Carrying capacity
&
Hadrian's Wall Path National Trail

The challenge of managing visitors
and archaeology

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Hadrian’s Wall World Heritage Site

Hadrian’s Wall is an ancient monument of international significance.

Constructed in AD122 under the orders of the Emperor Hadrian, it marked the northern limit of the Roman Empire.

80 Roman miles long it was a complex structure with forts, mile castles, defensive ditches and roads.
The Roman occupation of Britain ended in AD410 but the Wall has left a permanent mark on the physical and social landscape of Britain. In 1987 UNESCO recognised its importance in world history by awarding it World Heritage status. That has helped to promote the Wall as a tourism destination.
14 National Trails in England & Wales

Total 3520 km of path, bridleway or cycleway
Some general views showing Hadrian's Wall and its National Trail at their best
Hadrian's Wall World Heritage Site is one of the most legally 'protected' landscapes in the world.

However, the 1,900 year old Wall and its associated archaeological earthworks, without appropriate management, are easily damaged.
1991: before the National Trail - damage to archaeology
Drainage problem: Visitors are forced to walk on top of the monument
Is this much damage acceptable?
Or is the answer to construct engineered paths everywhere?
Why, then, if the Wall is so sensitive, develop Hadrian’s Wall Path?

In 1984 it was suggested that the best way of reducing the risk of erosion & damage to the Wall was to spread visitors over a much wider area.

A 135km walking route was researched and subjected to considerable archaeological scrutiny.

It received government approval in 1994 and opened in May 2003.
However, the government insisted that the Trail's **clear aim** is for a **green sward** (grass) path

“The most appropriate footpath surface is a **green sward path**”

“The Hadrian’s Wall Path NT should be proactively managed primarily as a **grass sward surface** to protect the archaeology underfoot and the setting of the World Heritage Site”
A green (grass) sward – like this
but not like this
A green sward – like this
in an area where in winter the soils are waterlogged?
Why is the green sward path so important?

Because everywhere under foot there is the likelihood of finding archaeology.

A green sward is considered to be the best way of protecting both the archaeology as well as the landscape setting of Hadrian’s Wall.
In the wet area........
we accidentally came across a Roman well
Carrying capacity

Archaeological earthworks, high rainfall and large numbers of people conflict with each other.

It is impossible to say how many people the landscape can take without causing damage.

Better to achieve consensus by defining and working towards agreed quality standards.
Some photos of Hadrian's Wall in the 1890s compared with the same view today

Will the Wall look the same in another 100 years?
Is the green sward path a **realistic aim**?

Is it a **realistic quality standard**?

By how much should the condition of the Trail be allowed to change **beyond which any further change is considered to be unacceptable**?

These are value judgements
Many archaeologists have concerns about the National Trail

They are concerned that it will lead to further damage to the archaeology
In 2005 we were reported to UNESCO

Hadrian's Wall trail erosion fear

An archaeologist has warned in a report that urgent action is needed to protect the trail along Hadrian's Wall from further serious erosion.

About 400,000 people have visited parts of the trail, which runs from Cumbria to Tyneside, in the last two years.

Former Newcastle University head of archaeology Prof Peter Fowler said he was "alarmed" at the trail's state.
However, our management strategy has been a successful one
Engaging our visitors in the conservation process

Trail’s key ‘conservation tips’
All of the key publishers of books and maps now include these messages

EROSION CONTROL
Help us to protect the archaeology
Please do not walk in single file
Avoid walking in worn lines in the grass

NATIONAL TRAIL

Thank you from the National Trail team
www.nationaltrail.co.uk/hadrianswall

Hadrian’s Wall World Heritage Site

Please avoid walking or climbing on Hadrian’s Wall
It is a fragile and sensitive monument and is easily damaged
**EROSION CONTROL**

Please walk as shown to avoid area under repair and protect Milecastle 38

**NATIONAL TRAIL**

Thank you from the National Trail team

www.nationaltrail.co.uk/hadrianswall

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**PROACTIVE GRASSLAND MANAGEMENT**

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**FOOTPATH REPAIRS**

Please walk as shown to avoid area under repair

**NATIONAL TRAIL**

Thank you from the National Trail team

www.nationaltrail.co.uk/hadrianswall
Proactive grassland management

Using temporary ground reinforcing sheets to help the grass recover
The same site a few weeks later – the sheets are then removed
Proactive management

Repairing field drains

Cutting the grass path

Aerating the ground
National Trail passport operates in the spring, summer and autumn only but not in the wet winter months when there is more risk of erosion.
Competitive running races are positively discouraged

Instead event organisers are encouraged to work with Trail staff to find solutions that respect the Trail's conservation aims
Large groups of walkers

If managed properly, and at the right time of year, do not present a problem
A well managed large group in August 2012
But in winter, when the Wall’s soils are waterlogged, they can cause very serious problems and result in erosion and damage.

In January 2003 a group of 850 people arrived without warning and caused a lot of damage.
The group of 850 people in January 2003 when the soils were saturated with water

Damage to monument & Trail

2009, after intensive repairs
Fixed point photographic monitoring

A simple, relatively low cost, but effective way of observing long term change and trends in a landscape.

Requires attention to detail; best results when undertaken by the same person every year.

Hadrian's Wall Path: 70+ sites, east & west bound views, photographed every April, August & November.

Notice the gradual changes in this 10 year sequence.
A large area of Ulex europaeus was removed in order to allow visitor access to both sides of Hadrian’s Wall.

In the following sequence notice, as the Ulex grows back, the risk of erosion and damage increases.
Another fixed-point photographic monitoring site

One of the most visited sites along Hadrian's Wall

See how the grass sward path responds to the grassland management

10 year sequence
The same site in 1991 – when the proposal was to build a stone path
Photographic monitoring: lessons learnt

Change over time can be gradual as well as sudden.

It is not always obvious that changes are taking place.

Understanding long term trends promotes better decision making.

It teaches you not to over react to situations.
Finally, a look at another World Heritage Site. At Stonehenge the aim is the same: to achieve a green sward setting for the monument.
It is achieved by intensive grassland and controlled visitor management.
But remember.....

It is essential to have **clear aims and objectives**

On Hadrian’s Wall **our aim, or quality standard, is the green sward path**

However, intensive management like this can be expensive

It requires a long-term commitment to adequate resources........or face the consequences
Hadrian’s Wall Path

winner of

Best Walking Trail

“Once the glory of the Roman Empire, today Hadrian’s Wall Path can boast a new honour – Britain’s finest long distance trail.”

FERGUS COLLINS, Editor, Countryfile Magazine