

QUO VADIS ?

Spatial models in ecological management and conservation.

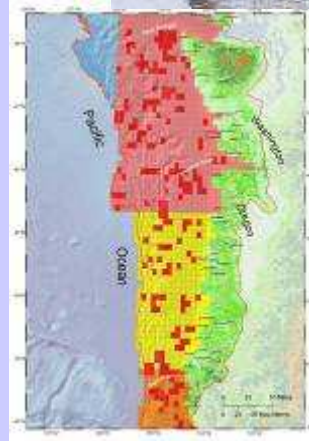
Spatial behaviour



An international workshop for researchers and professionals at Imperial College London, Silwood Park, Ascot, UK, 9-11 March 2010



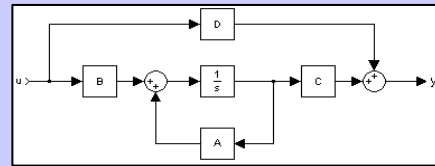
Tools



Models



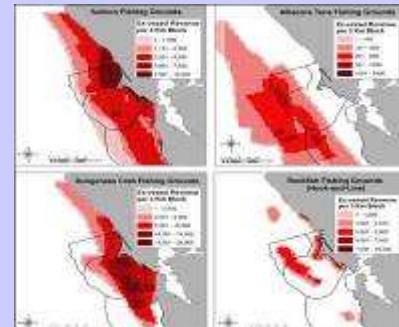
Data analysis



- Water Column Component
- Biotic Cover Component
- Surface Geology Component
- Sub-Benthic Component
- GeoForm Component



Spatial management challenges



Workshop aims

The workshop aims to bring together an international group of aquatic and terrestrial researchers to review the use of spatial models in ecological management and conservation, discuss research priorities, and outline good professional practice. The workshop will comprise a series of presentations, practical exercises, and a series of group and panel discussions.

Presentations

Opening keynote:

Alec MacCall (NOAA Fisheries, Santa Cruz): *Spatial considerations and the productivity of fish populations: Habitat selection, demography and serial depletion of patches.*

Invited talks:

Nicole Augustin (University of Bath) & Verena Trenkel (IFREMER): *Space time modelling of blue ling - estimating relative abundance from fisheries-dependent data.*

Julia Blanchard (Imperial College London): *Food, temperature and fishing effects on spatial distributions of fish populations and communities.*

Luca Borger (University of Guelph, Canada): *Animal home ranges: movement dynamics, population distributions and why the lifetime track concept may be useful.*

Rodolphe Bernard (Imperial College London): *Advanced spatial data handling, analysis and modelling in ArcGIS*
Niils Bunnefeld (Swedish University of Agricultural Sciences): *A model-driven approach to quantify migration patterns: individual, regional and yearly differences.*

Charles Edwards (Imperial College London): *Spatial management of fisheries: a case study evaluation of management initiatives.*

Joaquin Hortal (Imperial College London): *How to develop maps of ignorance to describe the uncertainty in the data on species distributions."*

Kai Lorenzen (Imperial College London & Mote Marine Laboratory): *Space, place, models and the governance of fisheries.*

Jason Matthiopoulos & Brett McClintock (University of St. Andrews): *Preliminary results from a spatially-explicit state-space model of fish-fishers-marine mammal interactions.*

Francois Royer (Collecte Localisation Satellite CLS, Toulouse): *Inference from tracking data: drawing track samples to answer practical questions. With applications to marine pelagic fish..*

Navinder Singh (Imperial College London): *Spatio-temporal patterns of Saiga antelope migration in central Asia.*

Juliane Struve (Imperial College London): *Estimating movement models and habitat preferences of coastal fish from sparse telemetry data.*

Practical exercises

Spatial R – Tools for mapping, plotting, analysing and modelling spatially explicit ecological data (Rick Reeves, NCEAS)

State-space models (Brett McClintock, Francois Royer)

Spatially structured matrix projection models (Arpat Ozgul, Imperial College London)

Group and panel discussions

Group and panel discussions will be held throughout the workshop in order to identify research priorities and elements of good professional practice.

Registration

Participation in the workshop is free of charge but space is very limited. If interested, please contact the workshop organiser before 1st February 2010 with a brief statement of your background and interest in the topic.



Practical details

Workshop Date: 9th-11th of March, 2010

Venue: Imperial College London,
Silwood Park, Ascot, Berkshire

Contact: j.struve@imperial.ac.uk