



## Highland Renewal

# Distant access to a long term field experiment

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# Background



- A field course changed my life!
- 1970 Marine Algology field course, Port Erin, IoM.
- A zoologist became a marine botanist
- At least 1 field course per year since then!

# Background

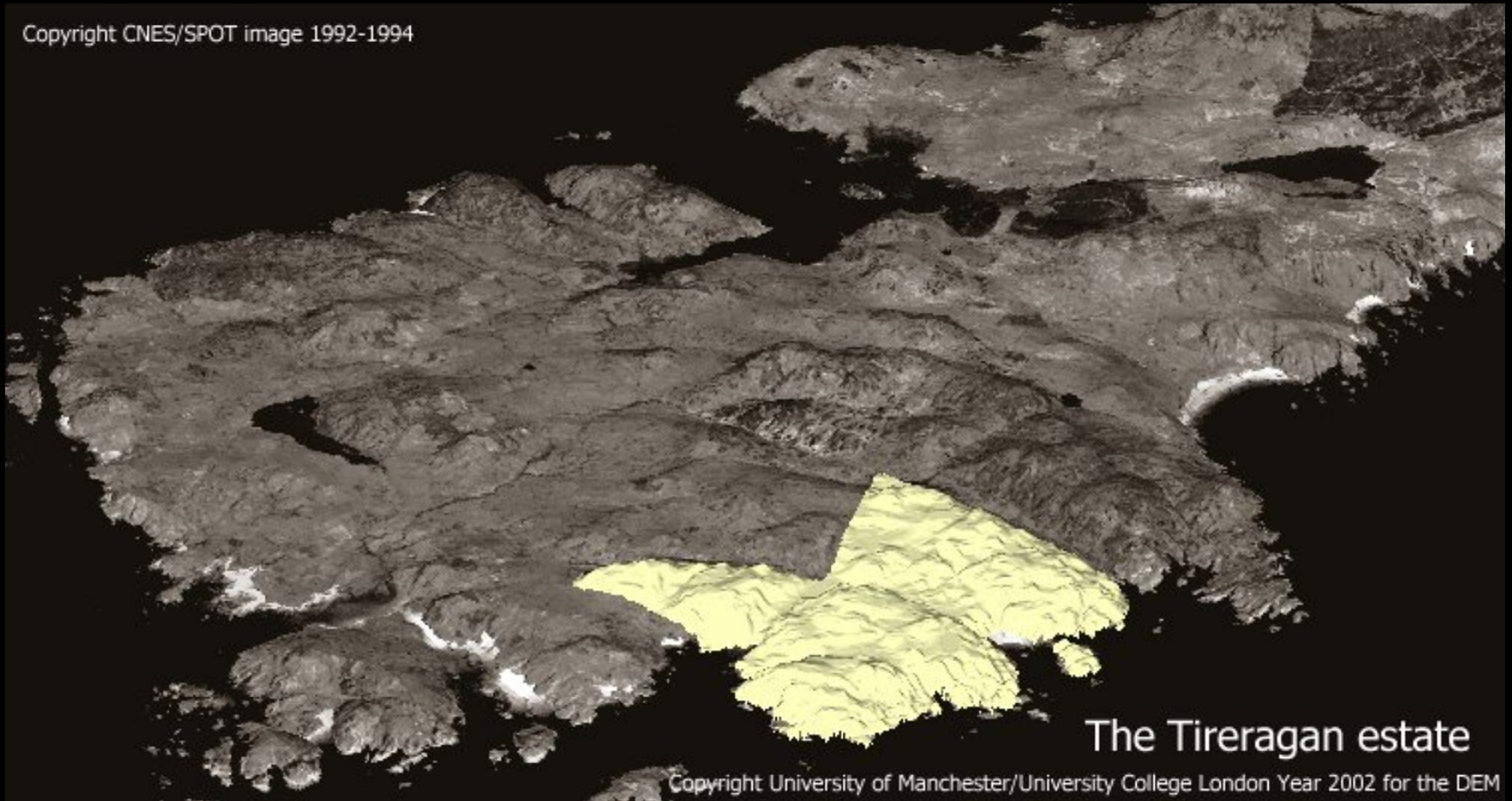
- MMU Biol. Sci. runs courses from first year to masters (Mull, Madeira, Tanzania & Kenya)
- In most places access to real datasets and large-scale field experiments is often difficult.
- Decided to share our results from a long term study.
- Aware that the data may be of value for students who find field work difficult.

# What we provide

- Real & virtual access to the experiment.
- Raw data & full experimental details via web pages.
- Accessible web material - all web pages validated by W3C markup validation service and comply with WAI-A & WAI-AA standards.
- Currently no exercises / assessments.
- Funding would allow us to develop pedagogical material.
- Is there scope for a central data resource from other field sites and experiments?

# 'Tireragan'

Copyright CNES/SPOT image 1992-1994

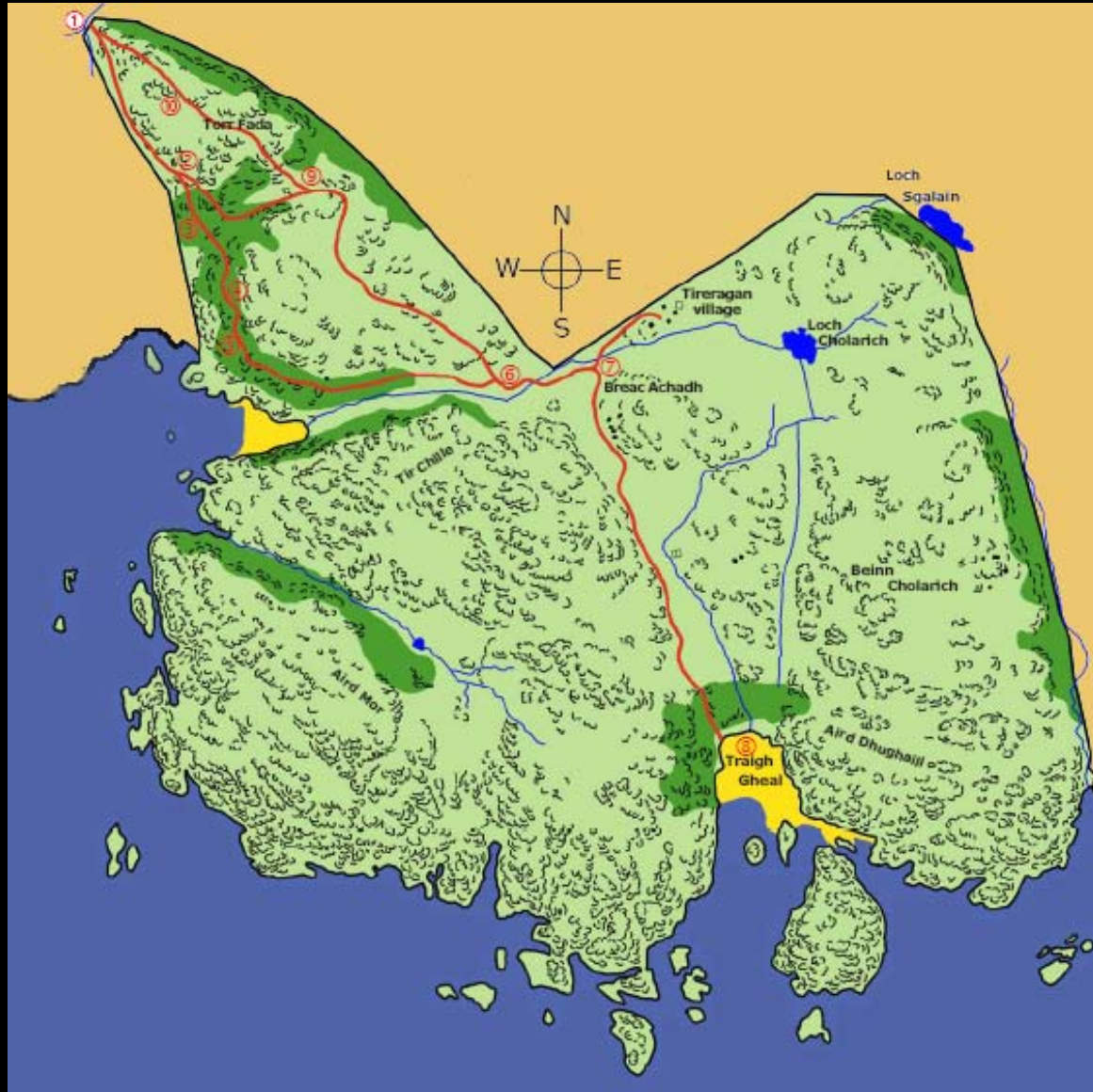


The Tireragan estate

Copyright University of Manchester/University College London Year 2002 for the DEM



# Main features



# Some general views









# Some of the fauna



## Vegetation comprehensively mapped (NVC) and surveyed in 1994 and 1999.

- Remnants original native deciduous woodland.
- More scrubby, wind-pruned woodland than elsewhere in Scotland.
- Some nationally or regionally uncommon plants.
- Woodlands & sheltered gullies particularly important.
- Good representation of oceanic plant species (13 vascular plant species and 27 bryophyte species).
- Good representation of the nationally uncommon, pollution-sensitive *Lobarion* lichen assemblage.
- Patches of dry heath dominated by heather and bearberry - scarce in the W. Highlands.

# The problem

- Discontinuity in woodland age profiles.
- Even aged mature trees are senescing (many planted as part of tenancy agreements)
- Grazing (pre-1996) prevented regeneration and no coppicing to extend their lives, particularly the hazels.
- Considerable recent regeneration (birch and rowan) but many large trees will be lost over a short period of time.
- Opens up the woodlands to problem species such as bracken.
- May retard regeneration and reduce biodiversity.



Aim: identify effects of grazing & woodland management on the biodiversity of regenerating and mature woodland.

- Permanent quadrats established Spring 2003.
- Selective coppicing began September 2003.
- Assess the biodiversity value of the woodlands using surveys of flowering plants, arthropods and birds.

Access to the experiment and  
results is via a web site

[http://obelia.jde.aca.mmu.ac.uk/knockvol/  
teaching.htm](http://obelia.jde.aca.mmu.ac.uk/knockvol/teaching.htm)

[Sample Pages](#)

<http://www.goldeneagle.ie/>

