Introduction Seminar

Excursion on Land Use on the South Island, NZ

Christina Bogner Franz Moder Michael Hauhs

24. October 2017

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

3/15

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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

3/15

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

optiona

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

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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

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Planned dates ...

excursion

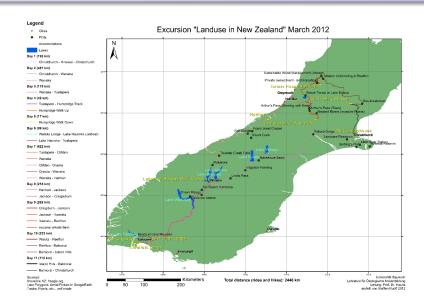
- register for excursion with Mrs. J.Samimi & transfer 200 € by 20 November 2017,second transfer by 31 January 2018
- self-organised travel to and from Christchurch (Chch), NZ
- arrive at 24 March 2018 (Saturday) at Chch (no food imports, boots washed prior to packing)
- earliest return flight 7 April 2018 (Saturday) from Chch, cheapest flights (October, 24th 2017: 1080€)
- costs to pay to UBT about 450,-€
- total costs about 1750,- €

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... and routes



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exchange risks



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)

Why NZ II

Topics

- restoration after non-sustainbale use (Hinwai, Banks Peninsula)
- ungrazed Tussock, a unique landscape
- invasice plants (into tussock and into southern beech)
- geomorphology (tectonic, glaciation histories)
- preservation in the presence of introduced mammals
- tourism and hunting in national parks
- forestry with exotic and indigenous species (beech)
- management of natural hazards (flooding)
- mixed farming
- mining operations (gold, coal)
- catchment hydrology
- dairying

Why NZ III

Topics (cont.)

- sawmill (beech timber)
- planing residental area
- erosion control, invasive plants (II)
- summing up, questions, with experts (Canterbury University)

Seminar 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)

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