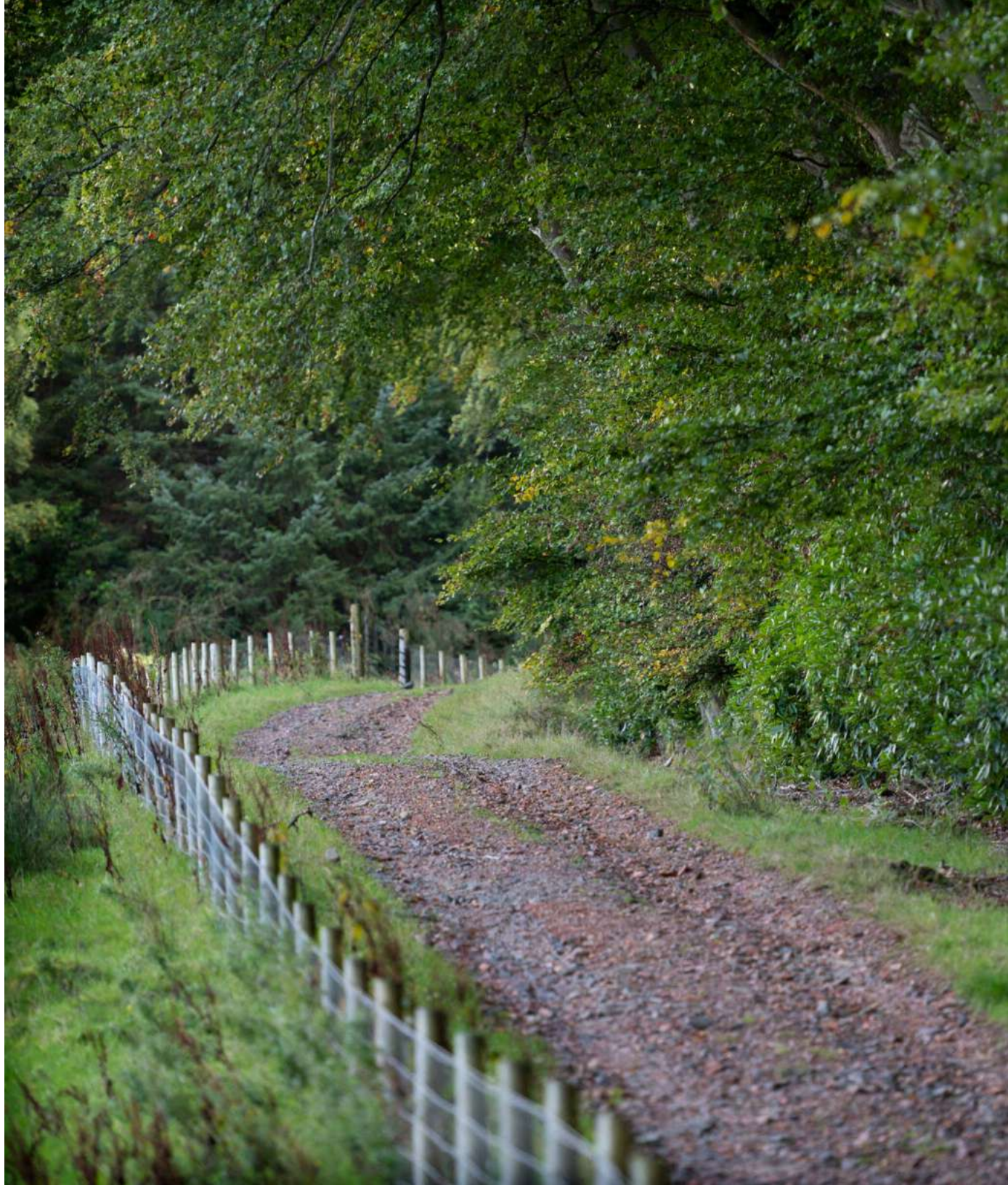




Leckie Estate

Case Study

akre took on the management of Leckie in 2020 tasked with the goal of shaping it into an estate of the future. The estate was a typical example of mixed land use, integrating intensive agriculture, forestry, and recreational areas.

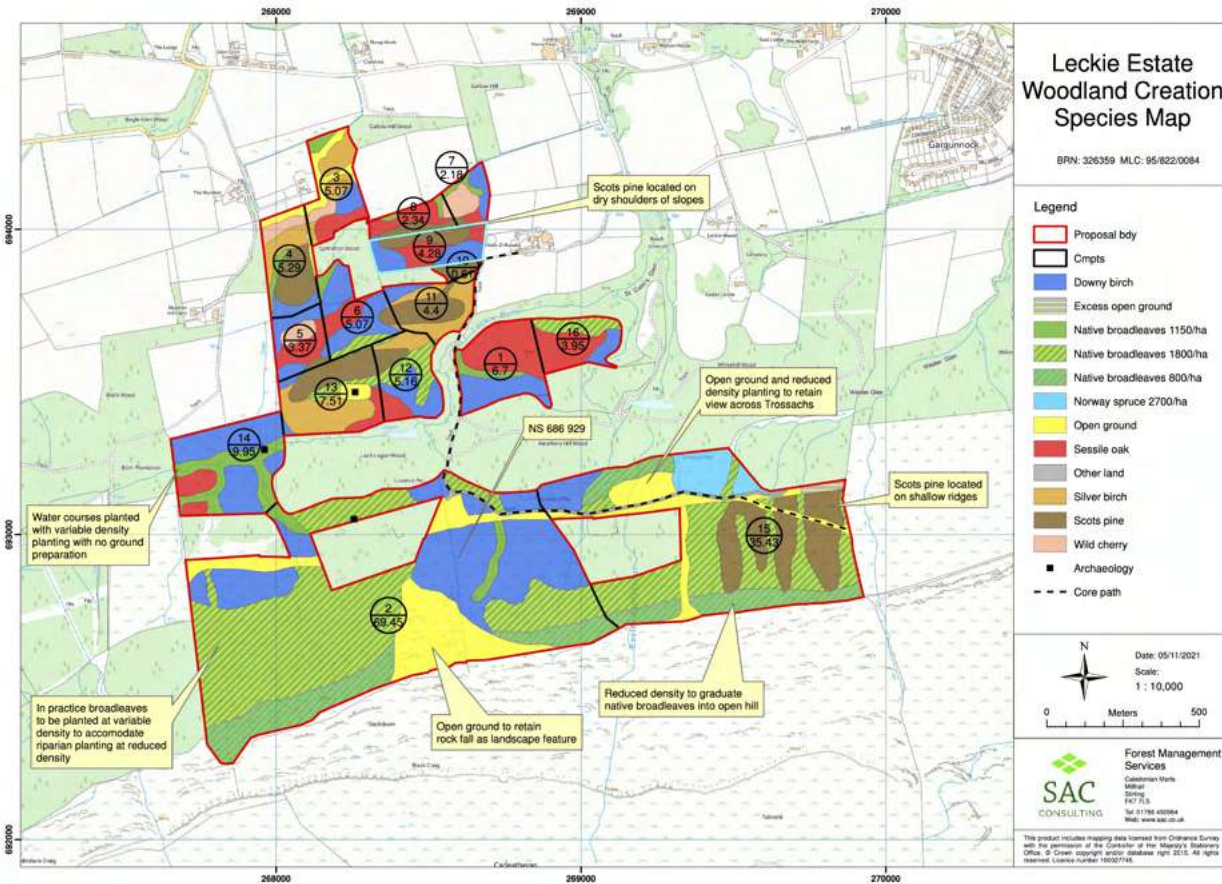




The Leckie Estate, situated west of Gargunnock, features a varied terrain that expands from enhanced pastureland through the impressive Gargunnock escarpment ultimately leading to a wild plateau. The plateau originally consisted of heather hill and rough grazing land before this was halted. This area is renowned for its extensive panoramic views, offering sights from Ben Lomond in the west to the new Forth Crossing in the east.



akre conducted a comprehensive review of Leckie in the form of a Natural Capital Baseline Survey. This revealed that there were parts of the estate that were depleted and in need of restoration. This information was distilled into a land-use intervention plan to enhance the estate's natural capital.



Thousands of data points were gathered from the habitat and breeding bird surveys, then integrated into a design for the native woodland creation project. The project consists a combination of natural regeneration on the 200 ha upland area which was subject to overgrazing in the past and new woodland creation where the project is adjacent to pre-existing non-native Sitka and Larch timber woods. The woodland creation project extends over 160 ha.



akre grew the trees used for this landscape-scale woodland creation project in its tree nursery in Fife, using seed collected on the hill at Leckie Estate. These trees were planted over the winter of 2022/23 and are now well established.





The world's first carbon negative tree nursery.

Modular, scalable and controlled propagation environment

totally off grid



10x more efficient



4x less compost

6x higher establishment rates



In addition to woodland creation, the Leckie Treehouses introduced a large wetland area on the lower ground, boosting wetland bird and invertebrate habitat.





All sheep were removed from the estate in 2023, and a reduced herd of Galloway and Belted Galloway are now acting as habitat engineers on the remaining grazing land.



Craig Arnott, a local young farmer who manages the livestock, has taken the opportunity to try to produce Scotland's best cut of beef using the woodland and pasture for grazing. If you are lucky you can spot Betty the rare brown Belted Galloway calf.

In the rare fragment of existing ancient woodland an extensive area of invasive *Rhododendron ponticum* has been removed to encourage the next generation of woodland to naturally regenerate.

Pigs were used to clear bracken and disturb the surface of the soil to encourage wildflower establishment. This was supplemented by broadcasting wildflower seed on the exposed soil.

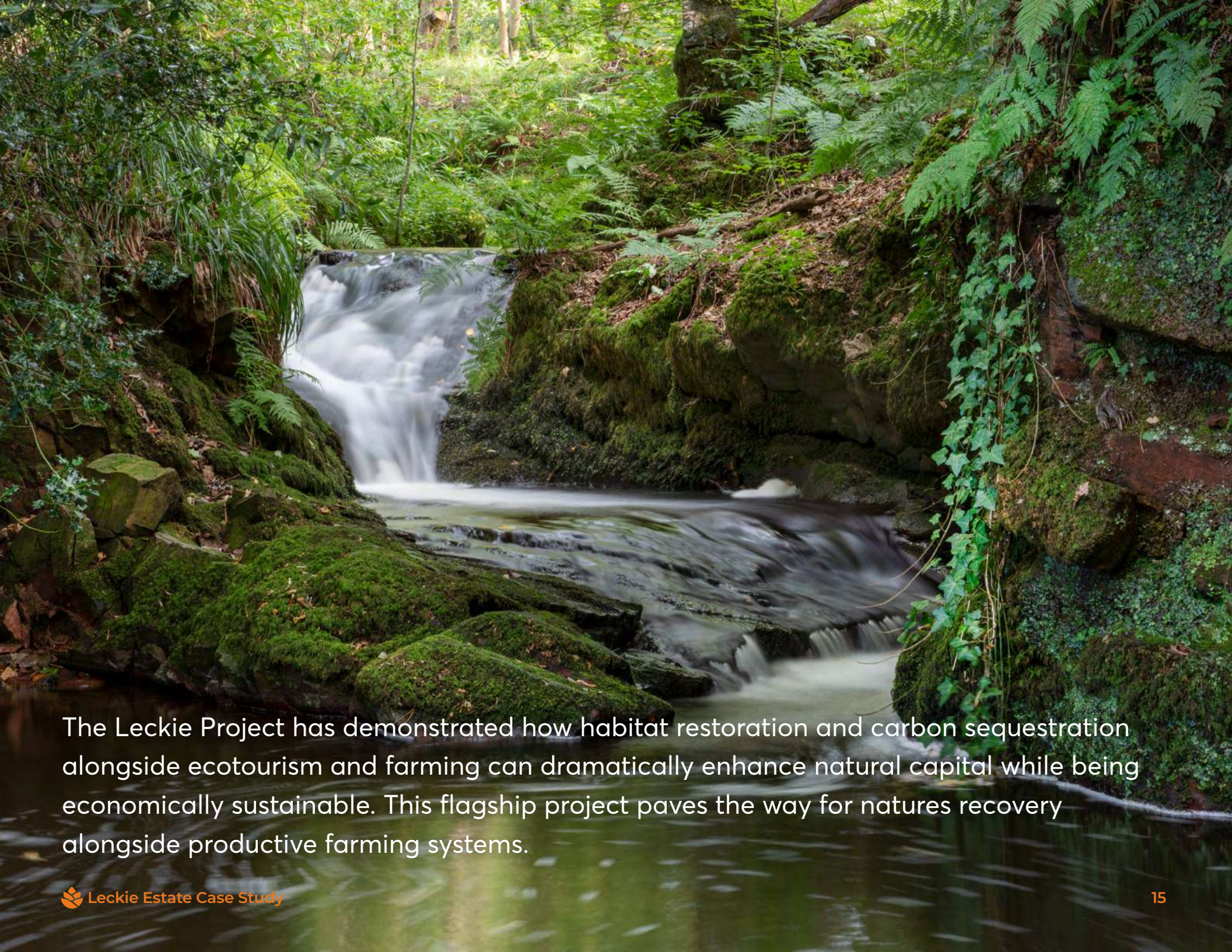




In order to protect the young trees 6 owl boxes were installed around the estate. This will help to boost biodiversity and reduce small mammal browsing pressure on the young woodland.



Four wild beehives have been introduced to the estate too to promote the recovery of the essential function these species play in a functioning habitat.



The Leckie Project has demonstrated how habitat restoration and carbon sequestration alongside ecotourism and farming can dramatically enhance natural capital while being economically sustainable. This flagship project paves the way for nature's recovery alongside productive farming systems.



Renwick Drysdale

Managing Director

✉ info@akre.co.uk

☎ +44 (0) 1592 725 557

🌐 akre.co.uk

