

A woman with blonde hair, wearing a black t-shirt, blue jeans, and green rubber boots, is standing in a shallow river. She is smiling and splashing water with her hands. The background shows lush green trees and foliage.

Nature's worth

...and why
spending on
the environment
is a sound
investment

Environmental assets in
The Marches are worth at
least **£14.7 billion**, according
to a new report produced by an
environmental economist for the
**Shropshire, Telford & Wrekin
Local Nature Partnership**

For society, business, wildlife and people it is essential we take care of these precious natural resources. For too long they have been perceived as 'free' and this lack of appreciation of their value has led to damaging exploitation.

Water is the single most valuable of these, a vital resource for all of us and also at times a threat, when flooding occurs. How we look after river catchments affects both the quality and quantity of water available.

There is growing awareness globally of how the environment affects people's health, both physically and mentally. Now, we have the figures to demonstrate its positive influence in the Marches region.

Climate change is destabilising our world but we can do much to minimise it if we make the right choices. Vast amounts of carbon are locked into the land, especially in peat bogs, so keeping it stored in the ground is crucial. Releasing it through inappropriate management will cost us all dearly.

Unfortunately, much of our environment has been degraded over the last century and damaging activity continues today. In this short booklet we will show why safeguarding our landscape and its lively ecosystems benefits the whole of society – and is good for business too.

The values given here are based on only half the land area of The Marches and do not cover the full range of services provided by the natural environment. Figures for nature's worth are in reality significantly higher.

Water

Water is the most valuable commodity on earth, a crucial resource for people, industry and wildlife. Since 1328 there has been legislation to protect England's water supplies from pollution.

However, most of our rivers are failing to meet good ecological standards. This is bad news for aquatic wildlife and also for us: we need clean water on tap for domestic consumption and industry. Pollution is very expensive; costly to the water companies which have to remove the harmful chemicals and also to industry which must pay for the pollution it causes.

This is why Ricoh in Telford is planning to invest £500,000 on a series of pools and wetlands around its factory to intercept polluting emissions and improve water quality. This global company recognises that investment in the environment is cost-effective and will reap rewards in the years ahead.

Flood control

Our climate is changing and extreme weather events becoming more common. Flooding wreaks havoc on people's lives and businesses and causes millions of pounds worth of damage. Appropriate management of river catchments can greatly reduce the impact of sudden

rainstorms, slowing the flow of water and reducing the risk and intensity of flooding. Farmers can play a very positive role in achieving this.

Waterlogged land may be no good for growing crops but in flood-prone river catchments it provides a huge service, holding back the deluges that threaten nearby towns and villages. When water is slowed down it also helps keeps the soil where it belongs: on the land. Currently, vast amounts of soil are washed into rivers during high rainfall and ultimately carried out to sea.

Our landscape today is less resilient to flooding than at any time in its history. Since Roman times 90% of the UK's wetlands have been drained to improve agricultural land, while increasing urbanisation reduces the surface area of land available to soak up water. Restoring or creating new pools and marshes in appropriate places would significantly increase the landscape's ability to absorb and retain water. River catchment approaches to flooding are significantly cheaper than engineering solutions.



Courtesy of the Shropshire Star

Battlefield roundabout, Shrewsbury

A busy entry point to the northern end of Shrewsbury, this roundabout has frequently been closed over recent years due to floods, while local businesses have suffered flooding on their premises. With the co-operation of a local farmer, a Slow the Flow project has now been implemented to reduce the flow of water into this urban basin. This includes rainwater harvesting on buildings, tree and hedge planting, a new wetland in an adjoining field and the excavation of a long swale, which soaks up surface water as it flows off the road. The project was run by Shropshire and Telford & Wrekin Councils and Shropshire Wildlife Trust and funded by the Environment Agency.



£1.6 billion

Value of natural
flood regulation in
The Marches

Health

The value of nature and greenspace for health is immense, with positive implications both for the NHS and employers.

The annual benefit of productivity arising from informal exercise such as walking and cycling is valued at £21.7 million. This figure is based on avoided absence days due to improved physical health. The Department of Health has suggested that increasing open spaces could reduce health costs by more than £2 billion annually.

Obesity and mental health problems are escalating. Both may be improved or avoided through exercise and contact with nature. The effect of the existence of greenspace on people's exercise levels in The Marches is valued at £146.9 million pounds annually or £3.1 billion capitalised over 25 years.



£3 billion

Value of nature
for health in
The Marches

Nature cure

Three years ago I made a decision that was to change my life. I engaged with nature.

I had suffered from a worsening hip injury for over twenty years. My quality of life was deteriorating. I couldn't sit for more than twenty minutes without pain, go to the cinema or theatre, or even out for a meal. Medical treatment didn't work. I was told my condition couldn't be cured. I was simply existing.

One day I decided that the only person who could help me was me. In a final throw of the dice, I joined the Apley Castle Walkabout Wrekin group and met a member of the Friends of Apley Woods, a local conservation volunteer group. Pushing aside my fears that my physical limitations would let everyone down, including myself, I took the plunge and joined the team. I started off simply; sweeping paths and picking litter. As my strength, flexibility and confidence returned, I took on more ambitious tasks like coppicing. I went on courses and learnt how to lay a hedge, thin trees and administer first aid.

I qualified as a walk leader. The exercise, fresh air and social banter provided the remedy I had desperately sought for 20 years and I was hooked. No walls, no boundaries, space and time to breathe, think and notice nature.

Julie Burroughs



“...the Stern review estimates that if we don’t act, the overall costs and risks of climate change will be equivalent to losing at least **5%** of global GDP each year, now and forever. If a wider range of risks and impacts is taken into account, the estimates of damage could rise to **20%** of GDP or more.”

£7.2 billion

The value of peat
stored in ecosystems
in The Marches

Climate change: keeping carbon locked up

Climate change is a certainty but nature itself can help minimise its intensity. Trees and other vegetation absorb carbon dioxide, along with a host of noxious gases including nitrogen dioxide, carbon monoxide, sulphur dioxide.

Meanwhile, vast amounts of carbon are stored in trees and in the ground. The value of carbon in woodland in The Marches region has been priced at £3.6 billion. Undisturbed land, such as permanent grassland and heathland, retains carbon worth billions of pounds. Frequent ploughing leads to significant losses, which can be reduced through the use of winter cover and catch crops and better use of modern technology.

Peat bogs are our ultimate natural carbon stores. As bog plants die and decay, the carbon they absorb from the atmosphere is held in the deep layers of peat. Many such bogs are 5 to 6 metres deep; in the Meres and Mosses of north Shropshire some areas are up to 14 metres in depth. Kept wet and in thriving condition

the carbon is retained within the bog but if peat is extracted or the bog dries out, huge amounts of carbon are released into the atmosphere.

Peatlands are the UK's single most important terrestrial carbon store containing 20 times more carbon than all UK forests.



Tourism

The value of tourists to Shropshire is estimated to be £1 billion annually. In a survey carried out in 2012, 80 to 90% of visitors gave the natural environment as their primary reason for visiting the county.

Landscape restoration such as the Back to purple project on The Stiperstones, Shropshire, enhance the visitor experience for visitors, encouraging longer stays and return visits.

Meanwhile, the Meres & Mosses Festival, which promotes an interest in the local landscape in all its variety, attracts several thousand visitors each year. Such ventures feed people's hunger for activities where they can engage with nature.

Investing in the environment and its wildlife is essential to maintain and grow this sector of the economy; the richer the experience the more people will value it and wish to visit.



£1 billion

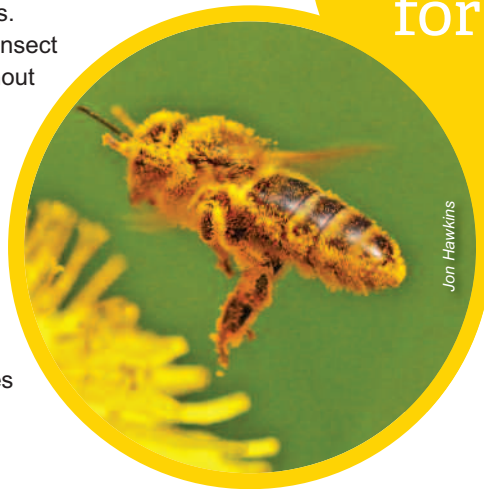
Value of wild species
diversity in
The Marches

Pollination

Crops such as oil seed rape, vegetables and fruit need bees and other insects to pollinate them. It is vital to maintain a diversity of pollinators; reliance on just a few is risky. With 60% of all invertebrate species declining it makes economic sense to invest in farming and other landscape management which encourages wildflowers and the insects that feed on them.

Our landscape needs nectar networks. Native flowers provide the greatest diversity of insects and farmers are increasingly seeing the value of incorporating wildflower margins within arable fields. Wildflower margins promote healthy insect populations, providing nectar throughout the spring and summer; a crop such as oil seed rape is a great source of nectar for a few weeks, but will not sustain pollinators throughout the year.

There are great opportunities to increase the abundance of wildflowers on road verges and roundabouts; around schools, factories and offices and in our own gardens.



Jon Hawkins

Pollinating insects
are worth £510 million
annually in the UK
for crop pollination

Planting trees strategically in just 5% of the upland landscape can reduce flood peaks by 29%

Street trees encourage people to walk or cycle to work more often

Values for nature's worth in The Marches were calculated for the Marches Ecosystem Assessment by Oliver Hölzinger of the Consultancy for Environmental Economics & Policy.

Produced by Shropshire, Telford & Wrekin Local Nature Partnership with Shropshire Wildlife Trust.



Shropshire
Wildlife Trust