The Wildlife Trusts

Greener gardening

Perfecting peat-free

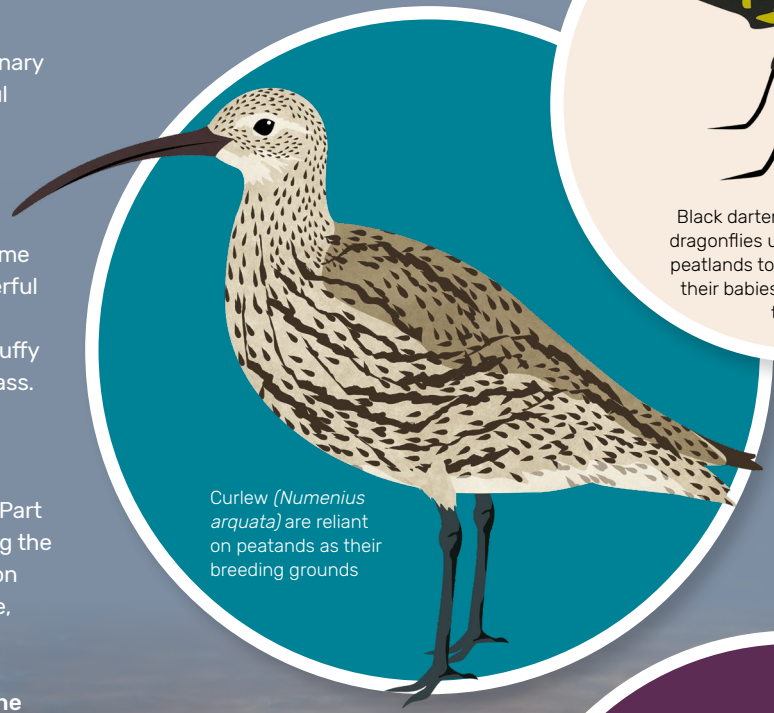
Peatlands are the UK's soggy superheroes! Keeping your garden peat-free will help protect these precious, rare habitats

GUNDULA VOGEL/PIXABAY

Peatlands: not-so-humble habitats

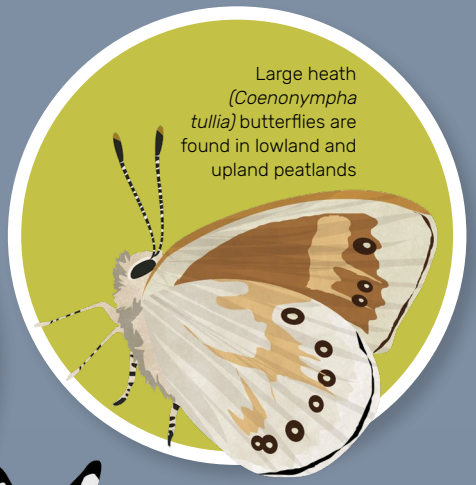
Peatlands are extraordinary places. These wonderful wetlands have always fascinated me. Once you kneel and take a moment to observe you will see they are home to a wild array of wonderful sticky, squishy plants, jewel-like insects and fluffy pom-poms of cottongrass. Lowland raised bogs, the main type of peatland dug up for compost, have been decimated and only around 5% of this habitat remains in the UK. There is now an opportunity to restore these special areas and bring them back to health. Part of helping this recovery, both at home and abroad, is halting the unnecessary use of peat in our gardens and food production systems. Being peat-free is an essential part of sustainable, nature-friendly gardening. Peat belongs in bogs, not bags!

Dr Emma Hinchliffe, Director – International Union for the Conservation of Nature UK Peatland Programme (IUCN)



Curlew *(Numenius arquata)* are reliant on peatands as their breeding grounds

Black darter *(Sympetrum danae)* dragonflies use the acidic bogs on peatlands to lay their eggs and for their babies, known as nymphs, to grow in



Large heath *(Coenonympha tullia)* butterflies are found in lowland and upland peatlands

Mountain hares *(Lepus timidus)* are found on peatlands in Scotland and the north of England

Common lizards *(Zootoca vivipara)* are one of four species of reptile found on UK peatlands

Hare's-tailed cotton grass *(Eriophorum vaginatum)* is the main food plant of large heath butterfly caterpillars

MARK HAMBLIN/2020VISION

Peatlands are **precious**

This guide will help you to transition to peat-free, offering up tips and tricks for getting the most out of your compost.

WONDERFUL WETLANDS

Peatlands are amazingly wild places which are home to rare and unusual plants, birds and insects. They are wetland landscapes characterised by waterlogged soils made of dead and decaying plants, called peat. The key component of peat is a moss called sphagnum, which forms multi-coloured carpets across the landscape and breaks down very slowly under the waterlogged conditions.

COSTLY COMPOST

For centuries peatlands were considered to have no value unless drained or extracted from. Today, we know this is untrue - yet 80% of the UK's peatlands remain degraded. Peat extraction for horticulture (gardening and growing) directly contributes to the decline of our peatlands, which is having knock-on impacts for the interlinked nature and climate crises. Our use of peat is also having an impact overseas, as more than half of the peat we use in the UK is imported from other European countries. This means that our peat use is causing the loss of wildlife and wild places, and releasing greenhouse gases across the continent.

BRINGING IN A BAN

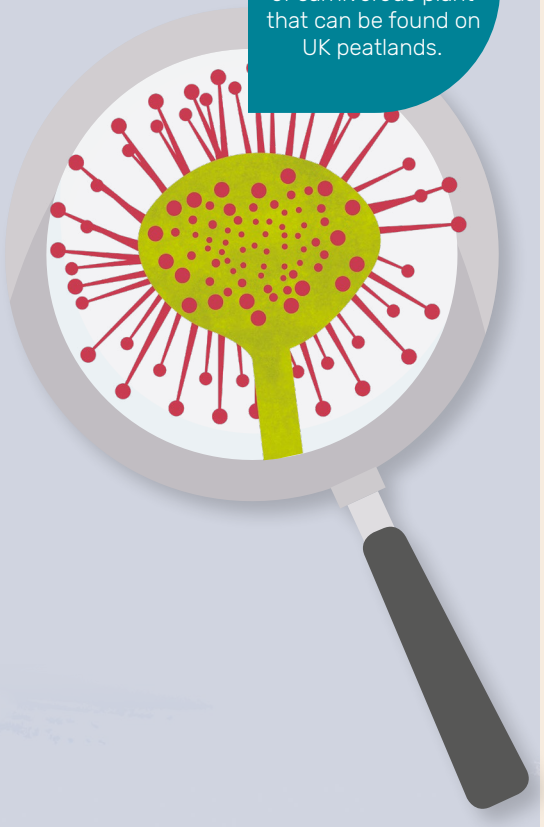
From the end of 2024, peat compost sold in bags for us to use in our gardens will be banned in England and Wales.

However, many of the plants we buy in pots to plant in our gardens and the mushrooms we buy in supermarkets to eat are grown in peat. UK Government has committed to banning these too but over a longer time period, with some products not banned until 2030. It is therefore really important that we, as consumer, check what products are grown in and ask in store if products are not clearly labelled.

SOGGY SUPERHEROES

There is already a range of great peat-free composts on the market, and many supermarkets and garden centres have called it quits on their love affair with peat ahead of government bans.

Did you know?
Sundews are a type of carnivorous plant that can be found on UK peatlands.



WHY EVERYONE NEEDS TO STOP USING PEAT

- Peatlands support a range of rare and threatened species, and some UK peatland species are found nowhere else in the world.
- Our peatlands store more carbon than the forests of the UK, France and Germany combined.
- Peat is a preserver! The lack of oxygen within peat slows down the process of decomposition. Scientists in Ireland sometimes discover 'bog butter'. This is real butter that has been preserved within peat, sometimes for thousands of years.
- When peatlands are drained, stored carbon is released into the atmosphere. Sadly, peatlands in the UK are amongst the most damaged in the world, releasing millions of tons of carbon dioxide every year.
- Emissions from peatlands make up around 4% of the UK's total annual greenhouse gas emissions contributing to climate change.
- The UK is one of the most nature-depleted countries on the planet and draining or digging up peatlands makes it worse, as it results in the loss of important habitat for wildlife.

Did you know?
Peat forms at an incredibly slow rate, accumulating at around 1mm a year - that means it takes 1,000 years for one metre of peat to form!

LORNA GILL SCOTTISH NATURAL HERITAGE

Did you know?
Sphagnum mosses, the main component of peat, can hold up to 20x their weight in water!

TESSA LEVENS

Peat-free **purchasing**

BACK TO BASICS

Today, gardeners have several choices when it comes to sourcing growing media for their indoor and outdoor plants. Compost can be bought from retailers; shop-bought compost can be enhanced at home, or compost can be made from scratch. Some councils also offer residents the opportunity to make use of municipal composting schemes in their local area.

Peat-free composts often include bark and wood fibre, green waste, and even sheep's wool. Just like peat-containing composts, different peat-free composts have different properties.

SAVVY SHOPPING

A number of supermarkets and garden centres have made the decision to stop selling bagged peat compost and now exclusively stock peat-free varieties.

However, it is important to remember that the 2024 ban will only apply to bagged peat compost. This means that many house plants, garden plants, plug plants, shrubs and trees will still contain peat.

SUSTAINABLE SOILS

It is important that the growing media we use to replace peat is sustainable. To learn more about the sustainability of various peat-free composts, check out the Responsible Sourcing Scheme (www.responsiblesourcing.org.uk).

TOP TIP
For a full breakdown of UK retailers and the composts on offer, visit our webpage **www.wildlifetrusts.org/actions/how-go-peat-free**

KELLY SIKKEMA/UNSPLASH

TOP TIP
If you are unsure what a plant is being grown in, ask a member of staff. Let them know this issue is important to you!

JONATHAN KEMPNER/UNSPLASH

The Responsible Sourcing Scheme ranks composts from A (very sustainable) to E (not sustainable) by taking into account a range of factors such as water consumption, energy use and impacts on biodiversity. However, caution is advised as some of the composts on this website do contain peat.

TOP TIP
Only ever purchase compost that is clearly labelled as 'peat-free'. If this is not visible on the bag of compost, then it most likely contains peat. Composts advertised as 'reduced peat' are NOT peat-free!

PERFECT PLANTING

The only plants that need peat to survive are those that live on peatlands! Even bog gardens, which are fantastic places to grow water-loving plants, do not require peat. Instead, try re-using compost that has already been used to grow pots of bedding plants or shrubs. This compost will give these water-loving plants the conditions they need to thrive.

- Seed-sowing compost can be made at home with a mix of finely sieved garden loam, sand and leafmould. This is especially helpful for gardeners who want to sow flowers and vegetables under cover early in the year.
- Many meadow plants prefer infertile soils, so their seeds will grow perfectly in pots and trays of loamy soil.
- Many trees and shrubs can be grown from seed and planted directly in garden soil, including roses, elder, hawthorn, oak and ash.

To find out more about creating your own bog garden, visit our webpage **www.wildlifetrusts.org/actions/how-make-bog-garden**

Caring for your **compost**

NECESSARY NUTRIENTS

Your plants should be fed through the spring and summer – as this is their growing period. Plants need nitrogen, phosphorus and potassium to convert energy from the sun into the sugars and proteins that enable them to grow. Plants also need carbon to live and grow.

Try this... An organic tomato feed can be used as a feed for both indoor and outdoor plants. Follow package instructions and try to avoid over-feeding your plants. This is bad for plants, wallets, and gardens!

Used teabags and a comfrey or nettle tea are also great natural fertilisers. To use, simply sprinkle loose tea leaves or plastic-free teabags around your plants (top dressing) or carefully dig them in or add to the compost before planting (base dressing). A base dressing is particularly useful if you are planting seeds.

WINNING AT WATERING

Every compost is different so working out your watering regime is key! Where you place your plants and pots can also effect how much you need to water. If it's a windy or a sunny spot, water loss will be higher. Planting in the ground or using larger pots if container gardening will save on watering too.

VITOR MONTHEY/UNSPLASH

TOP TIP
Composts containing wool are great for improving water retention.

To check how thirsty your plants are, try poking your fingers 5-6cm into the soil. If the soil feels dry, give your plant a drink! As a rule of thumb, plants will be thirstier through the summer months and will require less frequent watering in the winter.

Try this... Don't run water through your pot – this rinses away precious nutrients. Instead, try watering a little at a time, or give 'bottom watering' a go by sitting your plants in a tray of water and allowing them to soak up water through their roots. This should take around 20 minutes. It's important to make sure you don't leave your plants sitting in water for too long.

Don't be afraid to experiment – by mixing composts together you'll soon discover what works best for you and your plants.

TOP TIP
Vegetable water is rich in nitrogen – why not try watering your plants with your leftover cooking water? Not only does this help to save water, but your plants will love the added nutrients. You can also use cooking water that has been used to boil eggs, pasta, or potatoes. Just make sure your cooking water is unsalted and fully cooled before watering your plants.

DRAINAGE DECISIONS

Plants need oxygen too! Make sure you always use a pot with drainage holes. To further improve drainage, add stones, broken up sticks or crockery, or even pinecones to the bottom of your pots. This will allow your plant's roots to breathe and will help to prevent root rot.

MARVELLOUS MULCH

Mulch is a thin layer (around 5cm) of materials that can be added to the top layer of soil to add nutrients and to help create a more varied soil structure. Adding a mulch to soil will also help to reduce water loss. Some great options include leaf mould and seaweed. Try to keep the mulch away from woody stems to prevent rotting.

MARCUS SPISKE/UNSPLASH

GREENER GARDENING

Compost is resilient, so don't waste it! When repotting your plants, try using a 50/50 mix of new and used compost. This will both save you money and help to cut down on unnecessary waste. Just remember to freshen up your peat-free compost mix with some added nutrients and you're good to go.

Did you know?
The mire pill beetle, found on Hatfield Moors near Doncaster, has not been found anywhere else in the world!

Making your own **peat-free compost**

There are many ways to make your own compost. This can help to save you money whilst reducing the amount of food and garden waste that goes to landfill. It can take as little as six months to produce a compost that is useable.

CONTAIN OR NOT

Compost can be made year-round. The fungi and bacteria that convert waste to compost work much quicker when conditions are warm and damp, but don't worry if you don't have a container - a heap is fine too! Things just happen a bit slower.

Try this... Place your compost container out of direct sunlight so it doesn't get too hot.

VARIETY IS THE SPICE OF LIFE

It's best to add a variety of materials to your compost. 25%-50% of what you add should be 'green' - things like grass clippings and vegetable peelings. The rest should be 'brown' materials like woodchip, dead leaves, paper and carboard. This mix will prevent the compost from becoming too wet, while still allowing it to be damp enough for bacteria and fungi to get to work. You can purchase a compost activator, but you shouldn't need this if you have enough green components in your compost.


UNSPLASH

Dig less! Protect the soil by minimising disturbance to soil organisms. The soil community includes fungal threads *(mycorrhizae)* which help plants absorb nutrients. The more diverse the microorganism community, the healthier the soil and the better your garden will grow!


DAVID HUGHES/UNSPLASH

Did you know?
The daddy longlegs is not a spider nor is it a mosquito! It is a cranefly. There are 94 species in the UK and they are a very important food source for a number of birds that live on the peatlands.

Try this... Compost too wet? Try adding more brown materials. Compost too dry? Try adding more green materials.

TURN, TURN, TURN

Turning your compost heap adds air into the mixture and enables bacteria and invertebrates like worms and woodlice to break down the materials you have added. This also helps to prevent compaction.


LAUREN HEATHER

SPACE SAVERS

If you don't have access to a garden or an allotment, fear not! You can still get all the wonderful benefits of 'homemade' compost through community composting schemes. Through community composting, residents can deposit their green waste in exchange for compost. Not only is this great for the environment, but it can also be a great way to connect with people in your area.

Wormeries can also be used for making compost at home and can be kept on balconies, in garages or even in kitchens. This can be a great solution for people living in flats or apartments who are looking to turn their kitchen waste into compost for use in pots and window boxes in a more compact space.

TOP TIP
Search 'community compost' followed by your local area to find your nearest location.

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For more information about peatlands please visit:

wildlifetrusts.org

iucn-uk-peatlandprogramme.org

JONATHAN KEMPNER/UNSPLASH