

CAREERS IN GEOGRAPHY AND ENVIRONMENTAL SCIENCE



THE UNIVERSITY
OF AUCKLAND

NEW ZEALAND

Te Whare Wānanga o Tamaki Makaurau

To view current positions that our geography and environmental science graduates can apply for, visit: www.sges.auckland.ac.nz/the_school/jobs.shtm

MALCOLM NEAL Specialist Geography Teacher

Malcolm Neal left university wanting to pass on his enjoyment for geography to students coming through the secondary education system. Graduating with a BA and then an MA, Malcolm is now a specialist classroom teacher of geography at senior levels and a social science's teacher at junior levels. "I went straight into teaching as I felt I wanted to share the skills I had learnt in geography, and fresh out of tertiary study, it was offering good pay", says Malcolm.

Malcolm has been head of Year 12 geography with responsibilities including NCEA implementation and is also the school's Geographic Information Systems specialist. With both his geography degrees purposely being kept broad, Malcolm finds that his wide understanding and skill base in human and physical geography, along with his knowledge of historical events, helps him to teach a wide range of key geography concepts to his students. In addition, the classroom environment requires him to constantly call on his strong social skills along with his competencies in oral and written communication. Malcolm's advice to geography graduates, particularly those wanting to enter the teaching profession, "be as broad and adaptable as possible and importantly be prepared to consider all options."

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MALCOLM NEAL
Specialist Geography Teacher
BA, MA (Geography)

ANDREW DENNISON GIS Analyst / Programmer

Andrew Dennison graduated with a BSc degree in Geography, specialising in GIS. While the GIS courses in his degree gave him an excellent grounding in theoretical and practical GIS, Andrew soon realised he would be particularly sought after with a GIS/Information Technology mix, and so he also completed a Commerce Degree in Management Systems and Information Systems (MSIS).

Seeking a career in the GIS industry in New Zealand, Andrew found that his skills initially made him ideally suited for GIS analyst and administrator positions. These included a six-month short-term contract as a GIS Assistant, performing maintenance and updating the road centreline database and interpreting aerial photography for

Terralink's eMap division, and working as a Spatial Referencing Specialist for four years with Yellow Pages. Until recently Andrew was employed as a GIS Analyst / Programmer at Intergraph NZ, where he provided first level support to customers for desktop and web-mapping software. He is now seeking opportunities "over the ditch" in Australia where he believes his qualifications and experience will enable him to move into a management position in the GIS industry.

Andrew recommends that graduates entering the GIS / IT industry should try and make as many contacts as possible in this specialist field, as the industry is small in New Zealand and many of the jobs are typically filled by word of mouth. His decision however to move overseas, indicates the international career opportunities for students specialising in this dynamic field of geography.

ROBERT BRODNAX
Programme Manager
Environment Waikato

Robert Brodnax combined geology and geography in both his BSc and MSc researching coastal cliff erosion around the Waitemata Harbour for his Masters thesis. The complementary subjects of geology and geography, has led Robert to his current position as Programme Manager for Regional Plan Development at Environment Waikato. Here Robert is responsible for managing the team that prepares Environment Waikato's Regional Plans for land, water, air and geothermal issues and advocates on these issues to central and local government. In addition Robert's team is responsible for policy development and advocacy on behalf of Council for waste, contaminated land and hazardous waste issues.

After leaving University Robert worked in a variety of positions including work as a research assistant, a project manager for region-wide agrichemicals collection, a regional waste officer and an environmental planner. Robert found that he frequently needed to apply his strong grounding in the basic scientific principles of hydrology, ground water processes, engineering geology and chemistry. This theoretical understanding enabled Robert to easily adapt to the variety of issues that confronted him with little need to come to grips with the science.

Apart from these technical skills Robert has frequently used his research and writing skills and has been able to act as an effective translator of technical issues to a lay audience. Employers value graduates who have a good understanding of the legal and legislative processes and are knowledgeable about the need for community consultation. "Geography bridges the gap between the natural and social sciences which is critical for policy analysis and understanding of community processes," says Robert. For students who may wish to do postgraduate work, Robert recommends that they select projects that are applied and are relevant to the area that they would like to enter.



NIGEL BIRSE
Solid Waste Manager

Nigel Birse graduated from SGES with a BSc in Geography and a specialisation in Environmental Science. After undertaking a postgraduate diploma in teaching one year later, Nigel moved into the education sector as a secondary teacher, but after two years decided this was not the career for him. He is now as far removed from teaching as one could imagine, working as a Solid Waste Manager for the Franklin District Council. In this role he is responsible for the management of all refuse and recycle collections and contracts, remediation of closed landfills, graffiti cleaning, hazardous waste collection days, inorganic refuse collections, transfer stations, and just to remind him of his teaching days...waste education. Before taking up this position, Nigel was given a short-term contract with the Council to create the land hazard register. This temporary position gave him the ever important "foot in the door," assisting him in being appointed to his current managerial position. Apart from his qualification Nigel has found that his employer looks for people with good local knowledge, a mature outlook and excellent customer service skills.

Nigel recommends that graduates should never turn down the chance to do short term work, as this provides an excellent opportunity to experience a company, find the "key" people – (outside HR) and gain the very important – foot in the door. If at all possible Nigel recommends that university students try and gain a holiday job in an area that they might consider entering after graduating.



NIGEL BIRSE
 Solid Waste Manager
 BSc (Geography)

KATHLEEN BUNTING
Environmental Planner
Sydney

Kathleen Bunting is an Environmental Planner at a private consulting firm in Sydney. Her work involves project management and preparation of major environmental impact assessments for their mainly government clients in the transport sector.

Kathleen completed a BSc majoring in Geography and then an MSc specialising in physical geography. After graduating she worked as a Coastal Resources Officer at the Auckland Regional Council. After one year she left to go on her OE carrying out a number of administrative positions during her 18 months in the UK. She returned to New Zealand to work as an Environmental Planning Consultant in Auckland for two and half years before moving to Sydney, where she has worked for the past three years as an Environmental Planner.

The skills Kathleen learnt in both her degrees and particularly in her Masters have been able to be easily applied to all the jobs she has held. In particular the environmental science, geography, planning and resource management skills have greatly assisted her. Kathleen has found that employees seek graduates that have people skills, as well as skills in project management, time management and communication. Her competency in written communication has led her to be appointed as the company's in-house editor, which involves editing her colleagues' technical reports.

Kathleen recommends that graduates take the initiative themselves and approach companies for employment. "The best jobs I have had, I approached the company myself," says Kathleen, "by ringing up the HR departments, telling them I was interested in working for them and then sending them my CV". She found that many private consultancies are often looking for people but do not go through the same external advertising process like government departments and councils. While private consultancy work can be a little stressful at times and the hours often long, Kathleen finds the varied work stimulating and very rewarding.



STUDENT QUAD
 City Campus
 The University of Auckland

NICHOLA WOODWARD
Legal / Planning / Policy Analyst

Nichola Woodward graduated with an LLB and a BA in Geography and Sociology. Since leaving University she has worked as a legal / planning / policy analyst for a consulting practice in Auckland. Her responsibilities include strategic policy drafting and implementation, project management, relationship management, development and implementation of strategies and compliance frameworks, drafting submissions to central and local government, evidence drafting, new legislation and research. As the work is varied and crosses many different fields Nichola must work across a wide range of inter-disciplinary teams.

"The combination of geography and law is very useful from a resource management, local government and planning perspective." says Nichola. Her law degree has assisted her with being able to understand and apply new law, while the geography degree has provided an understanding of the social, environmental and economic dynamics of her work. In addition she found geography gave her a solid grounding in research and written communication skills, along with the ability to think broadly and to critically analyse.

Apart from her qualifications, Nichola says her employer sought someone who could demonstrate good writing

skills and had the ability to think and work independently. Graduates who do not think narrowly or too technically are also highly sought after, along with those who can demonstrate sound research skills and good social skills and are able to relate well to clients.

Nichola says, "Don't underestimate what you achieve in your degree, particularly in regards to research projects and wider skills like communication. For this reason geography is a very useful degree to have, as most of the things you learn can be applied to numerous situations that you come across in the work environment."



NICHOLA WOODWARD
 Legal / Planning / Policy Analyst
 LLB, BA (Geography & Sociology)



KIRI MILNE
Research and Evaluation
BA(Hons), MSc (Geography)

KIRI MILNE
Research and Evaluation
HSC

Kiri completed her BA Hons at Otago before coming to The University of Auckland to undertake a Masters of Science in geography. Her thesis investigated the relationship between residential mobility and health and wellbeing in low socio-economic communities.

After travelling overseas and taking short-term temp positions, Kiri returned to New Zealand where her strong postgraduate research focus in health led her to a position in the Research and Evaluation Team with the HSC. This is a Crown entity that promotes health and healthy lifestyles using social marketing approaches. In this position, which Kiri has now held for just over three years, she manages programme research and evaluation plans and contributes to both strategic and programme planning. In addition Kiri also commissions and manages research and evaluation projects and, in some cases conducts these projects herself.

"My degree gave me the ability to think at both systems and structural levels" says Kiri, "and provided me with a range of skills that I have found useful and which I believe would be widely useful in a number of professions". These skills include critical and analytical thinking, research skills and competency in both written and oral communication.

Kiri says that employers seek

graduates who are able to respond and competently deal with a range of situations and challenges. She recommends that graduates seeking jobs should be prepared to think out of the square when job hunting, as geography skills can be applied to a range of situations.

SARAH GIBBS
Biosecurity Officer

If office life is not for you, and you dream of working in the outdoors while doing something meaningful for New Zealand conservation, then you would have a lot in common with Sarah Gibbs.

Sarah completed her Masters in Environmental Science with first class honours. Her research looked at the habitat overlap between juvenile kiwis and their predators. While this didn't reveal any startling discoveries, Sarah learnt a lot about scientific methodology and analysis. She also gained valuable experience working within stringent ethical restrictions, although the hurdles she had to climb over in this respect has left her thinking that should she ever undertake a PhD, then she'll research ants!!

After graduating Sarah worked in an advocacy role with Forest and Bird. Here she rapidly learnt about the political and media side of conservation. After two stimulating years on a very steep learning curve, Sarah went on maternity leave returning to the work force after seven months, in the family friendly working environment at the Auckland Regional Council as their Waitakere Biosecurity Officer.

Sarah's job involves enforcement of the Biosecurity Act, carrying out eradication of low incidence species and advising people in a variety of areas, including pest control methods and identification of pest species. With many more exotic plant species than natives growing wild in New Zealand and with exotic plants naturalising at a rate of around 10 species a year, the role of the ARC's Biosecurity Officer is becoming extremely critical.

Sarah's work involves a lot of fieldwork, which she particularly enjoys. "It's been great to get an 'on-the-

ground' appreciation of effective pest plant control work." says Sarah. "It's also great to have a lunch time swim in some remote lake on a sunny summers day, knowing that there is a city-full of people stuck in air-conditioned offices a mere hour or so away!"

Sarah also helps out with a number of environmental projects such as researching the effects introduced species have had in Lake Wainamu, near Bethells Beach. "Aquatic pests are not something we've really come to grips with, in the same way as we have with mammalian pests and invading plants," says Sarah.

Sarah recommends that students try and gain some experience in the field they would like to eventually work in. She also found it useful to gain a number of additional qualifications such as first aid certificates and her gun licence, as employees saw these as an added benefit. Sarah says it's often the added extras that might swing a job in your favour. She recommends that graduates hunting for positions use as many contacts as possible; your family, your lecturer's, or even "the lady who walks your flatmate's cousin's aunty's dog!" Most importantly grab every opportunity that comes your way with both hands. Sarah says don't worry if the career 'path' gets a bit messy along the way, set the long term goals and the short term ones will sort themselves out. As the saying goes "Life is a journey not a destination."

EXAMPLES OF POSITIONS

- GIS Technician
- Environmental Consultant
- Manager, Environmental Management
- Pollution Control Officer
- Policy Analyst (Coastal)
- Database Management
- Research Associate
- Water Resources Scientist
- Air Quality Technician

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