

Dr. Anabelle Williamson Cardoso

Ecology and Evolutionary Biology Dept.
Osborne Memorial Labs
Yale University
165 Prospect Street, New Haven
Connecticut, 06511, USA

CURRENT POSITION

2019-present **Postdoctoral Research Associate, Yale University (visiting researcher at University of Witwatersrand)**
Ecology and Evolutionary Biology Department
In the labs of Carla Staver and Sally Archibald

EDUCATION

2015-2019 **Ph.D., University of Oxford**
Geography and the Environment
Supervised by Yadvinder Malhi, Imma Oliveras, Kate Abernethy, and William Bond
2013-2014 **M.Sc., University of Oxford, distinction**
Environmental Change and Management
2012 **B.Sc. (Hons.), University of Cape Town, distinction**
Botany
2009-2011 **B.Sc., University of Cape Town, distinction**
Ecology, Biodiversity & Evolutionary Biology

PUBLICATIONS IN PEER REVIEWED JOURNALS AND BOOK CHAPTERS

Google Scholar profile: <https://scholar.google.com/citations?user=-T7q0CgAAAAJ> (h-index: 6, citations: 180)

- Cardoso, A.W.;** Oliveras, I.; Abernethy, K.A.; Jeffery, K.J.; Glover, S.; Lehmann, D.; Edzang Ndong, J.; White, L.T.J.; Bond, W.J.; Malhi, Y. 2021. A distinct ecotonal tree community exists at central African forest-savanna transitions. *Journal of Ecology*. (citations: 1)
- Whytock, R.; Świeżewski, J.; Zwerts, J.A.; Bara-Stupski, T.; Koumba Pambo, A.F.; Rogala, M.; Bahaa-el-din, L.; Boeke, K.; Brittain, S.; **Cardoso, A.W.;** Henschel, P.; Lehmann, D.; Momboua, B.; Opepa, C.K.; Orbell, C.; Pitman, R.T.; Robinson, H.S.; Abernethy, K.A. 2021. Robust ecological analysis of camera trap data labelled by a machine learning model. *Methods in Ecology and Evolution*. (citations: 1)
- Bush, E. R.; Whytock, R. C.; Bahaa-el-din, L.; Bourgeois, S.; Bunnefeld, N.; **Cardoso, A. W.;** Dikangadissi, J. T.; Dimbonda, P.; Dimoto, E.; Edzang Ndong, J.; Jeffery K. J.; Lehmann, D.; Makaga, L.; Momboua, B.; Momont, L. R. W.; Tutin, C. E. G.; White, L. T. J. W.; Whittaker, A.I Abernethy, K. A. 2020. Long-term collapse in fruit availability threatens Central African forest megafauna. *Science*. (citations: 1)
- Cardoso, A.W.;** Malhi, Y.; Oliveras, I.; Lehmann, D.; Edzang Ndong, J.; Dimoto, E.; Bush, E.; Jeffery, K.J.; Labriere, N.; Lewis, S.L.; White, L.T.J.; Bond, W.J.; Abernethy, K.A. 2019. The role of forest elephants in shaping tropical forest-savanna coexistence. *Ecosystems*. (citations: 7)
- Willi, M.; Pitman, R. T.; **Cardoso, A.W.;** Locke, C.; Swanson, A.; Boyer, A.; Veldthuis, M.; Fortson, L. 2019. Identifying animal species in camera trap images using deep learning and citizen science. *Methods in Ecology and Evolution*. (citations: 79)
- Cardoso, A.W.;** Oliveras, I.; Abernethy, K.A.; Jeffery, K. J.; Lehmann, D.; Edzang Ndong, J.; McGregor, I.; Belcher, C.M.; Bond, W.J.; Malhi, Y. 2018. Grass species flammability, not biomass, drives changes in fire behavior at tropical forest-savanna transitions. *Frontiers in Forests and Climate Change*. (citations: 19)
- Cardoso, A.W.;** Midgley, J.J.; Hoffman M.T.; Geldenhuys, C.J. 2017. Temperate forest dynamics and carbon storage: a 26-year case study from Orange Kloof Forest, Cape Peninsula, South Africa. *Southern Forests*.
- Ah-Peng, C.; **Cardoso, A.W.;** Flores, O.; Wilding, N.; Strasberg, N.; Hedderson, T.A.J. 2017. The role of epiphytic bryophytes in interception, storage, and the regulated release of atmospheric moisture in tropical montane cloud forest. *Journal of Hydrology*. (citations: 35)

Dr. Anabelle Williamson Cardoso

- Cardoso, A.W.;** Medina-Vega, J.; Malhi, Y.; Adu-Bredu, S.; Ametsitsi, G.K.D.; Djagbletey, G.; van Langevelde, F.; Veenendaal, E.; Oliveras, I. 2016. Winners and losers: tropical forest tree seedling survival across a West African forest–savanna transition. *Ecology and Evolution*. (citations: 20)
- Todd, S.; Hoffman, M.T.; Henschel, J.; **Cardoso, A.W.;** Brooks, M.; Underhill, L. 2016. The potential impacts of fracking on the biodiversity of the Karoo Basin, South Africa. In: Hydraulic fracturing in the Karoo: Critical legal and environmental perspectives. Eds: Glazewski, J.; Esterhuyse, S. (citations: 11)

PUBLICATIONS IN PREPARATION AND REVIEW

- Cardoso, A.W.;** Archibald, S.; Govender, N.; Bond, W. J.; Coetsee, C.; Strydom, T.; Mpanza, N; Koumba-Pambo, F.; Edzang Ndong, J.; Makaga, L.; Lehmann, D.; Strydom, T.; Tillman, D.; Wragg, P.; Staver, A. C. Quantifying the environmental limits to fire spread in grass-dominated ecosystems.

GRANTS, SCHOLARSHIPS, AND AWARDS

- | | |
|-----------|--|
| 2015-2018 | Bruce, Julia, and Mortimer May Senior Scholar in Geography (£78 000 to support research expenses during doctoral studies). |
| 2015-2018 | Commonwealth Scholarship (≈£120 000 doctoral scholarship to the University of Oxford). |
| 2015-2018 | Oppenheimer Scholarship (selected by the Oppenheimer Foundation as one of the top South African recipients of the Commonwealth Scholarship). |
| 2013-2014 | Santander Travel Award (£1250 to support M.Sc. research expenses). |
| 2013-2014 | Skye Foundation Scholarship (£31 500 M.Sc. scholarship to the University of Oxford). |
| 2013-2014 | Commonwealth Scholarship (£32 000 M.Sc. scholarship to the University of Oxford – was unable to accept due to already having secured funding). |
| 2012 | South African National Research Foundation “Freestanding” Scholarship (R80 000 M.Sc. scholarship to the University of Cape Town - was unable to accept due to accepting a position at another university). |
| 2012 | South African Association of Botanists Scholarship (R10 000 B.Sc. Hons. scholarship). |
| 2011 | University of Cape Town Science Faculty Scholarship (≈R12 000 undergraduate academic merit scholarship). |
| 2010 | Dick and Dorothy Borchard’s Prize (award for the highest achieving student in 2 nd year Botany or Astronomy). |
| 2010-2012 | Class medal for achieving the highest mark in the class (B.Sc. Hons. in Botany, 3 rd Year Systematics, 3 rd Year Ecosystem Ecology, 2 nd Year Plant Diversity, 2 nd Year Principles of Evolution). |
| 2009-2012 | Dean’s Merit List (award for having a weighted average over 70% in all courses taken). |
| 2009 | University of Cape Town Entrance Scholarship (≈R30 000 undergraduate academic merit scholarship). |

SUPERVISION AND MENTORING EXPERIENCE

- | | |
|------|--|
| 2021 | Co-supervised the undergraduate thesis of Annli Nakayama, Yale University. |
| 2020 | Co-supervised the senior undergraduate thesis of Krish Maypole, Yale University. |
| 2020 | Supervised the undergraduate research project of Annli Nakayama, Yale University. |
| 2020 | Co-supervised the MSc thesis of Londiwe Mokoena, University of Witwatersrand. |
| 2020 | Mentored 2 MSc and 1 PhD students as part of the Women in Science at Yale program. |
| 2019 | Co-supervised the MSc thesis of Charles Emogor, University of Oxford. |
| 2018 | Co-supervised the MSc thesis of Ian McGregor, University of Oxford. |

TEACHING EXPERIENCE AND TRAINING

- | | |
|------|---|
| 2021 | Will complete the “Mental Health First Aid” certification, Yale University. |
| 2021 | Completed the “Peer learning through technology” course, Yale University. |
| 2020 | Lectured (online) on the B.Sc. “3 rd year field trip” course, module: Statistics in R, University of Witwatersrand (1 module and supervision of two field projects). |
| 2020 | Completed the 8-week “Introduction to evidence-based undergraduate STEM teaching” course, Yale University. |
| 2020 | In process of completing the 72-hour “College Teaching Preparation” certificate, Yale University. |

Dr. Anabelle Williamson Cardoso

2019	Lectured on the M.Sc. "Forestry" course, module: Tropical Forest Ecosystems, Yale University (1 lecture).
2017	Teaching assistant on the M.Sc. "Environmental Change and Management" course, module: Statistics, University of Oxford (1 module).
2015	Lectured and assisted with practicals on the M.Sc. "Conservation Biology" course, module: Community Ecology, University of Cape Town (2 lectures and 1 fieldtrip).

INVITED SEMINARS AND RESEARCH PRESENTATIONS

2021	"Fires, plants, and ecological thresholds", Davies Lab, Department of Organismic and Evolutionary Biology, Harvard University, USA.
2021	"Fires, plants, and ecological thresholds", Ecosystems Lab, School of Geography and the Environment, University of Oxford, UK.
2020	"Fires, elephants, and ecotones", Botany and Zoology Department, Stellenbosch University, South Africa.
2019	"How are forest-savanna transitions affected by fire and forest elephants?", School of Animal, Plant, and Environmental Sciences, University of Witwatersrand, South Africa.
2016	"How fire and elephants affect forest-savanna mosaic dynamics", School of Geosciences, University of Edinburgh, Scotland.
2016	"How re elephant are elephants? Forest elephants in a forest-savanna mosaic in Central Africa", Hertford College, University of Oxford, UK.

CONFERENCE PRESENTATIONS

2020	"Why do fires stop spreading?", Savanna Science Network Meeting, Skukuza, South Africa.
2019	"The role of forest elephants in shaping forest and savanna co-existence", Savanna Science Network Meeting, Skukuza, South Africa.
2018	"Are forest-savanna transitions home to a distinct woody community?", Savanna Science Network Meeting, Skukuza, South Africa.
2017	"How fire and forest elephants affect forest-savanna transition dynamics" (unable to attend in person, presentation given on my behalf by Dr Imma Oliveras), Association of Tropical Biologists Conference, Mérida, Mexico.
2017	"How fire and elephants affect forest-savanna coexistence", Savanna Science Network Meeting, Skukuza, South Africa.
2016	"How fire and elephants interact to affect forest encroachment in a central African forest-savanna mosaic" (poster), Savanna Science Network Meeting, Skukuza, South Africa.

ACADEMIC SERVICE

2020	The representative for postdocs on the Diversity and Inclusion committee of Yale University's Ecology and Evolutionary Biology Department.
2016 – present	Scientific reviewer: WGII contribution to the IPCC Sixth Assessment Report, Journal of Ecology, New Phytologist, African Journal of Ecology, Biotropica, and International Journal of Wildland Fire, Forest Ecology and Management, Journal of Vegetation Science, Plant Ecology.

STUDENT WORK EXPERIENCE

January-June 2015	Research Assistant to Timm Hoffman, Plant Conservation Unit, University of Cape Town.
June-July 2015	Research Assistant to William Bond, Botany Department, University of Cape Town.
June-July 2011	Research Assistant to Nicola Bergh, South African National Biodiversity Institute.
2013	Demonstrator on the BSc field course "Ecosystems", University of Cape Town.
2012-2013	Demonstrator on the BSc "Biology" course practicals, University of Cape Town.