

Towards a Geodiversity Framework for Scotland



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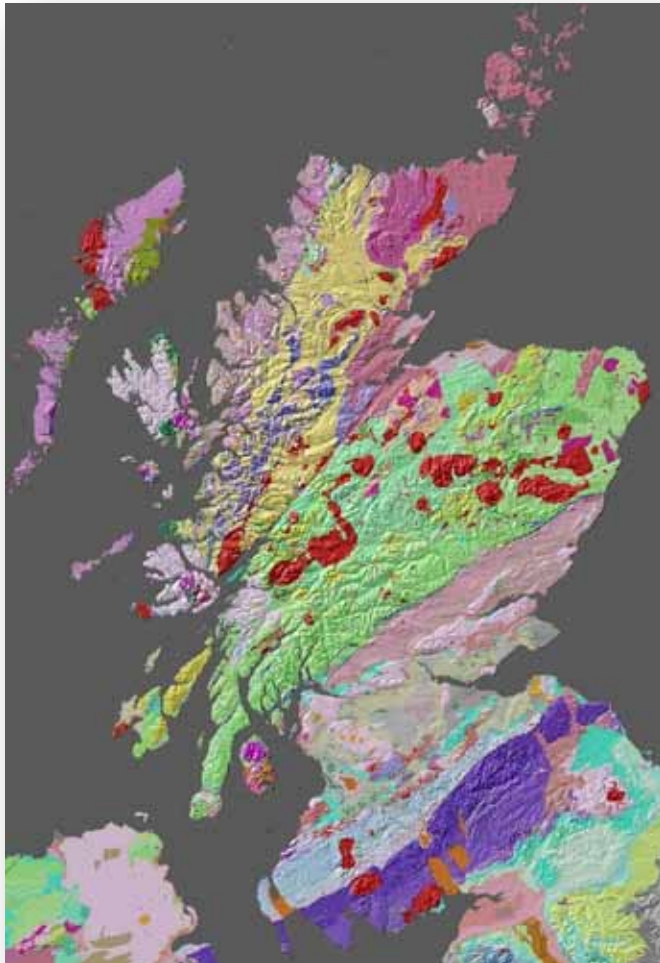


Outline

- q Why geodiversity matters – evidence base - values and benefits (Hugh)
- q Policy background - Geodiversity & Scotland's National Performance Framework (Hugh)
- q How do we improve the recognition & integration of geodiversity & realise the benefits? (John)
- q Do we need a geodiversity framework for Scotland? (John)
- q What might it look like? (John)

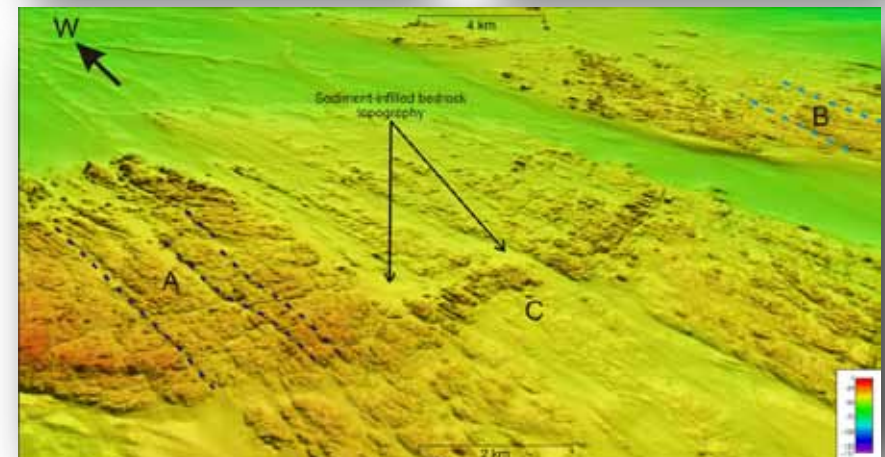


Geodiversity: scientific & educational values



Geodiversity: scientific & educational values

- q Length and diversity of rock record
- q Understanding past geological processes and modern applications
- q Palaeoenvironmental records
- q Rich and diverse fossil record
- q Peat / Soil : carbon issues
- q Modern processes
- q Marine geodiversity



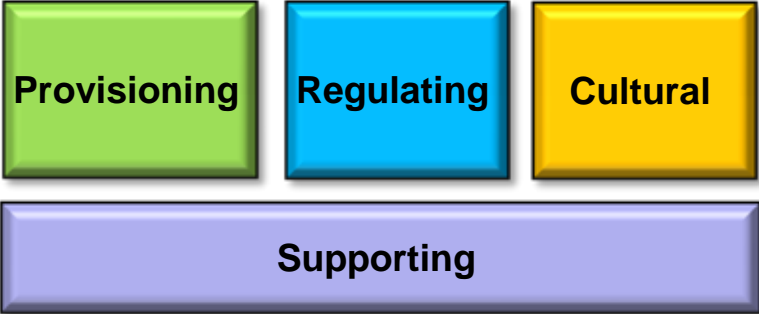
Living within a dynamic landscape: adapting to climate change

Benefits of understanding & working with natural processes:

- q maintain capacity of natural systems to absorb change
 - q recognise natural system sensitivity & potential tipping points
 - q protect soil / ecosystem multifunctionality
 - q spatially integrated management
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- q room for rivers through floodplain / wetland restoration - increasing floodplain storage & natural forms of flood management
 - q coastal realignment – restoration of natural coast protection functions of landforms.



Geodiversity: delivering wider values and benefits through ecosystem services



Supporting:
underpinning biodiversity



Cultural: landscapes, recreation and health



Ecosystem services - cultural



Economic activity - tourism



Geoparks



Ecosystem services - cultural



Built environment



Cultural inspiration: Art and literature



*Who possesses this landscape?
The man who bought it or
I who am possessed by it?
False questions, for this landscape
Is masterless and intractable
In any terms that are human*

Norman MacCaig, A Man in Assynt

Contributing to Scotland's National Performance Framework

15 National Outcomes

- q We value and enjoy our **natural and built environment** and protect it and enhance it for future generations.
- q We realise our **full economic potential** with more and better employment opportunities for people.
- q We are **better educated**, more skilled and more successful, renowned for our research and innovation.
- q Our **young people** are successful learners, confident individuals, effective contributors and responsible citizens.
- q We live longer, **healthier** lives.
- q We live in well-designed, **sustainable** places where we are able to access the amenities and services we need.
- q We **reduce** the local and global environmental **impact** of our consumption and production.



Smarter



Healthier



Safer & Stronger



Greener

Wealthier & Fairer

Building on the evidence base and requirements: developing a strategy for geodiversity in Scotland

Key challenges are to:

- raise awareness of values and benefits of geodiversity at all levels;
- develop better integration of geodiversity within relevant policies and guidance to enhance contribution and recognition to Scotland's National Performance.

One approach is through the development of a
geodiversity framework for Scotland



Vision

Geodiversity is recognised as an integral and vital part of our environment, economy and heritage

Building the evidence base and understanding the policy context

Distinctiveness of Scotland's geodiversity

Contribution to ecosystem services

Living in a dynamic world

Pressures on geodiversity

Policy context

Identifying aim, focus and outcomes



Aim

To promote the sustainable management and protection of geodiversity consistent with the economic, social and environmental needs of Scotland.

Future focus - key activity areas

Future-proofing ecosystem services

Promoting policy integration

Sustainable management

Conservation of geodiversity

Awareness raising

Knowledge base



Outcomes

- q Vital contributions to ecosystem services are safeguarded
- q Understanding of natural processes informs adaptations to climate change
- q Links between geodiversity and biodiversity are better understood
- q The geo-archives in Scotland's rocks and landforms are protected
- q Non-renewable resources are used sustainably



Outcomes (cont'd)

- q Geodiversity is integrated into relevant policies
- q Economic benefits are delivered through tourism (e.g. in Geoparks)
- q Communities are better aware of, and take pride in, their geoheritage
- q Educational benefits from resources for schools, lifelong learning etc
- q Public health benefits from outdoor activities and use of greenspace



Building the evidence base and understanding the policy context

Distinctiveness of Scotland's geodiversity

Contribution to ecosystem services

Living in a dynamic world

Pressures on geodiversity

Policy context

Identifying aims, focus and outcomes

Sustainable management

Awareness raising

Future proofing ecosystem services

Policy integration

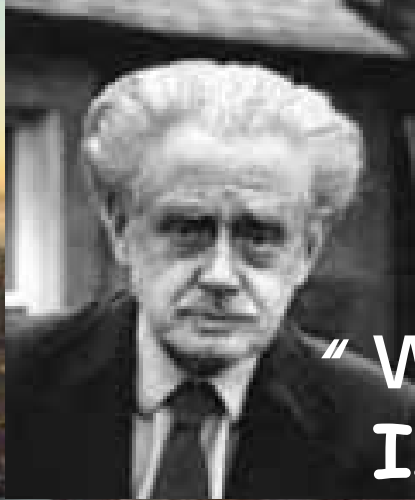
Conservation of geodiversity

Knowledge base

Geodiversity Outcomes

Geodiversity is recognised as an integral and vital part of our environment, economy and heritage





“ What happens to us
Is irrelevant to the world's geology
But what happens to the world's geology
Is not irrelevant to us.”

Hugh MacDiarmid, 'On a Raised Beach'

