Biodiversity Matters: Assessing Cultural Value in Lowland Landscapes

Joe Morris, Cranfield University

with Anil Graves, Jim McGinlay, David Parsons, Richard Bradbury, James Bullock

NERC sponsored Wessex BESS
Key message

Cultural services: Biodiversity matters, but not alone
Our research questions:

• How do people perceive biodiversity?
• Do people benefit from it?
• How much and in what way?
• ‘So what?’ and ‘What to do?’
Biodiversity and Cultural Benefits: a framework

- Biotic (biodiversity)
- Abiotic
- Human made

Environmental setting

Direct interaction:

Indirect interaction

Benefit pathways/processes

Wellbeing: Feeling and being ‘good’
A Lowland Landscape - Salisbury Plain, Wiltshire

Data and surveys

- **Exploratory**
  - 3 Workshops (n=42)
  - Preferencing survey (47)

- **Verification**
  - Public survey (550)
  - On line survey (300)
  - Farmer survey (20)

- **Decision support**
  - Stakeholder survey (7)

Wessex-BESS

- Biodiversity-ecosystem service relationships
- Water quality, fish production
- Crop production
- Climate mitigation
- Cultural services

1400 km² of lowland: grassland, arable, woodland, rivers & urban
Perceptions of biodiversity?

- People mainly see a holistic natural and cultural landscape
- Mainly at landscape and habitat scale
- Mainly visually-driven complexity
- Difficult to partition biotic, abiotic and human-produced features – salience?

Do characteristics of biodiversity affect benefits?

- Broad species groupings and satisfaction
- Charisma and reported benefit +vely correlated
- Bigger reported benefits by people involved in nature activities
- More positive response to less charismatic species by nature aware people

Species and Satisfaction: response to change

Birds

-ve  +ve

Current

Missing

Decreased

Increased

Nettles

-ve  +ve

Current

Missing

Decreased

Increased
What characteristics of landscape and habitats are associated with benefits?

- Landscape complexity/diversity preferred
- Ancient grasslands preferred to arable
- Accessibility and proximity
- Greater views
- Quality more than quantity
- Woodland
- Presence of historic interest

“Mark on the map 3 outdoor places of importance to you”; 470 points

What characteristics of people are associated with benefits?

- Social antecedents and activities with a nature-related focus
  - Self-reported knowledge
  - Nature-related education
  - Membership/participation in conservation
  - Outdoor ‘nature’ activities
  - Reading, listening, watching natural history
  - Age?

Farmers and Biodiversity

- Perceptions closer to ecologists/scientific view than public’s
- Farming and biodiversity: from balance & co-existence to competition & conflict: positive and negative species
- Farmers as beneficiaries
- Farmers as ‘suppliers’ of biodiversity benefits: opportunities and constraints
- Scope for negotiation?
Cognitive Pathways: from engagement to benefit

- Learning and understanding
- Being part of nature
- Being creative
- Linking to the past
- Being refreshed
- Communicating
- ‘Stewardship’

Responses: Perceptions of nature related benefits (n = 550)

Conclusions for Policy and Practice

- People get more benefit from biodiversity the more they know about it: but emotional attachment is very important.
- Difficult to partition the cultural significance of biotic, abiotic and human features: multiple functions and resources.
- Separating cultural benefits from other ecosystem benefits is not helpful.
- Cognitive pathways transform ecosystem goods into cultural benefits.

Biodiversity matters, but not alone:
- Assets and Infrastructure
- Institutions and organisations
- Agents: users, providers, enablers
- Building ‘sense of place, identity and attachment’
References


j.morris@cranfield.ac.uk