



Somerset
Wildlife Trust

Somerset Wildlife Trust Approach to Honeygar

Somerset Levels and Moors –
a human engineered landscape

October 2022

Levels and Moors is not a natural landscape and won't become one in the foreseeable future. The ancient tidal marshes were reclaimed by the Abbots and Bishops over 1,000 years ago. From the 15th century significant land drainage activity occurred to claim land for agriculture, increasing significantly in the 18th and 19th centuries. Drainage intensified post World War II to improve the agricultural outputs of the Levels, at the same time peat extraction intensified to an industrial scale also requiring the land to be drained. Read more about the 'natural state' of the landscape and the creation of the Levels as we know it today here: [Landscape History – Avalon Marshes](#)

Honeygar

We are setting out on a journey with Honeygar to transform this dairy farm into a haven for wildlife. Honeygar is Somerset Wildlife Trust's first Wilding project. Wilding is not about leaving the land alone entirely, it is about initial management interventions that will allow natural processes to be restored; and monitoring to see what this means for habitats, species and biodiversity in general. Other wilding and rewilding projects show this approach results in increased biodiversity and bio abundance.

Some of the natural processes we will look to restore at Honeygar include:

- Mega-herbivore grazing (A massive driver of species diversity)
- Natural flooding (where the site allows without negative impacts on our neighbours)
- Peat protection, improvement leading we hope to formation (a vital process but rare on the Levels)
- Natural afforestation including with some scrub and dead wood

A key aim for Honeygar is to restore the peatland by rewetting the peat soils. This will protect the carbon that has been locked up for millenia and we hope, over time, we will be able to turn Honeygar into a peat forming habitat and so begin storing new carbon in the healthy peat soils.

This approach will require some interventions up front to allow the processes to begin such as blocking up ditches, potentially reintroducing bog vegetation or maybe cell bunding to reinstate peat formation. Once these interventions have taken place we will watch and see what happens with very limited interventions for specific purposes, as set out below.

To be clear, we will not be managing Honeygar for the benefit of any one or particular assemblage of species or habitats.



Honeygar and Climate Adaptation

Due to its location and current restrictions on rewetting caused by land-use of surrounding areas, Honeygar offers little ability to directly support the adaptation of communities and infrastructure.

However:

- The trialling and testing of new and emerging funding mechanisms at Honeygar will, we hope, enable other land owners to have confidence in them and unlock potential for land management change in other areas across the Levels & Moors, possibly reconnecting sites to the rivers and/or main drainage ditches. This will offer significant adaptation benefits to communities and infrastructure such as roadways.
- SWT will also actively work with surrounding landowners and support them to rewet, this could unlock possibilities for floodplain reconnection that could bring significant flood and drought risk reductions.

Habitat/Species Adaptation:

- Honeygar's location increases connectivity within the Nature Recovery Network, forming a key link between reserves in the south and SSSIs in the north. This link, and the added complexity of hydrological features the site provides, will enable species to migrate as climate pressures increase; botanical communities will change over time, while more mobile fauna will have connected land to spread through depending on if seasons are wetter or drier.

Intervention Thresholds for Honeygar

We are setting ourselves some key principles for intervention at the outset of the project. We recognise this is a journey, and we are learning as we go, so we will take an adaptive approach and be led by the evidence we collect along the way, to restore the peatland and natural processes.

We recognise that as we progress with Honeygar there will be changes to species on the site over time as nature returns. This means that species will come and go, and we are ok with that. We recognise that initially some species currently present may not be able to adapt to wetter conditions, but new species will arrive more appropriate to the wetland habitat that Honeygar should be.

We will not adapt our management of the site to attempt to retain any particular species. We hope the site will be diverse and dynamic, with an increasing abundance of species that will change over time. We will not be prescriptive about what we want to see on the site.

Our aim is to use the natural geomorphology of the land and appropriate grazing animals to create natural features of a healthy functioning wetland. We anticipate Honeygar will require more intervention in the first few years as the site establishes and natural processes begin to develop. We also need to reduce the high nutrient load on the site caused by intensive agricultural practices.

We will take a phased approach to develop Honeygar over time.

Phase 1 will be to block up ditches and see where the wettest areas develop.

Phase 2 will be to consider whether we make any intervention to create a more natural wetland system, without damaging the peat soils and carbon locked up.

Phase 3 is to ensure we have appropriate grazing animals to manage the wetland features, to replicate natural conditions of this type of landscape to the best of our ability.

We have set out our plans in a 50-year management plan with key principles:

- Natural regeneration will be the primary delivery mechanism unless demonstrably unfeasible
- Allowing and accepting ecological dynamism
- Project will lead to measurable net gain
- Project will lead to no negative impact on surrounding sites of existing high distinctiveness habitats
- Project will involve restoration or enhancement of eligible habitat types
- Site is under no legal obligation to restore to higher level of habitat or condition
- Project will not lead to intensification of land use or operations elsewhere on our other sites



Scientific rigour: The development and ongoing implementation of a rigorous and annual scientific monitoring will be a fundamental principal of the Honeygar project. We have already have an established strong working relationship with the University of West of England and we will build on this alongside working with other academic and research bodies. Our annual monitoring regime will include:

- Carbon flux and methane measurements
- Measurements of carbon stocks
- Measurements of phosphate and nitrates in ditch systems
- Hydrological monitoring (water levels and wetness of peat)

Species and habitat monitoring programmes: There are some occasions where we may need to intervene further as set out below:

- 1. Carbon emissions:** Honeygar is one of our key opportunities to learn how to deliver nature's recovery while tackling the climate emergency by protecting and restoring the peat soils, and reducing the emissions coming from the site (baseline referenced here). We are working with

the University of West of England to monitor the impact of our change in management to greenhouse gas emissions. Should the data show our management is increasing emissions we will need to review our plan.

2. **Scrub:** it is generally considered that allowing scrub to develop on lowland peatland will increase carbon emissions as this can dry out the peat soils. However, if the site is wet enough scrub is less likely to develop. We are testing this theory by allowing small areas to develop scrub with no intervention and no grazing. We will be monitoring this closely with UWE to collect data and will change our approach to these areas, and other tipping points, if required.
3. **Ditch management:** as with all Levels and Moors sites there is a network of ditches running across Honeygar. Some of these are Viewed Rhynes managed by the Internal Drainage Board which will continue to be cleared. Other ditches we are blocking up where possible to allow the water table to rise. We will allow these ditches to change and become transitional habitats that we hope will become species rich, this will require consideration of an appropriate grazing animal that will create successional habitats over time.
4. **River Brue:** we are aware that what we do at Honeygar must not negatively affect local communities. It is our intention to allow the banks of the River Brue to become wilder where possible but we will need to intervene to avoid creating flood risk, in collaboration with the Environment Agency.
5. **Invasive Species:** these can be damaging to natural systems, neighbouring land and of course native species. We will consider on a case-by-case basis whether any intervention is required where these species threaten the natural ecosystem function, biodiversity or bioabundance of Honeygar, or are classed as 'injurious weeds', this includes aquatic invasive species such as zebra mussels known to be present on the South Drain and Huntspill; we will work with experts to do all we can to prevent this species from arriving at Honeygar.
6. **Animal welfare:** any animals on site will of course be treated in accordance with high animal welfare standards, with the required checks and welfare interventions.



- 7. Water Quality:** we believe our approach at Honeygar will improve the water quality on the site, and on the Levels and Moors. We have immediately improved the Phosphate load by adding no more nutrients to the soil since we acquired the site in May 2021 and will take grass cuts for the first couple of years to reduce the excessive nutrient load held within the soils. We will work with UWE and other academics to look at ways to additionally remove nutrients from the site to improve water quality.
- 8. Peat forming interventions:** a key aim of the site is to protect the peat soils and restore peat formation. This will require interventions including ditch blocking, reintroducing bog vegetation and potentially cell bunding to kick start this process.
- 9. Fire Risks:** Due to the changing climate, in the medium to longer-term, increasing fire risks are a key concern for Honeygar and other wetland habitats. As this threat increases it may be necessary to create fire breaks through reedbeds and scrub areas or even look into drawing water from the Brue to protect wetland areas from drought, which will inevitably increase in summer months as temperatures increase. These risks will be assessed as conditions change and management adjusted to protect the wetland habitat from fire.
- 10. Nature-Based Solutions:** Honeygar is intended to be a site to test and trial new and emerging funding mechanisms such as carbon credits, biodiversity net gain and nutrient mitigation schemes. Somerset Wildlife Trust hope that by testing and working to develop functioning schemes at Honeygar other landowners will be willing to consider them as a mechanism for sustainable businesses changing management on their land. SWT will carefully consider all and any scheme ensuring it is compatible with our aims and vision for Honeygar, and for the wider Levels and Moors, and will not enter into such a scheme that would be harmful for wildlife. These schemes will be legally contractual, and based on the Management Plan for Honeygar, but there may be a specific need to intervene to deliver on contractual arrangements for example to ensure that carbon reduction targets are achieved; this is compatible with the aims of Honeygar as described above

