

Henry Mitchell Scholarship Report

University of Missouri (UMSL) – St. Louis

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Throughout my career as a horticulturist at UWC, I have been deeply passionate about using horticulture to support conservation and biodiversity efforts, especially within the unique ecological context of South Africa. This passion has driven me to continually seek ways to deepen my expertise and contribute meaningfully to the field. Since 2018, I have aspired to pursue a master's degree, yet for several reasons, it had not come together. Year after year, I faced setbacks, and my goals often felt out of reach. However, in late 2023, everything finally aligned and I could register for MSc Biodiversity and Conservation Biology. In early 2024, my supervisor Dr. Patrick O'Farrell at UWC introduced me to the Henry Mitchell Scholarship and encouraged me to apply. Although I initially doubted my chances, my supervisor's support gave me the confidence to take a leap of faith.

When I learned I had been awarded the scholarship, I was thrilled and humbled. I departed from Cape Town International Airport on October, 1 and arrived in St. Louis the following day. Prof. Nathan Muchhala, who would be my primary mentor during my time at the University of Missouri, picked me up from the airport, gave me a tour of the campus, and took me to my accommodation. That afternoon, I attended my first Biolunch Seminar and lab meeting, marking the start of my journey.



Experiences at the Indigenous Knowledge Summit and 2024 UMSL Sustainability Summit

The Henry Mitchell Scholarship not only facilitated my visit to UMSL, but also provided me the opportunity to attend the 2024 UMSL Sustainability Summit - The Energy Transition Forum on Net Zero. This event offered insights into the urgency of transitioning to renewable energy, policy shifts needed, and technological advancements that could reduce dependency on fossil fuels. The discussions highlighted that achieving net-zero emissions is both a critical challenge and a necessity in our fight to combat climate change. Learning from experts broadened my understanding of sustainability, particularly how energy policies intersect with biodiversity goals. I was inspired by the dedication of those working toward sustainable energy solutions that balance ecological health, development, and human well-being.

Attending the Indigenous Knowledge and Sustainability Event Series, in St. Louis was transformative. This year's theme centered on the Buffalo Treaty and the profound influence of the American bison on culture, economy and the environment. Listening to Native American stories and history deepened my understanding of climate resilience and conservation on a global scale while also reshaping these concepts on a personal level. For many Native American communities, climate resilience goes beyond environmental protection—it embodies the preservation of life, tradition, and identity. For example, the Buffalo represents hope and restoration for many indigenous communities, symbolizing the interconnectedness between humans and nature, resilience, and survival. Hearing these perspectives was profoundly inspiring, underscoring that conservation is not just a scientific endeavor but a deeply human one, tied to identity, culture, and heritage. Dr. Leroy Little Bear's talk particularly highlighted what is at stake and I found myself shedding a tear as I reflected at my own country's struggles and triumphs in environmental preservation. The overall visit allowed me to delve into additional areas of relevance, from indigenous community engagement to structured Environmental Social Governance (ESG) approaches. This experience has deepened my appreciation for the rich tapestry of stories and wisdom that different cultures bring to the table, motivating me to work even harder towards sustainable solutions that honor both the earth and its diverse inhabitants.



2024 Indigenous Knowledge and Sustainability St. Louis



UMSL Sustainability Summit

Engaging with conservation experts and teams

I had the privilege of spending time with Conservation Biologist Matthew Albrecht and Jordan Hathaway who are based at Missouri Botanical Garden, witnessing their dedicated work in conservation and restoration. Matthew shared insights into conservation strategies for rare and endangered plants, detailing the methodologies that ensure successful restoration. Observing Jordan's work at Oertli Hardy Plant Nursery added to my understanding of practical restoration techniques, including seed collection, propagation, and monitoring efforts essential for ecosystem recovery and biodiversity preservation.

Prof. Nathan Muchhala and his team provided insights into the complex interactions between plants and animals, especially how they depend on each other for survival. Their research highlights the fascinating ways in which flowers and animals, like hummingbirds and bats, have adapted to each other over time, influencing each other's shape, colour, and behaviour. This demonstrates how biodiversity and conservation are closely tied to these interactions, highlighting the importance of protecting plants and pollinators to maintain healthy and resilient ecosystems.

In addition, I engaged with the team at the Center of Home Gardening at the Missouri Botanical Garden, gaining valuable insight into their sustainable gardening practices. They focus on promoting biodiversity and ecological health within residential landscapes, advocating for climate-resilient planting, and fostering community engagement around conservation practices in home gardens.



Center for Home Gardening at the Missouri Botanical Garden



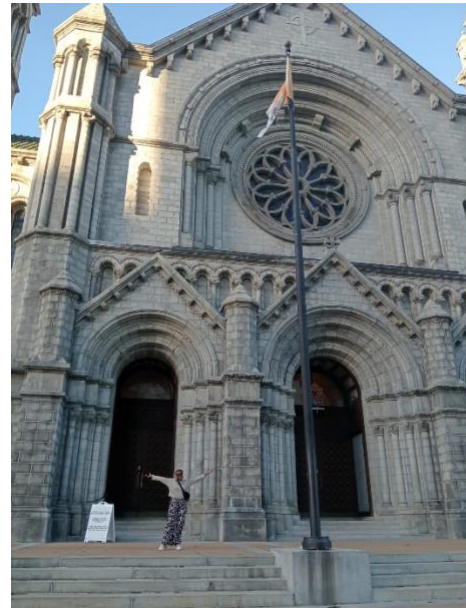
Oertli Hardy Plant Nursery

Balancing work, study, and new learning opportunities

This exchange program allowed me to fully immerse myself in my academic pursuits, giving me a renewed focus on my studies. Operating as a full-time student in St. Louis allowed for undistracted commitment to deepening my understanding of biodiversity and conservation strategies. The insights gained from the environmental conservation approaches in the United States have provided valuable benchmarks that will inform my work in South Africa. This experience has strengthened my research ambitions, equipping me with a multidisciplinary perspective that bridges scientific inquiry with cultural sensitivity.



Missouri Botanical Garden



The Cathedral Basilica of St. Louis



The Renaissance Fair

St. Louis offered a blend of nature, wildlife, and architectural beauty. I had the opportunity to explore Forest Park, visit the St. Louis Zoo, and marvel at the stunning Cathedral Basilica of St.

Louis. Additionally, I wandered through the historic streets of Saint Charles, soaking in its charm, and enjoyed the vibrant atmosphere at the St. Louis Renaissance Festival in Wentzville. Thanks to the convenience of my Metro Pass and friends, I navigated through the city with ease, making the most of every destination. Each spot was a delightful experience, showcasing the diverse charm of the city.

I am deeply appreciative of the encouragement and support that made this journey possible. With the insights I have gained, I am more motivated than ever to contribute to meaningful environmental solutions within my field. This experience has shown me that perseverance and faith can make all the difference, and I am especially grateful to Prof. Rodney Uphoff, Dr. Patrick O'Farrell, Prof. Nathan Muchhala, Prof. Matthew Albrecht and team, Mrs. Minnelise Levendal and her team, Raj Prasai, Belen Alvestegui, and Ketra Oketcho for their dedication and support. I am also thankful for the Henry Mitchell Scholarship as well as University of the Western Cape and University of Missouri for this opportunity.