

# BIOL875

# **Contemporary Conservation in Australia**

S1 Evening 2017

Dept of Biological Sciences

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# **General Information**

Unit convenor and teaching staff Lecturer (Unit Convenor) Rachael Dudaniec rachael.dudaniec@mq.edu.au E8C244

Credit points

4

Prerequisites

Admission to MBiotech or MBioBus or GradDipBiotech or MConsBiol or GradDipConsBiol or GradCertConsBiol or MEnv or MEnvPlan or GradDipEnv or MMarScMgt or MSusDev or GradDipSusDev or MPlan or MSc

Corequisites

Co-badged status

#### Unit description

This unit provides a current perspective of the values, threats to existence and conservation of Australian wildlife. The special characteristics of the Australian biota (plants, animals and other organisms) and the key threatening processes are discussed as well as its global and historical context. The role of biological research in informing conservation management is explored, and how conservation-based research is communicated and interpreted. An emphasis is placed on case studies in conservation biology with critical analysis of conservation successes and failures.

### Important Academic Dates

Information about important academic dates including deadlines for withdrawing from units are available at https://www.mq.edu.au/study/calendar-of-dates

# Learning Outcomes

On successful completion of this unit, you will be able to:

Describe theoretical concepts in conservation biology and current conservation issues in Australia and abroad

Communicate scientific research and issues in conservation to different target audiences

in verbal and written form

Evaluate literature on conservation issues within peer-reviewed scientific articles and

their representation within the written media Identify how research in conservation biology influences environmental management practices and assess how effectively this is undertaken Demonstrate a capacity for undertaking literature-based research into key topics in conservation biology and synthesising the current state-of-knowledge

# **Assessment Tasks**

Name	Weighting	Hurdle	Due
Weekly Online Quizzes	30%	No	weekly
Challenges in Conservation	15%	No	24 March 2017
Conservation Research Update	20%	No	5 May 2017
Conservation in the Media	35%	No	9 June 2017

# Weekly Online Quizzes

#### Due: weekly

Weighting: 30%

On the Wednesday following each lecture (i.e. excluding final lecture), a quiz will become available on iLearn (worth 2.5%) that you will have up to two weeks to complete (see timetable). The 12 online exercises will consist of short answers and multiple choice questions that **revise the content of each lecture (including tutorial discussions)**, encourage thinking and research skills, in alignment with the *Austral Ark* textbook chapters. The exercises may involve consulting the peer-reviewed literature, external websites, and chapters within the required textbook *Austral Ark*. See full unit guide for individual quiz due dates.

On successful completion you will be able to:

- Describe theoretical concepts in conservation biology and current conservation issues in Australia and abroad
- Communicate scientific research and issues in conservation to different target audiences in verbal and written form

### Challenges in Conservation

Due: 24 March 2017 Weighting: 15%

Choose ONE conservation issue in Australia, and discuss at least one of the above challenges associated with the issue in a short written essay in **1500 words**. Consult and cite the primary scientific literature, and any supporting information from government documents, the media etc.

You must cite the peer-reviewed scientific literature to support your claims and provide a formatted reference section. The aim of your essay is to provide a brief, objective, and *scientifically informative* evaluation of the main challenge(s) to effective conservation with respect to your chosen issue.

On successful completion you will be able to:

- Describe theoretical concepts in conservation biology and current conservation issues in Australia and abroad
- Communicate scientific research and issues in conservation to different target audiences in verbal and written form
- Evaluate literature on conservation issues within peer-reviewed scientific articles and their representation within the written media
- Identify how research in conservation biology influences environmental management practices and assess how effectively this is undertaken
- Demonstrate a capacity for undertaking literature-based research into key topics in conservation biology and synthesising the current state-of-knowledge

# **Conservation Research Update**

Due: **5 May 2017** Weighting: **20%** 

Many conservation strategies lack up-to-date insights from recent research findings, which is often because of poor communication of science outside of academia. It is just as important that scientific research be published as it is that can be understood by those who need to use the information. This leads to a long time between publication of scientific findings and their recognition and integration within conservation planning. For this assessment, you are required to choose a specific topic of recent conservation interest in Australia (or New Zealand/ Oceania) (e.g. in the past five years). The topic you choose may be in relation to a threatened/invasive species, habitat or other threatening process such as fire, disease spread or human disturbance. **Your task is to give a 12-minute pre-recorded presentation (***using powerpoint slides with audio only***) to pitch an update on a conservation issue of interest, integrating the scientific literature published in the last FIVE years (since 2011).** 

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- Identify how research in conservation biology influences environmental management practices and assess how effectively this is undertaken
- Demonstrate a capacity for undertaking literature-based research into key topics in conservation biology and synthesising the current state-of-knowledge

### Conservation in the Media

Due: 9 June 2017 Weighting: 35%

The media often reports scientific results and discoveries in mis-informed or mis-leading ways, in the interests of capturing reader attention or other motive. This occurs across many fields in science, but is also frequently the case in conservation biology. As scientists, it is important that we recognise when the media may be mis-representing other's work, or omitting certain aspects of results to tell a 'clear' story. As conservation biologists we can be confronted with this, and therefore must learn to highlight discrepancies and learn to better communicate our work to the public, the media, managers and policy makers. This task is designed to raise your awareness of these issues and ability to recognise and evaluate them by directly verifying media articles that report on conservation research through consultation of both scientific and non-scientific literature.

In a 3000-word report *in your own words*, you will assess how effectively the media is communicating the scientific literature. To do this, you will choose two recent (< 5 years old) media articles that each focus on a particular published scientific paper from a journal within conservation biology. Each media article must be on a separate conservation topic, with a different scientific paper associated with it. The chosen media articles should focus on conservation topics within or relevant to Australasia (defined as: Australia, New Zealand, New Guinea, and the South Pacific Islands). Each media article assessment is worth 15% and should be 1500 words (± 150 words) for each (x 2 media articles = 3000 words and 30%). Further details in iLearn Unit guide.

On successful completion you will be able to:

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- Evaluate literature on conservation issues within peer-reviewed scientific articles and their representation within the written media
- Demonstrate a capacity for undertaking literature-based research into key topics in conservation biology and synthesising the current state-of-knowledge

# **Delivery and Resources**

Weekly lectures and tutorials will be held Mondays 4.00-6.00pm in room EMCG240. **Attendance at lectures is highly encouraged** to enable face-to-face discussions with the invited speakers,

interact with other students and enhance your learning experience. <u>The lectures in this unit are</u> <u>almost entirely comprised of invited guest researchers who are active and renown in their fields</u>, <u>offering an excellent opportunity to connect with a diversity of researchers and expand</u> <u>knowledge</u>.

Students will need access to a computer and basic office software (eg. Microsoft Office or OpenOffice) to complete assessment tasks. An Internet browser will also be required to search for background information, for assignments and to complete online exercises and enable online course participation. Some tutorials may require a computer, which may be provided if needed. Course content and discussion boards etc. will be available through iLearn.

The set, **compulsory** text required for this unit is:

Austral Ark: The State of Wildlife in Australia and New Zealand (2015) Eds. A Stow, N Maclean. <u>G. Holwell. Cambridge University Press.</u>

The text book is available for purchase on campus at the Co-op bookstore.

# **Policies and Procedures**

Macquarie University policies and procedures are accessible from <u>Policy Central</u>. Students should be aware of the following policies in particular with regard to Learning and Teaching:

Academic Honesty Policy http://mq.edu.au/policy/docs/academic\_honesty/policy.html

Assessment Policy http://mq.edu.au/policy/docs/assessment/policy\_2016.html

Grade Appeal Policy http://mq.edu.au/policy/docs/gradeappeal/policy.html

Complaint Management Procedure for Students and Members of the Public <u>http://www.mq.edu.a</u> u/policy/docs/complaint\_management/procedure.html

Disruption to Studies Policy (in effect until Dec 4th, 2017): <u>http://www.mq.edu.au/policy/docs/disr</u>uption\_studies/policy.html

Special Consideration Policy (in effect from Dec 4th, 2017): <u>https://staff.mq.edu.au/work/strategy-</u>planning-and-governance/university-policies-and-procedures/policies/special-consideration

In addition, a number of other policies can be found in the Learning and Teaching Category of Policy Central.

### **Student Code of Conduct**

Macquarie University students have a responsibility to be familiar with the Student Code of Conduct: https://students.mq.edu.au/support/student\_conduct/

### **Results**

Results shown in *iLearn*, or released directly by your Unit Convenor, are not confirmed as they are subject to final approval by the University. Once approved, final results will be sent to your student email address and will be made available in <u>eStudent</u>. For more information visit <u>ask.m</u> <u>q.edu.au</u>.

# Student Support

Macquarie University provides a range of support services for students. For details, visit <u>http://stu</u> dents.mq.edu.au/support/

### **Learning Skills**

Learning Skills (<u>mq.edu.au/learningskills</u>) provides academic writing resources and study strategies to improve your marks and take control of your study.

- Workshops
- StudyWise
- Academic Integrity Module for Students
- Ask a Learning Adviser

# Student Services and Support

Students with a disability are encouraged to contact the **Disability Service** who can provide appropriate help with any issues that arise during their studies.

# **Student Enquiries**

For all student enquiries, visit Student Connect at ask.mq.edu.au

# IT Help

For help with University computer systems and technology, visit <u>http://www.mq.edu.au/about\_us/</u>offices\_and\_units/information\_technology/help/.

When using the University's IT, you must adhere to the <u>Acceptable Use of IT Resources Policy</u>. The policy applies to all who connect to the MQ network including students.

# **Graduate Capabilities**

# PG - Capable of Professional and Personal Judgment and Initiative

Our postgraduates will demonstrate a high standard of discernment and common sense in their professional and personal judgment. They will have the ability to make informed choices and decisions that reflect both the nature of their professional work and their personal perspectives.

This graduate capability is supported by:

### Learning outcomes

- Evaluate literature on conservation issues within peer-reviewed scientific articles and their representation within the written media
- Identify how research in conservation biology influences environmental management practices and assess how effectively this is undertaken

### Assessment task

· Conservation in the Media

## PG - Discipline Knowledge and Skills

Our postgraduates will be able to demonstrate a significantly enhanced depth and breadth of knowledge, scholarly understanding, and specific subject content knowledge in their chosen fields.

This graduate capability is supported by:

### Learning outcomes

- Describe theoretical concepts in conservation biology and current conservation issues in Australia and abroad
- Communicate scientific research and issues in conservation to different target audiences in verbal and written form
- Evaluate literature on conservation issues within peer-reviewed scientific articles and their representation within the written media
- Identify how research in conservation biology influences environmental management practices and assess how effectively this is undertaken

### Assessment tasks

- Weekly Online Quizzes
- Challenges in Conservation
- Conservation Research Update
- · Conservation in the Media

# PG - Critical, Analytical and Integrative Thinking

Our postgraduates will be capable of utilising and reflecting on prior knowledge and experience, of applying higher level critical thinking skills, and of integrating and synthesising learning and knowledge from a range of sources and environments. A characteristic of this form of thinking is the generation of new, professionally oriented knowledge through personal or group-based critique of practice and theory.

This graduate capability is supported by:

### Learning outcomes

- Evaluate literature on conservation issues within peer-reviewed scientific articles and their representation within the written media
- Identify how research in conservation biology influences environmental management practices and assess how effectively this is undertaken

• Demonstrate a capacity for undertaking literature-based research into key topics in conservation biology and synthesising the current state-of-knowledge

### Assessment tasks

- Weekly Online Quizzes
- Conservation Research Update
- Conservation in the Media

# PG - Research and Problem Solving Capability

Our postgraduates will be capable of systematic enquiry; able to use research skills to create new knowledge that can be applied to real world issues, or contribute to a field of study or practice to enhance society. They will be capable of creative questioning, problem finding and problem solving.

This graduate capability is supported by:

### Learning outcomes

- Evaluate literature on conservation issues within peer-reviewed scientific articles and their representation within the written media
- Identify how research in conservation biology influences environmental management practices and assess how effectively this is undertaken
- Demonstrate a capacity for undertaking literature-based research into key topics in conservation biology and synthesising the current state-of-knowledge

### Assessment tasks

- Challenges in Conservation
- Conservation Research Update
- Conservation in the Media

# PG - Effective Communication

Our postgraduates will be able to communicate effectively and convey their views to different social, cultural, and professional audiences. They will be able to use a variety of technologically supported media to communicate with empathy using a range of written, spoken or visual formats.

This graduate capability is supported by:

### Learning outcomes

- Describe theoretical concepts in conservation biology and current conservation issues in Australia and abroad
- · Communicate scientific research and issues in conservation to different target audiences

in verbal and written form

#### **Assessment tasks**

- Weekly Online Quizzes
- Challenges in Conservation
- Conservation Research Update
- · Conservation in the Media

# PG - Engaged and Responsible, Active and Ethical Citizens

Our postgraduates will be ethically aware and capable of confident transformative action in relation to their professional responsibilities and the wider community. They will have a sense of connectedness with others and country and have a sense of mutual obligation. They will be able to appreciate the impact of their professional roles for social justice and inclusion related to national and global issues

This graduate capability is supported by:

#### Learning outcomes

- Communicate scientific research and issues in conservation to different target audiences in verbal and written form
- Identify how research in conservation biology influences environmental management practices and assess how effectively this is undertaken

### Assessment tasks

- Challenges in Conservation
- · Conservation in the Media