

Carrying capacity  
&  
Hadrian's Wall Path National Trail

The challenge of managing visitors  
and archaeology

© Dave McGlade  
WTC Jeju January 2015



# 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



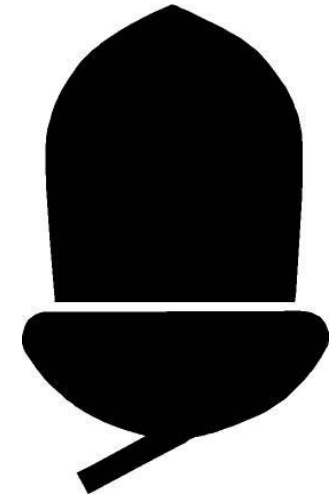
United Nations  
Educational, Scientific and  
Cultural Organization



**Frontiers of the Roman Empire**  
inscribed on the World Heritage List in 1987

# 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







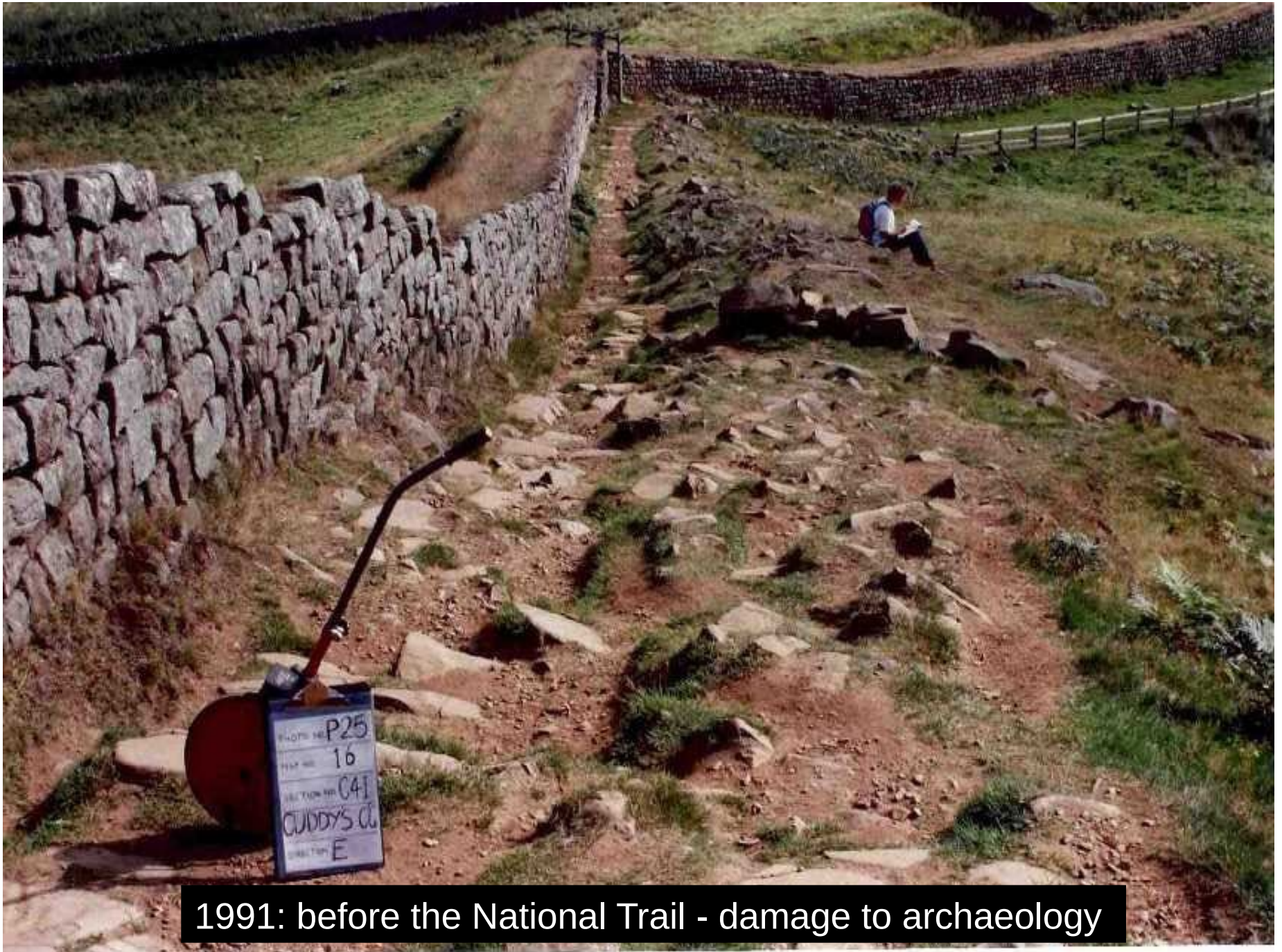




Hadrian's Wall World Heritage Site is one of the most legally 'protected' landscapes in the world

However, the 1,900 year old Wall and its associated archaeological earthworks, without appropriate management, are easily damaged

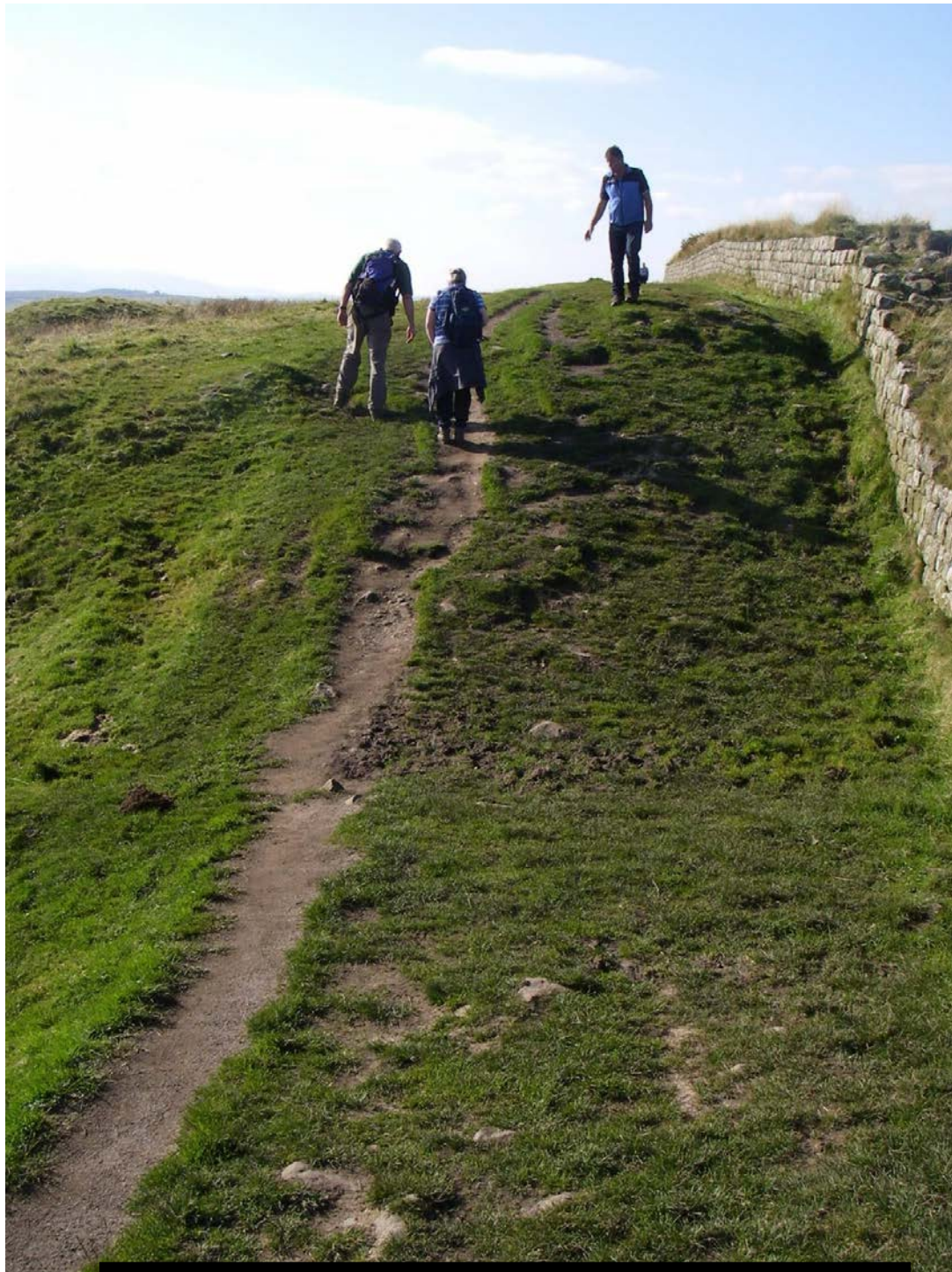




1991: before the National Trail - damage to archaeology



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?

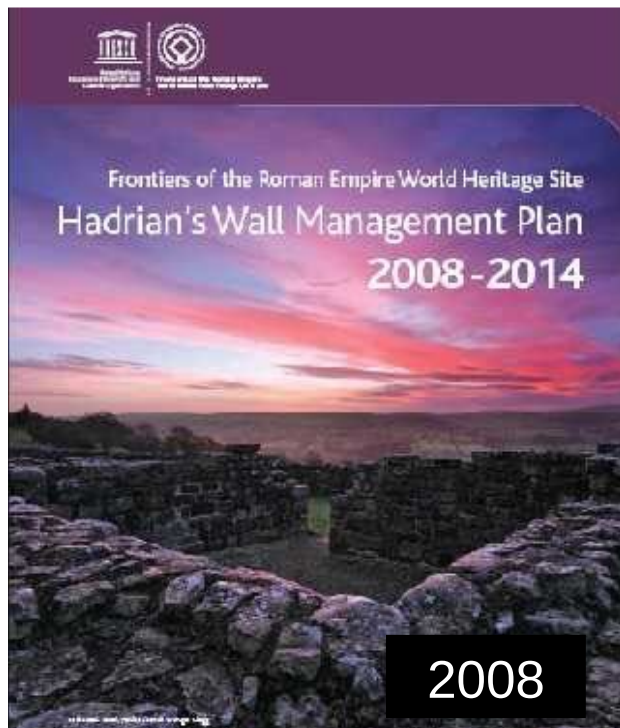
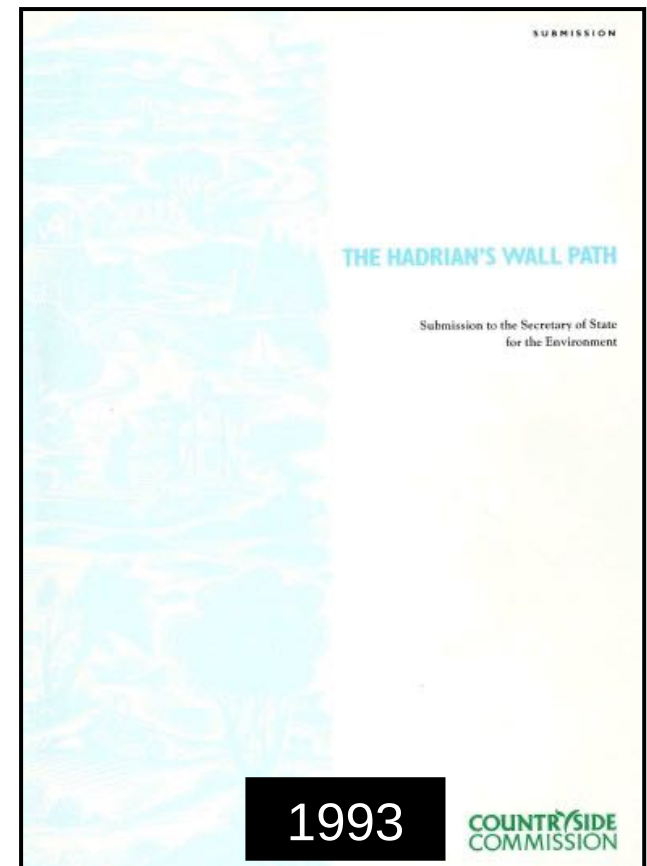
In 1984 it was suggested that the best way of reducing the risk of erosion & damage to the Wall was to spread visitors over a much wider area

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 another

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



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## 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.**



The trail was opened in 2003.

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



## **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 

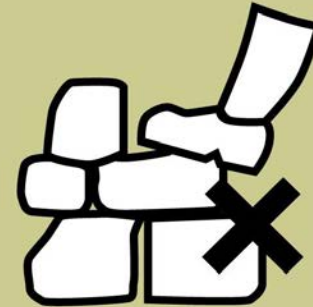
Thankyou from  
the National Trail team

[www.nationaltrail.co.uk/  
hadrianswall](http://www.nationaltrail.co.uk/hadrianswall)

# **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

## **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



Thank you from the National Trail team  
[www.nationaltrail.co.uk/hadrianswall](http://www.nationaltrail.co.uk/hadrianswall)



Proactive grassland management




## FOOTPATH REPAIRS

Please walk as shown to avoid area under repair



Thank you from the National Trail team  
[www.nationaltrail.co.uk/hadrianswall](http://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**



A passport stamping station

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



# 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

WM 29/1 APR 2003

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

WM 29/1 APR 2003





















# 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

WM 39/2 APR 2003





















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



# COUNTRYFILE<sup>®</sup>

MAGAZINE AWARDS 2011

## 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*

FERGUS COLLINS, Editor, Countryfile Magazine

