

Can't see the skills for the trees – critical shortages in forestry workforce skills put climate targets at risk

Executive Summary

Our Position: The Prime Minister's COP26 mantra, 'coal, cars, cash and trees', confirms how fundamental trees are to tackling the climate crisis. People need trees and trees need people. We cannot hope to achieve what is required without urgently expanding, upskilling and diversifying the forestry and arboriculture workforce. Immediate action is needed.

Risks: If we do not get this right, there will be grave consequences for the UK's climate leadership, biodiversity and the environment at every scale. There are risks to individuals, communities, businesses, the economy and the reputation of forest-based industry. If urgent action is not taken across the UK, there will be both short- and long-term consequences. An understaffed and under-skilled workforce will lead to poorly planted and managed woodlands, urban trees that do more harm than good, and the wrong trees in the wrong places, with increased susceptibility to pests and diseases. In effect, we would fail to play our part in addressing the environmental crisis and to make the most of the huge green growth opportunity.

Challenge: There are significant challenges and ambitious targets to meet. Projections from recent research indicate that the number of skilled people required to meet these targets – up to a 72% increase across the workforce – vastly outweigh both the current reality and the future trajectory of new entrants. Further and higher education providers are unable to provide the necessary training under current resourcing models. We are simply not educating or developing enough people to the standards needed to deliver what is required. Lack of awareness of forestry as a green career and poor accessibility of courses are major barriers to recruitment.

We are particularly concerned that there are not enough qualified and experienced professionals to address the complexity of modern sustainable forestry, as the UK delivers its planned rapid expansion of woodlands of all types. Professionals bring the skills, knowledge and experience needed to deliver the policies of government, meet the needs of industry, protect the environment and provide financial returns to owners. The small number of forestry professionals in a sector responsible for 13% of the UK's land mass speaks to the scale of that challenge.

Solution: We call on governments, public bodies, private and third sectors, higher and further education and allied professions to commit to resourcing the sector's education, training and development needs, campaigning to raise the profile of forestry and arboriculture careers and creating new pathways into the industry to widen access. We suggest three immediate actions:

1. Fund the development of a new Forestry Training Hub to foster higher education connections, employer networks, links between academia and business, good practice and online learning, and to act as a resource for businesses to engage with apprenticeships.
2. Mobilise a national recruitment campaign about working with trees to encourage more young people and career changers into training for careers that address the climate crisis and green recovery.
3. Support the delivery of a leadership training programme to ensure strong, long-term, inspirational leadership for delivering on the climate change agenda.

It is our collective responsibility to ensure a future forestry workforce that can deliver for climate, nature, people and economic outcomes. We urge you to read our position paper, contact the Institute to discuss further action and work with us to make our goals for the environment a reality.

Introduction

Trees have a huge role in mitigating the climate and nature crises and in helping us to adapt to a changed future climate. As the body representing tree professionals, we are proud to be playing our part in this. However, we have serious concerns that we will not meet these challenges without urgently solving the growing skills gap. We need more people from a more diverse range of backgrounds with the broad range of skills essential for modern forestry to thrive. It is imperative that in the rush to deliver on government targets we don't marginalise expertise and professionalism, lest we end up with a temporary fix that requires a much more expensive investment in future to repair the damage.

Urgent and systemic action is needed from individuals, organisations, public bodies and governments, across departments and borders. If we do not solve the skills crisis there will be severe consequences for generations to come in the form of poorly planted and managed woodlands, failing urban trees, failure to offset carbon and increased exposure to damaging pests and diseases. In short, we would be failing to address the environmental crisis and to benefit from the huge opportunity for green growth.

Our Role

The Institute of Chartered Foresters is the Royal Chartered body for tree professionals in the UK. Its membership covers the full range of tree professionals – more so than any other organisation – and this range of expertise is one of its greatest strengths. It has 2,000 members who practise forestry, arboriculture and other related disciplines in the private and third sectors, central and local government, research institutions, universities and colleges throughout the UK.

The Institute regulates standards of entry to the profession. It provides support to members, guidance to professionals in other sectors, information to the general public, and educational advice and training to students and tree professionals seeking to develop their careers.

As the professional body we are ideally placed to comment on the skills crisis that forestry is currently facing. We work closely with our colleagues in organisations across the sector, with the UK governments and public bodies, and with the third sector. We also work extensively with committees and groups including the Forestry Skills Forums and government stakeholder groups, with skills organisations, with allied professions and with our fellow chartered bodies.

The Context

Forestry past and present

The past century has seen the UK undertake several phases of forest restoration. Following two World Wars, it saw strategic need for fast-growing timber to support housing and industrial development, followed by a need for multipurpose forests with conservation and recreation as their primary objectives. The Institute recognises and welcomes the government's commitment to the forestry sector through aid to landowners to pay for planting, to science, plant health and regulation, and supportive taxation policies.

Now the pressing need is to reduce emissions and store carbon. Land is precious in the UK – we need to make sure that forestry is an efficient policy tool by encouraging tree planting that will strengthen biodiversity, mitigate flooding, provide access to the countryside, cool and enhance our cities and enrich habitats in addition to providing wood products. 100 years of consistent effort has resulted in a forestry and wood-based economy worth £2.22 billion (Gross Value Added in 2019¹), a richer countryside and townscape treasured by millions, and popular support for additional planting.

Drivers and priorities

The UK has ambitious planting targets – 30,000 hectares a year by 2025 – which we are currently failing to meet in England, Northern Ireland and Wales. We face workforce shortages exacerbated by our departure from the EU.

Globally, the UK is second only to China in the volume of wood and wood products that we import and that demand is rising, often increasing pressures on sensitive forests in other countries. In replacing the Common Agricultural Policy, a huge transition in agriculture is required – farms will need to play a big part in tree planting and management and will need advice from professional foresters to do so. There is also polarisation in debate over land use and approaches to managing and creating woodland. While we can rely on the UK Forestry Standard as the benchmark for sustainable practice², difficult decisions will need to be made and these will need clear, professional advice at every level.

Urban trees

In urban landscapes, trees provide multiple highly valued amenity benefits, crucial to environmental resilience through boosting biodiversity, filtering fine particulates and managing stormwater, and to our wellbeing, economic performance and property values, reducing heat loss in winter, providing shade in summer and improving mental health. The skills deficit is particularly evident in cities where the delivery of these multiple benefits through government grants and planting schemes depends on a small number of local authority Tree Officers.

Strategic agenda

Defra's England Trees Action Plan (ETAP) pays some attention to the skills shortage but there has been little to no funding for skills initiatives in recent years. Scotland's Forestry Strategy 2019–29 makes brief reference to supporting education and skills provision. Woodlands for Wales, the Welsh Government's forestry strategy, showcases the opportunities the forestry sector can offer and recognises the need for new entrants. Forestry has a high profile in Northern Ireland with the Green Growth agenda but without a particular focus on skills. None of these goes far enough to meet the crisis.

Professional standards

For professionals in every sector, taking the time to network and undertake continuing professional development (CPD) creates a dynamic learning culture. This, together with strong leadership, will support delivery on our targets in the most efficient and innovative way. However, in such busy times and an employee-led job market, CPD and professional membership tend to drop. Sharing knowledge and continuing to learn can ensure that our workers are kept safe, give a better chance of resolving the ever-increasing threat from pests and diseases, and mean that trees are not only planted but managed to maximise their contribution towards ecosystem service delivery.

The Risks

If we do not get this right, there are risks to the individual, to health and safety, to businesses, to the reputation of the sector, to the environment at every scale and to the climate change agenda.

Health, safety and reputation

The Health and Safety Executive has issued six incident reports of fatalities in forestry and arboriculture since December 2020³ and we cannot expect this to improve with underqualified and overworked staff. There has been a huge recruitment drive in the public bodies but shortages of appropriately trained staff, which can lead to incidents reported in the media that damage the sector's reputation.

Poor methods

The Institute is working with the Forestry Commission to support their intensive recruitment programme with new staff who need to be trained on the UK Forestry Standard, but they are just one organisation among many. Decades ago, inappropriate methods for planting trees led to serious ecological damage to peatland which is now costing

huge sums to restore. An inadequate approach to biosecurity has resulted in destructive pests and diseases through imported timber and trees. These things can only change if we have skilled professionals engaging in research and communicating to practitioners and with each other about good practice.

Failed tree planting schemes

There is a huge difference between meeting planting targets and sustainably establishing new trees and woodland. For example, 30% of new street trees die within the first few years, often due to unskilled planting. There is not only wasted effort when trees die but environmental impact – it may be economically cheaper to replace them, but the carbon cost is huge.

Falling standards due to overwork

There are currently many vacant jobs compared to the numbers of qualified workers. In such busy times, and when often one person is required to 'cover' gaps in the workforce there is a danger that they will not be able to keep up with their continuing professional development. Previously when the sector has been struggling, skills development has gone up as people needed the badge of credibility to set them apart, but in times of boom we have seen professional development fall. However, it is even more important in these times to set and maintain high standards. What we do today will be playing out in 30, 50, 100 years' time.

Long-term damage

These risks have consequences in both the short and the long term. Not only do they jeopardise carbon offsetting, but they entail other lost opportunities that would have an impact for generations to come. They would mean poorly planted woodlands, poorly managed or unmanaged woodlands, urban trees that do more harm than good, and the wrong trees in the wrong places, highly susceptible to damaging pests and diseases. In effect, we would fail to play our part in addressing the environmental crisis.

The Challenge

Never in peace time has there been a more urgent skills gap in forestry. The Forestry Workforce Research (FWR) report published in August 2021⁴ on the situation in England and Wales shows that nothing short of radical and innovative action is required. In Scotland, a report led by Lantra⁵ on the scale of recruitment needed to meet targets indicated that workforce numbers could need to increase by as much as 72%. A survey last year by the Royal Forestry Society⁶ on barriers to woodland creation detailed serious deterrents, including access to professional advice and availability of skilled workers. The Forestry Skills Forums have long been highlighting these challenges, for example in the Forestry Skills Study of 2017⁷ in England and Wales and the Scottish Skills Action Plan 2020⁸. However, very little has improved in recent years. Even with this large gap compared to other sectors, the numbers we need are relatively low. They are achievable, with the right support.

As evidenced in such publications, the problem areas for skills are as follows:

Lack of young people coming into the sector

- There are serious misconceptions of UK forestry among the public and little or no attention paid to it in the school curriculum.
- There is a lack of awareness of career opportunities in the tree sector and what they can offer.

Crisis in further and higher education (FE and HE) training provision

- There are very few providers offering courses, at lower and higher levels. This has been highlighted recently with the closure of Newton Rigg, which was subject to an EFRA Committee inquiry⁹.

- While HE admissions have increased marginally since the early 2000s, numbers are still low compared to preceding decades and many students only realise the opportunities forestry presents after studying another subject (with the associated debt this entails).
- It follows that low numbers of students in FE and HE have either made delivery impossible for providers or led to a long-term lack of investment in resources and facilities.
- The rural location of colleges makes attendance impossible for many students.
- There is a shortage of industry placement opportunities for undergraduate students, vital for gaining real work knowledge and skills development.
- Courses with industry placements are reporting that students are not returning to complete their studies due to the employee shortage, instead accepting a lower-level qualification and entering the workforce, further jeopardising delivery by lowering the size of the class cohort.
- The high cost of delivering such a specialist discipline for a reducing number of students led many traditional academic institutions to stop providing forestry and arboriculture courses – in the past decade the universities of Edinburgh, Oxford and Aberdeen have ceased teaching undergraduate forestry.
- There is no technical provision in Northern Ireland at all – entrants to the sector rely on accessing training in Great Britain or Republic of Ireland.

Apprenticeships

- There has been very low uptake of the forestry Level 2 apprenticeship due to demand being dispersed around the country and numbers of candidates too low to make a viable cohort.
- Degree-level apprenticeships will be launched in 2022. However, the Forestry Level 6 is woefully underfunded and uptake is expected to be low for both forestry and arboriculture, in part due to micro-businesses being unable to support them.

Composition of the sector

- The forestry sector is made up predominantly of micro-businesses, employing workers who move from one short-term contract to another. The impact is that these businesses struggle to invest in training or find the time and money to take on apprentices.
- Although it is critical, it is small compared to more headline-grabbing sectors (just 16,000 people work in forestry, not inclusive of arboriculture, sawmilling or panel mills¹⁰) which has made it easier to overlook.
- The changing nature of modern forestry, developments in health and safety and high workloads mean that the current workforce struggles to maintain and increase their own skills and standards, let alone support the needs of new entrants.
- There are not enough forestry professionals to plan and manage the complexity of science and environment, logistics, protection and engineering that constitute modern sustainable forestry in a densely populated country. Professionals bring the skills and expertise needed to deliver government policy, meet the needs of industry, protect the environment and provide financial returns to owners. The small number of forestry professionals in a sector covering 13% of the UK land mass speaks to the size of that challenge.

Existing workforce shortages and forecasts of widening gaps

- There is a significant gap between the numbers needed to meet targets and the numbers joining the sector. The estimated figures needed are between a 32% and 72% increase in Scotland from 2017 to 2027, and 63-86% in England and Wales by 2030.
- The average age in the current workforce is high and prospective retirement figures further widen this gap – we could lose 20% of the workforce to retirement by 2030.
- The sector also is subject to attrition by other factors such as loss of trained workers to other sectors like agriculture, estimated as 20% in Scotland in addition to attrition by retirement.

- This is not just a problem for rural planting and woodland management – for many years the sector has struggled with funding and recruitment for trained tree officers in urban local authorities.

High numbers of vacancies

- In recent years, the number of forestry vacancies has increased – there are simply not enough trained workers to fill the posts. According to the FWR survey the main reason cited by employers for unfilled vacancies is a “lack of skills/experience”, followed by low pay.
- For those who do enter the workforce, employers report worrying gaps between education and employment which underpin this lack of skills and experience, in part due to the above crisis in training provision.
- Employers are therefore hiring inexperienced staff who either rely on an organisation’s own training or learn whilst working in a less structured way. A common theme is the need for structured training programmes like graduate schemes and apprenticeships and the associated need for funding for these programmes.

Wider support across governments

- The Institute worked hard with Defra to highlight the issues and present a range of solutions, and we welcome the reference to the Forestry Skills Forum in the ETAP, but this is not followed by funding and support across government, particularly BEIS and DfE. The Green Recovery Challenge Fund was not set up to resource skills-based projects and the Kickstart scheme is unsuitable for small and micro-businesses.
- There must be strategic read-across between initiatives involving trees and environment, which will need to be addressed within and across governments. Forestry may be devolved but the skills market is trans-UK.

Skills gaps for allied professionals including farming

- We have concerns about how crucial advice on trees will be provided under agricultural transition. Many farmers want to plant trees but lack the knowledge or access to appropriate support, despite acknowledging that it is a key part of the transition to net zero¹¹. There are insufficient professional foresters to advise them.
- Allied professionals, such as planners, also acknowledge a need to be aware of sustainable forestry principles and the importance of professional advice on trees and woodland.

Loss of EU workers

- The skills shortage has been compounded by EU Exit discouraging workers from overseas¹². Before the end of the transition period, the majority of tree nursery staff came from Europe.

We are taking this opportunity to express our concerns in a time of crisis and urge the UK Government to consider this in the Spending Review.

The Solution

The solutions need funding and support but crucially they need political will and open-mindedness.

The **Institute of Chartered Foresters** commits to continue working with and supporting governments across the UK, as a UK-wide body, to help them deliver for climate and nature, whether as partner, convener or critical friend. We also commit to the following:

- Create a technical membership category and to offer vocational routes to chartership. This will recognise the skills that many of our existing tree professionals have, allowing them to commit to undertaking structured CPD and develop their careers.

- Develop a leadership programme that will ensure strong, long-term, inspirational leadership for delivering on the climate change agenda.
- Support the degree-level apprenticeships in England to encourage more qualified entrants into the sector.
- Share our knowledge with allied professions by working with other chartered and professional bodies, with trade organisations and with the third sector.
- Continue to support our members to engage with continuing professional development.

We ask that the **governments of the UK** continue to listen to sector expertise, work with the Forestry Skills Forums and commit to the following:

- Commit significantly more funding to recruitment and training, including novel approaches such as an internal Erasmus scheme whereby students anywhere can take forestry modules and receive credit for them, and support for short practical training courses.
- Fund the development of a new Forestry Training Hub (like the Forestry Learning Network, a partnership project funded by UKCES from 2012) to share best practice, form stronger (and new) HEI connections, foster employer networks and links between academia and business, develop ideas, act as an online portal for learning and a resource for micro-businesses struggling to engage with apprenticeships.
- Review forestry education provision, consulting with providers as to what would best support them to deliver quality training.
- Support the apprenticeships by recognising their importance, assigning more funding, and enabling access by small businesses.
- Support the development of a national recruiting campaign for joining the land-based sector, supported by digital media and television.
- Develop a structured national conversion programme for career changers with similar qualifications to undertake recognised training and development, as recommended in the FWR report.
- Consider a new approach to the school curriculum to allow education on the importance of trees and their sustainable management, linked across subjects and disciplines.

Public bodies should continue to work tirelessly with governments to support the skills agenda as well as:

- Continue to work with the Institute of Chartered Foresters and actively seek views from other sector experts and practitioners, with appropriate governance arrangements in place.
- Advocate for high standards and professionalism within their organisation, across the sector and beyond, and support membership of the professional body by linking performance review with becoming chartered.
- Actively support placement and apprenticeship schemes.

Further and higher education institutions (HEIs) should work together where it is in the interests of the students and the sector. They should also:

- Commit to more creative approaches to provision: more online provision (supported by intensive field weeks as appropriate) to improve access to courses; and supporting the delivery (and uptake) of forestry modules at other HEIs to students on related degrees such as Geography and Environmental Sciences, like a UK Erasmus scheme.
- Encourage student engagement with the professional body, engendering a culture of lifelong learning and professional development.

We ask that **third sector organisations** work together on the skills agenda and focus on where their priorities align rather than diverge. We also ask that they:

- Work with Institute of Chartered Foresters and others to urge governments to meet the challenge.

- Actively support apprentices and other skills initiatives.

Employers and private businesses are key to resolving the skills crisis and must support their employees to gain skills and take up CPD opportunities. They should also:

- Encourage their staff to work towards professional or technical qualifications.
- Identify the skills gaps, raise awareness of the opportunities and work with others in the sector to meet the needs.
- Support the new degree-level and level 4 apprenticeships in England and encourage Scotland and Wales to develop higher level apprenticeships.

Allied professions are encouraged to work with us to develop opportunities for cross sector learning and collaboration.

We ask that our **professional foresters** advocate for the profession and for high standards, continue their commitment to fulfil the CPD requirements of professional membership and help their Institute to develop the offering.

The Call to Action

As the body representing tree professionals it is our responsibility to sound the alarm. However, it is our collective responsibility to answer it. We need to come together to meet the skills crisis in order to solve the climate emergency.

¹ Forest Research, [Forestry Statistics and Forestry Facts & Figures](#), September 2021

² Institute of Chartered Foresters, [ICF Response to UKFS Review](#), September 2021

³ Forest Industry Safety Accord, [safety bulletins](#), 2021

⁴ Forestry Skills Forum, [Forestry Workforce Research \(England and Wales\)](#), August 2021

⁵ Lantra and the Scottish Forest and Timber Technologies Skills Group, [A review of the Forestry Workforce in Scotland](#), July 2019

⁶ Royal Forestry Society, [Woodland Creation Opportunities and Barriers](#), June 2020

⁷ Forestry Skills Forum, [A Forestry Skills Study for England and Wales](#), October 2017

⁸ Scottish Forest and Timber Technologies, [Skills Action Plan 2020](#), May 2020

⁹ Environment, Food and Rural Affairs Committee, one-off [session on land-based education](#) in England, 2021

¹⁰ Forest Research, [Forestry Statistics and Forestry Facts & Figures](#), September 2020

¹¹ National Farmers Union, [Achieving Net Zero: Farming 2040's Goal](#), September 2019

¹² Confor, [The end of the Transition Period](#), October 2020