

# Land Managers of the Future

## Engaging Student Perception and Practice through an Interdisciplinary Landscape Conference



Su Engstrand and Euan Bowditch

All conference images courtesy of Tim Meredith and Pete Moore



# Scotland's land: who benefits?



# Conflicts can and do arise

## Cairngorms authority urges restraint in culling hares

15 March 2016 | Highlands & Islands

f t w e Share



Mountain hares can be shot for sport and as part of the management of grouse moors

**The Cairngorms National Park Authority (CNPA) has backed calls for restraint in the culling of mountain hares.**

## Scottish gamekeepers and mountaineers oppose tree-planting plan

Two groups unite to oppose proposal to plant thousands of trees saying it could threaten the country's 'dramatic open views and vistas'



The two groups campaign for the protection of Scotland's iconic landscapes. Photograph: Stuart Sly/Getty Images/EyeEm



# Getting the best from our land.

## A Land Use Strategy for Scotland 2016-2021



- ‘Direction of travel towards a more integrated and strategic approach to land use’
- ‘Multiple use, multiple benefits’... the common good!
- What is the common good?



## UHI land based programmes

Are we developing the right skills?



- Agriculture
- Arboriculture
- Environmental Science
- Equine Studies
- Forestry
- Gamekeeping and Wildlife Management
- Geography
- Horticulture
- Marine Science
- Sustainable Rural/ Mountain Development

Image Darlene Russell



***“Foresters think like foresters, keepers think like keepers... we need to bring them together at an early stage.” Stewart Blair***





## UHI land based programmes

Are we developing the right skills?

- ✓ Specialist expertise
- ✓ Broad understanding of interdependencies
- ✓ Understanding of different perspectives, values, ethics
- ✓ Empathy
- ✓ Communication with range of audiences
- ✓ Negotiation skills



# To develop students skills through mixed groups of peers and professionals for integrated approach to land use



## Our focus

- Integrated approach
- Horizontal and vertical learning
- Employer-led
- Current and relevant
- Employability skills



# Integrated Land Use Conference 2012-2017

## Scope

- 8 contributing partners
- 50-60 undergraduate students
- 8 research postgraduates as group facilitators
- 20-30 UHI staff and sector professionals
- 5-10% external students
- Expanding to include students from international institutions



# Format

**Location:** Kinveachy Estate

Mixed disciplinary groups of 10 students

## Day 1

- Field presentations – Two professionals paired to demonstrate different perspectives
- Active learning – interactivity
- Students as experts take information back to group



## Day 2.

1. Conference presentations: Industry demonstrate integrated approaches
2. Workshops: Problem based tasks and learning, which are open ended, complex issues rife with uncertainty (real world)
3. Postgraduate research students: Participatory training techniques then employed at the conference
4. Group presentations: Prizes and formative feedback from industry professionals



# Our focus

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- **Integrated approach**
  - Developed by staff and sector
  - Mixed groups, collaborative and negotiative learning
- **Horizontal and vertical learning**
  - SCQF 6-12
  - RTL (and TRL)
- **Employer-led**
  - Steering group
- **Current and relevant**
  - Annual theme
- **Employability skills**
  - Professionalism, leadership, confidence, exposure to wider context and field skills
- **Legacy**
  - Creating a useful online interactive resource



Multidisciplinary

**Interdisciplinary learning**

Transdisciplinary learning

Integrated sector led  
education

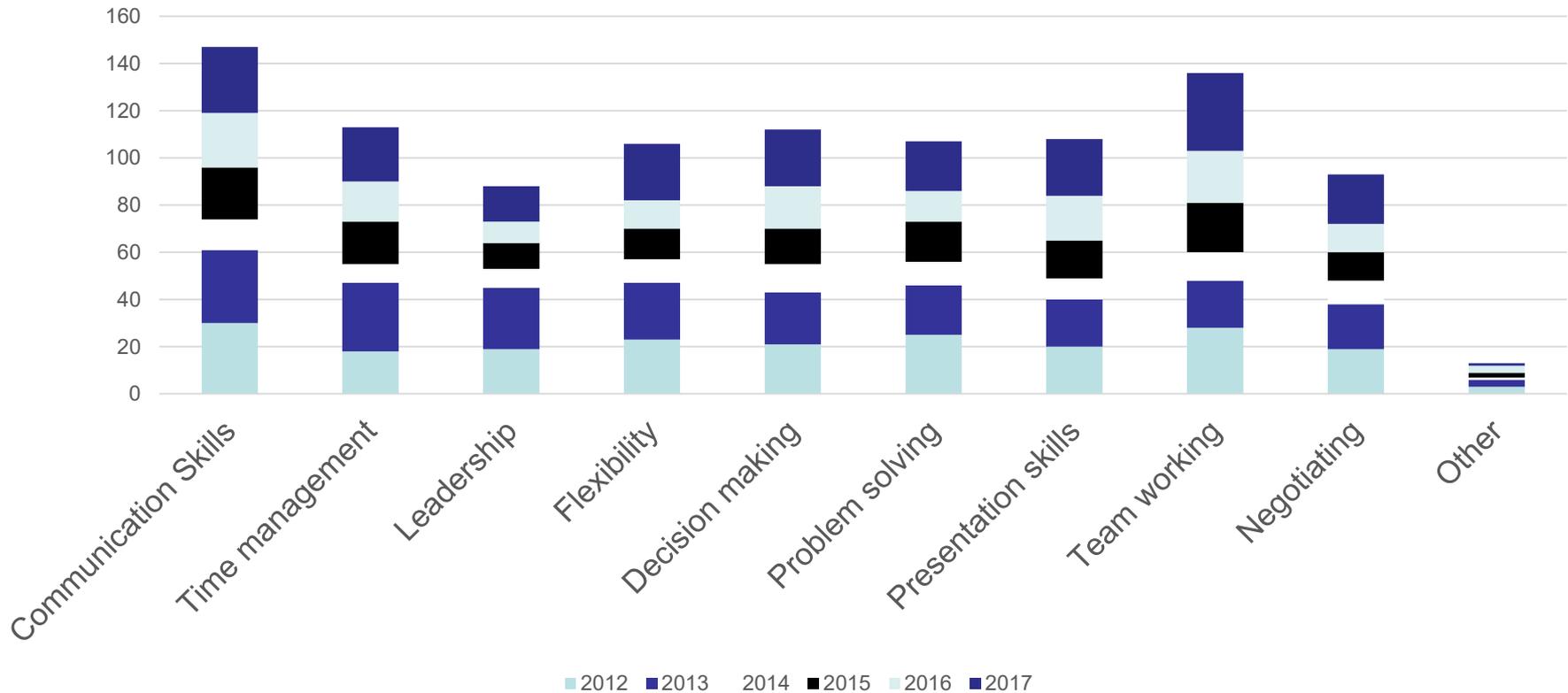


*“Interdisciplinary learning is the capacity to integrate knowledge and modes of thinking in two or more disciplines...to produce a cognitive advancement... in ways that would have been impossible or unlikely through single disciplinary means” Boix-Mansilla et al (2000).*



# Evaluation: employability skills

What skills did you use during the workshop?



# *What did you particularly like about the conference and why?*

- *“Great to mix with other students”*
- *“Definitely opened up my eyes to priorities and concerns of other sectors”*
- *“It opened up new ways of thinking across industry sectors”*
- *“I can see more links and effects of land use and my course”*
- *“Field talks were great, get hands dirty, a little cold at times”*
- *“External speaker input, providing different views on the same topic”*



## *Please tell us what you learned about land management during the course of the conference.*

- *“Too much to write”*
- *“That it needs an integrated approach and all stakeholders need to be included”*
- *“How open most landowners are to change and sustainability”*
- *“The huge importance that stakeholder engagement plays across all organisations and presents those organisations with opportunities work together to improve conditions in catchments”*



## *Have any of your attitudes changed during the course of this conference? If so please tell us how.*

- *“I realised that although forestry is a large/busy industry, there are a lot more industries out there that we should interact with...”*
- *“Really awesome to hear different priorities, shall now consider when planning”*
- *“I hadn’t realised how much the different authorities and NGO’s work together and how they also have to deal with conflicting interests amongst themselves”*



## *Have your thoughts about your future career changed during the conference? If so, please say how.*

- “Would be more inclined to do estate work or work with SEPA”*
- “Made me think about career options that I had never thought about before”*
- “There are more options available than previously thought, more routes to take into employment”*
- “No but have appreciated all contributions for all organisations involved and this has probably broadened my horizons in terms of what organisations I would investigate for job opportunities”*



# Ongoing challenges

- Extensive subject matter
- Student engagement across UHI between disciplines
- Diversity of presenters
- Education accreditation
- Sustainability (£6-9000)– rolling budgets
- Conflicting schedule with other field trips and courses
- UHI student presentation standards



# Benefit to UHI

- Student skills
- Staff and student professional networks
- UHI profile
- Legacy resources
- Researchers into teaching
- Pedagogic research
- PGR training
- Development of research proposals
- Informal student exchanges

The screenshot displays the Integrated Land Use Conference (ILUC) website and social media presence. The website header features the title "INTEGRATED LAND USE CONFERENCE" and a sub-header "Balancing landscape benefits of woodland expansion #iluc2017" above a landscape photograph. The main content area includes a "The series" section with a list of past events: 2016 Catchment Management, 2015 Skills for future land managers, 2014 Diversifying career choice for land managers, 2013 Twenty years into the past and forward into the future, and 2012 Integrated land use in the Highlands and Islands. Below this is a "2017 Conference Details" section with links for "Find the conference venue" and "Payment, programme, forms, etc.". A video player shows a person in a forest with the caption "ILUC 2017 - Introducing the Integrated Land Use Conference 20...". To the right, a social media feed for #iluc2017 shows a tweet from Intelia Technologies congratulating SBS for a health and safety award, and a tweet from Euan Sowditch about an outdoor interview with Lucy Ford.



# The Future

- Extend to 2.5 days
- Increased partnership
- Increased outcomes
- Paper – Landscape Didactics conference Switzerland
- Developing online educational materials and forum
- Land Use professional summer school at Mar Lodge
- Accredited module
- International scope: students, institutions and issues



# The Challenge for UHI

Can the model be applied to other disciplines and different learning environments?



Image: U.S. Air Force photo/Ilka Cole



Australian Aid Photolibrary



# Thank you to all ILUC contributors and thank you for listening

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