1 General issues

Who We Are
Christina Bogner
(geoecology)

research interests:
• land use (soil aspects)
• remote sensing
• statistical modelling

Michael Hauhs
(ecological modelling)

research interests:
• ecosystem theory
• sustainable land use
• catchment studies

Our home department: Ecological Modelling
note details & updates of the NZ-excursion on the e-learning server

Educational Objectives

After this course you should know:
• natural and cultural history of New Zealand
• similarities and differences from middle European ecosystems
• key notions and concepts for evaluating land use
• different disciplinary approaches, their main abstractions

After this course you should be able to:
• relate value judgement to different histories and environments
• argue about land use valuation in NZ (and Europe)
• classify interdisciplinary approaches
• see ecosystems at home differently
what we expect from you

compulsive

prior  • a presentation in this seminar
  • where and when you arrive, how to contact you

during  • at Chch: fit participants
  • in case, inform us about medical status
  • prepared for alpine weather: tracking boots, rain clothes, sleeping bag (10°C), etc.
  • active engagement in discussions with guides

after  • a topical report delivered by April, 30th 2018
  • attending a final session in summer term 2018

optional

• orga-group helping in preparations (interests, questions, exchange of material, forum for tips ...)

what we offer

seminar & excursion

prior  • advice and guidance for your tasks (e.g. entry literature, feedback on drafts)
  • tips where to stay, what to see before and after

during  • pick up at airport, accommodations, transport, local guides, entry fees, opportunities
  for shopping and cooking
  • interesting sites, challenges & people

after  • 7 credit points

Planned dates ...

excursion

• register for excursion with Mrs. J.Samimi & transfer 200 € by 31 October 2017, second transfer
  by 31 January 2018

• self-organised travel to and from Christchurch (Chch), NZ

• arrive at 25 March 2018 (Saturday) at Chch (no food imports, boots washed prior to packing)

• earliest return flight 7 April 2018 (Saturday) from Chch

• costs to pay to UBT about 450,- €

• total costs about 1750,- €

exchange risks

€/NZ$ exchange rates have been rather volatile, be aware that at this stage we can provide
only estimates of total costs based on the last two trips
Figure 1: the 2012 route

Figure 2: detail of the trip in 2012
2 Introduction

2.1 Examples

Why NZ and Ecological Modelling? I

New Zealand and Europe

- similar environment (climate, soils)
- different histories of settlement by biota and by humans
- differences in actual land use Europe vs. NZ
- different potentials and problems
- tourism profiles (100% pure New Zealand, 100% pure you, 100% pure adrenalin, 100% Middle-earth)

NZ is marketing itself as an attraction (for tourists) because it is “100% pure” nature. This campaign has been started in 1999. Tourism is an important for the NZ economy. There is concern that the intensive landuse under dairy farming is potentially in conflict with the image of “pure nature”.

Why NZ and Ecological Modelling? II

Key Topics & Concepts

- evaluation land use (ecosystem services)
- preserving biodiversity (nature culture dichotomy)
- dealing with strangers (globalization)

- by spatial separation and/or timing
3 History

Historical Background

Waitangi treaty 6.2.1840

- Founding event of the New Zealand state
  - as a contract between two people
  - Maoris became citizens of the British crown
  - Crown could legally buy Maori land (for British settlers)
  - still legal basis of relations between Maori and Pakahea
  - e.g. in 2008 forests worth of about 250 NZ$ were given to Maori tribes of the North Island as compensation for injustice

- basis of Kemp’s Deed (12.6.1848)


Kemp’s Deed

*translated by Kemp himself*

... We the Chiefs and people of the tribe called the "Ngaitahu" who have signed our names & made our marks to this Deed on this 12th day of June 1848, do consent to surrender entirely & for ever to William Wakefield the Agent of the New Zealand Company in London, that is to say to the Directors of the same, the whole of the lands situate on the line of Coast commencing at "Kaiapoi" recently sold by the "Ngatitoa" & the boundary of the Nelson Block continuing from thence until it reaches Otakou, joining & following up the boundary line of the land sold to Mr Symonds;


Competition with France

Longlois Deed

- Banks Peninsula was sold on 2.8.1838 (prior to Waitangi treaty) for ...
- ... 2 cloaks, 6 pairs of trousers, 12 hats, 2 pairs of shoes, some pistols, axes and 2 shirts.
- to the Whaler Jean-Francois Longlois

...almost french

- French ship with 60 settlers was on the way to Akaroa
- while the south island tribes joined the treaty of Waitangi

4 Summary

Expectations

• your maximal distance from home
  – inevitable stops at exotic places
  – first impression at Christchurch will be: familiarity
  – seek the exotic among the familiar

• NZ: strong segregation of culture and nature
  – second impression: alien nature
  – seek the familiar among the exotic

• reflect upon background
  – a modelling issue?
  – nature and culture not only perceived, but shaped by (implicit) models

• sort puzzling impressions:
  – peculiar nature (natural history)
  – peculiar culture (political, economic history)

Topics I:

geo-aspects of the south island

• climate

• geology, tectonics and soils (braided) rivers

• geomorphology along the main fault line

• coasts and lagoons

bio-aspects

• evolution history and biota settlement

• Nothofagus and European Beech

• forestry with indigenous species

• deciduousness in NZ

• introduced species (Red deer: hunting and farming)

• introduced species (Rainbow and Brown trout)

• invasive plants: Gorse and Lupins
Topics II:

**history**
- Wakefield society and Christchurch
- historical sheep runs in the Canterbury plains
- cultural history: Moa hunting
- cultural history: Kemp’s Deed
- wheat farming in the Canterbury plains

**risk management**
- hazard management: Christchurch quake 2010/11
- hazard management: tsunamis at Kaikura
- hazard management: floods at Franz-Josef
- nature protection vs. animal rights (stouts and 1080)

Topics III:

**land use**
- energy generation and distribution in NZ
- resources at the West coast (gold, coal, timber)
- history of tourism in NZ
- forestry with exotic species
- dairy farming and industry
- future visions (pest-free NZ 2050)

**your own choice**
- propose a topic

Literature on these topics is available at the office Geo 109 (mh). You can start reading about NZ already now...