

# Ruan van Mazijk, *Curriculum vitae*

MSc candidate, Dept. of Biological Sciences, University of Cape Town

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I am curiosity driven, interested in plant and animal phylogenetics and systematics, community ecology, plant eco-physiology, and the effects of climate change on the world's biota. I enjoy applying numerically and statistically grounded methods in these fields. My long-term goals are careers in research, academia, and teaching.

@rvanmazijk on  Twitter and  GitHub

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 LinkedIn  ResearchGate  Mendeley

## Education



MSc candidate (UCT) (2018–present), on *The effects of genome size on plant hydraulic ecophysiology, habitat, and phenology in Cape Schoenoid sedges (Cyperaceae: Schoeneae)*. Principle supervisor: Associate Prof A.M. Muasya. Co-supervisors: Associate Prof G.A. Verboom and Associate Prof A.G. West.

BSc Hons in Biological Sciences (UCT) (2017), on *The role of environmental heterogeneity in determining plant species richness in the Greater Cape Floristic Region and the Southwest Australia Floristic Region*. Supervisors: Associate Prof M.D. Cramer and Associate Prof G.A. Verboom. Graduated with distinction.

BSc (UCT) (2016). Majors: Ecology & Evolution, Applied Biology. Distinction in both majors & the degree as a whole.

National Senior Certificate (Fairmont High School, Durbanville, South Africa) (2013). Bachelor's Pass with honours and six distinctions.

## Publications

Van Mazijk, R., Cramer, M.D., Verboom, G.A. (In prep.). The role of environmental heterogeneity in determining plant species richness in the Greater Cape Floristic Region & the Southwest Australia Floristic Region.

Van Mazijk, R., Smythe, L.K., Weideman, E.A., West, A.G. (In review). Isotopic tracing of storm-water in the urban Liesbeek River. *Water SA*.

## Professional affiliations

South African Association of Botanists (SAAB) (2017–present).

Southern African Society for Systematic Biology (SASSB) (2018–present).

Golden Key International Honour Society (2015–present).

## Funding & awards

### Scholarships & bursaries

South African Association of Botanists (SAAB) MSc Student Bursary (inaugural recipient) (R20,000 p.a.) (2018, 2019).

Dorothy Cameron Scholarship (R20,000 p.a.) (2018).

UCT Masters Research Scholarship (R25,000 p.a.) (2018).

DST-NRF Innovation Honours Scholarship (R60,000 p.a.) (2017).

South African Association of Botanists (SAAB) Honours Scholarship (R10,000 p.a.) (2017).

UCT Science Faculty Scholarship (R15,000 p.a.) (2015, 2016).

### Awards & honours

Dick & Dorothy Borchers Prize (R1,000 p.a.) (UCT) (2015) for the highest standard in second year Biological Sciences.

Dean's Merit List (UCT) (2014–2016).

Class Medals (top of the class) for five Biological Sciences undergraduate courses (UCT) (2014–2016). Namely:

- *Evolutionary Biology* (BIO3016S) (2016)
- *Life on Land: Plants* (BIO2012S) (2015)
- *Life on Land: Animals* (BIO2011S) (2015)
- *Life in the Sea* (BIO2013F) (2015)
- *Biological Diversity* (BIO1004S) (2014)

## Leadership experience

Departmental Representative for the Dept. of Biological Sciences (UCT) (2016).

Class Representative for three Biological Sciences undergraduate courses (UCT) (2015–2016). Namely:

- *Evolutionary Biology* (BIO3016S) (2016)
- *Ecology* (BIO3015F) (2016)
- *Life on Land: Plants* (BIO2012S) (2015)

## Teaching

Assistant tutor for short course *SEEC-ACCESS Introduction to statistical modelling & data analysis* (2018-07-18–20).  
Organiser: A/Prof R. Altwegg (UCT).

Tutor for *Study Design & Data Analysis for Scientists* (STA2007F/S/H) (UCT) (2017–present). Convenor: A/Prof R. Altwegg (UCT).

Assistant tutor for *Bionumeracy* (STA1007S) R practicals (UCT) (2016–present). Convenor: A/Prof R. Altwegg (UCT).

Hot-seat tutor for *Mathematics for Biology, Earth, and Environmental Sciences* (MAM1004F/S) (UCT) (2015). Convenor: T. van Heerden. Hot-seat organiser: Dr R. Moolman.

## Research assistance

Assessing the current available data for the soils of the Greater Cape Floristic Region (2016-06–present), with L.M. Wootton. Part of “Biodiversity and Environmental Change in the Cape Floristic Region” Supervisor: Associate Prof M.D. Cramer (UCT).

Monitoring *Mimetes* spp. & *Leucospermum* spp. populations on the Cape Peninsula (2017-01–02), with L.M. Wootton. Supervisor: Dr J.A. Slingsby (SAEON/SANBI).

Legume symbiotic rhizobia culturing and field sampling (2015-12). Supervisors: Dr M. Dlodlu (UCT) and Associate Prof A.M. Muasya (UCT).

## Workshop & conference attendance

Presenter at *Pint of Science Cape Town* (2018-05-16). I presented hypotheses concerning the role of genome size in plant water use and ecology. [pintofsciencesa.wixsite.com](http://pintofsciencesa.wixsite.com)

Attendee at *satRday Cape Town* (2018-03-17). [capetown2018.satrdays.org](http://capetown2018.satrdays.org)

Presenter at workshop *Biodiversity and Environmental Change in the Cape Floristic Region* (2017-01-24). Organiser: Associate Prof L. Gillson (UCT). I presented a progress report on “Development of soil atlas for the Greater Cape Floristic Region”, with L.M. Wootton.

Attendee at workshop *Spatial Point Process Modelling for Ecological Survey Data with “inlabru”* (2017-01-11–13). Instructors: Prof D.L. Borchers, Dr J.B. Illian (CREEM, St Andrews University), and Dr F. Bachl (University of Edinburgh).

## Skills

Extended experience with:

- Apple macOS
- MS Windows, MS Office
- R, RStudio, RMarkdown, “tidyverse” packages
- Git, GitHub

Fluent in both English and Afrikaans.

Animal Ethics Course certified by South African Veterinary Council (part of BSc Hons general coursework) (2017-04).

## Miscellaneous

Open Day volunteer for the Dept. of Biological Sciences (UCT) (2017-04-22, 2018-04-21).

Botanical Society of South Africa (BotSoc) member (2017–present).

UCT Wine & Culture Society member (2016–present).

UCT Birding Club member (2016–2017).

Selected to give student feedback for curriculum-restructuring within the Dept. of Biological Sciences (UCT) (2016-08). Related to roles as Class/Dept. Representative—see above. Selected by: Associate Prof A.G. West (UCT).

Selected to give student feedback for *Biology: How Life Works* (2nd edition) (2016-05) (Morris et al., 2016. W.H. Freeman & Co., Macmillan Education). Selected by: Dr R. Kelly-Laubscher (UCT).

Cape Wine Ambassador qualification (2016). Conferred by: Clive Torr.

UCT Biological Society member (2015).

Two Oceans Aquarium *Young Biologist* Volunteer (2013–2014).

## References

Associate Prof R. Altwegg

- Dept. of Statistical Sciences, UCT
- Head of Centre for Statistics in Ecology, the Environment and Conservation (SEEC)
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Prof T.A. Hedderson

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