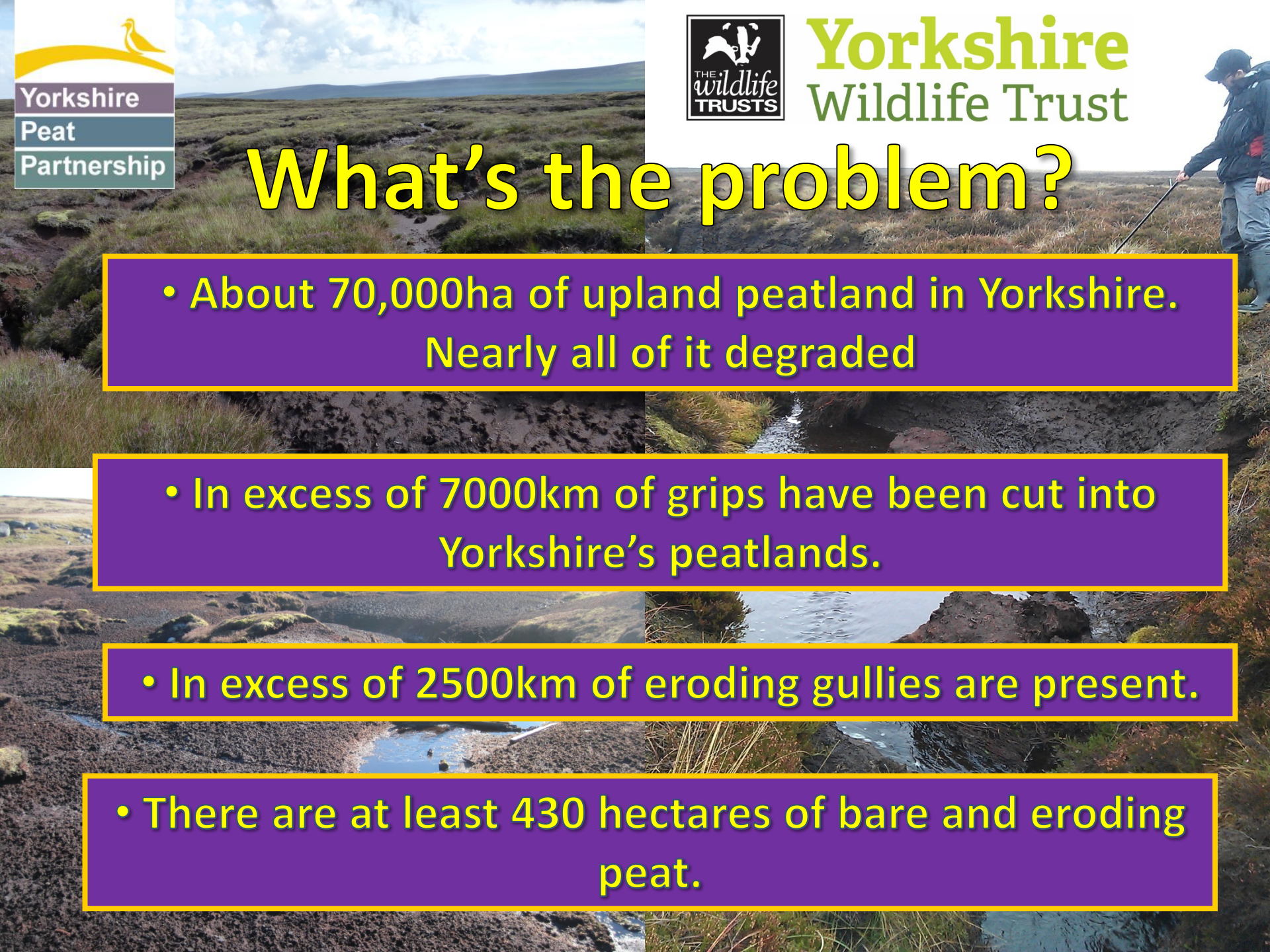
Yorkshire Wildlife Trust

Yorkshire Peat Partnership

Q: How do you set up a large-scale peatland restoration project?

A: I don't know – it started small & grew!


Yorkshire
Peat
Partnership
THE wildlife TRUSTS
Yorkshire
Wildlife Trust
What's the problem?
• About 70,000ha of upland peatland in Yorkshire. Nearly all of it degraded
• In excess of 7000km of grips have been cut into Yorkshire's peatlands.
• In excess of 2500km of eroding gullies are present.
• There are at least 430 hectares of bare and eroding peat.

Yorkshire Wildlife Trust

YORKSHIRE DALES National Park Authority

Scoping project funded by Yorkshire Dales NPA & Yorkshire WT

Need to tackle two aspects:

- Drainage (grips only at that time)
- Bare & Eroding Peat

- Some grip blocking already taking place

- Significant NE funding available for peatland restoration through ERDP

- NE called on other partners to assist with delivery

- All partners recognised need for strategic coordination of restoration activity.

- But no appetite to establish another peat restoration organisation

Yorkshire Peat Partnership

- Preferred option is to have a branded Yorkshire Peat Partnership "umbrella" that staff from the partner organisations would deliver under. The "umbrella" would :

- Provide a focus and secretariat for the partnership
- coordinate practical restoration programmes channelled through existing organisations (mainly using £8million ERDP funds – HLS)
- Develop and coordinate an ecosystems research programme
- Develop a communications and raising awareness programme for the project

Yorkshire Peat Partnership

Yorkshire Wildlife Trust

Landscape-scale action

- 67 sites surveyed from July 2009-March 2017 covering 40,281ha of peatland units
- UAV (drone) surveys of 7,786ha
- Greater than 20,000 individual survey points
- Restoration completed on 41 sites covering 26,151ha of peatland
- Operating costs July 2009-March 2017 £1.9million
- Restoration costs July 2009-March 2017 £13.3million

Yorkshire Peat Partnership

Partnership funded by:

Yorkshire Wildlife Trust
Yorkshire Dales NPA
North York Moors NPA
Environment Agency
Natural England
Yorkshire Water

Other partners: National Trust, Nidderdale AONB, National Farmers Union, Moorland Association, landowners, gamekeepers, farmers.

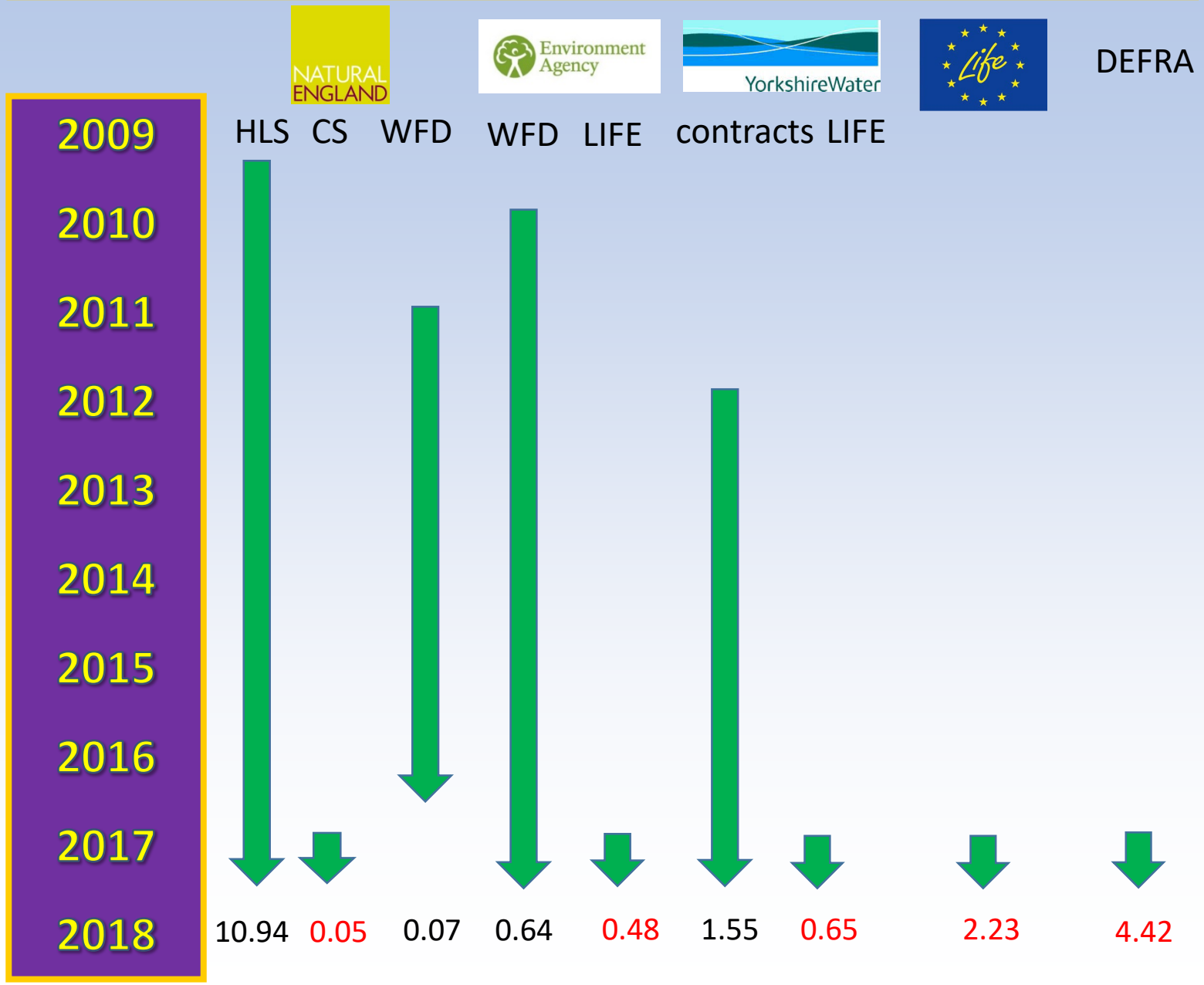
YorkshireWater
Environment Agency
NATURAL ENGLAND
NORTH YORK MOORS NATIONAL PARK
YORKSHIRE DALES National Park Authority

Simple strong vision

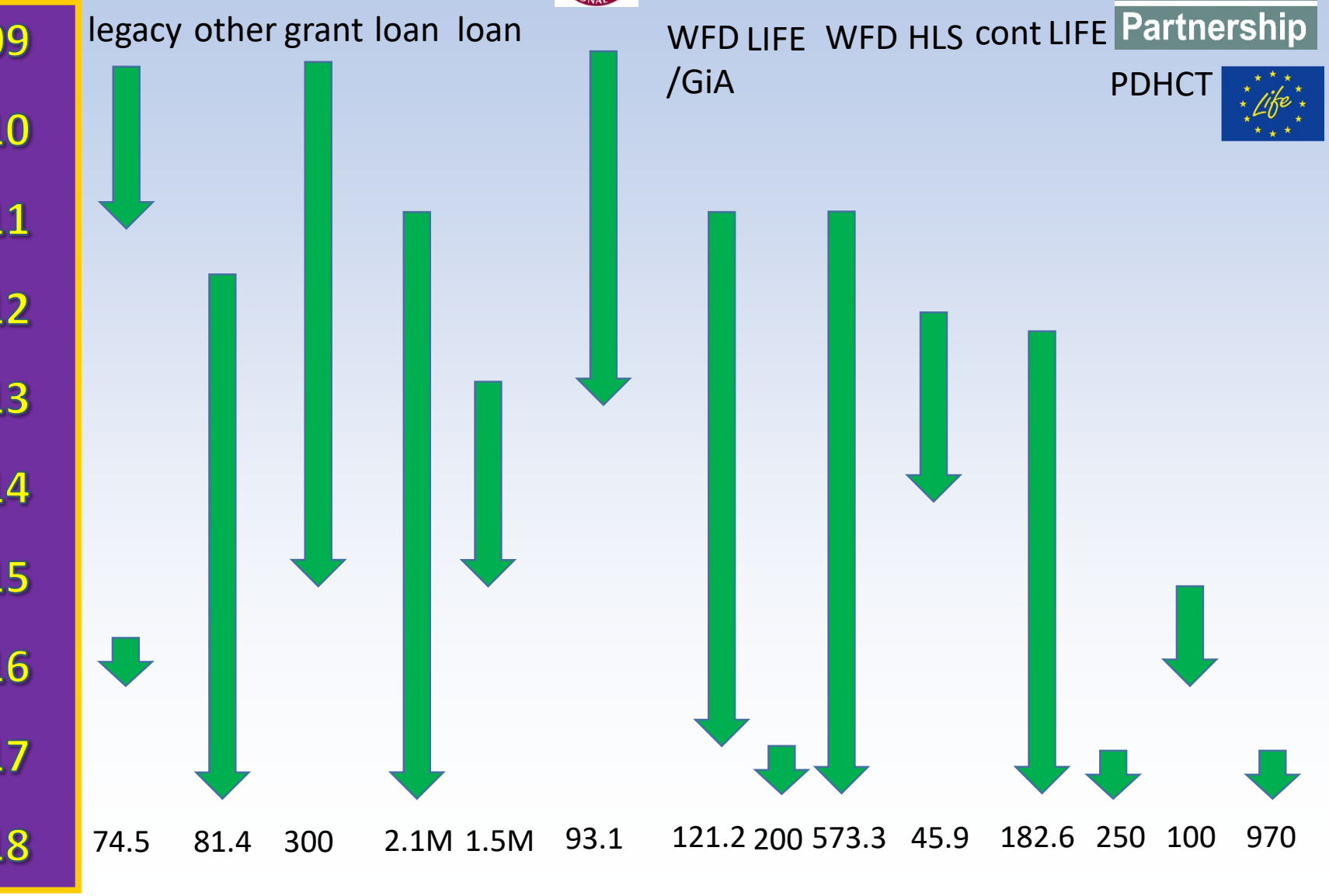
Yorkshire Peat Partnership

To restore 50% (35000ha) of Yorkshire's blanket bog through a programme of grip blocking, gully restoration and bare peat re-vegetation by March 2017.

Blended funding – capital (£13.3M)



Blended funding – core (£1.9M, 14% of capital)



Baseline data sets – pre-monitoring

The survey – over 20,000 records so far

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Vegetation community

Bare peat

Sphagnum?

Grip category

Peat depth

Gully category

Burn category

Latest technology - UAV

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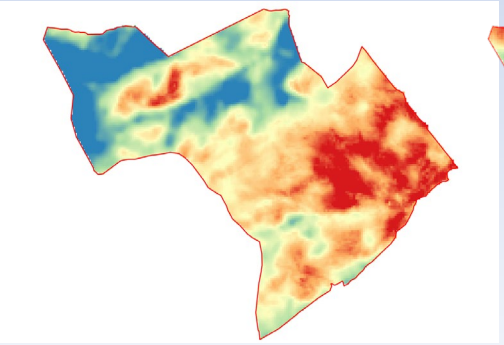
- RGB and Multi-spectral capabilities
- 24.4 mp RGB Camera
- 5 band multi-spectral sensor, R, G, B, NIR, Red Edge

Latest technology - Satellites

High West & Lodge: SMI



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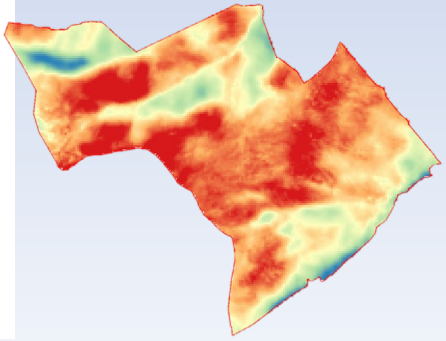

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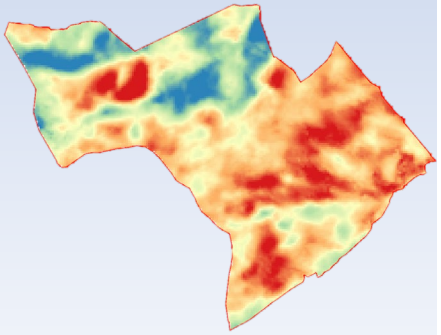

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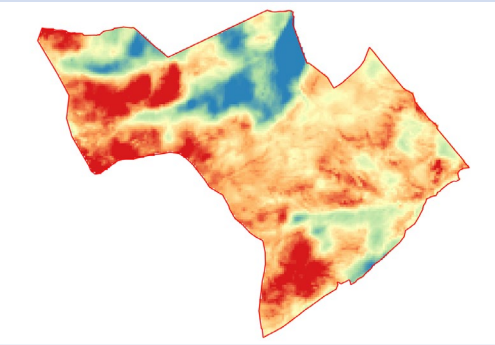

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Sphagnum Inoculation

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The keystone species in the bogs are the *Sphagnums* which are planted in a number of ways

Dendritic Hagging

Heather bale sediment traps are installed which slow the water and alter the hydrology. Cotton grass and *Sphagnum* are applied to revegetate the bare peat.

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Evidence – when can we speak with confidence?

- We are doing something good for carbon
- We are doing something good for water quality
- We are doing something good for water quantity
- We are doing something good for biodiversity

- How good do our numbers have to be before we stop apologising for the lack of data?

The very best people worked too hard with limited resources and little or no job security in extreme conditions!

Yorkshire Peat Partnership

2009 - 5

2010 - 7

2011 - 7

2012 - 8

2013 - 7

2014 - 7

2015 - 7

2016 - 6

2017 - 7

2018 – 10.5

2019 – 10.5

2020 - ?

But still dancing in the snow!

- 5 band multi-spectral sensor, R, G, B, NIR, Red Edge