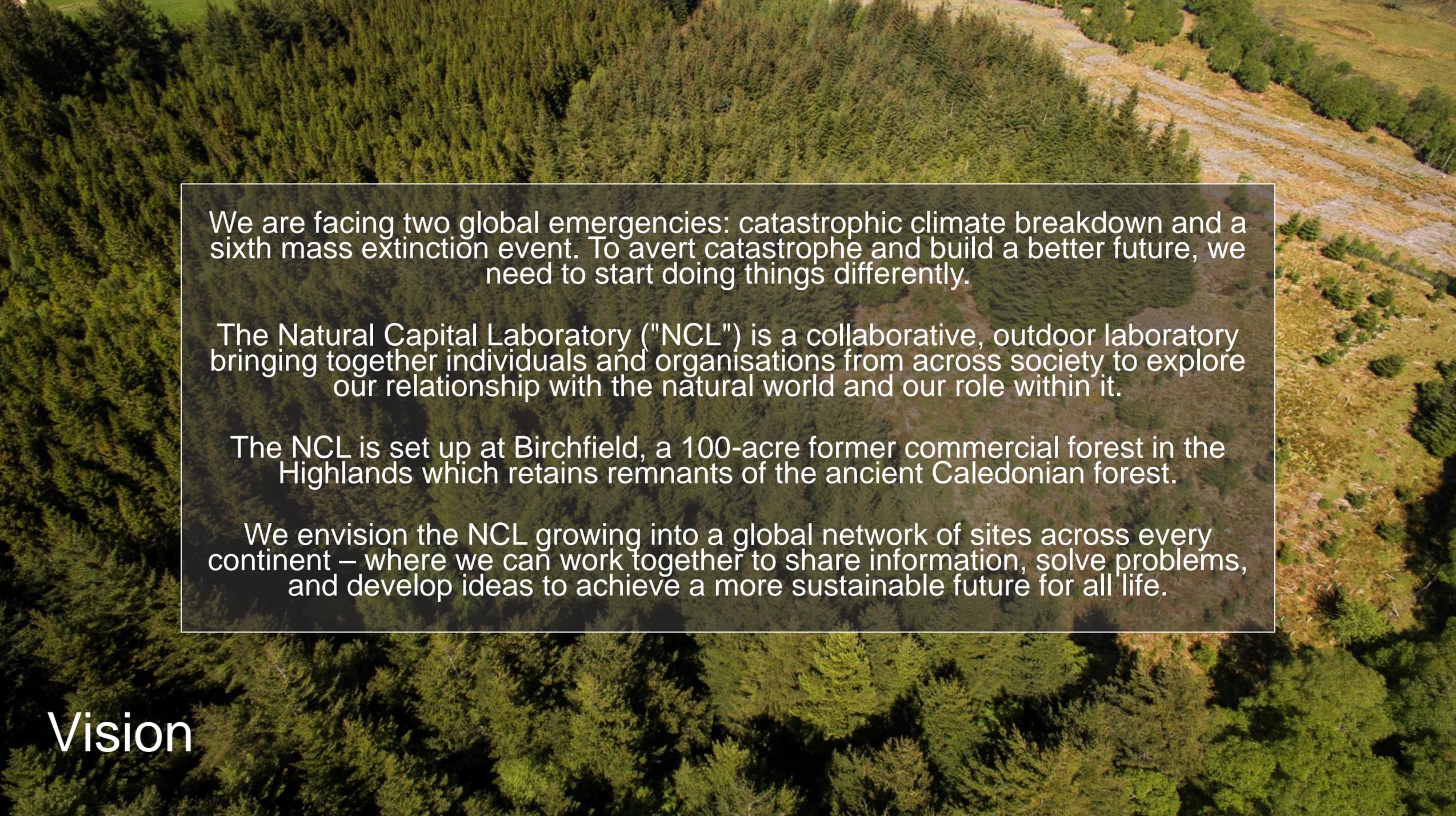




# The Natural Capital Laboratory at Birchfield

An aerial photograph of a forest landscape. The majority of the frame is filled with a dense, lush green forest of tall trees. In the upper right quadrant, there is a distinct cleared area, possibly a field or a road, showing a mix of brown earth, sparse vegetation, and some smaller trees. The lighting suggests a bright, sunny day, with shadows cast across the forest canopy.

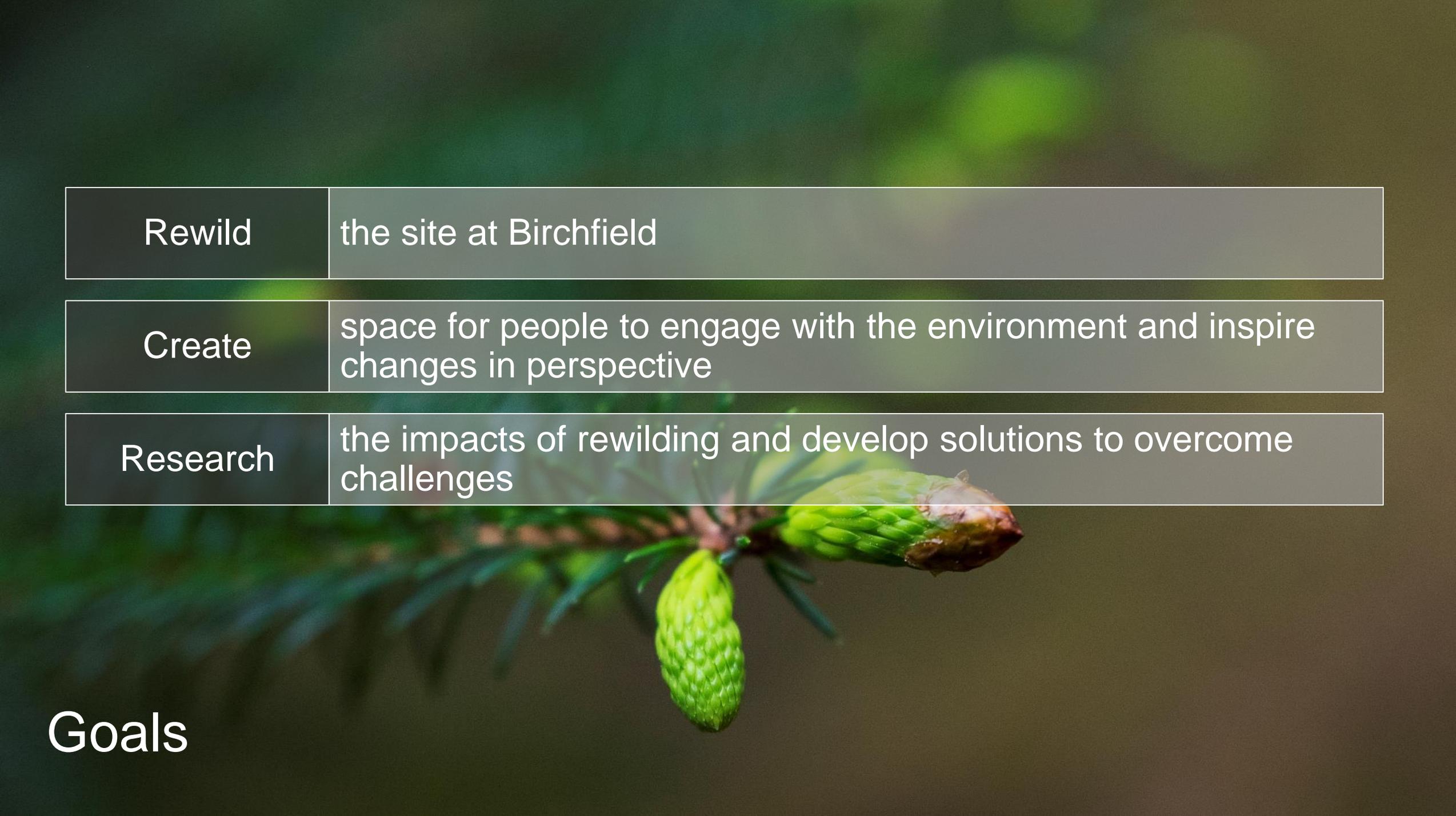
We are facing two global emergencies: catastrophic climate breakdown and a sixth mass extinction event. To avert catastrophe and build a better future, we need to start doing things differently.

The Natural Capital Laboratory ("NCL") is a collaborative, outdoor laboratory bringing together individuals and organisations from across society to explore our relationship with the natural world and our role within it.

The NCL is set up at Birchfield, a 100-acre former commercial forest in the Highlands which retains remnants of the ancient Caledonian forest.

We envision the NCL growing into a global network of sites across every continent – where we can work together to share information, solve problems, and develop ideas to achieve a more sustainable future for all life.

Vision



|          |  |
|----------|--|
| Rewild   | the site at Birchfield   |
| Create   | space for people to engage with the environment and inspire changes in perspective |
| Research | the impacts of rewilding and develop solutions to overcome challenges              |

# Goals



Restore

the habitat at Birchfield

Reintroduce

species lost from the area

Implement

the IUCN rewilding principles and guidance

Develop

practical approaches to rewilding and share the results so we and others can learn from them

Rewild

Connect

people with nature, including underserved communities whether of colour, poor, or differently abled

Improve

ways of communicating rewilding to a wider audience and inspire future generations

Provide

a space for creative and artistic expression, whether music, art, writing, or other creative endeavours

Build

a network of individuals and organisations to bolster a movement for rewilding

Create



Develop

ways to measure the social, environmental, and economic impacts of rewilding

Trial

new technologies and approaches to collecting data such as remote sensing, AI, and robotics

Encourage

collaboration and diversity of research viewpoints

Explore

how rewilding can address, or can be affected by, complex social, ecological and economic issues including the SDGs

Research

A photograph of a forest with many trees and a mossy ground. The trees have dark trunks and green foliage. The ground is covered in green moss. The text is overlaid on the image.

The NCL will adopt and implement the IUCN principles on rewilding. This is the first time the principles have been implemented in practice and knowledge gleaned from the NCL will be shared publicly for everyone to learn from our experience

Principles



## **Principle 1. Rewilding utilises wildlife to restore trophic interactions**

- Our aim is to restore functioning ecosystems that do not require human intervention to manage them
- We will restore habitat using naturally regenerating native vegetation and will intervene where necessary
- We will also explore the possibility of reintroducing specific species lost from Birchfield to restore natural functions and a balance between predators and prey

## **Principle 2. Rewilding should employ landscape-scale planning that includes core areas, connectivity and co-existence**

- Our aim for Birchfield is for it to become a core area of protected native ecosystems within the wider area
- Beyond Birchfield's boundaries we will aim to work with other land owners and managers to explore how Birchfield could be connected to other wild areas to provide a corridor for wildlife
- We will also seek to understand how rewilding can contribute to the economy and society allowing communities and wildlife to flourish





### **Principle 3. Rewilding requires local engagement and support**

- We recognise rewilding must involve local engagement and support for it to be truly sustainable
- We aim to ensure communities have a voice in the implementation of Birchfield’s rewilding and to actively encourage involvement where this is possible
- Such as through engagement events, volunteering opportunities, and feedback on plans and proposals

## **Principle 4. Rewilding focuses on the recovery of ecological processes, interactions, and conditions based on reference ecosystems**

- To guide the rewilding process, we will use the ancient Caledonian Forest as a reference point
- We will allow natural processes to recover and we will assist the process as required to ensure that there is a balanced recovery of this ecosystem
- This will allow the NCL to connect with other rewilding projects in the area with complementary goals, such as Trees for Life and Cairngorms Connect



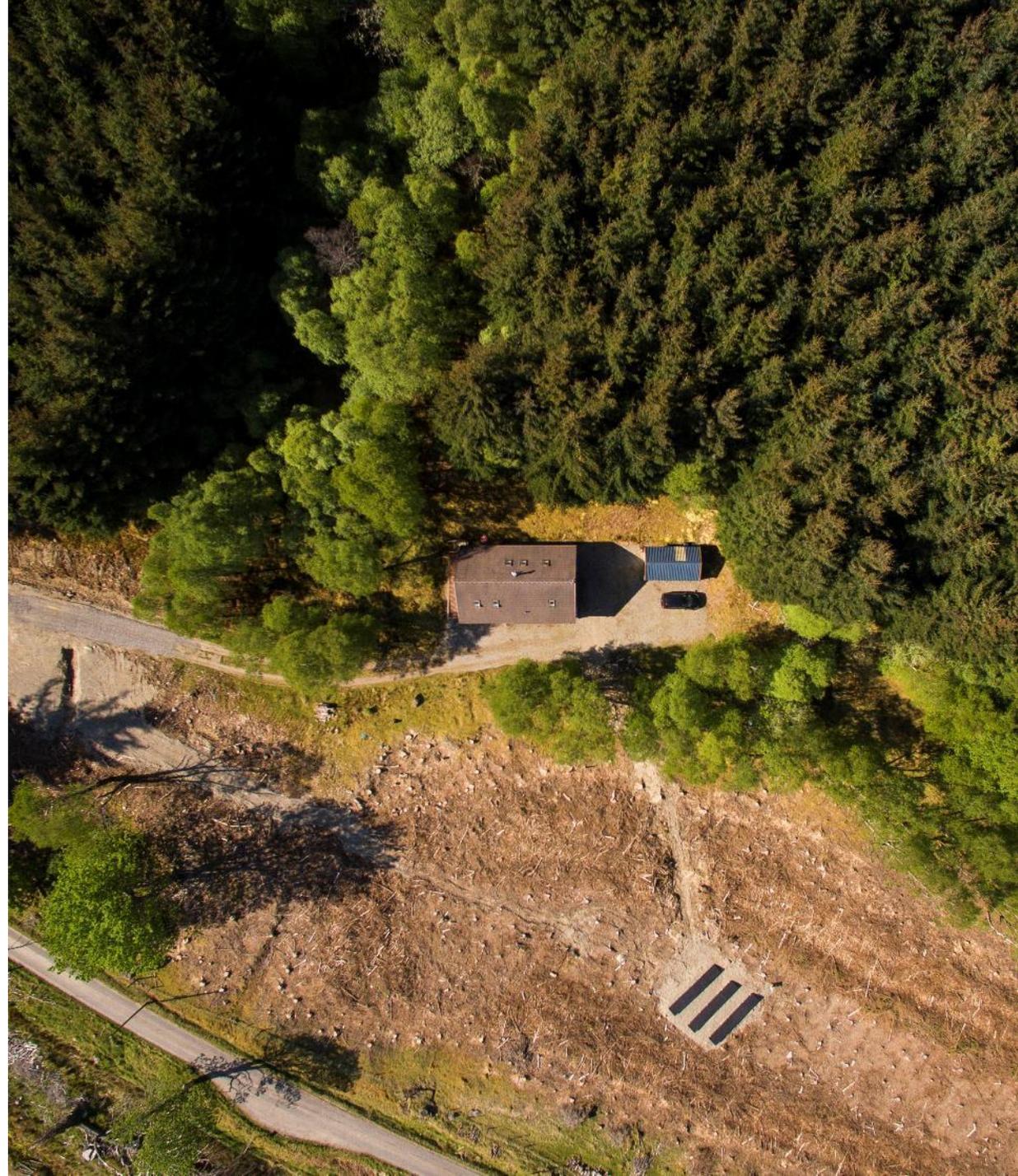


## **Principle 5. Rewilding recognizes that ecosystems are dynamic and change constantly**

- All plans for the NCL will allow for dynamic, changing processes such as floods, wildfires, seed dispersal, pollination, movement of species, and changes in climate
- We will anticipate these processes occurring and will aim to create the space on the site, and through connectivity with wider areas, to allow these processes to play out freely
- Rather than aiming to manage or control these processes, we will aim to study their implications on people and wildlife in the area

## Principle 6. Rewilding should anticipate the impact of climate change

- The NCL will explore the potential impacts of climate change on shaping the ecosystems and species in the area
- We will account for these impacts in the development of the site management plan
- Beyond this we will seek to make the NCL carbon negative through restoring forests and peatlands, using renewable energy, adopting a plant based diet, and offsetting any unavoidable emissions through certified carbon offsetting programmes





## **Principle 7. Rewilding is informed by science and considers local knowledge**

- The NCL will act as an ongoing process to collect the data needed to feed into the decision making process and allow informed, science-led decision making
- A scientific committee will be appointed to guide and feedback on the decisions made and we will work with local communities and organisations to ensure we use local knowledge to inform project plans
- Masters and PhD students will be encouraged and facilitated on site to encourage learning and knowledge generation

## Principle 8. Rewilding recognises the intrinsic value of all species

- We recognise animals are not objects and their intrinsic value is independent of their use by humans
- We will explore how conservation can engage with the complex ethical questions relating to the intertwined rights and relationships among humans, animals, and plants
- We will consider equitable biocentric decision making and evaluate how it informs existing evidence bases for decision making, such as natural capital accounting



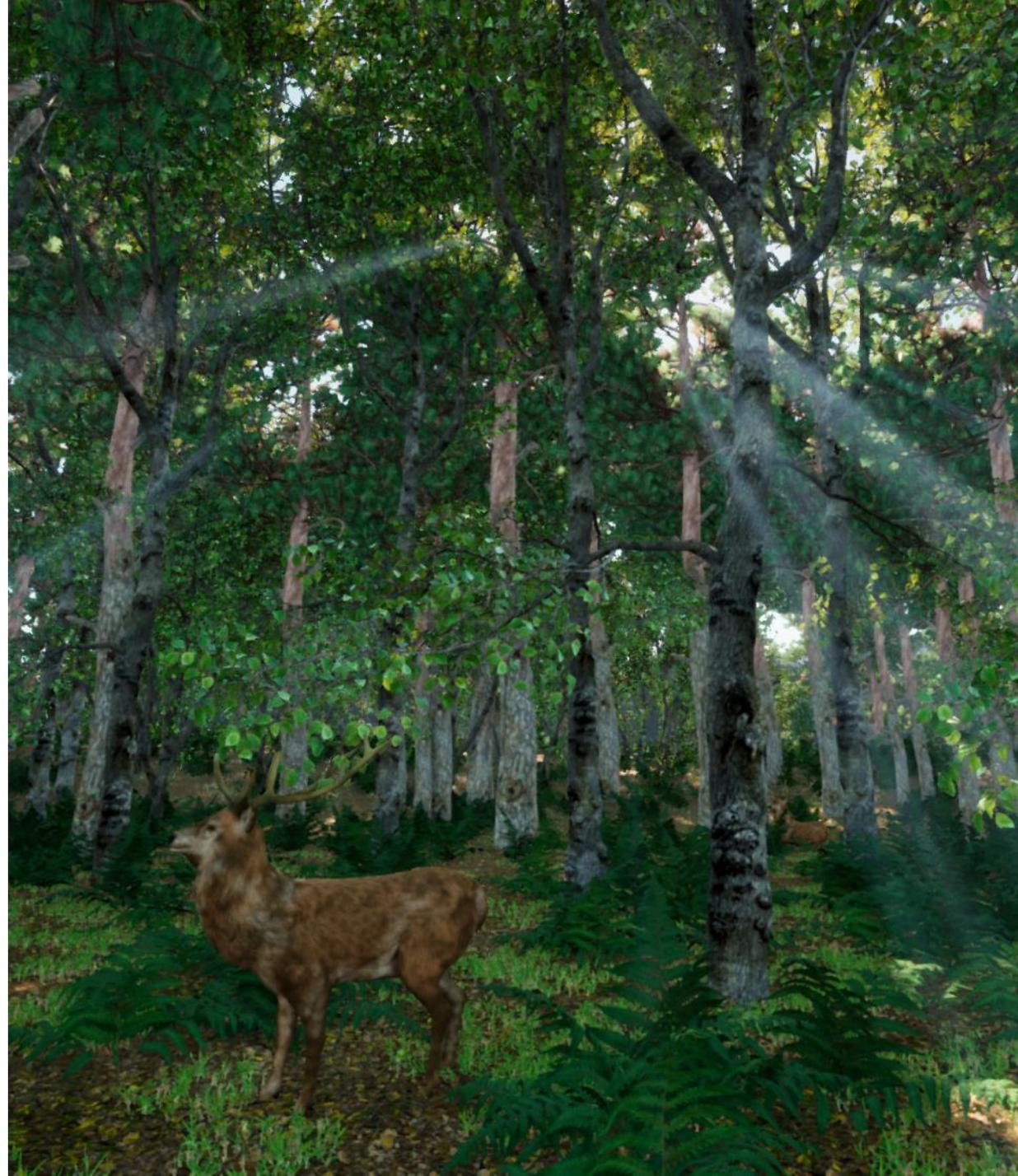


## **Principle 9. Rewilding is adaptive and dependent on monitoring and feedback**

- The NCL will monitor and measure environmental, economic, and social changes on site resulting from the rewilding process
- This information will be fed directly into the decision making processes guiding Birchfield's rewilding to allow an adaptive approach
- The data will be shared publicly to allow wider engagement and review of the process

## **Principle 10. Rewilding provides the opportunity for a paradigm shift in the co-existence of humans and nature**

- We will use the rewilding process at Birchfield to encourage a shift in the way people currently see, interact, and coexist with the natural world, imagining a different relationship, and explore how people's wellbeing improves as a result
- We will provide space for creativity on and off-site inspired by nature and the rewilding process
- We will use new technology, such as virtual reality, to showcase what a different future might look like and engage with the complex questions of how we can make that happen for the benefit of all





Birchfield Cottage

The NCL is a joint venture between landowners Emilia and Roger Leese, Lifescape Project, AECOM, and University of Cumbria

Who we are