



# BIOL875

## Contemporary Conservation in Australia

S1 Evening 2019

*Dept of Biological Sciences*

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## General Information

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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 or MScInnovation

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
<a href="#">Research Update Presentation</a>	20%	No	Week 5
<a href="#">Presentation Abstract</a>	10%	No	Week 5
<a href="#">Weekly Online Quizzes</a>	36%	No	Weekly
<a href="#">Media Report</a>	34%	No	Week 11

### Research Update Presentation

Due: **Week 5**

Weighting: **20%**

This Assessment Task relates to the following 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*
- *Demonstrate a capacity for undertaking literature-based research into key topics in conservation biology and synthesising the current state-of-knowledge*

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 10-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).**

Focus on the aspects of the scientific literature that relate to biological insights and conservation management of the topic you have chosen. **The aim of your presentation is to provide a RESEARCH UPDATE AND SYNTHESIS of a specific conservation topic, supported by the peer-reviewed scientific literature.**

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

## Presentation Abstract

Due: **Week 5**

Weighting: **10%**

Together with your Conservation Research Update Presentation (2a), submit a 400 word abstract that summarises your presentation, as if you were presenting it at a conference. Abstracts are a common way to explain your presentation in a short and interesting way and highlight the key points of your presentation and take-home messages.

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

## Weekly Online Quizzes

Due: **Weekly**

Weighting: **36%**

This Assessment Task relates to the following 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*
- *Demonstrate a capacity for undertaking literature-based research into key topics in conservation biology and synthesizing the current state-of-knowledge*

On the day following each lecture (i.e. excluding final lecture), a quiz will become available on iLearn (worth 3%) that you will have a week to complete (see timetable). The 12 online exercises will consist of short answers and multiple choice questions that **revise the topic 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*.

On successful completion you will be able to:

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

## Media Report

Due: **Week 11**

Weighting: **34%**

This Assessment Task relates to the following Learning Outcomes:

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

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 2000-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/journal article pairing may focus on conservation issues occurring **in any country** (not restricted to Australia or New Zealand).

Each media article assessment is worth 17.5% and should be 1000 words ( $\pm$  100 words) for each (x 2 media articles = 2000 words and 35%).

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

## **Delivery and Resources**

**Attendance at weekly lectures and tutorials is highly encouraged** to enable face-to-face discussions with the invited speakers, interact with other students and enhance your learning experience. The lectures in this unit are almost entirely comprised of invited guest researchers who are active and renown in their fields, offering an excellent opportunity to connect with a diversity of researchers and expand knowledge.

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, G. Holwell. Cambridge University Press.*

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

### **Other useful references:**

Attiwill, P. & B. Wilson, Ecology: an Australian perspective. Oxford University Press, New York. 648 pp.

Burgman, M. and Lindenmayer, D. (1998): Conservation Biology for the Australian Environment. Surrey Beatty & Sons, Sydney

Krebs, C.J. 1994. Ecology: the experimental analysis of distribution and abundance. 4th ed., Harper, New York. 800 pp

## **Policies and Procedures**

Macquarie University policies and procedures are accessible from [Policy Central \(https://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policy-central\)](https://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policy-central). Students should be aware of the following policies in particular with regard to Learning and Teaching:

- [Academic Appeals Policy](#)
- [Academic Integrity Policy](#)
- [Academic Progression Policy](#)
- [Assessment Policy](#)
- [Fitness to Practice Procedure](#)
- [Grade Appeal Policy](#)
- [Complaint Management Procedure for Students and Members of the Public](#)
- [Special Consideration Policy](#) (**Note:** *The Special Consideration Policy is effective from 4 December 2017 and replaces the Disruption to Studies Policy.*)

Undergraduate students seeking more policy resources can visit the [Student Policy Gateway \(https://students.mq.edu.au/support/study/student-policy-gateway\)](https://students.mq.edu.au/support/study/student-policy-gateway). It is your one-stop-shop for the key policies you need to know about throughout your undergraduate student journey.

If you would like to see all the policies relevant to Learning and Teaching visit [Policy Central \(http](#)

[s://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policy-central](https://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/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/study/getting-started/student-conduct>

## Results

Results published on platform other than [eStudent](#), (eg. iLearn, Coursera etc.) 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 [eStudent](#). For more information visit [ask.mq.edu.au](https://ask.mq.edu.au) or if you are a Global MBA student contact [globalmba.support@mq.edu.au](mailto:globalmba.support@mq.edu.au)

## Student Support

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

## Learning Skills

Learning Skills ([mq.edu.au/learningskills](https://mq.edu.au/learningskills)) 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](https://ask.mq.edu.au)

If you are a Global MBA student contact [globalmba.support@mq.edu.au](mailto:globalmba.support@mq.edu.au)

## IT Help

For help with University computer systems and technology, visit [http://www.mq.edu.au/about\\_us/offices\\_and\\_units/information\\_technology/help/](http://www.mq.edu.au/about_us/offices_and_units/information_technology/help/).

When using the University's IT, you must adhere to the [Acceptable Use of IT Resources Policy](#). 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

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

#### Assessment task

- Media Report

### 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
- 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

- Presentation Abstract
- Weekly Online Quizzes

## 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

- 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

- Presentation Abstract
- Media Report

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

## Assessment tasks

- Research Update Presentation
- Weekly Online Quizzes

## 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

- 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

- Research Update Presentation
- Presentation Abstract
- Media Report

## 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

- 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
- Identify how research in conservation biology influences environmental management practices and assess how effectively this is undertaken

## Assessment task

- Media Report