

Frequently Asked Questions: Invasive Species Management Courses, University of Canberra

Q. *Why is the University of Canberra involved in invasive species management?*

A. Introduced invasive species (whether plants or animals) have established large and widespread populations in Australia. We now accept the continued presence of these invasive species, and apart from exclusion or localised eradication campaigns, we are becoming more aware of the need to determine how best to manage them to minimize social, economic and environmental impacts.

In 2007, the Commonwealth released the Australian Pest Animal Strategy (APAS) which outlined the principles and strategies for managing pests – *Best Practice*. Few courses have embraced the *Best Practice* approach. Indeed, there has been a steady decline throughout Australia of courses aimed at giving the necessary skills and understanding about how best to manage pests. The courses developed by the University of Canberra aim to help redress this deficiency as well as embracing the changing landscape in the pest management field, including:

- The recent release of APAS;
- Limited succession planning with the aging of experienced pest operators;
- The increasing role of the 56 Natural Resource Management Boards in pest management – many with staff with little or no experience in pest management; and
- The increasing trend to outsource on-ground management to the private sector.

The University of Canberra is fortunate to have national experts in the pest management field to develop and teach courses in invasive species management.

Q. *What actually is invasive species management?*

A. Effective management of pests (plants or animals) requires a strategic approach that focuses on the desired outcome from management (e.g. higher productivity, recovery of native wildlife and communities, etc), not just killing pests. For effective management there is the need for effective training in strategic invasive species management. The University of Canberra has identified this need and has developed a suite of course to train people with responsibility for or interest in best practice management of invasive species.

Q. *What are the courses offered?*

A. The following courses dealing with invasive species management are delivered through the University of Canberra's Faculty of Applied Science (UC):

- a Graduate Certificate in Wildlife Management (Strategic Pest Management);
- a Graduate Diploma in Natural Resource Management (course approval expected in 1012);
- a Course Work Masters in Natural Resource Management (course approval expected in 1012);
- a Vocational Education and Training (VET) Diploma in Conservation and Land Management (Specialising in Pest Management)– this is a nationally accredited course conducted through the University of Canberra College (UCC); and
- tailored short courses specifically designed for agencies responsible for pest plant and animal management, incorporating, where required, certificates of attainment for competencies successfully completed (this is based on shorter versions of the material covered in the VET Diploma and the Graduate courses).

Q. *What is in the courses for me?*

A. The suite of courses is designed to provide you with the knowledge of the principles and approaches required to successfully undertake best management practice for invasive species. A tiered approach has been adopted to enable you to work through the various approaches to management from a basic understanding through to the development and application of sophisticated and complex multi-disciplinary management structures.

Q. *I work in the field in managing/ controlling pest species. Is there anything in the courses for me?*

A. While the courses are not designed to cover the 'hands-on' skills needed to undertake management actions (such as bait preparation), the courses do provide the management background to put into context the skills that are needed.

Q. *How long are the courses and how much do they cost?*

A. The **Graduate Certificate in Wildlife Management (Strategic Pest Management)** takes 6 months Full Time Equivalents to complete the necessary 12 credit points units (i.e. 2 x 6 credit point units) and with a total cost of \$7,500.

The **Graduate Diploma in Natural Resource Management** takes 12 months Full Time Equivalents to complete the necessary 24 credit points units (the 2 x 6 credit point units of the Graduate Certificate and an additional 4 x 3 the credit point units) and with a total cost of \$15,000 (course approval expected in 1012).

The Course Work **Masters in Natural Resource Management** takes 18 months Full Time Equivalents to complete the necessary 36 credit point units (the 2 x 6 credit unit points of the Graduate Certificate the 4 x 3 the credit point units of the Graduate Diploma and an additional 1 x 9 and 1 x 3 credit point units) and with a total cost of the three awards of \$22,500 (course approval expected in 1012).

The Vocational Education and Training (VET) **Diploma in Conservation and Land Management (Specialising in Pest Management)** takes 12 months and costs \$3,500.

Q. *Can the courses be undertaken part time?*

A. Yes, all the courses can be done on either a full or part time basis.

Q. *Can you complete one Post Graduate course and then progress to the next course?*

A. Yes, the Post Graduate courses are modular and you can undertake the Graduate Certificate alone (one semester), then progress to the Graduate Diploma (an additional semester) and then to a Masters (estimated as an additional semester) which includes completing a research project. The modular approach allows you to attain one level and graduate with a recognised university award and then return at a later stage to complete additional levels without the need to re-do the lower level course.

The cost of undertaking a higher level is lowered the by cost of the lower level award that you have already received. For example, if you have completed the Graduate Certificate and then come back and enroll in the Masters course, the cost of the Masters course is reduced to \$15,000 (i.e. the \$22,500 less the \$7,500 already paid for the Graduate Certificate). (Similarly, if you have completed the Graduate Certificate and then come back and enroll in the Graduate Diploma course, the cost of the course is reduced by \$7,500 to \$7,500.)

Q. *What are the entry requirements for the Post Graduate Certificate course and the other Graduate courses on offer?*

A. There are several pathways to enter the Graduate Certificate course. The first is having successfully completed an undergraduate degree. Another entry pathway is having a VET level diploma AND a number of years experience working in the field of natural resource or pest management.

When the other graduate courses come on line through the University of Canberra, the entry requirement for those courses will be the same as the Graduate Certificate.

You can enrol in any of the three levels directly with the entry requirements the same as for the Graduate Certificate. Effectively the same material is covered whatever

path you enter through. The Graduate Certificate material is the prerequisite for the Graduate Diploma, and the Graduate Certificate material together with the Graduate Diploma material is the prerequisite for the Masters.

Q. *What are the entry requirements for the VET Diploma Course?*

A. There are no formal educational prerequisites for entry into the VET Diploma course. It is expected that each applicant would have basic reading and writing competencies and the skills necessary to undertake the on-line course work. You are advised to discuss the course and the necessary skills with the lecturers before you decide on whether it is the correct course for you.

Q. *Can you complete the VET Diploma Course and then progress to the Graduate Certificate?*

A. The VET Diploma is a stand-alone course designed to cater for those already involved in pest management at the mid to upper level who see the need to approach pest management in a more strategic way. The VET Diploma course is also available to anyone interested in the strategic approach to pest management. Completing the VET Diploma together with several years experience can provide a pathway for entry into the Graduate Courses.

Q. *Is there financial help for the Courses?*

A. Financial assistance through VET FEE-HELP has been sought for the VET Diploma course with a decision anticipated in 2012. FEE-HELP is available for the Graduate Diploma course. The University is currently seeking to have the Graduate Diploma and the Masters courses as Commonwealth designated courses, therefore eligible for HECS-HELP.

Q. *Are there any other ways to offset the costs?*

A. Some students have obtained financial support from their employers through subsidizing the course fees, travel and accommodation expenses and by claiming the rest as a tax deduction for work based education.

Q. *Who teaches the Courses?*

A. Key lecturers are Professor Mike Braysher, Professorial Fellow, Natural Resource Management, Institute for Applied Ecology, and Dr Tony Buckmaster, Faculty of Applied Science. Both are based at the University of Canberra.

Q. *What are the backgrounds of the lecturers?*

A. Mike Braysher, Professor in Natural Resource management, University of Canberra

Mike has extensive experience in the pest management field encompassing the areas of research, on-ground management, policy development, strategic planning and high level training. He was a member of the National Vertebrate Pests Committee for 17 years. Some highlights of his career include:

- Lectured for three years in ecology and animal physiology at the Adelaide College of Advanced Education;
- In 1974 appointed to head the Wildlife Unit of the Australian Capital Territory Parks and Conservation Service;
- In 1991, Mike joined Bureau of Resource Sciences in the Commonwealth Department of Primary Industries and Energy to review past pest management and to establish and manage the National Vertebrate Pest Program;
 - Under this program he produced the Bureau of Rural Sciences series on Managing Vertebrate Pests Principles and Strategies, Rabbits, Feral Horses, Feral Pigs, Feral goats etc. and provided the scientific input into the seminal pest book '*Australia's Pest Animals. New Solutions to old problems*' Kangaroo Press, July 1998;
- In 1999, appointed Adjunct Professor in Natural Resource Management, University of Canberra where he worked with community groups and government agencies to develop and implement large –scale pest management programs based on current Best practice.
 - As a result of his experience he, along with Dr Glen Saunders published PESTPLAN, *A guide to setting priorities and developing a management plan for pest animals.*' Natural Heritage Trust, Commonwealth of Australia, Canberra.
- In 2006 developed and now delivers the on-line Vocational Education and Training Diploma in Conservation and Land Management (Specialising in Pest Management);
- Organised and/or presented at courses on:
 - strategic management of pest animal damage to NSW National Parks and Wildlife Service;
 - managing rabbit damage in the Sydney Basin for the Moss Vale Rural Lands Protection Board;
 - strategic management of pest animal damage for south-west NSW;
 - strategic planning and management of pest animal damage to biodiversity in Kangaroo Valley to the NSW NPWS;
 - biosecurity to officers from Agriculture and Food, WA.
- Authored papers/ reports on:
 - setting priorities for managing pest animals and weeds in the Western CMA, NSW;
 - the 2001 and 2011 ACT Pest Animal Strategies;
 - the national Threat Abatement Plan for managing the damage due to feral pigs;

- the economic impact of Australia's pests;
- several carp management plans to supplement plans to restore the health of large sections of rivers in the Murray Darling Basin;
- various aspects of pest management both at national and international conferences.

A. Dr Anthony Buckmaster, Lecturer at the Faculty of Applied Science, University of Canberra

Tony is an experienced lecturer in the field of pest management with research experience in the management of feral cats. Key qualifications include:

- In 2008 commenced as convenor and primary lecturer for the Vertebrate Pest Management Unit which is part of the Wildlife Health and Population Management Masters course run through the University of Sydney.
- In 2009 commenced teaching into the VET Diploma in Conservation and Land Management (Specialising in Vertebrate Pest Management).
- 2010 commenced as an associate lecturer at the University of Canberra designing graduate level courses on strategic vertebrate pest management.
- Organised and/or presented courses on:
 - Feral cat management techniques for NPWS at Perisher Valley
 - Pest management particularly cats and birds at the Biosecurity Queensland Local Government workshop
 - Biosecurity to officers from Agriculture and Foods, WA; and
 - Presented guest lectures at a number of universities on vertebrate pest management.
- Presented papers at national and international conferences on strategic pest management training.

Q. *Who can I contact to discuss the courses and my options?*

A. Professor Mike Braysher, can be contacted at the University of Canberra on (02) 6206 3847 or by email at: Mike.Braysher@canberra.edu.au.

Dr Tony Buckmaster, can be contacted at the University of Canberra on (02) 6201 5008 or by email at: Anthony.Buckmaster@canberra.edu.au.

Q. *Who can I contact to discuss enrolment?*

A. Mr David Walter, can be contacted at the University of Canberra on (02) 6201 5728 or by email at: David.Walter@canberra.edu.au, to discuss the process of enrolling in any of the courses.

Q. *Can I do the courses remotely?*

A. Yes, The courses have been developed to be delivered mainly on-line (approx 85% on line) through the UC's website and the open source software Moodle, used by the University. This approach enables the study program to be undertaken by you , whether you are based at home or internationally.

Q. *What are the key features that I should note if I am considering the courses?*

A. There are several notable features.

1. The courses have been developed to be delivered mainly on-line (approx 85% on line) through the UC's website and the open source software Moodle, used by the University. This approach enables the study program to be undertaken by remote domestic students or international students studying and completing the course in their home countries.
2. In each course there is a face-to-face component usually in the form of residential.
3. The courses are all delivered using inquiry-based learning where ever possible and utilises proven scenario based software.
4. All of the courses involve discussion and analysis of real life case studies.
5. All of the courses require the preparation of a project plan which is relevant to the student, ideally covering a natural resource and / or pest management issue that they are currently dealing with or are particularly interested in.

Q. *What are the short courses about?*

A. The short courses specially tailored courses drawing upon the principles and approaches covered in the VET Diploma , but are tailored to the requirements (such as location, number of participants, duration, content, delivery style and specific case studies) of the agency funding/supporting the training . A feature of the short courses is that they can be pitched to an audience or participants ranging from senior management through to operational level staff/ individuals responsible for planning and implementation of pest management. Course delivery can range from information sharing sessions through to requiring successful completion of exercises by participants upon which appropriate 'Certificates of Attainment', endorsed by the UCC, can be provided.