SOUTH DOWNS NATIONAL PARK

Case Study

Cockshut Stream Restoration

Background

With only around 200 existing worldwide, chalk streams provide an ecologically rare home for a whole host of wildlife.

The Cockshut - situated on the outskirts of Lewes, adjacent to Lewes Brooks Site of Special Scientific Interest (SSSI) - is a chalk stream that had previously been straightened and realigned to become an embanked ditch. Over time the channel had become degraded and lacked the shape and landscape connectivity of a functional watercourse. The stream had become choked with the highly invasive parrots feather. Overall there was very little flow and little biodiversity.

This project, a partnership between Lewes District Council, the Ouse & Adur Rivers Trust, South Downs National Park and Lewes Railway Land Wildlife Trust aimed to restore a more natural course for the stream and reconnect it to a series of wetland habitats. All improvements were aimed at increasing the sites biodviersity, its resilience to climate impacts, and enabling the features of the SSSI to return.

The area is popular with walkers and the works sought to improve access via a circular walk with interpretation panels highlighting the areas unique environmental histroy and the value of chalk streams in the landscape of the South Downs.

The project

Following a period of four-years to investigate, develop and consent, in June 2023 the project began to realign a 670m section of the Cockshut Stream into Lewes Brooks SSSI. Over the following three months the sites topography was altered, creating several pools, scrapes and enhanced ditches which together form 6.3ha of wetland around the new channel.

The new channel has been designed to meander through the site and has a shallow profile, enabling both connectivity with the floodplain and resilience against future periods of low flow resulting from climate change impacts.

It was really important that the project allowed water to drain into the rest of Lewes Brooks at the same volumes as before to ensure that there was no detriment to the remaining SSSI ditch network. Engineering the outflows from the wetland was one of the complicated elements of the project with site outlets having to be set at precise levels to ensure the new wetland functioned without drying out the surrounding area. Other works saw a chalk gravel substrate installed at points in the new channel along with the construction of two public footbridges and hydroseeding 4ha of wetland wildlfower meadows.

The engineering works were undertaken by Ebsford Environmental, supported by design engineers CBEC and cost a total of £380,000 with funding received from Lewes District Council, South Downs National Park (CIL) and the Veolia Environmental Fund.

"Our ambition is to preserve this special place, inspiring individuals and communities to engage with and protect our local rivers".

Chris Bibb – Lewes District Council

The outcome

The project has restored a dynamic stream and floodplain environment within a SSSI which has been in unfavorable and declining condition for a number of years and, whilst it is early days, the project partners are confident that everything is now in place to facilitate the return of those species within the Natural England SSSI Citation documents for the site.

Since its completion the wildlife value of the site has increased with a more diverse assemblage of bird life, including egrets, heron, greenshank, kingfisher and white storks being reported. Pre-project surveys recorded no reptiles on the site but since its completion there are several reports and photographs of grass snakes around the newly created hibernacula. Over the next five years, ecological surveys will be undertaken to enable robust comparison of pre-and post-works data.

The area has always been popular for walking and running and the newly created circular walk will provide opportunities for residents to engage with nature and observe wildlife on the urban fringe.

Ongoing monitoring of the site's biodiversity will take place coordinated by the project team with the help of local volunteers and professional ecologists.

The South Downs National Park Partnership Management Plan (PMP) 2020-2025 sets out a shared vision for how we all would like the National Park to be in the future. It includes 11 long-term outcomes, and provides a framework for communities, landowners, charities, businesses and public bodies to work together to make this vision and these outcomes a reality.

This project successfully achieved the following PMP outcomes:

Outcome 1: The landscape character of the South Downs, its special qualities, natural beauty and local distinctiveness have been conserved and enhanced by avoiding or mitigating the negative impacts of development and cumulative change.

Outcome 2: There is increased resilience within the landscape for its natural resources, habitats and species to adapt to the impacts of climate change and other pressures.

Outcome 3: A thriving and connected network of habitats and increased population and distribution of priority species within the National Park.

The future

The Cockshut Stream is set to become a fantastic home for a diverse array of wildlife as well as a valuable community asset, enabling residents to connect with nature on their doorstep.

Community acceptance of the scheme has been a critical part of its success. The formation of the Cockshut Volunteers, coordinated through the local Railway Land Wildlife Trust, will ensure that the community retain a sense of ownership and continue to play a central role in the sites management and maintenance into the future.

Another great success of the project has been the way partners came together to achieve a mutual ambition for the site. The lead organisation changed as the project developed, enabling the most cost-effective approach, and playing on the skill sets from Ouse & Adur Rivers Trust, Lewes District Council, South Downs National Park and the local Wildlife Trust. This partnership will continue to review the management plan, ensuring that the site develops its overall wildlife value.

The project partners will now look at the opportunities across the remaining 2km of the Cockshut Stream to see how they can build on the successes of the Cockshut Restoration.

For more information contact

Peter King, Director, Ouse & Adur Rivers Trust
peter.king@oart.org.uk

Chris Bibb, Lewes District Council
Christopher.bibb@lewes-eastbourne.gov.uk