### Daniel Booysen (1988 – 2010) Memorial Award



In 2010 the Conservation Ecology programme, and indeed the world, tragically lost a very promising young conservationist. Daniel Booysen, in his 4<sup>th</sup> year of his Conservation Ecology BSc, held great promise for a bright future – he was academically gifted, passionate, and committed to African Conservation.

To honour his memory, and to promote conservation in Africa, the Booysen family has generously committed funding towards the "Daniel Booysen Memorial Award" for the best Conservation Ecology 448 project.

### 2020 First place, best research project –Nicola du Plessis



From as early as I can remember, I have wanted to make a lasting and positive contribution to the world. I have been fortunate enough to have parents who have instilled empathy for the immense challenges faced by the majority of people in South Africa on the one hand, as well as a deep respect for the fragility of the ecological systems that sustain us on the other. During my fourth-year project which aimed to guide longterm ecological rehabilitation efforts along the Dwars River in the Western Cape, I was deeply struck by the extent of the multiple pressures on water availability in South Africa. These pressures including alien plant invasion, drought, pollution, and over-abstraction will almost certainly be exacerbated by the impacts of future climate

change. With the help of my dedicated and tremendously driven supervisors, Dr Alanna Rebelo, Prof Karen Esler and Prof David Richardson, this project equipped me with the necessary tools to map changes in land-use and invasive alien plant distributions over time and allowed me to engage with various stakeholders including farm owners and community members. This project not only opened up my eyes to how severely underfunded conservation work is, but it also revealed to me how important it is to consider the visions and demands of people when aiming to achieve restoration goals.

Although the coronavirus stole a large portion of the year that I would have spent on Stellenbosch campus, I was fortunate enough to have the support of my classmates, supervisors, and lecturers throughout. I feel incredibly honoured to have been chosen to receive the Daniel Booysen Memorial Award and I am so thankful to the Booysen family for investing in conservation. It is a field that truly needs it most.

If we want to continue living on this planet in the state that it is today, I believe that restoring degraded landscapes to some previous, natural condition is the best way we can go about doing this. I hope to take the skills that I have learnt over the last four years and apply it to restoring degraded systems in South Africa, so that one day my children and my children's children can live in harmony with the natural world.

### 2020 Second place, best research project – Nicholas Coertze



I was born and grew up in George in the Garden Route, a unique area of South Africa. My gran, Jane Coertze, a volunteer at the Garden Route Botanical Gardens instilled in me a passion and love for nature from an early age. In Holy Cross Primary Mrs Davis's "Weedbusters club" saw us fighting alien plants on an island in the middle of the Garden Route Dam. This was my first step in environmental activism! I matriculated at York High School where I thrived on outdoor activities like hiking, running, and cycling up in the Outeniqua mountains. The indigenous vegetation in this mountain range is both unique and highly threatened by anthropogenic impacts. We so badly need to conserve the precious indigenous vegetation we have, be it Fynbos or Afrotemperate Forest. We also need to combat the invasive alien plants that threaten our indigenous vegetation. A Disturbance Ecology module in my third year, presented by Prof. Karen Esler and Dr. Alanna Rebelo sparked my interest in the adverse effects of invasive alien plants. I approached them mid-year to be my supervisors, and thankfully they

accepted. I wanted to make my project personal, therefore I proposed a study within the Garden Route Dam Catchment and highlighted the need to combat invasive alien plants in this region. Alanna Rebelo helped me to evolve my ideas and very generously gave me access to, and trained me in, the use of an advanced mapping method she and Dr Petra Holden designed and currently use. This method combines satellite imagery, drone technology and stakeholder engagement to produce a highly accurate invasive alien tree map. I would like to thank the Booysens family for their generosity. It is such a great honour that my project was deemed worthy of this prize. I would definitely like to build on the skills I have learnt and the work I have produced. I must also commend the Conservation Ecology and Entomology Department. They not only care so much for conservation, but they also invest so much time and effort in us as students.

#### 2020 Third place, best research project - Sumarie

#### Rossouw

I was raised in a small table grape farming community, the Hex River Valley in the Western Cape, South Africa. From a young age, my parents took my brother and me on various adventures to see the wildlife of South Africa, Namibia and Botswana. Seeing all the different kinds of animals and plant life, it sparked my interest and passion for nature. Growing up my dad and I would always try and save injured animals and rebuild broken nests. I grew up with the idea to become a veterinarian to save and help animals. However, being a person that cannot stand the sight of deep wounds or the organs in biology class, my dreams to save and help animals was shattered. It was then at one of the opening days of Stellenbosch University that I got a pamphlet that said BSc Conservation Ecology and Entomology. It was like my dream that once got shattered was pieced back together, as this degree will give me the opportunity to



conserve both animals and plants, without the sight of any organs or animals that have to be cut open.

I started my journey at Stellenbosch University as an EDP (Extended Degree Programme) student. It was a very tough first year because as an EDP student we were not allowed to fail any subjects. I worked harder than ever before and kept holding on to my faith (Philippians 4:13 "I can do all things through Christ who strengthens me"). Finally, after a rocky start, I was allowed to do mainstream BSc Conservation Ecology and Entomology.

BSc Conservation Ecology and Entomology taught me about how ecological systems worked, the impact of humans on nature, how vulnerable nature is and that we need to conserve what is left to keep the functionality of nature and for our own survival. I really enjoyed the course and I think that this is one of the most informative and interesting degrees as it covers a wide spectrum of subjects. From learning about ocean creatures, plants, reptiles, mammals, GIS, restoration, entomology, agroeconomics, chemistry, statistical analysis and many more, this degree is literally a toolkit which takes everything in consideration to help conserve nature.

For my final year project, I challenged myself to choose a topic that I was not familiar with. I choose to work with entomopathogenic fungi which are fungi that can be used as a biological control agent against crop pest insects. Coming from a farm I knew how much damage pest insect outbreaks can have on the production yields. By using chemical insecticides to control crop pest outbreaks are not sustainable which have various negative effects on the environment and us as humans. This project showed me that there are sustainable alternatives that can be used instead of chemical insecticides, which does not negatively affect the environment and are therefore critical for conserving nature.

I would like to thank my supervisors Dr. Nomakholwa F. Stokwe, Prof. Antoinette P. Malan and Letodi L. Mathulwe, as well as my parents Andre and Adanda, my brother Etienne and everyone that supported me during this project. A huge thank you to Dr. Natasja Brown for supporting me from my EDP year and thank you to all the lecturers for teaching and sharing us their knowledge. I am honoured and grateful that my project was chosen as the 3<sup>rd</sup> place for the 2020 Daniel Booysen Memorial award. Thank you to the Booysen family for funding this award. I hope to contribute to the conservation field in the future.

### 2019 First place, best research project - Carly Bianca Vlotman



I have always loved animals, and as I grew up, this turned into a love for nature as a whole. This led me to apply for a BSc in Conservation Ecology and Entomology Stellenbosch University combined my two favourite things; nature and science! Although I was not fortunate enough to visit many of the parks and reserves that South Africa has to offer, some of my fondest childhood memories include catching tadpoles Keurboom Park, or picnics at Silvermine where my dad and I would hike up and explore the reserve. Although it has always been a dream of mine to work with

wildlife, the Conservation Ecology programme at Stellenbosch allowed me to discover new and interesting fields, such as entomology, that I never expected to enjoy.

My fourth year has been my favourite year by far. It started off with a bang as I spent two weeks in January collecting data for my fourth year project in Byrne Valley in the KwaZulu-Natal Midlands. Although it was both physically and mentally challenging, this is where I truly discovered my love for fieldwork. For the rest of the year, anytime a project called for fieldwork, I was the first to jump at the opportunity. This year, I have discovered a passion for biodiversity conservation, and I am grateful to the Conservation Department for igniting this passion.

I am extremely grateful to the class of 2019, who are an incredible bunch of people, for making my final year an unforgettable one! I would also like to thank the Booysen family for the award, I am honoured to have received first place this year. I look forward to more exciting adventures as I step into a world of opportunities next year.

### 2019 Second place, best research project –Nicola Vermonti

A love for nature has been instilled in me since I was a little girl. I grew up in the suburbs of Durban and have always loved being outdoors. I was very fortunate to grow up in KZN as I had the opportunity to explore all the natural areas the province has to offer: From the extensive coastline, to the majestic Drakensberg and exciting game and nature reserves. I still cannot tell you which areas I love more. Additionally family camping trips to Game Reserves throughout Southern Africa in my childhood, instilled in me a love for African wildlife and the 'bush'. I always



knew that I wanted to-be involved in conservation and believed in living out the quote: "Be the change you wish to see in the world". My original plan was to study something more logical like accounting and then find a way to involve myself in conservation afterwards, but when I first read the description of the BSc Conservation and Ecology degree, I knew it was the perfect degree for me. Fortunately, this last minute change of mind to follow my interests occurred, and I enrolled in the degree. BSc Conservation and Ecology has enlightened me to all the amazing biodiversity that exists in this world, I have gained insight and interest into the complexities of ecological systems, as well as awareness of the threats nature faces. I really enjoyed developing my Skills in GIS and statistical analysis. Exposure to all the broad subjects over the four years has helped me decided where to focus my interests and goals in life. I now know I want to contribute to protecting natural areas to keep habitat pristine for the wildlife in any way I can. I have developed interests in mitigating human-wildlife conflicts, habitat conservation, community involvement in conservation, environmental education, anything to do with aquatic systems as well as a strong calling to help save highly endangered species.

I found the fourth year project to be an incredible opportunity to undertake actual research. My project focused on studying an ephemeral saltpan which is going to be restored by its landowners, The research helped them understand more about what is happening in this very understudied and endangered habitat type and will hopefully contribute to conserving the site as a protected area one day. I'm really grateful for receiving this special award as, due too old family connections, Daniel was the first person who I had heard about who had undertaken this degree. So to receive his award is incredibly meaningful to me. I just want to thank all of my family and friends who have been with me through the past 4 years. I wouldn't have made it without your support and guidance.

## 2019 Third place, best research project – Chris Tonkin

I was born and raised in Cape Town but grew up as much in nature as I did in the city. Thanks to my parents, who were taking me camping and hiking before I could even walk, I have a deep love for the outdoors. Over the years this passion for nature has only grown. I am now an avid hiker and climber and would prefer to be out in nature then anywhere else. As I grew-up I also developed an interest in biology and learning about how all natural things function. Over the past few years I realised that I want to protect what is left of the natural world. The Conservation Ecology course at Stellenbosch University has provided me with the background knowledge I need.

The past four years of this course have shown me just how intricate nature is, and how much there is still



to learn. This year, for my fourth year project, I explored how Climate Change may influence C4 grasses in the Fynbos biome and whether rising temperatures may cause them to become invasive. In my opinion, Climate Change is one of the greatest threats humanity has ever faced. I want to continue exploring how Climate Change will influence nature and will be doing my masters at Stellenbosch University next year doing just that.

I am incredibly grateful and honoured that my project was awarded the Daniel Booysen Award. This would not have been possible without the help and support of my supervisors, Karen Esler and Guy Midgley.

I will continue to do all I can to study and protect nature so all future generations may have the opportunity to experience it, and love it, as I do.

#### 2018 Best research project – Megan Louise Jooste



I was born in Stellenbosch and had the privilege of growing up in this beautiful town, with Jonkershoek Nature Reserve as my 'playground', going for hikes over the weekends. I also spent most of my school holidays at Cape Infanta, a small seaside village bordering the De Hoop Nature Reserve. This is where I developed my great love for nature and the outdoors: snorkeling, fishing and hiking in the veld, drawing and photographing plants, insects and animals.

I have always dreamt of becoming a nature conservationist and since a young age I was involved as a volunteer in various projects and outreach programs, such as working at the Two Oceans Aquarium and organizing beach clean-ups. The BSc degree in Conservation Ecology at Stellenbosch University has been a perfect choice for me and has further inspired me to pursue a career in science. I am looking forward to apply the knowledge I gained throughout the duration of my studies. I have had great fun doing fieldwork, exploring our country: from the grassy Kwa-Zulu Natal Midlands to the rocky Great Karoo. These experiences, as well as my 4<sup>th</sup> Year Project in freshwater ecology, which investigated the effect of fluctuating pond water levels on aquatic insect diversity across a pondscape, have broadened my fields of interest.

The interesting, dynamic combination of subjects, such as GIS and Soil Science, has always been a high point for me, giving us exposure to a wide variety of disciplines. Entomology has been a definite favourite for me, as I have developed an even greater appreciation for the details of our natural world. I would like to thank my supervisor, Prof. M. J. Samways and co-supervisor, Mr. C. Deacon for their support, advice and guidance throughout my 4<sup>th</sup> Year Project. I feel very privileged to have received the 2018 Daniel Booysen Memorial Award. Thank you to my lecturers, for sharing their knowledge and insight, motivating us to think critically and 'out of the box', as well as my classmates. It has been an unforgettable four years! This course has truly inspired me, as a young scientist, to follow my vision of making the best possible contribution to my country, South Africa!

# 2018 Second place, best research project – Frederique Linnenbank



I grew up in Utrecht, the Netherlands, where I always had a passion for biology. My plan was however to study medicine which I did for four years. However during one of my holidays I went to Cape Town and fell in love with it. I stopped my studies and decided to take a gap year and spent some more time here. During this year I ended up staying in Nature's valley for a while, and there I realised I wanted to study nature in South Africa. I enrolled in Stellenbosch University for Biodiversity and Ecology but I was not accepted, I did get accepted to Viticulture. However during the orientation I found out about the BSc Conservation Ecology which I switched to before the year started. Because of the way I ended up doing this degree I really feel that it was meant to be and I am so grateful for that. I have enjoyed this degree so much, the courses that it offered were amazing and so diverse, and the lecturers were very inspiring and just overall lovely people. It has been amazing meeting many people with similar life views and priorities, both my peers and lecturers. The Conservation Ecology group that I was a part of, was lovely and I enjoyed the fieldtrips we did together every time. I know for a fact that many of these people I will meet again somewhere in the world. I am also very grateful for receiving the second place in the 2018 Daniel Booysen Memorial Award, I never expected it and I really would like to thank the Booysen family for the gift of the award. I really enjoyed doing my thesis and learned a great deal

from it, and I am so happy to hear other people also enjoyed it.

### 2018 Third place, best research project - Amy

Collop

I grew up in a small town called Ocean View in the middle of the Fynbos-rich Cape Peninsula. I was not fortunate enough to be able to visit many scenic places across South Africa, but my backyard was all I needed to realize my appreciation for nature. My friends and I would hike up into the mountains behind our houses, swim in the dams, and run away from the local baboons when they came too close. Trapping tadpoles in the dam not too far from my home became an after-school activity I revelled in. After heavy rains I could not wait to hear the croaking sounds of the frogs, which I now recognise as the mating calls of the Western Leopard Toad. As years went by, the dam began to dissipate, baboon troops had shrunk, toad calls were fewer and the shrubs I once ran through were replaced by trees with funny brown growths on them, which I now know to be the invasive Acacia saligna tree.

My interest in biology has always been a holistic one. Growing up surrounded by nature, I began to realise the beauty of South Africa's biodiversity at a very young age, along with the eminent threats they face. When deciding to apply to university, an academic path in nature



conservation was my first and only option. The Conservation Ecology department at Stellenbosch University has provided me with so many opportunities, which I doubt I would have received elsewhere.

During my second year I started enquiring about holiday work opportunities within the department. Prof. John Terblanche offered me a position as a lab assistant and for that I could not be more thankful. John and his team exposed me to a different side of conservation ecology. I learnt more about agricultural pests and invasive species, and the work done within his department continued to inspire me. I then proceeded to do my 4<sup>th</sup> year project with John, focusing on the invasive harlequin ladybeetle. Biology has now become a tool for me to address several issues that not only affect our biodiversity but also reach social systems. Conserving our rich biodiversity is not only the responsibility of a few, but of us all. I wish to apply the skills which I have learnt and use my passion of conservation ecology to make a valuable difference in the world of others.

I am extremely honoured to have been presented with a Daniel Booysen Memorial Award. Moving forward, the Daniel Booysen Memorial Award has reaffirmed my confidence in my capabilities of pursuing a postgraduate degree. Thank you for recognising my efforts, and I hope to inspire others as Daniel did.

#### 2017 Best research project – Stephen Avidon



As with most of us, I have always felt a deep connection with and an overwhelming appreciation of the natural environment. After finishing high school in KZN - where I was never particularly concerned with my academic achievement, I decided to explore these sentiments by travelling with a bicycle along the eastern side of the African continent. It was here I realized my lifelong journey to further my knowledge in the complexities of the biological world and lend my interpretation of this knowledge wherever it may be helpful. After struggling to get accepted into a tertiary institution for the courses I desired, I enrolled at UNISA and studied zoology and physiology. During this period, I became enthralled by a number of methods used in agriculture, particularly their varying consequences and assistances to the environment. Subsequently, only by permission from the dean of agricultural sciences, I enrolled to study agriculture and conservation at Stellenbosch University. Through the conservation ecology department (448 project) I was given the opportunity to investigate the biotic and abiotic factors that influence the distribution of South Africa's only endemic amphibians family (Ghost frogs) in there headwater habitats of cape fold eco-region, a topic of childhood interest. I am incredibly grateful to have had this opportunity and to the

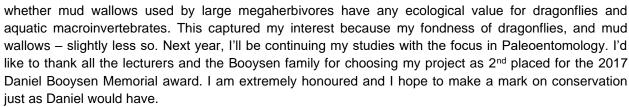
Booysen family for recognising the effort put in. Going forward, I hope to stay involved in the development of this topic by collaborating with other passionate students. I will be moving back to the Eastern Cape in 2018 to work on various conservation activities while investigating traditional agricultural methods in the region.

### 2017 Second place, best research project – Liaam Davids

Growing up in the suburbs of Johannesburg can be difficult sometimes for someone who loves the outdoors. Being so close to skyscrapers and shopping malls, one starts to appreciate nature so much more and from a young age, you'd always find me in the garden looking for "creepy crawlies" and "shongololos". To satisfy my need of being closer to nature, I applied for BSc Conservation Ecology at Stellenbosch University. These past 4 years working within this department has made this little town a home away from home.

I have been so lucky to study this course and be lectured by some of the best academics in the country and have such great classmates, which I know will go on to do great things. I have grown to love every part of this degree even though it had its tough moments. Having studied a broad range of subjects from chemistry to entomology — this course has equipped me with the necessary tools and skills to help both flora & fauna, and to enjoy it while doing so.

In my final year, I dedicated myself to exploring





# 2017 Third place (tie), best research project – Aaron Symondson



I was born in England and moved to South Africa at the age of 4. My love for nature stems all the way back to when I was 3 or 4 years old and my parents would take me for walks in the forests in Surrey. I would closely inspect everything I could lay my hands on during these walks and during bicycle outings in the countryside I used to love all of the farm animals.

Growing up in South Africa, I occasionally visited several of the wonderful national game reserves we have here and frequented our beautiful coastline. This, together with the love I had for my dogs and David Attenborough documentaries, kept my love for the natural world strong. As I got older, the negative impacts humans have on the environment on a daily basis became more and more apparent and so over time my dream of becoming a professional soccer player shifted to wanting to become an environmental activist. It was only when I found an injured penguin on the beach of Keurboomstrand and got it to an animal sanctuary that I decided I wanted to study something "environmental" and when, later that

holiday, a pod of dolphins swam past me and one of them sprayed water at me, I decided it had to be marine biology.

During my gap year I spent ten weeks in Indonesia where I went from never having scuba dived before to becoming a Padi Divemaster. During my time on the island of Gili Trawangan, I took part in a coral reef restoration project called "BioRock" which essentially involves broken coral, a metal structure, cable ties, an anode and a cathode and results in man-made coral reef. The metal structure that we made was in the shape of Spongebob Squarepants because of the board shorts I used to wear, so look out for coral in the shape of Spongebob if you ever find yourself on Gili T.

Fortunately, marine biology didn't work out and instead I got into Stellenbosch University to study Conservation Ecology. I'm happy that I studied this instead because of how much I came to realize that engaging human beings is integral in preserving our natural world, whereas before the course I hoped to never work with humans. Long story short, my fourth-year project ended up being a social study dealing with community acceptance of renewables.

### 2017 Third place (tie), best research project – Esmarie Vivier

I was born in Kuils River, Cape Town in 1995 and finished matric in 2013. My whole life I have been fascinated with nature and always wanted to explore and learn more about wildlife. My great passion in life is animals and I have owned every pet that you could think of in the past 22 years! My family has taken me to the most incredible nature reserves during my childhood. My dream is to one day work as a conservationist along the coastline of Knysna. I want to contribute to the conservation of all the beautiful and extraordinary animals and plants of South Africa. I have been privileged to grow up in an area rich in biodiversity and that made me realise that we have to do everything we can to protect our natural areas. In high school I realized that I definitely wanted to study something related to nature conservation and in 2014, I started with my BSc in Conservation Ecology. I have learned so much over the past four years and I think everyone should take the course to change their perspective on life. I realise now how important it is to conserve the little that we have left.



My favourite was all the field excursions during the course where we visited the most remarkable places. I am interested in conservation ecology, sustainable agriculture and restoration ecology and hope to one day work in one of these fields. My 4<sup>th</sup> year project was about parasite diversity on small mammals where I looked at the role of host-relatedness. It took a lot of time and effort, but I learned so much in the process and am eternally thankful for all the help from my supervisor, Professor Sonja Matthee, as well as everyone else that helped me during my project. I am very grateful for receiving the Daniel Booysen memorial award for the 3<sup>rd</sup> best 4<sup>th</sup> year project and hope to one day contribute to the conservation of South Africa's diverse fauna and flora.

#### 2016 Best research project -Alistair Galloway

I was born in Harare, Zimbabwe in 1994 and then moved to South Africa where I lived in a number of towns and cities before finally settling in Somerset West. For as long as I can remember I have loved being in nature and learning about the incredible diversity of life that exists on this planet. I was very fortunate to have visited numerous South African national parks and nature reserves with my family throughout my childhood and teenage years. From these experiences and, after much book reading about the natural world and the conservationists protecting it, I was convinced that I was going to become a game ranger one day. Being an active person I took every opportunity to be outside, whether it be to play sport, hike or just watch nature in action. It was during my time at Parel Vallei High School that I decided to follow my heart and enrol for the BSc in Conservation Ecology degree at Stellenbosch University. It has been a fascinating and enriching 4 years of my life as I learnt about the



daunting realities the natural world is facing in South Africa and the world over. I consider myself very fortunate to have been a part of a very special Conservation Ecology year group and I know that each individual is going to achieve great things as they continue to follow their life's callings. My interest has peaked in the fields of restoration ecology, invasion biology, conservation ecology and sustainable agriculture, and I hope to get involved in these fields during my career in conservation. My 4<sup>th</sup> year project, which investigated the impacts of pine plantations on fynbos above-ground vegetation and soil seed bank composition, was a tough but rewarding experience as I learnt a lot about my topic and about myself in the process. I am extremely thankful to have had Prof. Karen Esler, Dr. Patricia Holmes and Dr. Mirijam Gaertner as my supervisors as they guided and supported me throughout the year. I feel incredibly blessed to have received the 2016 Daniel Booysen Memorial Award and I hope to follow Daniel's example going forward in both my postgraduate studies and career as I strive towards a brighter conservation future in South Africa, Africa and beyond.

### 2016 Second place, best research project – Sinead O'Toole

I grew up in a small mining town in the North West. If you had asked me as a kid what colour grass is, I would have told you brown. As I grew up, I began to wonder if the grass was (literally) greener on the other side. Wanderlust took hold of me as a teen, and I became fixated with travelling. When the opportunity to travel to New Zealand arose after high school, I grabbed it with both hands, and spent two years exploring a country that had natural beauty on a scale like I had never experienced before. It was there my love for the outdoors really developed. When I returned to South Africa, I enrolled into the conservation program at Stellenbosch not really knowing what to expect. Now, as my journey here draws to a close, I can say



my experience in this course has completely blown me away. The ConsEnt department houses some of the most brilliant minds in the field. The lecturers love what they do, and they feed that passion into their students. I had the privilege of studying amongst a remarkable class, who I have no doubt will go on to do amazing things in conservation. It was a great honor to be awarded 2<sup>nd</sup> place for best ConsEnt project considering the high standard set by my peers. Thank you to the Boosyen family for recognising my efforts, and thank you to ConsEnt Department and the class of 2016 for helping and inspiring me every step of the way. I'm off to Australia for the next 3 months for a research internship thanks to Prof. Terblanche in the Entomology Department. After my time down under, the world is my oyster mate!

### 2016 Third place, best research project – Alheit du Toit

I was born in Pretoria and at young age moved to George. Growing up I always had a fondness for nature and enjoyed the outdoors. My passion for the environment and the animals all started with my grandfather and my parents that took me most weeks to the zoo to visit the animals and to learn about them. From then on my passion for the environment and the animals just increased. I started as a young school boy with a passion for nature and the environment; I was told at my school that I would never go study, though this did not stop me from following my dreams. Finishing school I was accepted for the Conservation Ecology course in Stellenbosch and after four years I now proudly say I finished my degree with a distinction and an award of having one of the best Conservation Ecology projects. My heart and passion has grown so much after



the four years in this course and becoming more in love with the environment. The conservation ecology course has been an eye-opener to the various aspects within the world of conservation. It has been an unforgettable experience. I strive to help make positive changes in my field of study and to become a better Conservationist and to help increase and promote Conservation in South Africa.

I am very grateful for the opportunity to study this degree with a bunch of incredible people, who have become like a family to me. I hope to start my own research consultancy business and to incorporate skills such as Geographic Information Technology and other conservation skills obtained during these four years.

#### **2015** Best research project – Courtney Morris



Attending La Rochelle Girls' High School in Paarl, it was only inevitable that my education would continue in Stellenbosch. Despite my passion for nature from an early age,
Occupational Therapy was in fact my dream – as much of life's fulfilment for me comes out of caring for others. In all honesty, I had not even heard of "Conservation Ecology" until the time came to fill in my second choice of

study on my university application. My parents encouraged me to study a BSc and after five minutes of the fortuitous game of 'eeny-meeny-miny-mo', my fate became bound up with sciences for the foreseeable future. This degree has certainly not been a Sunday stroll for me, after being diagnosed with medical conditions since my second year. Graciously, the amazing memories and experiences in this course have encouraged me to push forward. The people I have met throughout the past few years have deeply humbled me and I am lucky to call each classmate a friend. The fourth year class was such a lekker bunch of exceptionally talented, hilarious and caring students and I am certainly excited to see where our paths will lead us ten years from now.

I consider myself incredibly blessed to have had Alanna Rebelo and Professor Karen Esler as my supervisors for a fourth year project that concentrated on the ecosystem service provision of palmiet wetlands within the country. Alanna was driven and inspiring. Through her guidance I put everything into my project — which was both exceptionally challenging and in the end, immensely rewarding. Through her endless care and guidance, I am able to honour the memory of a passionate and gifted conservationist, Daniel Booysen. The world would certainly be a better place with more people like him, and even if my future does not take me down the path of conservation, I hope that I would be able to carry with me the same ethos that he embodies.

# 2015 Second place, best research project – Monique James

I was born in Port Elizabeth, but have been living in Cape Town for the past 13 years. Growing



up I always had a fondness for nature and enjoyed the outdoors — always climbing in trees and running after butterflies with a home-made net. Near the end of high school I still had no set plan on what I wanted to do with my life, but I knew that I wanted to study something that had to do with nature. When I heard about the Conservation Ecology program at Stellenbosch it sounded like the perfect direction to go. These past four years have

been exceptional. Being able to study a fun, interesting and exciting course like this in a place surrounded by beauty is a blessing for any young student!

Doing the Entomology module for the first semester of my fourth year has been one of the highlights. I have developed a great fascination for insects – they are small, yet so intricate, beautiful and simply amazing creatures! My final year project allowed me to explore all the nature reserves in the city and gain an even greater appreciation for insects, mainly beetles. It was exciting to be able to do fieldwork out in beautiful reserves and also interact with students and staff. This degree has indeed highlighted the great importance of people and their role in the environment, a role that simply cannot be ignored.

The Entomology module provided an in-depth introduction into insect taxonomy and physiology. I thoroughly enjoyed this and it lead to inquiries about doing a Masters in an insect-related field. A wonderful opportunity was available for me and next year I will indeed be continuing my studies with a Masters in Entomology. My Masters project will specifically focus on the biological control of fruit flies using entomopathogenic nematodes, fungi as well as parasitic wasps. I am excited to do this MSc which is strongly linked to conservation and sustainability and is thus in line with my interests. The use of pesticides is a major threat to conservation in the Western Cape in particular, as it is a biodiversity hotspot. I believe that finding alternatives to synthetic chemicals, will lead to more environmentally-friendly methods for managing pests, without compromising on fruit production. I am therefore excited to be given the opportunity to contribute to this important field of science. My hope for the future is to be an exceptional conservationist and make a difference in the only world we have!

### 2015 Third place, best research project – Williem Briers-Louw



I was born in Somerset West and grew up in the Strand, a beach-town in the Western Cape. As a child I spent hours on rocky shores catching "klipvissies" with a hand-line and a net, while my dad went diving for crayfish. My initial interest in animals stemmed from those NatGeo documentaries on big cats, snakes, and crocs by non-other than the late Steve Irwin. However, much of my holidays were spent in the veld on a Karoo game farm, and there my love

for wildlife started. I decided to follow my passion for the natural environment, studying a BSc in Conservation Ecology in 2012 at the University of Stellenbosch. During the holidays and weekends, I have been volunteering at Cheetah Outreach, Somerset West. I have been working there the past three years, gaining much experience in working with animals and people. Being in close contact with cheetahs inspired me to take on a research project focusing on the Cape leopard for my University studies.

The conservation ecology course has been an eye-opener to the various aspects within the world of conservation. It has been an unforgettable experience, especially being involved with the Cape Leopard Trust for my final-year project. I am very grateful for the opportunity to study a degree in conservation with a bunch of incredible people, who have become like family to me. I hope to continue my studies, doing an MSc on large predators in the Majete Wildlife Reserve, Malawi. Ultimately I would like to manage a game reserve somewhere in Africa or work for a conservation organisation that focuses on wildlife research.

#### 2015 Best management plan – Paul Jordaan

I have been a living in Stellenbosch my whole life. We used to stay in Jonkershoek until I was 3 years old, where my mother worked for CapeNature, and after that moving into town. If I look back at my time in this town, growing up with breathtaking mountain views, and its close proximity to the ocean, my love for nature and the outdoors definitely started during the early days of my life.

Before I knew it I had the privilege to study in the town which I grew up in, and which I love so dearly. I found myself studying an extra year, facing some of the curve balls of being a student who often loved the outdoors more than my books. But here I found the drive to work hard.



In the final year of my Conservation Ecology degree I saw the opportunity to do my project on a piece of this country that also stole my heart. I proposed to do my own project which was a management plan for Groot Dam Private Nature Reserve, located in the Blombos conservancy on the south eastern coast of South Africa, between the towns of Jongensfontein and Witsand. What made this piece of land special is that in 1966 my grandfather, JG Steytler, bought the property. Since then the Groot Dam has been home for our extended family. The property was proclaimed as a private nature reserve in 1992, and this could

only be done as a result of the great attitude of our family members towards biodiversity conservation, over the years. To grow up in an environment like this was inspiring, and I finally had the chance to do my part in contributing to the conservation efforts of our family. This project is dedicated to my grandfather who made Groot Dam Private Nature Reserve the special place it is today.

It was a privilege to be part of this project, and an incredible honour to be awarded the Daniel Booysen Award for best management plan for 2015.

Next year I will be doing my Master's degree in Sustainable Agriculture and I am extremely excited to use what I've learnt in the field of conservation and combine it with the new challenge of sustainability across the world.

#### 2014 Best research project – Matthew Wijers



I was born in Zimbabwe and grew up on the outskirts of the capital, Harare. My parents have always enjoyed the bush and so our home is surrounded by a variety of wildlife, with bush pigs, snakes and baboons making frequent appearances in our garden and bushbabies deciding to set up a base in our roof where they have lived for many years. Consequently, I developed an early appreciation for wild animals and really enjoyed family trips to national parks and other wildlife areas. After completing high school at St. Johns College in Harare, I was offered the

opportunity to join the Hwange Lion Research Project in Hwange National Park in the western corner of Zimbabwe. I spent a year volunteering for the project and had some amazing wildlife experiences while also learning a lot about lion ecology and the threats that they currently face. At this point I was certain that a career in wildlife ecology was what I wanted to pursue despite my career aptitude test suggesting I go for civil engineering.

The conservation ecology program has been challenging but really enjoyable. It has broadened my knowledge and appreciation for the less charismatic species while also teaching me about the importance of including people in conservation, which, previously, was a word I only associated with nature. I am very lucky to have been part of a great class of people from all over the world, each with their own opinions on conservation and from whom I have also learnt a great deal. Next year, I hope to do an MSc on large carnivores in Zimbabwe and ultimately would like to work my way up to managing a game reserve or conservation organization where I can apply everything I've learnt.

#### 2014 Second place, best research project - Alisa

#### Volkmann

I have had the great privilege to grow up next to the beautiful, cold and misty Atlantic Ocean in the quaint town of Swakopmund in Namibia. Already as a child I spent a lot of time exploring the marine life within the rock pools and swimming, body boarding and later also snorkeling in front of our house. My parents also took my siblings and I to go camping on weekends in the desert or further inland during the holidays. We took several trips to the Etosha National Park and also to the Kunene and Caprivi Regions. So without realizing it at the time, this is how I learned to love and appreciate nature. Now I am very thankful to my parents for exposing us to nature from such an early age. In high school I learned more and more about the great environmental problems that our Earth was facing and recognized the dire need for raising



environmental awareness, the shift to an environmentally-friendly lifestyle and the importance of nature conservation. However, studying in the environmental field never occurred to me until matric. I always wanted to study art, but when the time came to send in my university application, I realized that I was not excited about the graphic design course. I have always loved art and still do, but I felt that by making it my profession, I would not be doing something that would "make a difference". When someone then asked whether I have ever thought of doing nature conservation, I said: "No, but actually that sounds like just the right direction for me!"

And indeed. I enjoyed this course tremendously and feel that I gained a good general knowledge about many conservation related topics. I especially enjoyed learning about landscape ecology, ecosystem services, socioecological systems, restoration and insect conservation. The lecturers were great: down-to-earth, approachable and inspirational. I also think I was very lucky to end up having so many wonderful, like-minded and crazy classmates, many of which I hope will remain my friends for life! Being awarded a Daniel Booysen Award was a great honour and hence also the highlight of the course for me. I am very passionate about marine conservation and therefore really enjoyed my 4th year project, especially since I felt that I was actually and finally contributing to conservation in some way. I look forward to continue and expand on this project next year in my spare time with my supervisor and eventually aim to have the work published. I will also continue with my studies next year, but in a slightly different direction. I am thrilled to have now been accepted at the Sustainability Institute for a postgraduate diploma in sustainable development and cannot wait to start there! I want to become involved in urban restoration/greening, urban sustainable/organic agriculture and landscape planning/architecture. I hope to also incorporate my love for art, writing and film-making into my work one day to raise environmental awareness and become involved in environmental education within urban areas (rescuing the extinction of experience). Robert Goodland said: "The world will in the end become sustainable, one way or the other. We can select the timing and nature of that transition and the levels of sustainability to be sought, or we can let depletion and pollution dictate the abruptness of the final, inevitable transition. The former will be painful; the latter deadly." and I want to be actively involved in making this world sustainable as soon as possible! I want to be the change I want to see in the world!

## 2014 Third place, best research project – Liesel Kets



My name is Liesel. I come from a family of teachers, a family of people who have dedicated their lives to working with people. Me, on the other hand, I have always felt most comfortable surrounded by trees and animals. That's where I'm really at home. I have had the privilege to have had, with both parents being teachers, shared my holidays with my wonderful family. From before I could even

walk my parents took my sister and I camping over summer holidays. My favourite memories come from caravan parks along the coast of this beautiful country. From an early age I would disappear for most of the day, collecting crabs, klipvissies and funky-looking starfish from the rock pools, only returning for food and when the sun would set. Sometimes I would return with some kind of strange creature, like a snake that I once proudly brought back to the campsite, much to my mother's horror. Growing up I became obsessed with birds and simultaneously developed a paralyzing fear of spiders. Ever since I reared my first abandoned baby dove I have dreamed of rehabilitating animals in need, making a difference to those harmed by people. My best friend in life, Bob, is a parakeet that I received for my 9th birthday. He is very loud, occasionally grumpy and truly wonderful. Ironically I somehow ended up focusing on spiders for my 4<sup>th</sup> year project. The project relating to birds of prey that I had my heart set on fell through and I suddenly found myself committing to spiders. My parents laughed when I told them what I would be directing my attention towards for the coming year. I fell in love with spiders and I fell in love with linking agricultural landscape mosaics to conservation. I have never been the ideal student, but for the first time I found myself being a 'nerd' and choosing to focus on research above everything else. At this point in my life, scientific research feels like my niche, and for that reason I have chosen to continue my studies next year, focusing on agricultural landscape conservation. This degree has taught me more than I could have ever imagined. I have always felt confident about having made the correct decision for my future, purely because I could never possibly see myself being happy doing anything else. I am sincerely looking forward to where this adventure leads me.

#### 2014 Best management plan – Helene Booyens



The ConsEcol final year project gives students the opportunity to become experts in a chosen field. Projects from our cohort ranged from fynbos and fires to rhinos and elephant shrews. My final year project took place on Klapmutskop, just outside Stellenbosch. I've always enjoyed hiking, so when picking projects back in 2013 the prospect of fieldwork in the outdoors rather than in the lab really appealed to me. There were plenty of learning curves (there's even a photograph of me obliviously posing with a blister bush) but although I spent half the summer bundu bashing and leopard crawling through all things

poisonous and prickly, I definitely enjoyed the experience and learned a lot. The past four years as a ConsEcol student have been very interesting, and I appreciate the lengths the lecturers went to in order to expose us to a wide variety of subjects: we regularly had fieldtrips to game reserves, the coast, vineyards, laboratories, and, of course, Robben Island. Next year I'm off to study journalism, but I definitely intend to incorporate all I've learned at this faculty.

#### 2013 Best management plan - Bianca Pronk

Ever since I can remember, I have been fascinated and enchanted with nature, especially animals. I did not grow up on a farm and neither my mum nor dad is the outdoors type. Nonetheless, both of them love nature and animals. I can therefore say that some of my

inspiration to work with animals and in nature comes from them. I would definitely not be where I am without them, their support, unconditional love and trust in my abilities.

I grew up in a house that always had man's best friend.... dogs. Animals have always been part of my life; hamsters, birds, rabbits, mice, rats, cats and dogs. Growing up, my best friends were our dogs, and until this day my best friend is



my dog named Smokey. I was born in East London in the Eastern Cape, and lived there for 22 years. We then moved to Cape Town. I have always known that my passion lied with animals and that I would like to be as close to nature as possible. I always dreamt of and still would like to contribute a positive difference to the world.

After matriculating from Grens High School, we gained information regarding courses that will bring me closer to my dreams. We looked at Marine Biology at UCT, a course at NMMU and Saasveld. The University of Stellenbosch was not my first choice in the beginning, but they offered me what I had a passion and interest for, and I seized the opportunity. I enrolled at the University of Stellenbosch for BSc Conservation Ecology in 2010 and could not be any more grateful for finding this course, as it has brought me closer to my hopes and dreams. Even though I still do not know where I will end up, I am a step closer to my dreams.

I do know however, that I would like to end up somewhere in Alaska, Russia, Holland or any Island, where I can contribute to conservation. I do want to work with endangered carnivores and mammals, especially the wolves, polar bears, wild dogs, leopards, snow leopards and tigers, but wherever I land up I know I will be happy because I will be doing what I love and what I am passionate about. This course has opened my eyes towards conservation and has given me hope in that one day I could also contribute towards conserving as much as possible of Mother Nature.

### 2013 Runner up to best management plan – Jessica Wilmont

I've was lucky enough to always know that I wanted to work in nature. I used to picture myself driving a minivan, picking up stray animals to provide them with a better life. My dad's job always permitted us to live outside of towns surrounded by nature so conserving our heritage was ignited from an early age. My love for nature has shaped me into the person I am today and I can proudly say I'm not called Eco-Jess for nothing. My passion for the environment is also strongly based on my faith which has given me the drive needed to reach my dream. I'm a firm believer that everyone can make a difference in the environment, no matter how small the act.

Once I heard about this course I knew that was what I wanted to study. I still remember going to the University's open day specifically to look for the Conservation stand which no other students were particularly interested in. Although the first year of the course was extremely general and I felt slightly lost, in the end after the never-ending reports and group tasks I'm ready to make a difference in the conservation field. The incredible friends I have made through-out my time at Stellenbosch definitely helped me get where I am today. Even though we all had different views on conservation, our class had a special bond and I loved the fact that we all knew each other. Sometimes it felt like we were back at school.

The next chapter in my story awaits in Namibia where I'll be an intern at a wildlife rehabilitation centre. I hope to one day specialise in that field where I'll be able to grant animals a second chance to life in the wild. I can't wait to get in the field and actively conserve our beautiful wildlife.

"Nature is not a place to visit. It is home." - Gary Snyder

#### 2013 Best research project - Corlé Jansen

My transformation into a conservationist has been one of many adventures and ups and downs. I'm not what you would consider a 'people-person' and I have always felt a deeper connection with animals and nature than with people. Growing up I've always wanted to be a vet – until I realised that you needed good grades in high school to make the cut. Let's just say that studying has never been my strong point. I'm lucky that my parents



love nature and since our road trip to the Kruger National Park in 1999 trips to Namibia, Kgalagadi Transfrontier Park and the Karoo became a yearly ritual in our house. After our first trip to Namibia in 2004 I fell in love with photography – it was a way for me to finally express myself and the fact that you could capture the beauty of nature in one shot to keep forever had me fascinated. I decided photography would be the best route – I will only have to pass everything at school (except for Biology – this was the only subject which I cared enough about to actually work hard in) and I can escape to the wilderness to just take photographs and be. I graduated from Parel Vallei High School in 2007 and enrolled at City Varsity School of Media and Creative Arts for a 2-year diploma in Professional Photography. I loved it here and for a short while the glamour corrupted me and I dreamed of working as a portrait photographer in London or New York. However, nearing the end of my 2 years here, an amazing September holiday to Kgalagadi Transfrontier Park opened my eyes to where my heart truly lies: nature.

In 2010 I enrolled as a full-time student at Stellenbosch University in Conservation Ecology. I've always watched nature documentaries and I later developed a preference for shows involving leopards. They became my favorite animal and as I grew older my obsession grew. Visiting the Karoo from a small age, I could never understand the hatred so many farmers had in response to such amazing animals. I knew that through conservation I would be able to play a role in the persistence of these beautiful creatures and help both farmer and leopard. I did my fourth year project through the Cape Leopard Trust setting up camera traps in the Cederberg to determine leopard densities in this region. I'll be continuing my work with the CLT for my MSc next year where I will be working in Namaqualand assessing the diet of carnivores in this region. I hope to continue working in human-wildlife conflict throughout the world and understanding the dynamic between man and beast. My four years of undergrad have been amazing and I wouldn't give it up for anything in the world. I have finally found something I'm passionate about which encourages me to work hard and give it my all. I also met like-minded people here, people that are as crazy as me about wide open spaces. I've finally found my niche.

#### Runner up to best research project - Gabi Kietzka

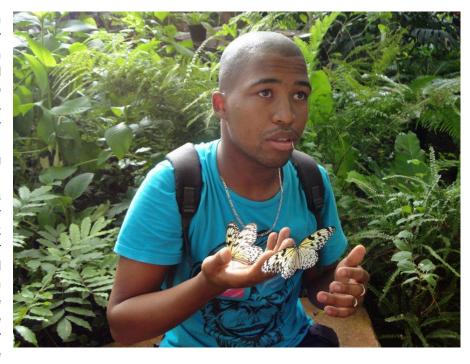
I was born and raised in the town of Pietermaritzburg in KwaZulu-Natal. Both of parents studied at Stellenbosch University and were involved in agricultural and forestry research. Growing up in a home surrounded by people who loved nature and chose career paths associated with it, was without a doubt what sparked my passion for conservation from a young age. Throughout my school career at Epworth Independent School For Girls, I upheld my reputation as the official school "tree hugger" and was an active member and eventually head of the school's environmental society, Earth Active. During



this time my love and interest in the environment flourished. In 2009 I led a team of Epworth girls to the Nationals of the WESSA-Mondi Environmental Quiz and it was at this point in my life that I realized my purpose was to help conserve the biodiversity of our world. I have always believed that in order to achieve this I must aim to live by and inspire others to "be the change you want to see in the world". My years spent at Stellenbosch University have been the best years of my life and the knowledge I have gained has further motivated me to strive to make a difference. Having now completed a BSc in Conservation Ecology and fallen in love with the beautiful town of Stellenbosch and the Western Cape, I have decided to further my studies in 2014. My final undergraduate research project made me more aware of the potential and important uses of dragonflies as indicators of ecosystem health, which I aim to apply in the Cape Winelands for my post graduate studies.

#### 2012 Award winner 1 (joint award): Roderick Juba

have alwavs interested in the finer details of nature. I was born in a small neighborhood outside Humansdorp in the Eastern Cape. Here I was exposed to not only raw nature, but also realized the importance of a working relationship between man and his surroundings. As a community mostly subsistence livestock farmers it was important for us to maintain natural veld the best condition possible to enhance growth. This made realize that the healthier environment.



greater the welfare of the people. I then set out to become an ecologist, which was a hard decision really, as my parents insisted I become a medical doctor. Judging by my performance in the microbiology lab, I definitely made the right decision by not taking that route. I never really aspired to be anything other than an ecologist, except for my week-long dream of becoming a sound engineer. The reason I didn't pursue this dream was the sudden establishment of a hiking club at my school, which I immediately joined and rekindled my passion for nature.

I heard about the Conservation Ecology course at Stellenbosch and in no time had my Life Orientation teacher making arrangements for me to get everything I need. At the time I also applied for some funky course at NMMU, but I was never going to be interested in any other university as long as Stellenbosch would take me. In retrospect, if I had known it was going to be this hard I would have thought twice about applying. My four years as an undergraduate have been bumpy to say the least; mostly fighting through my first two years to make HEMIS (credits to stay in res). During this time I realized I am really terrible at exams and started focusing on my writing skills. This was mostly inspired by a line from one of my favorite rappers, "a goal is just a dream with a deadline". I thus set out to reach my goal which was to become an exceptional writer. It was only in my fourth year that I finally saw the fruits of my hard work, my best academic year on campus.

I started working part-time in the conservation ecology department in 2009 and in doing so, greatly enhanced my understanding of the scope of the field. It also helped me to become more organized in the lab, field, and in handling data. Needless to say, I would like to work in a similar environment when I have finished my studies. I am currently enrolled for an MSc in Conservation Ecology and would like to leave this place with a PhD.

#### 2012 Award winner 2 (Joint award): Karlien Malan



My first encounter with nature was at the age of 2 weeks; my parents took me as a newborn to the Kruger National Park. I believe that my love for nature was not just awakened in the early stages of my life but that I inherited from grandparents and mγ parents. My love for nature is deep routed and is part of my identity. So when the time came to choose a study area, there was no question about it, conservation ecology was my calling. The four year course learned me much about

environment, how to make difficult decisions and most importantly how to think critically. In the final year of the conservation course you had to choose a project to do. When I perused the list of projects that were available my heart sank, there was absolutely nothing that interested me. So I decided that I would make up my own project. I still remember the day I decided on a topic; my friends and I sat on the grass of the rooi-plein, I told them that I really liked wild dogs and then we brainstormed what I could do. I decided to do a project on preventing and managing rabies in African wild dogs. My supervisor gave me contact details of a student who had done a project on wild dogs the previous year and he helped me get access to Thanda Private Game Reserve in KZN. I filled a temporary position at the game farm as endangered species monitor and helped monitor the wild dog pack on the reserve. The first day we encountered the wild dog pack I realized that it is the first time I have seen them in the wild and not on a TV screen or in a magazine, the moment was overwhelming and one I will never forget! They are magnificent creatures and I hope that I contributed a little to their survival. Currently I am enrolled as a masters student at Stellenbosch University. My project is on parasitic mites that occur on rodents in South Africa. It is really exciting to work on parasites, it's like a whole miniature ecosystem that you discover when examining the host organism. My study will hopefully shed some light on the scant available knowledge on the ecology and diversity of chigger mites of South Africa.

#### 2011 Award winner: Sarah Chippendale



I was born on the 25<sup>th</sup> April in Mowbray Hospital in Cape Town: a day earlier than expected. In retrospect, this early arrival makes sense: I am usually restless and easily feel claustrophobic, hence preferring to play outdoors. I grew up in Cape Town, where guineafowl and hadida were considered the local wildlife. As a child I was not allowed my own pet, so I had to improvise by using insects from our garden: I would name them, give them swimming lessons in the basin (they kept failing, I kept trying) and take them to school in a matchbox (oxygen depletion didn't cross my mind). Not quite the beginnings of a conservationist. However, I was lucky enough to be able to escape the burglar bars, electric fencing and high walls of the city at our holiday house in Langebaan - and later in Plettenberg Bay - where I was able to explore the vegetation, tidal pools, beaches and estuary without hindrance. After matriculating from Herschel Girl's School in 2007, I began my degree in Conservation Ecology at

Stellenbosch University in 2008, where the combination of practical experience and scientific discipline appealed to me. I greatly enjoyed the four years spent studying at Stellenbosch and the degree and surroundings have not only stimulated by passion for the environment, but also provided me with a strong foundation of skills and knowledge needed for future endeavors. However, my attempts at conservation are still very suspect: goldfish last a maximum of 2 weeks in my care and squirrels tend to hurl themselves at my car. Therefore, as opposed to concentrating my efforts on single species conservation, I am more attracted to understanding how whole ecosystems function, and how all the different puzzle pieces come together so efficiently and resourcefully: I am a great believer in Lovelock's *Gaia* concept. I am currently living in Edinburgh and attending part-time courses through the University of Edinburgh in geology, art, architecture and photography. In 2012 I hope to expose myself to many different forms of conservation through volunteer work/internships, to gain a more worldly perspective, to perfect my fly-fishing skills and catch a wild salmon.