

## College of Agriculture and Environmental Sciences

### Research focus areas for 2024: Department of Environmental Sciences - Nature Conservation

Focus area	Researchers in the focus area	Specialisation of researchers in the focus area	Profile of the researcher	Research project themes	Capacity per researcher for 2023
<b>Wildlife welfare</b>	Dr Ann Wilson	Wildlife welfare and general conservation management	Ann Wilson is a senior lecturer in the Nature Conservation programme at Unisa  With the intensive use of or wildlife and natural areas, understanding our impact on their wellbeing is important. This relatively young science has many opportunities for research open to it.	Includes conservation management, wildlife welfare, animal behaviour, policy, ethics, human-wildlife interactions	2 Masters students
<b>Plant ecology / Vegetation Science</b>	Prof LR Brown lrbrown@unisa.ac.za	Vegetation Science and Management	Leslie R Brown is a Professor in Plant Ecology and Head of the Applied Behavioural Ecology & Ecosystem Research Unit in the Department of Environmental Sciences at UNISA. He holds a PhD in terrestrial plant ecology from the University of Pretoria. He is involved in various collaborative research projects in the field of plant ecology throughout South Africa. Current projects involve vegetation ecology and animal	<ol style="list-style-type: none"> <li>1. The ecology and management of <i>Stoebe vulgaris</i> within the grassland biome.</li> <li>2. Long-term vegetation changes within Nama karoo vegetation of the Mountain Zebra National Park</li> <li>3. The effect of fire and grazing on vegetation composition, production and veld condition.</li> <li>4. Phenology of key tree resources for selected trees at LDNR.</li> </ol>	MSc : 1 PhD : 1

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			behaviour research in Loskop Dam Nature Reserve; Mountain Zebra National Park, Samara Private Game Reserve and North-west Province. His research interests include phytosociology, veld management, fire ecology, restoration, long-term monitoring, wetlands, and plant-animal interactions.	<ol style="list-style-type: none"> <li>5. Altitudinal effects on small mammal presence, abundance and biodiversity at LDNR.</li> <li>6. Ecosystem drivers of the Namaqualand Sand fynbos vegetation within the Namaqua National Park .</li> <li>7. The ecology and habitat utilisation of chacma baboons within the Bankenveld.</li> <li>8. Impacts of animal carcasses on vegetation within the grassland biome.</li> <li>9. Vervet ecology within the Nama-karoo.</li> <li>10. The effect of climate changes on vegetation within Kalahari vegetation.</li> </ol>	
<b>Plant and animal ecology</b>  <b>Impacts of animal carcasses on terrestrial ecosystems</b>	Dr AS Barrett barreas@unisa.ac.za	Plant and animal ecology	Senior Lecturer in the Department of Environmental Sciences. He Holds a PhD in Environmental Management. He is involved in various collaborative research projects involving vegetation and animal ecology at Kruger National Park, Loskop Dam Nature Reserve and Telperion Nature Reserve. Research interests include systems ecology, GIS, primatology, herpetology, plant and animal ecology, and modelling.	Research interests include systems ecology, GIS, primatology, herpetology, plant and animal ecology, and modelling.	MSc : 0 PhD : 1

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<b>Plant and animal Ecology (Nature conservation)</b>	Dr SE Nkosi nkosise@unisa.ac.za	Vegetation Ecology	Senior Lecturer in the Department of Environmental Sciences at Unisa. She holds a Ph.D. degree in Environmental Studies from the University of the Witwatersrand. She is involved with the Kalahari Endangered Ecosystem Project (KEEP) sponsored by Tswalu Foundation. Research interest include vegetation ecology (fire and alien plants), vegetation classification and modelling (phytosociology), earth observation (GIS and remote sensing).	<ol style="list-style-type: none"> <li>1. African elephants influence on woody vegetation.</li> <li>2. Spatio-temporal vegetation dynamics (Remote sensing)</li> <li>3. Alien plants on various ecosystems</li> <li>4. Biodiversity Stewardship Programmes</li> <li>5. Classification of plant communities</li> <li>6. Prosopis invasion and its implication to land use/land cover dynamics</li> <li>7. Microbial diversity in indigenous herbivores.</li> </ol>	MSc : 3 PhD : 4
<b>Human-Wildlife interaction</b>	Prof K Mearns mearnkf@unisa.ac.za	Social Ecology  Human-wildlife interaction  Community-based natural resource management	Prof Kevin Mearns is a full professor in the Department of Environmental Science. Prof Mearns holds a PhD degree from the University of Portsmouth in the United Kingdom. Prof Mearns' research interests include the social dimensions of conservation areas, ecotourism, and community-based natural resource management.  Methodology expertise: Qualitative and Mixed- method research	Social Ecology Human-wildlife conflict Community-based natural Resource Marine protected areas People and protected areas nexus	MSc: 2

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<b>Waste Management</b>	Tsakani Tshimbana	Waste Management	Ms Tsakani Tshimbana is a lecturer at the Department of Environmental Sciences. She holds her MSc in Environmental Management. Her Focus area is waste management with specific focus on electronic waste management, household waste, medical waste, waste reclamation and recycling, Environmental Education and awareness and Environmental compliance on waste management.	Electronic waste management, Waste reclamation, Recycling. Environmental compliance	MSc: 2
<b>Wildlife Ecology and Management</b>	Dr WM Strauss strauwm@unisa.ac.za		Dr Strauss is a Senior Lecturer in the Sciences. He holds a PhD from Wits University. His research focus is on mammal ecology/ecophysiology/conservation physiology. Methodology expertise: Biologging	Mammalian adaptations Conservation physiology	MSc: 0 PhD: 0
<b>Wildlife Ecology</b>	Dr K Slater slatek@unisa.ac.za	Mammal ecology	Dr Slater is a senior lecturer in the Department of Environmental Sciences. She holds a PhD from the University of Pretoria in Zoology. Her research focus is on the behavioural ecology of mammals and has a keen interest in the ecology of reptiles.	Behavioural ecology of Brown hyaena Predator management and ecology in human/wildlife conflict areas Baboon ecology	MSc : 1 PhD : 1

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<b>Nature Conservation</b>	Ms Sarisha Jaga dayas@unisa.ac.za	Threatened species legislation and protection	Ms Sarisha Daya is a Junior lecturer in the Department of Environmental Sciences, Nature Conservation program. She is currently completing her M Tech in Nature Conservation. Her research focus is the effectiveness of current legislation in protecting threatened species in South Africa. Her research also extend to the effects of climate change on species distribution and protection initiatives.  <b>Methodology expertise:</b> Descriptive, quantitative and qualitative studies	1. National documenting and protection of threatened species. 2. Climate change modelling effects on threatened species distributions.	MSc : 1
<b>Freshwater ecology</b>	Ms ME Brand bbrand@unisa.ac.za	Freshwater ecology	Ms Brand is a senior lecturer in the Department of Environmental Sciences. She holds an MSc in Zoology (Ecotoxicology) from RAU (now UJ) and is currently enrolled for a PhD in Science.). Her current research focus is on freshwater ecology and conservation management.	River health using various indices General aquatic ecology and conservation management aspects in selected national parks.	MSc : 0 PhD : 0

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<b>Terrestrial Wildlife Ecology, Population Dynamics and Systematics</b>	Dr Haemish Melville Email: <a href="mailto:melviha@unisa.ac.za">melviha@unisa.ac.za</a>	Mesopredators, Population dynamics, Community ecology and biosystematics, bioacoustics	Dr Melville is a terrestrial systems wildlife ecologist who qualified with his PhD at Texas A&M University. He joined Unisa in late 2015. His interests include mesopredator guild structures, terrestrial mammalian population dynamics, human wildlife conflict, ecological community structure, biosystematics, and bioacoustics	<ol style="list-style-type: none"> <li>1. Testing the mesopredators release hypothesis in the Kalahari system</li> <li>2. Small mammal guild structure in Natal</li> <li>3. Ecosystem responses to carcass decomposition</li> <li>4. Predator response to carcass decomposition</li> <li>5. Estimating predator populations from camera trap data</li> <li>6. Caracal and jackal spatio-temporal interactions on small stock farms</li> <li>7. Bat guild structure and responses to carcass decomposition.</li> <li>8. Terrestrial mammal bioacoustics</li> <li>9. Mammalian response to lunar light</li> </ol>	MSc: 0 PhD: 0
Freshwater Ecology	Dr Pfananani Ramulifho <a href="mailto:eramulpa@unisa.ac.za">eramulpa@unisa.ac.za</a>	Aquatic Ecosystem Health, the influence of Land use, and Climate Change.	Dr Pfananani Ramulifho is a senior lecturer in the Department of Environmental Sciences. He holds a PhD in Zoology from the University of Venda, and a master's degree in Hydrology from the University of KwaZulu-Natal. He is interested in research on macroinvertebrate ecology and stream flow changes.	<ol style="list-style-type: none"> <li>1. Macroinvertebrate Ecology</li> <li>2. Stream flow dynamics</li> <li>3. Catchment Management</li> </ol> Water temperature and Climate Change trends	MSc – 1 PhD - 1

<p><b>Ecotourism, Nature Conservation</b></p> <p><b>Work Integrated Learning</b></p>	<p>Mr SG Blenkinsop</p>	<p>Ecotourism</p> <p>Social Ecology</p> <p>Human-wildlife interaction</p> <p>Community-based natural resource management</p> <p>Work Integrated Learning</p>	<p>Mr Steven Blenkinsop is a lecturer in the Department of Environmental Sciences, Nature Conservation. He obtained his MTech in Ecotourism Management exploring the role of various technologies in enhancing visitor experiences in the Kruger National Park.</p> <p>Methodology expertise: Mixed method research, qualitative research &amp; descriptive statistics.</p>	<p>Sustainable tourism.</p> <p>Protected area management.</p> <p>Technology in tourism &amp; nature conservation.</p> <p>Psychology in tourism &amp; nature conservation.</p> <p>Social ecology &amp; human-wildlife conflict.</p> <p>Environmental education.</p> <p>Work Integrated Learning in Nature Conservation</p> <p>ODeL in Nature Conservation</p>	<p><b>MSc: 1</b></p> <p><b>PhD: 0</b></p>
<p><b>Protected Areas Management,</b></p> <p><b>Human-Wildlife Interactions,</b></p> <p><b>Environmental Sustainability</b></p>	<p>B Malatji</p> <p><a href="mailto:malatmb@unisa.ac.za">malatmb@unisa.ac.za</a></p>	<p>Wildlife management,</p> <p>-Wildlife utilization,</p> <p>Environmental Education</p> <p>Social Ecology</p>	<p>Mr Billy Malatji is a lecturer in the Department of Environmental Sciences. He holds a B Agric Hons in Wildlife Management from the University of the Free State and is currently enrolled for a MSc in Environmental Management with University of South Africa. Her research focus is on Protected Areas Management, Human-wildlife interactions and Environmental sustainability</p>	<ol style="list-style-type: none"> <li>1. Wildlife management</li> <li>2. Human-Wildlife interactions</li> <li>3. Environmental Education</li> <li>4. Social Ecology</li> </ol>	



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<b>Social ecology</b>	Mr SB Hlabisa hlabisbl@unisa.ac.za	Conservation performance  Society and conservation	Mr Hlabisa is a lecturer in the Department of Environmental Sciences. He holds a Master's degree from the Monash University and is currently enrolled for a PhD with the University of the Witwatersrand. He also holds a Bachelor of Technology degree in Nature Conservation as well as a National Diploma, both from Mangosuthu University of Technology. His research focus is on conservation performance and natural resource access.	<ol style="list-style-type: none"> <li>1. Protected areas and livelihoods.</li> <li>2. Protected area management effectiveness evaluation.</li> <li>3. Stakeholder engagement in protected areas.</li> <li>4. Human-wildlife coexistence.</li> <li>5. Community participation in conservation.</li> </ol>	Masters: 2
<b>WIL, ODL and ODeL</b>	Mr Graeme Wilson <a href="mailto:wilsoga@unisa.ac.za">wilsoga@unisa.ac.za</a>	Work Integrated Learning, Mobile learning, Education for sustainability	Mr Graeme Wilson is a lecturer in the Department of Environmental Sciences. He currently holds a MEd in ODeL from Unisa, a BEd (hons) from Rhodes University and a Certificate in ODeL from UMUC. His research focus is on the affordances of mobile technology is WIL student support in a Nature Conservation context and WIL in the Conservation Sector with a Afrocentric bias.	<ol style="list-style-type: none"> <li>1. ODeL in Nature Conservation</li> <li>2. Work-integrated learning in Nature Conservation</li> <li>3. Technology aided learning</li> <li>4. Education for Sustainability</li> </ol>	Hons: 0 Masters: 0 PhD: 0
<b>Nature Conservation</b>	Ms BF Mongale <a href="mailto:mongabf@unisa.ac.za">mongabf@unisa.ac.za</a>	Plant and animal ecology	Ms Boitumelo Mongale is a junior lecturer in the Department of Environmental Sciences. She acquires MSc in Nature Conservation (UNISA). Her MSc research focus is on Habitat utilisation and activity patterns of Impala. She also holds a BTech and National diploma in Nature Conservation (TUT). Her research focuses on plant-animal interaction	<ul style="list-style-type: none"> <li>• Vegetation Ecology</li> <li>• Phytosociology/ vegetation classification</li> <li>• Animal-Vegetation interactions</li> <li>• Behavioural ecology</li> <li>• Natural resource management</li> </ul>	Masters: 0 PhD: 0

