**Post Graduate Candidates**

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| C:\Users\Stuart\AppData\Local\Microsoft\Windows\INetCache\Content.Word\Stuart Demmer Head and shoulders.jpg    Stuart Demmer (Hons Candidate)  BSc Ecology (UKZN)  Email: 214518784@stu.ukzn.ac.za | **Brief Description of Research** (Max. 100 words)    Much of our historical grasslands have been transformed into commercial forestry plantations and croplands. Restoring these lands back to their natural state is often difficult because of a loss of seed and altered soil properties such as allelopathic compounds and increased nutrient levels which inhibit native plant germination and promote alien plant establishment. My research looks at mechanisms to mitigate this problem and promote rapid and economic transformation of old commercial forests (*Acacia*, *Eucalyptus* and *Pinus*) back to their historically biodiverse grassland states.  Supervisor(s)  Prof Kevin Kirkman  Dr Michelle Tedder |

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| Sinenhlahla Mntambo (Hons Candidate)  BSc Environmental Sciences (University of KwaZulu-Natal),  Email:213509230@ukzn.ac.za | **Brief Description of Research** (Max. 100 words)  My research project is titled the effects of black and white frost on C3 and C4 grasses. The C3 grasses being used are *Eragrostis curvula* and *Eragrostis teff*, and the two C4 grasses will be *Festuca rubra* and *Festuca arundinacea*. The motivation behind the study is the gap in literature surrounding the effects of frost on grass survival and biomass production. The results of this study will offer insight on the response of these grasses to frost, and also the impacts frost will have on fire regimes and agricultural production in future.  Supervisor(s)  Dr. Michelle Tedder |
| **C:\Users\Kgabo\Desktop\Moratho 20170423_110711.jpg**    Tlou Kevin Ngoepe (MSc Candidate)  BSc Agriculture (University of Limpopo),  MSc Grassland Science (University of KwaZulu- Natal)  Email: 217032198@stu.ukzn.ac.za | **Brief Description of Research** (Max. 100 words)  The study is based on the impacts of grassland management on *Aristida junciformis* as an undesirable grass species. The species is problematic, reducing grazing capacity, in much of South Africa. It is a fibrous, unpalatable species which has no grazing value. The study aims at determining the impacts of herbicide, fire, grazing, trampling and mowing on *Aristida junciformis.* The outcomes of the study will benefit both domestic and wildlife production systems, considering that well managed grassland plays an important role in animal production.  Supervisor(s)  Prof. Kevin Kirkman  Dr. Michelle Tedder |

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| E:\picture.jpg    Naledi Zama (MSc Candidate)  BSc Environmental Sciences (UKZN)  BSc Hons Ecological Sciences (UKZN)  MSc Ecology (UKZN)  Email: ZamaN@arc.agric.za | **Brief Description of Research** (Max. 100 words)  Herbivore-induced changes in grasslands in species composition have been documented all over the world. It is widely recognized that tolerance to herbivory is important in plant survival. However, few studies have investigated the ability of plants to grow following defoliation in mesic grasslands. I am currently working on determining the grazing tolerance of common mesic grass species namely; *Themeda triandra*, *Tristachya leucothrix*, *Eragrostis curvula* and *Eragrostis plana*. Successful management of grasslands requires some level of understanding of plant grazing resistance and associated strategies used by plants in response to grazing.  Supervisor(s)  Dr. Michelle Tedder,  Dr. Ntuthuko Mkhize  Mr Craig Morris |

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| **C:\Users\MbandeA\Desktop\IMG_20170426_094520.jpg**    **Name Surname:** Abongile Mbande (MSc Candidate)  BSc Hons Biological Sciences (University of KwaZulu-Natal),  **Email:** [214581102@stu.ukzn.ac.za](mailto:214581102@stu.ukzn.ac.za); mbandeA@arc.agric.za | **Brief Description of Research** (Max. 100 words)  Soil nutrient and water content are important bottom-up factors that affect plant quality and subsequent trophic interactions. In insects, host plant quality has been associated with differences in oviposition preferences and herbivore performance. For biological control of invasive weeds, the understanding of the impact of environmental gradients on insect herbivore performance is of importance as it may inform when control will be less effective. Therefore, the overall goal of my project is to unveil the impact of both water and nutrient stress on within and transgenerational life-history traits of *Neolema abbreviata* beetles on their host plant *Tradescantia fluminensis.*  Supervisor(s)  Dr. M. Tedder  Dr. F. Chidawanyika |

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| **C:\Users\Administrator\Downloads\IMG_20161102_161812.jpg**  Ntomboxolo Mamayo (MSc Candidate)  BSc Agriculture (University of Fort Hare),  BSc Agriculture Hons (University of Fort Hare)  Email:ntmbymmy@gmail.com | **Brief Description of Research** (Max. 100 words)  Seasonally, crude protein and fibre along with other minerals fluctuate, and the most significant fluctuation is between the dormant and growing season. These fluctuations are most noticeable in areas where grasslands are unfertilized and the primary source of nitrogen (N) is the atmosphere. This is the situation in most communal regions of South Africa and is extremely aggravated by overgrazed rangelands where continuous grazing is/has been carelessly employed. This study then seeks to investigate the seasonal nutrient dynamics of forage grasses within and between the dormant and growing season; comparing natural grasslands under Continuous grazing systems with those under rotational grazing systems.  Supervisor(s)  Prof Kevin P. Kirkman |

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| Lindokuhle Xolani Dlamini (MSc Candidate)  BSc Environmental sciences (UKZN),  BSc Hons Ecological sciences (UKZN)  MSc Ecological Sciences (UKZN),  Email: leendoh.lx@gmail.com | **Brief Description of Research** (Max. 100 words)  Exotic grasses have proven problematic in natural veld, reducing biodiversity and productivity. Vetiver *(Chrysopogon zizanioides)* is a fast-growing, tall exotic grass (from India) with deep roots (approximately 3m) allowing it to withstand extreme environmental conditions such as drought, frost, and flood. The species is popular worldwide for its essential oil released/extracted from the roots, and application in soil (e.g. erosion control) and water conservation (e.g. purification). We investigate the competitive ability of Vetiver under varying soil nutrients, and its allelopathic effect (chemicals that inhibit growth of neighbouring plants) on indigenous grasses, possibly through the oil, to contribute to predictions of its invasion potential.  Supervisor(s)  Dr. Michelle J Tedder  Prof. Kevin P Kirkman |

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| C:\Users\Jennifer\AppData\Local\Microsoft\Windows\INetCacheContent.Word\At Ithala.jpg    Jennifer Russell (PhD Candidate)  BSc Biological Sciences (University of Natal),  BSc Hons Biological Sciences (University)  MSc Botany (University),  Email:jmrussell0355@gmail.com | **Brief Description of Research** (Max. 100 words)  *Vachellia sieberiana* has encroached into high altitude grasslands in northern KwaZulu-Natal. My project investigates possible reasons as to why this is occurring. More specifically, I am investigating the effect of fire, frost and mowing of the grassy sward on seedling establishment of *V. sieberiana* along an altitudinal gradient from 1 260 m ASL to 1 700 m ASL. Controlled pot trials conducted at UKZN will establish the critical temperature below which seedlings cannot survive, as well as the extent to which frost damage will affect regeneration of the seedlings.  Supervisor  Dr. Michelle Tedder |