

Luke Pen Scholarship 2008 Honours Scholarships - Guidelines for Applicants

Honours definition

Completion of an Honours year of study at a Western Australian University.

Honours focus

The Luke Pen Fund has been established to provide funding for research into aspects of waterway management that were the areas the late Dr Luke Pen considered in critical need of research understanding to assist and direct management efforts. Further, Dr Pen had the vision of encouraging young people to be involved in the gaining of scientific experience in characteristics of rivers.

There are four focus areas for funding under this fund:

- Wheatbelt valleys and their waterways
- Increasing understanding of the hydrology of the south-west of Western Australia
- Plants that increase water use to help manage changes in hydrology
- Salt tolerant plants for use in salinising landscapes.

Projects submitted for consideration will need to address some aspects of at least one of the four focus areas.

Suggested topics

Honours topics can be of the student's choice (provided they address some aspects of at least one of the four focus areas). Some ideas for suggested projects include:

Wheatbelt valleys and their waterways

- Methods of ameliorating water quality downstream of deep drain discharge into natural creek lines (eg. acidic water, high in metals)
- What is the cause of current and future wheatbelt wetland degradation - increasing salt, increasing flow, or increasing acidity?

Increasing understanding of the hydrology of the south-west of Western Australia

- Characterising the change in hydrology from land-clearing and the impact on river structure and riparian vegetation
- Using sediment deposition in streams as an indicator of erosion processes taking place upstream.

Plants that increase water use to help manage changes in hydrology

- Is it possible to restore hydrological balance in the wheatbelt with new farming systems?

- Evaluation of the change in hydrology from implementation of new farming systems.

Salt tolerant plants for use in salinising landscapes

- Placement of various plant species currently used in saline areas, in order to stabilise creeklines without restricting flood flows
- Plant species that stabilise riparian zones of degraded saline creeks and may provide farm production benefits
- Rates of colonisation of resilient native species in riparian salt scalds and the impacts of colonisation on increasing riparian restoration.

Funding available

The Fund was established in late 2003 for a 5-year period with total funding of \$50,000. Up to \$10,000 will be available to fund a number of Honours projects during the calendar year of 2008.

General conditions

Funding can be used for travel and field costs, experiments and laboratory costs and preparation of material (eg. reports).

Funding cannot be used for the purchase of computers, payment of salaries, purchase of vehicles.

Products

Successful funding through this fund requires that the applicant develops and submits an Honours Thesis and also prepares a 5-10 page summary report that can be published by the Department of Water. This publication will be used as the extension document to ensure the results of the research reach the community and are applied. The Honours applicant would maintain authorship of both publications.

Closing date

Applications to be submitted no later than **Monday 31 March 2008** to:

Verity Klemm
Department of Water
Drainage and Waterways Branch
P O Box K822
Perth WA 6842

For more information e-mail: james.mackintosh@water.wa.gov.au