Uplands – Case study 3

Gait Barrows NNR, North Lancashire

Publicly accessible
Grid ref. SD478768

Case study provided by Jim Turner, Natural England and Bill Grayson, Morecambe Bay Grazing Company

Aims of the natural colonisation: Woodland creation is not a primary objective of the management of the site, but blurring ecotones (supporting transitional areas between habitats) to positively impact biodiversity is a part of the management plan. This has led to natural regeneration of scrub and some woodland species in areas of semi-improved grassland.

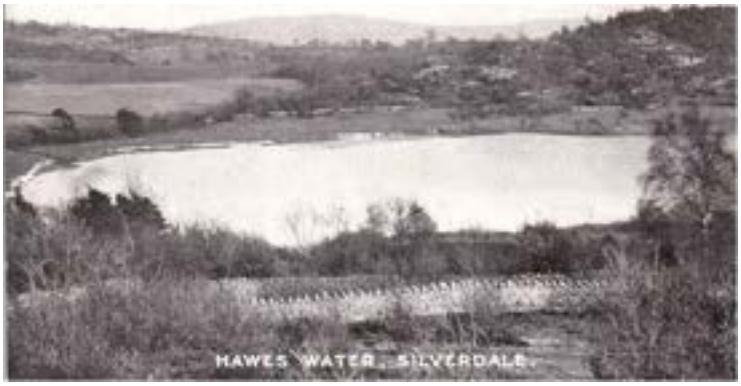
Site description: 122 ha nature reserve, predominantly calcareous grassland, with alkaline fen, woodland, and limestone pavements.

Year that natural colonisation began: 2020

Other methods of woodland creation: None

"There is a risk in the form of reducing the diversity of vascular plants in the meadows due to the shift in grazing, scrub colonisation and ranker sward."

Seed sources for natural colonisation: Nearby established woodland of hawthorn, blackthorn, hazel, ash, oak, sycamore, yew and other species. The site includes ancient woodland and mature hedgerows.



Preparation actions prior to the natural colonisation: None

Maintenance during establishment of natural colonisation: Deer management across the site, and winter cattle grazing.

Which species have successfully colonised? Blackthorn and hawthorn are frequent pioneers with seedlings/saplings of oak and hazel also often found

Is natural colonisation proceeding in line with expectations? Scrub colonisation has occurred faster than anticipated but is broadly in line with expectations.

Dominant drivers of natural colonisation: The grazing pattern of the cattle are the dominant pressures. The natural colonisation is largely due to shifting from late summer grazing to winter grazing and has enabled the blurred ecotones and scrubby regeneration.

Successes and reasons behind them: Given the close seed sources and switch to winter grazing, scrub establishes easily, starting the process of transition to woodland.

Failures and reasons behind them: For this site it may be that we are losing too much of the species rich grassland habitat to scrub and may need to revise grazing patterns/management to take this into account.

Images - Top: Gait Barrows at around 1900, looking Southwest from an area that has now formed closed-canopy woodland through natural colonisation; middle: view of scrub/pasture looking North to South (Bill Grayson); bottom: reverse view looking South to North, showing mature woodland following ~100 years of natural colonisation (background) and pastures kept open prior to the switch to winter grazing in 2020 (foreground; Jim Turner).