

Join The Dots: The rise of rewilding tech

Curation and Maddyness have created Join the Dots, a platform dedicated to ESG that highlights the need for businesses to look at all three in correlation. At our launch event, we invited three experts to discuss the E, the S and the G along with a moderator. The result? A masterclass in how joined up thinking can drive both a sustainable and profitable business.

Join the Dots is a series of podcasts, events and articles designed to equip your business with the knowledge to navigate and understand the complexities of ESG.

Duncan Grossart is a rewilding consultant and founder of Journeys with Purpose, a travel company that provides immersive hosted experiences with inspirational leaders created to inform and catalyse the celebration and advancement of nature conservation projects across the world.

If there's anything the rise of rewilding has taught us, it's that nature doesn't fare well when humans interfere with it too much. Over years of industrial intervention, spraying plants with fertilisers and scooping them up with combine harvesters, we've produced impressive quantities of food. But we've also left much of our land stripped and barren.

As Duncan Grossart, rewilding consultant and founder of Journeys with Purpose, says in the Join the Dots podcast: “Rewilding is the large, long-term restoration of our landscapes – where nature can begin to *take care of itself* once again.” It’s an antidote to our “consumptive” and “extractive” relationship with land and sea as things stand.

Even knowing all this, it’s hard to ignore the accompanying rise of rewilding tech. Startups are emerging with manmade solutions they claim can maximise nature’s ability to do its thing. There are even drones that can restore land 11 times faster than current methods – collecting data on land characteristics and establishing what needs to be done, before embarking on an aerial seeding process.

“Technology, with the possibility to make exponential change to our world, is needed if we are to restore the truly staggering amount of land that has to be remediated,” says Dr Susan Graham, founder of Dendra Systems, which makes them.

There are GPS collars, used to track the location and behaviour of animals like bison and pumas as they are reintroduced into landscapes, and remote hive-monitoring technology, which is building up a global map of data on bees. One tool uses blockchain smart contracts to reward communities for ecosystem preservation, and another is working towards a seed coating machine that, with an open-source design, could be replicated globally and boost the survival of seeds planted as part of rewilding efforts.

There are virtual fences that can stop poachers in their tracks, and techniques for using DNA found in soil and water to get a full picture of a space’s biodiversity. Plus: the associated concept of agricultural hyper-intensification where, through structures like vertical farms, we can dramatically reduce how much land we need for food production – leaving it free for rewilding.

The list goes on, and is in fact helpfully compiled under the #Tech4Wildlife hashtag on Twitter, manned by conservation technology network WILDLABS. Elsewhere, WILDLABS has noted concern within focus groups that there hasn’t been enough evaluation of the ethical impacts of conservation tech on wildlife and communities. Its members, while pioneering computer vision and networked sensors in an eco context, are clear that this is a constraint.

Evidently, wonderful things can happen when nature and technology as we know it work together rather than against each other. But care must be taken to keep this relationship symbiotic, so as to avoid history repeating itself.

As Vance Russell, biodiversity lead at Ecosulis, writes: “Challenges also abound in the practical application of technology. Camera traps, although arguably invaluable for conservation science and management, are making wilderness

less wild and may change animal behaviour, while drones have been proven to increase animal stress.”

“For all its burgeoning potential, technology also presents ecologists with a host of challenges. As it gives rise to new disciplines that we need to shape, apply and master, we are all learning.”

Listen to episode 2 of the Join the Dots podcast

An example: Rewilding Britain and Treeconomy

Alongside his work at Journeys with Purpose, Grossart spearheads fundraising and development at Rewilding Britain – which researches, promotes and facilitates the practice of rewilding nationwide. A fortnight ago, the charity launched the *Rewilding Innovation Fund*, which will award grants of up to £15,000 to 15-20 projects it sees as taking a novel approach to conservation.

There’s already been a pilot, with cash invested in an effort to model carbon capture as it’s happening at three rewilded sites in the Scottish Highlands, Norfolk, and Sussex. A startup called Treeconomy is measuring how much carbon is being captured by scrub and wood pasture on these estates.

This is important in the context of achieving long-term financial sustainability for rewilding – because one way projects can be funded is via the purchase of carbon credits. Treeconomy is able to calculate just how efficient specific wilding sites are in sequestering carbon dioxide, providing an accurate picture of impact for funders.

The logic stacks up: as a tech solution, Treeconomy can facilitate rewilding and therefore boost its uptake. High-resolution data provides assurance and transparency for buyers, who can fund carbon offsetting knowing it’s actually meaningful. And with the promise of readily-available customers, comes an incentive for more people to get started with tree-planting.

But to return to that fine balance we must observe, when using what got us into this mess to help get us out of it. Part of avoiding the tech trap in rewilding is, Grossart says, “including local communities and experts, and ensuring that we don’t become myopically focussed on the carbon aspect of rewilding. After

all, the biodiversity impact is arguably larger, it's just less developed and less clear as to how to generate any financial support from biodiversity uplift currently.

"Treeconomy's technology is designed to work with local communities rather than instead of them. Remote sensing and AI technology is fantastic but we will always need input from the ground, especially in relation to the biodiversity aspect.

"We plan to build a system that combines these aspects from both a business perspective and a financial perspective, so that the 'best' projects receive the best financial rewards. It's about aligning incentives, and we're working very hard with our partners to do this properly from the start."

We've got billions of hectares of land to rewild, and will need every tool in our arsenal to help us get there. Technology – whether it's assisting in the creation of wild spaces, or determining their market value in our new carbon economy – is one of these tools. It's important, nevertheless, that we don't rely on it too much, and that we are responsive to issues as and when they emerge.

Duncan Grossart is a rewilding consultant and founder of *Journeys with Purpose*.

Join the Dots is a collaboration between Curation and Maddyness. To get involved or collaborate with us for your own series, email hello@maddyness.com.

Join The Dots: Taking a methodical approach to ESG for your startup with

Eleanor Winton

Join The Dots: The rise of rewilding tech with Duncan Grossart

*Join The Dots: What significance does health have in responsible investment?
with Jessica Attard*

Join The Dots: SMEs daunted in face of ESG demands with Marc Lepere

Sign up for Sustt

Article by FLORENCE WILDBLOOD