
GEOS 2121: ENVIRONMENTAL AND RESOURCE MANAGEMENT

Second Semester 2008

Lectures

Monday 12.00pm Carslaw 173

Tuesday 12.00pm Carslaw 173

Coordinator/Lecturer/Tutor

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GEOS 2121 Resource and Environmental Management explores cultural constructions of nature and resources, the evolution of environmental thought and the debates about sustainable development and climate change. It integrates environmental, economic, cultural and social considerations, with particular regard to water, mining, forestry and fishing industries in Australia and other countries. The unit includes a fieldtrip to the Hunter Valley to look at geological and geographical issues pertaining to mines, wines and the thoroughbred breeding industries in this region. The unit of study enables students to learn about the economics of resource extraction and the social, cultural and environmental considerations that must be taken into account when developing and implementing environmental and resource management policies. The unit deals with key concepts and principles of environmental and resource management from a societal perspective. The environment, natural resources and explanations of resource and environmental degradation are presented as contested entities. The approach therefore eschews the “one right way” approach to environmental management in favour of an approach based on understanding the diverse and complex societal contexts in which environmental and resource managers operate. These principles are illustrated throughout by means of case studies at a number of scales.

In order to participate fully, students are expected to:

- Attend lectures for an introduction to key themes and for illustrative detail of the case studies presented.
- Keep up with the prescribed readings to reinforce your understanding of the main material. Supplementary reading will deepen this understanding.
- Decide early on in the semester what your essay topic will be, and aim to read as widely as possible for this topic in order to give yourself a geographical and thematic context upon which to relate the lecture material.

- Develop data management and presentation skills in the practical classes later in the semester, recognising that these are parallel rather than integral to the lecture themes.
- Participate actively in tutorial-format discussions, using them as an opportunity to clarify concepts introduced in the lectures, cover key reading material and discuss topical environmental issues.
- Sit a final exam, which will be based on readings, lectures, practicals and key material covered during the discussions.

Assessment

The full semester assessment is as follows:

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|--|-----|
| a) Discussion Reports (Weeks, 2, 5, – due Weeks, 3, 6,) | 5% |
| b) One 2000 word essay, due 4.00pm Thursday 18 September 2007 (week 8) | 25% |
| c) Upper Hunter Field report due 4.00pm Thursday 30 October 2007 (week 13) | 30% |
| d) One final 2-hour exam [end of semester] | 40% |

The essay questions and the tutorial report questions are provided in this unit reader. The Upper Hunter Fieldtrip report questions, readings and other details will be provided at a later date in a separate handout. The examination will consist of both short-answer and essay questions. All assignments must be placed in the 2nd Year Environment drawer outside the School Office (Madsen Building). A penalty of 5% per day will be deducted for late assignments unless a valid reason is given for the lateness.

SATISFACTORY COMPLETION OF ALL THESE COMPONENTS IS REQUIRED TO PASS THE UNIT OF STUDY.

Lecture outline

Week 1	The environment and natural resources: contestation and management	
	Introduction: Nature and natural resource management	28 July 2008
	Principles of sustainable development	29 July 2008
Week 2	Environmental philosophy	
	Technology and the philosophy of science	4 August 2008
	Anthropocentric environmentalism	5 August 2008
Week 3	Environmental philosophy / geography and environmentalism	
	Radical environmentalism	11 August 2008
	Environmentalism in Australia – a brief history	12 August 2008
Week 4	Population, development and environment	
	Global overview and population debates in Australia	18 August 2008
	Numbers of people: The ultimate resource or the population bomb	19 August 2008
Week 5	Global energy and climate change	
	Energy and the carbon cycle	25 August 2008
	Addressing climate change	26 August 2008
Week 6	Water management in Australia	
	Use and abuse of a precious resource	1 September 2008
	The politics of water allocations and trading	2 September 2008
Week 7	READING WEEK	
Week 8	Animals and the environment	
	Defining humans and other animals	15 September 2008

Trade in wildlife – problem or solution? 16 September 2008

Week 9

Land clearing and rural conservation in Australia 22 September 2008

An orientation to the environmental politics of the Upper Hunter 23 September 2008

Semester break: Upper Hunter Field Trip (PM// RG)

Week 10 Frontiers: forestry and fishing

Public Holiday (Forest frontiers –lecture notes on the web) 6 October 2008

Fish frontiers 7 October 2008

Week 11 Media and the Environment

Media construction of environmental issues 13 October 2008

Greenwashing? 14 October 2008

Week 12 Resources and indigenous peoples

Resources, nations and indigenous peoples 20 October 2008

Contested geographies of Aboriginal Australia 21 October 2008

Week 13 Impact assessment

Environmental, Social, Strategic and Integrated impact assessment 27 October 2008

Summary: The “environmental crisis” and the future 28 October 2008

Tutorials

Commencing in Week 2, a series of compulsory one hour weekly tutorials will be held until week 9. After the Fieldtrip, this slot will become the Practicals for weeks 10-12.

Tutorials Weeks 2-9, Practicals Weeks 10-12

Monday 2.00pm – 3.00pm Madsen Tutorial Room 318

Tuesday 11.00am – 12.00pm Madsen Tutorial Room 318

Tuesday 1.00pm – 2.00pm Madsen Tutorial Room 318

Wednesday 12.00pm-1.00pm Madsen Tutorial Room 318

Thursday 9.00am – 10.00am Madsen Tutorial Room 318

Thursday 10.00am-11.00am Madsen Tutorial Room 318

Commencing in Week 2, students will begin tutorial discussions. At the commencement of the tutorial in the week following the tutorial of weeks 2 and 5 a 500 word discussion paper must be submitted. The questions to be answered in this discussion paper are listed below.

Discussion Questions: There are two discussion reports to be submitted. A 500 word discussion paper for assessment must be submitted at the beginning of the discussion in the following week. These discussion papers are designed to reinforce your learning and help your revision for the exam. These discussion reports should be easy marks for students who are working well at this early stage of the semester. The other questions below are tutorial prompts.

Week 2 Discussion: Environmental philosophy

Discussion question (to be submitted at the beginning of the week 3 tutorial)

Why do a range of environmental positions/philosophies exist and what might this mean for the management of Australia's environment?

What does anthropocentric mean?

Is business the dominant organisational vehicle in our society?

Will change be driven by market forces?

Do we need a greater or reduced role for government?

What is sustainable development?

Week 3 Discussion: Environmental Philosophy/Geography and environmentalism

What are the main differences between biocentric and anthropocentric perspectives on nature? What implications may result from these differences?

Has the development of Australian environmentalism been an inevitable evolution of thought?

Why may environmental history be important?

Why have complex Indigenous understandings of the environment been ignored?

How does contemporary Australia relate to the environment?

How, why, and to what degree, have attitudes changed over time?

Week 4 Discussion: Population and the Environment

What is the IPAT formula?

Explain the relationships between population and resource use.

Why is counting population numbers and documenting population change considered important?

What are the main arguments used for and against increased population at the global scale, the national scale and the local scale?

How may human population growth impact upon other species?

Identify and explain patterns of population change in Australia over the past fifty or so years.

Australia's population should be boosted to 50 million people by 2050. Discuss.

Week 5 Discussion: Global Energy and Climate Change

Discussion question: Explain why the scientific, economic, cultural and political aspects of energy and climate change may not be in synchronicity. What could be done to address this issue?

Are we sure that anthropogenic global warming is occurring?

Is nuclear energy the solution to achieving carbon reductions?

Is there a technological fix to global warming?

What is the carbon economy?

Why does the United States refuse to ratify the Kyoto Protocol?

What are the stumbling blocks to achieving international cooperation in relation to climate change?

Should democratic rights be over-riden in order to address issues associated with anthropogenic climate change?

What are the environmental justice arguments in the climate change debates?

Week 6 Discussion: Water management in Australia

What have been the major changes in water management in Australia since the end of WW2?

How may water trading rights be connected to neo-liberalism?

Have water rights been over-allocated in the Murray-Darling Basin?

Is our water too cheap?

Do we need more dams? Discuss options to meet projected water demand in our major cities.

Week 7 Reading Week

There are no lectures and tutorials this week. The week is to be used for reading material for the Upper Hunter Fieldtrip/alternative assignment (same reading list – available in this course reader) and the essay.

Week 8 Discussion: Animals and the Environment

How do we define what is an animal (bird, fish, virus)?

How do we construct other animals as being like humans, and how do we draw barriers between humans and other animals? Give examples.

In what ways are animals consigned particular places and excluded from other places in resource and environmental management?

Should we be changing our cities/lives to greater accommodate animals (native birds, mice, spiders, cockroaches, crocodiles)?

How may animals challenge human spatial orderings?

Week 9 Discussion: Land clearing and rural conservation in Australia

Are farmers stewards of the land or destroyers of the land?

Should there be tougher penalties for land clearing?

What does Australia's position on land clearing in the Kyoto Protocol mean for environmental management?

How may climate change encourage more clearing of land?

Is Australian agriculture unique or should it be treated similar to other industries in regard to climate change issues?

UPPER HUNTER FIELDTRIP

The Tutorials are now replaced by Practicals. The following questions and the readings in your reader have been provided for students to extend their learning, and to assist with exam preparation.

Week 10 Frontiers: Forestry and Fishing

What is a resource frontier?

Is over-exploitation possible?

How may technology influence the construction of a frontier mentality?

What evidence can you cite of resource management moving away from a frontier mentality?

What, if anything, makes forestry unique as a resource management activity?

How may resource management promote or restrict environmental justice?

Explain the changing relationships between forests and employment in countries such as Australia and Canada.

Week 11 Media

How may media construct environmental issues to favour particular outcomes?

What is greenwashing and why is it important to understand this concept?

Why may greenwashing be sometimes challenging to identify?
How does the media frame particular issues?

Week 12 Resources and Indigenous People

Indigenous people have been managing country for thousands of years – what could be more sustainable? Discuss.

What are some of the major differences between various forms of indigenous environmental management and scientific environmental management?

On what points do indigenous people and wilderness advocates agree and disagree regarding environmental management?

How are introduced species constructed in some indigenous environmental management practices?

Contemporary indigenous people are often on the lowest scale of wealth, health and longevity indices – why should they manage the land sustainably according to introduced models of environmental management?

Week 13 Impact Assessment

What are the origins of impact assessment?

What are the strengths and weaknesses of traditional forms of environmental impact assessment?

What is Strategic Environmental Assessment (SEA)?

What are cumulative impacts?

Will newer forms of impact assessment overcome the weaknesses of traditional approaches to impact assessment?

Academic Honesty and Plagiarism

The role of the University of Sydney is to create, preserve, transmit and apply knowledge through teaching, research, creative works and other forms of scholarship. A commitment to academic excellence and high standards of ethical behaviour is essential in this undertaking. As such, the University requires all students to act honestly, ethically and with integrity in their dealings with the University, its employees, members of the public and other students.

In February 2006, a new policy covering the issue of student plagiarism in coursework Units of Study offered by the University was introduced. The policy requires all students to sign and submit plagiarism compliance statements to each School or Department of which they are a student member.

The School of Geosciences requires a signed compliance statement for each Unit of Study offered by the School in which students are enrolled. Students should download from the School of Geosciences website (<http://www.geosci.usyd.edu.au/current/plagiarism.html>), print and complete the Unit of Study Plagiarism Compliance Statement, the Cover Sheet for Individual Assignments and the Cover Sheet for Group Assignments as required.

Students should take particular note of section B 5-7, which defines plagiarism and distinguishes between negligent plagiarism and dishonest plagiarism.

If you have any questions regarding the policy and its implementation, please speak to your Unit of Study coordinator or lecturer, or the School's Student Liaison Officer on 9351 2886 or by email: b.mcmillen@geosci.usyd.edu.au.

Essay assignments

Choose one of the following six essay topics. Essays should be a maximum of 2000 words and should have the word length written on the title page. The due time and date is **4.00pm on Thursday 18 September 2008**. Essays are to be placed in the Geography 2 Environment box in front of the Madsen office.

The essay topics are as follows:

1. “The Gordon below Franklin was of course a major issue but relatively speaking pales into insignificance against the massive challenge we are facing now ... our very survivability is at stake, yet politics are a complete replica of what we experienced in 1983” Bob Hawke (2008, 7 in the Hobart Mercury article in your Reader)

Discuss the above statement with reference to the history of conservation, sustainable development and climate change. What do you think replicates that of 25 years ago, and what do you think has changed over this time period?

2. We should abandon the term “sustainable development” and focus solely on the issue of climate change. Discuss.

3. Given the current mining boom in Australia, which of the environmental philosophies discussed in this unit of study (or using another environmental philosophy of your own choosing that may have been overlooked) is most likely to result in the effective management of Australia’s mineral reserves such that it leads to better environmental outcomes? Why?

4. What are the main differences between eco-feminism, eco-Marxism and a Christian approach to the environment? Explain how these differences may lead to different environmental management and outcomes in relation to a conflict anywhere in the world that involves water.

5. If there are over 6.7 billion people in the world, Australia cannot be overpopulated. Critically assess this idea drawing on the history of demographic and environmental thought in the world and in Australia.

6. “Rather than seeking to conquer climate, we should be aiming to celebrate climate and respect it as part of ourselves” (Hulme, 2008, 14).

The above conclusion by Mike Hulme in a recent article in *The Geographical Journal* raises questions about the value, use and type of science employed in climate research. What, if anything, does his approach offer us? Should we be engaging with the issues raised by Hulme, or simply letting the IPCC and others get on with the science of climate change?

Insert Hobart Mercury article here

Staff Feedback on the Unit of Study Evaluation (USE) GEOS2121 Environmental and Resource Management

Dr. Phil McManus has taught in the equivalent of this unit every year since 1999, with the exception of 2004. In 2005 it became a 6 credit point unit and was very well received by students in 2005 and 2006. The unit code, name and format changed in 2007 as a result of wider restructuring within the School of Geosciences. There was a new fieldtrip to the Upper Hunter and the unit was even more popular with students. The following feedback from 2007 has assisted to improve the unit again this year.

I believe that it is important to incorporate student feedback into teaching in order to promote better learning outcomes. Given the history of the unit of study outlined above, it is useful to provide detailed feedback on the 2007 USE process and highlight changes for 2008. In 2007, 48 of 63 students enrolled in the unit of study completed the USE (a 76% response rate). 85% of students were either satisfied or strongly satisfied with the quality of this unit.

The teaching in this unit is design to help students to learn. In 2007, 85% of students agreed or strongly agreed that “the learning outcomes and expected standards of this unit of study were clear to me). 4% of students disagreed or strongly disagreed with this statement. You are likely to get as much out of this unit as you put into it in terms of your own organisation and study. Previous surveys have highlighted that sometimes students feel that each topic in this unit was not dealt with sufficiently. There is a perception that in this subject there is a lot of material to cover, and sometimes students are looking for more depth in areas in which they are particularly interested (fantastic!). The lectures, however, are only a way into the themes and ideas of GEOS2121. It is generally possible for students to develop their particular interests through the essay questions. Some students also pick up these themes in other units of study, or in their Honours year. The reading resources are designed to encourage, inspire and challenge students to take the lecture material further in their own learning.

Prompt and constructive feedback on essays, reports, tutorial papers and practicals is very important in encouraging student learning. 75% of students agreed or strongly agreed that “feedback from assessment was useful in helping me to learn”. This is the USE question on which student satisfaction tends to fluctuate most from year to year. Prompt return of all student work with helpful feedback is an aspect of the course that we will again monitor closely in 2008.

In 2007, 85% of students agreed or strongly agreed that “the teaching in this unit of study helped me to learn effectively”. The teaching is designed to enable students to learn, allowing for the different learning styles of students. Learning resources are provided in different formats. The tutorial reader is designed to make regular reading easy, and to be used as a resource in the future. The essay questions are designed to encourage students to develop research skills. While there are many resources listed in the course reader, students are encouraged to find additional resources.

In the past many students have appreciated the challenging nature of this unit. For example; "I really enjoyed this unit of study. It helped challenge my views and taught me much about research and also how to approach problems and how to think" and "Really got you thinking about enviro issues in a broad sense and not just trying to learn information presented." These comments reflect the aim of education and what we are trying to do in this unit of study.

There were some changes in the introduction of GEOS2121 to replace GEOG2421 between 2006 and 2007. Other than the usual updating of reference material, lecture notes and presentations, the main changes were the fieldtrip, the contact time and the focus of the unit. In 2007 a new fieldtrip to the Upper Hunter to study coal mining, viticulture and thoroughbred breeding related to lectures on sustainable development, resource management, energy resources, water management, agriculture and climate change. The fieldtrip was shortened to four days. The fieldtrip, and some other lectures by Phil McManus, also included material that is relevant to students from geology and geophysics backgrounds.

In 2007 the contact time was reduced by one hour per week with the deletion of a practical component to the unit of study, which brought the unit of study into line with other 6 credit point workloads, and was suggested by some students in the 2006 USE. The reduction of the tutorial/practical block from 2 hours to a 1 hour tutorial assisted students in timetabling their classes and avoiding timetable clashes.

In 2008 this tutorial/practical slot will change slightly, with the latter part of the semester devoted to practicals that are designed to assist students with their fieldtrip reports. This should enable all students to produce better quality reports. As part of this process, 5% of marks have been added to the fieldtrip report. This has been taken from the Tutorial Reports, which have been reduced in number from 3 to 2, thereby reducing the student workload by 500 words. Importantly, the tutorial reports are worth an easy 5% if students do the work well, and enable students to get some feedback on their work prior to the submission of the bigger essay and fieldtrip report.

I'm very pleased to welcome Gareth Edwards and Raewyn Graham as tutors/practical demonstrators in 2008. Both Raewyn and Gareth are PhD students studying topics relevant to this unit of study, and both have previous teaching experience. I am very pleased about the growth in popularity of this unit of study, with student numbers rising rapidly. Given the environmental concerns we face in the world, I would be troubled if students were not engaging with these issues. We have attempted to accommodate the increased student enrolments with one new tutorial/practical class being added, but I am sure that one of the biggest challenges this year will be to maintain the high standards set in previous years for a much larger class size in 2008.

Finally, to assist students with their time management, the assessment is conducted throughout the semester and the essay topics can be commenced well before the submission deadline. We are fortunate to be building upon a successful unit of study, but if students have suggestions for improvements throughout the semester we are happy to discuss ideas and accommodate good suggestions if it is possible.

Phil McManus
July 2008

Readings

Unless otherwise specified, the following readings are located in the new Sciences Library, including through electronic access. Books that are of particular relevance to many of the course themes include:

Elliott, Jennifer, 2006, *An Introduction to Sustainable Development* (3rd Ed.), London, Routledge.

Howitt, Richard, 2001, *Rethinking Resource Management: Justice, sustainability and Indigenous Peoples*, London, Routledge.

McManus, P., 2005, *Vortex Cities to Sustainable Cities: Australia's Urban Challenge*, Sydney, UNSW Press. (This book is a compulsory text for GEOG3521 Sustainable Cities).

Useful journals include *Sustainable Development*, *Local Environment*, *Journal of Environmental Management, Organization and Environment*, *Environmental Politics*, *The Journal of Rural Studies* and *Capitalism, Nature, Socialism*. These journals are available online through The U. of Sydney library.

Prescribed and supplementary reading

In order to follow the course themes, key readings are prescribed each week. These readings are in your Course Reader. For examination purposes, it will be assumed that you have covered this prescribed reading. There is also suggested supplementary reading to increase the breadth of your understanding of the course material and to assist you in library research for your essays. Reading is organised by course theme, as follows:

Week 1 The environment and natural resources: contestation and management/sustainability

A) Prescribed Reading: **(This is an overview and an introduction: You need to do the reading for the week 2 tutorial in the same week as you look at this reference).**

Miller, G. T. Jr., 2002, "Environmental Issues, their causes, and sustainability" in *Sustaining the Earth*, 5th Edition, Wadsworth, California, pp.1-16

B) Supplementary reading:

Aplin, G., 2002, "Evolving values, attitudes and social pressures" in *Australians and their environment: an introduction to environmental studies*, 2nd edition, Oxford University Press, Melbourne, 124-155.

Beder, Sharon, 1996, *The Nature of sustainable development*, second edition, Newham, Scribe Publications. [333.715/18A] Chapters 1-3 (pp 3-23).

Commonwealth of Australia, 1990, *Ecologically sustainable development: a Commonwealth discussion paper*, Canberra, Australian Government Publishing Service. [Badham, Business 333.4994/1]

McManus, P. 2000, "Natural Resources", "Resource", "Resource Evaluation" and "Resource Management" in Johnston, R., et al, *The Dictionary of Human Geography* (4th Edition) Oxford, Blackwell.

Pulver, S. 2007, Making sense of corporate environmentalism. *Organization and Environment*, 20 (1), 44-83.

World Commission on Environment and Development, 1987, *Our Common Future*, Oxford, Oxford University Press. [363.7/30]

Week 2 Environmental Philosophy

A) Prescribed reading:

McGregor, A, 2004, "Sustainable development and 'warm fuzzy feelings': Discourse and nature within Australian environmental imaginaries". *Geoforum*, 35, 5, pp. 593-606

B) Supplementary reading:

General:

Bridge, G., P. McManus, and T. Marsden, 2003, The Next New Thing? Biotechnology and its Discontents. *Geoforum* 34: 165-174

Dobson, A. 1995. *Green Political Thought* (2nd ed.). Routledge, London.

Fox, W. 1992. New philosophical directions in environmental decision-making. In Hay, P. & R. Eckersley (eds). *Ecopolitical theory: essays from Australia*. Centre of Environmental Studies, Hobart, 1-20.

Hay, P., 2002, *Main Currents in Western Environmental Thought*, UNSW Press, Sydney

Heath, Y. and Gifford, R., 2006. Free-market ideology and environmental degradation: The case of belief in global climate change. *Environment and Behavior*. 38 (1), pp.48-71.

Jamison, A, 2001, "The dialectics of environmentalism" in *The Making of Green Knowledge: Environmental Politics and Cultural Transformation*, Cambridge University Press, Cambridge, pp.71-97.

Deep Ecology:

De Jonge, E., 2004. *Spinoza and deep ecology : challenging traditional approaches to environmentalism*. Ashgate, Aldershot.

Fox, W. 1990. *Toward a transpersonal ecology*. Shambhala, Boston.

Katz, E, Light, A and Rothenberg, D. (eds), 2000, *Beneath the surface : critical essays in the philosophy of deep ecology*. MIT Press, Cambridge.

Luke, T., 2002. Deep ecology: Living as if nature mattered: Devall and sessions on defending the Earth. *Organization and Environment*, 15, 2, pp 178-186

Sessions, G, (ed) 1995. *Deep ecology for the twenty-first century*. Shambhala, Boston

Ecofeminism:

Emel, Jody ,1995 "Are you man enough, big and bad enough? Ecofeminism and wolf eradication in the USA". *Environment and Planning D: Society and Space* 13: 707-34.

Figgis, P, 1999, *Taking paradise and putting up parking lots : the role of women in reclaiming the environment*, Sydney, Department of Women (Fisher Research 333.7082 4)

Mallory, C., 2006. Ecofeminism and forest defense in Cascadia: Gender, theory and radical activism. *Capitalism, Nature, Socialism*, 17 (1), pp.32-49.

Reed; M and Mitchell, B, 2003, "Gendering environmental geography". *Canadian Geographer*, 47, 3, pp.318-337.

Turner, T.E. and Brownhill, L. 2006: Ecofeminism as gendered, ethnicized class struggle: A rejoinder to Stuart Rosewarne. *Capitalism, Nature, Socialism*. 17 (4), pp.87-95.

Warren, K, 2000, *Ecofeminist philosophy : a western perspective on what it is and why it matters*, Rowman and Littlefield, Maryland. (Fisher Research, 305.4201 159)

Warren, K, (ed). 1997, *Ecofeminism: Women, Culture, Nature*. Indiana University Press, Bloomington.

Free Market Environmentalism

Anderson, T. and Leal, D. 2001. *Free Market Environmentalism (2nd ed)*, Palgrave, New York.

Heath, Y. and Gifford, R., 2006. Free-market ideology and environmental degradation: The case of belief in global climate change. *Environment and Behavior*. 38 (1), pp.48-71.

Pennington, M. 2005. Liberty, markets, and environmental values: A Hayekian defense of free-market environmentalism. *Independent Review*, 10 (1), pp 39-57.

Socialism and Marxism:

Castree, N., 2002. "False antithesis? Marxism, nature and actor-networks", *Antipode*, 34, 1, pp.119-148

Castree, N., 2002, Environmental issues: from policy to political economy. *Progress in Human Geography* 26, 357-365.

Clark, B. and York, R. 2005: Dialectical materialism and nature: An alternative to economism and deep ecology. *Organization and Environment*. 18 (3), 318-337.

Darling, E, 2001, The Lorax Redux: Profit biggery and some selective silences in American environmentalism. *Capitalism, Nature, Socialism*. 12, 4, pp.51-66

Harvey, D., 1996, "The Environment of Justice" in Harvey, D., *Justice, Nature and the Geography of Difference*, Oxford and Cambridge (USA), Blackwell, 366-402.

Hughes, J. 2000. *Ecology and historical materialism*, Cambridge University Press, Cambridge (Badham 577.012)

Low, N. and Gleeson, B. 1998, "Environmental Justice: Distributing Environmental Quality" in Low, N. and Gleeson, B., *Justice, Society and Nature: An exploration of political ecology*, London and New York, Routledge, 102-132.

Pepper, D. 1996. *Modern environmentalism: an introduction*. Routledge, London.

Rosewarne, S., 2006. Socialist ecology's necessary engagement with ecofeminism. *Capitalism, Nature, Socialism*, 17 (4), pp.78-86.

Christianity:

Barry, J. 2007, *Environment and Social Theory*. Routledge, London.

Coates, P. 1998, "The Middle Ages", Chapter 3 in *Nature: Western Attitudes since ancient times*, Polity Press, Cambridge.

Gatta, J. 2004, *Making nature sacred: literature, religion, and environment in America from the Puritans to the present*. Oxford University Press, New York.

Gore, Al, 1992. *Earth in the Balance: forging a new common purpose*, Earthscan, London.

Leal, R. B., 2006. *Through Ecological Eyes: Reflections on Christianity's environmental credentials*. St. Pauls Publication, Sydney.

Rue, C. 2006, *Catholics and nature : two hundred years of environmental attitudes in Australia*. Australian Catholic Social Justice Council, Sydney.

Yarri, D., 2005. *The ethics of animal experimentation : a critical analysis and constructive Christian proposal*. Oxford University Press, New York.

Week 3 Geography and Environmentalism

A) Prescribed Reading:

Buller, H. (2008) Safe from the wolf: biosecurity, biodiversity, and competing philosophies of nature. *Environment and Planning A*, 40, 1583-1597.

B) Supplementary Readings:

Darling, E, 2001, The Lorax Redux: Profit biggery and some selective silences in American environmentalism. *Capitalism, Nature, Socialism*. 12, 4, pp.51-66.

Diesendorf, M. & Hamilton, C. (1997) "The Ecologically Sustainable Development Process in Australia" in Diesendorf, M. & Hamilton, C. (eds.) *Human Ecology, Human Economy*, St. Leonards, Allen & Unwin, 285-301.

Doyle, T. & D. McEachern. 1998. *Environment and politics*. Routledge, London.

Frawley, K. 1998. A 'green' vision: the evolution of Australian environmentalism. In Anderson K. & F. Gale (eds) *Cultural Geographies: 2nd edition*. Longman, pp.265-293

Gaynor, A., et al, (eds), 2002, *Country: Visions of land and people in Western Australia*, Western Australian Museum.

Hutton, D. and Connors, L. (1999) *A History of the Australian Environmental Movement*, Melbourne, Cambridge University Press.

McCarthy, J and Prudham, S, 2004, Neoliberal Nature and the Nature of Neoliberalism. *Geoforum*, 35, pp.275-283.

McCormick, J. (1995) "The Roots of Environmentalism" in McCormick, J., *The Global Environmental Movement (2nd Edition)*, Chichester, John Wiley & Sons, 1-26.

Mosley, G., 1999, *Battle for the Bush: The Blue Mountains, the Australian Alps and the origins of the wilderness movement*. Envirobook/the Colong Foundation for Wilderness Limited. Sydney.

Week 4 Population, development and environment

A) Prescribed reading:

Cutter, S and Renwick, W, 2004, The Human Population. In *Exploitation, Conservation, Preservation: A geographic perspective on natural resource use (4th Edition)*, John Wiley and Sons, New Jersey, pp.87-106.

B) Supplementary reading:

Christophers, B., 2007, Underpopulation, television economies, and the power of the geographical imagination. *Geografiska Annaler (Series B)*, 89 (1), 39-51.

Ehrlich, Paul, 1971, *The population bomb*, Ballantine, Friends of the Earth. [304.66/21]

Ehrlich, Paul and Anne Ehrlich, 1990, *The population explosion*, Brookvale, Simon and Schuster. [Fisher research 304.6/66]

McManus, P, 2005, Population. In *Vortex Cities to Sustainable Cities: Australia's urban challenge*. Sydney, UNSW Press, 91-108.

Simon, Julian, 1981, *The ultimate resource*, Princeton, N.J., Princeton University Press. [333.7/338]

Yencken, D. and Wilkinson, 2000. Population, consumption and technological change (Chapter 3), *Resetting the compass: Australia's Journey Towards Sustainability*, CSIRO Publishing, Australia, pp. 31-54.

Week 5 Global energy and climate change

A) Prescribed Reading:

Flannery (2006). The Road to Kyoto. In *The Weather Makers*, pp222-231.

B) Supplementary Readings:

Appenzeller, T. (2004). The Case of the Missing Carbon, *National Geographic*, 205(2), Feb 2004. pp88-117

Appenzeller, T. (2004). The End of Cheap Oil, *National Geographic*, 205(6), June 2004. pp80-109.

IPCC (2007). Contribution of Working Group I (The Physical Basis of Climate Change) to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. Summary for Policymakers. 18 pages

Lowe, I, 2005, *Living in the Hothouse: How global warming affects Australia*, Scribe, Melbourne.

McIntyre, A and Berg, C, 2005, Wake up: They're misleading you. The media's climate change propaganda. *Review* (Institute of Public Affairs), 57, 1, pp.8-11.

Munasinghe, M and Swart, R, 2005, Climate Change: Scientific background and introduction. In *Primer on Climate Change and Sustainable Development: Facts, Policy Analysis and Applications*. Cambridge University Press, Cambridge. pp.1-55.

Week 6 Water management in Australia

A) Prescribed Readings

Ginis, E. (2005). The use and abuse of our most precious asset. *Australian Geographic*, 77 (Jan-Mar), pp.36-52.

Flynn, J and Wheatley, L. (2004). Debate: Our Water is too cheap. *Australian Geographic*, 76 (Oct-Dec), pp.32-33.

B) Supplementary Reading

Bennett, J. (2003). *Environmental Values and Water Policy*. Australian Geographical Studies, 41(3), pp237-250.

Commonwealth Government of Australia (2007). *A National Plan for Water Security*, 25 January 2007 http://www.pm.gov.au/docs/national_plan_water_security.pdf

Cosier, P et al. (2003). Blueprint for a national water plan, The Wentworth Group of Concerned Scientists, WWF, Sydney (Available at www.wwf.org.au).

Gibbs, L. (2006). Valuing Water: Variability and the Lake Eyre basin, Central Australia, *Australian Geographer*, 37(1), pp73-85.

Hatton Macdonald, D., Lamontagne, S., and Connor, J.D. (2005). The economics of water: taking full account of first use, reuse and the return to the environment. *Irrigation and Drainage*. 54(S1), pp.S93-S102.

Kirby, M., Evans, R., Walker, G., Cresswell, R., Coram, J., Khan, S., Paydar, Z., Mainuddin, M., McKenzie, N., Ryan, S. (2006). The shared water resources of the Murray-Darling Basin. Murray-Darling Basin Commission and CSIRO, Canberra.

The Economist (2007). 'The big dry', April 26, 2007. Available at

http://www.economist.com/world/displaystory.cfm?story_id=9071007

Ward, F. A. (2007). Decision support for water policy: a review of economic concepts and tools, *Water Policy* 9(1), pp.1-31.

Week 7 (READING WEEK – NO TUTORIAL) See Upper Hunter Fieldtrip Reading list at the end of the weekly tutorial readings). One reading has been provided at this point in your course reader for convenience – it is also the reading for Week 9.

Week 8 Animals and the Environment

A) Prescribed Reading:

Franklin, A, 2006, *The Animal Enigma*. In *Animal nation: the true story of animals and Australia*. UNSW Press, Sydney, pp.1-25.

B) Supplementary readings:

Anderson, K, 1997, "A walk on the wild side: a critical geography of domestication", *Progress in Human Geography*, 21: 463-485.

Castree, N, 2003, "Environmental issues: relational ontologies and hybrid politics", *Progress in Human Geography*, 27, 2, pp.203-211.

Ferguson, A, 2005, Making ends meet: How much space should be made for ethics in the harsh reality of factory farms? *The Big Issue*, 229, pp. 12-14.

Franklin, A, 2006 *Animal nation: the true story of animals and Australia*. UNSW Press, Sydney

Hobson, K. 2007, Political animals? On animals as subjects in an enlarged political geography, *Political Geography*, 26, (3), pp 250-267

Leal, R. B., 2006. "Animals and birds in creation". In *Through Ecological Eyes: Reflections on Christianity's environmental credentials*. St. Pauls Publication, Sydney, pp.75-94.

Lorimer H, 2006, Herding memories of humans and animals. *Environment and Planning D: Society and Space* 24(4) pp.497–518

McManus, P, 2001, "Feeding a Growing City: The Glebe Island Abattoir and the provision of meat for Sydney", *Rural Society*, 11, 3, 243-253

Philo, C and Wilbert, C, 2000, "Animal spaces, beastly places: an introduction" in Philo and Wilbert (eds) *Animal Spaces, Beastly Places: New geographies of human-animal relations*, Routledge, London and New York, 1-34.

Whatmore, S, 1999, "Rethinking the 'human' in Human Geography" in Massey, D., Allen, J. and Sarre, P. (eds) *Human Geography Today*, Polity, Oxford, 22-39.

Wolch, J., West, K. and Gaines, T. E. (1995) "Transspecies urban theory". *Environment and Planning D: Society and Space* 13: 735-769

Yarri, D., 2005. *The ethics of animal experimentation : a critical analysis and constructive Christian proposal*. Oxford University Press, New York

Yarwood, R and Evans, N, 2003, Livestock, locality and landscape: EU regulations and the new geography of Welsh farm animals. *Applied Geography*, 23, pp.137-157.

Week 9 Agriculture and landuse

A) Prescribed Readings

Hunter Valley Thoroughbred Breeders Association and Aushorse Ltd (2007), *The Upper Hunter Thoroughbred Horse Industry: Jeopardised by Coal Mining*. Hunter Valley Thoroughbred Breeders Association and Aushorse Ltd, Scone. **(pp.101-107 of this reader)**

B) Supplementary Reading

Bully, L. et al. (2003). A New Model for Landscape Conservation in New South Wales: The Wentworth Group of Concerned Scientists Report to Premier Carr, WWF Australia, Sydney. 18 pages (Available at www.wwf.org.au)

Cogger, H., Dickman, C. and Ford, H. (2007). Impacts of Landclearing: The Impacts of the Approved Clearing of Native Vegetation on Australian Wildlife in New South Wales, WWF Australia, Sydney. 18 pages (Available at www.wwf.org.au)

Upper Hunter Fieldtrip. Tutorials finished and Practicals commence. The following readings are provided to support the lecture material, for extended student learning and for exam preparation.

Week 10 Frontiers: Forestry and Fishing

A) Supplied Reading:

Pauly D.; Watson R.; Alder J., 2005, Global trends in world fisheries: Impacts on marine ecosystems and food security. *Philosophical Transactions of the Royal Society of London Series B Biological Sciences*, V. 360, Issue 1453, Pages 5-12.

B) Supplementary Readings:

Forests

Fisher, R.J. 2001 'Experiences, Challenges, and Prospects in Collaborative Management of Protected Areas: An International Perspective.' In Buck, Louise B., Charles C. Geisler, John Schelhas and Eva Wollenberg (eds) *Biological Diversity: Balancing Interests Through Adaptive Collaborative Management*. CRC Press: Boca Raton, Florida.

Hillier, J. 2005, Diabolical images: Cartoons as a contorted mirror of dissent in the Western Australian Regional Forest Agreement debate. In Cryle, D and Hillier, J. (eds) *Consent and Consensus: Politics, Media and Governance in Twentieth century Australia*, Perth, API Network, pp.197-215 and 411-413.

Hillier, J. 2002, "Can't see the trees for the wood? Visions and revisions of old-growth forests in Western Australia" in Gaynor, A., et al, (eds) *Country: Visions of land and people in Western Australia*, Western Australian Museum, pp.57-81

Johnson, C and Forsyth, T., 2002, In the eyes of the state: negotiating a "rights based approach" to forest conservation in Thailand, *World Development*, 30, 9, 1591-1605

Lane, M. 1999, "Regional Forest Agreements: Resolving Resource Conflicts or Managing Resource Politics", *Australian Geographical Studies*, 37 (2), pp.142-153

McManus, P., 2002, "The potential and limits of progressive neopluralism: a comparative study of forest politics in Coastal British Columbia and South East New South Wales during the 1990s", *Environment and Planning A*, 34, 845-865.

Robbins, P. and Fraser, A., 2003, "A forest of contradictions: producing the landscapes of the Scottish Highlands", *Antipode*, 35, 1, 94-118

Shrestha, K and McManus, P, 2005, Sustaining inequity? Rethinking the history of Nepalese forest policy. In Calver, M. et al, (eds) *Proceedings 6th National Conference of the Australian Forest History Society Inc.* Millpress, Rotterdam, pp.681-691.

Simon, A., 1998, "Backlash! Corporate Front Groups and the Struggle for Sustainable Forestry in British Columbia" in *Capitalism, Nature, Socialism* 9 (4) 3-37

Fish

Dearden, P. and Mitchell, B., 1998, "The Atlantic Fisheries" – extract from "The Global Commons" in Dearden, P. and Mitchell, B., *Environmental Change and Challenge: A Canadian Perspective*, Toronto, Oxford University Press, 475-485.

Kurlansky, M., 1998, *Cod: A Biography of a fish that changed the world*, London, Jonathan Cape, 158-173.

- Mansfield, B, 2004, Neoliberalism in the oceans: "rationalization," property rights, and the commons question. *Geoforum*, 35, 3, pp.313-326.
- McDowall, R.M., 2006, Crying wolf, crying foul, or crying shame: Alien salmonids and a biodiversity crisis in the southern cool-temperate galaxioid **fishes?** *Reviews in Fish Biology and Fisheries*, 16, (3-4), pp 233-422
- Rogers, R.,1998, "The Atlantic Fishery" in Keil, R., et al (eds), *Political Ecology: Global and Local*, London & New York, Routledge, 102-119.
- Waite, Gordon and Hartig, Kate, 2000, "Ecologically Sustainable Fishing in Theory and Practice: individual transferable quotas in Australia's South East Fishery", *Australian Geographer*, 31 (1), pp.87-114

Plus, a theme issue containing 15 papers - *Philosophical Transactions of the Royal Society of London Series B Biological Sciences*, January, 2006, v.360, Issue 1453. Electronic access available through the University of Sydney library system.

Week 11 Media

A) Supplied Reading:

- Kjerulf-Petersen, L., 2007, Changing public discourse on the environment: Danish media coverage of the Rio and Johannesburg UN Summits, *Environmental Politics*, 16 (2) 206-230.

B) Supplementary Readings:

- Anderson, A. 1997. *Media, culture and the environment*. UCL Press, London.
- Beder, S. 1997 *Global Spin: The Corporate Assault on Environmentalism*. Scribe Publications: Melbourne. Chapters 10 and 11, pp.161-194.
- Boykoff, M. and Boykoff, J., 2007, Climate change and journalistic norms: A case-study of US mass-media coverage. *Geoforum*, 38 (6), pp.1190-1204.
- Burgess, J. 1989. The production and consumption of environmental meanings in the mass media: a research agenda for the 1990s. *Transactions: Institute of British Geographers NS* 15, 139-161.
- Compas, E. et al, 2007, Murky waters: Media reporting of marine protected areas in South Australia. *Marine Policy*, 31 (6), pp.691-697.
- Harrabin, R. 2000, "Reporting sustainable development: a broadcast journalist's view" in Smith, J. (ed.), 2000, *The daily globe : environmental change, the public and the media*, Earthscan, London, pp.49-63.
- McGregor, A. 1998. Ruralness, development and democracy: media, myths and the creation of meaning at Lake Cowal, New South Wales. *Australian Geographer*, 29, 191-203.
- McIntyre, A and Berg, C, 2005, Wake up: They're misleading you. The media's climate change propaganda. *Review (Institute of Public Affairs)*, 57, 1, pp.8-11.
- McManus, P., 2000, "Beyond Kyoto? Media Representation of an Environmental Issue", *Australian Geographical Studies*, 38, 3, 306-319.
- Rowell, A. 1996. *Green backlash. Global subversion of the environmental movement*. Routledge, London
- Symes, D, 2005, Fishing, the Environment and the Media. *Fisheries Research*, 73, 1-2, pp.13-19.
- Tokar, B. 1997. *Earth for sale: reclaiming ecology in the age of corporate greenwash*. South End Press, Boston.

Week 12 Resources and Indigenous Peoples

A) Supplied Reading:

O'Faircheallaigh, C. and Corbett, T., 2005, Indigenous participation in environmental management of mining projects: The role of negotiated agreements. *Environmental Politics*, 14 (5), pp.629-647.

B) Supplementary Readings:

- Fisher, R.J. 1996 'Shifting Cultivation in Laos: Is the Government's Policy Realistic?' In Bob Stensholt (ed) *Development Dilemmas in the Mekong Sub-Region: Workshop Proceedings, 1-2 October 1996*. Monash Asia Institute, Monash University, Clayton Victoria. Pp 42-48.
- Howitt, R, 2001, Co-Management of Local Resources. In *Rethinking Resource Management: Justice, Sustainability and Indigenous Peoples*, Routledge, London, pp.369-377
- Howitt, Richard, with John Connell and Philip Hirsch, eds, 1996, *Resources, nations and indigenous peoples: case studies from Australasia, Melanesia and Southeast Asia*, Oxford University Press, Melbourne.
- Jackson, S. 2006, Compartmentalising culture: The articulation and consideration of Indigenous values in water resource management. *Australian Geographer*, 37 (1), pp.19-31.
- Lajoie, G. and M. A. Bouchard, 2006, "Native involvement in strategic assessment of natural resource development: the example of the Crees living in the Canadian taiga", *Impact Assessment and Project Appraisal*, 24 (3), pp.211-220.
- Lloyd, D, van Nimwegen, P and Boyd, W.E. 2005, Letting indigenous people talk about their country: A case study of cross-cultural (Mis)communication in an environmental management planning process. *Geographical Research*, 43 (4) pp.406-416.
- Nathan, H. (1993) Aboriginal Forestry: The Role of the First Nations. In Drushka, K., et al, (eds.) *Touch Wood: BC Forests at the Crossroads*, Madeira Park, BC, Harbour, pp.137-170
- Shrestha, K. and McManus, P., 2008, The politics of community participation in natural resource management: Lessons from community forestry in Nepal. *Australian Forestry Journal*, 71 (2), 135-146.

See also numerous articles in *Geographical Research*, volume 45, number 2, June 2007.

Week 13A: Impact assessment

A) Supplied reading:

Duinker, P. and Greig, L., 2007, Scenario analysis in environmental impact assessment: Improving explorations for the future. *Environmental Impact Assessment Review*, 27, pp.206-219.

B) Supplementary reading:

- Barrow, C.J. 2002 'Evaluating the social impacts of environmental change and the environmental impacts of social change: an introductory review of social impact assessment.' *Environmental Studies*, Vol 59 (2) pp 185-195.
- Burris, R. & Canter, L., 1997, "Cumulative Impacts Are Not Properly Addressed in Environmental Assessments" in *Environmental Impact Assessment Review*, 17, pp.5-18

- Conacher, A and Conacher, J, 2000, Environmental Impact Assessment. In *Environmental Planning and Management in Australia*. Melbourne, Oxford University Press. pp.222-254.
- Gibson, R. with Hassan, S. et al (2005) *Sustainability Assessment: Criteria and Processes*. Earthscan, London.
- Glasson, J., R., Therivel, and A. Chadwick, 2005, *Introduction to Environmental Impact Assessment*. 3rd ed. Routledge, London.
- Howitt, R, 2001, "Social Impact Assessment", chapter 11 in *Rethinking Resource Management: Justice, Sustainability and Indigenous Peoples*, London, Routledge, 324-356.
- Lajoie, G. and M. A. Bouchard, 2006, "Native involvement in strategic assessment of natural resource development: the example of the Crees living in the Canadian taiga", *Impact Assessment and Project Appraisal*, 24 (3), pp.211-220.
- Lee, N. and C. George, eds. 2002, *Environmental Assessment in Developing and Transitional Countries*. Wiley, Chichester.
- Marsden, S. and S. Dovers, eds. 2002, *Strategic Environmental Assessment in Australasia*. Sydney, The Federation Press.
- Morrison-Saunders, A. and J. Arts; eds. 2004, *Assessing Impact: Handbook of EIA and SEA Follow-up*. Earthscan, London.
- Rees, W., 1995, "Cumulative Environmental Assessment and Global Change" in *Environmental Impact Assessment Review*, 15, pp.295-309
- Thomas, I. and Elliott, M. 2005, *Environmental Impact Assessment in Australia: Theory and Practice (4th ed.)*, The Federation Press, Annandale [Chapters 1 and 2]
- Wood, C. 2002, *Environmental Impact Assessment: A Comparative Review*. 2nd ed., Prentice Hall U.K.

Week 13B: The 'Environmental Crisis' and the Future

A) Supplied Reading:

None

B) Supplementary readings:

- Boykoff, M. and Boykoff, J., 2007, Climate change and journalistic norms: A case-study of US mass-media coverage. *Geoforum*, 38 (6), pp.1190-1204.
- Cocks, D, 2003, "21C: A difficult century" in *Deep Futures: Our Prospects for Survival*, Sydney, UNSW Press, pp.3-72.
- Elliott, L., 1998, "Strategies for Sustainable Development", Chapter 8 of *The Global Politics of the Environment*, London, Macmillan Press.
- Marshall, B.K. and Goldstein, W.S. 2006, Managing the environmental legitimization crisis. *Organization and Environment*, 19 (2), pp.214-232.
- Wackernagel, M. and Rees, W., 1996, 'The Search for Sustainable Futures', Chapter 4 of *Our Ecological Footprint*, Gabriola Island, B.C., New Society Publishers

GEOS2121 Upper Hunter Fieldtrip Reading List

The following references are provided to enable students to become familiar with the Upper Hunter and issues relevant to the fieldtrip prior to actually attending the fieldtrip, and to assist students completing their fieldtrip assignment. Week 7 has been set aside as a Reading Week to enable students to undertake this reading.

- Albrecht, G. A. (2000) Rediscovering the Coquun: Towards an environmental history of the Hunter River, in *River Forum 2000, Our River: Our Future*. Hunter Catchment Management Trust, Paterson. 4-26.
- Charnock, N. and Grant C. (2005) Assessing various rehabilitation strategies for coarse coal washery reject dumps in the Hunter Valley, Australia. I. Chemical characteristics. *International Journal of Surface Mining, Reclamation and Environment*, 19, (2)108-131
- Daly, M. and Brown, J. (1966) *The Hunter Valley Region, N.S.W.*, The Hunter Valley Research Foundation, Newcastle.
- Department of Environment and Conservation, NSW (2006) *New South Wales State of the Environment, 2006*, Department of Environment and Conservation, NSW, Sydney.
- Department of Urban Affairs and Planning, NSW (1997) *Upper Hunter Cumulative Impact Study and Action Strategy*. Department of Urban Affairs and Planning, Sydney.
- Getz D. and Brown G. (2006) Critical success factors for wine tourism regions: a demand analysis. *Tourism Management* 27, 146-158.
- Golab, A, et al (2007) Petrography, carbonate mineralogy and geochemistry of thermally altered coal in Permian coal measures, Hunter Valley, Australia. *International Journal of Coal Geology*, 70, 1-3 SPEC. ISS., April 02 2007, 150-165
- Greenhouse Office, NSW (2005) *NSW Greenhouse Plan*, Greenhouse Office, NSW, Sydney.
- Halliday J. (2005) *The pocket guide to wines of Australia: 2005-2006 edition*. Harper-Collins Publishers, Sydney.
- Halliday J. and Jarratt R. (1979) *The Wines and history of the Hunter Valley*. McGraw-Hill, Sydney.
- Hillman, M. (2005) Justice in river management: Community perceptions from the Hunter Valley, New South Wales, Australia. *Geographical Research* 43 (2), 152-161.
- Hunter Valley Research Foundation (2005) *Newcastle and the Hunter Region Yearbook 2005-2006*. Hunter Valley Research Foundation, Newcastle.
- Hunter Valley Thoroughbred Breeders Association and Aushorse Ltd (2007) *The Upper Hunter Thoroughbred Horse Industry: Jeopardised by Coal Mining*, Hunter Valley Thoroughbred Breeders Association and Aushorse Ltd, Hunter Valley.
- Laurence, D. C. (2006) Why do mines close? in Fourie A, and Tibbett, M. (eds) *Mine Closure 2006: Proceedings of the first international seminar on mine closure, 13-15 September, 2006, Perth*. Centre for Land Rehabilitation at The University of Western Australia and the Australian Centre for Geomechanics, Perth, 83-94.
- Maitland B. and Stafford D. (1997) Newcastle-Coalfield Coalition, in Dingle T. (Ed.) *The Australian City - Future/Past: The Third Australian Planning History/Urban History Conference Proceedings*, Held 11-14 December 1996, pp.365-371. Monash University, Melbourne.
- McManus, P., (2008) Their grass is greener but ours is sweeter – Thoroughbred breeding and water management in the Upper Hunter region of New South Wales, Australia, *Geoforum*, 39 (3) May 2008,1296-1307.
- McManus, P., (in press), Mines, wines and thoroughbreds: Towards regional sustainability in the Upper Hunter, Australia, *Regional Studies*, available online from 16 April, 2008 as DOI: 10.1080/00343400701827394

Roberts B. and Enright M. (2004) Industry clusters in Australia: recent trends and prospects. *European Planning Studies*, **12**, 99-121.

Total Environment Centre (2007) Impacts of longwall coal mining on the environment in New South Wales. Total Environment Centre, Sydney.

Whitehead, M., Jones, M. and Jones, R. (2006) Spatializing the ecological leviathan: territorial strategies and the production of regional natures. *Geografiska Annaler* **88 B**, 49-65.

Websites:

<http://www.globalcoal.com/> Global coal

<http://www.nswmin.com.au/> NSW Minerals Council Ltd.

<http://www.muswellbrook.nsw.gov.au/> Muswellbrook Shire Council

http://www.singleton.nsw.gov.au/templates/singleton_splash.aspx?edit=false&pageID=335 Singleton Council

<http://upperhunter.local-e.nsw.gov.au/> Upper Hunter Shire Council

http://www.upperhuntercountry.com/hunter_valley/default.htm Upper Hunter Country

<http://www.huntertourism.com/> Hunter Tourism

<http://www.planning.nsw.gov.au/regional/hunter.asp> NSW Department of Planning (Lower Hunter Regional Strategy and Upper Hunter Coal Mining Assessment)

<http://www.hunterregion.com/hedc.shtml> HUNTER ECONOMIC DEVELOPMENT CORPORATION

<http://www.newportcorp.com.au/> Newcastle Port Corporation

<http://www.hvrf.com.au/pages/index.php> Hunter Valley Research Foundation

<http://www.wineaustralia.com/Australia/Default.aspx?tabid=302> Australian Wine and Brandy Corporation.

<http://www.anvilhill.org.au/> Anvil Hill Alliance

Upper Hunter Coal Mining Assessment (available at <http://www.planning.nsw.gov.au/regional/hunter.asp>)