







Rewilding

Sat 25 September 2021

With Andrew Ramsey (University of Derby), Matt Buckler Derbyshire Wildlife Trust, Dawn Ward (rewilding pioneer)



The seventh in a series of Zoom events designed to celebrate and prepare for the 26th UN Climate Change Conference of the Parties (COP26) in Glasgow. These events cover different climate themes, bringing together experts and examples of best practice to identify the actions needed to achieve a zero carbon society. The speakers at this event explained the theory behind rewilding and its relevance to a carbon zero future, what is being done by Derbyshire Wildlife Trust in partnership with local authorities and one individual's experience of rewilding land that was previously agricultural. The recording of the event can be found here or here: https://www.youtube.com/watch?v=U6oF1kC0vGY

The speakers

Andrew Ramsey: Head of Discipline <u>Environmental Sciences</u>, University of Derby

Andrew is an ecologist and conservation biologist and teaches these at undergraduate and postgraduate level. He is Programme Leader for Zoology and one of the research leads for 'Ecosustainability and evolution' in the University of Derby's <u>'Environmental Sustainability Research Centre'</u>. Andrew is author of a blog on <u>Biodiversity Loss and why it Matters</u>

- Andrew noted Michael Soule's analogy of ecosystems and an aeroplane. A plane relies
 on multiple parts to keep going and loss of a few nuts and bolts is ok but if it loses too
 many parts it stops working.
- Our ecosystems are like a shaky plane we have destroyed habitat, overexploited species, damaged areas with pollution and spread exotic species, so that many species of plants and animals are being driven to extinction.









- We are losing species at an increasing rate. Pre-history we lost 1 species per 1000 species per 1000 years. Now it's 10-50 species per 1000 species per 1000 years and in the future it's forecast that we will lose over 1,000 species every 1,000 years.
- For birds alone, despite huge conservation efforts the numbers of species moving towards endangered status or extinction between 1988-2016 far outweighs the numbers who are becoming less threatened.
- Why should we care? Biodiversity provides numerous benefits supporting (eg photsynthesis), provisioning (eg fish or wood), cultural (eg recreation) and regulating (eg carbon capture or flood management)
- The UN decade of restoration (2021-203)) aims to restore natural capital
- Rewilding is a way of restoring nature. Various approaches or definitions:
 - o Rewilding Soule advocated putting back big carnivores and linking habitat
 - o Passive where natural succession allowed without any human interference
 - Translocation where nature is given a helping hand
 - Pleistocene putting things back that have been lost for many years (functional equivalent of extinct species)
- Yellowstone wolves which had been driven out by the national park were reintroduced as predators for elk which had overgrazed the area. The population of elk was reduced which had positive impacts on tree height (less grazing) which is good for carbon capture, the bison population increased and the ecosystem was restored
- A reserve in Costa Rica which was previously grassland and grazing cattle has been restored over 30 years to tropical rainforest with jaguar, tapir and howler monkeys

Matt Buckler: Head of Wilder Landscales for <u>Derbyshire Wildlife Trust</u> and Councillor for Derbyshire Dales District Council

Matt is passionate about developing creative, sustainable solutions to land management problems and engendering an awareness of the wonder and value of nature. DWT is the leading conservation charity in Derbyshire, with 49 Nature Reserves across the county and countless conservation and wellbeing projects. They have a number of <u>rewilding projects</u>, including <u>Thornhill Carr Nature Reserve</u>.

- DWT first nature reserve was Overdale in the Peak District and now they have around 50. Over time the reserves have become isolated islands in the landscape.
- 2010 government report by John Lawton 4 principles for nature better, bigger, more and joined up. These principles have fed into the current strategy. The Wildlife Trusts want to see nature friendly management on 30% of the country by 2030.
- DWT work with natural processes. Previously they would manage for specific species but now started to think about ecosystems. Not talking about passive rewilding as so many large herbivores have been eradicated, so if not managed you simply get succession.
- Matt recommended the book '<u>The Serengeti rules</u>' about how life works and restoration projects which warned that we don't know everything! If managing for one species, you don't know what's missing.
- Willington is a 47ha DWT reserve with reed beds, open water, wet meadows near to the village of Willington which regularly gets flooded. In the past DWT would go in and fell the willows that colonised the reedbeds, burn the brush and treat the stumps. However they realised this was working against nature, so DWT stopped burning and treating the stumps to more closely mimic the work of beavers. They are now









introducing beavers (this week), and while they don't know the exact impact this may have on the ecosystem, it will include all of the impacts that they would have had in the past. It is hoped the beavers will maintain the wetlands, provide more carbon sequestration and allow more water to be retained in the landscape. Next to the site is an area of 200ha with permission for gravel extraction which they hope will be part of the wetland in the next few years.

- Trent Valley vision is to connect up habitats across the Trent valley. 20% of the 76,000 ha catchment is currently managed for conservation and the aim is to increase to 30% by 2030. The aim of the initiative is to get 20% of the 3600km2 catchment (72,000 ha) to be managed in semi-natural habitats.
- Wild Derwent Forest DWT hoes to connect the Northern Forest (north of Chesterfield) to the National Forest (South Derbyshire) to provide North-South wildlife corridors. They have been awarded a £3/4 million grant from Defra and are hoping to create 30,000 ha of new woodland within the Derwent catchment for natural flood management over the next 30 years.
- **Wild Peak** various project such as Thornhill which are passive rewilding. DWT want to develop a nature based economy for the Peak District, based on access for nature.

Dawn Ward, Local Rewilding Pioneer

Dawn has always loved growing, especially completing the full cycle with seed collection and as time went along the principles of vegan permaculture and its symbiotic relationship with nature and wildlife. She obtained just over 2 acres on the edge of the peak district in 2017, previously used for an annual cereal crop, which is slowly building biodiversity through rewilding, steered with a gentle hand.

- Dawn bought half a field (2.4ha) in the Peak District for rewilding. It is 300m above sea level with high winds from all directions so quite bleak. She noted most of the landscape in the Peak District is not natural as the tree cover has been cleared for agriculture and grouse shooting.
- Her rewilding is somewhere between passive and transocation.
- She has divided the land into 4 plots for rescue animals (sheep and goat), woodland, grassland and agroforestry.
- Key moment was the natural arrival of yellow rattle in 2020, a key plant in biodiversity increase in crop fields as it kills the grass allowing other wild plants to grow.
- In only a few years the difference in insects/birds has been phenomenal increase in insect activity, curlews, pheasants, rabbits and squirrels
- Translocation Dawn has planted 1200 shelterbelt and pollinator trees (Woodland Trust pack natives designed for highlands) to divide land into pockets and create microclimates
- People attending the talk also had a chance to visit Dawn's land the same afternoon to see for themselves the transformation in progress. (see picture right)
- As well as rewilding Dawn argued we need to change our agricultural system to one that works with nature rather than against it.











21% global greenhouse gases are from agriculture, much of it animals. If we switch to a plant based diet we can feed ourselves but allow much of the land to be used more sustainably. She noted that <u>Tolhurst Organic</u>, near Oxford who use veganagricultural practices, produce large amounts of food sustainably incorporating hedgerows, trees, beetle banks etc. They achieve this whilst increasing carbon sequestration in the soil rather than by emitting extra.

Questions and Answers

Q. What is the best thing that we can do individually or collectively to help restore biodiversity? A [AR]: Just do something, it doesn't have to be big. Eg plant wildflower seeds in your garden. In Derby they have a project to rewild the city and found that the vast majority of green spaces are in gardens. There are too many people who are either unaware of the biodiversity crisis or who don't care, we need to reach out.

A (MB]: Be more plant-based [in your diet]. The website <u>B-lines</u> from Buglife shows a series of 'insect pathways' running through the countryside and towns, along which people have identified as important to connect. If anyone has done any work creating wildflower rich habitats they should upload the details onto the website. https://www.buglife.org.uk/our-work/b-lines/ People should also get involved politically – particularly Parish Councils who can do a lot. And write to your councillor.

Comment: Everyone should urge their council and MP to support the Climate and Ecological Emergency Bill

Q. [from Christine in Doveridge]: What other help can we have to become a "biodiversity village" instead of a best kept village? Our Parish Council has agreed to back this.

A [AR]: That's a great initiative Christine - maybe our students could help you (zoologists or BSC in Environmental Sustainability). Get in touch with me at the University of Derby. Equivalent of what we are trying to do with Derby at smaller scale. Rather than Britain in Bloom should have Britain in Biodiversity.

A[MB] There is no designation for this but it is a fantastic idea but need set of criteria as no one has done this. I would like to be involved but good if it could be a national initiative. The District Council owns nothing, and need to get other people involved. Developing 'Team Wilder' to get people to act. Really keen to see how you do it.

Q. A lot of this work seems to be done by volunteers. What is the scope for increasing the number of paid workers in some of these projects?

A. [AR]: I want as many people employed as possible but difficult to find funding. To do it properly we do need to employ more people. Conservation is underfunded. Need to demonstrate the whole value of biodiversity to decision makers and how much money does it save (eg reduced insurance from flood prevention). But it will take a seachange.

A [MB]: I'm optimistic, with more people talking about climate and biodiversity. Government commissioned the <u>Dasgupter review</u> which is very positive eg nature is too important to e left to nature charities. Write to your councillor about biodiversity. Underplaying the value of volunteering eg benefits to mental/physical wellbeing. More jobs in conservation now but need to get people involved. eg green social prescribing.









A [DW]: Councils put a lot of responsibility onto voluntary groups eg Hope Valley Climate Action. It is the volunteer groups pushing it through. Some can get lottery funding to employ people. Good to see something big in Derbyshire but needs funding.

Comment: I would like to see more education to raise awareness in the general public of how everyone can take action and secondly a ban on the use of peat in horticulture.

Comment: Yes to campaigning against use of peat - so what are the garden centres doing selling it???!!! We have a local garden centre which has put plastic grass down where the outside café tables are!!!!! What is going on!?

A [MB] First thing I did as town councillor was to ban horticultural peat in our planters - stuff that all councillors can do. Councils will all have planting schemes.

Q. Does every council have a biodiversity and sustainability officer and how are they linked together in order to promote more joined up public, community and council action that will make a difference? Someone to coordinate activity and has knowledge.

A [AR] lots of organisations could do more to raise profile of biodiversity

A [Dave W]: Derbyshire County Council emerging Climate Strategy will involve action on biodiversity so claiming that they are joining up. Proof will be in action.

A [AR]: So many opportunities for win wins, projects to deal with climate crisis that are helpful for biodiversity eg peat restoration, tree planting that are positive for people and biodiversity A [from Karl]: Erewash Borough Council has a Trees Officer focused wholly on trees in the borough.

A [MB] no councils in Derbyshire have biodiversity officers, although they all used to. DWT provides ecological advice to all planning authorities. They have biodiversity leads and are moving towards having officers. With Environment Act, all councils will have to have nature recovery networks and strategies. All starting to do stuff but councils are under severe pressure. Keep emailing! DWT about to start action on COP26 – all conservatives said they would support work on biodiversity – need to email them to ask what they are doing? A [Dave W]: I'm Amber Valley Councillor – please write to me.

Comment: if ever get chance to visit Knepp Estate – wonderful example of rewilding. Recommend Isabella Tree book <u>Wilding</u>.

Comment [MB]: 360,000 HH in Derbyshire will be getting a letter about natural flood management and we will be working with councils.

Q. I have been trying to add wild flowers to the verge in front of my house. Between all of the houses on Haddon Road Bakewell we have acres of land in the buglife corridor. I have asked for support from the council, but no reply. Any suggestions?

A [MB] email me and Derbyshire Dales Council to suggest that land, it can be considered as part of the biodiversity programme. When you write to council officer, make sure you copy in Councillors. If you write to councillor it will get directed to Director of Service. Councillors have more clout than you think.

Thanks to all the speakers, Steph Futcher, Margaret Hersee and Colin Harrison for help with this event. See write-ups and recordings of previous events at http://transitionchesterfield.org.uk/countdown-to-cop/