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Natural Capital and Climate Adaptation

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What is Natural Capital?
The Tool: Natural Capital Accounting
The Need: Adaptation

Diagram of the Causes of Mortality in the Army in the East.

The areas of the blue, red, & black wedges are each measured from the centre as the common vertex. The blue wedges measured from the centre of the circle represent areas for areas the deaths from preventable or mitigable Zymotic diseases; the red wedges measured from the centre: the deaths from wounds; & the black wedges measured from the centre: the deaths from all other causes. The black line across the red triangle in Nov 1854 marks the boundary of the deaths from all other causes during the month.

In October 1854, & April 1855, the black area coincides with the red; in January & February 1856, the blue coincides with the black. The entire areas may be compared by following the blue, the red & the black lines enclosing them.
Climate Change Adaptation

Committee on Climate Change. Land use report. November 2018:

*The Government needs to address climate change, which threatens the land’s ability to provide critical services including clean water, healthy soils and timber, and ensure sufficient food production for an increasing population and space for new homes.*

New land use policy should promote transformational land uses and **reward landowners for public goods** that deliver climate mitigation and adaptation objectives. New policies should also reflect better the **value of the goods and services** that land provides.

*New land-use policy must promote radically different uses of UK land.*
How?

- Catchment scale
- Adaptation costs are nationally significant
- Climate scenarios: 1.5°C is happening, understand 4°C
- Local distribution of changes are important
- Low regrets actions vs transformational adaptation
- Organise data: Natural capital accounts
## Natural Capital Accounting – 5 Questions

<table>
<thead>
<tr>
<th>Question</th>
<th>Response</th>
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<tbody>
<tr>
<td>What natural capital assets are owned, or managed, or depended on?</td>
<td><strong>Natural Capital Asset Register</strong> - Registry of all natural capital assets owned / managed / dependent on</td>
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<td>What flows of benefits do the assets produce?</td>
<td><strong>A statement of physical flows</strong> – Benefits, both for the organisation and for wider society, in biophysical metrics</td>
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<td>What is the value of the benefits and to whom do they accrue?</td>
<td><strong>A benefit valuation statement</strong> - in monetary terms where possible</td>
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<td>What does it cost to maintain the natural capital assets?</td>
<td><strong>A schedule of maintenance costs</strong> - Relevant activities and their costs</td>
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<td>What’s the net impact on natural capital?</td>
<td><strong>A natural capital balance sheet</strong> - Sum of natural capital benefits over time vs the sum of costs to maintain the natural capital assets in a condition that generates the benefits</td>
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Adaptation

Diagram: The causes of mortality in the army in the East, April 1854 to March 1855.

- Black wedges measured from the centre; the deaths from all other causes.
- The black line across the red triangle in Nov. 1854 marks the boundary of the deaths from all other causes during the month.
- In October 1854 & April 1855, the black area coincides with the red.
- In January & February 1855, the blue coincides with the black.
- The entire areas may be compared by following the blue, the red & the black lines enclosing them.
Thank you

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