

Master's Research Opportunities in Temporary Wetlands Ecology

Background:

A 3-year Water Research Commission (WRC) research grant has been awarded to a multidisciplinary team to carry out research on the delineation and ecological functioning of temporary wetlands within the Nelson Mandela Bay Municipality in the Eastern Cape. This work will allow us to gain insight and examine current challenging issues (e.g. inundation periodicity, plant and animal interactions and biogeochemical cycling during and post inundation) so as to better manage and protect these diverse and sensitive wetland ecosystems. The successful applicant(s) will be involved in developing new knowledge and understanding of temporary wetlands in and around Port Elizabeth and adjoining areas.

Candidates with interest in aquatic systems and a background in aquatic ecology, hydrogeography, water/soils chemistry and/or GIS research are encouraged to apply.

Research:

Successful candidates for Master's level research will be joining a team of multidisciplinary oriented academics and researchers in the Departments of Botany and Zoology, at NMMU. A thesis topic will be chosen towards achieving the aims of the overall research project as they pertain to the temporary wetlands in the Nelson Mandela Bay (NMB) area with specific focus on one of three key areas:

- Biodiversity and ecology of the aquatic invertebrates;
- Microalgal (phytoplankton/filamentous/benthic algae) ecology and biodiversity;
- Wetland plant ecology and ecophysiology;

as they relate to the understanding the effect of landscape position of a wetland versus other environmental factors in structuring biodiversity patterns including their roles in the overall functioning of temporary wetland systems.

Requirements:

MSc candidates must have a strong BSc and Honours degree (final mark >60%) in Botany or/Zoology, previous training in aquatic ecology (Botany/Zoology) or GIS is preferable.

All candidates must be able to work well both independently and within a team, be able to communicate progress and results of research both orally and in written form. Successful applicants will have to apply through NMMU and to the department which they are interested in working in and will be subject to final approval by the University and the Faculty of Science.

Applications:

A covering letter, a curriculum vitae and recent transcripts, including any research outputs and relevant experience, two references with email addresses, should be sent to Dr Denise Schael in electronic format at:

<u>Denise.Schael@nmmu.ac.za</u>. <u>Closing date for applications is 30 November 2012</u>. Successful applicants will be invited to apply via NMMU application system including application for an NMMU postgraduate research bursary.