



Somerset Wildlife Trust Position Statement

Peat Extraction

February 2022

image: Mark Hamblin/2020VISION

Peatlands are one of our greatest carbon stores, and as such are one of the most important instruments in our fight against climate change. When peat is extracted for use in compost it becomes dried and exposed to the elements and, instead of safely storing up carbon, it puts it back into the atmosphere as CO₂.

If we are to meet our national and local carbon and biodiversity targets, we need to end peat extraction in Somerset right now. It cannot wait. There might well be a short term financial cost, the consequences of not taking this action now will cost us for generations to come.

Peatlands are amazing places and incredibly important

Peatlands are amazingly wild places, home to endangered and unusual plants, birds and insects. They are dramatic wetland landscapes characterised by waterlogged soils made of dead and decaying plants, called peat. Peat forms at an incredibly slow rate, accumulating on average only 1mm a year (in ideal conditions)- that means it takes 1,000 years for one metre of peat to form!

The response to the climate crisis, both in the UK and globally, will define our ability to restore nature. If global action to reduce greenhouse gases (GHGs) remains at today's effort, the world will fail before 2050 to meet the Paris Agreement goal of limiting warming to 1.5°C above pre-industrial levels and is likely to be heading for 3°C or more warming by 2100. This will be catastrophic for life on earth. Any additional warming will lead to increasingly severe impacts, while every action to avoid warming is vital to prevent the most extreme impacts.

Healthy, functioning ecosystems help lock up carbon while providing vital habitat for wildlife and many other benefits including clean water, flood management and wellbeing for communities. Our UK peatlands store an amazing 3.2 billion tonnes of carbon. When considered globally, this is even more impressive, as they cover just 3% of land area but in that pack 30% of all soil carbon.

But there is even more to peatlands. Upland peatlands help to alleviate flooding, by slowing the flow of and filtering water, making it cleaner when it arrives at our water processing plants - and eventually into our taps. 70% of drinking water coming from upland areas dominated by peat.



Peatlands are disappearing

Over 80% of the UK's peatlands are damaged due to land management practices requiring the peat to be drained - when damaged, the peat becomes dried and exposed to the elements, and instead of storing and taking up carbon emits it back into the atmosphere as CO₂. Peat extraction requires the land to be drained not just where extraction takes place but surrounding land, causing degradation of peat soils and loss of the carbon stored within, in addition to the carbon released as extraction takes place.

If just 5% more of our peatlands were to go, the amount of carbon lost would equate to the total annual UK man-made greenhouse gas emissions. Therefore, it's important that we restore them back to health, so that they keep carbon locked up in the ground. Once restored to a healthy, functioning habitat they will also start to absorb carbon as they build up more peat.

Somerset Peatlands

The Somerset Levels and Moors is an area of 60,000 ha of lowland peatland representing the largest proportion of the total lowland peatland in the Southwest of England and is also the largest remaining wetland in England. It is a nationally significant carbon store, containing almost 11 million tonnes of carbon. Around 10 per cent is covered by international nature conservation designations and SSSI. It remains of outstanding importance for wintering wildfowl and is one of the last strongholds in southern England for breeding waders.

The landscape has a 2000-year history of peat excavation and drainage for agriculture and settlement, which has led to where we are today; a completely human engineered landscape with an extensive network of rhynes and a water level regime that is primarily focussed on keeping the wetland dry for agriculture. Some raised water level areas are in place, but even these tend to be managed to allow the land to dry out in summer for agricultural purposes and therefore prevent peat-forming habitats from establishing.

The area is also on the UK's frontline for climate change, facing increased risks from river flooding, drought and sea-level rise. This highly protected landscape also suffers from phosphate pollution with all SSSI's recently downgraded to Unfavourable Declining by Natural England.

This landscape has the potential to be a major carbon sink due to the deep peat soils but our draft initial estimates (not yet peer reviewed so for illustration only) for just one section of the Levels and Moors, known as the Avalon Marshes (15,000 hectares), show that current management of the peat soils emits 20 tonnes of CO₂e per hectare per year, which amounts to 300,000 tonnes of CO₂e per year - an amount equivalent to the annual CO₂ emissions of Bridgwater. There are not figures available for the amount of carbon emitted as a direct result of peat extraction. The RSPB estimate that use of peat compost in the UK is responsible for 630,000 tonnes of carbon emissions per year.

The climate benefits of investing in peatland restoration are two-fold; ongoing emissions are quickly reduced, and a long-term carbon sequestration opportunity is created.

It is vital we protect and restore our peatlands; to do this we must keep the peat in the ground, rewet it and manage it as a carbon store.

Peatland extraction in the UK

The IUCN states: “Commercial peat extraction occurs mainly on raised bogs to provide peat for gardening. The mechanised peat removal has a major ecological impact, stripping away the living layer and subsequently exposing large quantities of peat to oxidation and loss of carbon. Neighbouring areas of bog within the same hydrological unit can become degraded as a result of the drastically lowered water table.

Currently, nearly three million cubic metres of peat are sold for horticultural use every year in the UK, one third of which comes from UK peatlands. The main users are amateur gardeners (66%), followed by industry (34%) and a small percentage by local authorities (<1%) (Defra 2010). [Most peat use in the UK can readily be replaced by more sustainable alternatives.](#) The growing media industry has developed high quality products often using composted green wastes which are now widely used.”

Peat extraction in Somerset

Peat has formed on the Somerset Levels over thousands of years starting around 6,000 to 7,000 years ago and continuing to about 400 AD. The lowest layers of peat started as reed swamp, then wet woodland and finally huge, raised bogs.

There is a long history of peat extraction in the landscape starting with hand cutting for fuel by the Romans but mechanisation of this process in the second half of the 20th century vastly accelerated the damage, and this continues today.

Somerset peat has a coarse texture so is mixed with finer peat imported from Ireland and Eastern Europe adding to the environmental damage and carbon emissions of this industry.

While the total volume of peat extracted may be higher in places like Cumbria, due to the fragmented ownership of the Somerset Levels and Moors the majority of peat licenses are held here, around 95% of all England peat licenses in fact. However, there are no clear records held of the number of active licenses. Most were granted in the 1940s and are held only on paper, they expire around 2042. There are no records either on the total volume of peat that will be extracted or how much has already gone. We know that Somerset County Council have now put in place resource to address this lack of information.

In the Somerset Minerals Plan 2015, which is overdue for review (scheduled for 2020), Somerset County Council committed to granting no new licenses. The Minerals Plan is the closest we have to any understanding of number of licenses or total volume of peat to be extracted.

Somerset Minerals Plan states

- *Assuming a decline in sales in line with government targets to zero sales in 2030, around 700,000m³ of peat will be required for the plan period (from 2015). Notwithstanding the direction set by the NPPF, information held by the Mineral Planning Authority indicates that current peat permissions already exceed the requirement for predicted demand for the plan period.⁴⁹*
- *Research commissioned by Somerset County Council estimates that current rates of extraction in Somerset represent a loss in the carbon store of around 1450tC/year.⁵⁰ In order to recapture this carbon, a minimum of 70 hectares of grassland or open water would need to be converted to commercial reed beds, a much larger area than that worked for peat. Other land use changes could require much larger areas of conversion.*
- *A screening process undertaken by Somerset County Council initially identified 75 sites with permission for peat extraction that may have the potential to negatively impact on the Somerset Levels and Moors SPA / Ramsar and merited further review. Further screening has now reduced this number and these sites are referred to by the Council as “Regulation 63” sites.*

To our knowledge there has not been an attempt to create the required hectares of additional grassland or wetland as stated above; even with the adoption of the Climate Emergency Strategy in 2021.

The Growing Media Association reports a decline in demand for peat products since 2015 when the Somerset Minerals Plan was adopted, and even then, the amount of peat under license exceeded demand.



Economics of Peat Extraction in Somerset

The Growing Media Association reports that around 1,000 jobs in the whole of the UK are related to the manufacture of growing media. Somerset Minerals Plan reported that in 2007 (most recent data available) 42 people were employed in the county for the purposes of peat extraction.

Peat extraction companies can and have transitioned to sustainable business models globally, and those in Somerset need immediate government support to be able to do so. This transition is crucial for a green economy and will create opportunities for sustainable employment.

For example, Bord na Móna were once peat extractors who supplied energy for the Irish population. Today, all extraction on their lands has ceased, and instead Bord na Móna is working to restore 8,000 hectares of raised bog to its natural state. In doing so, it has transitioned from a traditional peat business to a climate solutions company who provide stable employment to 1,500 people.

There is huge value in healthy, resilient lowland peatlands including their unique ability to deliver important ecosystem services to local communities. Healthy peatlands – those that have not been drained, burned or extracted from – act as natural flood defences, are a crucial source of the UK's drinking water, and are of immense cultural importance for their ability to preserve ancient artefacts through which we come to better understand our past.

DEFRA Consultation to Ban Horticultural Retail Sales

In December 2021, the English and Welsh Governments announced a consultation on ending the sale of peat to amateur gardeners. This does not go far or fast enough.

For decades the UK Government has failed to bring to a clear end the commercial extraction of peat and its sale to gardeners and the horticulture industry. In 2010 a voluntary target was set to phase out the use of peat by amateur gardeners by 2020. Today, peat still accounts for a significant volume of the growing media sold by retailers and despite its initial aspirations, the voluntary targets set by the Government have been unsuccessful in changing the industry.

A similar target to end peat use in the professional sector by 2030 looks set to be missed, with peat still accounting for around 41% of the growing media used in horticulture overall. Unfortunately, today the UK and Welsh Governments have demonstrated that they will not act with the urgency required by immediately ending the sale of peat in both the amateur and professional markets.

Once the consultation closes in March 2022, the UK and Welsh Governments must publish a strategy which sets out a framework for an end to peat use among amateur growers and gardeners, by 2024 at the latest. The Wildlife Trusts (46 independent charities) are calling for:

- An immediate end to the sale and use of bagged peat compost in the amateur market.
- An immediate end to the sale and use of peat in the professional market.
- The immediate cessation of the extraction of peat from the UK's peatlands.
- An immediate end to the importation of peat for compost; two-thirds of peat used in the UK is imported. An import ban must therefore be implemented alongside an extraction ban in order to prevent 'offshoring' of peatland damage to countries with less stringent legislation.
- Restoration of all bogs damaged by the removal of peat as a priority.



The need to end peat extraction in Somerset. Now.

In May 2021 the Government launched the England Peat Action Plan recognising the importance of protecting and restoring our peatlands. The Plan commits to restoring 35,000 ha's of peat by 2025 and consult on banning the sale of peat products in the amateur sector by 2024.

This is not enough.

An estimate from The Wildlife Trusts estimate that if peat continues to be extracted and sold for horticulture until 2024, based on past usage over 500,000 metric tonnes of stored carbon would be lost from peatlands in the UK and further afield. If all of the carbon stored within this volume of peat oxidised, we estimate that approximately 1.8 million tonnes of CO2 would be released.

Continuing with extraction releases carbon into the atmosphere contributing to global warming and exacerbating climate change. All carbon is not equal, the carbon locked up in the Somerset Levels has been out of the natural cycle for thousands of years so when released it is adding to the existing load of carbon being emitted by current activities.

Extraction requires land to be drained, not just the peat that's about to be extracted but surrounding land as well. And drained peat emits carbon.

When peat is extracted and spread on a garden it releases carbon. The remaining peat is now dry and degraded and continues to emit carbon.

The ban on the sale of retail peat will not end peat extraction. Professional growers will continue to use peat, imports will still be possible, and the ban wouldn't come into effect immediately. In fact, in the short-term it may make the situation worse as peat extractors race to get as much 'product' or money as possible by escalating their operations.

To allow this to continue when the UK Parliament and Somerset Councils have all declared a Climate Emergency lacks any kind of reason.

The cost of restoring 100% of the UK's peatlands is estimated to be between £8 and £22 billion, but the carbon emissions benefits that would be gained are expected to be five to ten times greater. Given that the cost of peatland restoration will continue to increase until extraction ceases, it would be both illogical and an inefficient use of public funds for UK Governments to continue to invest in peatland restoration whilst permitting peat use and extraction to continue.

This is exactly what is happening. The DEFRA Peatland Grant Fund is investing in peatland restoration, including on the Somerset Levels and Moors, right next door to sites that are continuing to extract peat.

Whilst peat extraction permissions can require extractors to 'restore' peatlands, this is impossible once all peat has been exhausted from an area. What this kind of 'restoration' often entails is the lining of an open crater with clay, which is allowed to fill with water and is initially devoid of life, and entirely devoid of carbon. Environment organisations such as Somerset Wildlife Trust, the RSPB, Natural England and the Hawk and Owl Trust, have raised and invested many millions of pounds in the Somerset Levels to turn some of these peat voids to the fabulous nature reserves known as Westhay Moor, Ham Wall and Shapwick Heath. While these are nature recovery success stories, responsible for helping to increase and stabilise the UK's population of bitterns, egrets and breeding waders, they are incomparable to a healthy peatland.

What Somerset Wildlife Trust is Doing

Practical Delivery

In the 1970s, Somerset Wildlife Trust was the first conservation organisation to acquire land on the Somerset Levels following industrial peat extraction, to restore it for nature. Since then the Trust has extended its landholding there and, as part of the Avalon Marshes Partnership, created the magical wetlands that are now home to many rare species and attract people from near and far. We continue to manage these sites such as Westhay Moor NNR and Catcott NNR, for the benefit of people and wildlife.

DEFRA Peat Discovery Grant

Working with partners including the RSPB, Natural England, FWAG SW, local councils and the Environment Agency, we have been successful in securing funding to develop our approach to peatland restoration on the Somerset Levels and Moors.

Our aim is to create a future where large areas of the peat are restored to their naturally functioning state, with paludiculture, the provision of public goods, and high-quality low-density grazing bringing conservation and communities together to combat climate change and biodiversity decline.

Activities will include developing a Somerset Peatland Partnership, representing all different bodies across the Levels and Moors, which can drive peatland restoration on a landscape scale.

The Peatland Partnership has a clear stated aim:

‘To bring peatland landowners, farmers, and communities together to prepare for landscape-scale changes to water and land management across the Somerset Levels and Moors that reduce the release of CO₂ from the peat soils.

By 2025, the partnership will be managing a process of transformational change that will shift the Levels and Moors from a landscape dominated by carbon emissions to a landscape managed to deliver net sequestration.’

Our objectives are:

1. 1000 Ha of degraded peatland on a trajectory to recovery by 2025
2. 262,500 cumulative tonnes of CO₂e emission reductions by 2050*
3. Somerset Peatland Partnership fully established for Somerset and North Somerset
4. 2 applications to the Restoration Grant, one in 2022 for the first tranche of sites and again in 2023 for the remainder.

Honeygar

[Honeygar | Somerset Wildlife Trust](#)

Honeygar Farm is a newly acquired site by Somerset Wildlife Trust. It is 46.5 hectares of intensively grazed farmland backing onto the River Brue, a 200-year-old farmhouse, and a collection of sheds and outbuildings, and was previously a dairy farm.

Honeygar is perfectly situated to connect and buffer the Trust’s existing nature reserves and act as a stepping-stone between these sites and those of our Avalon Marshes partner organisations. It is also situated next door to a peat extraction company with many of the surrounding fields in active extraction status including one field opposite Honeygar, which has only been opened for extraction in 2021.

Honeygar is also a key site within the Somerset Peatland Discovery Grant project area, where we will be exploring how to create the right conditions for lowland peatland restoration; funded by the government through taxpayers money.

Honeygar is also a pathfinder project for Wilder Carbon – an initiative that secures funding and support for nature-based solutions through carbon capture to invest in nature restoration and wildlife recovery.

[Honeygar Farm | Wilder Carbon](#)

Thanks to the Wilder Carbon Carbon Habitat Tool we are able to reliably calculate the amount of carbon that can be locked up by Honeygar, as we work to rewet and restore the degraded peat soils.



What are we doing?

We are calling for the UK government to:

- Ban the sale and use of peat now, another consultation is not necessary. This has been discussed for decades.
- Go beyond banning sales and end peat extraction in the UK now. Yes, it may be expensive as peat extractors will need support to transition to a more sustainable business, but we can't afford not to do it.

We are calling for Somerset County Council to:

- Urgently review and update the Somerset Minerals Policy to integrate the Somerset Climate Emergency Policy and announce the intention to end peat extraction in Somerset immediately.

What you can do:

- Avoid purchasing any products containing peat. There are many suppliers of compost out there that offer alternatives. You will have to check labels carefully as peat is not always listed in any obvious way on the packaging. This means avoiding the purchase of plants in pots at supermarkets and garden centres as they are usually in peat soils. There's some advice from the RHS here on-going peat-free [What are the alternatives to using peat compost? / RHS Gardening](#)
- Sign The Wildlife Trusts petition calling for an immediate ban on the sales of peat [Protect our peatlands \(wildlifetrusts.org\)](#)
- Write to your MP asking them to call for an immediate end to peat extraction in Somerset and a complete ban on the sale of peat products now, with absolutely no exemptions for professional growers or non-bagged retail products.

Resources

- NT statement on peat [Joint statement on horticultural peat | National Trust](#)
- TWT statement on consultation [Governments set low bar on phase out of gardeners' use of peat | The Wildlife Trusts](#)
- [The RSPB: News: Conservationists and business unite behind call for garden peat levy](#)