Case Study

SOUTH DOWNS

Creating Heathland Stepping Stones

Background

The Lynchmere Ridge is a prominent geological feature in the Wealden Heath area of the South Downs National Park (SDNP). Due to its sandy, nutrient-poor soil and historic land management, it is home to a series of heathland sites. These are well managed by the National Trust, the Lynchmere Society and Forestry England, however the land in between had been re-purposed for forestry and is now largely uncongenial for heathland species.

It is important for key heathland species, such as the adder, sand lizards or great crested newts, to be able to move from site to site, to increase population resillience and genetic diversity. To faciitate this movement, 'corridors' or 'steppingstones' were identified as an important resource that could be created along Lynchmere Ridge.

Two sites, Shufflesheeps and Hatch Fir, were identified as suitable corridors due to signs of remnant heathland such as gorse, bilberry and small amounts of heather.

After discussions with Forestry England, *Rhododendron ponticum* was cleared from the two sites in winter 2019 using funding from the 'Heathlands Reunited' project, a five tear multi-partner project to manage, restore and create Heathland funded by the National Lottery. A plan to create heather stepping-stones through brash spreading was designed and agreed. The widened woodland ride at Shufflesheeps, Hampshire



The project

In autumn 2020, Forestry England widened their woodland rides on the two sites to 20 metres and ground the larger remnant tree stumps down to allow for future ride management. Ride maintenance had already been scheduled, but liaising with the beat forester allowed for the negotiation of the slightly wider clearance and removal of scrub.

South Downs National Park Authority (SDNPA) Rangers from the Wealden Heath area team used a remote controlled flail with a bucket attachment to scrape sections of the rides back to bare earth. It was particularly important to remove all leaf litter, pine needles and bracken rhizomes in order to create a sterile seedbed. Any existing heathland/acid grassland species were left intact and the sections scraped were spaced along the rides to allow future brash spreading in between – this promotes a diverse age range and creates a habitat matrix rather than a monoculture heather ride.

The Ranger team then collected a trailer load of heather brashings from a local heathland site and spread them to approx. Icm deep using a hayfork. The donor site was chosen due to its similar character and absence of invasive species. The heather was mown in early November using a tractor-mounted cut and collect tool. Once spread, the heather brash was left in situ to shelter seeds and improve germination in the first year.

The cost of the project was minimal with fuel to transport heather brash, fuel for the robotic flail, and National Park Authority staff time (4 days) being the only costs. A good working relationship with the donor site and Forestry England meant that the process was efficient and was completed within one week. "It's great to see routine Forestry England operations being enhanced by South Downs National Park Authority. These sites are now multifunctional and benefit both woodland and heathland species."

The outcome

Creating heathland stepping-stones between larger sites allows permeability through the landscape for specialist species, and by reducing the distance between areas of suitable habitat, it is hoped that the population movement and genetic diversity of heathland species will increase as a result. What were once two shady woodland rides with little undergrowth have now become light, open spaces that have the capacity to support many more species.

Forestry England also now have more manageable and accessible rides. Heather is very slow growing, dry and woody shrub, keeping low to the ground, that can be driven on without any lasting damage. When forestry operations are underway, the ground disturbance from machinery and vehicles will even help to maintain the heathland stepping-stones by creating areas of bare ground and refreshing heather growth.

It is hoped that this style of habitat diversification could be replicated at many other woodlands where ride management is needed, and geology allows for heathland restoration. With a small amount of effort, these stepping-stones can quickly enhance a landscape and transform it into a functional habitat for specialist, rare, and often endangered species.

The South Downs National Park Partnership Management Plan (PMP) 2020–25 The Partnership Management Plan 2020-2025 brings together and coordinates the aspirations of many different partners who help contribute towards the purposes for which it was designated.

This project successfully achieved the following PMP outcomes:

Outcome 3.1 Join up habitats: To create, restore and improve areas of priority habitat to be more, bigger, better, and joined up at a landscape scale.

Outcome 3.2 Manage prioirty and invasive species: To increase the genetic diversity and resilience of target species and implement a landscape scale strategy for tackling invasive species, pests and diseases.

https://www.southdowns.gov.uk/partnership-management-plan/

The future

In summer 2021 a return visit showed positive results with good seed germination, healthy new heather growth and very few 'weed' species present on all of the newly created sections.

The National Park Authority Ranger team hope to repeat the process again in autumn 2021 creating further sections along the rides, to expand the stepping-stones and produce a larger, more viable heathland corridor.

Management of invasive species, such as bracken, birch and pine, will be required to prevent the rides from scrubbing over but work to achieve this should be minimal requiring volunteers one day a year, or utilising Forestry England beat foresters whenever visiting the site.



For more information, please contact: Kate Dziubinska, SDNPA Wealden Heath Ranger <u>kate.dziubinska@southdowns</u> .gov.uk

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