Brief Bio of SARAH ANGELA HAIDEN

I am passionate about preserving our astounding natural biodiversity and take a particular interest in the development and implementation of conservation strategies, especially in light of climate change and invasive species control. As a Botany Honours student at the University of Cape Town, I am required to submit two research projects this year, and each of my selected topics ultimately have implications for conservation, though differ significantly in content.

My first project aims to make a largely idiographic contribution through evaluating the monophyly of *Syncarpha* (Gnaphalieae or 'sewejaartjies'), a genus (containing 28 species) recently identified as one of the highest-priority groups in need of taxonomic or evolutionary work by the Custodians of Rare and Endangered Wildflowers (CREW). I aim to generate a species-level hypothesis for the genus and use this to explore the role of topography and other ecological factors in limiting dispersal, and hence, speciation.

My second project aims to evaluate the success of the seed-feeding weevil, *Melanterius servulus,* as a bio-control method for the invasive *Paraserianthus lophantha* (Stinkbean). An assessment of this bio-control agent's impact was performed over a decade ago; I aim to re-assess the situation through examining the level and extent of seed-damage by investigating the abundance of seed in the soil at selected *P. lophantha* sites within the Western Cape, and make suggestions as to whether additional agents are required. *P. lopantha* has been observed to form dense stands which have the capacity to out-compete indigenous vegetation, lower biodiversity, reduce stream-flow and increase erosion-risk; hence, I feel any further research on this group and agents of control is justified and will make a valuable contribution to conservation ecology.