






WELCOME

Dr Mark O'Connell
 Director, ERT Conservation
 Visiting academic, University of Bath

Bristol, 2016

January 2016




Group introductions

A brief hello from all....

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Introductions - Mark

Lake district national park	➡	Assistant ranger
British Antarctic Survey	➡	Biologist
University of Durham	➡	Post-doc
Wildfowl & Wetlands Trust	➡	Head of Research
University West of England	➡	Senior Lecturer
University of Bath	➡	Visiting academic





Director, Ecological Research & Training



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The course: process



In 4 days !!

- Write on blank page
- Provide a 'framework'

1. Lectures & discussion
2. Computer work

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The course learning outcomes - GIS

By the end of the course you will:

- Understand the basics of representing features of the real world in two dimensions (cartography).
- Have skills in using QGIS software and understand its key components and structure.
- Know how to access, import, manipulate, analyse and create a range of spatial data from different sources
- Understand the role of GIS in the wider research process

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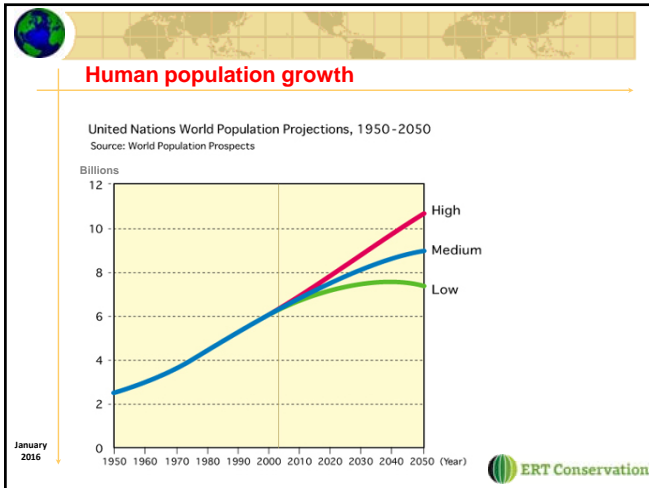



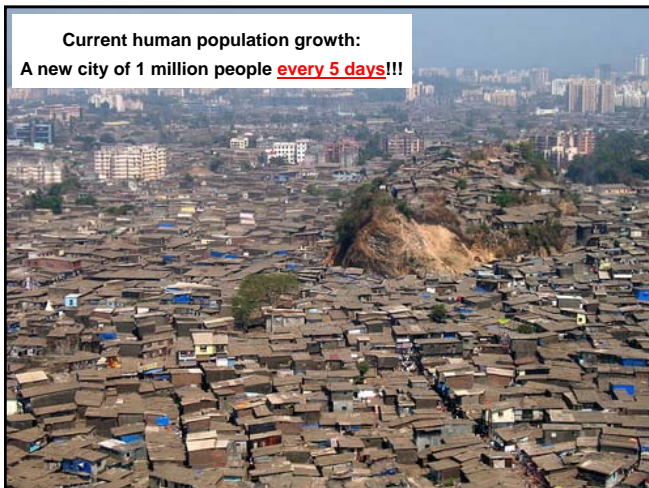
Why use GIS ?


➤ Link between GIS and research?

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 **Human primary needs**

Fundamental elements that allow individuals to lead fulfilled and self-actuated lives

- Basic Needs Approach (BNA)
- Human Development Approach (HDA)
 - ✓ FOOD
 - ✓ SHELTER
 - ✓ WATER
 - ✓ ENERGY

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Primary needs: impacts on species, habitats & ecosystems

The big four !!

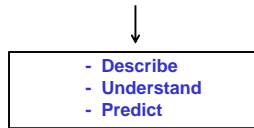
1. Habitat loss, degradation & fragmentation
2. Invasive species & diseases
3. Over-exploitation (extraction, fishing, bushmeat, poaching)
4. Climate change





Why use GIS?

- Link between GIS and research?



UNDERPIN ACTION!!

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Why use GIS ?

- Spatial questions require spatial solutions !!

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The course

1. Theory = enough to get you started
2. Practice = enough to make you a 'competent user' of GIS

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Your GIS log

- Crucial discipline to start
- Must record names and functions

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This is GIS (and computers)

and so....

- Things will go wrong
- Irrational and maddening computer behaviour
- Laptops and Macs will perform differently

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So you want to learn QGIS in 4 days !!

The course....

- A lot to cover (very intense)
- Can't go at pace of slowest
- Can't focus on individual needs (framework)
- We will use many tools more than once

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