

# THE TREE SURGERY

**Never before have nature's healing powers been so vitally needed – and the Woodland Trust is preparing the tonic. Kit Buchan and Fiona Collins report**

**VER RECENT** years, whispers of a new wonder drug have been causing a stir among health experts worldwide.

It doesn't need to be synthesised in a lab, it comes free of charge and it has no negative side effects, but according to a growing mountain of scientific evidence, its effects are little short of miraculous. As well as stabilising blood pressure and treating anxiety and depression, this panacea has been shown to increase anti-cancer cells, reduce the number of underweight births, even accelerate recovery from surgery.

The wonder drug – you guessed it – is woodland. “Lots of the answers lie in nature,” says Dr Lucy Loveday, a Devon GP. “Many of us today lead unsustainable lives, including the amount we put into our brains: decisions, information, endless inboxes. We expect far too much of our neural pathways, and meanwhile we have become increasingly disconnected from our physical space and our natural environment.”

Lucy has a passionate ambition to see the medical establishment embracing the potential of ‘green prescriptions’, and she's just one of several experts now working with the Woodland Trust. As you'll read

over the coming pages, at our woods nationwide we're busy launching health programmes and researching the benefits that nature in general and woods in particular can deliver for those of us who visit them.

Working with our team at Fingle Woods on Dartmoor, Lucy has designed and piloted a promising template for helping disadvantaged young adults access green spaces through the NHS (see page 21).

“At the core of this is the desire to help young people appreciate that as humans, we're not separate from nature,” she says, “we are nature. And the combined evidence is compelling – it suggests that spending time in the outdoors isn't just a luxury or a leisure activity – it's a human need.”

That need has been brought sharply into focus this year by the COVID-19 pandemic, as all of us in the UK have found our lives disrupted. But even as governments imposed lockdowns, their medical chiefs were repeatedly urging the continued importance of getting outdoors. “Being outside in the park is a very good thing... so long as people keep their distance,” said England's top doctor Chris Whitty in March, while his deputy Jenny Harries warned of the “potential mental health risks” of staying indoors.

Insufficient exercise is a well-known problem in UK healthcare. A quarter >>



Social inclusion



## 'It's a gift to be useful again'

"ON MY FIRST DAY volunteering at Smithills Estate, I had a massive feeling of freedom and relief. I looked down on the town from the hill, on all my obstacles and anxieties, and knew that up there, I was safe. It was a great gift to find I could be helpful to someone."

When Gael Kouam (below) fled persecution in Cameroon, a refugee charity in Bolton pointed him to the Woodland Trust's flagship site nearby, where we've launched a suite of initiatives to help vulnerable groups. "I have a degree in environmental science," Gael says, "but as an asylum seeker I was unable to work. I was desperate to feel useful again."

It was love at first sight. He joined our popular Smithills' wildlife group, and soon became a fully-fledged warden there, alongside the estate's most dedicated volunteers. "These old chaps really know their stuff," he laughs, "and they immediately accepted me as one of them."

Gael has since been granted leave to remain, and is helping our team to develop a refugee group at Smithills – their first outing should have been in May. It's just part of a full-blown programme targeting marginalised groups in the region, funded by the estate's National Lottery Heritage grant. Walk & Talk sessions for those with anxiety and agoraphobia have introduced 65 people to Smithills who lack confidence in the outdoors, while hikes run with Greater Manchester Mental Health Trust provide respite for those caring for loved ones with schizophrenia. Monthly dementia events have proved a particular success, drawing as many as 40 people.

"I can't praise them enough," says Julie Wright, whose husband Keith has advanced Alzheimer's disease. "We used to be good walkers, and Keith is still very mobile. The moment we're out on the trail with the other walkers he relaxes, smiling and chatting. The staff are amazing, and it's wonderful to be around people who are in the same position we are."

» facebook.com/wtsmithillsestate



of adults are obese, and physical inactivity is predicted to cost the NHS £10 billion a year by 2050. But the evidence behind Chris Whitty's advice goes beyond the simple need for exercise. Studies across the globe have measured the comparative benefits of sitting or walking in a green space versus the same activity in a built-up area, and invariably the natural environment offers far greater rewards.

A 2013 probe from the University of Michigan showed an immediate improvement in memory and mood among depression sufferers walking in woods, while a Chinese study in 2012 noted lower blood pressure in elderly people after a week of 'forest bathing' – the Japanese practice of communing with the sights, sounds and textures of the woodland ecosystem. On average they saw their systolic blood pressure fall by over 6%, while the same patients gained no such benefit from city walks.

The Woodland Trust is already wading into this pool of research. We've contributed £14,000 to a Bangor University PhD on the long-term benefits of woodland exposure, and researcher Heli Gittins is now crunching through four years of data. "We know from many studies that access to nature can be transformative," Heli says. "For example, it's been shown that stress can be reduced among prisoners and hospital recovery times are trimmed for patients simply by offering a window with green views."

According to Heli, even tiny doses of

nature can work wonders – which will be a comfort to many who've experienced forced confinement this spring. Her own research takes a longer view: "What's not been studied before is whether there are longer-lasting positive effects."

Heli has tracked 120 people who enrolled in a range of woodland activity programmes with the charity Actif Woods Wales. Sessions ranged from foraging and basket weaving to woodcrafts and mindfulness courses, and Heli looked for changes in the groups' self-esteem, their feelings of social trust and their general health and wellbeing. Crucially, she also revisited them three months after their formal programmes ended.

"The participants faced a huge range of challenges," reports Heli, "from low incomes and social isolation to drug rehabilitation and mental health issues. What's been staggering is that almost across the board, positive change endured for a full three months after their activities ended. It suggests the programme has been a catalyst for lasting benefits in their lives."

Heli says she was often reduced to tears reading back over interviews where people recalled the impact time in the woods had on them. One elderly lady told how the programme "got her through the darkness of winter", while a man with significant mental health challenges said that only now could he see possibilities for his future.

"A big finding of my research is the power of connecting with other people in a safe

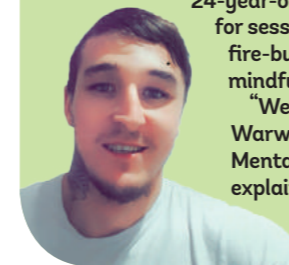


Mental health

## 'In that peaceful place, I felt things lift'

DR LUCY LOVEDAY first went to Fingle Woods in 2018 for a 'forest bathing' session – and embarked on a journey that could help to change the NHS. "I'd been keen on green health for a long time," recalls the Dartmoor GP, "and looking for a way to address mental health problems in an outdoor setting."

The result was Resilient Young Minds, a programme to get young Devonians with mental health issues out into nature. The four-week course brought a dozen 16 to 24-year-olds into the woods for sessions spanning fire-building, nature art, mindfulness and more.



"We tested using the Warwick-Edinburgh Mental Wellbeing Scale," explains the Woodland Trust's Eleanor

Lewis, "and participants reported a boost in almost every measure, from their mood and confidence to their sense of independence."

Joseph Chilcott (below) can vouch for that. "When I stood in that peaceful place," recalls the 23-year-old, "listening to the birds, I felt everything just lift off me. I'd been down a bad path after losing my parents: I'd been to prison, it was all going downhill. But even the act of walking into the forest boosts your confidence: you forget everything else and just fall into nature. For me it has opened up a new perspective."

Glowing results have since seen Resilient Young Minds accepted by the local NHS primary care network, and GPs and link workers can now refer patients directly to Fingle Woods – it's hoped sessions will begin in earnest next spring. Those people will join a raft of hard-to-reach groups who've

already enjoyed green therapy there thanks to the Trust's wider programme, backed by £750,000 from the National Lottery Heritage Fund.

Our team have so far run 55 sessions for 325 vulnerable people, including forest schooling for troubled pupils and guided walks for the disabled. Dr Lucy Loveday hopes NHS groups will soon be supporting similar projects nationwide: "Mental health costs the NHS more than £22 billion a year in England alone. My heart-held vision is to see green prescriptions placed at the centre of mental healthcare."

» finglewoods.org.uk; @drLucyloveday.



JOZEF POLC/ALAMY

ALAMY

CULTURA RM/ALAMY; ROGER BAMBER/ALAMY

Physical health

# 'Keeping fit is the cherry on top!'

WHEN BARBARA FOXON retired from teaching, she was hit by how quickly her social life shrank. A friend knew she loved gardening and all things green, and recommended Barbara and husband Alan (pictured below) check out their local green gym in Ashford, Kent.

"I'd had a traumatic few years, and joining was exactly the tonic I needed," Barbara recalls. "Some mornings we come back dripping in sweat and completely worn out, but it's the social aspect that's been most transformative – we've made so many new friends. And getting to eat cake in the woods is a bonus!"

Despite the name, the green gym movement has nothing to do with push-ups and planks – instead it encourages groups of volunteers to beaver away each week, beautifying their local woods and green spaces. Research has shown a session can burn up to a third more calories than your average aerobics class, while a study from the University of Westminster showed green gym bunnies can boost their cortisol levels by up to 30%. That means they'll be less stressed and in better nick physically – not to mention the feelgood factor that comes from giving your neighbourhood flora and fauna a fillip.

"On a typical day we might be out coppicing, hedgelaying, clearing a trail or lining a pond," explains Barbara. "We often muck in at Woodland Trust sites, including Great Chart Wood in the Stour Valley and



DANIEL ALLAN/JALAMY



Packing Wood at Hamstreet, where we do an annual blitz of the non-native western hemlock. It's amazing what 16 people can get done in three hours!"

Ashford Green Gym was set up in 2008 by Peter and Sophie Walkden, and it's the largest self-funded group in a network of almost 50 across the UK, mostly overseen by the conservation volunteering charity TCV.

"We're open to all, and it's completely free," says Peter. "Over the years we've provided a lifeline to rehab patients, youngsters with learning difficulties and people with depression or anxiety, but really we're just everyday folk who love being outdoors. You can take things at your own pace, and we talk, we laugh and we share problems.

"I can honestly say that it's the companionship that allows people to blossom – keeping fit and active is the cherry on top!"

» To find your local green gym group, check out [tcv.org.uk/greengym](http://tcv.org.uk/greengym).

natural environment," Heli concludes. "Coronavirus isolation has thrown that up in the air for a while, but it highlights the importance of people trying to maintain those connections, even if only via a screen."

While Heli gets busy hammering out the hows and whys of nature's healing power, a group on Merseyside is already putting it into practice, bringing green therapy to those who lack the opportunity to access it.

"Some of us don't think twice about grabbing a map and heading for the hills," says Clare Olver of the Mersey Forest, the region's thriving community woodland body. "But people in deprived areas are much less likely to do that, and research has shown they're also ten times less likely to have green space within easy reach." In 2015 these issues inspired the Mersey Forest to pioneer its 'Natural Health Service' initiative, which has so far helped more than 3,000 vulnerable people get active in the woods.

"Merseyside and North Cheshire have very high levels of health inequality," explains project chief Clare. "With help from the Woodland Trust and others we've seriously increased tree cover across the region,

“**Like so much in nature, it's symbiotic: we need the woods, the woods need us**

planting nine million saplings since 1995. The idea is to connect those new woods with the people who need them most."

The Natural Health Service offers five off-the-shelf activities – walking, gardening, mindfulness, forest schooling and woodland conservation sessions – all tailored to specific individuals and communities. Each can be 'prescribed' to those who need it – and everyone from job centres to housing authorities, churches to children's homes has taken up the offer. There have been spin-off gains for wildlife, too: a new 'green gym' group at a Chester country park has huffed and puffed its way to planting 2,000 trees.

University-backed analysis has borne witness to the programme's results: a slew of health walks in Toxteth in 2012 sparked

an 18% boost in participants' wellbeing, while a 2016 study showed that every £1 invested reaps £6.75 in 'social returns' by easing pressure on the NHS and other public services.

"It can never be a one size fits all," says Clare. "Elderly widows in Cheshire West may be more open to mindfulness sessions, while out-of-work men in Ellesmere Port might benefit from woodland photography workshops. So it's important that we work with people who understand local needs."

Such schemes illustrate the potential for outdoor therapies to become a mainstream healthcare solution, and the endgame for forward-thinkers like Dr Lucy Loveday will come when 'green prescriptions' are embraced across the NHS as a serious addition to primary care. To help achieve that seismic shift, the Woodland Trust is funding and hosting a raft of grassroots initiatives UK-wide, sampled elsewhere in this article.

"I'm an eternal optimist," says Lucy, "and I believe that if we come to understand the value of the natural environment, it will encourage us to take better care of it. Like so much in nature, it's a symbiotic relationship: we need the woods, and the woods need us."

## And relax...

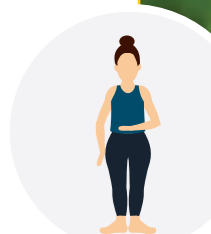


Soften the stress of lockdown with four simple exercises from mindfulness teacher Heli Gittins

**1 Meet your feet**  
Whether in a wood or your garden, stand barefoot, feet at hip-width apart. Close your eyes and drop your weight into your feet, noticing how it feels. Where's the contact? Your toes? Your heels? Shift your weight, noticing the sensations as you tune in to the ground beneath.



**2 Just breathe**  
Now move your focus to your breath, noticing the movement of your body as each breath flows in and out. Long, short, shallow, deep – there's no right or wrong, you're simply observing your natural rhythm however it shows up.



**3 Tune in**  
Widening your focus, what sounds do you hear? Birdsong, traffic, the wind? Letting go of any thoughts about the sounds, simply receive them, noticing their pitch and duration. Slowly move your focus to take in a view of nature – in a wood, in a flower, through a window – simply noticing the variations in movement, texture and hue as if seeing it for the first time.



**4 Be natural**  
Now take a natural object in your hand – a leaf, a cone, a stick. Roll or move it in your palm, tuning in to the sensations on your skin and noticing textures, colours and wrinkles. Does it have a sound? Placing the object down, return your attention to your feet and the space around you.

