

Fishing for a sustainable future?

Hamish G. Rennie
Land, Environment and People Research Centre,
Lincoln University
&
IGU Applied Geography Commission



Lincoln University, Christchurch, New Zealand

Outline

- Setting the net
- Some holes in the net
- Some fishy 'facts'
- Property rights – the 'Big One' that got away
- The Anchored Position
- Weighing Anchor – Repositioning Fisheries Geography

Lincoln University, Christchurch, New Zealand

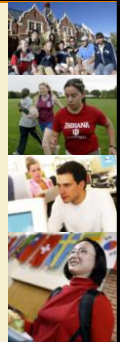
Setting the Net

- Fisheries geography?
 - Freshwater/saltwater/anadromous
 - Inshore/offshore
 - Pelagic/demersal
 - Sedentary/mobile
 - Highly mobile/straddling
 - Lake/river/bay/reef...
 - Tickle/fly/net/hook, line and sinker/kite/rawl/dredge/stealth/spear
 - Capture/(aqua)culture

Lincoln University, Christchurch, New Zealand

Resetting the net

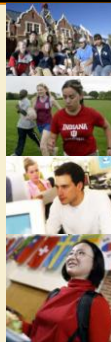
- Physical geography
 - Geomorphology, hydrology, climatology, biogeography, zoogeography
- 'Landlubberist'?
- Oceanography – Physical geography of the sea without the flora and fauna
- Marine biology – biogeography/zoogeography



Lincoln University, Christchurch, New Zealand

Some holes in the net

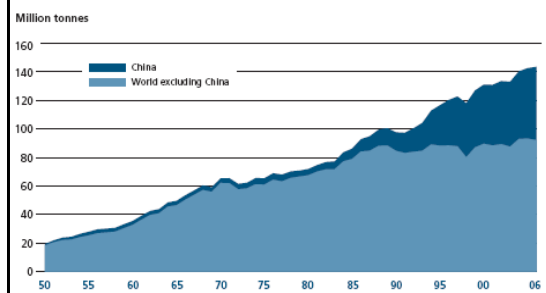
- Humans are fish out of water – literally!
- National Geographic
- Google Ocean
- Reliance on catch data and assumptions



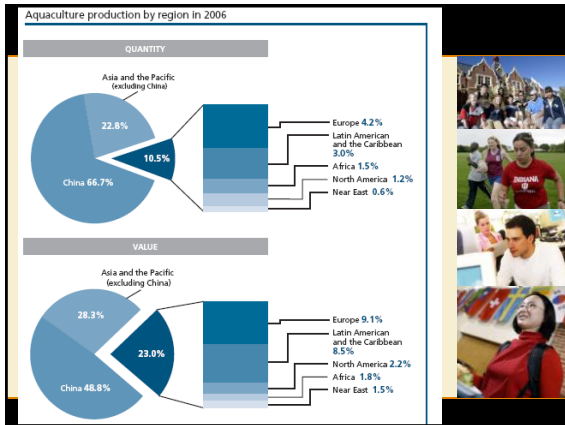
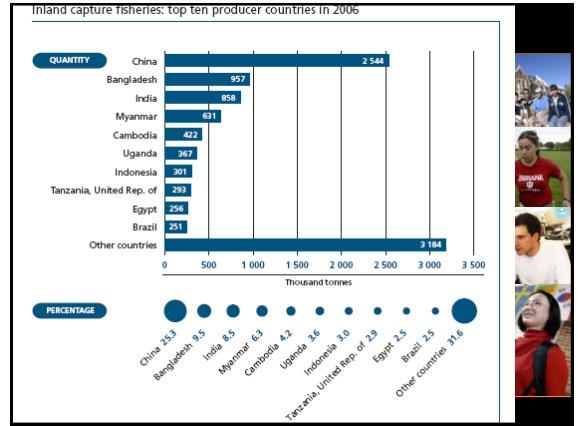
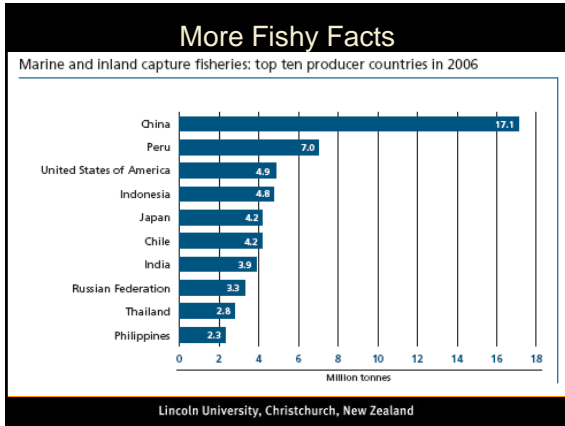
Lincoln University, Christchurch, New Zealand

Some fishy 'facts'

World capture and aquaculture production



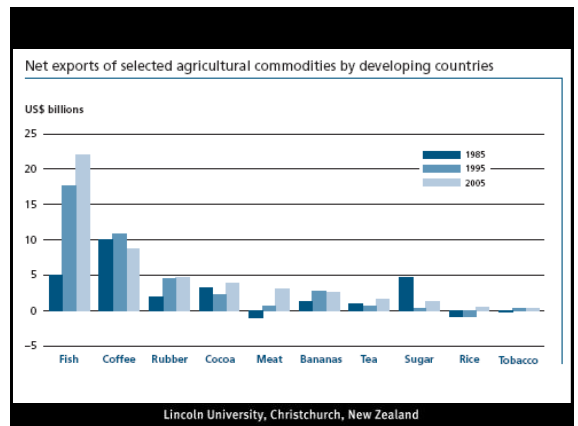
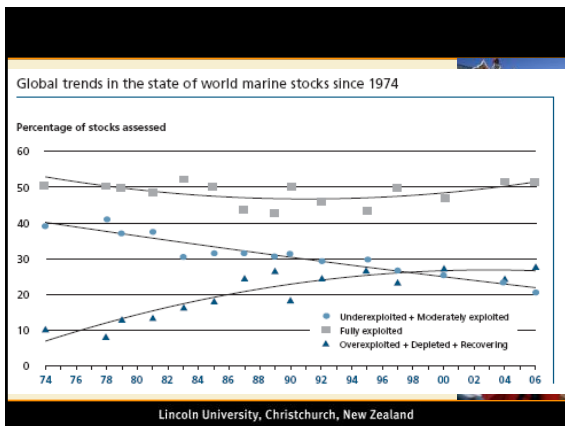
Lincoln University, Christchurch, New Zealand

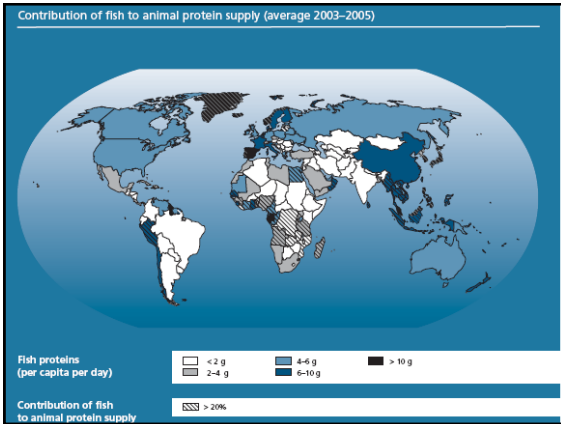


State of the World's Fisheries

- 28% overexploited
 - 19% overexploited
 - 8% depleted
 - 1% recovering from depletion
- 52% fully exploited
- 20% moderately or underexploited
- Top Ten species comprising 30% of the world's fish production are fully or overexploited
- Future is aquaculture

Lincoln University, Christchurch, New Zealand





The one that got away

- Tragedy of open access
 - Property rights
 - Mutual coercion mutually agreed
- ITQ system
 - Absentee landlords
 - High grading
 - The deadly 'independent observer effect'
- Cuts to recreational catch limits of ITQ holders – but do we care?

Lincoln University, Christchurch, New Zealand

The Anchored Position

- Fisheries geographers: James Coull, David Symes, Kevin St. Martin, Becky Mansfield...
- *De facto* Political Geographers
 - Critique of globalisation and neoliberalism
 - Promoting a sense of place, shared communities
 - Promoting normative marine spatial planning
- Instrumentalist GIS folk – 'find the best place to stuff up'
- Fly-by-night economic geographers usually promoting market based solutions
- Tourism – dive tourism, charter boats, is 'catch-and-release' a form of ecotourism?

Lincoln University, Christchurch, New Zealand

Repositioning Fisheries Geography

- Critical mass – need basic issues taught at schools and undergraduate level
- Expand the traditional
 - Environmental histories of fisheries
 - Evaluation geographies – eg of dam removal
 - Combine cellular automata with individual based modelling for simulating probable futures
- Critiqueal mass
 - Gendered spaces
 - *To Work and to Weep: Women in Fishing Economies*
 - Tourism places
 - *Izola's fishermen between yacht clubs, beaches, and state borders: Connections between fishing and tourism*
 - Fishing guides, women flyfishers, memoirs

Lincoln University, Christchurch, New Zealand

Question

- How many of you teach any of the preceding material in any of your classes?

Lincoln University, Christchurch, New Zealand

Where is Lincoln?

Lincoln University, Christchurch, New Zealand



**Lincoln
University**
Te Whare Wānaka o Aoraki



Lincoln University, Christchurch, New Zealand