


Embracing adaptation at the RSPB

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Research

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- Projecting potential range change
 - Assessing species population changes against climate suitability trend
 - Projecting species persistence and turnover in protected areas
 - Autecological studies on mechanistic responses underpinning range change
 - Investigate the dynamics of range expansion
 - Understanding how to build resilience at the trailing edge



Policy

- RSPB Council paper establishing our overall position
- Priority species assessments
- Adaptation assessment of all of our work

Delivery

- Futurescapes
- Reserves management

Reserves management

1. Planning what to do

2. Action on the ground

3. Species management



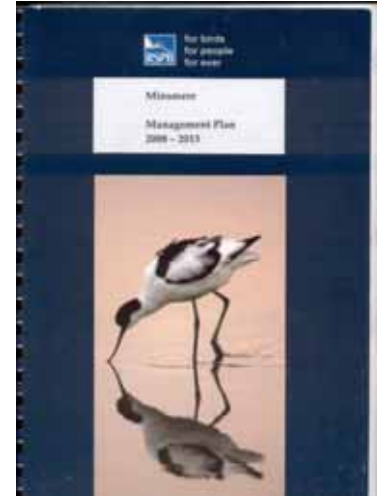
Site management planning: the importance of different timescales

- **Short lead-in time/
short-term impacts**
e.g. grazing management,
control of water levels



- **Long lead-in time/long-term impacts**
e.g. habitat creation, land acquisition, woodland
management, ensuring long-term water supply at sites

Our existing management planning *system*

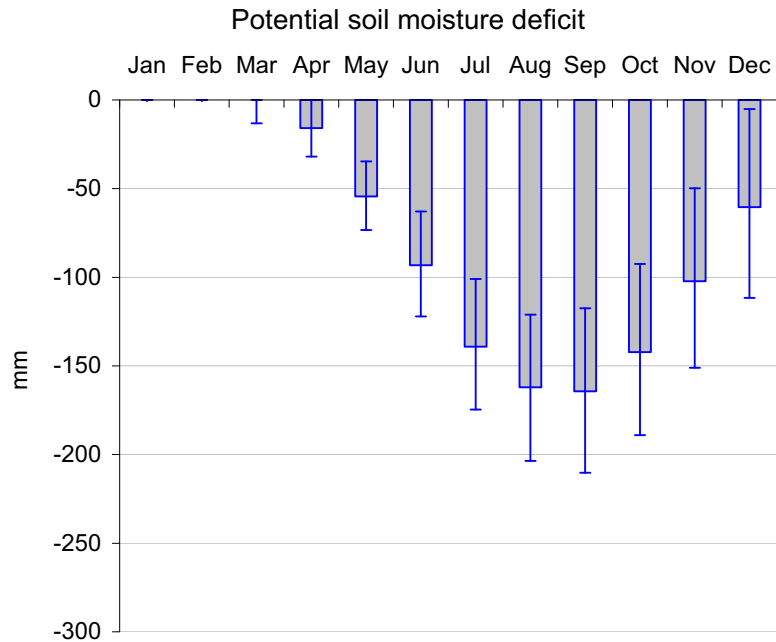


The management plan sets out the site's:

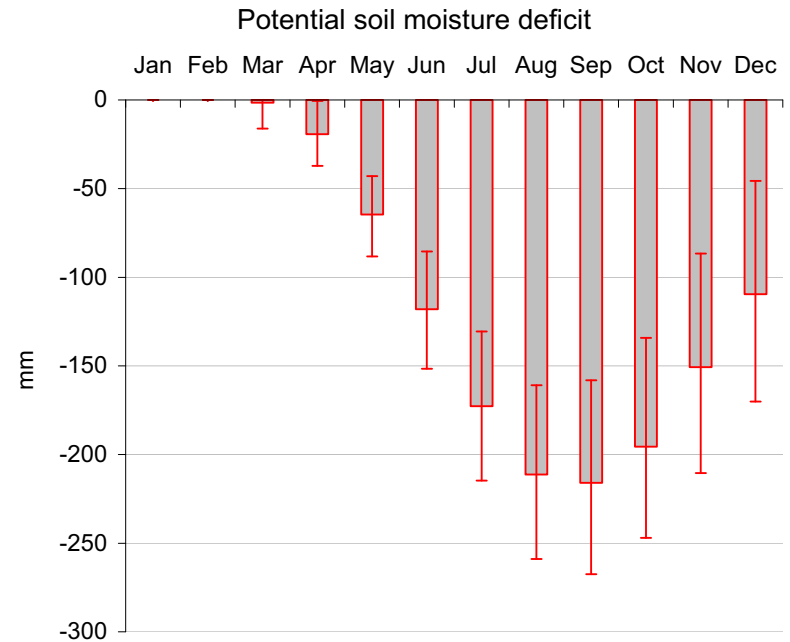
- 25-year vision (reviewed every 5 years)
- 5-year objectives (re-set every 5 years)
- Individual management prescriptions (reviewed annually)

Taking account of CC in our site management planning

Current



2030 (high emissions scenario)



Graphs show medians, upper quartile & lower quartiles. Data from UKCIP09 weather generator

General principles

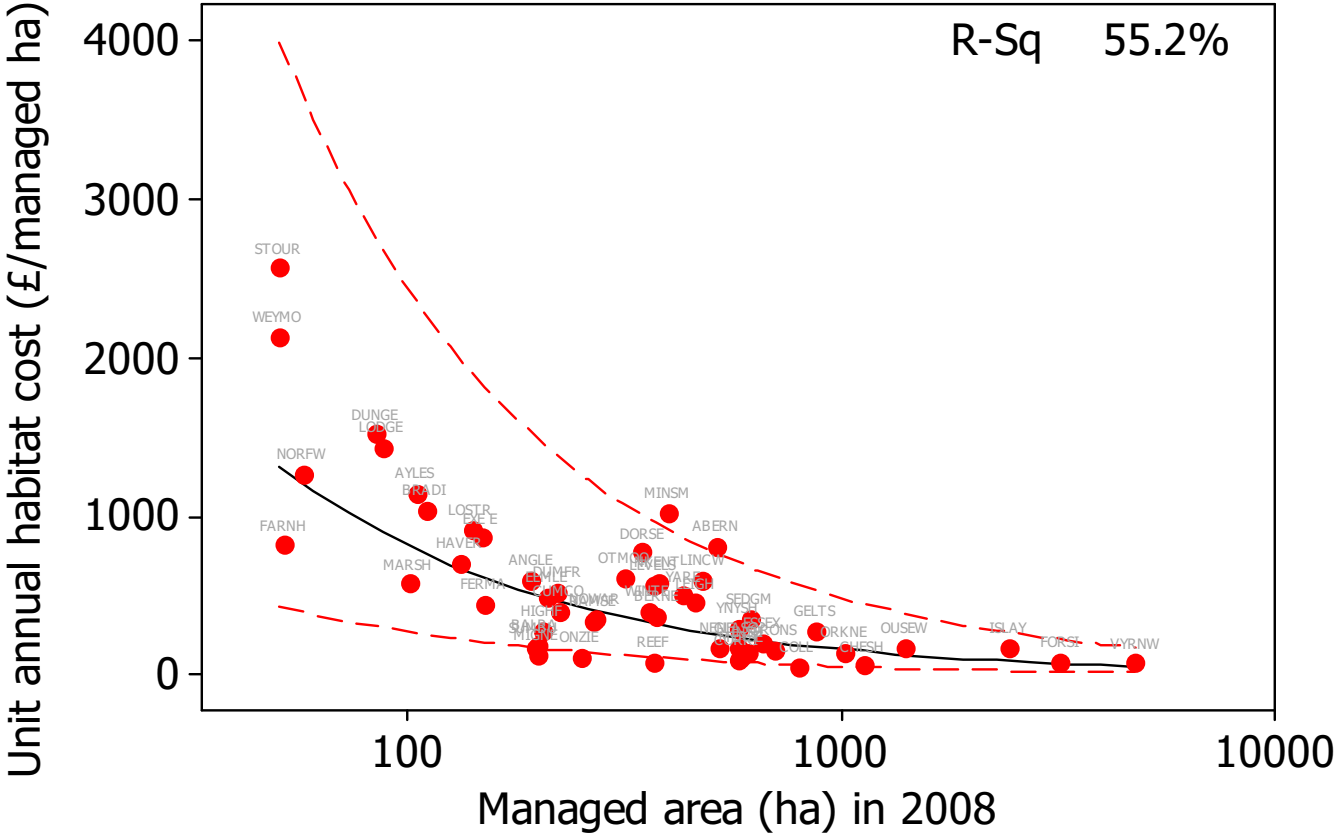
1. Semi-natural habitat will continue to remain important for biodiversity, even though assemblages at individual sites will change
2. For actions with long-term implications/long lead-in times, we need to focus on 'no regrets' measures

These are measures that stand a high chance of being beneficial (and very unlikely to be damaging) under a wide range of scenarios

Main types of 'long-term' adaptation measures taking place now:

- Increasing the extent of semi-natural habitat
'more, bigger, better and joined'
- Reducing other pressures
- Securing long-term water supply

Large sites are cheaper to manage per unit area



Habitat composition & visitor status of reserves also important in explaining variation in costs

Re-creation of intertidal habitat: Wallasea Wild Coast Project



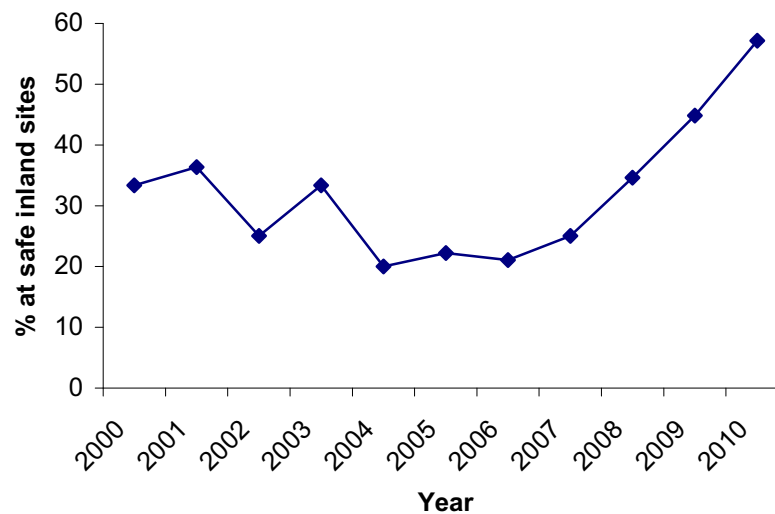
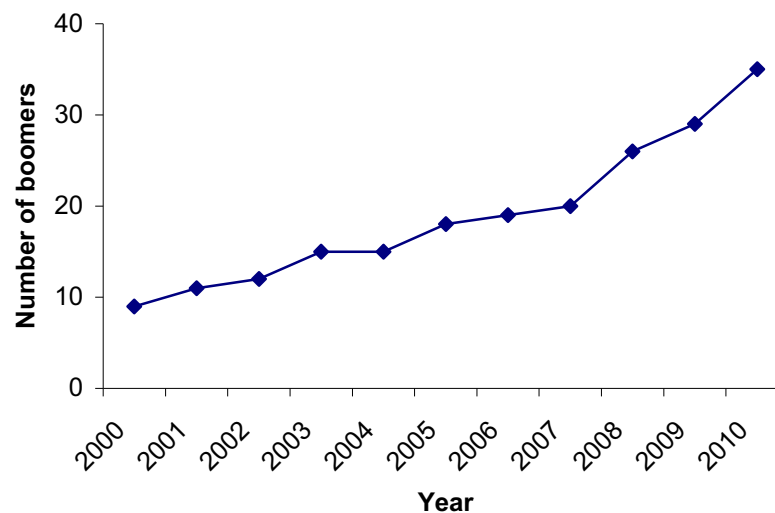
- **Biodiversity**
- **Public enjoyment & well-being**
- **Beneficial use of waste material**
- **C sequestration**
- **Flood risk management**



Creating and restoring freshwater wetlands away from vulnerable coastal areas



Creating and restoring freshwater wetlands away from vulnerable coastal areas





ca 160 spp of Nationally Scarce or rarer inverts on
RSPB reserves vulnerable to saline inundation



Possibly translocations at some stage?

Ouse Washes Pilot Project



**Minsmere
heathland
& acid
grassland
creation**



**Minsmere
heathland
& acid
grassland
creation**



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Expansion of native woodland at Abernethy



Reducing other pressures



Securing long-term water supply



Cultural landscapes: species management or ecosystem approach?



Some win-wins & some trade-offs between species-led management and providing other ecosystem service benefits

Conclusions/thoughts

- **A lot of CC adaptation for biodiversity (for an under 2°C rise) is basic good conservation practice, but there are some extra things that you need to do**
- **The key is having a *simple system* for ‘adaptive management’ (i.e. management planning)**
- **Otherwise, a big danger in giving up on key species at sites prematurely**
- **Site managers generally very knowledgeable about coastal CC issues, but less so about other CC impacts**
- **Still a big gap between policy & practitioners**