **Understanding Institutional Diversity: Challenges in Governing the Commons.** Masterclass presented by Prof. Elinor Ostrom, Indiana University, USA. 7 March 2005, Canberra, Australia.
27. **CSIR Blue Skies Workshop: How can environmental researchers best support and contribute to the formulation of business visions, strategies and action plans which promote sustainable development?** With guest speaker Clem Sunter. 3 February 2004, CSIR, Pretoria, South Africa.
28. **CSIR Energy Scenarios for Africa Workshop, in Partnership with Shell International.** 26 September 2003, Council for Scientific and Industrial Research, Pretoria, South Africa.
29. **Scoping workshop to discuss the monitoring of biodiversity in South Africa.** 14 March 2003, National Botanical Institute, Pretoria, South Africa.
30. **Knowledge Engineering and Decision-Aid Modelling Workshop.** 13 March 2003, Council for Scientific and Industrial Research, Pretoria, South Africa.
31. **Thukela Dialogue Workshop: Managing water related issues on climate variability and climate change.** Sponsored by the International Dialogue on Climate and Water. 24-25 July 2002, Pietermaritzburg, South Africa.
32. **Post-flood research workshop and field trip.** 3 days, July 2000, Skukuza, Kruger National Park, South Africa.
33. **Workshop on the management of rare game in the Kruger National Park.** 1 day, May 2000, Skukuza, Kruger National Park, South Africa.
34. **Mini-symposium and workshop: Setting up collaborative LTER projects between the Kruger National Park and US LTER sites.** 1 day, April 2000, Skukuza, Kruger National Park, South Africa.
35. **River Management Workshop: Scientific Services and Management.** 1 day, November 1999, Skukuza, Kruger National Park, South Africa.
36. **Spatial Technology Workshop.** Presented by the Council for Scientific and Industrial Research. 1 day, August 1999, Nelspruit, South Africa.
37. **International long-term ecological research (ILTER) workshop: Setting up a long-term ecological research network in South Africa.** 1 day, August 1999, Skukuza, Kruger National Park, South Africa.
38. **Aerial census workshop.** 1 day, February 1999, Skukuza, Kruger National Park, South Africa.
39. **Agricultural Research Council (ARC) Degradation Workshop.** 2 days, January 1999, Skukuza, South Africa.
40. **The changing role of game rangers in the Kruger National Park.** 1 day, November 1998, Skukuza, South Africa.
41. **Groundwater Workshop.** 1 day, August 1998, Skukuza, Kruger National Park, South Africa.
42. **Presurvey wetland workshops presented by the Rennie Wetlands Project.** 1 day each, 1998–2000, various locations in Mpumalanga Province, South Africa.

INTERNATIONAL PROJECT PLANNING & MANAGEMENT WORKSHOPS (dealing with planning of project activities and implementation)

1. **Seeds of Good Anthropocenes Project Planning Workshop.** 21-23 February 2017, Stockholm, Sweden.
2. **Guidance for Resilience in the Anthropocene: Investments for Development (GRAID) South Africa - Sweden planning workshop.** 22 November 2016, Stellenbosch, South Africa.
 - ↘ **Organizer & facilitator.** 1 day workshop with CST, CSIR and SRC coordinating teams to plan work for 2017.
3. **South Africa-Sweden exchange program planning workshop.** 26-28 October 2016, Stockholm, Sweden.
 - ↘ **Organizer & facilitator:** 3 day workshop with collaborators from South Africa and Sweden to design and develop funding proposals for a graduate and staff exchange program.

4. **Guidance for Resilience in the Anthropocene: Investments for Development (GRAID) International kick-off workshop.** 14-17 March 2016, Stockholm, Sweden.
 - ↘ **Co-organizer:** 4 day workshop with international collaborators from around the world to plan collaborations and work on the GRAID project.
5. **Policies for resilience and development in the Anthropocene workshop.** Proposal development workshop organized by Environmental Economics Unit, Gothenburg University, Beijer Institute of Ecological Economics, and Stockholm Resilience Centre, Stockholm, Sweden. 20-21 October 2014, Dar es Salaam, Tanzania.
6. **Seeds of Good Anthropocenes project planning workshop.** 25-26 September 2014, Stockholm, Sweden.
7. **Sociology of Acacias SESYNC project meeting.** 1-4 September 2014, Halle, Germany. [Joined and presented by Skype on 2 September 2014]
 - ↘ **Presentation:** Gaertner M, **R Biggs**, C Hui. 2014. Acacia species as drivers of regime shifts in South African fynbos. Sociology of Acacias SESYNC project meeting. 1-4 September 2014, Halle, Germany. [Joined and presented by Skype on 2 September 2014]
8. **Sociology of Acacias SESYNC project meeting.** 26-28 February 2014, Annapolis, USA. [Joined and presented by Skype on 27 February 2014]
 - ↘ **Presentation:** Gaertner M, **R Biggs**. 2014. Regime shifts following alien plant invasions. Sociology of Acacias SESYNC project meeting. 26-28 February 2014, Annapolis, USA. [Joined and presented by Skype on 27 February 2014]
9. **Proposal design workshop: Beijer-Gothenburg interdisciplinary research program in developing countries.** 27–29 October 2013, Monkey Valley Resort, Cape Town, South Africa.
10. **Programme on Ecosystem Change and Society (PECS) Scientific Committee Meeting.** 25 March 2012, London, UK. [Attended as an official observer]
11. **SIDA Governance of ecosystem services in Southern and East Africa project planning workshop.** 23-24 May 2011, Stockholm, Sweden.
 - ↘ **Co-organizer & Facilitator:** SIDA project planning workshop. 2 day workshop, 6 international participants.
12. **Meeting of the Scientific Committee for the Programme on Ecosystem Change and Society (PECS).** 26-27 January 2011, Stockholm, Sweden. [Attended as an official observer]
13. **EU FP7 Proposal preparation workshop.** 16 December 2009, Stockholm, Sweden.
14. **Meeting of the Social-Ecological Systems (SES) Database Project.** 31 March – 1 April 2009, Stockholm, Sweden.
 - ↘ **Host & Organizer:** Project meeting with 15 attendees.
15. **Workshop on “Getting in the right lane for 2050” Project.** 23-24 March 2009, Bilthoven, The Netherlands.
16. **Meeting of the Social-Ecological Systems (SES) Database Project.** 9-11 October 2008, Potsdam Institute for Climate Impact Research (PIK), Potsdam, Germany.
17. **SAfMA Advisory Committee Meeting.** 8-10 June 2004, Maputo, Mozambique.
18. **SAfMA Integration Workshop.** 6-9 January 2004, Luiperdskloof, Bronkhorstspuit, Gauteng, South Africa.
19. **SAfMA Integration Workshop.** 27-29 August 2003, Port Elizabeth, South Africa.
20. **SAfMA Technical Advisory Group and Advisory Committee Meeting.** 4-5 November 2002, Randburg, Gauteng Province, South Africa.
21. **SAfMA Pilot Scenarios and Response Options Workshop.** 27-31 May 2002, Luiperdskloof, Bronkhorstspuit, Gauteng, South Africa.
22. **Millennium Ecosystem Assessment Global Scenario Development Workshop.** 14 –17 April 2002, Port of Spain, Trinidad.
23. **Technical steering committee and board meeting of the SAfMA project.** 16-18 February 2002, Pretoria, South Africa.
24. **Proposal development workshop for the Southern African Sub-Global component of the Millennium Ecosystem Assessment (SAfMA).** September 2001, Pretoria, South Africa.

LOCAL PROJECT MANAGEMENT WORKSHOPS & STAFF RETREATS (dealing with planning of project activities and implementation)

1. **CST-GRAID Project Reporting planning workshop.** 2 November 2017, Wedgeview, Stellenbosch, South Africa.
2. **Centre for Complex systems in Transition (CST) Staff Planning Retreat.** 13 October 2017, Lovane Wine Estate, Stellenbosch, South Africa.
3. **Guidance for Resilience in the Anthropocene: Investments for Development (GRAID) Stellenbosch University planning workshop.** 31 July – 2 August 2017, Wedgeview, Stellenbosch, South Africa.
 - ↘ **Organizer & facilitator.** 3 day workshop with CST group.
4. **Guidance for Resilience in the Anthropocene: Investments for Development (GRAID) Stellenbosch University planning workshop.** 26-27 January 2017, Blue Butterfly, Tulbagh, South Africa.
 - ↘ **Organizer & facilitator.** 2 day workshop with CST group to plan GRAID project for 2017.
5. **Guidance for Resilience in the Anthropocene: Investments for Development (GRAID) CST planning workshop.** 29 July 2016, Wedgeview, Stellenbosch, South Africa.
 - ↘ **Organizer & facilitator.** 1 day workshop with CST group to plan potential work for 2017.
6. **Guidance for Resilience in the Anthropocene: Investments for Development (GRAID) South Africa project planning workshop.** 19 February 2016, Mont Fleur, South Africa.
 - ↘ **Organizer & facilitator.** 1 day workshop with CST and CSIR groups to plan collaborations and work with SRC.
2. **Guidance for Resilience in the Anthropocene: Investments for Development (GRAID) Stockholm Resilience Centre (SRC) Science Retreat.** 19-20 January 2016, Villa Brevik, Stockholm, Sweden.
 - ↘ **Co-organizer.** 2 day workshop with senior SRC scientists to discuss science plans for GRAID.
7. **Centre for Complex Systems in Transition (CST) Retreat.** 14-17 August 2015, Stanford, South Africa.
8. **ScenNet project kick-off meeting.** 17 March 2015, Cape Town, South Africa.
 - ↘ **Co-organizer:** Half-day meeting with 10 people to plan the initial phase of the ScenNet collaborative grant aimed at building regional networks and capacity to model future scenarios of change in biodiversity and ecosystem services.
9. **SRC Theme Leader meeting: Syntheses and the 2017 process.** 6 February, 2015, Stockholm, Sweden.
10. **Stockholm Resilience Centre Annual Staff Retreat.** 8-10 September 2014. Stora Karlsö, Gotland, Sweden.
11. **Stockholm Resilience Centre Annual Staff Retreat.** 28-30 August 2013. Stora Karlsö, Gotland, Sweden.
12. **Stockholm Resilience Centre Annual Staff Retreat.** 26-28 August 2012. Stora Karlsö, Gotland, Sweden.
13. **Stockholm Resilience Centre Theme Leader Retreat.** 19-20 October 2011. Vår Gård, Stockholm, Sweden.
14. **Stockholm Resilience Centre Annual Staff Retreat.** 4-6 September 2011. Stora Karlsö, Gotland, Sweden.
15. **Stockholm Resilience Centre Theme Leader Retreat.** 28-29 April 2011. Lidingö, Stockholm, Sweden.
16. **Site visit by FORMAS Research Council.** Stockholm, Sweden, 4 December 2008.
 - ↘ **Invited speaker: Biggs, R.,** S.R. Carpenter and W.A. Brock. 2008. Turning back from the brink: Can an impending regime shift be detected in time to avert it? Presented at the Swedish Research Council FORMAS Evaluation of the Stockholm Resilience Centre. Stockholm, Sweden, 4 December 2008.
17. **Gariep River Basin Millennium Ecosystem Assessment User Advisory Group Meeting.** 24 November 2003, Stellenbosch, South Africa.
18. **Gariep Basin Millennium Ecosystem Assessment User Advisory Group Meeting.** 20 June 2003, Pretoria, South Africa.
19. **First Meeting of the Gariep Basin Millennium Ecosystem Assessment Advisory Committee.** 6 February 2003, CSIR, Pretoria, South Africa.
20. **Second Meeting of the Gariep Basin Millennium Ecosystem Assessment Technical User Committee.** 28 January 2003, CSIR, Pretoria, South Africa.

DEPARTMENTAL SEMINARS & DIALOGUES

1. **Biggs R.** 2017. *Tackling the Anthropocene Challenge: The Resilience Thinking approach.* Invited guest seminar in the Department of Psychiatry, Faculty of Medicine and Health Sciences, Stellenbosch University. 18 July 2017.
2. **Biggs R.** 2016. *Seeds of Good Anthropocenes.* Invited guest presentation at WWF-SA. 19 September 2016, Cape Town, South Africa.
3. **Biggs R.** 2016. *Tackling the Anthropocene Challenge: The Resilience Thinking approach.* Invited presentation at the Cosmopolitan Karoo Research Forum, hosted by Prof Cheryl Walker, SARChI Chair in The Sociology of Land, Environment and Sustainable Development, University of Stellenbosch, South Africa. 18 August 2016.
4. Galaz V.*, F. Moberg*, G. Peterson*, **R. Biggs***, H. Österblom, G. Rosell*. 2013. *Creating a Good Anthropocene - what would it take?* Panelist on Global Futures Panel Discussion. 24 May 2013, Stockholm Resilience Centre, Stockholm, Sweden.
5. **Biggs R.***, M Hamann*, V Masterson*, MJ Spierenburg* and M Tengö*. *Enhancing human well-being and equity through social-ecological stewardship: An Eastern Cape contribution towards SAPECS.* Guest seminar at the Department of Environmental Science and the Environmental Learning Research Centre, Rhodes University, Grahamstown, South Africa, 5 February 2013.
6. **Biggs R.***, B. Reyers*, T. Daw*, E. Enfors*. 2012. *How can a SES perspective contribute to understanding the links between ecosystem services and human wellbeing?* Weekly Resilience Dialogue, Stockholm Resilience Centre, Stockholm, Sweden, 19 September 2012.
 - ↘ **Organizer, facilitator & speaker:** Weekly resilience dialogue session; 1.5 hours, ~50 participants.
7. **Biggs R.***, B. Reyers*, M. Hamann*, V. Masterson*. 2012. Southern African Program on Ecosystem Change and Society (SAPECS). Brown Bag Seminar, Stockholm Resilience Centre, Stockholm, Sweden, 5 September 2012.
8. **Biggs, R.** 2012. Ecosystem services in the Anthropocene: Anticipating and managing regime shifts. Invited seminar at the Stellenbosch Institute for Advanced Study. 8 March 2012, Stellenbosch, South Africa.
9. **Biggs, R.*** 2011. Ecosystem Services in the Anthropocene: Anticipating and Managing Regime Shifts. Guest seminar at the Scientific Services Division of the Kruger National Park. Skukuza, South Africa, 10 January 2011.
10. **Biggs, R.*** 2010. Ecosystem Services in the Anthropocene: Anticipating and Managing Regime Shifts. Guest seminar at Natural Resources and Environment Division, Council for Scientific and Industrial Research. Stellenbosch, South Africa, 1 December 2010.
11. **Biggs, R.*** 2010. What on earth is resilience? Guest seminar at Natural Resources and Environment Division, Council for Scientific and Industrial Research. Stellenbosch, South Africa, 26 November 2010.
12. *Dialogue on Regime shifts and Transformations.* Stockholm Resilience Centre, Sweden, 11 November 2010.
 - ↘ **Organizer & Facilitator:** Organized and facilitated a 2-hour dialogue, attended by ~50 people.
13. *What is a Regime shift? Science Pub.* Stockholm Resilience Centre, 8 September 2009.
 - ↘ **Organizer & Facilitator:** Organized and facilitated a 3-hour "Science Pub" attended by ~50 people.
14. *Frontiers of Resilience Thinking Science Pub.* Stockholm Resilience Centre, 1 April 2009.
 - ↘ **Organizer & Facilitator:** Organized and facilitated a 3-hour "Science Pub" on, attended by ~50 people.
15. **Biggs, R.***, S.R. Carpenter and W.A. Brock. 2008. Turning back from the brink: Can an impending regime shift be detected in time to avert it? Invited presentation in the seminar series of the Department of Physical Geography and Quaternary Geology, Stockholm University. Stockholm, Sweden, 28 November 2008.
16. **Biggs, R.***, S.R. Carpenter and W.A. Brock. 2008. Turning back from the brink: Can an impending regime shift be detected in time to avert it? Presented in the seminar series of the Stockholm Resilience Centre. Stockholm, Sweden, 12 November 2008.
17. **Biggs, R.** 2008. Turning back from the brink: Can an impending regime shift be detected in time to avert it? Presented at the weekly seminar of the Center for Limnology, University of Wisconsin. Madison, Wisconsin, USA, March 2008.

18. **Biggs, R.** 2008. Uncertainty, learning and adaptation in ecosystem governance. Guest seminar at Natural Resources and Environment, Council for Scientific and Industrial Research. Stellenbosch, South Africa. January 2008.
19. **Biggs, R.** 2007. Uncertainty, learning and adaptation in ecosystem governance. Guest seminar at the Workshop in Political Theory and Policy Analysis, Indiana University. Bloomington, Indiana, USA. October 2008.
20. **Biggs, R.** 2007. Scenario planning as a tool for collaborative environmental decision-making. Presented at the weekly seminar of the Center for Limnology, University of Wisconsin. Madison, Wisconsin, USA, March 2007.
30. **Biggs, R.** 2005. Assessing biodiversity intactness in southern Africa. Invited presentation at the weekly seminar of the Center for Sustainability and the Global Environment, University of Wisconsin. Madison, Wisconsin, USA, November 2005.
31. **Biggs, R.** 2005. Assessing terrestrial biodiversity intactness in southern Africa. Presented at the weekly seminar of the Center for Limnology, University of Wisconsin. Madison, Wisconsin, USA, October 2005.
32. **Biggs, R.** 2005. Nature supporting people: The Southern African Millennium Ecosystem Assessment. Presented at the weekly seminar of the Scientific Services Division in the Kruger National Park. Skukuza, South Africa, May 2005.
33. **Biggs, R.** 2005. Assessing ecosystem services at multiple scales: The Southern African Millennium Ecosystem Assessment. Presented at the weekly seminar in the CSIRO Sustainable Ecosystems Division. Canberra, Australia, March 2005.
34. **Biggs, R.** 2004. The Southern African Millennium Ecosystem Assessment. Presented at the weekly seminar in the School of Animal, Plant and Environmental Sciences, University of the Witwatersrand. Johannesburg, South Africa, June 2004.

PUBLICATIONS

JOURNAL ARTICLES

1. Metelerkamp L, S Drimie, **R Biggs**. *In press*. We're ready, the system's not – youth perspectives on agricultural careers in South Africa. *Agrekon*. ISSN: 0303-1853
2. Van der Merwe S, **R Biggs**, R Preiser. 2018. Building social resilience in socio-technical systems through a participatory and formative resilience assessment approach. *Systemic Change Journal* 1(1): 1-34
3. Preiser R, **R Biggs**, A de Vos, C Folke. 2018. Social-ecological systems as complex adaptive systems: organizing principles for advancing research methods and approaches. *Ecology and Society* 23(4): 46.
4. Shackleton RT, **R Biggs**, DM Richardson, BMH Larson. 2018. Social-ecological drivers and impacts of invasion-related regime shifts: consequences for ecosystem services and human wellbeing. *Environmental Science & Policy* 89: 300-314.
5. Reyers B, C Folke, M-L Moore, **R Biggs**, V Galaz. 2018. Social-ecological systems insights for navigating the dynamics of the Anthropocene. *Annual Reviews of Environment and Resources* 43: 267-289
6. **Biggs R**, GD Peterson, J Rocha. 2018. The Regime Shifts Database: A framework for analyzing regime shifts in social-ecological systems. *Ecology & Society* 23(3): 9.
7. Luvuno L, **R Biggs**, N Stevens, K Esler. 2018. Woody encroachment as a social-ecological regime shift. *Sustainability* 10, 2221; doi:10.3390/su10072221.
8. van der Merwe SE, **R Biggs**, R Preiser. 2018. A framework for conceptualizing and assessing the resilience of essential services. *Ecology and Society* 23(2): 12.
9. **Pereira LM, T Hichert, M Hamann, R Preiser, R Biggs**. 2018. Using futures methods to create transformative spaces: Visions of a Good Anthropocene in southern Africa. *Ecology and Society* 23(1): 19.
10. **Preiser R, Pereira LM, R Biggs**. 2017. Navigating alternative framings of human-environment interactions: variations on the theme of 'Finding Nemo'. *Anthropocene* 20: 83-87.
11. **Bennett E, M Solan, R Biggs, T McPhearson, A Norström, P Olsson, L Pereira, G Peterson, C Raudsepp-Hearne, F Biermann, S Carpenter, E Ellis, T Hichert, V Galaz, M Lahsen, M Milkoreit,**

B Martin-López, K Nicolas, R Preiser, G Vince, J Vervoort, J Xu. 2016. Bright spots: Seeds of a good Anthropocene. *Frontiers in Ecology and the Environment* 14(8): 441-448. doi:10.1002/fee.1309

12. Hamann MH, **R Biggs**, B Reyers. 2016. An exploration of human well-being bundles as identifiers of ecosystem service use patterns. *PLoS ONE* 11(10): e0163476.
13. Folke C, **R Biggs**, A Norström, B Reyers, J Rockström. 2016. Social-Ecological Resilience and Biosphere-Based Sustainability Science. *Ecology & Society* 21(3): 41.
14. **Biggs R**, WJ Boonstra, GD Peterson, M Schlüter. 2016. The domestication of fire as social-ecological regime shift. *Past Global Changes (PAGES)* 24(1): 22-23.
15. Rocha J, GD Peterson, **R Biggs**. 2015. Regime shifts in the Anthropocene: drivers, risks, and resilience. *PLoS ONE* 10(8): e0134639.
16. Selomane O, B Reyers, **R Biggs**, S Polasky, H Tallis. 2015. Towards integrated social-ecological sustainability indicators: exploring the contribution and gaps in existing global data. *Ecological Economics* 118: 140–146.
17. Hamann MH, **R Biggs**, B Reyers. 2015. Mapping social-ecological systems: Identifying ‘green-loop’ and ‘red-loop’ dynamics based on characteristic bundles of ecosystem service use. *Global Environmental Change* 34: 218–226.
18. Homer-Dixon T, B Walker, **R Biggs**, A-S Crepin, C Folke, EF Lambin, GD Peterson, J Rockström, M Scheffer, W Steffen, and M Troell. 2015. Synchronous failure: The emerging causal architecture of global crisis. *Ecology and Society* 20 (3): 6.
19. Fischer J, TA Gardner, EM Bennett, P Balvanera, **R Biggs**, SR Carpenter, T Daw, C Folke, R Hill, T Hughes, T Luthe, MI Maass, M Meacham, AV Norström, G Peterson, C Queiroz, R Seppelt, M Spierenburg, J Tenhunen. 2015. Advancing sustainability through mainstreaming a social-ecological systems perspective. *Current Opinion in Environmental Sustainability* 14: 144-149
20. Palmer CG, **R Biggs**, GS Cumming. 2015. Guest Editorial: Applied research for enhancing human well-being and environmental stewardship: using complexity thinking in Southern Africa. *Ecology and Society* 20(1): 53.
21. **Biggs R**, C Rhode, S Archibald, LM Kunene, SS Mutanga, N Nkuna, PO Ocholla, and LJ Phadima. 2015. Strategies for managing complex social-ecological systems in the face of uncertainty: Examples from South Africa and beyond. *Ecology and Society* 20(1): 52.
22. Steffen W, K Richardson, J Rockström, SE Cornell, I Fetzer, EM Bennett, **R Biggs**, SR Carpenter, W de Vries, CA de Wit, C Folke, D Gerten, J Heinke, GM Mace, LM Persson, V Ramanathan, B Reyers, S Sörlin. 2015. Planetary Boundaries: Guiding human development on a changing planet. *Science* 347(6223): 1259855. DOI: 10.1126/science.1259855.
23. Rocha J, J Yletyinen, **R Biggs**, T Blenckner, and GD Peterson. 2015. Marine Regime Shifts: Drivers and Impacts on Ecosystems Services. *Philosophical Transactions of the Royal Society B* 370: 20130273.
24. Tallis H, Lubchenco J, et al. 2014. Working together: A call for inclusive conservation. *Nature* 515: 27-28. doi:10.1038/515027a
25. Leadley P, V Proença, J Fernández-Manjarrés, HM Pereira, R Alkemade, **R Biggs**, E Bruley, W Cheung, D Cooper, J Figueiredo, E Gilman, S Guénette, G Hurtt, C Mbow, T Oberdorff, C Revenga, JPW Scharlemann, R Scholes, M Stafford-Smith, R Sumaila, M Walpole. 2014. Interacting Regional Scale Regime Shifts for Biodiversity and Ecosystem Services. *BioScience* 64: 665-679.
26. Mace GM, B Reyers, R Alkemade, **R Biggs**, FS Chapin, SE Cornell, S Díaz, S Jennings, P Leadley, PJ Mumby, A Purvis, RJ Scholes, AWR Seddon, M Solan, W Steffen, G Woodward. 2014. Approaches to defining a planetary boundary for biodiversity. *Global Environmental Change* 28: 289-297.
27. Gaertner M, **R Biggs**, M Te Beest, J Molofsky, DM Richardson. 2014. Invasive plants as drivers of regime shifts: Identifying high priority invaders that alter feedback relationships. *Diversity and Distributions* 20: 733-744.
28. Scholes RJ, B Reyers, **R Biggs**, MJ Spierenburg, A Duriappah. 2013. Multi-scale and cross-scale assessments of social–ecological systems and their ecosystem services. *Current Opinion in Environmental Sustainability* 5(1): 16-25.

29. Rogers KH, HC Biggs, **R Biggs**, S Blignaut, A Choles, R Luton, C Palmer, P Tangwe. 2013. Fostering complexity thinking in action research for change in social-ecological systems. *Ecology and Society* 18(2): 31.
30. Reyers B, **R Biggs**, GS Cumming, T Elmqvist, AP Hejnowicz, S Polasky. 2013. Getting the measure of ecosystem services: a social-ecological approach. *Frontiers in Ecology and the Environment* 11: 268–273.
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VIDEOS

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